https://doi.org/10.15388/vu.thesis.199

VILNIUS UNIVERSITY
INSTITUTE OF LITHUANIAN LITERATURE AND FOLKLORE
LITHUANIAN ACADEMY OF MUSIC AND THEATRE

Aivaras
JEFANOVAS

Cohabitation in shared landscapes in Arctic Yakutia: social relations between reindeer herders/hunters and wolves

DOCTORAL DISSERTATION

Humanities,
Ethnology (H 006)

VILNIUS 2021

This dissertation was written between 2016 and 2020 at the Faculty of Philosophy, the Institute of Asian and Transcultural Studies, Vilnius University. The research was supported by Research Council of Lithuania.

Academic supervisor:
Prof. Dr. Donatas Brandišauskas (Vilnius university, humanities, ethnology - H 006).
Academic consultant:
Dr. Stephan Dudeck (University of Lapland, Finland, social sciences, sociology - S 005) (2018-11-19 - 2020-09-30).

https://doi.org/10.15388/vu.thesis.199

VILNIAUS UNIVERSITETAS
LIETUVIŲ LITERATŪROS IR TAUTOSAKOS INSTITUTAS
LIETUVOS MUZIKOS IR TEATRO AKADEMIJA

Aivaras
JEFANOVAS

Kohabitacija Arkties Jakutijos kraštovaizdžiuose: elnių augintojų ir medžiotojų socialiniai santykiai su vilkais

DAKTARO DISERTACIJA

Humanitariniai mokslai,
etnologija (H 006)

VILNIUS 2021

Disertacija rengta 2016 – 2020 metais, Filosofijos fakulteto, Azijos ir transkultūrinių tyrimų institute.
Mokslinius tyrimus rėmė Lietuvos mokslo taryba.

Mokslinis vadovas – prof. dr. Donatas Brandišauskas (Vilniaus universitetas, humanitariniai moklai, etnologija – H 006).
Mokslinis konsultantas – dr. Stephan Dudeck (Laplandijos universitetas, Suomija, socialiniai mokslai, sociologija – S 005) (2018-11-19 - 2020-09-30).

TABLE OF CONTENTS

ACKNOWLEDGMENTS

I would have been unable to conduct this research and complete my thesis without the assistance and encouragement of many people, I would like to express my gratitude to all of them. Special thanks go to the reindeer herders/hunters of the Eveno-Bytantaiskii district, especially Afanasii Konstantinov and Daria Starastina and their family members for accepting me and sharing their lives and households on the Siberian taiga and the village. I also want to express my deepest thanks to Dr. Innokentii Ammosov and his wife Nadezhda Ammosova from Sakkyryr for their hospitality, friendship and support in introducing me to key contacts, also taking care of me when I was sick or unsure of any issues. Furthter, I would like to convey my thanks to Maria Karmanova from Sakkyryr, who met me on my initial arrival in the Eveno-Bytantaiskii district and opened her house to me. My gratitude also lies with Varvara Sotrudnikova who mediated some of my conversations with local herder/hunters and translated from the Eveny/Yakut language to Russian. I am also very grateful to her for guiding me in Yakutsk and introducing me to Yakut art and culture. I appreciate Vadim Nikolin for taking me on a wolf hunting trip, giving me an exceptional opportunity to understand concealed wolf hunter-wolf relations.

Many indigenous people of Yakutia also made contributions to my research, it is impossible to mention them all here. However, the following reindeer herders/hunters and villagers of the Tomponskii district deserve special thanks: Maksim Orlov, Aitalina Baisheva, Grigorii Zamiatin, Vlas Golikov, Konstantin Androsov, Margarita Prokopeva, Nadezhda Petrovna, Natalia Golikova, Marija Pogodaiava and Tataeva Fedora. I am also very grateful for the help and support given to me by the head of the Tomponskii *Nasleg* administration Nadezhda Kladkina.

I also want to express my deep appreciation to Dr. Ekaterina Nazarovna Romanova at the Institute for Humanities Research and Indigenous Studies of the North (IHRISN) in Yakutsk, for her incredible cooperation, encouragement and support in solving my immigration issues. My gratitude also goes out to Russian colleagues at the IHRISN, especially Dr. Galina Varavina for her generosity and great assistance in getting access to Yakutsk archives. I also thank my mentor Dr. Aleksandr Krivoshapkin at the Department of Biology of the North-Eastern Federal University in Yakutsk for helping me organize a field trip, as well as consulting on predator ecology. Many thanks are also due to government officials of the Ministries of Ecology and Agriculture of Yakutia for providing data on the management of predator populations in Yakutia.

I also thank the Tozhu reindeer herders/hunters in Tyva for their cooperation during my earlier fieldwork and for giving me information and knowledge that is also reflected in this thesis. Special thanks to Svetlana Demkina, an indigenous Tozhu woman and the leader of the Association of Indigenous Tozhu-Tyvinians of Siberia, for her assistance in organizing a trip to the taiga encampment of the Tozhu reindeer herders/hunters.

Outside Siberia, I want to thank my general supervisor Prof. Donatas Brandišauskas for his experienced guidance over five years - he made my doctoral studies possible even though I had had no prior background in the humanities and social anthropology fields. Huge thanks also go to my second supervisor Dr. Stephan Dudeck for reviewing and commenting on my thesis drafts. My research for this thesis would have been impossible without the institutions that funded my doctoral studies and fieldwork: the Faculty of Philosophy of Vilnius University and the Lithuanian Research Council. I would like to thank VERBI Software, the company behind MAXQDA, which funded in part my fieldwork and granted me a two-year (2018-2020) software package licence for qualitative and mixed methods research. I want to express my deepest sense of appreciation to Prof. Dr. Arūnas Poviliūnas, the Dean of the Faculty of Philosophy of Vilnius University who made the funds for this research available. In addition, profound thanks are due to the academic staff of the Faculty of Philosophy and the Institute of Asian and Transcultural Studies, especially Dr. Vytis Silius, Dr. Kristina Garalytė, Jūratė Rapalavičiūtė, and Vilmantė Matuliauskienė who all put much effort into organizing my doctoral studies. I am grateful to Prof. Victor de Munck from the Institute of Asian and Transcultural Studies, for his discussions on the writing-up process of this dissertation and informal conversations. I also thank Jos Stratford who edited the English language of this thesis.

Finally, I am very much indebted to my wife Lina for her understanding, patience and immense moral support during my trip time and during the writing up process, especially for those times that I felt exhausted or a little lost. I am grateful to my parents for inspiring me to continue and wishing me optimism.

I would like to dedicate this dissertation to my daughter Austėja Jefanova and to my wife Lina Burbaitė.

ABBREVIATIONS

IHRISN – The Institute for Humanities Research and Indigenous Studies of the North
DBNEFU – The Department of Biology of the North-Eastern Federal University in Yakutsk
MEFRS – The Ministry of Ecology, Nature Management and Forestry of the Republic of Sakha
HRMD – The Hunting Resources Management Directorate under the Ministry of Ecology, Nature Management and Forestry of the Republic of Sakha
ADEBD – The Agricultural Directorate of Eveno-Bytantaiskii District
USSR – The Union of Soviet Socialist Republics
YASSR – The Yakut Autonomous Soviet Socialist Republic
OBKOM – The Regional Committee of the Communist Party
GOSSTRACH – The General Directorate of the State Insurance System of the USSR
GOSPLAN – The Soviet State Planning Committee, supervising five-year plans governing the economy of the USSR.
MUP – Municipal Unitary Enterprise
YANTS SO RAN – Archives of the Yakutsk Scientific Centre of the Siberian Branch of the Russian Academy of Sciences
NARS – National Archives of the Republic of Sakha

NOTE ON TRANSLITERATION

In this dissertation, Russian and Yakut words/expressions are transliterated from the Cyrillic script following a simplified version of the Russian–ALA-LC transliteration system. ALA-LC is a set of standards for the romanization of texts in scripts other than the Latin alphabet. This label consists of the initials of the American Library Association (ALA) and the Library of Congress (LC). In the thesis, Russian terms are written in italics and/or are indicated “Rus”. Yakut terms are also italicized and/or are indicated by the abbreviation “Yak”. Russian and Yakut words, as well as other important expressions that are used in the text, are explained in English and placed in the glossary (see Appendix II).

SUMMARY

This ethnographic study is devoted to the reindeer herders and hunters of Arctic Yakutia who live in the mountainous taiga and tundra landscapes and engage in social relationships with other than humans beings, specifically wolves. This dissertation explores how these interspecific relationships, which are based on aggressive interaction and peaceful existence, intermingle and account for the complexity of the cohabitation of humans and predators in the shared landscapes. Furthermore, this thesis aims to demonstrate how human-predator cohabitation in Arctic Yakutia can be shaped by reciprocal interaction and interspecific communication. To give a deeper understanding of contemporary interactions of wolves and the reindeer herders/hunters of Arctic Yakutia, this study also explores the animistic worldview of the herders/hunters and examines the interspecific relations from historical, socio-economic, political and spatial viewpoints. In concrete, this thesis describes the opportunistic lifestyles of the Arctic reindeer herders/hunters that I lived with and shows the role that predators play (predating livestock) in the subsistence of the people heavily dependent on reindeers. Discussing how human-predator relations could be perceived in the context of Soviet times, this study examines the predator extermination practices that prevailed in the Yakut Autonomous Soviet Socialist Republic (YASSR), as well as whether the Soviet atheistic ideology changed the vernacular perception of reindeer herders/hunters regarding predators. This thesis, applying the idea of interspecific communication, shows how reindeer herders/hunters of Arctic Yakutia and predators read the behavioural signs of each other and mutually adapt their behaviours by engaging in cohabitation. Finally, attempting to give an understanding of the complexity of human–predator cohabitation in Arctic Yakutia, this dissertation describes the intimate relations between wolf hunters and wolves that, along with practice of predator hunting, interspecific communication and behavioural adaptation, also involves the aspects such as taking the perspective of a wolf, showing empathy for wolves and displaying a respectful attitude towards them.

Keywords: reindeer herders/hunters of Arctic Yakutia, non-human beings, human-predator social relations, aggressive interaction and peaceful existence, cohabitation, interspecific communication, behavioural adaptation, predator regulation/extermination.

CHAPTER 1: INTRODUCTION

1.1 The subject matter

This dissertation is the outcome of almost 10 months of ethnographic research that took place mostly in Arctic Yakutia (about nine months) and the Tyva Republic[1] (six weeks). The mountainous taiga and tundra of Eveno-Bytantaiskii and Tomponskii districts in Arctic Yakutia (within the Arctic Circle and the subarctic) are considered the homeland of Eveny reindeer herders/hunters (for the purposes of this dissertation, I use the Russian plural Eveny). Numbering about 15 thousand people in Yakutia, the Eveny are Tungus-Manchu speaking indigenous people recognized as a minority in the Russian North (see also Belianskaia 2014). However, the identity of these indigenous people is relational and can shift over their lifetimes (for "relational" identity of indigenous people in northeastern Siberia see also Anderson 2000). For instance, often dictated by education, the entering of mixed marriages or the possibilities of governmental benefits, reindeer herders may choose to declare an ethnic identity on their identity document as Eveny or Yakut or even Russian (see also Vitebsky 2005, 399-401). Regardless of identity, the lifestyle of the communities of reindeer herders and hunters can be characterized as of a traditional subsistence, based on nomadic reindeer herding and hunting as well as fishing.

To spend time with the reindeer herders/hunters and learn about their daily life in the remote Arctic Siberian landscapes, I repeatedly flew the 6,000 km from my native European country of Lithuania to north-eastern Russia. The impetus that led me to the one of coldest inhabited places on earth (winter temperatures can fall to -70 C), yet at the same time one of the most beautiful parts of the north, was not only my curiosity of how indigenous people adapt to the socio-economic and ecological environment of the Arctic, but moreover my interest in their relations with predators.

My first visits to Siberia and central Asia were long before these anthropological studies took place. From the time of my bachelor studies in ecology in my home country, I had been passionately involved in travelling to the taiga and mountains of Altai, Eastern Saian, the Baikal region, Mongolia

[1] Initially I spent six weeks in Tyva Republic (before Yakutia), investigating reindeer herders/hunters in the Eastern Saian mountains, my first attempt at field research. The dissertation includes some ethnographic materials from Tuva.

and Kyrgyzstan. As a naturalist, I was especially interested in getting to remote natural environments and to observing the predators (bears and wolves) that had become the subject of my ecology studies. It was during these early trips to Siberia that I had my first experiences of meeting the indigenous herders/hunters. It gave me the impulse for my very first thoughts of how these taiga people lived daily in the close presence of predators.

As time passed, I began to realize that investigations into human-wolf relationships in Siberia could be a major aim of my further scientific research in the field of anthropology - I had the idea to apply an interdisciplinary approach combining ethnography with the observation of animal behaviour, i.e. ethology. Such complexity in the field of human and animal sciences is described by Lestel et al. (2006) as etho-ethnology and ethno-ethology, where the focus is not reduced either to ethology devoted strictly to animal behaviour or to ethnology concerned exclusively with the life of humans in society. By and large, these combined approaches seek to describe human-animal relations and how humans and animals live together in human-animal societies (ibid.). Although, to some degree, this study can be linked to the investigation of animal behaviour, it has no such aim to examine human-animal relations in purely functional means. To the contrary, this thesis considers human-animal interactions as a process of mutual adaptation in which not only humans but animals also exercise the agency. Furthermore, this study also seeks to capture how predators are perceived from the perspective of the cosmology of the reindeer herders/hunters.

The ethnography which sparked my initial interest in the, so to say, non-western[2] perception of predators was the book by the Russian ethnographer of the mid-20th century Vainshtein (1961). The author vividly described a ritual

[2] Western thought about humanity and animality could be characterized as a nature-culture (nature-society) dualism which largely arose from Cartesian metaphysics some three centuries ago and has had a potent and lasting impact on how we think about ourselves in relation to non-human animals (see Willerslev 2007, 13-15). The dichotomy between humanity and animality has thus been arranged next to those between subject and object, person and thing, mind and body, intentionality and instinct and, above all, culture and nature (see Ingold 2000: 41). Cartesian philosophy separated mind and matter keeping humans and animals physically the same biological "machines", but mentally wholly different. It was claimed that animals lack the thing that makes humans distinct from mere machines: they lack mind, and because mind and soul are absolutely inseparable, animals do not possess souls either (ibid.). It comes as no surprise, therefore, that anthropology as an intellectual product of the Cartesian tradition has tended to see indigenous claims about the existence of non-human persons as a particular cultural construct (ibid.).

performed by indigenous Tyva hunters/herders to calm the bear spirit and to evade possible revenge from the predator following a kill. During the bear honouring ceremony, the hunters would ritually blame crows for the killing of the bear, absolving the hunters of their guilt. The bear's skull and paws were then hung on a tree in the direction of sunset in such a way demonstrating the respect for the killed predator (see Vainshtein 1961, 172-173). Following ethnographic readings on the relationships between indigenous inhabitants of circumpolar regions and animals, I wondered if the relationships between Siberian herders/hunters and predators could be characterized as social, resulting from a long-term living in the shared landscapes. My assumption arose first of all from the idea in anthropology that indigenous people perceive animals as subjects – other-than-human persons (for the definition of non-human beings, see also Anderson 2017; Hallowell 1960) with whom humans build relations. Although this thesis relies heavily on the contributions of the indigenous people in their conceptualizations of animals, I also aim to show predators as persons/active agents with a will of their own. From this perspective, predators can be perceived as the neighbours with whom the indigenous people live, communicate and engage in reciprocity.

I would like to note that the attitudes and the ways of behaviour shown by the reindeer herders and hunters of Arctic Yakutia towards animals (especially in terms of hunting activities) do not always align with the personal attitudes of the author of this thesis.

In the following sections, I outline my fieldwork settings and also describe my strategies for collecting ethnographic material.

1.2 Entering the field site

I believe that my earlier experiences in travelling to the Siberian taiga (as a self-organised tourist), as well as my background in predator ecology, were important features that gave me inspiration in the organizing of ethnographic field research and finding a way to communicate[3] with the reindeer herders

[3] As a native Russian speaker, I had the opportunity to speak fluently with the indigenous people of Yakutia during my fieldwork. The Russian language has become the *lingua franca* in Yakutia since the incorporation of Yakutia (by the Bolsheviks) into the bloc of autonomous Soviet Socialist Republics. During the Soviet times, the Russian language was in a privileged position in Yakutia and teaching at schools was conducted mainly in Russian, besides it was also the main institutional language. Thus, the overwhelming majority of native inhabitants of Yakutia became bilingual and are fluent in both languages - Russian and Yakut (see also Alekseev 2008). Currently, both Russian and Yakut are recognized as the official languages of the

and hunters of Arctic Yakutia. However, Yakutia was not my initial setting for fieldwork of doctoral studies. Impressed by the ethnographic works of Vainshtein (1961; 2016), my first idea was to settle in the Tyva Republic and investigate the Tozhu reindeer herders/hunters of the Todzhiinskii district (Eastern Saian mountains). However, during an exploratory visit to Tyva (2017), I did not find the strong community of herders/hunters that I had expected. I did get in touch with a few herders watching over small herds of reindeers, but that could hardly be enough for writing my thesis. This fieldwork experience in Tuva did however significantly influence my subsequent ethnographic research in Yakutia. The six-week long session of fieldwork in the nomadic reindeer encampment in the Eastern Saian mountains gave me first-hand knowledge of reindeer herding and hunting practices, as well as the experience of dwelling in the traditional conical tent called a *chum*. Furthermore, I had the opportunity to apply field data collection strategies in practice, as well as the possibility to establish relations with indigenous people based on trust and reciprocity. The ethnographic materials I collected during the visit led me to the writing of the article "Predatory Relations of the Tozhu Hunters/Herders" (Jefanovas 2020). Furthermore, ethnography from the Tyva fieldwork supplemented my thesis with several examples that I incorporated to describe the relationship between herders/hunters and predators.

After my visit to Tyva, my gaze turned to Arctic Yakutia where strong indigenous communities sustain herds of thousands of reindeers. The wisdom of changing my focus to Yakutia was further enhanced by the fact that several ongoing modern anthropological studies on human-animal relationships also take place in the districts of Yakutia I chose (Eveno-Bytantaiskii and Tomponskii). Anthropologists such as Piers Vitebsky, Florian Stammler and Hiroki Takakura whose works I quote in this thesis, investigate the adaptation of the indigenous inhabitants of Yakutia to the Arctic environment and socio-economic conditions. There are many articles written by these authors on the domestication of animals, as well as on the relationships between the Arctic herders/hunters and reindeers/horses. However, no existing research on the

---

Sakha Republic. During my field research on the taiga and in villages, many indigenous people spoke to each other in the Sakha language (except from Tomponskii district where the Eveny tongue is predominant), but people easily switched to Russian in my presence. Thus, almost all of my conversations were conducted in Russian, with the exception of a few cases when I needed a translation from Sakha or Eveny language into Russian.

relationship between humans and animals in Arctic Yakutia had considered predators as the main subject. I saw an opportunity to fill this gap with my ethnographic investigation on human-wolf relations.

Preparing for the fieldwork in Arctic Yakutia, I established an agreement of collaboration with the Institute for Humanities Research and Indigenous Studies of the North (IHRISN), as well as with the Department of Biology of the North-Eastern Federal University in Yakutsk (DBNEFU). I also contacted two indigenous people, the Yakut man Innokentii Ammosov and the Eveny women Maria Karmanova, both from Sakkyryr village (the administrative centre of the Eveno-Bytantaiskii district), who accepted the duty to meet me and introduce me to the village community. At the beginning of March 2018, I arrived in Yakutsk and then took a flight with a local airline to the airport of Sakkyryr. Innokentii Ammosov, who at the time of my fieldwork was the manager of the Agricultural Directorate of Eveno-Bytantaiskii district (ADEBD), greatly contributed to the establishment of my relations with the village administration, households and reindeer herding enterprises in the district. Additionally, during all stages of my fieldwork, he used his network of acquaintances in Yakutia to provide me with contacts from other districts of Yakutia, as well as from the city of Yakutsk. With a doctoral degree in agricultural sciences, Innokentii was also a contributor to projects involving investigations into livestock breeding and domestication in the Eveno-Bytantaiskii district. These research programs were organized by, and had contributions from anthropologists from, the University of Lapland, the University of Japan and the Natural Resources Institute of Finland. This mutual interest in science brought friendship between Innokentii and myself, I could always consult with him about organizing trips to reindeer encampments and also always find shelter in his house when recovering from flu or fatigue. While I getting familiar with Sakkyryr and finding the reindeer herders that would take me to their taiga encampments, the Eveny woman Maria Karmanova also invited me to live in her village house together with her family. As she works in a veterinary facility that provides vaccination services for reindeers, Maria knew a lot about the reindeer herds in the district and was familiar with herders with whom I was introduced. Additionally, working with schoolchildren in an education centre, she also provided me access to villagers of different age groups, including children, teenagers, their parents, their grandparents and other relatives. She also guided me during the annual “Reindeer Herder’s Day” festival that takes place every March in Sakkyryr. At the festival, I got to know many of the district's reindeer herders and, most importantly, two leaders of reindeer herding enterprises, these becoming the main people (my hosts) with whom I did most of my field

research. The first of these was the indigenous woman Daria Starastina, a prominent leader of the clan community "*obshchina*" that owns of one of the biggest reindeer herds in the district and whose reindeer encampment I visited. The other of these persons was the reindeer herder, brigadier[4] Afanasii Konstantinov, who was to take me to his encampments in the taiga where he nomadizes with his family. By involving myself in the daily life of these people, I could observe, learn and experience taiga life and also access a different kind of knowledge concerning human-animal relations.

Throughout my fieldwork, while living together with reindeer herders/hunters for weeks and months in log cabins, canvas tents and village houses, I relied on participant observation as my general data gathering method. I also conducted semi-structured interviews (by asking "open-ended" questions) as well as engaged in extensive unstructured conversations which, as well as providing much insight into reindeer herding and the role of predators, also provided me with many life histories of people. It is difficult to calculate exactly how many interviews and conversations were conducted during my fieldwork, as a lot of spontaneous talks took place between daily jobs or while travelling, as well as in the evenings sitting by the stove in a log cabin or in a canvas tent listening to the accounts of people. Nevertheless, in the course of my fieldwork, I recorded 54 open-ended interviews (47 people), each of which lasted an average of 70 minutes (shortest 20 minutes, longest 3 hours), totalling 62 hours of recordings. Additionally, as there were often various obstacles to recording conversations (extreme weather, people on the move, refusal of some contacts to be recorded), I also jotted down about 90 conversations (45 people) in my field diary. My strategy of participant observation was to nomadize together with people, temporarily staying in the village, then moving back to the taiga, this cycle repeated. The community of reindeer herders relied on the constant maintenance of a network of relationships and reciprocity, thus people always had a purpose to move from the taiga to the village and meet families, take provisions and exchange or sell

[4] The term "brigadier" has been widely applied since Soviet times to the head of a brigade that consists of a group of reindeer herders. A brigade usually has a core of long-term members and a number of less committed young men who come and go (see Vitebsky 2005, 43-44). In Soviet times, a typical brigade contained six male herders and was run by a male brigadier and fed by female cook called a "tent worker" [Rus. *Chumrabotnitsa*] (ibid.). In Soviet times, each brigade looked after a herd of around 2000 reindeer. The corresponding groupings of humans and reindeer were referred to as "brigade", "herd" [Rus. *Stado*] or "camp x" (ibid.).

reindeer meat. Permitting me access to different age and gender groups of people, the constant movement of reindeer herders between the encampments and village served as an advantage to me. The main age group of my contacts were 50-70 year-old indigenous people (roughly 58%), while the age groups 30-50 and 70-90 years old (several elders at 90 years of age) accounted for about 19% each. The smallest group of my contacts were people younger than 30 years of age (about 4%). Most of the reindeer herders/hunters had houses in the village, but the men stayed on the taiga for long periods with the reindeers, while women and their children remained in the village and moved to the taiga for shorter periods. Thus, as I spent more time on the taiga than in villages, the majority of the people I contacted during my fieldwork were male reindeer herders/hunters (roughly 65 % of contacts), while there were less females (about 35%). When I stayed in the encampments with the reindeer herders/hunters, I tried to participate in herders' daily jobs by taking a range of duties that could be prescribed as the jobs of men, such as bringing reindeers, preparing firewood, butchering animals and bringing ice blocks and breaking them into fragments to melt in a kettle over the fire. I also participated in some tasks traditionally ascribed as the responsibility of children, e.g., washing dishes, fetching and boiling water for tea, feeding dogs, etc. Having in mind that I was not a skilful reindeer herder and that I had to learn a lot by following and observing others, some people in the taiga encampment jokingly referred to me with the Yakut word *khamnachchyt* - a servant. Once, a herder even joked that I should be given the most difficult herder's jobs in order to teach me to become a herder. However, people on the taiga very much operate on the principle that nobody should become an obstacle to anyone else and should retain their highly valued autonomy. For this reason, people frequently recounted that nobody had taught them how to do things correctly, but they had had to "catch" everything by themselves. Therefore, after being shown how to ride reindeers and harness the sledges once, I had to develop these skills based mostly on my own mistakes and understanding. However, the most difficult job I took part in was the annual reindeer count and vaccination in spring, a task known among the herders as corralization [Rus. *Koralizatsiia olenei*]. Reindeers were driven by the herders into a corral in groups of 50–100 heads and each was wrestled to the ground and held while the veterinarian would approach to take a blood sample and give the vaccination against brucellosis. Sometimes almost 2000 reindeer passed through the hands of the men who counted and vaccinated the entire herd – only then would the animals be released to spread out again on the taiga. Fighting down animals weighing up to 150 kg (reindeer males), people were like wrestlers enclosed in a small ring and it is not surprising that some

man lost a tooth or got a black eye after 3-4 days of such difficult work in the close proximity of the hooves of many animals restlessly circling inside the muddy corral. However, the reindeer corralization is more than just a technical inventory of the animals, it is a seasonal event that brings the whole community together. The reindeer herders ask each other to come and share their energy in this work, also, it is an opportunity to meet their friends and relatives who also come from the village. For me, it was a great opportunity to familiarize myself with people and engage in conversations. By participating in people's lives and striving to help them in their everyday duties, I build trust between myself and these people. This brought me and the people closer and also opened the door to a deeper understanding of their lives this often otherwise hidden to outsider's eyes. As Brandišauskas (2009, 94-100) also showed, trust is an essential element in all practices on the taiga, this is not just a strategy but also the development of relationships.

I also tried to enhance the trust developed between me and the people by showing the things that an ethnologist does in the course of fieldwork. For instance, using a camera for what is called visual anthropology, I showed pictures and short videos to people. Seeing pictures with themselves, their friends and relatives taken in daily activities, people asked me to share the images. This was also beneficial to my research, as while watching themselves on camera, reindeer herders/hunters frequently commented on certain events, providing details about herding and hunting. Moreover, the video I had made about Tyvan reindeer herders/hunters from my previous fieldwork, also attracted the attention of the people I lived with. Watching the video and comparing reindeer herding in Tyva and Yakutia, people revealed new insights that I hadn't noticed. For instance, it improved my understanding of the differences between the reindeer herding of Eastern Saian and Arctic Yakutia. Furthermore, my background in predator ecology also seemed to play a role in reciprocal relations with hunters and herders, who were particularly interested in hearing about animal behaviour. In exchange, people gave me accounts of their experience with predator hunting. Becoming familiar with the reindeer herders/hunters, I was able to build relations with their relatives and acquaintances from other reindeer encampments, villages, districts and even the city of Yakutsk. I soon learned that Yakutia, occupying 3 million km^2 with a population of only 1 million inhabitants, resembled a network of relatives and acquaintances. My network of connections in the Eveno-Bytantaiskii district led me to other districts of Yakutia. For instance, in autumn 2019, I visited reindeer herders of Tomponskii district and the village of Topolinoe, where I learned more about the adaptations of people to market economy conditions. The same year, at the beginning of the winter, I joined a

wolf hunter on his trip to the Kobiaiskii district taiga, where I learned about wolf hunting practice and how predator regulation was organized in Yakutia.

Although the participants in my survey were mostly those that I could reach at the particular time, I also tried to involve not only villagers, reindeer herders and hunters representing local attitudes towards reindeer herding and predators, but also representatives of the State (of the Ministries of Ecology and Agriculture of Sakha) and the municipality. I also consulted with biologists from the DBNEFU, ethnologists, folklorists and archaeologists from the IHRISN, as well as historians from the Faculty of History of the North-Eastern Federal University in Yakutsk.

Altogether, I spend about 10 months on my fieldwork, including my first field trip to Tyva Republic (six weeks) and about nine months in Yakutia. Of this, around seven months were actually engaged with visiting reindeer herders/hunters Eveno-Bytantaiskii district, the village of Sakkyryr, Tomponskii district and the village of Topolinoe, as well Kobiaiskii district in the Republic of Sakha. When planning my fieldwork, I tried to cover the cold and warm periods of the year, since the annual cycle of reindeer herding activities depends on the season. So, over two years (2018-2019), my visits to Arctic Yakutia took place in summer, spring, autumn, early winter and late winter. Only in the coldest months of January and February (when temperatures drop below -50°C) did I not engage in fieldwork, as not only would it have been challenging for me to survive such cold, but it would also have been difficult to get to the field site as flights are often cancelled due to the extreme weather conditions. I also lived in Yakutsk for about two months, interviewing governmental authorities in the fields of game management, ecology and agriculture. I also collected archival materials about reindeer herding, hunting, predator management and ethnography on the Eveny and Yakuts in the Archives of the Yakutsk Scientific Centre of the Siberian Branch of the Russian Academy of Sciences (YANTS SO RAN), as well as the National Archives of the Republic of Sakha (NARS) and Pushkin's National Library of Yakutsk. I initially categorised and analysed the huge amount of ethnographic material that I collected during my fieldwork in Yakutia by applying MAXQDA software, a package for qualitative and mixed methods research.

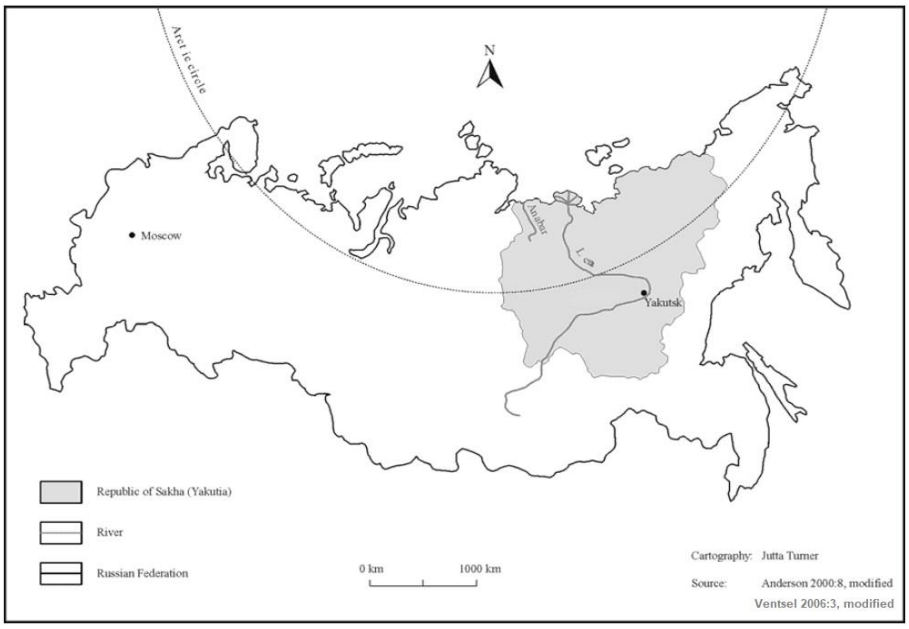
I would like to note that this dissertation contains only those original names and surnames of people who agreed to be mentioned by their real names. The names of other participants (whose consent could not be obtained due to the impossibility of contracting them on the taiga after the field research) were replaced by Russian names beginning with the same letter. However, other than those mentioned above, most contacts in this dissertation are simply

referred to as reindeer herders/hunters of Arctic Yakutia. This generalization is used in order to not unnecessarily reveal real names and also to avoid "overloading" the text with an abundance of names that could lead to confusion.

1.3 Overview of the fieldwork site: The Republic of Sakha (Yakutia)

The Republic of Sakha (Yakutia) (see Figure 1) is the largest Russian region in the Far East occupying a territory of 3,103,200 sq. km, a size comparable to India. Yakutia is located within the Arctic Circle and the Subarctic Zone of Eastern Siberia. The land is divided by the vast Lena River that flows for a total of 4400 km, emptying into the Arctic Ocean (Takakura 2015, 24-29). Administratively, the land of Yakutia consists of 35 national administrative units (districts), called *ulusy* in Sakha language (see Pakhomov 1999, 6-9). The capital city Yakutsk and the centre, as well as southern districts of the Republic of Sakha, are the most densely populated. However, Yakutia is inhabited by a population of only one million (with density of just 0.31 persons per square kilometre in rural areas).

Figure 1. Russia and the Republic of Sakha (Yakutia)



Turkic-speaking Yakut people (Sakha) make up a third of the whole population (Vitebsky 2005, 38), with Yakut people dominating in Yakutsk

and in the central parts of the Republic. From historical times, Yakuts have been pastoralists and horse and cattle breeders. Low in numbers, other nationalities of indigenous peoples live mostly in eastern and northern regions, traditionally subsisting on hunting, fishing and reindeer herding (see also Ventsel 2004, 2-6). It is supposed that the Yakuts migrated from their original area of settlement in the vicinity of Lake Baikal in South Siberia to the central Yakutia regions during the thirteenth to fifteenth centuries (see Pakendorf et al. 2006). Migrating with their horses and cows, Yakuts introduced the tradition of raising cattle to northern areas. However, during their migration and subsequent expansion, the ancestors of the Yakuts settled in territory originally occupied by the Tungus-Manchurian tribes of Evenki and Eveny, as well as the Yukaghirs, thus pushing them to the north and east (See Burykin 1992, 3-13; Pakendorf et al. 2006). Therefore, Yakuts have absorbed and mixed with these local hunter-gatherer tribes and expanded their territory over time (see also Gurvich 1977, 3-8). Although Yakuts have maintained their cattle and horse-breeding lifestyle across wide stretches of their area of settlement, this was not possible in the northern tundra/taiga belt, forcing them to switch to nomadic reindeer herding as practised by the Tungusic-speaking Evenki and Eveny (Pakendorf et al. 2006). At present, as the population of Yakuts exceeds 50,000 registered members, the limit to be classified as a minority group (see also Vitebsky 1996, 94), Yakuts are not recognized as one of the minority peoples of the North that have special status and privileges (e.g. exceptional hunting rights, governmental subsidies). The largest recognised indigenous minorities of the Russian North in Yakutia are the Tunguso–Manchurian speaking Evenki (population 15,100) and Eveny (population 10,532). There are also a number of smaller minorities - the Chukchi, the Yukaghirs and the Dolgans (see Ventsel 2004, 4-5), each with populations numbering less than 1000.

Yakutia landscapes are distinguished into two major ecosystems, the taiga and the tundra. However, in terms of different climatic conditions for reindeer herding in Yakutia, a number of natural zones can be distinguished, such as tundra, forest-tundra, mountain taiga and taiga. For instance, the areas of my fieldwork (Eveno-Bytantaiskii and Tomponskii districts) are prescribed to mountain taiga zones (see Daianova et al. 2017). In general, the climate of Yakutia is characterized by cold winters and short relatively warm summers. Temperatures drop below freezing for an eight-month period from October to April (Takakura 2015, 24-29), with average winter temperatures dropping to about -50°C, though -60°C is not unusual. Most people in Sakha are very proud of the fact that the negative temperature pole of the northern hemisphere, where the temperature can drop as low as -72 °C, lies in the

eastern part of the Republic in the Verkhoianskii Mountains (see Ventsel 2004, 2-6). The low temperature is related to the relative lack of wind. Meteorological stations in the two small towns of Verkhoiansk and Oimiakon compete to record the lowest ever temperature in the northern hemisphere, both making claims for this figure (Vitebsky 2005, 41). Although the climate of Yakutia is marked by extreme cold, there is comparatively little snow cover due to the low precipitation (see Takakura 2015, 24-29). Snow in the central parts of Yakutia melts in early May, while winter starts at the end of October with the falling of the first snow. In the northern parts, the last snow melts only in the middle of June and returns again in the middle of September. However, these seasonal differences vary in both the north and the south of the country. The polar night starts in November and ends around the end of February or in the first half of March. The spring in northern parts begins in April when the polar nights end. From the second half of April, the polar days begin and the sun shines 24 hours a day, this continuing until the beginning of September. The average summer temperature varies between +38°C and +40°C in the central part of Sakha and +25°C in the north (see Ventsel 2004, 2-6).

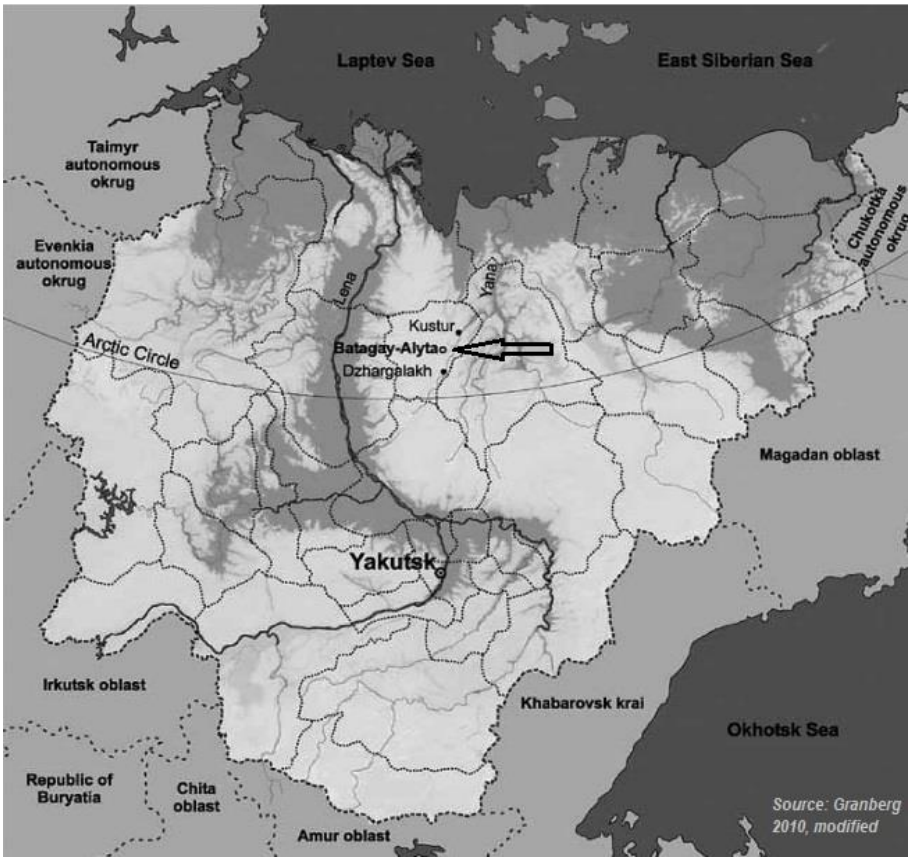
1.3.1 Eveno-Bytantaiskii district and village Sakkyryr (Batagai- Alyta)

The district (see Figure 2) is located within the Arctic Circle in Northern Yakutia at the eastern foothills of the Verkhoianskii mountains, within the upper-middle basin of the River Yana. The territory occupies 55,200 km², a district almost comparable in size to my native country Lithuania (65,300 km²). The Verkhoianskii Mountains range runs in an unbroken chain northward to the Arctic Ocean and is the coldest inhabited place on earth with winter temperatures falling to -71°C, a figure only beaten by a site near the South Pole in Antarctica (see Vitebsky 2005, 40). The extreme and harsh Arctic environment of Eveno-Bytantaiskii district is home to 2994 (according to 2020 data[5]) indigenous people with a predominance of Eveny (1774 people) and, to a lesser extent, Yakuts (1250 people). Other nationalities, such as Russians and Ukrainians, exist as small minorities in the district, though only up to 10 persons per nationality.

[5] Data on the 2020 census of inhabitants of Eveno-Bytantaiskii district was obtained from the district's administration.

Eveno-Bytantaiskii district is administratively included in the current Republic of Sakha (Yakutia) of the Russian Federation. Historically, in 1989, the district was organized during the Soviet period of Perestroika as a national district (ulus) by the autonomous movement of the Eveny, an ethnic group (see Takakura 2002). However, in the past, the Eveny population led a nomadic life travelling along mountain ridges with their reindeer and did not have permanent settlements before the 1930s (Granberg 2010, 179-193). At that time, as part of the Soviet policy towards the numerous minorities in Siberia, the nomadic peoples were organized into associations in national districts with limited self-governance (ibid.).

Figure 2. Location of Sakkyryr (Batagy-Alyta) in the Republic of Sakha



At first, the Sakkyryskii district was established in 1931, but was disbanded in 1963 and divided into the Verkhoianskii and Kobiaiskii districts. Thus, the establishment of the Eveno-Bytantaiskii district in 1989 should be viewed as the reorganization of the former Sakkyryskii district (see Boiakova et al. 2012). According to Vitebsky (1990, 353), the autonomous movement for

establishing the Eveno-Bytantaiskii district produced a discourse of a "more generalized package of Eveny culture" as exemplified by the "focal image" of reindeer herding, which was usually regarded as part of the traditional culture of the Eveny (quoted by Takakura 2002). Vitebsky (1992, 225) also explained that Yakuts were the dominant ethnic group in the local community rather than the Eveny, but for Yakuts the identity of the Eveny was sustained by a combination of their distinctive occupation of reindeer herding and long-established government policies granting special privileges to the smallest ethnic minorities (ibid.). Furthermore, Vitebsky (ibid.) mentioned the assimilation of the Eveny into the Yakuts during the Soviet period and the reverse situation after the movement for establishing the Eveno-Bytantaiskii district. Thus, the identity division between the Eveny and Yakuts is not always sharp, with many people who claim one identity also having ancestors of the other (see Vitebsky 2005, 415).

Figure 3. The village of Sakkyryr (Batagai-Alyta) (photograph by Jefanovas 2018)

The administrative centre of the Eveno-Bytantaiskii district is the central village Sakkyryr (Batagai-Alyta) (see Figure 3), which was constructed as a Soviet-style settlement and includes the historic nomadic territory of the Eveny clan (see Takakura 2002). The village community itself was made up of both the Yakut and the Eveny, but the two ethnic communities were separated until the 1917 Revolution (ibid.). While under Soviet rule, established by the October Revolution of 1917, the Communists sought to break tribal ties by developing an identity based on belonging to a broader

group of so-called “native Soviets”, “clan Soviets” and “nomad Soviets”, these categories then transformed into “village Soviets” for integration into the Soviet regime (see also SSorin-Chaikov 2000, 45-57; Takakura 2002). Thus, two ethnic communities, which were separate before the 1917 Revolution, were amalgamated into a national district. Furthermore, the village Sakkyryr was established as a unit with a socio-economic foundation irrespective of either Yakuts or Eveny nationality, this enhanced over the course of time by an increase in inter-ethnic marriage (see ibid.). Although it was taken that people with Eveny nationality would tend towards reindeer herding while Yakuts favoured horse and cattle breeding, most of the reindeer herders I visited during my fieldwork identified themselves as either Eveny or Yakuts or a mixture of both nationalities. Furthermore, the blurring of the nationalities has been encouraged by privileges granted to the Eveny as a minority. The designation of Eveny nationality in a passport affirms privileges such as in education and the issuing of special hunting licenses including for animals listed as protected species [Rus. *Krasnaia kniga*]. Thus, Sakkyryr villagers who had some kinship connection to Eveny, tended to register their child as being of Eveny nationality.

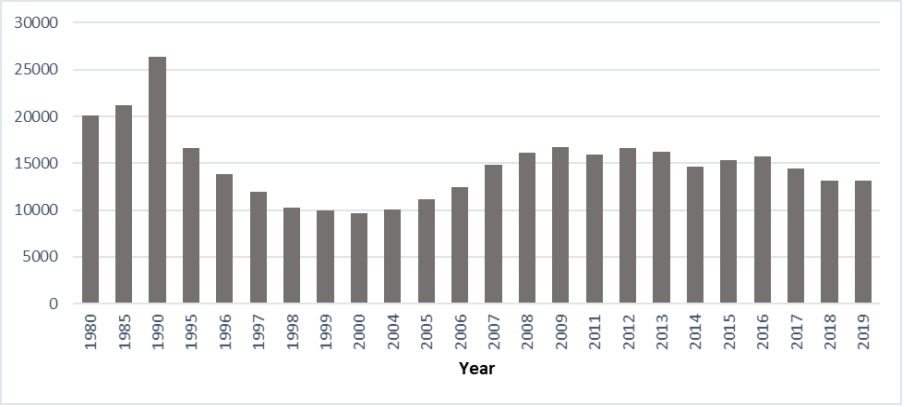
However, most of the Soviet chairman in the Eveno-Bytantaiskii district were selected by the Yakuts - not the nationality designated of the national district. Historically, the Yakuts also played a dominant role in establishing socialism in Yakutia, as well as in the district (see Takakura 2002). Furthermore, the Yakut language was developed as the predominant language in the education system (see Forsyth 1992, 319), while the Eveny language almost vanished from the village community. The mother tongue of the Eveny belongs to the Tungus-Manchu language family. However, with the expansion of Yakut traders over the past 300 years, Sakha has become the lingua franca across north-east Siberia, operating at a level between local languages and Russian (Vitebsky 2005, 415). With the end of Communist times, the Eveny language was introduced in various classes within school systems[6], but many pupils nevertheless perceived it as a difficult foreign language (see also

[6] After the pre-war creation of alphabets and textbooks, native languages in Siberia had been neglected in the 1960s and 1970s to the point where some had become almost extinct (Vitebsky 2005, 186). Among the Eveny too, the 1960s generation was the one with the least knowledge of their language (ibid.). By 1990 however, in a new spirit of cultural revival throughout the country, pressure from native activists had brought language learning back into schools (ibid.).

Takakura 2002). However, at the time of my field research in the Eveno-Bytantaiskii district, there were a few teachers in Sakkyryr school who taught in the Eveny language.

Economically, Eveno-Bytantaiskii district was established on the basis of the *sovkhoz* "Leninskii", mainly sustained on reindeer herding, e.g. there were 21,326 reindeers in 1988, accounting for 87.8% of all livestock (reindeers, horses, cattle) in the district. The *sovkhoz* was also involved in fur animal farming, hunting, horse breeding and the breeding of the endemic Yakutia cow breed called "*Sakha Ynaga*". After the breakup of the Soviet Union in the 1990s, the *sovkhoz* "Leninskii" went bankrupt, but was reorganized in 1998 into the "Leninskii" and "Bytantai" Municipal Unitary Agricultural Enterprises (MUP), specializing in reindeer herding and horse breeding. One more agricultural branch, the State Unitary Agricultural Enterprise (GUP), called the "*Sakha Ynaga*", was organized for the breeding of the cattle.

Figure 4. Dynamics of reindeer numbers in Eveno-Bytantaiskii district (1980-2019)



Sources: Boiakova 2012; Report on the number of reindeers in Eveno-Bytantaiskii district. Provided by the ADEBD

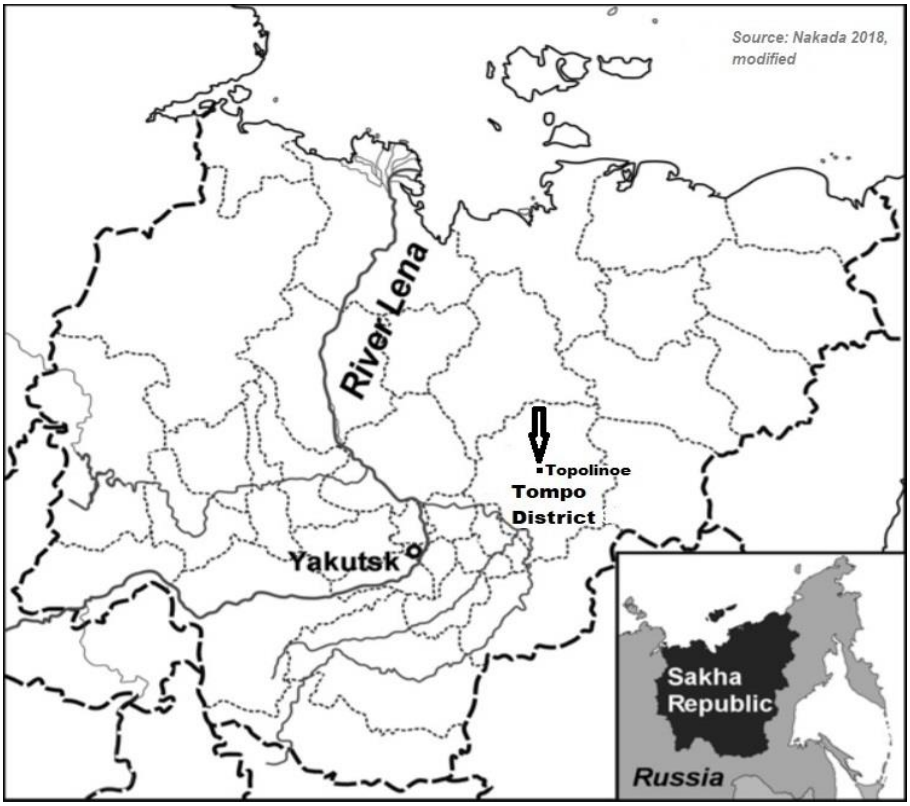
During the transition period from socialism to the market economy, the main agricultural activity based on reindeer herding declined almost threefold, from 26,329 heads in 1990 to 9650 in 2000, an all-time low number (see Figure 4). However, along with the adaptation of the indigenous people to the conditions of the market economy, the number of reindeers in the district gradually increased and in recent years has ranged between 13,000 and 14,000. At the time of my fieldwork, the MUP "Leninskii" continued to function as one of the main supporting large enterprises of the region's economy, sustaining 38.1 % (2019) of reindeers in the district (see Neustroeva et al. 2020, 220-245). The same time, 22.3 % of reindeers were sustained in agricultural cooperatives and 39.6 % in other forms of commercial enterprises:

private companies, entrepreneurs, clan communities - *obshchiny* (the Russian plural) (ibid.). Hence, as of 2019, the main agricultural economic activity of the residents of Eveno-Bytantaiskii district was based on reindeer herding, also accounting for around 80 % of all livestock, while horse and cattle breeding very much came second (based on statistics of the ADEBD).

1.3.2 Tomponskii *Nasleg* and village Topolinoe

Tomponskii *Nasleg* is a rural locality located in the central-eastern part of the Sakha Republic covering 96 533 km^2, which is comparable to the area of Hungary.

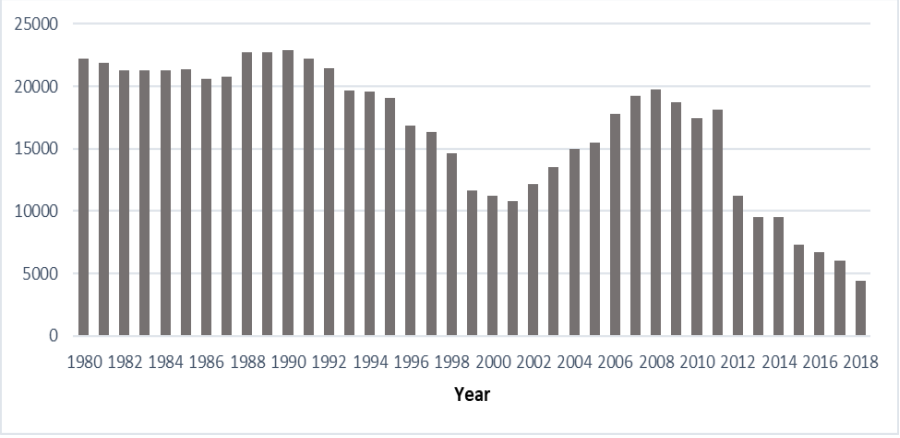
Figure 5. Tomponskii district and the village of Topolinoe in the Republic of Sakha



Tomponskii *Nasleg* is an administrative unit constituting more than two-thirds of the whole area of the Tomponksi National district (see Figure 5). The territory is crossed by the Verkhoianskii mountain chain and is covered with sparse larch taiga and, in the higher treeless areas of the mountain ranges, by tundra habitats. The Tompo River is the main river in the area and gives its name to the Tomponskii district.

Most of the inhabitants of Tomponskii *Nasleg* (915 people, according to the 2010 census) are of indigenous Eveny nationality residing in the village of Topolinoe (see Figure 7), which is the only settlement in the whole *Nasleg* (see Nikolaev 2015, 5-7). Depicted on the district's contemporary coat of arms as a reindeer with proudly raised head and huge antlers, Tomponskii *Nasleg's* claim to fame is the former reindeer farm - the *sovkhoz* "Tomponskii" - which in the 1980s achieved the hight economical results in the YASSR. The number of reindeers in the *sovkhoz* before the collapse of the Soviet Union ranged over 20,000 heads, but declined fourfold in the times of the market economy to an all-time low (see Figure 6). At the time of my fieldwork (2019), 75.6 % of reindeers (according to Neustroeva et al. 2020, 220-245) in the district were sustained in the agricultural production cooperative "Factoria Tompo". Meanwhile, 24.4 % of reindeers were kept by other commercial enterprises (private companies, entrepreneurs, clan communities *obshchiny*) (ibid.).

Figure 6. Dynamics of reindeer numbers in Tomponskii district (1980-2018)



Sources: Nikolaev 2015; Report on the number of reindeer in Tomponskii district. Provided by the administration of the reindeer herding cooperative "Factoria Tompo"

Set on the banks of the River Tompo and established by the *sovkhoz* chairman Vasilii Kladkin in 1976, the administration of the *sovkhoz* Tomponskii, as well as the village Topolinoe, occupy the grounds of a former gulag from Stalin's times that had been closed in 1955. During my fieldwork, the old barracks of the gulags were still used as a part of the village infrastructure for keeping vehicles and storing various materials. During many conversations I had in the village, people were proud of two things. The first was that the Eveny from Topolinoe still spoken in their native tongue, while the Sakha language are spoken less there than in other districts of Yakutia (see

also Vitebsky 2005, 415). Secondly, villagers were proud that Topolinoe had been the first and most innovative settlement to be established for reindeer herders since Soviet times. According to Nadezhda Kladkina, the contemporary head of the Tomponskii *Nasleg* administration, Topolinoe was famous during the *sovkhoz* Tomponskii times, both in Yakutia and in Russia, even abroad. The village had been visited several times by reindeer herding managers from Finland, Norway, Canada and China. Various travellers, journalists and scientists from 21 countries had also visited the village and farm to learn about reindeer management. Indeed, according to Vitebsky (2005, 38), who visited the village in 1988, Topolinoe was the so-called showcase example, with the most advanced facilities used to impress foreign visitors and to feature in articles by western travellers and journalists.

Figure 7. The village of Topolinoe (photograph by Jefanovas 2019)

The village was built for an expected 1.5 thousand residents of various nationalities from the Soviet Union who would work in the Sovkhoz. Twelve wooden houses were also built with 12 apartments each, as well as two wooden houses with eight apartments each. Houses were supplied with many facilities, such as hot water, central heating, sewerage, landline telephone communication and both TV and radio. A school was also built for 320 pupils, plus a boarding school for 100 children of reindeer herders, along with a library, hospital, post office, shops, "house of culture", sports facility, freezers for storing meat, and an industrial processing workshop for reindeer products.

There was also an airport, boiler room and a power station. During my fieldwork in 2019, parts of the Soviet infrastructure, especially the farm structures, were in ruins, while other parts had been renovated, for example new modern living houses had been built to replace the crumbling wooden buildings of Soviet times.

1.4 The argumentation and theoretical context

This ethnographic study explores the social relationships between the reindeer herders and hunters of Arctic Yakutia and non-human beings, i.e. wolves, who live in close proximity and share their taiga and mountainous tundra environments. In this thesis, I explain how these social relations can be perceived in terms of aggressive interaction and peaceful existence which are shaped by reciprocity and based on interspecific communication within the shared landscapes. I will demonstrate how these interactive modes (aggressive interaction and peaceful existence) are indeed intermingled and compose a complexity of human–predator relations that my study will reveal through an analytical conception of cohabitation. The term cohabitation is a commonly used ecological metaphor describing the evolution and ecology of different species that inhabit the same area (for the ecological meaning of cohabitation of species, see also Lawson and Nguyen-Vannuoroda 2020; Lestel et al. 2006; Harper et al. 1960). For instance, Boitani (1995, 11) studying wolf biology/ecology describes cohabitation as a long-term association between the two species: *"men and wolves have had the opportunity to observe one another and to develop strategies in order to live together, generally avoiding the establishment of conflicts which are best contained through long-lasting associations between the two species, to allow them to learn about each other and find a compromise".* However, in this study, I am not about to slip into ecological functionalism in which humans, animals and landscape comprise an ideal equilibrium. More, I adjust and widen this conception aiming to grasp not just the associations between the two species in the ecological meaning, but to describe the social interaction between humans and predators in Arctic Yakutia. The subsequent portion of the text summarizes the relevant ethnographic literature reviewing the relationships between indigenous people and animals in different parts of the circumpolar and boreal forest regions (Russia and North America), as well as a few examples from Amazonia. Giving examples of the anthropological studies carried out by a group of scholars, I have the intention to introduce the conceptual instruments that I apply in this study to shape the human-wolf social relations in Arctic Yakutia.

An important inspiration for the thesis was a draft of an article proposed by Brandišauskas (in print) that describes how wolves are perceived by the Evenki of South Siberia as other than human persons having individual characteristics which are learned by indigenous people through an active process of neighbouring socialization and tensions, as well as experiences of sharing common living places. Wolves are shown as potential partners of humans and relations with neighbouring wolves are based on mutual adjustment and acknowledgement of social norms as well as reading each other's intentions (ibid.).

Considering the interrelationship of reindeer herders/hunters of Arctic Yakutia and wolves as social, this study applies the cornerstone idea in animism[7], the "personhood", which is the indigenous perception of animals as non–human persons (beings). However, other-than-human persons can be perceived in a variety of ways among different indigenous communities. For instance, it might be described as a model of agency and morality, as well as a concept of a life force or energy, the inner essence, the self or the conscious entity. One of the more influential descriptions of "other-than-human personhood" in anthropology was given by Hallowell (1960) who showed that according to the cosmology of North America indigenous Ojibwa, persons can take a variety of forms, of which a human being is only one, the persons can also appear in the shape of rivers, trees, souls, animals and spirits (quoted by Anderson 2017, 133-143). Meanwhile, in Siberia, the indigenous Orochen hunters of Zabaikal'ia and South Yakutia perceive that humans and non-humans (material objects, places, animals and spirits) have a "living energy"

[7] Animism is one of anthropology's earliest concepts, if not the first. It was introduced by Tylor (1929: 424) as a way of characterizing the simplest form of religious belief, the belief in spiritual beings (quoted by Willerslev 2007, 1-3). Animism was understood by Tylor as a "magical" philosophy about the workings of the world, though it was taken as erroneous ideas of the primitive (see Willerslev 2007, 15-19). The "primitive" was incapable of making a rigid distinction between imagination and reality, and between subjective and objective realms of being (see ibid.). However, the stream of anthropological research which gave new insights to animism was developed in the 1980s by the anthropologist Descola (1992; 1996) who investigated the ontology of Amazonian aboriginals. Descola took his inspiration from the the structuralist Lévi-Strauss (1968) who categorized human–animal relations. The theory of animism developed by Descola implies that people attribute social features, as well as the status of a person, to all animated and/or inanimate beings in their environment. In such a universe, the intrinsic qualities of beings remain the same, whereas differences manifest themselves especially in bodily appearances (see Laugrand and Oosten 2016, 11-12; Bird-David 1999).

(called *musun* in Orochen) that can impact their health and ability to move or influence experiences of luck (see Brandišauskas 2017, 3). Therefore, Brandišauskas (ibid.) showed that human and non-human beings, whether animals or spirits, are believed by Orochen to have a "soul" (*omi* in Orochen) that can manifest itself through intentionality, volition and cognitive abilities. According to Alekseev (2008, 42-45), Yakuts believe that mountains, lakes, rivers, woods and even lonely trees have their spirits. Yakuts call these spirits *ichchi* which have many-faceted meanings, e.g., spirit-master, spirits dwelling in things and natural phenomena, inner strength, essence. These non-humans can be benevolent or malevolent concerning people by bringing luck or misfortune, illness or even death (see ibid.). Vitebsky (2005, 259-260) is an important author in my study because he investigated the Eveny reindeer herders/hunters of Arctic Yakutia and described their animistic worldview in which mammals, birds, fish, rivers, lakes and forests are alive with their own souls or spirits, giving them some degree of consciousness. Vitebsky (ibid.) showed that the understanding of the meaning of the spirit among Eveny is wider than the European sense of the soul. Eveny perceive the life force in animals, places and tools. For instance, tools are the life force that represents efficacy, the spirit of the knife or gun is manifested through its ability to cut or shoot (see ibid.). Thus, because non-human beings have consciousness, they can also have intentions: an animal may cooperate with humans or be recalcitrant, mountains and rivers may nourish or kill people (see ibid.). According to Vitebsky (ibid.), similar animistic ideas among the indigenous societies can be observed around the globe, from the Amazon to Borneo to the Canadian Arctic.

Indeed, Nadasdy (2007, 25-43) showed that the people of Kluane, indigenous hunters of the south-west Yukon (Canada), conceive animals as spiritually powerful beings capable of conscious actions, who can think, communicate and learn. In this regard, dealing with non–human animals is not fundamentally different from dealing with fellow humans. Kohn (2002; 2013), drawing on research among the Runa of Upper Amazonian (Ecuador), focused on the relations of these indigenous people with the non-human Selves (animals and spirits) inhabiting Amazonian forests. According to Runa cosmology, all beings (humans and non-humans) engage with the world and with each other as Selves - that is, as beings that have a point of view (see Kohn 2007, 103-131). Selves are defined by Runa as interactive, conscious, soul (*alma*, expressions by Runa) possessing beings having the capacity to perceive other Selves and to act on those perceptions (see Kohn 2002, 174-181). For instance, animals possess a soul because of their abilities to "become aware of" or to notice those beings that stand in relation to them as predators

or prey. Following this logic, losing the capacity to recognize those other beings that inhabit the cosmos as Selves means losing the soul, what Kohn calls soul blindness (see Kohn 2007). In this thesis, I will use Kohn's idea of non-verbal communication between the conscious Selves (humans and non-human animals), showing how wolves and herders/hunters of Arctic Yakutia can read each other's signs and respond adaptively.

Outside of Amazonia, the indigenous people from my fieldwork in Arctic Yakutia often associate the agency of non-human beings (especially predators) with their ability to act vindictively against humans. For example, herders/hunters of Arctic Yakutia believe that treating predators improperly (e.g. killing them in excess) can result in retribution from an animal, his soul (herders/hunters use Russian word *dusha* or *dukh*) or spirit-master [Rus. *Khoziain*]. Indeed, the belief that different species of animals have their own spiritual "owners" or "masters" is widespread among the tribes of northeastern Siberia (see Hallowell 1926, 81-87). The essence of the animal is perceived by herders/hunters of Arctic Yakutia as a spiritual force residing as embodied and beyond the body as an ambulating soul. However, it is also perceived that an entity/deity called the spirit-master of animals [Yak. *Baianai*] can act through the animal. Thus, in some instances, the perception of the agency of an animal (his soul) and the agency of a spirit-master/deity might mix. According to Eveny reindeer herders/hunters, the strongest power of *Baianai* is manifested in the bear (see also Vitebsky 2005, 264). It is believed that *Baianai* can send, order or navigate a "killer bear" to punish humans. Thus, reindeer herders/hunters perceive that Baianai rules wild animals and also can influence the destiny of humans and their interaction with animals.

Social relationships between herders/hunters of Arctic Yakutia and predators should be considered in the context of the shared interspecific landscapes of mountainous taiga and tundra that compose the common place where the predators, livestock and humans live in close proximity, meet and interact. Although the common landscapes are perceived by indigenous herder/hunters of Arctic Yakutia as a continuum where household sites interrupt the taiga and vice versa, I classify these with the anthropological term "domestic places", this used in investigating circumpolar reindeer herding (for the broader description of domestic landscapes, see also Anderson 2017, 133-149; Anderson et al. 2017; Brandišauskas 2012; Davydov 2014a; 2014b; 2013). This concept will allow me to better underline the places where interaction with predators is likely more intensive in comparison to surrounding landscapes. Thus, the grounds where domestic reindeers are grazed, bred, watched over, trained for harnessing onto sledges and slaughtered for utilization by herders/hunters, I define here as the domestic

landscapes/places. Domestic places in large shall be understood as build-up taiga structures such as reindeer herding encampments with log cabins, enclosures (corrals) and food storage platforms. These nomadic encampments with pastoral architecture are not separate or "fenced-off from nature" places, but are open structures built for temporal living and herding, not dividing animals from people. According to Anderson (2017, 133-149), reindeer herding architecture in circumpolar regions is a form of pragmatic attention to the environment that is never separate from it. Therefore, the meaning of domestic landscapes in the context of Arctic Yakutia pastoralism shouldn't be perceived in the European sense of enclosed cattle husbandry where domestic animals are kept in captivity and dominated by people. Nomadic reindeer herding in circumpolar societies is characterized by livestock autonomy with loose human intervention, considering that "wild" and "domestic" are relative categories (see also Stepanoff et al. 2017; 2012; Anderson 2014, 11–27; Davydov 2013; Donahoe 2012). However, additionally, in the definition of domestic places in Arctic Yakutia, I would like to include Siberian villages with the adjacent grazing areas for the livestock, since these places are also incorporated into the taiga-tundra landscapes and, furthermore, the livestock in these areas are also attacked by wolves.

Domestic landscapes in the Arctic of Yakutia are places where the social and economic goals of reindeer herders/hunters clash with the intentions of the predators to predate the livestock. Meanwhile, the interest of the people is to defend the semi-domestic reindeers, the base of human subsistence, from predator attacks. In this sense, the relational intensity of the herders/hunters of Arctic Yakutia and predators might be defined by the idea of proximity – the physical as well as the temporal distance between humans and predators, or, in other words, the distance of predators from the domestic places (for the idea of human-animal proximity, see also Oehler 2016, 12-21). The physical presence of predators or their traces in the herding or household area is treated by the herders/hunters of Arctic Yakutia as an indication of potential predation of the livestock. In such cases, predators are usually pursued and destroyed. However, these human-predator relations are temporal in the meaning of fluctuations over the seasons. For instance, in Arctic Yakutia, bears would primarily be an issue for herders/hunters in the spring when bears waking from hibernation attack reindeers to re-establish their energy with high nutrient food. By contrast, wolves also attack reindeers throughout autumn and winter, as their young come of age and thus require more food to sustain.

Henceforth, this ethnographic study shall consider the landscape of Arctic Yakutia as an arena that bounds herders/hunters and different species of animals into complex social relations which I would like to discuss further by

reviewing two theoretical directions in the investigations of human-animal relations in circumpolar regions. Anthropological theories in this study area contrast hunting societies (characterized by animist cosmologies and relations of reciprocity with non-human beings-animals) and herding societies (that consider domestic animals as property at their owners' disposal) (see also Stepanoff et al. 2017). Anthropological theories describing circumpolar hunting societies usually characterize animal hunting as a long-term relationship of reciprocal exchange between animals and the indigenous humans who hunt them (see Nadasdy 2007, 25-43). Some ethnographers have suggested that indigenous northern hunters conceive animals as other-than-human persons who surrender themselves to the hunters (see Nadasdy 2007, 25-43; Hallowell 1960). Thus, animals are seen as offering themselves to be killed. By accepting such gifts from their animal benefactors, hunters incur a debt that must be repaid through the performance of certain rituals such as food taboos, ritual feasts and prescribed methods for disposing of animal remains, as well as injunctions against overhunting and talking badly about animals (see Nadasdy 2003, 88–94). These thoughts echo with Ingold's (2000, 72–73) idea about trust and reciprocity in hunting societies, that is that the hope and expectation that the other partner - the animal - will do likewise and respond in ways that are favourable to the hunter. Hence, by performing rituals and ensuring that animals are killed and consumed properly, their souls will then reincarnate. As such, circumpolar hunters can then trust that the animals, in turn, will continue to present themselves to be killed (see White and Candea 2018). Although the reciprocity between humans and non-human beings (for reciprocity see also Brightman 2002; Tanner 1979) is an important point in my study describing the very principle of mutual interspecific interaction, along with other authors (Stepanoff et al. 2017, 57-81; Willerslev et al. 2015), I would like to doubt that animals could really give themselves freely so that hunting would be essentially non-violent reciprocal sympathy and "sharing" between hunter and prey. The authors (ibid.) note that, in fact, wild animals run away from hunters rather than surrender themselves. Thus, it seems that the claims of indigenous hunters that animals intentionally present themselves to be killed, which are then passed on by anthropologists, represent an ideological claim rather than the real course of things during an actual hunt in reality (see Willerslev et al. 2015). Along with these insights into the animal hunt, this study considers the relationship between humans and predators in Arctic Yakutia as an embodiment of the everyday practices that are not concerned with the metaphorical meaning of animals giving themselves to the hunters, but rather with interspecific interaction that also includes aggressive relations (trapping and killing animals with physical force). Brandišauskas

(2017), in his book focussed on the Orochen hunters of Zabaikal'ia, also re-examines the ideas found in various Siberian, Inner Asian or Canadian ethnographies of hunters and gatherers that have provided iconic descriptions of how animals give themselves up to hunters as long as they are treated with respect. Brandišauskas (2017, 1-15) demonstrates that interactions between humans and animals (as well as spirits, material objects and places) can be perceived as "complex relations that involve cooperation, but also contest with other beings, as well as domination, which creates experiences infused with anxiety, ambiguity and risk". He stressed (Brandišauskas 2017, 94-98) that "*nowadays the life in the taiga necessarily involves a perpetual, risk-generating contest of aggression between humans and wolves, who can cause heavy losses to reindeer herds*". Brandišauskas (2017, 189- 217) also admitted that in the times before Soviet rule, the Orochen perceived their relations with bears and wolves as cooperation based on respect, autonomy and sharing between humans and animals. However, today, living in an environment marked by shortage and State constraints, Orochens have to dominate and even poach animals just to survive (see ibid.). Brandišauskas (2017, 36) explained that the lives of Orochens had come to depend not only on exchange and cooperation with other humans and non-humans, but also on taking advantage of any opportunity. This often meant acting aggressively against others (human or non-human), engaging in covert practices or refusing cooperation. Hence, in my study, I aim to elaborate further the idea of Brandišauskas on ambiguous relationships between humans and non-human beings and demonstrate how such interspecific interaction can be integrated into the experiences of reindeer hunters/herders of Arctic Yakutia and their relationships with wolves.

Ingold (2000, 72–73) described domination as a form of human-reindeer relationship (found among circumpolar pastoralists) which is based on the presumption that domestic animals lack the capacity to reciprocate and care about themselves and therefore control over them has been relinquished to humans (quoted by White and Candea 2018). Hence, the autonomy of animals is curbed by means of force (whips, bits, hobbles), and these relations are characterized by the exercise of human will over the animal, rather than by reciprocity, like in hunting societies (see ibid.). Meanwhile, discarding the description of North Asian herding exclusively in terms of "domination," other authors such as Beach and Stammler (2006), Takakura (2015, 7-8), Vitebsky and Alekseev (2015) have preferred to use the biological notion of "symbiosis" (quoted by Stepanoff et al. 2017). They claimed that Arctic herders often live in close proximity to their livestock, thus establishing with their animals an "intimate partnership" that is the basis of a "symbiotic

domesticity" (see also White and Candea 2018). However, Stepanoff et al. (2017), in the article "Animal Autonomy and Intermittent Coexistence", argued that the North Asian herding system consists not so of symbiosis but rather to "maintain a balance between two possibly conflicting tendencies: animal autonomy and animals' disposition to engage in cooperative interaction with humans". The animal autonomy here is understood as a part of the indigenous herding system in North Asia where livestock are often let loose, with rare supervision and without food supplies, shelter, fences or protection from predators (see ibid.). Meanwhile, Safonova and Santha (2013), working among the Evenki of Buriatiia, described human-animal cooperation as a "companionship" - a mode of relations that brings together, in temporary cooperative interactions, participants who retain autonomy the rest of the time. While the cooperative interaction between humans and reindeers presupposes at least intermittent benefit for both relational parties, the human–predator relations seem not beneficial for reindeer herders/hunters, bearing in mind the predation that predators cause to livestock and the competition for wild game. I would like to agree with Vitebsky (2005, 270-273) who showed that since indigenous people of Arctic Yakutia first began hunting wild reindeer, they have been in competition with the wolf. While the domestication of the reindeer around 2000 years ago must have brought about a reinterpretation in the eyes of their human minders, the wolf changed from competitor to the looter (ibid.). Hence, I would like to think that the notion of cooperation, describing mostly human-reindeer relations in the circumpolar regions, takes a different meaning in the context of human–predator interaction. As the indigenous people of Arctic Yakutia do not cooperate with wolves or bears, it is difficult to say the "partnership" has a mutual benefit. In my study, instead of considering the notion of "cooperative partnership", I suggest that humans and predators can establish temporal peaceful existence which is always mingled with aggressive interaction.

By discussing the human-predator peaceful existence as an integral part of cohabitation, my study follows the works of prominent Russian ethnographer Shirokogoroff (1929; 1935), who in the 20th century investigated the social organization of the northern Tungus. On the one hand, the author (1929, 42-44) described the Tungus–predator interaction as competition for places, writing that sometimes wolves compelled the Tungus to change their locality. Likewise, bears in some places were so numerous and dangerous to man that the Tungus migrated elsewhere (ibid.). On the other hand, Shirokogoroff (ibid.) also showed that "peaceful existence" could be established on the taiga between two parties. He explained that these relationships would be regulated by mutual awareness of the ownership of the places by human and predator.

For instance, the areas that belonged to the bears could be recognized from the marks that the predator left on a tree by biting or scratching it (ibid.). Recognizing bear marks, the Tungus would not go to war with their neighbouring predators unless they were forced to take away the territory so occupied (ibid.). Moreover, the bears would not go to the places occupied by man, as it would evoke a fight (Shirokogoroff 1935, 79). According to Shirokogoroff, the struggle between human and bear would be resolved when one of them abandoned a place, or else upon the formation of a so-called "taiga commonwealth" [Rus. *Taezhnoe obshchestvo*] that would be based on mutual dependence and regulated by norms and traditions (quoted by Brandišauskas 2017, 207). This idea of Shirokogoroff (1929, 42-44) that the peaceful existence of humans and predators can be established on the taiga by the mutual awareness of the ownership of the places marked by signs, sparked in me the initial idea of interspecific communication.

The role of communication between herders/hunters of Arctic Yakutia and predators can be metaphorically described as a bridge linking interspecies relations. To develop this concept further, I also relied on the ideas of Kohn (2013) and his call towards an anthropology beyond the human in the book "How Forests Think", this investigating the Runa indigenous inhabitants of the forest of the Upper Amazon and their semiotic relations with non-human beings. In his thoughts, Kohn strove to overcome the anthropocentrism in sociocultural anthropology and the Cartesian divide of nature/culture (nature/society) by offering to expand the boundaries of semiosis beyond symbolic human language. He argued that social theory, whether humanist or post humanist, structuralist or post-structuralist, conflates representation with human language, but non–human life forms also represent the world (Kohn 2013, 7-8). Thus, the main idea of the author was to show the human-animal relations without anthropomorphizing non-human beings, claiming that non-human animals could represent themselves in the world and communicate through non-symbolic signs, icons and indexes[8]. Applying the notion of non–

[8] According to Peirce's terminology, the icons are signs that share likenesses with the things they represent, while index involve signs that are in some way affected by otherwise correlated with those things they represent (Kohn 2013, 1-25). For example, a monkey sitting in a tree, hearing a loud crack of a breaking palm (an icon sign) can connect the event with a concomitant event in the past - an approaching predator (see ibid.). The number of such iconic associations can associate events with something else that is not sound, what is not in the present, but what can happen - for example, with danger. The connection of sound with danger is an index sign (see Kohn 2013, 33-35).

symbolic communication, Kohn relied on the work of the nineteenth-century scholar Peirce (1931) who dealt with semiotics (how signs represent things in the world). Additionally, Kohn drew on the biological anthropologist Deacon's (1997) application of Peirce semiotics to biology.

Participating in two-way communication, the herders/hunters of Arctic Yakutia and predators strive to apprehend each other's actions via the reading the non-symbolic signs of each other (e.g. footprints, the smell of gasoline, signs of traps) and accordingly respond with behavioural adjustments. Such mutual reading of human/wolf behaviour can be described as the purposeful withholding of information from each other (for the idea of human/wolf mutual reading, see also Oehler 2020, 142-160). In my study, I consider that human–predator relations in Arctic Yakutia can be perceived as mutual adaptations when the wolves strive to comprehend and overcome the intentions of hunters (to kill wolves), while hunters strive to outsmart the predator with the purpose to trap them. This study explores how wolf hunters [Rus. *Volchatniki*[9]] read the activity signs and movements of the predators to predict wolf behaviour and accordingly to adjust traps to optimal position. Meanwhile, in response, the wolves observe the traps, human footprints, odours and other marks of human actions to recognize the threats within them. Furthermore, the traps can be also perceived as a sign, an interspecific communication device, as well as an extension of the human intentions to kill the wolf. Similarly, Anderson (2017, 398-418), talking about reindeer domestication in circumpolar regions, emphasized that objects (e.g. the lasso of the herder), when wielded properly, become an extension of the mind signalling intentions as well as force. Thus, following Anderson's idea, I will show that traps intermediate in human–wolf communication in Arctic Yakutia. It is important to note that in addition to describing wolf behaviour from the point of view of my contacts (herders/hunters), I also strive to give my own experience in observing wolf trapping, as well as directly exploring the wolf's ability to comprehend the concealed threat in the traps. In such a way, I attempted to get into direct contact with the wolf, thereby making him so to speak "a primary informant".

[9] In this thesis, I use the terms "*volchatnik*" (Russian singular) and "*volchatniki*" (Russian plural) which are expressed by herders/hunters in Yakutia to refer to wolf hunters.

Other examples in my study on human-predator communication in Arctic Yakutia will show that herders/hunters apply non–lethal methods to warn predators: shooting into the air, burning fire, circling with snowmobiles to leave tracks, etc. These non-lethal methods are intended to serve as warning signs for predators to not to approach domestic places. I will also demonstrate how signs of the presence of wolves can also make reindeer herders keep a distance by driving reindeers away. Indeed, avoidance of predators as a strategy for reindeer herders was also described in other Siberian regions, for example, in the 20th century, Petri (1927) wrote that *Karagas* (Tofalars - reindeer herder/hunters of Eastern Saians) didn't use strychnine or traps for wolves when wolves appeared and attacked reindeer, but people vacated the location and quickly migrated to another area. I argue that through avoiding conflict with wolves and communicating with them through the warning signs, herders/hunters of Arctic Yakutia establish a peaceful existence with the predators in the shared landscapes. However, my investigation will also demonstrate that the indigenous people of Arctic Yakutia strive to establish peaceful existence with the realm of the spirits. According to the animistic worldview of herders/hunters (based on my fieldwork observations), reciprocal relations with the spirits can be established through a complex set of rituals connected with honouring and respecting various birds and animals. Animistic worldview of herders/hunters also include a taboo on excessive killing of totemic predators such as bears and eagles. For instance, the Eveny restrain from killing bears without urgent need (such as bears attacking humans or reindeers) as it is believed that the bear is a common "mythic" ancestor with Eveny. However, if people do kill a bear, they show respect by ritually mounting the bear's skull on a larch facing eastward, so that the gaze of the predator would be directed to the rising sun – the home of the souls. The Eveny believe that neglecting this ritual could evoke revenge in the bear's soul and that this would bring various misfortunes in exchange. I will show that the rituals performed by the herders/hunters of Arctic Yakutia in honouring killed predators can be perceived as communication with the spirits through the signs. Establishing communication with spirits, the herder/hunter strives to evade the punishment which would be meted out by the spirits for ritual negligence. Furthermore, it is believed that the soul of the killed predator can ask spirit-master *Baianai* to punish the human in revenge for the act of killing the predator. My study will show that most, but not all, reindeer herders/hunters in Arctic Yakutia engage in reciprocal rituals with the spirit-master *Baianai* that supervises relationships between humans and animals. However, the human-animal social relations in Arctic Yakutia are influenced not only by the animistic worldview of herders/hunters, but are also regulated

by the State. This ethnographic study considers the regulation of the State as a political-economical influence which penetrates the everyday life of the indigenous people of Arctic Yakutia as well as their relations with the predators. The State is represented by the policymaking authorities of game management and agriculture, which apply their economic regulations in the rural areas through local institutions (administrations of the national districts, municipal organizations, local game management authorities). Although the State is perceived by local inhabitants to be located outside the landscape, its regulation is sensed on the land through the economy. For instance, the State provides subsidies per reindeer head to maintain the traditional reindeer herding economy in Yakutia. Additionally, the State organizes the regulation of wolf population, this influencing the economic losses to reindeer farming. For instance, the government of Yakutia established bounties per killed wolf for the purpose of encouraging wolf hunters in the districts. Additionally, mobile brigades of professional wolf hunters were organized by the game management authorities to be sent to the districts to combat wolves. Management of predator populations should be understood as the State regulating wolf numbers, but not aiming for full range extermination - the eradication of the species would be both impossible in the vast taiga and tundra landscapes of Arctic Yakutia and enormously expensive to even attempt. However, during Soviet times in socialist Yakutia, the policy of the Soviet state concerning predators was different - enormous efforts and resources were thrown at the extermination of wolves as a species.

To give an understanding of how human–predator social relations have changed historically, this study examines the impact of Soviet policy and economic factors on these interactions. The Soviet period had a most significant socio-cultural influence on predator perception among the reindeer herders and hunters of Arctic Yakutia. Soviet ideology strove to annihilate the animistic worldview of indigenous herders/hunters and establish aggressive relations with predators based on the atheistic notion of wolves as agricultural pests that they sought to eliminate from the lands of Yakutia. With the building of collective farms [Rus. *Kolkhoz*] and state farms [Rus. *Sovkhoz*] in Siberia, seemingly this dramatic change in predator perception had to occur as predator attacks on livestock had become an economic issue at the national scale. As a result, with the purpose of reducing economic losses in agriculture, the government of the YASSR established economic and political regulations to exterminate predators. In this context, the farms represented mini-government, which, according to Caroline Humphrey (1983), were a

microcosm of the Soviet state[10]. Indeed, Vitebsky (2005, 51-52) noted that in the northern village of Yakutia Sebian, set at the foot of the Verkhoianskii ridge, the farm almost completely overlapped with the village, forming an integral institution like a monastery, prison or military camp, thus almost everyone was an employee of the farm. It could be claimed that the farm regulated cultural and economic life in rural areas, which also included the anti-predator ideology and the spreading of negative attitudes towards predators, as well as material and financial supplies for wolf extermination. It seems that the aggressive ideology of predator extermination was a Soviet Union-wide practice that should be considered in the context of the idea of Soviet social construction. Households and local Soviets (councils), reindeer herding "brigades" and Soviet farms together presented a microcosm of an ambitious project of the Soviet state to modernize the Siberian North (see Ssorin-Chaikov 2016, 45-57). The policy of the Soviet Union was moulded by an ideal of "mastery" of the North, a term that literally means appropriation, which was to be accomplished through a combination of futuristic technological progress and tight political control (Vitebsky 2005, 47). According to Ssorin-Chaikov (2016, 45-57), "capitalism" and "nature" formed two related modalities of "wilderness" that the socialist construction and ideology were supposed to overcome. Referring to the concept "After Nature", developed by the anthropologist Strathern (1980, 176) in her essay "No Nature, No Culture: the Hagen Case", Ssorin-Chaikov (2016, 45-57) also discussed that socialism construction in Russia was after "nature" as it was after capitalism. Following this idea of socialist construction, I would like to suppose that wolves represented the wilderness that Soviet ideology strove to tame in the sense of modernization and "rational" management of the rural economy. Considering the conception of the extermination of wolves in socialist Yakutia as part of the operation of Soviet governmentality in the Siberian North, this ethnographic research wonders how the bureaucratic mechanism and ideology of the Soviet state were applied against predators. It seems that the Soviet government with its aggressive atheistic ideology to some degree dominated the realm of the spirits, with whom herders/hunters of Arctic Yakutia had engaged in reciprocal relations through history. As Alekseev (2008, 201-212) admitted, the most significant changes in the

[10] In this thesis, I use the term "Soviet state" to refer to the Communist Party of the Union of Soviet Socialist Republics, to Ministries and to Soviets (councils - communist governmental bodies at local and Republic level) as one structure governing socialist state.

spiritual culture of Yakutia indigenous inhabitants took place during the Soviet times with the introduction of ideas of atheism in schools, of communism and of the Russian language which became the *lingua franca*. According to Alekseev (ibid.), during the Soviet times, the indigenous inhabitants of Yakutia became, so to speak, the typical representatives of the Soviet nation brought up on the norms of Communist morality. Gurvich (1977, 191) also noted that in 1940 there had already been changes in the worldview (concerning shamanic and hunting rituals) of reindeer herders of North Yakutia (Olenekskii district). However, the ethnographic material from this study suggests that these animistic notions of herders/hunters of Arctic Yakutia continued to exist along with the Soviet atheistic ideology. Much like Brandišauskas (2017, 251); Anderson (2011, 87-91) and Pedersen (2011, 52-53) discussed "hidden rituals", I propose that predator honouring rituals suppressed by the atheistic ideology of the communists were silently drowned in the everyday practices of indigenous people to hide it from the regime. Moreover, Ssorin-Chaikov (2000, 45-57; 2016, 689-721) explained Soviet construction was never completed, or became ruined, the result being Soviet society resembled an everlasting construction site in which the frameworks of construction were more important than what was constructed. In this sense, the indigenous cosmology and animistic perception of predators were never substituted completely by the atheist/rationalist Soviet ideology. Furthermore, my fieldwork data allows me to suggest that at least some indigenous people of Arctic Yakutia experienced that the plans of the Soviet state to "tame the Arctic nature" was utopia. Therefore, indigenous people didn't take the plans for predator extermination as real and, in some cases, just utilized governmental resources for their own purposes instead of wolf shooting. It is likely that during Soviet times, the human–predator relations were maintained due to the animistic worldview, as well as a side effect of human negligence, which led wolves to adapt and survive even in intensive extermination times. Since that time, State regulations in predator extermination have changed dramatically with the collapse of the Soviet Union in the 1990s and the following transition to the market economy. Control over predators in Yakutia has weakened due to a shortage in supply, an absence of State employed wolf hunters, the prohibition of the poisons and the reorganization of game management and agricultural authorities. These can be considered the main reasons why the populations of predators (especially wolves) in present day Yakutia have increased and the post-socialist government is unable to re-establish regulation to the level of Soviet times.

Hence, this dissertation is intended to demonstrate that the interaction of reindeer herders/hunters of Arctic Yakutia and wolves can be perceived as

social relations with persons (beings) other than humans. Furthermore, this thesis argues that social relationships between humans and predators in the shared landscapes can be conceptualized as interspecific cohabitation, bearing two intermingled categories, namely aggressive interaction and peaceful coexistence. Aggressive interaction includes warlike relations with wolves, e.g. trapping, pursuing, shooting from helicopters, killing cubs in dens and exterminating with poisons, as well as propagating (by the Soviet state) aggressive ideology towards predators. On another hand, wolves also can act aggressively toward indigenous people by attacking and predating livestock, while bears sometimes enter log cabins and attack people in the taiga encampments. However, the concept of cohabitation assumes that the aggressive relationship between indigenous people of Arctic Yakutia and wolves is intermingled with a peaceful existence, thereby constituting a complexity of relations. In the context of this study, the notion of peaceful existence can be described by measures such as keeping a distance from each other, restraining from livestock attacks (talking about wolves/bears), mutual avoidance of conflicts, observance of the taboo on the excessive killing of predators and treating predators with respect. Thus, the boundaries between the aggressive interaction and peaceful existence of wolves and people are not defined, but rather are blurred. In essence, the cohabitation of herders/hunters and predators can be also characterized as a reciprocal interaction regarding both aggressive relations as well as peaceful existence. However, by and large, reciprocity in this thesis is considered as an interspecific relationship based on the mutual interpretation of signs or, in other words, human-animal communication based on non-verbal semiotics. Furthermore, this study will show how herders/hunters and wolves, by reading each other's behavioural signs, can comprehend their intentions and mutually adjust their behaviours. In short, the model of human–predator cohabitation can be described as follows: while the reindeer herders/hunters are aware of their inability to fight all wolves, the predators seem equally conscious of the risks of being shot or trapped. This mutual awareness leads to a constant adjustment between aggressive interaction and peaceful existence which involve non-verbal communication and is sustained by a mutual behavioural response. Examples of such communication are the warning shots the herders/hunters fire into the air so that predators could read this sign of human intentions and keep a distance from the livestock. Thus, cohabitation means constant adjustment between aggressive interaction and peaceful existence which is based on interspecific communication and behavioural adaptations derived from their long-term history of living together of humans and predators in the shared landscapes.

The idea of human-wolf cohabitation in some sense resonates with the proposals of Charlier (2011, 105-166) who depicted the perception of the wolf by Mongolian hunters as a complex of signs reflecting multilevelled functions: the wolf as the authoritative supernatural messenger, the omen indicating a period of either good fortune, generosity or the malevolence, punishment. Charlier (2011, 29-55) demonstrated the heterogeneous attitudes of hunters towards the wolf who is perceived as the dog (messenger) of the spirit-master, the owner of the game. The spirit-master can send his wolves to eat livestock and punish "bad herders", while only meritorious hunters can be granted by the spirit to obtain game (ibid.). The wolf may also be metaphorically related to not only ideas of fortune, morality, success and autonomy, but also excess and animality (Charlier 2011, 167-173). Thus, Charlier presented the wolf as a multi-faceted concept assembling seemingly incompatible symbolic roles of the wolf and making them coexist. By speaking about the wolf as a multifaceted symbol, Charlier applied Deleuzian's (1990, 174) notion of the "disjunctive synthesis" (quoted by Charlier 2011, 105-166), showing that the wolf gathers together opposite perspectives which constitute it. Henceforth, along with Charlier, who relied on the Deleuzean notion of "disjunctive synthesis", this dissertation deals largely with the idea of the complexity of the social relationships between humans and predators. However, this thesis is not focused so much on the symbolic meaning of the wolves, but tries to represent them as "ecological Selves" who are active agents involved in corresponding relations with the herders/hunters of Arctic Yakutia on a daily basis - such interspecific interactions I call here cohabitation. Finally, as well as the idea of cohabitation integrating aspects of the contemporary dynamics of human-wolf interactions, it also gives us an understanding of how such relationships can be perceived in the means of an animistic worldview, as well as historical, socio-economic, political and spatial contexts. Dealing with these approaches, the concept of cohabitation points to an unfixed and dynamic interaction of humans and animals, rather than merely to a *status quo* of such relations.

1.5 Outline of the dissertation

The beginning of this dissertation represents my attempts to describe the daily lives of the reindeer herders/hunters that I lived with and to show the role predators play in people's lives. Thus Chapter 2 introduces the socio-economic background of the opportunistic lifestyles of contemporary reindeer herders/hunters in Arctic Yakutia and illustrates how the subsistence of these people depends on their relations with reindeers and wolves. To give an

understanding of why, after the fall of the Soviet Union, the subsistence strategies of these people in the market economy should be considered opportunistic, I observe the post-Soviet period, which is also known as the transition from socialism to the market system. Anthropologists such as Brandišauskas (2017), Vitebsky (2005) and Stammler (2004) investigating the recent practices of subsistence of Siberian reindeer herders/hunters have described it as a way of adaptation for people to the post-socialist environment, which involves the creation of the networks of cooperation and exchange. In Chapter 2, I discuss people's opportunistic lifestyles as taking advantage of socio-economic possibilities, e.g. managing contemporary technologies to communicate in social networks and sell or exchange reindeer production to get various commodities and services, as well as to win high economic value prizes during the "Reindeer Herder's Day" festival. The ethnic identity of reindeer herders/hunters is strongly connected to their traditional economy and to reindeers, which is especially evident during social events such as festivals, competitions and various performances. In this regard, the reindeer herders/hunters usually blame wolves not only for predating the reindeers, but also for destroying the traditional economy on which the culture of the indigenous peoples entirely depends. Chapter 2 also observes different property models for the management of reindeer herds in the conditions of the market economy, e.g. the clan community *obshchina*, the large-scale enterprise - cooperative, the mixed property of private and municipality own reindeers and small scale reindeer herd owners. These models demonstrate different property relations as well as different lifestyles of the herders. With each model of reindeer property, I describe the reindeer herding practices and the mobility of the households briefly demonstrating the seasonal cycle of herders' jobs. Hence, Chapter 2 gives a basic understanding of how the economy and lifestyle of reindeer herders/hunters depend on reindeers and in what changing socio-economic context the relations of people and wolves shall be discussed.

To introduce human–wolf social relations more deeply, I move from a depiction of the subsistence practices of contemporary indigenous people to the historical background showing how human-wolf relations can be perceived in the context of Soviet times. Chapter 3 tries in large to answer the question of what kind of practices were used to exterminate wolves in the YASSR. I show that State bodies and bureaucracy, ideology, propaganda, extermination measures and the system of awards and social competitions to encourage wolf hunters were all involved in the wolf extermination campaign. Chapter 3 also aims to explore whether the Soviet period had a socio-cultural impact on the reindeer herders/hunters' vernacular perception about predators.

The chapter tries to show that the ideology of the Soviet state strove to eradicate not only wolves, but also the animistic worldview of the indigenous people of Yakutia. I discuss how the most aggressive conception of "an enemy of the nation", used by Stalin's military police to send people to gulags or execution, also became the label for wolves. By analysing when and how human-predator relations became so aggressive, this chapter considers predator extermination in the context of the Soviet times industrialization, social construction and modernization of the Russian north. It is likely that wolves represented the wilderness that the Soviet state strove to tame in the sense of modernization and "rational" management of the rural economy. As a result of such aggressive regulation of the Soviet state, incredible amounts of resources were thrown at organizing helicopters, poisons and human force for wolf extermination. However, this chapter demonstrates that despite the attempts of the Soviet ideology to annihilate the animistic worldview of the indigenous people, it didn't vanish, but existed alongside the Soviet atheistic ideology. Additionally, Chapter 3 also discusses that the ecology, plasticity and adaptability of wolves contributed to their survival during the most aggressive attempts of the Soviet state to exterminate these predators as a species.

Chapter 4 moves forward from the context of Soviet times to the central idea of this thesis by answering another question, namely how reindeer herders/hunters of Arctic Yakutia engage in social relationships with non-human persons – predators. This chapter is an investigation into the social relations of humans and predators who, living in proximity and sharing the landscapes, engage in intermingled relations of aggressive interaction and peaceful existence - what I call here the human–predator cohabitation. Chapter 4 applies the idea of non-symbolic communication between humans and animals which was developed by Kohn (2002). I use this concept to show how reindeer herders/hunters of Arctic Yakutia and wolves can apprehend each other's intentions by reading behavioural signs and mutually adapt their behaviours, engaging in a constant adjustment of aggressive interaction and peaceful existence. Chapter 4 also explores human–predator cohabitation from the perspective of the indigenous cosmology. Reindeer herders/hunters perceive the excessive killing of predators as sinful after which punishment and various misfortunes could be meted out by the spirit *Baianai* – a master of animals. It is believed that seeking revenge, the soul of a killed predator can request *Baianai* to punish humans in revenge. At the same time, people seeking to evade misfortune, perform predator honouring rituals. Chapter 4 analyses predator honouring rituals as a form of communication with the purpose of establishing peaceful existence with the spirit realm. In this sense,

cohabitation could be perceived as the mutual interaction between humans, predators and spirits. Furthermore, Chapter 4 shows that the relations between humans, predators and spirits are hierarchical. I argue that the hierarchy of the interaction between herders/hunters and the realm of the spirits in some sense resembles the principles of the State and its subordinate institutions, which as well as the spirits also regulate human-predator relations.

The penultimate Chapter 5 develops the last piece of the whole mosaic of human–predator social relations by examining the daily practices of wolf hunting, performed by special hunters called *volchatniki*. The chapter deals with the question of what concrete practices and tactics, as well as tools, are used to regulate wolves in Arctic Yakutia. Chapter 5 sums up and also specifies aspects of human-wolf relations discussed throughout this thesis, such as the respectful perception of predators, communication via signs and behavioural adaptation, as well as practice in predator extermination, state regulation and the economy of wolf hunting. Moreover, Chapter 5 also adds new insights, for example showing that wolf hunting is based not wholly on the skills of a hunter in adjusting traps, but also on capabilities to take the perspective of the wolf to comprehend his behaviour and to foresee movements. These features of the *volchatniki* derive from their intimate daily relations with wolves. The way of life of the *volchatniki* involves them engaging in prolonged interaction with wolves, therefore of being able to look from the wolf's eye. *Volchatniki* also empathize with these predators. I show how empathizing with wolves, *Volchatniki* also perceive positive behavioural features of these predators, for example bravery, stamina and the will to survive, these evoking respect towards the predators. In this chapter, I consider how respect for other beings – wolves - leads to the cohabitation of humans and wolves.

Chapter 6 (conclusions) summarizes the main ideas of each chapter, setting out the main points underlying this thesis, namely the factors relating to the cohabitation of humans and wolves in shared landscapes.

CHAPTER 2: OPPORTUNISTIC SUBSISTENCE OF CONTEMPORARY REINDEER HERDERS/HUNTERS

2.1 Introduction

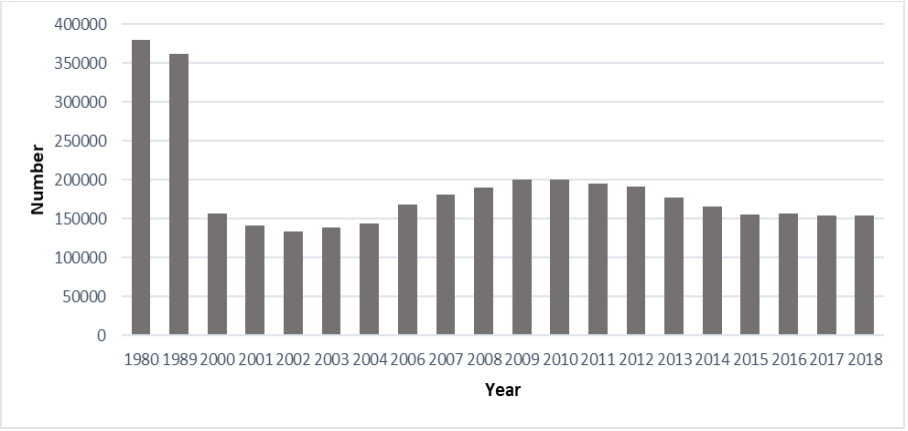
In this chapter, I analyse the opportunistic subsistence practices of contemporary reindeer herders/hunters in the environment of a market economy. Through the different life stories of people I lived with, I will illustrate the annual cycle of the herders/hunters' jobs and activities. I will also highlight remarkable events in the lifestyles of reindeer herders that seem to be representative examples of opportunistic subsistence. As well as revealing the socio-economic framework of people's lifestyles, this chapter will also lead to an understanding of how humans, reindeer and predators are interconnected in a market economy environment.

In this chapter, I will consider opportunistic subsistence as an adaptation of people to the utilisation of economic and social possibilities such as winning of high economic value prizes during the reindeer herders festival, as well as using electronic technologies and engaging in social networks which provide opportunities to sell or exchange reindeer products and to obtain various commodities. However, herders/hunters also believe that successful subsistence on the taiga can be achieved by establishing reciprocal relationships with spirits dwelling in the common landscape. Through daily practices such as feeding a fire or offering to the spirit of locality "*khoziain mestnosti",* people expect to receive fortune and success in return. Indeed, investigating recent subsistence practices of Siberian reindeer herders and hunters, anthropologists such as Brandišauskas (2017), Vitebsky (2005), Stammler (2004) and Ventsel (2004; 2006) describe the people's lifestyles as an adaptation to the post-Soviet environment, this involving the creation of cooperative networks and relations based on exchange between human and non-human beings. Meanwhile, Ventsel (2004, 27-33), who conducted ethnographic research in north western Yakutia, emphasizes that in post-Soviet times the networks of urban and rural kin and links between the State and producers have become the institutions that distribute goods and services among people.

The environment of the post-Soviet time is usually associated with the transition/transformation/integration into the global market system, this having taken place since the early years of the collapse of the Soviet Union (see Ventsel 2004, 81-112; Stammler 2004, 32-39). It was marked by political upheaval, a shortage of resources and the consequences that came with the collapse of state farms, as well as the loss of local integration into the wider

economic system of the Soviet state. The resulting socialist economic breakdown of the 1990s led to a crisis within reindeer herding in many Siberian regions, as well as in Arctic Yakutia (see Vitebsky 2005, 238-255, Stammler 2004, 69-74; Donahoe 2004, 188-192). For example, over 25 years (1990-2015), the number of reindeer in Russia fell by 30 percent (from a total number of 2.3 million heads) (see Doianova et al. 2017, 5-20). Based on the statistics provided by the MEFRS, reindeer numbers in Yakutia dropped by 41 percent between 1980 and 2018, i.e. from 380 000 to 155 000 (see Figure 8). However, the large reindeer herds sustained during the *sovkhoz* times were a part of the modern industrial development of the Russian North. Additionally, before the Soviet regime, reindeer herders in Northern Yakutia traditionally kept small herds for hunting and transport (see also Vitebsky 2005). It is therefore not surprising that after the de-industrialization of Siberia in the post-Soviet times of scarcity, the new government could not sustain the large numbers of herds without a reserve of resources.

Figure 8. Dynamics of reindeer numbers in Yakutia (1980-2018)



Sources: Doianova, et al. 2017; Statistic report about reindeer numbers in Yakutia. Provided by the MEFRS

Wages, supplies and basic services provided by the state farms in the Yakutia regions declined sharply as a result of the collapse of the Soviet state. North Yakutia villages with the structures set by the Soviet state in the furthest periphery of Russia could no longer be sustained. Meanwhile, indigenous communities that had lost their self-sufficiency during the total control of the Soviet state no longer knew how to function on their own after the collapse of this State (see Vitebsky 2005, 252-253). Native communities were made psychologically and logistically dependent on the various services and facilities of Soviet villages, e.g. hospitals, schools and veterinary services, of

all which were connected with the outer world via planes and helicopters (see Vitebsky 2005, 382). In post-Soviet times, these facilities and services were withdrawn and many native villages of North Yakutia plunged into unemployment and alcohol intoxication (see ibid.). Many people in post-Soviet Russia used apocalyptic words to describe the deteriorating socio-economic situation, e.g. *raspad* (decline), *polnyy krakh* (total crash) and *konets sveta* (the end of the world) (see Vitebsky 2005, 253). Of course, as well as the transition to a market economy causing frustration and anger among people hard hit by the new reforms, it also opened up new opportunities. New forms of cooperatives, collectives, production associations and commercial enterprises emerged, as did new arrangements and self-organized activities throughout native North Russia (see also Vitebsky 2005, 375). For example, in Eveno-Bytantaiskii district, after the bankruptcy of the Leninskii *sovkhoz*, a municipal unitary enterprise (MUP) was organized. In the new institutions, however, many features from the structures of the former state farms and the organization of the work processes have been preserved. Besides, many leaders who previously held positions in the administration of *sovkhoz* retained them in the MUP. Not only is the MUP still called a *sovkhoz* by the villagers, but when people talk about private enterprises, the nomadic clan communities *obshchiny*, they still refer to them as brigades (see also Ventsel 2004, 87). The collapse of the Soviet regime has given rise to *obshchiny* which were intended to fulfil many of the functions formerly performed by state farms, such as organizing the distribution of reindeer products, providing food, tents, clothing, guns and bullets, organizing transportation and providing a regular salary in return for the members' work as herders/hunters (for examples of *obshchiny* in Tyva, see also Donahoe 2004, 193-200). Economically these enterprises mostly depend on government subsidies that are based on the number of reindeer heads within each herd. Although *obshchiny* are usually understood as an alternative to State agricultural collective enterprises and are seen through the prism of land rights and land use, they do not possess the right to have privately owned reindeer pastures (see Ventsel 2004, 26-27). As in post-Soviet Russia, the land belongs by law to the State (see Ventsel 2004, 118-119), though *obshchiny* have been given the right to the long-term leasing of pastures by the government. Therefore, the *obshchina* can be seen as an indigenous economic organization that adapts to a market economy through the right to legally sell and buy in the market (see Ventsel 2004, 102). However, contemporary reindeer herders/hunters of the Arctic Yakutia see themselves as living in a form of wild market capitalism. In their words, indigenous people perceive

their life as a struggle for survival [Rus. *Borba za vyzhivanie*]. In this struggle, people try to seize opportunities to get cash.

Although the productive activities of the *obshchiny* are still fully dependent on the ability of their owners to distribute reindeer products (meat, antlers, hides) and obtain supplies (equipment, spare parts, fuel) via networks of relatives and acquaintances, I will show that social networks go far beyond the local level and reach foreign countries to develop what is called reindeer tourism. Additionally, reindeer herders strive to participate in various public events and socially oriented competitions organized by local governments and the State, which provide monetary and material prizes of high economic value. Thus, the opportunistic subsistence of contemporary reindeer herders/hunters should be considered as an adaptive response of the people to move forward in accordance with the changing socio-economic environment brought by the collapse of the Soviet state and the transition to a life in a new age market capitalism.

To show the everyday subsistence practices of reindeer herders/hunters that I lived with, I will observe four different property models of reindeer management: first, a mixed model of private and municipality owned reindeers; second, clan community *obshchina;* third, large scale agricultural enterprise (cooperative) and fourth, small-scale privately-owned herds. With the example of brigadier Afanasii Konstantinov, an indigenous reindeer herder who manages a mixed herd of private and municipality-owned reindeers consisting of about 1000 reindeers, I will demonstrate how Afanasii combines family life and reindeer herding. Afanasii represents the unique lifestyle of a family of reindeer herders - since the Soviet state sought to "civilize" the nomads by sedentarizing them in villages, most reindeer herders join brigades living separately from their families on the taiga for long periods of time or remaining unmarried all their lives. The case of Afanasii also perfectly illustrates a contemporary reindeer herder who is keen on electronic technologies, network communications and various subsistence opportunities such as the possibilities of competition for profitable prizes during public events (e.g. the festival of reindeer herders). The winnings in the competitions (e.g. during reindeer races) also contribute to the social status and prestige of the herder/hunter and his family. However, to fulfil family needs he has to constantly move between village and taiga, sometimes leaving reindeers without attendance and thus exposed to wolves. Illustrating the *obshchina* model, I will then highlight the lifestyle of the Eveny women Daria Starastina who is the head of an *obshchina* owning about 2000 reindeers. Unlike Afanasii, the Eveny women Daria spends most of her lifetime on the taiga only rarely visiting a village or city. The main strategy of the head of the

obshchina is to constantly watch over reindeers not leaving them without attendance even for short moments. The precise management of reindeers have made Daria an economically strong and rich person holding one of the biggest reindeer herds in the region. Reviewing the third model of reindeer herding practice in Tomponskii district, I will show how reindeer herders associate the transition to a market economy with the ruins of the previously well-known "Tomponskii" *sovkhoz* and the abandonment of the reindeer economy. Additionally, I will show that people even accuse wolves of the destruction of the reindeer herds, this reinforced by the perception of wolves as a symbol of great disappointment in the times of scarcity and economic upheaval. I will show how, in response to the difficult economic situation in the market economy, reindeer herders are adapting to using social networks connecting people from abroad to develop reindeer tourism. Finally, in this chapter, I will examine the fourth model of opportunistic subsistence through the example of an owner of a small-scale reindeer herd in Tomponskii district. I will reveal that by combining income from subsidies, hunting and reindeer tourism, the owner of a small herd can subsist even better than maintaining a position in a large-scale reindeer herding enterprise.

Therefore, considering reindeers as the base of the opportunistic subsistence of reindeer herders/hunters in market economy conditions, this chapter will also provide a framework for understanding human–predator relations in an unstable and, at the same time, adaptive socio-economic environment.

2.2 Afanasii Konstantinov, brigadier of the Stado Nr. 6.

March 2019. A small Russian plane, an AN -24 built back in Soviet times, violently sways in the cold arctic atmosphere as it adjusts to land in the eastern foothills of the Verkhoianskii mountains, the homeland of reindeer herders/hunters in Eveno-Bytantaiskii district. I had flown 600 km from Yakutsk to the local airport of Sakkyryr (Batagai-Alyta), a North Siberian village and the administrative centre of the district with a population of just 2013 (data provided by the district administration, 2020). Within this population, the largest ethnic group were the Eveny (1201) and the smaller were the Yakuts (812). Although it was the beginning of March, the temperature frequently dropped to - 30 °C during the day and - 40 °C at night. Relative warmth, as the temperature can drop below – 50 °C during the dark polar months of January and February. As I struggled with my baggage laden with heavy arctic equipment, I searched for transport. Before my eyes, I saw

an approaching Russian van, an UAZ-452 with the huge inscription “Prize of the Head of the Republic of Sakha” adorned on its side (see Figure 9).

Figure 9. Russian van UAZ-452 - the general prize that was won by Afanasii in the reindeer festival competition (photograph by Jefanovas 2018)

The van belonged to Afanasii Konstantinov, locally called *Afon'ka*, an indigenous man that I had previously met on a trip the year earlier. Afanasii grabbed my heavy backpack from my shoulders and effortlessly threw it into his van. Inside, already were seated his mother Maria together with Afanasii’s wife Varvara (Varia), his fourteen-year old daughter Maria (Maianka), the middle 12-year old son Martin and preschool-age daughter Karina, as well his three-year old foster-son Aigyl. Afanasii and his family had arrived at the airport to pick up his mother, she coming back from Yakutsk on the same plane that I had been on. Together we all travelled to his reindeer encampment on the taiga, the camp named *stado*, this meaning a herd. I was surprised how this meeting had happened almost spontaneously. I hadn’t organized it at all, but Afanasii was aware of my arrival as I had mentioned it a month earlier via the social communication messenger “WhatsApp”, this widely used in Yakutia. At that very moment, I learnt to appreciate that reliability and thinking ahead are among the most valued properties of a taiga man, these qualities could be the determiners of life or death in an unpredictable arctic environment. Local people from the Sakkyryr described Afanasii as a reliable person, one could easily contact him if wishing to visit his *stado* on the taiga.

His winter encampments were located relatively near a village 40 km distant and could be easily reached by van or snowmobile via the frozen river Big Sakkyryr. In the summertime, the reindeer herders move upstream and it

is then only possible to reach Afanasii's encampment on horseback or by helicopter. It is not once that Afanassii's *stado* has been visited by officials, various Russian and foreign tourists, journalists, moviemakers and other wanderers. Everyone in Sakkyryr village recounts the famous movie "*Afon'ka* Does Not Want to Herd Reindeer Anymore" [Rus. *Afon'ka uzhe ne khochet pasti olenei*] made in 2004 by Czech documentalist Martin Ryšavy who visited and filmed Afanasii's life story over several years. Afanasii even gave the name Martin to his son in memory of the friendship with Martin Ryšavy. Therefore, Afanasii himself and his lifestyle looked to me very promising to study the opportunistic subsistence of contemporary reindeer herders. Furthermore, Afanasii represents a charismatic leader who is engaged in wide networks of social relations.

At the time of my fieldwork, Afanasii Konstantinov was 38 years of age and was an indigenous man that had come from a prominent family of reindeer herders that were well-known in Soviet times, all either prosperous brigadiers or skilful hunters. His father was of Yakut nationality and was a prosperous reindeer herder during the *sovkhoz* times. It was from his father that Afanasii gained his skills of taiga craftsman, huntership and herding. Meanwhile, Afanasii mother identified herself as Eveny, again with ancestors who were reindeer herders. Despite mixed nationalities, Afanasii linked himself more to Eveny than Yakut, claiming that the Eveny origin was stronger in him and that reindeer herding had always been Afanasii's calling. In his childhood, Afanasii attended Sakkyryr primary school, thereafter moving to another town located near Yakutsk where he graduated school. He said that the taiga had constantly called him back and ultimately, after attempting to become a professional driver and welder in Yakutsk, he gave up and returned to his hometown. He married an Eveny woman Varvara and immediately turned to taiga life by taking the position of a reindeer herder and later becoming the brigadier. However, with Afanasii's sister, three brothers and father all dying in accidents, the residents of Sakkyryr village also associated Afanasii's family with tragic events. Some villagers thought that the Afanasii family was spoiled by someone jealous of the family's success in reindeer herding. Others believed that he should go to a shaman to do a protective ritual as Afanasii was the last remaining man from his family. Noticing huge scars on Afanasii's right hand, behind a tattoo of an eagle. Afanasii explained that in the dark days of the 1990s, after the collapse of the Soviet state and resultant lawlessness and harsh living conditions, various skirmishes often took place in the village, usually fuelled by alcohol. Embroiled in such an incident, Afanasii had been injured, fortunately not fatally.

According to Vitebsky (2005, 238-240), the collapse of the Soviet state at the end of 1991 and following economic crises resulted in a breakdown in the deliveries of provisions, transport and led to a lack of payment of wages, but regardless helicopters, biplanes and winter trucks still brought vodka to the North Yakutia villages. This became a profitable business, with a litre of vodka worth 20 kilos of reindeer meat, this equivalent to about a quarter of a whole reindeer (ibid.). As the 1990s progressed, the villages of North Yakutia came to resemble a horror movie in which people succumbed one by one to a zombie plague (ibid.). In the 1990s, many villagers were depressed and cash-starved, they drank, stabbed each other, drowned in accidents and committed suicides (ibid.). By the time of my fieldwork however, the trade in alcohol was controlled by the Sakha government, with vodka sold only in specialized stores. It was forbidden to sell vodka in Sakkyryr at night or during public events, though one could obtain illegal bootleg vodka through the use of trading points [Rus. *Tochka*] for a price at least three times higher than in shops.

Figure 10. The brigadier Afanasii during the reindeer herder's festival in Sakkyryr (photograph by Jefanovas 2018)

I met Afanasii for the first time in spring 2018 during the festival "Reindeer herder's day" (see Figure 10). After staying in Eveno-Bytantaiskii district for a while, Afanasii contacted me and offered me the possibility to join him and help with English-Russian translation so he could communicate with a Norwegian couple who came with two children to live for a while in the encampment. Afanasii saw an opportunity to earn extra cash from the Norwegians, and I saw a chance to join his family life, so we agreed and met in his village house. In Soviet times, the sedentarization of nomads in the villages was a foreseen goal of the industrialization and modernization of the Russian North. Thus, many reindeer herders have houses in villages, residing in these more and more and leaving their reindeer unattended on the taiga. Elders who worked in *sovkhoz* often scold modern nomads for their negligence,

saying that "*today reindeers are herded by wolves*" [Rus. *Olenei pasut volki*] by this, they mean that not only do wolves take reindeers, but also they disrupt the herds by driving some of the animals far away from the main grazing areas. These reindeers may become lost and become feral. Non- attendance of reindeers was an unusual practice during the *sovkhoz* times, as herders were personally responsible for every lost animal. However, to go with the contemporary lifestyles and to meet the needs of the family, reindeer herders such as Afanasii have to constantly move between the village and encampments. Afanasii drove me on a snowmobile to his *stado*. I was impressed by his highly energetic mode and at the same time calm self-confident manner. Afanasii appeared very relaxed when wearing American-style sunglasses and calmly smoking a cigarette as he rode the snowmobile many kilometres along mountain ridges, actively manoeuvring at high speed between trees on the taiga. Later, getting to know him better, I called him "a man gifted by the power of a hundred reindeers". During the three-day reindeer *koralizatsiia* in springtime, an activity I was also able to take part in with other reindeer herders, Afanasii wrestled down hundreds of animals one after another. After the job was done and almost two thousand reindeers had been counted and vaccinated by a group of herders (including Afanasii), Afanasii still seemed energetic and not exhausted. I, by contrast, could not even lift my hands. I was surprised. He told me that "*no matter how you feel, you have to do what you have to, who instead of you will do it*?". This episode opened to me the general principle of the opportunistic reindeer herders' way of life on the taiga - no matter what, people do the things they are obliged to do for the sake of their community.

2.3 Movement of the households

The time when Eveny reindeer herders lived in traditional nomadic conical dwellings made from wooden poles and covered with reindeer hides has passed. According to the Russian ethnographer Gurvich (YANTS SO RAN: F5. Op. 1, D.258, 1953-1954), nomads in Sakkyryr historically used two variants of traditional dwellings depending on the season - the *ostov* in winter and the *chuara* in spring-autumn, these being the terms used by the reindeer herders/hunters However, it seems that the types and names of the traditional dwellings of the indigenous people of Arctic Yakutia differed depending on the district. For instance, the conical traditional dwelling of the Eveny reindeer herders in Tomponskii district was called the *elbyn*. During my fieldwork, reindeer herders from Tomponskii district recalled how it was hard to make the suede reindeer leather [Rus. *Rovduga*] for the *elbyn*. *Rovduga* was made

by hand by tanning the skins of reindeer with wood scraps mixed with the boiled liver of reindeer. *Rovduga* was also smoked on moss to make it long-lasting. 56 *rovduga* were needed to make one *elbyn*, so sometimes it took several years to collect the required reindeer skins. In summer time, the *elbyn* was entirely covered with *rovduga*, while in winter with a double layer of covering. Its inner side was layered with reindeer skin with the fur inward, while the outer side entirely with *rovduga* (for traditional dwellings of Eveny, see also Burykin 1992, 9). Later, in Soviet times, when farms provided canvas to reindeer herders, the outer side of the *elbyn* was covered by this. It was difficult to keep warm inside the dwelling. Although an open fire was kept inside, the inside temperature would soon fall to that of the outside when the fire went out. To keep warm at night, people used double-layered sleeping bags sewed from the hides of reindeers or mountain sheep. Gurvich (ibid.) noted that reindeer herders in the Sakkyryr locality who worked in farms in the 1950s dwelled mostly in canvas tents with a stove, though traditional conical dwelling were also used. Gurvich (ibid.) also acknowledged that living conditions in reindeer herders' dwellings were difficult, for example the temperature in the tent or traditional conical dwelling sometimes dropped to – 50 °C in the winter. Some dwellings, however, were improved by making wooden floors and doors, sometimes even a small window. Light inside was provided by candles or oil lamps (see ibid.). Trying to improve the living conditions of reindeer herders, farms ordered yurts from Soviet factories that were made from light aluminium frames covered by canvas. However, the aluminium yurt was even colder than a traditional dwelling, thus it was not useful for reindeer herders. During the Soviet times, the traditional nomadic dwellings were eventually replaced by canvas tents with stoves, as they were quick to build and make warm. However, since the second part of the 20th Century, reindeer herders in Eveno-Bytantaiskii district have been built log cabins in their winter encampments, a practice introduced by the state farms.

Afanasii and his family spend the cold months on the taiga residing in log cabins heated with a stove (see Figure 11). During my stay, the Afanasii encampment was equipped with gasoline electricity generators and Chinese-made solar panels and rechargeable batteries, thus people could have light in the cabin, recharge their smartphones, tablets and laptops and watch movies also play games during their free time. Additionally, a long-range satellite antenna providing internet (WiFi) on the taiga was erected near the household. Reindeer herders also use chainsaws for making firewood and for cutting ice blocks for water, as well use various electrical devices such as a powerful fan for warming vehicle engine in the cold and welding machines to fix broken equipment right on the taiga. Encampments also were equipped with product

storage platforms and corrals used for the temporary enclosure of reindeers. During the autumn, winter, and early spring, Afanasii used three reindeer herding encampments with log cabins each built 10 km apart across the basin of the river Big Sakkyryr.

Figure 11. Winter log cabin of reindeer herder Afanasii (photograph by Jefanovas 2019)

Autumn and winter dwellings were located in the lower reaches of river valleys covered by sparse larch taiga with lichen and moss, rarely interrupted by willow on islands or boggy riverbanks. The valleys are surrounded by the Verkhoianskii mountain chains with sparse tree cover from a minimum altitude of 500 m above sea level rising to high treeless ridges at 1300-1600 m. With the shifting pattern of seasonal grazing in spring, the herders changed the camps every two to three weeks, moving gradually up the streams from the winter sites to the spring pastures by reaching the transition zone between mountainous taiga and open tundra habitats.

The summer reindeer pastures were established near the upper reaches of the rivers *Mass-Salla* and *Tumara* in flat valleys surrounded by the treeless rocky Verkhoianskii mountain chains. Here, lichen tundra habitats prevailed with swamps in lower areas of the valleys. Dwarf birch and cotton grass tundra occurred in more humid areas, while parts of some riverbeds were covered with willow bushes. During the summer, the tundra highlands provide cooler temperatures for the reindeers, as well as cold winds that protect the reindeers

from mosquitoes and flies [Rus. *Ovod*] which lay their eggs under the animals' skin and irritate them. *Ovods* could make reindeers run for fifteen hours a day, sometimes exhausting them to the point of death (see also Vitebsky 2005, 103). To not lose their herds, herders have to follow the reindeer migration and move their households accordingly.

Figure 12. Summer encampment of reindeer herder Afanasii and his family (photograph by Jefanovas 2018)

To provide favourable conditions for the reindeers in the encampments, herders make fires to protect the reindeers from the *ovod* and also bring the herd together. In summer, the Afanasii family dwells in a spacious modern canvas tent with an iron stove (see Figure 12). Other herders and pupils who came to the camp during the summer holidays occupied several smaller tents scattered around the camp. Summer encampments were also equipped with a gasoline generator for electricity and a satellite antenna for the internet. Afanasii changed localities every two weeks by moving along river valleys between nine summer camps with a Russian truck "Ural-4320". In contrast to the traditional way to move encampments by harnessing reindeers, Afanasii loads all gear and equipment onto the truck. It seems this practice became common starting from the Soviet times when vehicles were provided by the *sovkhoz*. However, this possibility is dependent on the economic position of the reindeer herders, those who keep small reindeer herds (100-500 reindeers) do have not enough income to organize trucks, so nomadize mostly relying on

animal force. The herding area where Afanasii grazes reindeers is officially assigned [Rus. *Zakreplen*] to the Municipal Unitary Enterprise (MUP) "Leninskii" which was established in 1998 reorganizing the former *sovkhoz* "Leninskii". At the time of my fieldwork, Afanasii worked as a brigadier of the *stado* which consisted of 500 reindeers belonging to the MUP and around 500 reindeers owned by Afanasii's family members. Additionally, about 20 reindeers belonged to the Sakkyryr school administration that Afanasii had agreed to look after. Such an opportunistic subsistence strategy seems beneficial for Afanasii, as he receives official salaries from the MUP and also gets governmental subsidies for every private reindeer he and his family own.

2.4 The daily life of the nomadic family

The nomadic Afanasii family represents a rarity anywhere in the district, as most of the herders working in brigades are single or divorced men, or at least their wives and children live separately in villages and towns. However, Afanasii combined family and reindeer herding most of the time while living and nomadizing between the taiga and village with his wife, children and his mother. The reasons why nomadic families on the taiga disappeared can be traced back to Soviet times. The regime of the Soviet state tried to break families up and make them "workmates" in the so-to-speak open-air reindeer factory (see Vitebsky 2005, 252-253). Many reindeer herders' brigades were formed primarily around the core of male kin, but they were not allowed to function as families (ibid.). Although the Soviet state and the factory model collapsed, the family model had been disabled in the Sovietisation process - for generations, men had been separated from women, while children were taken from their parents (ibid.). According to Vitebsky (2005, 43-44), one of the goals of the Soviet authorities in North Yakutia was the establishment of villages (from 1920s onward) to convert northern native peoples to a sedentary way of life. The traditional response of indigenous people to the living conditions of Arctic Yakutia was nomadism in which entire families lived and migrated together in an annual cycle. However, the Soviet authorities were confident that such nomadism was "backward", thus the solution of the State was to replace traditional reindeer herding by a more progressive and "civilized" "industrial nomadism" (ibid.). As a result, industrial reindeer husbandry was introduced and the indigenous people settled in villages, while the care of reindeers was isolated from the family and reduced to that a worker's job like any other (ibid.). Furthermore, the Soviet state policy of "sedentarisation" of nomads also included forced education in boarding schools whereby indigenous children were taught in Russian and punished for

speaking their native tongue. According to Vitebsky (2005, 183-195), helicopters flew to the reindeer camps in the Soviet times to take children at the age of 5 – 7 years from parents and, with the exception of summer vacations, they would only return to their mothers and fathers at age of 15. The "sedentarisation" of nomadic families in North Yakutia was completed in around 1990 (ibid.), when almost all school-age children and their mothers had been settled in villages. Approximately at that time, the number of boarding schools was reduced, as mothers were able to take their children to the constructed village schools (ibid).

However, since the end of socialist rule, the life of the nomads has changed greatly. In addition to Russian and Sakha languages being taught in schools as main languages, the native Eveny language has been introduced in Sakkyryr school. However, parents strive to receive an education for their children that allows them to study at universities and get jobs in Yakutsk and other cities of Russia. Thus, the Russian language, as well as Sakha, has become a feature of life in the market economy times. Hence, many children of the indigenous herders/hunters choose to fly to cities for better education and jobs but few come back to spend their lives as reindeer herders. Meanwhile, Afanasii strived to convey the skills and traditions of reindeer herding to his children. He even managed to agree with the school administration to take his children to the taiga even before the actual school vacations began. Usually, children of reindeer herders are taken from school by their parents during the winter, spring and summer holidays. However, Afanasii utilized the opportunity to take his children more often than others. To fulfil the needs of the family, he was always on the move between the taiga and village.

An excerpt from my fieldwork describes the daily life of the Afanasii family as follows. It was the beginning of spring, Afanasii, his family and I arrived at the log cabin to settle in the taiga encampment. The nights were still cold and the temperature dropped below - 40 °C, thus after using the firewood brought to the cabin to keep the heat inside, Afanasii rises several times during the night to bring more firewood so that his family could wake up to a warm home. Afanasii prefers to get up at 9:00 in the morning, which is a bit later than reindeer herders usually do. Afanasii prefers to stay a bit longer in the cabin during the mornings with his youngest daughter Karina, who likes to play games, watch videos or listen to music on her daddy's smartphone. I noticed that Afanasii provided his family, especially kids, with electronic devices such as smartphones, tablets, laptops and action cameras. In the mornings, Afanasii also makes breakfast for his children. Once, I was astonished to see grapes, apples, oranges and bananas served in an iron pot and Coca-Cola drink and candies on the table. This was all the more

remarkable when considering that fruits are a rarity on the Siberian Taiga. After a while, calmly smoking a cigarette and sipping Cola, Afanasii put on thick and warm modern arctic coveralls and goggles ready to drive his Russian snowmobile "*Buran*". Although one might expect that the herders would wear the traditional reindeer fur coat "*kukhlianka*" (stereotypically Arctic nomads are depicted wearing traditional fur clothes in ethnography, especially in Soviet times), modern coveralls are widespread in Arctic Yakutia. Besides, after the end of the *sovkhoz*, which also maintained the artels (cooperative associations of artisans) producing fur clothes for the herders, traditional wear became more the subject of public events and exhibitions. Of course, when the winter temperatures drop below -50 °C, synthetic coveralls can not substitute for fur coats, which often become a matter of life and death in the extreme environment. However, it was not as cold as -50 °C below zero, so Afanasii in his camouflage coveralls went on a snowmobile to bring the so-called "home reindeers" [Rus. *Domashniia oleni*] to the encampment (see Figure 13).

Figure 13. Reindeer herder Afanasii lassoing reindeers from a snowmobile (photograph by Jefanovas 2019)

Although all kept reindeers are domesticated, what herders call "home reindeers" are a small number of about 100 heads kept separately from the main herd near the household. These are transport reindeers called *uchakhs* that are trained for riding or harnessing to sledges. *Uchakhs* are castrated reindeer males selected to be strong enough to carry a herder on the saddle (see Figure 14). A riding stick held in the right hand helps a person to keep balance. It usually takes up to several months to train a reindeer to accept the bridle and adapt to the saddle. It takes even more time to train reindeers to work in the caravan pulling sledges (see also Vitebsky 2005, 94-95). If wolves predate *uchakhs*, people usually get angry and curse the wolves as these are the most important reindeers and have individual names. While other reindeers do not have names, the *uchakhs* are named according to their behaviour, appearance or particular abilities such as to run fast. For instance, Afanasii called a fast-harnessing reindeer "Foreign Car"

[Rus. *Inomarka*] or *Buran*, while a big strong *uchakh* was called "Bear" [Rus. *Misha*] and a timid one "Coward" [Rus. *Trusik*]. Names can also be just funny for example the candy "Chupa-Chups", "Cola" or the chewing gum "Orbit". Most of the names of "home reindeers" reflect the spirit of the time quite well. For instance, according to Vitebsky (2005, 95-96), in the early post-Soviet years, some reindeers were named after the prime minister of the Russian federation, Chernomyrdin, who was considered stolid.

The modern names of reindeers seem to reflect the times of the market economy, when snowmobiles are increasingly becoming a convenient substitute for *uchakhs*. Although *uchakh*s are still used as the traditional way to drive the reindeer herd, snowmobiles are the main means of transportation to the village and back onto the taiga, as well as for chasing wolves down. There was a time when sledges harnessed to reindeers were used by herders to drive wolves away from the herd. While this is currently not the case, sledges are still quite often used to transport cargo or to reach remote corners of the grazing area. What limits the usage of snowmobiles is the shortage of fuel and spare parts. Herders often say that while gasoline can run out and a snowmobile can break down, reindeers only need lichen to keep running forward.

Figure 14. A herder watches reindeers while riding on a saddled reindeer called an "uchakh" (photograph by Jefanovas 2018)

While Afanasii was busy on the Taiga with reindeers, his wife Varia took care of the household by keeping the fire in the oven going, boiling tea and preparing meals from meat for everyone's lunch. The diet of herders consists almost entirely of reindeer, but moose [Rus. *Sokhatyi*], mountain sheep [Yak. *Chubuku*] and wild birds such as arctic partridge [Rus. *Kuropatka*] were also eaten quite often. At first, eating so much meat every day felt unusual to me. Reindeer herders joked with me that on the taiga one is used to eating meat in the morning, afternoon, late evening, and all the time in between. Jokes aside, the herders told me that without the meat and fats, they would die in the harsh and cold Arctic environment. Meanwhile, Afanasii's kids seemed to have a routine filled with duties that actively contributed to the household. They brought in firewood and river ice for melting into drinking water, they fed the dogs, washed dishes, cleaned the hut floor and helped to prepare meals. Usually, close to midday, Varia routinely sewed torn clothes, while the kids played cards, browsed smartphones or went for short walks around the hut.

In the afternoon everyone would usually sit quietly in the cabin unless the peace was disturbed by the sudden sound of bells mounted on reindeer necks. As well as helping people to hear the herd from afar, the bells tinkle on the lead reindeers to warn wolves that people are nearby ready to protect the herd. On that day, the bells and the noise of the snowmobile engine signalled the approaching herd driven by Afanasii. Everyone, including me, rushed outside from the cabin to help drive the reindeers into the corrals. Afanasii's daughter Maianka took a pocket full of salt and ran ahead to lure the reindeers into the enclosure, calling "*ma, ma, ma*", which means – "take it". The reindeer responded by stretching their muzzles towards her, sniffing and then following. Meanwhile, the other children, Varia and I waved our hands and pushed the reindeers toward the fence. Afanasii approached the herd from behind and locked the enclosure with poles so that the reindeers wouldn't escape. Reindeers are usually brought to corral in the morning and then, in the afternoon, some of the animals would be selected (by lassoing) to pull sleds or be saddled (see Figure 15). The rest of the reindeers would be released from the enclosure after about an hour to graze free.

Once, soon after letting the reindeers go, Afanasii was busy repairing the corrals. What impressed me was how simply Afanasii adapted fallen larches to repair the enclosure. Taking a stick, he slightly flattened the ending with an axe and mounted it horizontally to replace broken poles. When a horizontal stick was too short to mount it between the upright posts, Afanasii took a forked branch and supported the short stick. Additionally, trees growing in suitable positions were used as uprights to support horizontal sticks. I noticed that many things on the taiga were made and repaired with simple pragmatism

applying hand-held resources. This is probably optimal as everything on the taiga can change very quickly and there is no point in wasting energy building great constructions. For instance, I observed how reindeer sledges were crafted by lashing wooden parts together with quick “releasable knots” or without knots at all, only by securing the ends of the strips. Thus, the sledges were quickly assembled and repaired if, for example, they hit stones too hard and broke. Likewise, the cargo on the sledges was fastened with quick-release knots. The examples above demonstrate opportunistic strategies and adaptation applied by the reindeer herders in an extreme environment where things need to be manually adjusted as effectively and quickly as possible. A case with a broken gasoline generator seemed to confirm my thoughts.

Figure 15. Reindeer herder Afanasii lassoing reindeer in corral enclosure (photograph by Jefanovas 2019)

One cold evening, the generator didn’t start, as the manual starter mechanism was broken. Afanasii quickly took tools and dismantled the generator into pieces right on the snow where it stood, changed the broken parts and put everything back together. It was amazing how he could do it with his bare hands in the cold. The generator started and many Chinese-made led light strips mounted inside and outside the cabin illuminated the encampment. It was a time after the daily routine when everyone gathered together in the cabin to watch movies on Afanasii’s laptop, charge smartphones, play games, boil food, eat and drink tea. It became noisy in the cabin at such moments, as many things were happening at once. As it was dark outside already, Afanasii

brought in an iron sheet and cut it into pieces with a circular saw, hot sparks flying on everyone causing the children to begin screaming and hiding under the beds. Meanwhile, others loudly listened to music or played games on smartphones. It was a little bit confusing for me to be in such a crowded room, it seemed as if no one here expected to have any personal space. However, it didn't seem to worry the others, they were used to getting together in tight groups. Moreover, the mobile satellite equipment for the internet was also switched for a few hours right there on the taiga and one could communicate via social networks with family members, fellows in the village and city or even abroad. For instance, after my return from the fieldwork to my country, I still received pictures from Afanasii and could consult with him through the internet about things I didn't fully understand during my fieldwork. The mobile internet on the taiga is weak and sparse as well as expensive, thus only a few households can afford it. However, it is also possible to connect via radio stations that were made back in Soviet times. Since the radio stations were introduced by the *sovkhoz*, they are still used by all reindeer herders and each encampment can take its turn to speak to each other. Hence, people turn on their radios in the morning, midday and evening, usually at 9 a.m., 12 noon and 6 p.m. It serves as a source of extra news and can be used to call in an emergency.

One way or another, Afanasii exploited communication and social networks as an opportunity to sell or exchange reindeer products and to order spare parts for the vehicle, electronics and other scarce supply commodities. However, in contrast to *sovkhoz* times when reindeer production was integrated into the wide network of the Soviet economy, contemporary reindeer herders of Eveno-Bytantaiskii district don't export reindeer meat to the city except for small quantities for their relatives. Usually, the meat is sold in the village through a network of acquaintances and relatives. Meat also could be exchanged for some things such as gasoline or for the work of someone. Hard antlers [Rus. *Boi rogov*] and velveted (soft) antlers [Rus. *Panty*], however, are in high demand in China and Korea for medical use and are good products for export to the outside world. For instance, herders could obtain 600-800 roubles for one kilo of hard antlers. The leg pelt of reindeer [Rus. *Kamus*], from which traditional winter boots [Rus. *Unty*] are made, are also in high demand and can obtain a good price in the village and city. In Sakkyryr, kamus costs from 500 to 2000 rouble depending on colouration, while *unty* could cost for 40 000 roubles, twice the monthly salary of a reindeer herder. However, almost everyone in the village has relatives or companions in the *stado* who can exchange *kamus* for other things or services. For

instance, a seamstress might sew an *unty* for someone in exchange for a *kamus* and then make a *unty* for herself.

2.5 The festival of reindeer herders in the village Sakkyryr

The annual "Reindeer Herder's Day" festival [Rus. *Den' olenevoda*] takes place in Sakkyryr every March and is organized by the village municipality and community. It includes various sport competitions such as reindeer races, lasso throwing and northern national wrestling. In the case of 2019, the prizes for the competitions were given by municipal unitary enterprises, State unitary enterprises, agricultural cooperatives and local private organizations (individual entrepreneurs, *obshchiny*, other local companies).

The Reindeer Herder's Day was initially introduced by the Soviet state for celebrating reindeer herders' work, in a similar manner to events for many professions during Soviet times (see Takakura 2002). However, the Reindeer Herder's Day is not entirely a sports event, it also has a significance for indigenous identity expressed through various public performances, e.g. exhibitions of national clothing and handmade things, concerts and traditional dances. This festival has become an integral part of the so-called "traditional culture" (see also Stammler 2004, 100). Furthermore, the reindeer is an icon for the identity of most of the indigenous people of Arctic Yakutia, considering that the reindeer is connected with many aspects of indigenous life, e.g. traditional clothes, traditional dishes, musical instruments (made from reindeer bones, hooves and antlers) for ethnic ensembles, reindeer symbolism for stamps, coats of arms, flags, etc.

Usually, the end of March is chosen for the festival as most reindeer herders can access villages just before they migrate long-distances upstream from their winter-spring encampments on the taiga. It is a celebration for everyone, but especially for reindeer herders who gather together from nearby taiga areas and neighbouring districts, e.g. Bulunskii, Tomponskii, Verkhoianskii. They come to converse with each other and compete for lucrative prizes, e.g. snowmobiles (see Figure 16), new rifles, gasoline generators, smartphones and barrels of fuel. Moreover, special flights from Yakutsk to Sakkyryr airport are organized to deliver government officials from the Ministries of Culture, Education and Agriculture, as well as the heads of district municipalities and journalists. In 2018, even the champion of national wrestling, originally from Sakkyryr, came to honour the Reindeer Herder's Day. The Reindeer Herder's Day also serves as an opportunity for people to meet with district and State politicians, also for decision-makers to express their views on current affairs in reindeer herding. For most reindeer

herders, the festival is also a chance to visit the village, acquaintances, relatives and families.

Figure 16. The general prize of the reindeer festival competition - snowmobile (photograph by Jefanovas)

The festival officially lasts about three days, but the stay can often extend to a few weeks longer for some people involved in drinking parties. Although alcohol stores in the village are closed during the festival, people can get vodka and moonshine in unofficial outlets. The prolonged stays of reindeer herders in the village after the festival often leads to violent scuffles or can even end with deaths. There were many cases during my fieldwork when reindeer herders involved in drinking "disappeared" for several weeks somewhere in the village with the result that the normal workflow in the *stado* was paralysed. Drinking is not always confined to the village, as some heavily intoxicated herders continue to drink in the *stado*. Referring to such a situation, one Eveny woman argued: "*what those men can do, many do not even have any property neither in the village nor in the stado, they don't have wives and children*. *Others are divorced, as women often do not tolerate such a life when a man is almost absent from home*".

However, despite the dramatic side of the festival, wins in the competitions significantly supplement the budget of reindeer herders as the prizes have high economic value. For example, several years ago during the Republican Festival of Reindeer Herders which took place in Yakutsk, Afanasii won a Russian van UAZ-452. The Reindeer Day is the biggest annual event for reindeer herders, hence Afanasii and his family carefully began preparing several weeks before the festival. Varia and Afanasii's mother Maria spent evenings in the log cabin sewing the decorations for reindeers: the headband (see Figure 17) and side strips. The colourful attributes are made from beads, white reindeer hide, red, blue and yellow materials and comprise reindeer icons, various symbols of nature, the sun, snow-covered mountains and shapes of people that join together in a wavy line symbolizing unity and friendship. These were considered to be the pride of the family as the best-decorated

reindeers are nominated for a prize. Afanasii's mother showed me the reindeer headbands that she made about 40 years ago. To my surprise, I noticed in it the emblem of the Lithuanian factory "Vairas" (see Figure 18) which manufactured bicycles named "Ereliukas", a similar bicycle I had in my youth.

Figure 17. Decorated reindeer with a headband (photograph by Jefanovas 2018)

Figure 18. Headband for reindeer decoration with the emblem of a Lithuanian-made bicycle (photograph by Jefanovas 2019)

Amazingly, this emblem had ended up on the Siberian Taiga 6000 km away from my country to be included in reindeer decoration. Perhaps it had been delivered to Yakutia at a time when Lithuania, as well as other Baltic countries (Latvia and Estonia), were part of the Soviet Union. Through this story, I once again chanced upon the opportunistic character of these people, as they could adapt anything at hand to meet their needs.

Meanwhile, Afanasii selected the fastest and most resistant reindeer from the herd which he had been training to pull sledges. I asked him, how he distinguish which one reindeer will fit for the race? Afanasii told with the simplicity that there is nothing to distinguish. By living in the *stado* you just know which reindeers have stamina and which are to week. Time after time, some reindeer herders visited Afanasii *stado* before the festival for friendly races and to train with reindeer sledges on the river ice. The men took riding sticks, put on ski masks and goggles, warm gloves and arctic coveralls and went on a race for 5 km. However, Afanasii himself didn't need to train at all because he did these things daily as part of his job. He was often the fastest among herders and took first place in competitions many times. I wondered how Afanasii achieved such great results. He explained that during races, he talks with the reindeer to encourage them to run faster. He whispers things like, "*hey guys try more*,

just a little left to the finish line, we need a new snowmobile, please do your best". Not once I noticed Afanasii's passionate desire for speed, for example when going by snowmobile he manoeuvred at high speed. Sitting on the sledges attached to the snowmobile, sometimes I was afraid we would crash in the mountains. Once, going with the reindeer sledges (see Figure 19) on a day-long journey to a neighbouring *stado*, Afanasii instructed me to drive one caravan, while he drove another. It was a harsh trip for me. I was trying my best to speed up reindeers by urging them with the long riding stick. However, after half the trip, the reindeers gave up listening to my commands and just stopped and laid on the snow. With the whole caravan chaotically tangled, I couldn't establish order and Afanasii had to come and help me. Many times, we replaced reindeers, but the scenario repeated. Afanasii went far forward while I desperately tried to make the reindeers run faster. Finally, as my hands got tired of pushing the reindeers with a stick, in the blink of an eye, I broke my stick by accidentally hitting a hillock. When Afanasii came to help, I asked him how he managed to run reindeers so fast. He answered "*how can I explain it to you, something in my blood makes reindeers run fast and other riders usually fall behind, even my mother wonders how I manage it. My father was a skilful reindeer herder all his life, but he too lagged behind me"*.

Figure 19. Crossing a river with reindeer sledges (photograph by Jefanovas 2018)

Charisma, high adaptiveness and abilities to utilize various subsistence opportunities brought Afanasii success as well as prestige that came with the awarding of the title of Master of Sports, gained in Arctic multi competitions that included riding reindeers, racing with reindeer sleds, lasso throwing,

wrestling, sport shooting, skiing and running. Afanasii is the winner of many such competitions organised by the Republic of Sakha, the Russian Federation and at the international level. One could see countless cups, medals and prizes on display in the Afanasii village house. Once, when I asked Afanasii to tell me about his sports victories, he confessed that he had won so many times that he could not even remember where some of the prizes came from. It seems that winning the prizes, such as snowmobile in various public events, had become a matter of business for Afanasii and his family.

The day of the Reindeer Festival approached, two sledges harnessed with eight reindeers were driven ahead to the village by Afanasii's son Martin and other reindeer herders who cooperated with Afanasii. It is not uncommon for reindeer herders who do not have their own reindeers or do not work in the *stado* to ask their acquaintances to borrow reindeer and sledges for the competition. In exchange, herders would share the prizes they win. When the figures of reindeer herders with sledges disappeared on the horizon, Afanasii loaded huge bags with family belongings into the truck and put two carcasses of slaughtered reindeer on the roof of the vehicle. Reindeer meat is a coin that can be exchanged for goods and services, so reindeer herders never go to the village empty-handed, as that would be considered by the community of herders/hunters as negligence. Halfway to the village, Afanasii stopped at the old remnants of a burnt hut to leave offers to the taiga spirits. To my surprise, the kids brought an empty bottle of Coca-Cola with a bottle cap tethered on a cord. They mounted the bottle on the larch in the place where offering to the spirits were presented, e.g. cigarettes, bullets, rags and empty vodka bottles (see Figure 20). Afanasii, Varia and the kids put in cigarettes, matches and candies. The bottle would keep the offerings dry, so that they would last longer. From this example, I learned again that various adaptations on the taiga reflect the opportunistic mood of reindeer herders.

Figure 20. A Coca-Cola bottle adapted to leave as an offering for the spirits (photograph by Jefanovas 2019)

The offerings are made by herders to honour the spirits with the belief that they will be granted success in return, so the longer the offerings last, the longer the spirits will be benevolent to the people.

The village atmosphere, compared to being on the Taiga, reflected differently on Afanasii's family's mood. Whereas village life is an integral part of Taiga subsistence, their life back on the taiga itself is slower and calmer, but not less busy. After entering the house, I noticed that Afanasii immediately became very busy, he rushed to contact many people via the phone to make deals for selling reindeer meat and obtaining various household goods, vehicle parts and gasoline. While in the village and preparing for competition, reindeer herders also have to think two steps ahead and utilize the opportunities to refill all possible storages. Meanwhile, Varia seemed nervous having to look after the yelling smallest kids while at the same time cooking the meals, washing clothes and preparing the sauna. In the midst of such a busy rush, guests flooded the house, mainly reindeer herders from other districts who had arrived for the festival. The room became noisy with the voices of men, some of them already drunk and all arguing loudly about the prizes in the upcoming competition and about reindeers. Many also made various requests to Afanasii.

The festival began the day after we arrived in the village. It was opened with the traditional marching of all participant groups carrying flags with the icons of their districts. It was a huge noisy caravan of people, colourfully decorated reindeers, barking dogs, sleds creaking in the cold, rushing snowmobiles, trucks and cars, it filled the main street and continued its way to the festival arena on the outskirts of the village. All gathered together in the square which was equipped with a main stage and a reindeer race area. It was lined with tents representing various authorities, enterprises and *obshchiny*. One could enter modern heated tents and try traditionally used offal, such as boiled reindeer guts [Rus. *Potrokha*] and its soup, blood sausages, salted foal meat [Rus. *Zherebiatina*], sliced frozen fish [Rus. *Stragonina*] and pancakes [Rus. *Olad'i*]. The head of the municipality gave the opening speech, followed by other leaders of various authorities, as well as guests of honour. Traditional Eveny songs and dances on the stage initiated the reindeer herders' competition. As usual, it started with men's reindeer sledge races (see Figure 21), the first being 5 km and for the next 10 km. The men wore clothing specially tailored for the race: *unty* ornamented with bright and dark squares and vests made of reindeer hide with their district's emblem on the back. Afanasii's vest had an icon of a mountain sheep which is the symbol of Eveno-Bytantaiskii district. The men wore traditional Eveny hats made from reindeer hide and decorated with wolverine, arctic fox or sable fur. As the race began,

clouds of snow splashed up from under the sleds and flickered in the Arctic sun, loud shouts echoed from the escort drivers desperately trying to speed up the reindeers by poking them with riding sticks. Observers showed great excitement, shouting, and emotionally gesturing to encourage the drivers. Many watchers placed bets on certain drivers of the sledges, thus people nervously watched with binoculars and cheered for their favourite. However, for some the race ended at the beginning with tangled reindeers, while for others the end came with crashes, one reindeer broke his leg and was slaughtered.

Figure 21. Reindeer sledges race during the "Reindeer Herder's Day" festival (photograph by Jefanovas 2019)

After the race, reindeers stood with their tongues out, breathing heavily and emitting clouds of vapour from nostrils and mouths, some animals were with bloody backsides from the repeated poking with the driving sticks. Other competitions such as riding on *uchakhs,* throwing the lasso and jumping over sleds were organized for both genders and for kids. At the end of each competition, the winners of first, second and third places were called to climb up on the stage to be granted a medal, a diploma of honour and a prize, either monetary or material. Quite many awards were given to the winners of the various competitions - over the course of the March 2019 festival, 38 monetary and material prizes were distributed among the winners. Additionally, the top prize, a Russian snowmobile *Buran* priced at about 300,000 roubles (3350 €), was awarded by the head of the district

administration to the winner of the 10 km reindeer sled. As well as the sporting element, the festival also has a political dimension for the authorities of Eveno-Bytantaiskii district in that they can demonstrate to both the local community and the "outside world" (Republic of Sakha or even Russia) their concern for supporting and stimulating (through prizes and bonuses) traditional reindeer economies. The event also expresses cultural values maintained within the local community. Apart from the opportunities to win profitable prizes and to negotiate with the policy makers (local as well as republic level) on issues of reindeer husbandry, indigenous people are strongly motivated by the prestige of participating in the social event through which the cultural identity of reindeer herders is expressed.

This part also shows that the daily subsistence practices of reindeer herders can be perceived as a wide net of relations connecting reindeers, people, taiga, village life, local authorities and also the State. Being engaged in such relations, indigenous people strive to utilize potential possibilities to move forward, this reflecting the very principle of the opportunistic lifestyle of herders/hunters, a quality that was an integral part of the subsistence of the indigenous peoples in the changing socio-economic environment of the North (considering the disruption of the planned economy of the Soviet state, the post-Soviet period of transition to a market economy and modern life in a market economy conditions).

2.6 Getting to the *obshchina* "Sagakh"

As winter ended, having spent a month in Sakkyryr village, the day came when I had been promised by reindeer herders to take me to the *stado*. However, it would be an entire week more that I waited for the reindeer herders to drive me on the snowmobile to the *stado* belonging to the *obshchina* "*Sagakh*" (meaning Horizon), managed by the indigenous women Daria Starastina. The reindeer herders were not in a hurry! Eventually, that week passed and at midnight the sounds of snowmobiles made me run outside to meet the arriving Daria with other reindeer herders. I quickly brought my baggage to load on the sledges attached to the snowmobile and then, before sitting on the top of the cargo loaded on the sledges, I jokingly asked if people always came at night a week later than they had promised. However, nobody smiled but quietly explained that it is always like that because people must wait to fully utilise opportunities to take as many provisions as possible to ensure their subsistence on the taiga, thus nobody goes empty. It was about -30 °C that night, thus I dressed in all that I had for the 50 km drive, a journey of about 4 hours to the base encampment. Despite having gloves and a vest

made from beaver hide as well as an eiderdown jacket resistant to – 40 °C, the herders also insisted that I put on a winter coat *kukhlianka* made from double reindeer skin. The herders looked at my readiness with suspicion, since I seemed to them a non-experienced novice. We went quite fast through sparse taiga of low larch and then turned to the frozen tributes of the river Big Sakkyryr. Fortunately, I took a ski mask and goggles as otherwise, driving quite fast, my nose and eyes would have frozen. Although the headlights of the snowmobiles illuminated the route well enough, sitting on the back on the sledges with goggles that at times fogged up and froze from my breath, I had to concentrate to not bump my feet into frozen hillocks, trees or rocks. The snowmobile drivers, concerned about me, turned to me after some 15 minutes to see if I was okay. Before reaching the river Big Sakkyryr, which serves as the main road during the cold season, we stopped at a special group of larches to leave offerings for the spirits: pancakes *olad'i*, candies and red and blue rags [Yak. *Salama*] that were tied to one of the larches. People always stop there to ask the spirit of the river for favour to successfully reach their destination. The place looked rather marvellous, the few larches were totally decorated with the various offerings made by nomads to honour the spirits, items including rags, unused parts of snowmobiles, old watches, sunglasses, cigarettes, matches, bullets, bottles, game cards, shoelaces, candies, old garlands with coloured light bulbs. I observed this place several times later in daylight and couldn't take my eyes off such the variety of things (see Figure 22). Once, an elder from Sakkyryr told me that the roads in the taiga are so unpredictable that one could be lost and freeze to death at any moment if the spirits were inhospitable to him. Thus, if you have nothing with you to leave to please the spirits, you can just leave a lock of your hair, said the elder. Going further, we turned from the river Big Sakkyryr to the river Chubukalakh and from there we drove through the taiga

Figure 22. A tree with offerings for the spirits (photograph by Jefanovas 2018)

and reached the main camp (see Figure 23) near the so-called “Mammoth Lake” [Yak. *Seli Kuolė*]. Barking dogs met us as we approached the encampment, a compound consisting of a log cabin, corral, satellite–antenna mounted on a larch, storage platforms raised above the ground [Rus. *Labaz*], garages for snowmobiles and a truck, sauna, meat storage building and other small taiga buildings. On a flat area in front of the cabin, there were scattered reindeer sledges, snowmobiles and broken parts, fuel barrels, ropes, reindeer saddles, straps and bridles. As we entered, the first thing that caught my eye when the gasoline generator lit the cabin up was the clean floor carefully painted brownish and various small things (e.g. binoculars, cartridges boxes, spotlights, sewing accessories, toolkit, kitchen tools) placed on shelves. I did not expect to see such cosiness and neatness in the remoteness, not even all the houses in the village seemed so neat. It is probable that taiga log cabins are cosier than some village houses in Sakkyryr because taiga homes are small and don’t contain many things inside as these are stored outside in the wooden storage constructions [Rus. *Ambar*]. Additionally, there were two TV sets inside the log cabin, plus a table, a sink with a portable washbasin, two beds for guests and one bed in the corner with sliding curtains for Daria. There were several sockets for charging electronic devices and two satellite phones, which were used mostly for emergency calls, as calls are expensive. In addition, the encampment also had a radio station to connect with other *stados*. Just after entering the cabin, herders took firewood and a kindling called "*kyspa*" which they had prepared before leaving the camp. In the blink of an eye, a fire was lit in the oven. People fed the fire in the oven by throwing in the *Olad'i*, an offering consisting of a piece of meat, candies, bread with butter, cigarettes and sprinkled tea. It is a most important ritual because spirits of the place should accept you, especially upon arriving at a new place or coming back to the same after some time. Everyone should also feed the fire before going on long trips. Therefore, when going hunting,

Figure 23. After arrival in Daria’s encampment (photograph by Jefanovas 2018)

people feed the fire by asking the spirit-master of wild animals *Baianai* for success. After successful hunting, a hunter also must say thanks to *Baianai* by throwing a piece of the meat of the prey into the fire or a cap of vodka. Indigenous people believe that if one forgets to feed the fire after arrival at a place, this will evoke the anger of the spirit-master of the place [Rus. *Khoziain mestnosti*], also called *ichchi* or *sibien*. Furthermore, herders/hunters say that *khoziain mestnosti* in anger can drive a person out of the cabin or the tent by not letting him sleep. For instance, Vitebsky (2005, 312) shows that according to the worldview of the Eveny of the Sebian locality in North Yakutia, the identity of the spirit is derived from the character of the place itself, most of the spirits had the name of the site. According to Vitebsky (ibid.), Eveny believes that the spirit of the place is identical to the spirit of the river or lake besides which one is camped, those spirits were made manifest as one migrated through a succession of sites. Thus, in feeding and honouring spirits, people call them to engage in a partnership to create a habitable place (ibid.). Such interaction of humans and spirits, Brandišauskas (2017, 245-250) terms cooperation that shows how the Orochen Evenki, the hunters of Zabaikal'ia, engage in reciprocal relations with the spirit-master to receive hunting luck. Spirit-master is perceived as non–human entity dwelling in the landscape who own the wild animals and shares the game with the hunter (ibid.). Thus, moving via roads in the taiga, as well as dwelling in a certain area and changing localities on the landscape also means entering into relations with non–human beings, these perceived as the masters of the place. As well as in other places on the taiga, the household of Daria is also believed by herders/hunters to be supervised by a *khoziain mestnosti*.

2.7 The head of the *obshchina* Daria Starastina

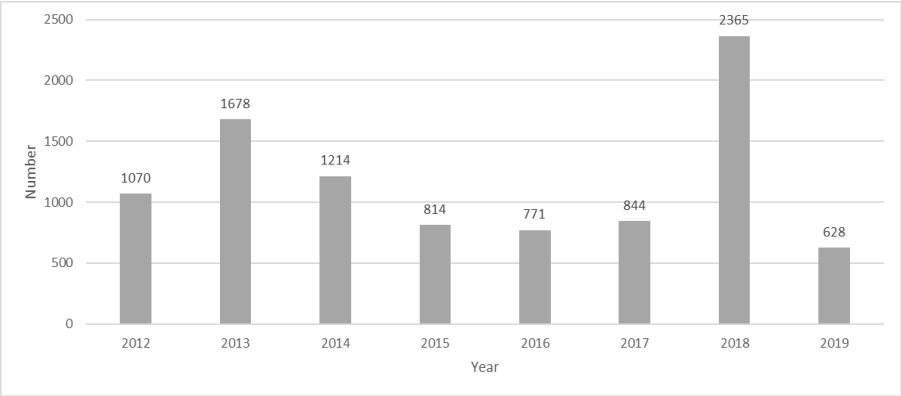
Daria is the aunt of the reindeer herder Afanasii, a sister of his mother Maria. At the time of my fieldwork, Daria Starastina was 62 years old and was an indigenous small-statured woman who remained silent most of the time or talked in the Yakut language with a thin quiet voice. Daria learned Russian at school and surely understood it, but refrained from using it and only occasionally answered in Russian. Fortunately, other reindeer herders in the camp translated most of Darya's speech into Russian for me.

She was dressed more traditionally than most of the herders that I met. She wore *unty* or *torbaza*, double-thickness boots for extremely low temperatures and deep snow. She also wore a traditionally ornamented *kukhlianka* coat made from reindeer hide and a sable hat with earflaps made in the Russian style. At first glance, Daria gave the impression of a very shy person. The

calmness of reindeer herders seems to result from their interaction with reindeers, as herders are used to keeping quiet when approaching reindeers, they don't talk and don't make any sudden movements. However, later I learned that Daria was a very strong person commanding strict order in her *stado.* With the assistance of her herders, she carefully managed roughly 2000 reindeers and restricted any usage of alcohol in her encampment. Some Sakkyryr villagers depicted her as a hard charactered person, mostly because she avoided communication and selected only certain people to interacts with. Thus, in her *stado,* Daria was usually visited by the so-called former elite, e.g. former chiefs and brigadiers of the *sovkhoz* and other people formerly in a high position, as well as prominent hunters and herders, some of whom had been awarded medals during the Soviet times. Daria was also awarded the "Order of Friendship of Peoples" [Rus. *Orden Druzhby narodov*] for her great labour achievements in the reindeer herding economy of the *sovkhoz*. As well, she was known among the Sakkyryr inhabitants as a good shooter and had won the women's reindeer sled race many times in the past. People in the village did not hesitate to call her a rich person who, for example, had a property in the city and village and managed to have a quite a large pool of vehicles - a tractor, snowmobiles, quad-bikes, an all-terrain Russian auto UAZ and a large Russian cargo track URAL–4320. However, some of the Sakkyryr people I interviewed believed that Daria was a pure taiga inhabitant very tightly related to her place. She spent most of the time in the *stado*, rarely visiting a village or city. Even during a short stay in the city, Daria felt it hard to breathe annoyed by the emissions and loud noises of vehicles. Usually, she wore a face mask when walking in the city. Although Daria was in her sixties (during my fieldwork) and felt tired of working long and hard with reindeer throughout her life, she could not nevertheless picture her life without the taiga. Daria, as with many indigenous children in Soviet times, was born not in the traditional dwelling on the taiga, but in Sakkyryr maternity hospital. In her childhood, Daria and her two sisters went to boarding school in the village for 10 years. Her parents lived all the time in the *stado* and only during the holidays, usually in summer, they took Daria and her sisters from the school to the taiga. After the autumn holidays, the parents had to take the children on reindeer to the boarding school. Daria always waited for the time that she would return to the *stado*. She recounted that children were left almost to their own means in terms of subsistence in the boarding school. For instance, children were given a coupon for a month to exchange for food in the communal dining room in the settlement. If someone lost a coupon, they would be without food for a month and nobody cared. Nobody dared to complain to the teachers, as it would always be considered your fault.

Speaking in the native Eveny language also was forbidden, children were beaten if they did not speak only in Russian. After finishing school, Daria studied geology at Yakutsk university, but, according to her, it was very difficult to support herself at that time in the city as there were no relatives to ask for support. Hence, after half a year, she quit her studies and returned to work in the *stado* of *sovkhoz* "Leninskii". After marriage, Daria with her husband Pavel, worked together in the *sovkhoz* till its bankruptcy along with collapse of Soviet state. However, Daria and Pavel were awarded reindeers by the state farm as a bonus for their good results in reindeer husbandry. Initially, Daria and Pavel kept their reindeers together with the herd of the *sovkhoz,* but after the bankruptcy of state farm "Leninskii", they organized their own private herd. When the reindeer herd reached about 200 heads, Daria and her husband founded the *obshchina* in 1999. An area for the grazing of the 200 reindeers was officially assigned (for long term lease) to the *obshchina* of Daria by the administration of the municipal authority, but with the expansion of the herd, larger pastures are required to sustain the reindeers. Thus, in fact, the lands (mountainous tundra and taiga areas) where the reindeer herders graze their herds are much larger than officially assigned by the authority. Reindeer herders distinguish their reindeer herding areas from neighbouring pastures by relying not so on officially designated land boundaries, but by common agreement between them. The lands on which Daria's ancestors lived and grazed reindeer in pre-revolutionary times were occupied by the *sovkhoz* "Leninskii" and, at present, these lands are managed by the MUP "Leninskii" (the successor to the "Leninskii" state farm). Daria recalled that she and Pavel initially lived in a canvas tent while they build their first log cabin near the lake *Seli Kuolė*, the locality of the base camp of the *obshchina*. Daria and Pavel watched over the reindeers by themselves until 2009. The livestock was alternately guarded against predators every day and night, these efforts resulting in the herd starting to gradually grow - every reindeer counted. According to Daria, it was economically very sensitive to lose reindeers to either diseases or wolves. However, the herders didn't dare to speak or complain loudly about the wolves, believing that this could trigger more attacks on the reindeers. Overall, annual losses to wolves in Eveno-Bytantaiskii district amounts to about 1000 reindeers, or 8% of the total reindeer pool (see Figure 24 and Table 1). Although this does not seem to be very large on a district scale, the losses of reindeers to predators could challenge the subsistence of people, especially when the herds are small. However, as the herd of Daria grew by as much as four times (from an initial 200 heads) over about 10 years of careful management, the losses of some reindeers (to wolves and diseases) became not so economically sensitive.

Figure 24. The number of predated reindeers by wolves in Eveno-Bytantaiskii district (2012-2019)



Source: Report on reindeer predation by wolves in Eveno-Bytantaiskii district. Provided by the ADEBD

Table 1. Numbers and percentages of predated reindeers by wolves in Eveno-Bytantaiskii district (2012-2019)

Years	Reindeer number	Number of predated reindeers	Percentage of predated reindeers
2012	16639	1070	6.4%
2013	16182	1678	10.4%
2014	14648	1214	8.3%
2015	15371	814	5.3%
2016	15750	771	4.9%
2017	14477	844	5.8%
2018	13137	2365	18.0%
2019	13114	628	4.8%

When the *stado* increased to 800 heads, Daria and Pavel looked for assistance to manage their reindeers. Daria's niece Olga, a daughter of Maia, came first to the *stado.* As Daria and Pavel have no children, Olga became as close as a daughter. Daria remembered that Olga could do any job, for example drive a tractor, cut wood, bring reindeers, look after the household, etc. However, the unexpected death of Olga from alcohol intoxication after New Year celebrations in the village left Daria distraught and confused. She recounted how Olga had arrived at the *stado* from the village and that, soon after arrival, her heart stopped beating and there was nothing anyone could do in such remoteness. Daria had expected Olga to stay with her in the *stado*, she had even bought her a new all-terrain vehicle "UAZ", which, at the time of my fieldwork, still stood unused in the wooden garage in the encampment. For the sake of her memory, Daria even asked me to mention Olga in my writings.

Meanwhile, as the *stado* continued to grow significantly, Daria also asked the 30-year-old Yakut man Gerasim Bochkarev (for his biography see in chapter 5) to work at the *stado* as the main reindeer herder and predator hunter. Working with the *stado*, Gerasim is usually assisted by his twin brother, his cousin or his nephew. Over the years, Gerasim became one of the most prominent *volchatnik* of Eveno-Bytantaiskii district. Meanwhile, Daria's husband Pavel mostly continued to look after the about 100 "home reindeers", he trained the *uchakhs* and harnessed the reindeers, he also took care of the herding dogs. However, after the death of Pavel in the winter of 2017, it became difficult for Daria to manage the household and *obshchina.* She remembers her husband to be a very neat man. Pavel always kept the hut warm and also prepared the food. He did general jobs which Daria prescribed to a man: making sleds, building canvas tents, preparing firewood, weaving ropes, bringing the ice for melting into water, setting traps for wolves and hunting bears and big ungulates. On the other hand, Daria also claimed that, in general, are no strict divisions on the taiga between the jobs of women and men. A woman is able to do almost all the jobs as a man does, especially if there are no men at a time. For instance, Daria also hunted wild ungulates such as *chubuku*, as well as birds, squirrels and sables. Additionally, she also constantly visited the main reindeer herd, which grazed at a distance from the household.

According to Daria, although some people took Daria's success in reindeer herding for granted, not all of them considered the hard work Daria had done throughout her life to achieve her success, especially in terms of her organizing the annual jobs in the *stado*, such as reindeer recounting and vaccination in April (see Figure 25), as well as the separation of males from pregnant females. At the beginning of May, the separated reindeer females must be driven to the mountains to the so-called calving place [Rus. *Otel*] to give birth to the new generation of reindeers. With assistance of other herders, she also selected reindeer males that had to be castrated to make them manageable for training into *uchakhs* and harness reindeers. Additionally, from May, calves had to be guarded round the clock from wolves, awakening bears, wolverines, lynxes, eagles and even crows. It is the most vulnerable season for reindeers, so herders have to keep on the eye on them and be ready with a rifle to fight against the predators. At the end of May, the grown calves need to be earmarked authentically to distinguish them from reindeers of neighbouring herds. In summer, though it is even more difficult because the herd has grown in size (with the birth of calves), they still have to be watched over all the time, this made even more difficult as the reindeers often disperse many kilometres to try to avoid mosquitoes and flies. With the reindeer

dispersed, often scattered at distance and without protection by man, reindeers become an easy target for wolves. Autumn brings the second annual reindeer count, this demanding the strength of the muscles of many men. In general, Daria thought that her herd had become too big to manage successfully, thus she was about to sell some of the reindeers for breeding. She had already sold 700 reindeers five years earlier to the reindeer herders from Kustur village in Eveno-Bytantaiskii district. However, at a time of my fieldwork, Daria couldn't sell further reindeers as Eveno-Bytantaiskii district had been designated unfavourable due to the presence of brucellosis, a bacteria causing disease to both reindeer and humans, damaging joints and muscles, conditions that usually persist for life.

Figure 25. Corralization - spring reindeer recounting and vaccination (photograph by Jefanovas 2019)

It had been determined by veterinarians that few herds were infected in Eveno-Bytantaiskii district, thus the veterinarian authority would not permit the selling of reindeers for breeding, despite annual analysis not finding brucellosis in Daria's *stado* for 10 years. To sell reindeers only for meat would be unprofitable, as delivering it to the city would demand huge investment, for example the need to open a slaughtering facility to the required veterinarian requirements, the need to build infrastructure for meat storage, gasoline for transportation and the need to hire additional staff for reindeer slaughtering and preparing the meat. The price of meat would jump significantly and people wouldn't buy it. Besides, it should be considered that

wild reindeers (hunted in those districts that contain wild reindeer populations) delivered to the city by the hunters are much cheaper, as it costs nothing to sustain them. Thus, the price of the domestic reindeers would be below the cost of production. For the herders, it is better to sell reindeer products locally in small amounts or use it for exchange, for example to pay for the jobs of seasonal workers. Instead of relying on selling reindeer meat, the main income of the *obshchina* consists of State-paid subsidies per reindeer head, thus the bigger the herd, the bigger the income. Additionally, selling reindeer antlers for Chinese and Korean medicine also contributes to income. However, even having the cash, it is sometimes very difficult to get essential supplies. For instance, fuel in Sakkyryr is always in short supply, thus one needs to have relatives or acquaintances who could organize barrels of gasoline. It is also a quite difficult task to get spare parts for snowmobiles and other vehicles, which can become urgent in everyday subsistence. Thanks to Daria's relatives and acquaintances in the city, it was often possible to obtain the things and have them delivered to Sakkyryr with plane. However, this network of relatives and acquaintances also had to be reciprocated and maintained with a supply of reindeer meat.

Visiting Daria's *stado* after a year, I found that the herd remained as large as it had been, or had even slightly increased. I also learned that assisted by a network of relatives and acquaintances, Daria had successfully managed the *stado* by organizing and performing all annual jobs urgent for reindeer sustainment. Despite the death of Daria's husband, who had also been her partner in the reindeer herding for 34 years, this indigenous woman had adjusted to maintain the size of the herd by utilizing subsistence opportunities and the experience in reindeer herding that she had accrued throughout her lifetime.

2.8 The reindeer herding cooperative "Factoria Tompo" and the former sovkhoz "Tomponskii"

At the beginning of the winter in 2019, I visited the village Topolinoe in Tomponskii district to learn how reindeer herders had utilized opportunities to adjust their subsistence in the market economy times since the disappearance of the formerly famous *sovkhoz* "Tomponskii", also known in the YASSR as a *sovkhoz* millionaire. During the transition from socialism to a market economy and the bankruptcy of *sovkhoz*, the reindeer number in Tomponskii district fell to its lowest level ever (see in Figure 6). During my fieldwork, I saw the disappointment of many of the inhabitants of Topolinoe village. People would say that during the time of the *sovkhoz*, many of them

were reindeer herders, but now they had lost their nomadic jobs and had settled in the village. Many of them remained unemployed, while others worked in the village administration, school, kindergarten, power plant, boiler room and shops. Recollecting memories of an extensive vehicle pool with weight cargo tracks, about 20 *Buran* snowmobiles and assorted tractors, excavators and tracked vehicles, my contacts emphasized their previous life as one of abundance as well as of the power of the *sovkhoz* "Tomponskii". People also proudly declared that a Japanese-made Nissan Patrol SUV appeared for the first time in Topolinoe, which was considered a rarely seen thing in socialist times Yakutia. Additionally, there was an airstrip built for small aviation, mostly for helicopters and planes AN-2. Helicopters delivered provisions and various short supply goods to the village and to the reindeer encampments. So-called mobile trading [Rus. *Vyezdnaia torgovlia*] was organized where the herders could buy with priority right the commodities from abroad unseen else in Yakutia, e.g. audio players, tape recorders and clothes. According to my contact, a former reindeer herder, helicopters and small planes flew to Khandyga, the centre of the district, and back to Topolinoe several times a day sometimes and it was no big deal to ask the pilots to bring vodka to the village or *stado*. Moreover, a cow farm numbering 86 heads was established in Topolinoe, as well as a farm for 700 pigs, both of which were finally liquidated in 2001. Greenhouses were built for growing tomatoes, cucumbers, carrots, onions and various flowers. The foundation and maintenance of these facilities in an Arctic environment where only reindeer herding can flourish was something incomprehensible and required enormous effort and resources. Therefore, people remembered it as an economic miracle. However, during my visit to Topolinoe, most of the former infrastructure of the *sovkhoz* rested in the ruins and the airport was not in use anymore. For many people in the village, the ruins of the old buildings designed in the *sovkhoz* times still evoked a memory of the past. Meanwhile, the economy of reindeer herding dramatically declined after the collapse of Soviet state (see also Nakada 2018). In 1994, the *sovkhoz* was reorganized into the reindeer herding enterprise "Tompo", which united 17 community-based enterprises – *obshchiny* (these were organized by reindeer herders during the initial agricultural reform in Russia that followed the collapse of the Soviet state) (see Nikolaev 2015, 256-257). All the property of the former state farm was transferred to the shared collective ownership of the enterprise "Tompo". However, in the five years following the foundation of the "Tompo" enterprise, the number of reindeers decreased from 19511 heads (in 1994) to 11678 heads (in 1999), while the supply of meat to the State decreased over the same period from 402 tons to 170 tons (ibid.). In 1999, the reindeer herding enterprise "Tompo" was

reorganized into the agricultural production cooperative “Factoria Tompo”, the main economy of which was reindeer herding. In addition, there were other activities such as processing leather and fur materials (sewing footwear and workwear), the production of reindeer meat products and the harvesting and processing of wood (ibid.). At the time of my fieldwork, the “Factoria Tompo” was still active and there were seven reindeer herds and 48 permanent herders in the cooperative. Although the local inhabitants of Topolinoe had expected that the establishment of the “Factoria Tompo” would stabilize the reindeer number, the number of livestock is still declining and at the time of my field work it was about 5,000 heads (see in Figure 6). Apart from the cooperative “Factoria Tompo”, the independent *obshchiny* were established in Tomponskii district, which were headed by outstanding reindeer herders, known since the times of *sovkhoz* as successful leaders.

People realize that without strong governmental support it would be very difficult to re-establish the reindeer economy to the level of *sovkhoz* times. For instance, the Eveny woman Aitalina Baisheva who worked in the administration of the “Factoria Tompo” commented that the economy of contemporary reindeer herding in Tomponskii district is without rentability. It is based mostly on governmental subsidies paid per reindeer head, thus it is barely enough to even pay salaries for reindeer herders. Facing the difficult economic situations, the administration of the “Factoria Tompo” did not mind if reindeer herders took additional income from the selling of reindeer antlers that belonged to the cooperative. Meanwhile, the sewing of artel is an enterprise that had also remained since the time of *sovkhoz*, operating with a small profit. However, only several seamstresses worked at the artel, these not full time, because, comparing to *sovkhoz* times, only small numbers of reindeers were slaughtered for the production of meat and hides. At least, however, the artel provided the reindeer herders with special fur clothing for work in cold weather, as well as with canvas tents. A small part of the fur production (fur hats and gloves, also fur boots *unty*) was also sent to Yakutsk for selling. In the past, the *sovkhoz* provided big quantities of fur clothes as well as reindeer meat to Yakutsk and further afield in Russia. In 1985 for instance, 645 tons of meat was produced from 6384 reindeers slaughtered (see Nikolaev 2015, 246-250). However, in the times of the market economy, “Factoria Tompo” could barely provide only the village with reindeer meat. In 2018, about 100 reindeer were slaughtered for meat production, while during my fieldwork in 2019, the administration of “Factoria Tompo” expected only 50 reindeer for meat production. Reindeer meat mostly circulated in the village and didn't travel to the city or else, at least, did not officially.

One of the responses of contemporary reindeer herders in Tomponskii district to the conditions of a market economy is the so-called reindeer tourism. Some herders who managed reindeers in the "Factoria Tompo", as well as herders leading their *obshchiny* were involved in the tourism business by bringing European and Japanese people to the *stado*. Reindeer herders have a quite wide network of acquaintances abroad which they contact via the internet by offering annual visits to the *stado*. For instance, the indigenous woman Aitalina and her husband reindeer herder (both worked in the "Factoria Tompo") ran reindeer tourism, focussing particularly on French tourists. Aitalina's son lives in France, thus she went to France almost every year to improve her French language, also widening the net of acquaintances and clients in the process. The tourists can arrive (by plane or ground transport) from Yakutsk by themselves to Khandyga, the centre of Tomposnkii district and then take a driver to get to the village Topolinoe (located 300 km from Khandyga). Tourists are usually accommodated in the village of Topolinoe while reindeer herders or local drivers take them to the reindeer encampment where tourists spend on average a week. The tourists usually arrive in February to live in the *stado,* experience the extreme cold and to see the remnants of Stalin's gulags nearby. Winter is a good time for travel to the *stado* with snowmobiles or truck via frozen rivers. It would be almost impossible to reach the *stado* at other times (at least till November) as the 400 km from the village is marked by open rivers, floods and difficult mountain passages. Some reindeer herders of Topolinoe also cooperate with travel agencies in Yakutsk, which organize full-fledged trips for tourists, from arriving to Topolinoe and accommodation there to delivering people to the reindeer encampments. Of course, reindeer tourism organized through travel agencies is more expensive for tourists than a direct agreement with reindeer herders to visit their herd without intermediaries. For example, at the time of my fieldwork, the price of the transportation of the tourist (who organizes his trip without travel agencies) from the Topolinoe to the *stado* would on average cost around 40 000 roubles, to which a tourist would also pay roughly 21 000 roubles a week to stay in the *stado* (about 3000 roubles per day). For comparison, the average monthly salary of reindeer herders in Yakutia at that time was 19 160 roubles (see Neustroeva et al. 2020, 220-245).

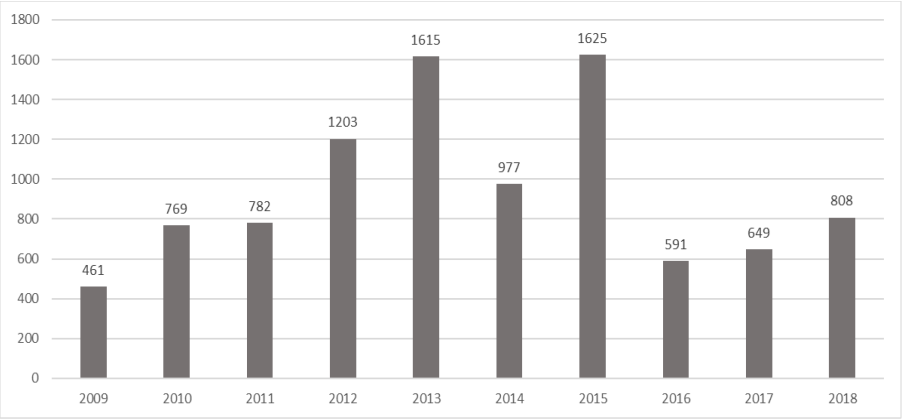
Although tourists may wish to visit the *stado* for their entertainment, the young generation of the Eveny of Topolinoe seem to be abandoning life on the taiga. Many reindeer herders commented on the reduction of reindeer herding in Tomponskii district as the main threat to the Eveny identity, as well as to their native language and traditions. Many of Eveny have settled in Topolinoe village and already do not live traditionally. Their children are

losing the knowledge and abilities to live on the taiga and manage reindeers. My contact reindeer herder argued that some children had become unable even to make a fire. One of the reasons why the young generation is abandoning taiga life is the difficulty of getting from the *stado* back to school after the summer holidays. The reindeer herds are usually kept up to 500 km from the village, but nowadays helicopters rarely fly to take schoolchildren from such distant places. Reindeer herders have to take the children to the village on reindeer backs - not only does it take time, but the trip depends entirely on whether the rivers are frozen or not. There were cases where children went to school only in November, but not in August. As a result, many parents being concerned about their children's education, decided to stop taking them onto the taiga at all.

People remembering the *sovkhoz* times associate it not only with the availability of helicopters to deliver children to school, but also to fight predators. Reindeer herders curse wolves accusing them of the destruction of reindeer herding and the entire nomadic economy of Tomponskii district. On average, wolves annually destroy about 900-1000 reindeer, which is 11% of the total number of domesticated reindeers in Tomsponskii district (see Figure 26 and Table 2). However, wolves cause less damage than the loss of reindeers classified in the statistics of "Factoria Tompo" as "loss for unspecified reasons" (including human fault, environmental factors, diseases) which, according to data given by "Factoria Tompo" administration, amounts to an average 1500 reindeers annually. Nonetheless, reindeer herders blame wolves most of all. Indeed, for instance, Lavrillier and Gabyshev (2018) also showed that the reindeer herders of southern Yakutia–Evenki declared that due to a growth in wolf and bear populations, predation became "the number one problem" exterminating reindeer herding in the face of which it is very difficult to adapt. Meanwhile, the Topolinoe reindeer herders argued that it had become extremely expensive to organize helicopters, and the government would give no more money for that. In *sovkhoz* times, if one or two wolves appeared in the *stado,* it would cause an alarm and a helicopter would fly to shot the wolves immediately. In more modern times, however, packs of 10–12 wolves can walk near reindeers and nobody could control it. Moreover, the bears had also become very numerous, with herders expressing no surprise to observe 5-6 bears per day. When herders shot bears, they found their stomachs full of the remnants of reindeer calves. Reindeer herders complained that the poisons (strychnine and barium fluoroacetate) that were extremely effective in fighting against wolves in Soviet times, had been banned by the government. Although herders/hunters blame wolves for reindeer destruction, the wolf is also a metaphor for human predation, known as "two-legged

wolves," as the loss of reindeer through human fault, inattention or overconsumption is often written off in farm accounts under the name of a wolf (see also Vitebsky 2005, 271-273). Thus, wolf predation statistics should be always considered as a very approximate evaluation. In some sense, wolves seemingly serve as a scape-goat absorbing the frustration of people, also symbolizing the times of shortage and economic upheaval. As Vitebsky (ibid.) put it, the increase in the destruction wrought by wolves had run in parallel with the collapsing economy. Thus, while there used to be a coercive welfare Soviet state, the economic decline and transition to a market economy represent for people pure predation, just like a wolf (see also ibid.).

Figure 26. The number of predated reindeers by wolves in Tomponskii district (2009-2018)



Source: Report on the number of reindeer in the Tomponskii district. Provided by the administration of the reindeer herding cooperative "Factoria Tompo"

Table 2. Numbers and percentages of predated reindeers by wolves in Tomponskii district (2009-2018)

Years	Reindeer number	Number of predated reindeers	Percentage of predated reindeers
2009	18736	461	2.5%
2010	17445	769	4.4%
2011	18084	782	4.3%
2012	11201	1203	10.7%
2013	9552	1615	16.9%
2014	9529	977	10.3%
2015	7340	1625	22.1%
2016	6677	591	8.9%
2017	6026	649	10.8%
2018	4392	808	18.4%

2.9 The privately-owned stado of herder Gavril Zadorov

During the fieldwork in Tomponskii district, I also visited 40-year-old native herder Gavril Zadorov to learn about the opportunistic subsistence of small-scale reindeer herd owners [Rus. *Chastnik*]. Additionally, I wanted to compare the subsistence practices of the herders of Eveno–Bytantaiskii and Tomponskii districts.

Gavril Zadorov was an Eveny reindeer herder from Topolinoe who owned about 100 reindeers which were managed by him and his partner (another reindeer herder). The reindeer herd was officially ascribed to the *obshchina*. After finishing school, Gavril had worked as a reindeer herder since the *sovkhoz* times, later he was a brigadier of the *stado* belonging to the "Factoria Tompo". However, five years earlier, he had quit the cooperative taking out his owned reindeers, which he had kept along with Factoria's *stado*, to form a private herd. Gavril had successfully managed the Factoria's reindeers by expanding the *stado* from 500 to 2000 heads, a good result as herds usually consisted of about 1000 reindeers. Many villagers considered Gavril a successful and confident brigadier and, reflecting his good results in reindeer breeding, he had repeatedly received awards, including reindeer, which he took to organize his herd instead of slaughtering and selling animals. According to Gavril, the salary provided by the "Factoria Tompo" was too low to maintain his big family consisting of a wife and seven children. Thus, he decided to run a private business with reindeers and try to subsist on his own.

At first, it was rather difficult to persuade Gavril to take me to his *stado*. The reason was that Topolinoe reindeer herders were used to wealthy tourists from Asia and Europe who pay good money for the trip. For instance, once a group of the Japanese tourists paid Gavril 28 000 roubles for a day trip with reindeers. It did however, underline to me that reindeer herders utilize opportunities to supplement their subsistence by taking tourists by chance. However, through the mediation of the head[11] of the administration of the Tomponsky *Nasleg*, Gavril agreed to take me for free. Gavril was asked by a head of the administration to do me a favour and in such a way contribute to my scientific study of Arctic reindeer herders.

[11] I am deeply grateful to Innokentii Ammosov (the manager of the ADEBD), who personally contacted the head of the Tomponskii *Nasleg* and asked to support me during my field research in the village Topolinoe. This became possible thanks to the personal connections of Innokentii with the head of the administration of the Tomponskii *Nasleg*.

Gavril arrived at the village to take me with a new–looking Russian *Buran* snowmobile that he had won in the 2019 Reindeer Herder's Day competition, which had taken place in Topolinoe village. In the same way, as in the case of Afanasii from Eveno-Bytantaiskii district, winnings in competitions complemented the budget of Gavril and could be taken as a component of the reindeer herding economy. Gavril took me with his snowmobile 10 km from the village to the place where he kept his reindeers. Gavril was close to the village to stay for a week with his family, who lived in Topolinoe and it was thus a good chance to join him near the village before he nomadized to the taiga again, thereby making it very difficult to reach him. On the way to the *stado*, Gavril suddenly stopped his *Buran* noticing the dog tracks, a sign that meant dogs had probably chased over the reindeers scattering them across the outskirts of the village. It would be a hard task to gather the reindeer together, it could take three days or more. Gavril swore in Russian, cursing the dogs and setting snares in bushes to catch them. According to Gavril, stray dogs on the outskirts of the village had become a bigger problem for reindeers than wolves. However, wolves would also come down from the mountains to attack reindeers that, since November, had been driven by herders to the corrals 18 km from the village. Reindeer herders brought to the village only that part of the reindeer herd selected for slaughtering. While the reindeers were in the corrals, the herders usually utilized the opportunity to visit their families in the village for a time. In turn, wolves used the opportunity to attack the temporarily unattended reindeers left near the village.

During the previous winter, wolves had taken five reindeers from the Gavril *stado* and it was a significant loss for him. Bearing in mind that due to the small number of reindeers in his herd, Gavril tended to not slaughter reindeers even for feeding himself, the loss of five was significant. On his everyday table, one would rarely taste reindeer meat, but his diet mostly consisted of hunted animals or stored provision, as well as homemade pancakes and tea. The hunting of wild reindeer, moose, mountain sheep (*chubuku*) and musk deer, as well as sable, squirrel and arctic fox, had become a significant part of his subsistence in the autumn-winter period. Gavril also sold furs and meat of wild prey, mostly in the village. However, gall bladder, claws and teeth of bears, as well as musk deer glands, he sold for Chinese medicine. After arriving at the encampment, Gavril went to bring the reindeers by taking a lasso [Rus. *Arkan*], saddle, riding stick (helps to keep the balance when riding on reindeer), bridle and rifle in case if met dogs attacking his reindeers. He didn't find any stray dogs that time, fortunately they hadn't touched his reindeers. When he showed up among the herd riding on the

uchakh (see Figure 27), I noticed that the reindeers seemed bigger than I had observed in Eveno-Bytantaiskii district.

Figure 27. Reindeer herder Gavril Zadorov bringing reindeers to the encampment by riding on an uchakh (photograph by Jefanovas 2019)

While Gavril was luring reindeers with salt, I asked him about the size of the animals. It appears that during *sovkhoz* "Tomponskii" times, local reindeers had been interbred with the larger Tofolaria breed. The Tofolar reindeers had been brought from Irkutsk Oblast to Topolinoe, a distance of more than 2000 km, by helicopter, what a feat that would be impossible in present times due to the high cost of fuel. While spending time with Griorii, we stayed in his canvas tent heated with a stove (see Figure 28). The canvas was mounted on the frame of larch poles strapped together with ropes. The floor of the tent was covered with larch branches and the hides of reindeer, *chubuku* and musk deer. This combination of branches and hides gave perfect insulation from the cold. Besides, the stove fired with larch wood quickly heated the tent as, without the constant fire, the heat would quickly dissipate. Gavril, as well as other reindeer herders of Tomponskii district, used canvas tents in wintertime and summer. Comparing to the Sakkyryr reindeer herders, Topolinoe herders don't build log cabins and use fewer technologies run by electricity. Not so many reindeer encampments in Tomponskii district were equipped with gasoline electricity generators. From the taiga encampment of Gavril, it was impossible to connect with the outside world via the internet, as herders there had no long-range satellite antenna providing internet (while

herders in Eveno-Bytantaiskii district use such equipment). Reindeer herders could contact other encampments via radio stations made back in Soviet times. People could speak to each other at certain hours and pass on messages to their families through someone who would go to the village. Of course, some reindeer herders could afford themselves to have satellite phones for emergency calls. Gavril however didn't have one.

Figure 28. The encampment of reindeer herder Gavril Zadorov (photograph by Jefanovas 2019)

To reach the Gavril encampment in summer located aside a stream in the mountains, one would have to travel for weeks on the back of *uchakh*. Additionally, a boat would be needed to cross the river Tompo before the village. It would be easier to travel to the summer encampments on horses, but the reindeer herders of Topolinoe haven't keep horses since the disruption of the *sovkhoz*, a contrast to Eveno-Bytantaiskii district. Due to difficulties in accessing herders, provisions were delivered to the encampments by trucks as late as March while the rivers were still frozen. Gavril recalled that while working in the *stado* of "Factoria Tompo", which was located 300 km from the village Topolinoe, Gavril had to take the schoolchildren to the school by the 1st of September. Such trips on *uchakhs* lasted the whole of August, also requiring people to traverse rivers and mountains. Thus, as well as the low wages, difficulties with the transportation of children became a reason why Gavril decided to leave the job of brigadier in the "Factoria Tompo". However, since becoming a private owner of a reindeer herd, Gavril had managed to nomadize closer to the village, thus he could visit his family in Topolinoe more often than while working at the *stado* of "Factoria Tompo".

2.10 Conclusions

In this chapter, I demonstrated the opportunistic practices of subsistence of contemporary reindeer herders/hunters in Eveno-Bytantaiskii and Tomponskii districts by revealing different life stories of the people I lived with. I showed

herders/hunters as modern people managing electronic technologies and engaging in social networks at local, country and international levels, these providing opportunities for the selling/exchange of reindeer products (meat, hides, antlers) and for the obtaining of various supplies (commodities, fuel, equipment, provision), as well as for developing the so-called reindeer tourism with people from abroad. Although herders/hunters use modern technology and are involved in cooperative networks with humans, they also have to engage in reciprocal relations with non-human beings to succeed in daily subsistence. Traditionally, it is believed that feeding the fire, and leaving offerings on the taiga roads to the landscape spirits will bring prosperity and success in exchange.

By framing the socio-economic background of people's subsistence, I aimed to give an understanding of the changes from the planned economy of the Soviet times to the post-Soviet period of transition to a market economy and modern life in a market economy, as well as the adaptive socio-economic and ecological environment in which the human–predator relations take place. Talking about an unstable subsistence under market capitalism, indigenous people see their lives as a struggle for well-being in post-socialist times, which is linked to a hard transition to a market system after political upheavals, lack of resources and the collapse of state farms, as well as the loss of integration into the planned Soviet economy. The breakdown of the socialist economy led to a crisis in reindeer herding. I showed that in Yakutia from 1980 to 2018, the reindeer number diminished by 41 percent (from 380 000 to 155 000) (see Figure 8). Meanwhile, since the end of Soviet times, the weakly controlled population of predators increased, resulting in high predation. Such a disappointing socio-economic situation resulted in nostalgia for the Soviet times among many herders/hunters. For indigenous people of Arctic Yakutia, the wolf not only is a predator of reindeer, but also symbolizes the shortage and economic decline in the times of market capitalism which represents predation, just like a wolf.

However, herders/hunters also see opportunities in the market economy and respond with the establishment of large-scale agricultural enterprises, cooperatives, clan community enterprises-*obshchiny* and other self-organized activities. Thus, based on my fieldwork ethnography, I specified four property models of management of reindeer herding as follows.

As a first example, I described the lifestyle of Afanasii Konstantinov, an indigenous herder from Eveno-Bytantaiskii district who is the brigadier of a reindeer herd (1000) of combined property: the reindeers owned by his family and reindeers of the Municipal enterprise (MUP). Receiving a salary from the MUP, as well as subsidies per private reindeer head, Afanasii successfully

meets the needs of his family. The nomadic family of Afanasii represents a rarity in the lifestyles of contemporary herders/hunters - since the Soviet policy of "sedentarizing nomads", families of herders/hunters usually live separately in villages. However, combining family needs and reindeer herding, Afanasii must compromise between taiga and village, sometimes leaving reindeers unattended and exposed to wolf attacks. The festival "Reindeer Herder's Day" that takes place in Sakkyryr village became an integral part of Afanasii's subsistence, as herders compete in reindeer racing for profitable prizes (e.g. snowmobiles, rifles, barrels of fuel). The festival also represents a part of "traditional culture" through which indigenous identity based on reindeer symbology is expressed during various public performances, traditional exhibitions, concerts and dances.

The second case, the indigenous woman Daria Starastina from Eveno–Bytantaiskii district, reveals the lifestyle of the head of the *obshchina* that owns one of the biggest reindeer herds (2000 heads) in the district. As all reindeers were Daria's own property, she put a lot of effort into day-night protection of the herd from predators. Furthermore, skilful management of the reindeers had ensured a stable increase in the size of the herd. Dedicating most of her life to reindeers, Daria had become an economically strong person. Although having the property in the city and village, the indigenous woman, unlike Afanasii, rarely left the taiga. However, to manage the large herd, the head of the *obshchina* cooperated with her relatives and acquaintances. To assist in daily watching over reindeers, Daria hired only one permanent herder, while other herders temporarily participated in extensive seasonal jobs, receiving in exchange slaughtered reindeers (meat, hides, other sub-products from reindeers) or equal support.

For the third model, I described reindeer management by the large-scale enterprise, the cooperative "Factoria Tompo", which was the successor of the formerly powerful *sovkhoz* "Tomponskii" set in the village Topolinoe (the main settlement of Eveny reindeer herders in Tomponskii district). I showed that the reindeer economy in Tomponskii district had dramatically declined since the collapse of the Soviet state and, during my visit, the reindeer number had dropped to its lowest level. Although there were seven herds (5000 reindeers) and 48 herders in the cooperative "Factoria Tompo", many of the indigenous inhabitants of village Topolinoe had lost their nomadic jobs after the end of the *sovkhoz*. For the decline of the reindeer economy, indigenous people blamed the low interest and abilities of the current State in supporting reindeer herding at the level of *sovkhoz* times. However, the reindeer herders of Tomponskii district were the most concerned about the increasing predation of reindeers by predators, accusing the government of failing to establish

constant control over wolves, as they had done in Soviet times. Responding to the declining reindeer economy, herders supplemented their subsistence by contacting foreign tourists via the internet and offered trips to the reindeer encampments for money. Some of reindeer herders of Topolinoe also collaborated with travel agencies in Yakutsk, which took the responsibility to organize “all-included” trips for tourists, from arrival from Yakutsk to Topolinoe, accommodation there and delivery to the reindeer encampment.

The fourth model was the subsistence strategy of herders/hunters of Tomponskii district to separate from the cooperative “Factoria Tompo” by establishing private reindeer herds. In this case, I demonstrated how a herder/hunter from Tomposnskii district owning a relatively small reindeer herd (100 heads) could subsist on aggregate incomes such as subsidies per reindeer and benefits from fur animal/wild ungulate hunting (non-official trading in wild animal parts for Chinese medicine, selling/exchanging of animal fur, also meat for commodities or various supplies), these also supplemented by reindeer-tourism and winnings of prizes during public events such as the annual festival “Reindeer Herder's Day”.

CHAPTER 3: SOVIET STATE REGULATION AND IDEOLOGY OF EXTERMINATION OF WOLVES

3.1 Introduction

This chapter reveals how Soviet state ideology and bureaucratic apparatus were applied to launch campaigns of predator extermination in the YASSR. By studying the practices of predator extermination in Soviet times, I strive to reveal the historical background to the relationship between humans and predators in Yakutia. I will show that these interspecific relations were very aggressive, essentially the Soviet state waging war with the predators by applying helicopters, poisons and traps, and pronouncing wolves not just simply pests of agriculture, but outlaws [Rus. *Vne zakona*], an ulcer on society [Rus. *Obshchestvennaia iazva*] and enemy of the Soviet nation [Rus. *Vrag naroda*] (see also Bibikov 1993; 1985, 5; Pavlov 1990, 11). Negative ideology against predators was applied and amplified through propaganda, bounties and rewards for wolf killing, as well as through social competitions and training seminars that had a sociocultural impact on the vernacular perception of herders/hunters about animals. In several publications by Russian authors, wolf hunters perfectly conveyed the ideas of the time regarding the extermination of wolves, for example "Wolf and Struggles with It" (Zvorykin 1936) and "Wolf and the Methods of its Extermination" (Kozlov 1955). In Soviet times, the wolves were pronounced by the Soviet state as the agricultural pest that caused the greatest amount of livestock predation and it was exterminated to a greater extent than other predators (for example, foxes, lynxes, wolverines and eagles) and more than even bears that, unlike wolves, had the legal status of a game animal. An extremely negative attitude towards wolves in the YASSR seems to have become widespread after the intensive construction of farms and the concentration of domesticated animals as predation by wolves was considered harmful to the state's agricultural economy (see also Bibikov 1985, 547). I will demonstrate that predation was the main stimulus to launch the massive extermination campaigns against the wolves which could be also seen in the context of socialist construction, industrialization, collectivization and modernization of the Russian North. To achieve the goal of mass extermination, the Soviet state threw vast amounts of resources into organizing wolf shooting from helicopters and poisoning, both of which were considered the most effective measures (for the Evenki of southern Yakutia, see also Brandišauskas in print). I will examine how these measures were applied in practice and will analyse their effectiveness as well as failures in predator extermination. I will also illustrate the hazardous effects

that the poisoning of wolves also had on other living beings and the environment. Furthermore, I will show how herders/hunters perceived such excessive killing of animals in the context of the animistic worldview.

I argue that, a response of indigenous people to the Soviet ideology of mass predator extermination, so-called "human factors" (negligence of "Soviet men" and a failure in exterminating predators as well as the animistic worldview) played a role in the adaptation and survival of wolves. For instance, according to a former game manager, some hunters/herders, farm chairmen, Party chiefs and helicopter pilots used the helicopters for their own purposes instead of wolf extermination. Furthermore, I will show how despite the aggressive atheistic Soviet ideology against predators, the indigenous people retained respect for wolves. Thus, this chapter argues that the Soviet campaign against predators didn't eradicate the animistic worldview of herders/hunters, but rather both the animistic worldview and the aggressive practices of predator extermination intertwined in the human-predator relationships. In a similar manner to that in Soviet Russia, the extermination of wolves in Europe and America in the 20th century also was very intensive. From the end of World War II (WWII), it seems that a struggle with predators was a main issue in the development of agriculture across the Western world and Russia. For instance, as a result of mass extermination campaigns, wolves were almost eradicated by the middle of the twentieth century in northern parts of the USA, south-eastern Canada and western Europe (Steven et al. 2003, 317-321; Bibikov 1985, 552). In the USA, very hazardous poisons (strychnine and cyanides) were used in the extermination of wolves, as well as traps, the establishment of bounties for wolf pelts and hunting by air and snowmobiles (see Lopez 2004, 137-199; Bibikov 1985, 553). As a result, during the peak of wolf harvesting in North America in the 1920s and 1930s, 21,000 wolves were killed each year (Busch 1995, quoted by Boitani 2003, 329). In Canada, 17,500 wolves were poisoned in the period from 1951 to 1961 (Lopez 2004, 194). Meanwhile, according to Boitani (2003, 320), little historical information is available about the wolf population in south-central Asia, but, by quoting Ginsberg and Macdonald (1990), the author infers a pattern of extermination from vast areas in which the species is no longer present, including 80% of China and India. In northern Inner Mongolia, wolf numbers were reduced from 1940, primarily because of livestock predation, but also because of the poaching of gazelles, the wolf's main wild prey there (Maruyama et al. 1996, quoted by Boitani 2003, 320). By contrast, over most of the vast territories of the former Soviet Union, wolves were never exterminated and, furthermore, wolf numbers in the Soviet Union peaked twice in the 20th century, following the two World Wars (as a result of

weakened predator control during the wars) (ibid.). For instance, in the late 1940s, the wolf population was estimated at 200,000 animals (Boitani 2003, 327-328). About 30,000 wolves were exterminated across the Soviet Union annually, with 40,000 – 50,000 taken during the peak years (ibid.). However, after the intense wolf extermination campaigns applied by the Soviet government (after WWII), the wolf population reached a lowest level in 1970 and the wolf disappeared from large areas of the European Soviet Union (see ibid.). By the early 1980s however, the wolf population in the Soviet Union had peaked again and had reached 80,000 – 120,000 (ibid.). The reason for such an increase in the wolf population was the introduction of changes in wolf regulation which became based more on scientific research and an ecological approach rather than entirely on the ideology of mass extermination that had prevailed before the 1970s (see also Bibikov 1985, 7-8; Pavlov 1990, 12-13). For instance, the prominent Russian zoologist Bibikov (1985, 7-8) talked about ecology and the rational control of wolves, he also suggested to protect predator species in established nature reserves. Such attitude also contributed to the creation of a law for the protection and use of wildlife fauna, that came into force in Russia in the 1980s and limited the extermination of large predators (mostly bears and wild feline species), as well stopping the destruction of falcons that had previously been accused of depleting game resources (see ibid.). Furthermore, with the collapse of the Soviet Union, the so-called continent-wide system of wolf population control also collapsed and predators appeared to start increasing in number again (Boitani 2003, 327-328).

Along with the historical context of the Soviet Union's practice of wolf population regulation, this chapter also attempts to examine how wolf extermination campaigns were organized in the YASSR and what impact they had on predator populations as well as on the social relations of wolves and the reindeer herders/hunters of Arctic Yakutia.

3.2 Wolves - enemies of the Soviet nation

The term “enemy of the Soviet nation” was commonly used in Russia during the times of Stalin to label political opponents, contra revolutionists and anybody else critical of Stalin and the Bolshevik regime. Enemies of the people were considered outlaws and after being arrested they were brought to trial and sent to gulags or even executed (see Naimark 2010, 1-14). Stalin also pronounced some people as enemies of agriculture, particularly local officials who supposedly prejudiced the success of Soviet agriculture (see Naimark 2010, 117). For instance, writing to local party chiefs, Stalin stated on 3

August 1937: *"considering completely necessary the political mobilization of kolkhozniks around the work carried on to destroy the enemies of the people in agriculture, [the Central Committee] orders you to organize in every region by locality open show trials against enemies of the people, wreckers in agriculture"* (see ibid.).

When applied to wolves during Soviet times, the Soviet concept of the enemy of the nation influenced people's attitudes towards these animals and encouraged the view that wolves were outlaws that had to be rooted out. Similar terms applied to predators circulated in Soviet times newspapers, books and mass media concerning hunting issues and agriculture management. The notion of a natural disaster was suggested for grey crows, grey rats and grey wolves (Pavlov 1990, 5). The instance from the 1965 document (NARS: F. R976, Op.3, D.33, 1965) written by a Soviet game manager as a recommendation for the extermination of crows perfectly conveys the general communist attitude towards agricultural pests as enemies:

<< >> Possibly it will be the first case in the world when crows are listed as the enemy of the Soviet nation. << >> I suggest that poisons such as strychnine would be too expensive and too dangerous, while barium or sodium acetate is eight times more poisonous than strychnine, so to use it would be even more dangerous. However, it seems that phosphides could be suitable for crows. << >> For one bird weighing around the 1.3 kg, 0.23 g. of such poison will be enough. << >> Of course, alongside the crows, the occasional falcon will be poisoned, as well as and some mammals << >>.

Discussions between hunters, farmers and biologists about the status of wolves usually raised questions of whether the wolf was necessary in nature, about what the use of wolves was for nature and people and whether the wolf should receive the status of a hunted animal or whether it was better to keep it outlawed by naming it as an especially harmful pest (see also Pavlov 1990, 5-6). For example, according to the Law on Nature Protection in the Russian Soviet Federative Socialist Republic [Rus. *Zakon ob okhrane prirody v RSFSR*], adopted in the YASSR in 1961, wolves did not fall under this law but were considered as agricultural pests (NARS: F. R976, Op.3, D.33, 1965). Based on this law assignment, the government of Yakutia decreed to cleanse the lands of Yakutia from wolves by 1965, especially taking all necessary measures in all areas of the farms (ibid.). According to the 1964 report of the game management authority of the YASSR, only 300-350 predators remained in Yakutia after the intensive extermination (NARS: F. R976, Op.3, D.33, 1965). The game managers calculated that taking into account the total area of Yakutia, 3084 million km^2, the wolf population density was reduced to one wolf per 10,000 ha. The game managers also suggested that such a small

number of predators distributed across huge lands of Yakutia would require very accurate and responsible organization of extermination actions that would demand a lot of resources. To achieve this goal, 5800 hunters, who were workers of the state and collective farms, operated on the territories of the farms to eliminate wolves (ibid.). In 1964, the game management authority of the YASSR declared that, having been so successful in killing wolves and considering that other predators also predate livestock, it would soon be possible to also intensify the extermination of other predators (bears, lynxes, wolverines and eagles). This worked on the premise that wolves in Yakutia would soon no longer be a problem (ibid.).

According to the hunting rules of the YASSR (Semenova et al. 1989), wolves were excluded even from the list of game species. It meant that wolves, as well as feral dogs, were persecuted and exterminated year round in all areas of Yakutia. Moreover, it was allowed to kill wolves by tools and methods that were outlawed in the hunting on wild ungulates, e. g. killing wolves in dens, aerial shooting, shooting from any kind of vehicles with a lamp, poisoning, using audio recordings of wolf howls to lure wolves, using nets and using all kinds of traps. These methods were allowed for special organized brigades of wolf hunters employed by the state farms and collective farms, as well as for other hunters, hunters for sport and for state wildlife inspectors and workers of nature reserves. Thus, it seems that the Stalin times concept of the enemy of the nation was also applied to wolves and was reflected in the Soviet legislation on nature protection and used to wage the war with these so-called agricultural pests.

However, did the Soviet state have real plans to exterminate predators completely or was it only a bureaucratic utopia? The State plan was the main economic law of socialism, the living practice of the dictatorship of the proletariat (see also Humphrey 1983, 92). Thus, the plans of the Soviet state to exterminate predators stood as law in Stalin times. However, according to a game manager[12] of the MEFRS, the notion of wolf population management/regulation was used instead of extermination in the later Soviet

[12] In the course of my field research, I repeatedly interviewed and received consultations on the issue of managing the wolf population in Yakutia from officials of the MEFRS and the HRMD (In this thesis, I call them game managers) who have worked in the field of hunting management (including organizing the management of predators) since Soviet times. Besides, I also interviewed a former game manager who in Soviet times took the position of a state game manager responsible for organizing predator regulation measures in the YASSR and several times took part in missions to shoot wolves from the air.

period (roughly 1960-1970). The ideas of predator extermination should be considered in the context of the Stalin times utopian plans of total industrialization and social construction of nature. An example of such utopia of the communists' planners was to divert the flow of the northern rivers southwards to irrigate the agricultural lands of Central Asia (see also Zherelina 2003, 10-11). However, the enormous industrialization processes throughout Russia, and especially in the North from the 1930s, were conducted by central industrial ministries developing large scale projects such as timber cutting, oil, minerals and gas extraction, as well as construction of industrial complexes and settlements and the building of the railway to the Russian Far East (see also Vakhtin, 1992). At almost the same time, in 1929, the collectivization process in Siberia began (ibid.). Meanwhile, the discourse of "conquering nature" and "mastering the North" became a key element of Soviet propaganda representing the Soviet "war" against the environment (see Bolotova 2014, 3-19). The Soviet state, which proclaimed the domination of man over nature, associated this idea with the creation of a "new Soviet people", portrayed as separated from nature, capable of regulating and bringing order to a chaotic passive nature (See Bolotova 2014, 73-75). Soviet historians call this early post-revolutionary period the stage of intensive socialist construction which lasted until approximately the 1960s. Meanwhile, the second period after Stalin's death (1957) was the stage of reached and developed socialism (see also Humphrey 1983, 93-94). However, this late post-revolutionary period included the same ideas of man's struggle with nature, but the discourse on nature was, so saying, normalised and standardised, and became rather homogeneous and pathetic: the Soviet people were depicted as successfully struggling against the hostile and powerful nature, and in the official rhetoric they were presented as the ultimate winners in this battle against the natural world, demonstrating their incredible strength and heroic qualities (See Bolotova 2014, 73-75). It seems that along with these, so to say, socialist construction processes, the communists' plans for predator extermination in the Union of Soviet Socialist Republics (USSR), as well as in socialist Yakutia, took place as a part of the wider projects of the modernization and industrialization of the Russian North. As with most industrial development projects, the Soviet state also developed a plan for the extermination of wolves (and other predators). The plans for predator extermination were written for periods of five years. They included the planning of supplies for anti-predator measures, the number of predators to be killed, the scheduled flight hours for shooting wolves from helicopters, the quantities of poisons, the numbers of traps and snares, the resources for propaganda and economic stimulation of wolf hunters (NARS, F. R55, Op.16,

D.61; F. R50, Op.10, D.190). To illustrate how the plan for predator extermination in Yakutia worked, I present here the account of a former game manager with whom I consulted. His account shows that the implementation of the plan was a strict duty upon game managers of the state game management authority of the YASSR because the plans were controlled by the government. My contact recollected how he had to visit the Regional Committee of the Communist Party in Yakutsk every week to submit the Plan report about the extermination of wolves. Here is his account:

"I was nervous about such visits because I had no time for this bullshit because I was obliged to execute the plan on time. It was complicated even to enter the cabinet of the chief [Rus. Nachal'nik] - first of all, you had to get permission from this bureaucrat and then show it to the policeman who was sitting in the reception on the first floor. I had to climb the stairs to the second floor and wait in a nearby office until I was ordered to enter and submit the papers. It was ironic to see those idlers sitting and staring all the time at the lunch schedule that was placed under the glass of the table, in case not to miss the time of lunch. Moreover, the bureaucrats might waste your time by asking for a report on the expected implementation of the plan. How was it possible to demand the expected indicators of the plan implementation? It was totally absurd, so to say, the communist party decided everything".

Hence, the execution of the plan was a highly bureaucratized process, while game managers delivering the statistics on killed predators to the Committee of the Communist Party were only, so to say, the peak of the iceberg. According to the former game manager, the statistics of the implementation of the plan had to be delivered monthly to the State's Statistical Directorate. Meanwhile, responsibility for any data distortion was equivalent to a criminal offence. These statistics had to be included in the General Governmental Plan (GOSPLAN), which was under the jurisdiction of the State Planning Committee that governed the economy of the State. Furthermore, although the planning of the supply of predator extermination campaigns was based on the GOSPLAN, the money was provided by the state insurance authority GOSSTRACH (NARS, F. R55, Op.16, D.61). Meanwhile, according to another game manager from the Hunting Resources Management Directorate under the Ministry of Ecology (HRMD), the system of Soviet state regulations was confusing and bureaucratic, but, comparing to the policy of the present government of Yakutia, the former was at least stable. For instance, money allocated for predator control couldn't be redirected to another social area, for example plugging gaps in the budget or addressing economic crisis. As a result, the extermination of predators in Soviet times Yakutia was performed consistently and systematically.

3.3 Predation – the main reason for the mass elimination of wolves

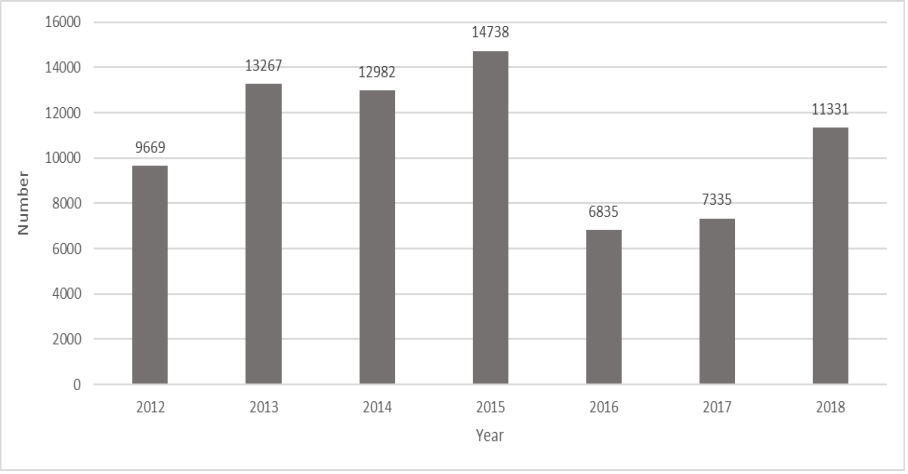
Damage to livestock by wolves (predation) is the main reason for the development of social attitudes towards them (Bibikov 1975, 29-36). I would like to think that since the farms became one of the communist state's political-economic base grounds, predation by wolves also became a matter of high importance in the economic development in rural areas. It seems that materialistic thinking and rationalism led to an important turn in the social relationship between humans and predators. I argue that since livestock predation was calculated into the State's lost money and was seen as an economic challenge to production on the farms, wolves became the enemy of the nation. Soviet biologists distinguished several periods of increased livestock predation by wolves across Russia. The periods of high predation, which corresponded to increases in the wolf populations, were documented during the interwar years (1920 -1925), as well in the years of WWII and the early post-war period till about the 1950s when strict measures of predator control were then exercised across the Soviet Union (see also Bibikov 1985, 374-377). It seems that both the increased wolf population and predation could be explained by the absence of predator regulation measures and unorganized hunting activities, considering that most male hunters during the war times were recruited to the Russian army.

Archival materials (NARS: F. R55, Op.15, D.93, 1925) show that wolves killed 1356 domestic reindeers in Yakutia in a period of three interwar years (1923-1925) in three northern districts, namely Bulunskii, Bytantaiskii and Verkhoianskii (from a total of 25 districts). During the same period, the indigenous inhabitants of Viliuiskii district (located in the central part of the Yakutia) equated wolves to a natural disaster because wolves destroyed up to 1000 reindeers annually. This number accounted for six percent of the total domestic reindeer stock (16,600) in Viliuiskii district and the damage from wolves was valued at 160 thousand roubles (ibid.). Moreover, Sedalishchev and Odnokurtsev (2016, 255-260) mentioned that in Yakutia in the 1930s, the annual damage from wolves on livestock was high and increasing. For example, in Bulunskii district in 1932, wolves killed up to 200 reindeers of the Bulunskii farm (from a total of 13-18 thousand reindeers), the next year they predated twice as many reindeers (410) and then, in just three months in 1934, the wolves took 130 reindeers (ibid.).

Starting from about the 1950s intensive predator extermination campaigns were implemented across the Soviet Union as well as in the YASSR (see also Bibikov 1985, 374-377; Sedalishchev and Odnokurtsev 2016, 255-260). As a result, in the 1960s, economic losses from wolves in Yakutia were reduced

because many predators had been exterminated, especially in *sovkhoz* and *kolkhoz* areas (see also Sedalishchev and Odnokurtsev 2016, 255-260). For example, in the period before 1958, reindeer losses to wolves accounted to 4309 reindeers annually (seven year average) in Yakutia, whereas annual losses of reindeers to wolves in the following eight years (1958-1967) averaged 2409 heads, a decrease of almost twice (see ibid.). Meanwhile, according to archival data (NARS: F. R976, Op.3, D.33, 1965), the economic damage caused by wolves to the *sovkhoz* "Tomponskii" (Tomponskii district) in 1964 consisted of 64 reindeers and 23 horses. For comparison, the *sovkhoz* "Tomponskii" kept 14,692 reindeers in 1965, thus wolves were responsible for taking less than one percent of reindeers.

Figure 29. Statistics on reindeer predation by wolves in Yakutia (2012-2018)



Source: Statistic report about the reindeer numbers in Yakutia. Provided by the MEFRS

Table 3. Numbers and percentages of reindeers predated by wolves in Yakutia (2009-2018)

Years	Reindeer number	Number of predated reindeers	Percentage of predated reindeers
2012	191100	9669	5.1%
2013	177076	13267	7.5%
2014	165270	12982	7.9%
2015	156011	14738	9.4%
2016	156835	6835	4.4%
2017	154635	7335	4.7%
2018	154763	11331	7.3%

In the 1970s, a new rise in the wolf population resulted in a peak in the predation rates as the extermination of predators in the USSR had been

reduced due to the application of an ecological approach to wildlife management (see Bibikov 1985, 374-377). Based on the predation data provided by Bibikov (ibid.), the economic damage from wolves in the YASSR in 1978 was valued at millions of roubles. For instance, in 1978, wolves predated 7000 reindeers and 1000 cattle, these worth 1.5 million roubles. Thus, compared with the average annual loss of 2409 reindeer to wolves in Yakutia in the 1960s (see Sedalishchev and Odnokurtsev 2016, 257), the predation rate increased almost threefold (to 7000) in 1978.

Since the years of the collapse of the Soviet Union, weakened control of predators (due to a lack of resources) has resulted in an expanding wolf population and increasing predation of livestock (see ibid.). Furthermore, statistics on reindeer predation by wolves in Yakutia in 2012-2018 shows that on average around 11,000 reindeers were killed by predators annually, that is around 7 % of the total reindeer number in Yakutia (see Figure 29 and Table 3). Reindeer herders/hunters of Arctic Yakutia think that predation by wolves, in general, was much lower in Soviet times and economic damage from wolves was less serious than at present. However, indigenous people also judge that the reason why predation by wolves has increased is not only because the State no longer supplied helicopters for constant wolf control, but also due to the low responsibility of the managers of the reindeer farms in organizing livestock protection measures. According to the game manager of the MEFRS, the chairman of *sovkhoz* was personally responsible in Soviet times for controlling livestock predation (by wolves) in rural areas. The chairman of the *sovkhoz* could even be expelled from the party (*sovkhoz* chairmen were usually members of the Communist Party) for the negligent implementation of livestock protection measures that could lead to economic losses. Well-organized management of the sovkhoz was critical to the overall prosperity of the farm itself, as a successful *sovkhoz* was better supplied than a weak farm.

Hence, if a *sovkhoz* was losing livestock to wolves due to the negligence of managers, the reputation of such a backward farm could be much damaged. According to my contact game manager, for negligence in livestock predation control, the chairman could be even fired by local party bodies, because it could appear that no one would trust him at all. Thus, it seems that the implementation of predator control measures in state farms was taken quite seriously by both local and state authorities (e.g. the council of the sovkhoz, local party bodies, state game management authority). Moreover, farm managers were considered highly responsible for their part in the implementation.

3.4 The apparatus of the Soviet state and predator control

To better understand Soviet state regulation of predator control, I will demonstrate here the bureaucratic model of the governmental bodies involved in the organization of campaigns against predators. According to the former game manager, issues concerning harm to the agricultural economy from predators were of such high importance that the anti-predator ideology was even considered by the Regional Committee of the Communist Party of the YASSR [Rus. *Oblastnoi komitet KPSS*, abr. "OBKOM"]. Thus, the governmental body in the YASSR responsible for the implementation of the anti-predator policy and ideology consisted of the OBKOM with the subordinated Council of Ministers of the YASSR. The Party's biggest concern was to raise agricultural productivity and increase livestock on farms, thus the predation by wolves was an urgent issue. The OBKOM supervised how the plan of the extermination of predators was executed in the YASSR. My contact former game manager recalled that when livestock predation by wolves increased, the Party bureaucrats demanded the subordinated governmental bodies organize immediate war against predators with the application of all possible measures. However, according to the former game manager, the Party didn't play a key role in predator regulation. Meanwhile, the main executive governmental body responsible for the actual organization of administrative and economic measures for predator control was the Council of Ministers of the YASSR. The Council organized the coordination of financial allocations for the regulation of wolf population, also the convocation of emergency commissions to struggle with predators in the districts of Yakutia, as well as the establishment of economic measures to stimulate wolf hunters. Another State body of great importance in predator control was the Game Management Authority [Rus. *Upravlenia okhotniche-promislovogo khozaistva pri sovete ministrov YASSR, abr. "Okhotupravlenie"*], established under the Council of Ministers of the YASSR. *Okhotupravlenie* implemented orders and decrees directed by the Council of Ministers. The main duties of *Okhotupravlenie* were the application of predator extermination measures, the implementation of economic stimulus for wolf hunters, the spread of anti-predator ideology and propaganda and the supervision of the execution of anti-predator measures in the districts (mostly in farm areas). In other words, the *Okhotupravlenie* brought a wolf extermination plan into action.

The central governing body in Moscow supervising how control over predators was executed in the Soviet Socialist Republics was the General Directorate of Game Management and Nature Reserves under the Council of

Ministers of the Russian Soviet Federative Socialist Republics [Rus. *Glavnoe upravlenie okhotnichego khoziaistva i zapovednikov pri Sovete Ministrov RSFSR, abr. "Glavokhota"*]. Although the Council of Ministers of the YASSR with the *Okhotupravlenie* were subordinated to the OBKOM, these bodies of the YASSR were also under the supervision of the *Glavokhota*. According to the former game manager, the main decisions concerning plans for predator extermination in Soviet times were issued from the *Glavokhota*. Thus, we can understand that predator control was a USSR-wide issue and general decisions about the extermination of predators were centralized and controlled by the authority from Moscow.

Meanwhile, the *Okhotupravlenie* also had quite wide power in Yakutia, e.g. it supervised how the administrations of state and collective farms executed predator extermination measures in the districts. However, the farms were under the jurisdiction of the Ministry of Agriculture of Yakutia. The Ministry of Agriculture also played a significant role in predator extermination campaigns, as its main issue was the organization of livestock protection measures in the areas of the farms. The Ministry of Agriculture had its own plan and budget for pest control. According to a former chairman of a sovkhoz, anti-predator measures and funding sometimes overlapped, e.g. wolf aerial shooting from helicopters in the *sovkhoz* area could be organized and funded by several authorities: the *Okhotupravlenie*, the Ministry of Agriculture or even by the directorate of the state farm. Hence, the main governmental bodies responsible for the organization and implementation of predator extermination campaigns in the YASSR were the Council of Ministers, the *Okhotupravlenie*, the Ministry of Agriculture and the *Glavokhota*. The measures for the extermination of predators included in the plans were coordinated between these branches of State bodies.

Based on examination of the sources in NARS, as well as accounts of former chairmen of the farms, game managers and herders/hunters, it could be claimed that at the end of the long bureaucratic chain of the governmental apparatus of the YASSR were wildlife inspectors/game managers in the districts, wolf hunters, fur hunters, reindeer herders and horse, and cattle breeders. All of them to one or another degree were responsible for predator extermination in the *sovkhoz* and *kolkhoz* areas. Wildlife inspectors/game managers of the districts, as well as special wolf hunters – *volchatniki*, although under the roof of the farms, had the special status of State employees responsible for organizing constant predator control at the district level. Hence, wildlife inspectors/game managers and *volchatniki* occupied privileged positions on the farms as they received State provided salaries which were usually higher than those of other farmworkers. Meanwhile, other

farmworkers were organized (usually by the directorate of the farm or local wildlife inspector/game manager) into special wolf hunting brigades consisting of four or five men responsible for trapping wolves, poisoning and killing cubs in dens. These brigades were most active during wintertime, as wolves could be easily tracked in the snow. However, the main duties of those farmworkers were preparing hay for livestock, fishing, herding and harvesting fur animals. Thus, although farmworkers were not full-time wolf hunters, they played a significant role in predator extermination at the local scale.

3.5 Ideology against wolves and economic stimulation of hunters

Three types of socio-economic measures can be distinguished, all of which were combined to increase the efficiency of predator extermination campaigns: economic awards (bounty, bonuses, prizes), social competitions and propaganda, and seminars with predator extermination instructions. State awards to encourage the hunting of wolves were planned by the Council of Ministers of the YASSR and *Okhotupravlenie*, but the money was provided by the GOSSTRACH. For instance, in 1968, a total of 49,134 roubles were spent on predator extermination campaigns, of which 16,134 roubles were spent on awards and the organization of social competitions for hunters of wolves (NARS: R976, Op.3, D.82, 1968). For comparison, 16,134 roubles would have been enough to reward roughly 100 farmworkers with bonuses equal to their average monthly wages[13]. The reward system was a widespread principle of the strategy of stimulating human productivity in the Soviet Union. For instance, the bounties for wolf killing were specified in the Hunting Rules of the YASSR (Semenova et al. 1989) as follows, an adult wolf female was priced at 150 roubles, a wolf female taken together with cubs at 200 roubles, an adult wolf male at 100 roubles and a wolf cub at 50 roubles. Hence, it was quite good encouragement for reindeer herders and hunters as the monthly salaries of the farm employees could be lower than or similar to the wolf bounties.

[13] For instance, in Sakkyryrskii district in 1951 (since 1989 reorganized to Eveno-Bytantaiskii district), the monthly salaries of kolkhozniks in the *kolkhoz* "Victory" was about 266 roubles (12.66 roubles per work day) and in the *kolkhoz* named after Stalin about 136 roubles (6.45 roubles per work day) (see Boiakova et al. 2012, 99). Meanwhile, the average USSR wages for top jobs in the *kolkhoz* in 1969 were as follows: *kolkhoz* chairman 155-256 roubles, zootechnician 95-114 roubles and brigadier 68-101 roubles (according to Humphrey 1983, 260). Thus, the average wages of farmworkers in Soviet times could be around 160 roubles.

Good examples of rewards in Siberian farms to enhance the achievement of high results in production were given by Humphrey's (1983) studies in socialist Buriatiia. Rewards included declarations of thanks, the giving out of prizes, the awarding of valuable presents, the awarding of a diploma of honour, the mentioning on the honour board or in the honour book and the conferring of the title "Merited Kolkhoznik" and "Honoured Kolkhoznik" (see Humphrey 1983, 110-111). Meanwhile, in the YASSR, by a resolution of the Council of Ministers of the YASSR in 1965 and a resolution of the Presidium of the Supreme Council of the YASSR, the directorates of farms were also obliged to establish (additionally to the awards provided by the State) monetary prizes or bonuses (for example, a live foal or a reindeer) paid from the farm funds to hunters for the extermination of wolves in the farm area (NARS: F. R976, Op.3, D.33, 1965). However, the process of rewarding the hunters in the farms of Yakutia was quite bureaucratic. For example, in the *sovkhoz* "Tomsponskii", a hunter was obliged to submit to the chairman three copies of a paper with a recommendation signed by the representative or secretary of the sovkhoz, also by the brigadier and by the hunter himself. Additionally, a hunter had to deliver a special certificate signed by the brigadier and veterinarian proving the wolf killing. Handling in all these documents, a hunter could receive a bonus of 50 roubles if the chairman of the *sovkhoz* "Tomsponskii" signed the papers (ibid.). However, there were instances when the hunters addressed complaints even to the local party bodies blaming the farm chairman for not awarding the hunter (ibid.). Local party bodies usually redirected the hunter's complaint to the Ministry of Agriculture and the *Okhotupravlenie*, as well to the district prosecutor's office (ibid.). Hence, on the one hand, encouragement of the hunters with rewards for killed wolves was considered an important matter by the State authorities responsible for predator control, but, on the other hand, seemingly some directorates of farms were not so enthusiastic about paying bonuses from the funds of the farm to hunters who usually were farm workers receiving constant wages. Thus, lengthy bureaucratic procedures for obtaining rewards from farms could discourage hunters from submission of requests. Meanwhile, the officials of the *Okhotupravlenie* often warned the chairmen of the farms for breaking the law and, for this, the chairmen could be held accountable and punished. Thus, the chairman of a *sovkhoz* could be ordered by the *Okhotupravlenie* to reward a hunter with a foal or reindeer for a killed wolf and to announce these awards in the local newspaper, so that other hunters would be also encouraged (NARS: F. R976, Op.4, D.44, 1973-1974; F. R976, Op.3, D.82, 1968).

Apart from rewards, decrees and punishments, there was also social competition organized by the *Okhotupravlenie* to raise interest in wolf hunting. Competitions were conducted at the level of the Republic of Yakutia [Rus. *Na respublikanskom urovne*], as well as by regional party bodies in certain districts. According to a Yakutia government decree, residents of the districts had to be widely informed by local authorities about planned competitions and prizes. For instance, in an advertisement of a 1965 competition (NARS: F. R976, Op.3, D.33, 1965), prizes were announced amounting to 300 roubles (five such prizes) as bonuses for hunters that killed not less than five wolves and 150 roubles (15 such prizes) for hunters that killed not less than three wolves. Additionally, for each exterminated wolf, the *sovkhoz* would pay to a hunter a bonus of 50 roubles and give a reindeer or a foal, while the *Okhotupravlenie* would give a moose license per killed wolf. According to the hunters who were workers of *sovkhoz* "Tomponskii" during Soviet times, a licence for a moose for personal use was difficult to obtain. Officially, moose hunting in Soviet times was strictly controlled by the State, because most of the moose meat was supplied by hunters to meet government demands.

The Soviet regime also applied propaganda to spread ideology against predators, it was an integral part of all other measures aimed at encouraging and stimulating the hunters. To better understand what I mean, I shall give here an example of such propaganda which in 1965 was directed by the *Okhotupravlenie* to the local authorities and farm managers, as well as to herders and hunters:

"*all who are involved in wolf extermination have to contribute and participate fully in the anti-predator campaign. Those who show negligence and failure to fulfil their duties will be held personally liable. We must do our best because every wolf causes damage to the livestock husbandry and also to wild animal farming. One wolf consumes 1.5 tons of raw meat per year and this annually costs the state 10-15 thousand roubles*".

Apart from these agitative actions, the wolf extermination propaganda was spread through central and regional newspapers, journals and special radio programs (NARS: F. R976, Op.3, D.33, 1965). The perception of predators as enemies of the Soviet nation was introduced to the indigenous inhabitants by print and the spreading of posters and informative flyers with slogans such as "*Let's clean our lands from the grey bandits*". For instance, according to the 1965 report of *Okhotupravlenie,* the authority ordered 2000 posters to be printed with wolf extermination propaganda. Wolf hunting specialists also discussed the benefits of predator extermination in 33 radio broadcasts and 55 articles against predators were printed in newspapers (ibid.). Another way to

spread anti-predator views was applied by conducting seminars that provided wolf extermination instructors and transferred wolf trapping and poisoning practice to local hunters and herders. For example, in the same report (ibid.) in 1965, the *Okhotupravlenie* stated that during the predator extermination missions conducted in the districts, game managers from the *Okhotupravlenie* provided 12 seminars about wolf extermination methods with the involvement of 187 local herders/hunters and wildlife inspectors (ibid.). Therefore, the local wildlife inspectors by themselves organized 453 conversations on predator extermination issues in the districts with the total involvement of 3004 farm herders/hunters. However, it is difficult to judge if such conversations/seminars on wolf extermination ideology did really take place (not just on paper) back in Soviet times on the farms and if this ideology was taken seriously by the local people. Nevertheless, it could be supposed that the Soviet authorities intended to raise the interest of local people in wolf extermination, as well as to annihilate the animistic worldview of the reindeer herders/hunters who believed in the revenge of the wolves and restrained from excessive killing of predators. Indeed, according to my contact game manager of the HRMD, such cases when locals refused to participate in wolf extermination missions because they were afraid of predator revenge took place during the Soviet times. Furthermore, based on 1929–1934 archival materials (NARS: F. R50, Op.10, D.190, 1929 – 1934), local inhabitants of some districts of Yakutia rarely hunted wolves; thus, the government of the YASSR was supposed to take care of the extermination of predators as well as take measures to educate local hunters/herders for wolf extermination methods (e.g. poisoning with strychnine, setting traps, using wolfhounds for pursuing wolves, killing wolf cubs in dens). Therefore, it can be assumed that the government of the YASSR strove to introduce predator extermination methods among the hunters/herders in the districts because indigenous people weren't keen on wolf killing. Of course, indigenous herders/hunters had struggled with predators before Soviet times by applying their traditional methods such as self-shooting traps called "*aia*", but the killing of predators wasn't on such a large scale as in Soviet times. Meanwhile, it seems that encouragement with awards for wolf killing as well as the ideology against predators made many local herders/hunters perceive wolves as pure pests. Indeed, Vitebsky (2005, 270-271) characterized the attitude of Eveny herders/hunters towards wolves (in the context of early post-Soviet years) as unremittingly negative. People called wolves with the Russian words "*khitry"* (cunning or devious) or "*zloy*" (wicked or aggressive) as if the entire species could not have other dispositions (ibid.). When wolves attacked domestic

reindeers, people killed wolves by shooting, trapping or poisoning them without any concern whatever for their souls (ibid.).

3.6 The poisons

Poisoning predators with strychnine and barium fluoroacetate was one of the most effective methods widely applied by the agricultural and game management Soviet authorities. However, it was also extremely hazardous for the entire ecosystem. As a side effect of the application of poisons, falcons, rodents, sables, wolverines, foxes and other mammals including dogs died in large numbers after eating poisoned carrion (see Bibikov 1985, 571). Although, due to the hazard to the environment, these poisons were outlawed in Russia at the beginning of the 21st century (see also Lavrillier and Gabyshev 2018, 23), many herders/hunters, especially elders, still consider it as the best measure ever applied to exterminate predators. For instance, if a single wolf ate a piece of the bait, the deadly poison would spread to the rest of the pack through saliva contact and the whole pack would die at once. During my fieldwork in Eveno-Bytantaiskii district, herders/hunters were afraid even to touch the bones of long-ago poisoned wolves, believing that the poisons were so strong and long-lasting that their dogs would collapse or die after even just sniffing the bones.

Strychnine and barium fluoroacetate were mass manufactured in Russian factories for agricultural pest extermination. Strychnine had been applied for wolf extermination in Siberia from Tsarist times. There are records in the National Archives of Yakutia showing the application of strychnine from the 19th century (NARS: F. I12, Op.1, D.10656, 1892-1896; F. R84, Op.1, D.45, 1920-1921; F. R55, Op.16, D.52, 1928). During the Soviet times, strychnine was also commonly used in Yakutia until about the 1930s. In 1928 for instance, a quantity of 2.9 kilograms of strychnine was issued to the district for killing 7000 wolves (ibid.). Thus, only 0.4 grams was enough to kill a wolf, the poisons were extremely strong. Meanwhile, from about the 1960s, strychnine wasn't mentioned in the reports of the *Okhotupravlenie*, as it had been substituted with another kind of poison - barium fluoroacetate (NARS: F. R976, Op.3, D.82, 1968; F. R976, Op.4, D.34, 1972). According to my contact game manager of the HRMD, it was expected that barium fluoroacetate would be more effective in killing predators, less expensive and less harmful to the ecosystem. Both kinds of poisons however proved equally hazardous to the ecosystem.

The barium fluoroacetate manufactured in a factory in the Siberian industrial city of Irkutsk travelled for thousands of kilometres to the

Okhotupravlenie in Yakutsk, then was distributed among farms. As barium fluoroacetate was highly effective, it was enough for the one farm to receive on average 100 grams of poison per year. In 1965 for instance, the *Okhotupravlenie* ordered 2.5 kilograms of poison from the Irkutsk factory to distribute to the farms in all districts of Yakutia (NARS: F. R976, Op.3, D.33, 1965). After delivering poisons to the farm, it had to be distributed among the wolf hunters, other hunters, reindeer herders and horse breeders who had to sign for the poison and receive usage instructions. For example, more than 500 hunters of the farms in Yakutia districts were given the poison in 1964 (ibid.). According to the instructions provided by the *Okhotupravlenie*, the poison had to be supplied to the hunters through the district's veterinary service, which was responsible for poison storage, putting the correct doses into starch capsules, issuing it and accounting for it (ibid.). However, there were many cases of negligence on the part of hunters and veterinarians who grossly violated the instructions for using the poison, thereby lowering its effectiveness in wolf extermination. For example, there was a case when barium fluoroacetate was delivered to farm hunters without the starch capsules, thus there were no possibilities even to quantify the poison into the correct doses (ibid.). The barium fluoroacetate is effective when it is packed in starch capsules at the dosage of 0.3 grams and inserted into a piece of meat. In such quantities, it takes effect gradually and the wolf dies after running some 5-7 km or at the place where the bait was eaten. However, hunters often overdosed the poisons, perhaps inserting a dose of 0.5 gram or more (ibid.). When such quantity of poison is swallowed by a wolf at once, this cause vomiting that frees the stomach of the poison and the wolf survives. According to the instructions, hunters should have received only properly dosed poison in the capsules which had to be held in the carefully closed glass bottles to avoid evaporation and loss of strength (ibid.). Additionally, and very negative to the environment, most people, who were given the poison tended to abuse the instructions to pick up and destroy poisonous bait that remained untouched by wolves at the end of the hunting season (spring). Regardless, hunters/herders would receive fresh portions of the poison each year, thus the poison accumulated in the environment and didn't decay for many years. The most hazardous side effect occurred in the spring when the poisoned baits melted and spread across the landscape in water.

To demonstrate how poisons were applied in practice by the hunters/herders and what hazardous effect these had on the living beings, I would like to provide an account of the hunter Maksim Orlov from Topolinoe village. Maksim worked at the *sovkhoz* “Tomponskii” as a hunter of moose, wild reindeer, mountain sheep, fur animals and predators. In wintertime, he

was usually asked by the *sovkhoz* managers to visit the reindeer herders and solve problems with the wolves which often attacked the livestock. Winter is the most suitable season to track the wolves, as predators follow constant trails in the deep snow in order to move easily over large distances, thus it is easy to place poisoned baits on the wolves' paths. Maksim had an East Siberian Laika dog that he usually took on the wolf hunting in the taiga. However, despite his love of dogs, he decided not to keep dogs anymore after the dog poisoning incident described below. It was October already and a thin layer of snow covered the permafrost of Arctic Yakutia lands when he arrived to hunt wolves, he recalls:

"I went to check the baits, but I didn't spot any wolf footprint, so I turned back far before approaching the bait place, so as to not expose it to my dog. I stayed for a night in the campsite of the reindeer herders, who were workers of the Tomponskii sovkhoz. Suddenly at night, sleeping in the tent, I heard the mass howling of the dogs of the reindeer herders, the noise also woke up people in the encampment. After a while silence came, we understood that the dogs had been poisoned and died. To our misfortune, in the morning we found my dog and almost all other dogs dead, only two pups were alive as they hadn't touched the poisoned flesh. We gathered all carcasses of dead dogs and burned them in one place, as we were afraid that the poison could spread through the campsite and even people could be poisoned. I examined footprints and found out that it was my dog that had found the bait and had eaten the poisonous flesh. Hunters use to insert the capsules with poisons into carcasses of the predated reindeers, waiting for wolves to come back to the remnants and eat. But the reality was that my dog had found the poisoned flesh and carried it to the campsite and, as a result, the other seven dogs ate it too and died.

The reindeer herders keep two kinds of dogs in the encampments, one kind specialized for reindeer herding and the other for hunting. The dogs are highly valued, as without dogs it is difficult to hunt or to drive the herd to the encampment and perform daily jobs with reindeers. It may take a year for a raised dog to become experienced enough to listen to the commands and drive the reindeers properly. Thus, to lose your dogs would have both an emotional as well as an economic impact.

Although Maksim lost his hunting dog, he still had to solve the problem with the pack of wolves that attacked reindeers at night. Thus, after a time, he went to check again the place with poison. To his surprise, the bait had been eaten and footprints of wolves were everywhere and went from side to side, which meant that poisons had affected the predators. Maksim followed the prints when suddenly on the way he saw a running wolf and a crow behind,

pecking the wolf from the top. Crows usually serve as a signal for hunters, as well as for predators, that carrion is somewhere nearby. Maksim decided to check that place. Upon arrival, he saw the carcass of a poisoned wolf without guts. It seems that the previously seen wolf had cannibalized the poisoned carcass of another one. Thus, as the poison spread through the ecological chain by contaminating living creatures, the wolf eating the guts of the dead poisoned wolf also took a dosage of the poisons and died. Almost all wolves from the pack eventually fell victim to the poison, but one maternal wolf survived. It was an experienced female that didn't touch the bait. The wolf seemed to have decided to take revenge for the killed pack members by attacking the reindeers in exchange. The strategy of the wolf female was to separate up to seven reindeer from the herd and drive them out of the encampment to predate. Maksim accounted how he had to change his tactic of setting poison to outsmart the wolf female. Here is his account:

"*the reindeers seemed stupid, they didn't run away and stood crowded while the wolf killed them one by one. The wolf female didn't eat most of the reindeers and left their carcasses in the place. However, she left some reindeers half-dead, who looked like "zombies" moving slightly in the encampment. Seemingly she prepared for herself easy prey so that she could come back later and eat any time. It took me two weeks more to finally poison that wolf female, but it was not so easy to outsmart the cunning predator. First, I placed poison in the carcasses of dead reindeers near the encampment. However, it didn't work, as the wolf noticed my footprints in the snow and immediately fled the place. Then, I changed strategy and I approached the so-called "zombie" reindeers and, by making an incision, inserted poisonous capsules right into their thighs. The thing was that the half-dead reindeer didn't die at once and moved for a while, so a wolf couldn't detect my footprints nearby. Finally, the wolf female disappeared, seemingly she died, but in total she and her pack destroyed 40 reindeers".*

From accounts such as Maksim's, I learned that although the poison was held by hunters/herders to an effective way to struggle with wolves, people also acknowledged that many other living creatures died from the poison. Hence, by poisoning wolves, people also accidentally poisoned everything around, even their own dogs that were urgently needed in people's everyday life. However, why didn't killing living creatures in excess contradict the belief of herders/hunters about predator revenge and punishment from spirits in exchange? Did people perceive the contradictions between their worldview and Soviet ideology in predator extermination? Reflecting on this question, my contact former game manager mentioned that in Soviet times some hunters/herders could easily throw big doses of poison into nature by thinking

that the wolves would die out because of their stupidity to eat poison. Thus, some indigenous people believed that there was no human guilt in poisoning predators because the wolves themselves were to blame, therefore there should be no revenge and punishment either from predators or spirits. Hence, it seems that indigenous herders/hunters (at least some of them) showed ambivalence towards the relations with predators in Soviet times when killing wolves excessively. On one hand, the mass poisoning of wolves in Soviet times as a daily practice was propagated and encouraged by the Soviet state, while on the other hand, it contradicted the notion of the nomads about the agency of animals who possess spirit and can take revenge in exchange. Such a mixed feeling seemingly made people feel a tension that could be resolved by a kind of deception called by herders/hunters in Russian "*otmazki*" which means an excuse, blaming the other to eliminate someone's fault, duty, responsibility.

Although, the usage of both strychnine and barium fluoroacetate was prohibited in Russia from the beginning of the 21st century, it remained a common practice to use poison for some time from "hidden stashes". As Oehler (2016, 209) also wrote, many Soiot herders of Buriatia were known to have hidden small stashes of Barium, which had been dispensed to them before the state ban on wolf poison. At the time of my fieldwork, the hidden stocks of barium fluoroacetate were depleted and many herders/hunters of Arctic Yakutia used another chemical "*Adilin*" for wolf poisoning, this not recognized officially as poison. Originally, *Adilin* was used in Russia for the euthanasia of stray animals. *Adilin* is prescribed as a muscle relaxant drug that stops cardiac activity and causes paralysis of the respiratory muscles. Comparing it to strychnine and barium fluoroacetate, the use of *Adilin* for killing wolves does not cause environmental pollution, as it affects only the certain animal that has swallowed the dose. However, *Adilin* has very low efficiency as the dosage for a particular wolf is difficult to determine. Moreover, it causes immediate vomiting in the animal, thereby detoxifying the effect of the drug. Herders/hunters aim to make *Adilin* more effective by mixing it with various old medicines such as antiemetics, blood pressure drugs and heart medicines. The mixture is inserted into a small roll of meat which is thrown onto wolf trails. Many elderly people, recalling the times when strong poisons were used to exterminate wolves, usually scoff at the use of *Adilin* by jokingly criticizing that at present wolves are cured with these drugs rather than killed. Along with the poison, the usage of helicopters for predator extermination also has become a main subject of talk among reindeer herders/hunters reminiscing about Soviet times when both measures were available.

3.7 Soviet helicopters and wolves

If one asked reindeer herders/hunters of Arctic Yakutia or game managers what the most effective strategy of predator extermination was in Soviet times, he would receive the certain answer that it was the shooting of wolves from helicopters. The method of aerial shooting from helicopters and, in some cases, planes came into use in Russia in about 1950 (Pavlov 1990, 175-176). However, in the 1970s, the commission of Soviet biologists working on wolf issues criticized this wolf population control method as non-effective and resource wasting (see ibid.). The criticism came in part because of the abuse of aviation in selfishly using the helicopters for own purposes instead of wolf shooting (see ibid.).

However, in the 1960s, the amounts of allocated fuel for aerial wolf shooting in Yakutia were huge. For example, 54 tons of fuel were allocated to supply three airports in the Arctic regions of Yakutia with aviation for a predator extermination mission during the two months of March and April in 1965 (NARS: F. R976, Op.3, D.33, 1965). To put into context, the Russian light aircraft Yak-12, which was used in Yakutia for aerial wolf shooting on tundra areas, could fly up to 810 km with a full tank of 0.225 tons of fuel. Thus, for 54 tons of fuel, a Yak-12 could cover about 194,000 km. Meanwhile, the Russian helicopter MI-2, also used in wolf shooting, with a total capacity of 0.6 tons of fuel, could operate at a range of 580 km. Thus, with a consumption of 54 tons of fuel, the MI-2 could cover 52,200 km which is more than enough to fly around the globe. According to my contact former game manager, there were also cases in Soviet times when fuel barrels were dropped from helicopters or planes over the tundra. It was purposed for refuelling small planes right on the tundra for continuous flight and wolf shooting. Planes were very effective in open places, as they could cover huge territories and easily reach wolves as the predators had only a few places where to hide. Meanwhile, helicopters were most effective in mountainous taiga areas, where pilots had to make difficult manoeuvres to pursue the wolves.

The resources for the rent of aviation for wolf shooting was provided by the GOSSTRACH or funded from the budget of the Ministry of Agriculture, as well as from the farm directorate. Missions of aerial wolf shooting were organized by the *Okhotupravlenie*, either by the Ministry of Agriculture or the *sovkhoz/kolkhoz* (NASR, F. R976, Op.3, D.82, 1968). The cost of fuel used for aerial wolf shooting was set by special governmental decree at a privileged rate. For instance, according to the report by the *Okhotupravlenie* in 1968, the use of aviation (rent and fuel cost) for the mission of aerial extermination of predators cost 33,000 roubles (ibid.). As a result, 75 wolves (34% of the total

cull of wolf) were killed during the mission in the 1968 spring months (March-April) across the Republic of Yakutia (a certain number of helicopters and planes were organized to operate in different districts of the YASSR). Moreover, 3739 roubles were spent on awarding the members of the aerial wolf shooting mission for the 75 killed wolves (ibid.). Consequently, the cost of the given mission of wolf extermination could be valued at 36,739 roubles or 489 roubles per wolf. The extermination of predators with aviation was more costly than hunting wolves on the ground (poisoning, trapping, shooting with rifle, killing wolf cubs in dens, pursuing wolves with ground transport). For example, the shooting of predators with the application of aviation in 1968 accounted for 74% of the annual budget allocated for predator control measures (including ground methods and awards) in the YASSR (ibid.). On the other hand, game managers claimed that shooting from a helicopter was effective because the entire pack of wolves (other predators such as bears and lynxes were also shot on occasion) could be destroyed in one flight and the damage to livestock husbandry by predators justified the cost of such missions. According to a report of the *Okhotupravlenie* (NARS, F. R976, Op.3, D.33, 1965), the economic losses of livestock (reindeer, horses, cattle) from predators (without specifying wolf, bear or lynx) in Yakutia in 1964 totalled 208,000 roubles, a figure that is almost six times higher than the cost of the mission of aerial wolf shooting described above. However, there were cases when, due to bureaucratic obstacles, aircraft remained at airports and the flights for predator extermination were cancelled (NARS: F. R976, Op.3, D.33, 1965). Additionally, disputes frequently arose between mission organizers and airport authorities over aircraft maintenance. The reason was that the services provided by the airport staff, which included transportation of fuel barrels, use of oil at the airport and the refuelling of helicopters and planes, weren't financed by the GOSSTRACH (ibid.). Such services were based on collaboration and agreement between organizers and administrations of airports. This seems to have often caused complications as the airport administration didn't always agree to provide services from its account (ibid.). Probably, sometimes, the airport staff did not take seriously the fact that helicopters rented to shoot wolves should be serviced on time. It could be proposed that such human failures worked best for wolves that then had a chance to survive at least till the next mission.

Although bureaucratic obstacles sometimes led to failures in wolf shooting, the missions in general were carefully coordinated between crew on the helicopter and ground hunters who led the helicopters towards the wolves. The crew of a helicopter MI-2 (which could carry up to 10 passengers) usually consisted of a chief pilot, a second pilot, a mechanic, game managers, a

zootechnician, an employee of the Ministry of Agriculture and a worker from the farm who knew the area well (NARS: F. R976, Op.4, D.44, 1973-1974; F. R976, Op.3, D.82, 1968). Each crew member had to perform specific tasks, for example the mechanic and pilots had to ensure the safety of the flight, while the local farmworker helped the pilots navigate the terrain and several shooters had to open fire to kill as many wolves as possible. Furthermore, to keep communication between shooters in the helicopter and hunters on the ground, military radio stations were used. Helicopter crew also connected with other helicopters exercising wolf extermination tasks in neighbouring districts (ibid.). Thus, the pursuit of predators was well-coordinated, which also enabled the collection of information on the movements of wolves across the districts. During the missions, biological information on killed wolves was also collected: the length of the head, body length, the height, tail length and weight of the body. Additionally, biometric parameters such as the number of embryos, sex and age as well as several examples of the skulls of wolves were taken (ibid.). According to the gathered biological parameters, the wolf population was examined by zoologists for the purpose of improving extermination methods. To make aerial wolf extermination more effective, helicopter crews also gathered information from local herders/hunters about the locations of wolf dens. Then, in spring, ground brigades of wolf hunters were sent to these places to exterminate wolf cubs in the dens. Additionally, local inhabitants were asked about predated livestock, the place where predation had occurred and what the number of wolves was (NARS: F. R976, Op.3, D.82, 1968). Local herders/hunters also had a duty to inform game managers through the radio station immediately after predation took place in an area. The pilots were ready to take off in helicopters as soon as information about predation and wolf movement in the area was provided. Such manoeuvres were possible in Soviet times because helicopters were based in almost all centres of the districts ready to take off. That is not the case at present.

Experienced pilots were key figures in the aerial wolf shooting missions in Soviet times. According to my contact, the former game manager who took part in aerial wolf shooting, professional pilots participating in wolf missions were well aware of the behaviour of predators and also could distinguish the tracks of a wolf from the cockpit. Pilots also could accurately hover a helicopter close to the ground over a wolf trail to enable hunters to jump from the helicopter into the snow to determine the freshness of wolf footprints. If wolf tracks were fresh, the pilot continued to follow the tracks until they approached the wolves to enable the shooters to do their job. These special pilots were highly demanded on wolf missions, other pilots were usually

rejected as not everyone was experienced and could follow predators from the air. Professional pilots were famous across Yakutia and known by their surnames. For example, Makhatyrov (2002) wrote in the local periodic "Tomponskii vestnik " that a famous first-grader pilot, who was flying to the Tomponsky district on an MI-2 helicopter to exterminate wolves was even comparable to a hero of WWII who fought Nazi planes. According to Makhatyrov (ibid.), when pilot's helicopter appeared in Tomposkii district, the so-called "wolf riot" was soon suppressed and for several months there was calm in the encampments of reindeer herders. The pilot made an impression on the reindeer herders/hunters, who jokingly called him the "main herder" of the Tomponskii district. Of course, there were not only heroic victories of the socialists over the so-called enemies of the nation – wolves - but also accidents due to human negligence. According to former game manager, pilots also crashed into mountains and onto the taiga by being too passionately involved in the poaching of moose and wild reindeers. It was not unexpected however that some aerial hunting crews turned to poaching of wild ungulates during the wolf missions. There were also cases when aerial wolf shooting became a sports game or amusement for farm chairmen, chiefs of state authorities and marksmen. Additionally, the low visibility from the helicopter cockpit sometimes resulted in accidents when inexperienced or alcohol intoxicated shooters accidentally blew up the fuel tanks on the bottom of the helicopter causing it to crash.

My contact, the game manager of the MEFRS, argues that it is difficult at present to use helicopters for wolf shooting to such extent as in Soviet times as there were fewer restrictions and requirements in the past for flights in extreme conditions (flights in the mountains or in forested areas at low altitudes). Moreover, in the past, helicopters were used daily for almost everything, thus the pilots had many hours of flight. They exercised their professionalism during so-called unusual situations, e.g. when landing hunters on their hunting grounds in thick taiga or transporting reindeers and even horses from one district to another. Those experienced pilots had special permission to flight as low as 50 meters from the ground and also had special permission to fly in mountainous areas. Therefore, the pilots based on their professionalism and responsibility were allowed to choose a landing place on the tundra/taiga at their discretion. Due to such flexibility in the flight instructions, it was possible to take off immediately, fly to the destination, manoeuvre at low altitudes and finally land on any surface chosen by the pilots themselves. Meanwhile, according to the game manager of the MEFRS, the flying rules today require to schedule, approve and document every landing point, it is actually almost forbidden to land the helicopter on a so-called

unprepared ground. Thus, if such a site is absent, e.g. in the reindeer herding place, a helicopter is not allowed (officially) to be landed. Consequently, along with a shortage of supplies (resources allocated by the government to regulate predators), flight requirements also limit the effective use of helicopters for shooting wolves at present.

However, are helicopters effective in wolf control in all landscapes of Yakutia? I would like to consider that wolves always had an opportunity to survive and re-establish in remoteness where helicopters couldn't approach. According to the opinion of my contacts, game managers, helicopters could in general fly almost everywhere. However, there are thick taiga areas especially in central and south districts of Yakutia (e.g. Aldanskii district) where shooters couldn't shoot because wolves hid under dense coniferous trees which usually stretch along the river valleys. In such cases, the helicopter usually circled around for the shooters to make a few tries, but if a wolf remained under cover the shooters would think: "*well let's leave it for a while*". The helicopter would then fly further to hunt for other wolves. After a while, the helicopter would turn back to the point where the wolf had been hiding. Usually, the wolf would have left the cover after some time and the pilot could then trace him following footprints, approach it and give a position for shooters to end the wolf. According to my contact *volchatnik* who participated in wolf shooting missions, the persecution of wolves in thick taiga places often resulted in enormous usage of fuel and time consumption with many take-offs and landings. One such landing routinely took around an hour, thus the pilots avoided exercising it too often. Sometimes wolf hunters could only take a look at wolves from the cabin while the helicopter had to turn back as fuel was low. Thus, the wolves used the opportunity to hide and escape from the shooters in the thickness of the forest. During my fieldwork (both in Yakutia and in Tuva), I heard from herders/hunters the common legend about wolf abilities to hide from helicopters by standing on two legs and leaning back against a tree trunk, thus causing the helicopter to only circle without a result. In these stories, wolves were said to have human-like wisdom which made the struggle between human and predator even harder. It seems that such legends are also common in other parts of Siberia, e.g. among Soiots of western Buriatia (see also Oehler 2016, 202).

In many cases, shooting the wolves from helicopters in the YASSR were successful, but it wholly depended on the pilot's virtuosity. According to my contact *volchatnik*, wolves had to be pushed out from the forest to an open area such as a frozen lake, river, or meadow. Usually, spotting wolves, the pilot swung the helicopter from side to side, but the wolves were not fools, they used to escape deeper into the thickets. The pilot would go lower to make

a loud noise and storm from the rotor blades, which scared the wolves into running out from the thickets. An inexperienced pilot would fly over the wolves and they would scatter in all directions from under the helicopter to run back to the forest. Meanwhile, an experienced pilot would start slightly pushing the wolves from a distance until they were driven out into an open area. The wolves usually passed through an open area in a line, giving the shooters opportunity to finish them all one after another. Shooters could kill as many as 12-16 wolves at once, a whole huge pack (based on an interview with a *volchatnik*) (Figure 30).

Figure 30. Wolf hunting crew at the airport with a killed wolf pack (photograph by Innokentii Semenov 1970s)

In mountainous landscapes, it is very difficult to shot wolves from a helicopter, as wolves managed to survive by using the folds of the landscape to run away from human persecutors over many kilometres under cover. Predators particularly choose eroded riverbanks with many pockets, ravines and windfalls to hide. For instance, during the helicopter mission, pursued wolves ran right underneath ice tunnels that had formed above dried mountain rivers. These natural structures usually form during the cold period, especially when the water drops to the river beds. The hollows in the ice were sometimes of the human height and extended several kilometres or more, seemingly wolves consciously chose such sites to survive. My contact, the game manager

of the HRMD, gave an account about the survival strategies of wolves to hide under the ice hollows:

"wolves suddenly disappeared from my eyes, but soon I spotted footprints leading under the ice sheet. As it was too dangerous to land, the helicopter hovered over the surface and I with several hunters jumped out with shotguns, pistols and flare-guns. Two men scared the wolves out by firing flare-guns, while I waited in ambush. As the wolves ran out, I shot them However, one juvenile wolf got stuck in an ice lens, it seemed that it was very scared and hid in the hole as though it had been a natal den. I crawled under the ice and saw the wolf's tail sticking out. It seemed to me that the wolf was wounded, so I finished him immediately with a pistol. However, if the wolf had chosen to run a little closer to the main riverbed, he would certainly have escaped".

Hence, sometimes one or two wolves hid undercover (for example, as in the account above, under ice sheets) and hunters had to leave them alive, as it was impossible to get them out. Moreover, according to the game manager, sometimes wolves also chose such rugged terrain that even if shot, it would have been impossible to pick the wolves up into the helicopter. The desperate will of the wolves to adapt and survive demonstrates the feature of these beings that deserves them respect. The bodies of hunted predators have been treated by indigenous people with respect for many ages, but did the Soviet ideology change the minds of indigenous hunters/herders to treat animals as biological machines rather than sentient beings? Thus, how did hunters in Soviet times treat the bodies of dead predators that had been shot from helicopters? Based on the information of my contact, hunters did not usually have time for such things as respectful rituals because carcasses of many killed predators often had to be skinned with bare hands in temperatures as low as -40 degrees and subsequently loaded into the helicopter. Many hunters and game managers were people of Soviet upbringing who usually adhered to an atheistic ideology. However, there were cases when people could not remain indifferent after seeing the incredible courage of wolves. Once, a male wolf desperately attacked a helicopter to protect his female. It made hunters perceive wolves as self- sacrificing animals and their desire for survival and victory evoked deep respect in people. According to former game manager "*wolves are very strong and brave predators, that's why a man with all his weapons cannot exterminate them*". Moreover, so-called strange events sometimes happened with wolves and (based on the words of the former game manager) "*soviet hunters adhered to hunting prejudices*". For example, in cases when the game manager took a rope (to wrap it around the neck of a killed wolf to drag the carcass through the snow) the hunt was unsuccessful. Thus, he restrained from taking ropes believing that otherwise the hunt would

be unsuccessful. Once, the wolf was shot during a mission, but it seems the shot only stunned him because, once in the helicopter, the unconscious wolf suddenly revived in the warmth and started to move. Astonished people in the helicopter got confused, but eventually killed the wolf right there in the cockpit of the helicopter. According to the former game manager, this accident almost ended in an emergency. Since sometimes there were various incidents with wolves, hunters held that these predators deserved respect and that their strength as well as character should not be underestimated.

Although the job of the wolf shooters was dirty, it was quite profitable and privileged, the helicopter crew all convincingly stimulated by bounties and bonuses. For instance, participants of wolf shooting missions were given an extra vacation day for every six flying hours. Moreover, according to the instructions provided by the *Okhotupravlenie* (NARS: F. R976, Op.3, D.82, 1968), the income from the wolf bounty had to be shared by all aerial hunting crew members. Meanwhile, ground hunters, who navigated the helicopters toward wolves, received a moose license from the *Okhotupravlenie* for every wolf shot from the helicopter. Additionally, the farm was also obliged to reward ground hunters with a live calf, reindeer or foal (ibid.). My contact, the game manager of the HRMD, admitted that he strove to participate in wolf extermination missions all across the Yakutia. Taking part in missions yearly throughout his career from the 1980s (till the time of my fieldwork), he shot about 200 wolves. There was also such nonsense in Soviet times that the helicopters had to fly from the countryside to Yakutsk airport just to pick up the state game managers, instead of taking local staff hunters.

Hence, wolf extermination from helicopters and, in some cases, planes was organized and highly supplied by special governmental bodies and, furthermore, economic stimulation and privileges encouraged hunters to actively participate in these missions. The amounts of allocated resources for the helicopter missions were big, taking into account not only the tons of fuel that was consumed for aviation, but also the well-established monetary awards for helicopter crew members. However, in some cases, the organization of wolf extermination missions with the application of helicopters failed due to bureaucracy obstacles. Such situations gave chances for wolves to survive.

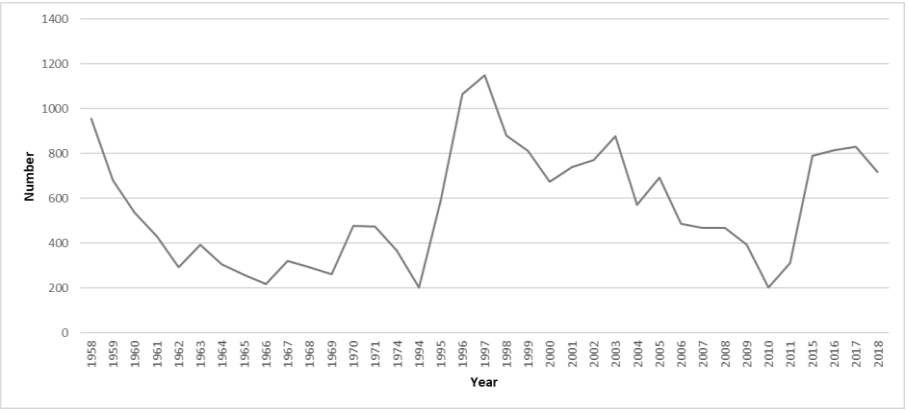
My study also revealed another perception of the wolf, different to that of the notion of an enemy of the nation. In addition to the aggressive atheistic Soviet ideology aimed at eliminating predators and annihilating the animistic perception of indigenous peoples about these animals, features of wolves, such as intelligence and an amazing will to survive, aroused respect among people.

3.8 Wolf extermination rate and population size

After examining how the Soviet state organized the "war" against the so-called enemies of the nation, i.e. the predators, the obvious question arises as to what the results of all this were. By answering this question, I shall study the number of predators that were exterminated in the YASSR and I will try to evaluate how many wolves existed in socialist time Yakutia and how much the wolf population has increased since the collapse of the Soviet state.

According to Sedalishchev and Odnokurtsev (2016, 257), an average 440 wolves were killed each year during the ten-year period 1958 -1967 in the YASSR (the highest cull of wolves was in 1958 and 1959, respectively 957 and 680). Based on the statistics provided in the report of the *Okhotupravlenie* (NARS: F. R976, Op.4, D.34 1972), an average of 376 wolves were culled in Soviet Yakutia from 1968 to 1971. Overall, it could be stated that an average of about 400 wolves were annually culled in the YASSR from 1958 to 1971 (for statistics of wolf culling in the YASSR, see Figure 31).

Figure 31. Statistics on wolf culls in Yakutia between 1958 - 2018.

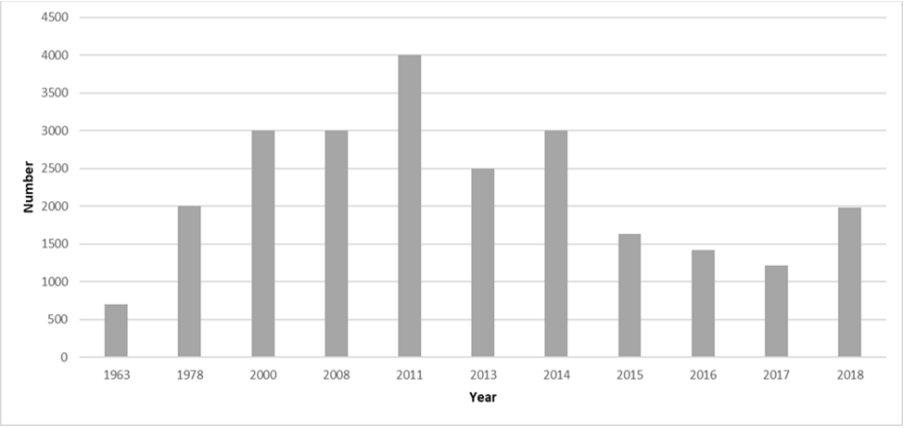


Sources: Statistic report about annual wolf culls in Yakutia. Provided by the administration of national fur concern "Sakhabult" and the MEFRS. Sustained statistical data on wolf culls in Yakutia is available for several periods: 1958-1971; 1994-2011 and 2015-2018. Data on wolf culls between these periods are missing.

Bears were also pronounced as pests, but these had the legal status of a game animal and so, unlike wolves, bear hunting was licensed and determined seasonally from 15 August till 28 February (see Semenova et al. 1989). Compared to wolves, bears were perceived by herders/hunters more positively, for instance bears were referred to as individuals and were called the master of the taiga or grandpa [Yak. *Ehe*]. Wolves were called by the

Russian word *zloy,* which means wicked or aggressive (see Vitebsky 2005, 270-271). Even when bears attacked reindeers, they were not condemned for this as a whole species (as was the case with wolves), but rather as some "bad-tempered" individuals (see ibid.). The killing of bears by herders/hunters, even when justified, entailed anxiety (see ibid.). According to the former game manager, a hunting quota of about 400 bears was established annually in the YASSR. However, officially only about 60 licenses per year were taken by hunters. In reality, the hunters annually killed many more than 60 bears, but they didn't care too much about licenses. In fact, bears, like wolves, were hunted all year round and the actual number of bears killed per year is difficult to determine. The population of the bear in Yakutia in the 1960s was estimated at about 15-20 thousand (see Aiyy Uola-Aian 2004, 15). In the 1980s, the number of bears declined to about 8-10 thousand animals because of intense hunting and established bounties for bears as pests of agriculture (see ibid.). However, the regulation of bears as pests ceased from the beginning of the 1990s, which led to an increase in their numbers (see ibid.). Estimates of the number of bears from the Soviet times show that there could be 10 times, and later five times more bears in the YASSR than wolves (for statistics on wolf population size, see Figure 32). It may also show that the emphasis for the extermination of predators concentrated on wolves.

Figure 32. Statistics on wolf population dynamics in Yakutia between 1963-2018



Sources: Statistic report on wolf census data in Yakutia. Provided by the MEFRS

Other smaller predators, such as lynx, wolverine and eagles, were exterminated to a lesser extent than wolves and bears because small predators caused less damage to Soviet farms. For instance, in 1965 across Yakutia, 32 lynxes and 54 wolverines were exterminated (NARS: F. R976, Op.3, D.33, 1965). However, these numbers can only roughly represent the real

extermination rate of small predators, as many more animals were killed by fur hunters but not officially announced. Besides, it should be considered that huge numbers of these smaller predators were killed as a side effect of wolf poisoning.

Consequently, in Soviet times, though the extermination of wolves was the more intense than with other predators, statistics show a surprisingly low number of annually killed wolves (average of 400) given how large scale the organisation was for the destruction of these predators. For comparison, 1000 wolves were killed in 1959 in Alaska, the country which is just over half the size of Yakutia (see Fitzgerald 2009, 205). Was wolf extermination in Soviet times Yakutia ineffective or was it so effective that only small portions of the wolf population remained? Based on the expert judgment of my contact, the game manager of the MEFRS, wolf regulation in Soviet times was effective and the population of predators was reduced to a minimum, almost exterminating these predators in 15 of the total 35 districts of the YASSR. In other words, wolf population was strongly reduced in 43 percent of the districts of the YASSR. These 15 areas were of greatest concern and the most intense killings of wolves (especially aerial shooting) were directed to the areas of farms, pastures and hunting grounds, as economic losses from predation were most significant there. Given that helicopters rarely flew to the most remote mountainous and densely forested areas as this was very often resulted in a waste of time and resources, wolves in such places were exterminated much less. Thus, it could be proposed that most of the wolves were killed in farming areas and the statistics on wolf culls represents predators extracted from the agricultural lands. Besides, the population of wolves was held under constant control to keep it at a minimal level.

In the early post-Soviet period, the cull of wolves decreased (e.g. in 1994, only 204 wolves were killed) due to a lack of government supplies for predator regulation measures, especially the use of helicopters (see also Sedalishchev and Odnokurtsev 2016, 258). However, from 1995, wolves were hunted more intensively with the use of snowmobiles *Buran* and thus many wolves were killed in 1996 and 1997, respectively 1062 and 1186 (see also ibid.). However, from 2006 to 2010, there was again a decrease in the hunt of the wolf, e.g. only 204 wolves were culled in 2010 (see ibid.). Overall, in the period 1995-2011, an average of 656 wolves were annually hunted (see Figure 31). Furthermore, from 2011, the government of Yakutia strengthened regulation measures of the wolf population and the cull of predators increased, thus an average of 788 wolves were annually culled from 2015 to 2018 (see ibid). Consequently, it can be proposed that statistical data on wolf culling in post-socialist times show an even bigger number of hunted predators than during

the Soviet times. Paradoxically, State supply for the extermination of predators in Yakutia in Soviet times was much higher than during the post-Soviet deficit. It could be supposed that this paradox is connected with the re-established density of the wolf population after the period of weakened control. Wolves are distributed more evenly over the landscapes of Yakutia than was in Soviet times when the population was reduced to its lowest density and were almost absent in farming areas. At present time, wolves are hunted in almost all districts of Yakutia as they have spread almost everywhere. Besides, there are now more amateur hunters with sophisticated rifles, vehicles and snowmobiles that can reach distant areas through many newly built roads on the taiga. It was not the case during Soviet times as rifles were scarce and mostly given to professional hunters, thus although Soviet hunters were professionals, there were fewer people with powerful vehicles and guns on the taiga. Hence, the strategy of hunting on predators has changed significantly since the Soviet times when the extermination of wolves concentrated on farm areas, whilst at present wolves are hunted all over Yakutia. Moreover, the bigger wolf population and the increased number of hunters on the taiga results in a higher cull of predators. Furthermore, bounties for wolves also play a significant role in wolf culls. The wolf bounties established in Soviet times devalued immediately after the collapse of the Soviet state and hunters had no stimulus to deliver wolf pelts for the miserable cost. According to the game manager of the HRMD, the government of the Republic of Sakha has increased bounties since 2011 to combat the dramatic growth of livestock predation caused by wolves. The impact of the bounties on the annual wolf cull can also be seen in Figure 31, which shows the increase in the number of killed wolves after 2011.

How many wolves occurred in Yakutia during the period of high extermination in Soviet times and how much did the wolf population increase after the collapse of the USSR when extermination weakened? Is the contemporary argument of reindeer herders/hunters correct that predator populations have increased since the collapse of the Soviet state and are causing a devastating effect on the reindeer economy? According to the data provided by the biologists Sedalishchev and Odnokurtsev (2016, 257), there were 500-700 wolves in Socialist Yakutia in 1963-1964. Meanwhile, in 1978–1979, the number of wolves was about 2000 (ibid.). After socialist times, the wolf population increasing to, for instance, about 3000-4000 across Yakutia during 2008-2011. However, due to measures the government took to regulate wolves from 2011, the population decreased to 2500 in 2013 (see also Stepanova and Nikolaev 2015, 177-182). Meanwhile, according to official data on the dynamics of the wolf population in Yakutia (see Figure 32), the

average number of wolves in 2013-2018 was estimated at about 2000. However, the estimate of the number of wolves in Yakutia should be regarded as approximate due to errors in the methodology for counting wolves (for wolf census, see below). Although there is no precise data on the dynamics of wolf numbers in Yakutia, the wolf population in the 21st century has almost doubled in comparison with Soviet times, this based on the judgment of my contacts, game managers from the MEFRS and the HRMD.

The wolf population census in Yakutia is based on rough estimates of the number of wolves and the totals depend on the wolf counting methodology. Officially, the census of wolves consists mostly of a questionnaire for hunters, reindeer herders, horse breeders, hunting ground users and local game inspectors. However, the game manager of the HRMD thinks that the wolf census in Soviet times was conducted more precisely than at present because the wolf hunters were State employees who had to watch constantly over assigned farm areas. Besides, they gathered data about wolves from local herders/hunters and provided all of it to the *Okhotupravlenie*. Meanwhile, at present, the questionnaire about wolf abundance is limited by the shortage of supply and lack of employees who could carry it out.

Additionally, as well as the questionnaire, there is another method of predator counting in Yakutia called "wolf footprints counting in winter". The game manager of the HRMD revealed to me that according to wolf footprints counting, the average size of the wolf population in the more recent decade of 21st century could number not a few thousand, but 10,000. Although this huge number is often manipulated by the mass media of Yakutia and by herders/hunters to underline the horror of the mass number of predators, it is not taken for real by game managers and biologists because it has a serious counting error. According to my contacts, the "wolf footprints counting in winter" method is the least reliable and can be used only for the evaluation of population tendency (increases/decreases). During this counting, which is framed by the districts, the same wolves are counted by multiple counters as the predators frequently crossed borders of adjacent districts. Thus, the number of wolves counted can be at least twice the size of the actual population. However, the wolf census method based on the questionnaire also doesn't represent the real population size, because most of the data is gathered near domestic areas. It seems that most counted wolves were so-called (by game managers) "synanthropic" wolves habituating near human settlements and farm areas. Meanwhile, wolves that occurred in the mountains and deep taiga usually remained unseen by respondents and uncounted. Thus, due to the uncounted wolves, the population can be bigger than officially estimated. However, those uncounted wolves habituating far from domestic areas are not

of concern to game managers, as those wolves keep a distance from livestock, preying mostly on moose and mountain sheep.

3.9 The "human factor" and wolf adaptation

The reindeer herders/hunters, as well as game managers and managers of agricultural enterprises, all are convinced that after the disruption of the Soviet state, the wolf population (as well as bears and other predators) increased dramatically, as did the loss of livestock caused by predator attacks. Thus, predators are still seen as a most important problem for reindeer herding in many districts of Yakutia. For instance, Lavrillier and Gabyshev (2018) wrote that according to Evenki herders of Southern Yakutia (Aldan), several reindeer herds entirely disappeared in 2006 because of wolf and bear attacks. Other herds lost between a quarter to two-thirds of their reindeer and, furthermore, these losses increased annually along with the predators (see ibid.). However, if wolves did increase in numbers as soon as Soviet state regulations over predators in the YASSR weakened, then how did the wolf population re-establish and double in size so quickly, and how did human–predator relations contribute to wolf adaptation and reoccupation of Yakutia landscapes after Soviet times? I suggest that at least two important circumstances contributed to the survival of wolves in Soviet times, the human factor (animistic perception of predators and "Soviet man[14]" negligence in predator extermination) and the incredible plasticity as well as adaptability of wolves as a species. Throughout this chapter, I have demonstrated the aggressive Soviet ideology directed to destroy the wolves, as well as to eliminate the animistic worldview of indigenous people. However, I don't mean that the animistic worldview of hunters and reindeer herders was completely brushed out. It seems that the warfare relations between Soviet times herders/hunters and predators contained a kind of respectful notion, which is rooted in the animistic worldview (for more about the animistic worldview of herders/hunters and the perception of predators, see chapter 4).

[14] In using the term "Soviet man", I rely on the concept of "Soviet people" expressed by Vakhtin (1992), which shows that the ultimate goal of Soviet state policy was the "melting down" of various ethnic groups into one single unit, the "Soviet people". In the context of this chapter, "Soviet man" includes residents of the YASSR with various occupations (e.g. herders/hunters, farm workers, farm chairmen, officials and other staff of various state institutions) and Soviet upbringing, who negligently utilized Soviet state resources at their own discretion.

Therefore, human–predator relations in the YASSR could be also metaphorically compared with the battlefield, where enemies respect the incredible bravery, stamina and strong will of the adversary to fight for life. I suggest that perhaps the wolf stamina, strength and courage demonstrate the desirable features of herders/hunters living in a harsh Arctic Yakutia environment. Thus, such perception of wolves by herders/hunters also entails a respectful attitude towards predators (for the Evenki of southern Yakutia, see also Brandišauskas in print). A similar idea was also expressed by Fijn (2011, 208-210) who described the relations between Mongolian herders and wolves as a war between respected parties, of attack and counter-attack (for the Orochen Evenki of Zabaikal'ia, see also Brandišauskas 2017). Fijn (ibid.) showed that Mongolian herders spend large amounts of time and energy guarding and protecting the herds against wolf predation. Gieser (2020, 50-62) exploring the relationship between wolves and Tuva pastoralists (living about 150 kilometres north-west of the Mongolian capital Ulaanbaatar) showed that wolves are highly respected for their cunning, intelligence and bravery (which often surpasses human capabilities), only the best hunters are deemed worthy of killing a wolf by the gods and the wolves themselves. Charlier (2015, 170) also demonstrated that in Mongolia, wolf hunting expresses the hunter's desire to increase his own *hiimor* (success potential), as it is believed that the wolf is endowed with a large amount of *hiimor* thus the hunter can appropriate it. Furthermore, the hunter also wants to identify with certain aspects of the wolf, such as resourcefulness, stamina, intelligence and capacity to find food on its own (see ibid.). Hence, in some sense, the wolf represents the model of ideal qualities defining the human male personhood (see ibid.).

However, it seems that herders/hunters of Arctic Yakutia not only identify themselves with some features of wolves, but also empathize with them. For example, herders/hunters of Eveno-Bytantaiskii district recount about three hunters who found the den of a wolf and pulled out the cubs (a method of wolf extermination commonly applied in Soviet times), then crudely cut the tendons of the wolf cubs' hind legs. The hunters wounded the cubs so that they would cry and howl near the den calling the wolf mother, while the hunters waited in ambush to shoot the approaching maternal wolf. However, after a time, those three hunters lost their legs in accidents. People believe that those hunters were punished by the spirits in exchange for the disrespectful and unfair behaviour with the wolves. When telling this story, people felt sorrow for the crying wolf cubs and the wolf mother who saw her offspring in pain. People compared the crying cubs to their own children, wondering how hunters could be so cruel as if they had no mothers and no children.

Supposedly, empathy with wolves could also play an important role in the predators' survival, because wolf hunters could restrain other times from excessive killing of wolves (more about empathy with wolves, see Chapter 5). Furthermore, it seems that the belief of hunters/herders of Yakutia in the revengeful nature of predators also has restrained them, at least in some cases, from excessive predator killing. People believe that for the killing of one wolf, other pack members would devastate an entire reindeer herd in exchange. According to the game manager of the HRMD, some herders/hunters even in Soviet times refused to participate in wolf extermination missions because they were more afraid of predator revenge than penalties for the refusal.

Paradoxically, but the negligence of the Soviet man in wolf extermination seems also to have contributed to the adaptation of predators. Perhaps it naturally occurred as a side effect of the Soviet man's negligent use of resources and failures in missions to exterminate predators. For example, as I showed, the supply allocated by the State for the aerial wolf extermination was sometimes unused due to institutional bureaucracy and helicopters did not take off. In other cases, the resources for helicopters were corrupted e.g. for wolf shooting for sport and entertainment or poaching of wild ungulates, flying for vodka and transporting reindeers with a helicopter. On another hand, it seems that people just used the opportunity to use cost-free resources for their purposes instead of wolf extermination. For example, my contact, a reindeer herder from Tomponskii district, trying to emphasize the high fuel supply in Soviet times, said that helicopters and even small planes could be used to deliver vodka or any goods in demand to the taiga. Another example is the 1968 report of the *Okhotupravlenie* that argued that *sovkhoz* by organizing wolf shooting from helicopter consumed 12,700 litres of fuel, although it was accounted only for 8,200 litres, thus 4,500 litres of fuel were illegally misused (NARS: F. R976, Op.3, D.82, 1968). Moreover, the *Okhotupravlenie* also stated that aerial wolf shooting shouldn't take a so-called convivial or sport like character (ibid.). What was the governmental authority trying to say between these lines? Could it mean that wolf extermination in Soviet times was not taken seriously, at least by some hunters/herders and farm chairman? Besides, it also appears that farm chairmen neglected rewarding hunters for killed wolves (NARS: F. R976, Op.4, D.44, 1973-1974; F. R976, Op.3, D.82, 1968) and this could discourage the hunters. However, some hunters seemingly were also cheating on purpose to get profitable awards for wolf pelts. For example, my contact, a hunter from Tomponskii district, said that in Soviet times, hunters/herders agreed to collect all wolf skins from fellow hunters and give the skins to one of them so that he could win a big prize (that later could be shared among fellows) at a

competition. Such deception could likely distort statistics and create an erroneous impression of progress in the extermination of wolves. Another contact, a former game manager, recollected that among professional game managers (wolf shooters from helicopter) there was an idea to deliberately allow a few wolves to survive in a certain area, because the absence of wolves would mean no flights, no mission and no extra money. Furthermore, as I showed, human negligence in applying poison (barium fluoroacetate or strychnine) for predator extermination also allowed wolves to survive due to ineffective dosage of poison. Consequently, while the wolves were desperately trying to adapt to human persecution, people seemed to deliberately or unintentionally increase the possibilities for it to happen. Supposedly, humans by acting dishonestly left some landscapes free of predator pursuing, meanwhile wolves thanks to their plasticity and adaptivity naturally moved to places with lower extermination pressure and concentrated there. I shall call such areas free of persecution as the refuges where wolves could hide, re-establish, breed, raise the cubs and, time after time, make attacks on livestock from there. Predators, pursued intensively by humans, associate man as a great threat and as death, and naturally avoid encounters, e.g. flee away when spotting a human or smelling him. However, reduced extermination reduced the wolf's instinctive fear of humans. For example, according to Makhatyrov (2002), at the beginning of the use of helicopters for wolf shooting in the Tomponskii district, predators felt safe when keeping a distance 7-15 km from the domestic reindeer herds. However, after more and more helicopters were used to shoot wolves, predators changed behaviour by avoiding getting closer than 50 km from the herds. It seems that the wolves realized the danger posed by the helicopters and kept away from the reindeer herds, where they could most likely be found. When hearing the sound of the rotor blades of an approaching helicopter, wolves would flee to a distance. However, according to the game manager of the MEFRS, some experienced wolves adapted to living near humans by avoiding his pursuit, for instance by connecting the sound of the helicopter with threat and withdrawing from persecution places to a refuge, but returning when the helicopter fled away. As a result of such adaptations, the so-called (by game managers) synanthropic wolves appeared which specialized in surviving near human settlements and pastures and attacking domestic livestock.

However, what were the features of wolves as a species that led to adaptation and survival under the high extermination levels in Soviet times? I suggest that the high adaptivity of the species as well as peculiarities of the Yakutia landscapes that limited human possibilities to apply extermination measures everywhere allowed wolves to compensate for population losses.

However, to give a better understanding of the nature of wolf adaptivity, I shall move on to the ecological mechanisms of the wolf population. The core element of the wolf population consists of mated pairs and their offspring of several generations. In the pack, there is usually one maternal wolf alpha female that breeds with its partner alpha male. There could be variants of this, such as multiple breeding, when the dominant male breeds with extra females, e.g. his daughter, or when the father of maturing females is lost and replaced by a new wolf male which could breed with any pack female (see Mech and Boitani 2003, 1- 4; Packard 2003, 38-99, 58-59). This strategy of replacement may work as an opportunity for the wolf population to survive when the hunting pressure is high and one alpha wolf (male or female) is lost. Within the pack, normally young females are subordinated by the mother wolf, so that young wolf females do not reproduce as long as they remain in the pack. Meanwhile, young wolf males mature in their third year and, becoming competitive and aggressive, are usually cast out from the natal pack by the alpha male (see Mech and Boitani 2003, 1-34). We can metaphorically imagine the wolf population as a mechanism that converts prey into young wolves and spews them far and wide over the landscapes (see ibid.). Breeding wolf pairs, so to say, "pump out" numerous offspring from the pack when they mature, especially when prey becomes too scarce to maintain the big number of pack members. Those young dispersals roam across the vast landscapes to find free females to mate with and establish new packs in vacant territorial space (see, ibid.). Consequently, wolves are always keen to reoccupy free landscapes, raising pack units and numbers inside the packs.

What could have happened to the wolf population under the huge pressure of extermination? Supposedly, it resulted in many free females and males searching for partners to reproduce because the usual order in the pack was disrupted with the killing of the alpha male or female. With the disappearance of the alpha pair, younger wolf pack members are not suppressed from breeding anymore. The wolf pack's social structure becomes fragmented and wolves spread in all directions being ready to reproduce by establishing new pairings and reoccupying free landscapes (see ibid.). So, the high extermination of wolves leads to the proliferation of wolf breeders, these then comprising a higher proportion of the population and thus the rate of offspring can increase (see Peterson, Woolington and Bailey 1984). Therefore, it can be argued that the intensive killing of wolves increases the rate of their reproduction (as a natural adaptation) and, thus, compensates for population losses. Moreover, the social organization in wolf packs by itself increases the survival of them. For instance, if a maternal wolf female is killed, its eldest daughter or sister can take the mother's role in pups raising. I was told by

herders/hunters (according to their observations and interpretation of the traces of wolves) of Eveno–Bytantaiskii district about how a wolf male took his cubs from the den and translocated them to his sister's neighbouring pack after the male's other family members were killed by a *volchatnik*.

According to the biological data of wolves from Russia, wolf females normally reproduce about six pups once a year (Bibikov 1985, 383-387). However, during population depression times, wolf reproduction rates become higher and more females then usually are born in the population, thus it works as a mortality compensation mechanism (see also Bibikov 1985, 404-408). Wolf ecologists estimated that a wolf population is capable to withstand about 30-50 percent losses, remaining less or more stable or slightly decreasing. For instance, a five-year study in north-western Alaska showed that the wolf population remained stable even at an annual winter mortality rate of 53 percent (Ballard et al. 1997). Thus, if my contacts, game managers, were right in judging that there could have been at least about 2000 wolves during Soviet times in Yakutia, then the mortality from hunting (with an annual harvest of 400-600) was 20-30% of the wolf population. Theoretically, this data could indicate that the wolf population in Yakutia had enough reserves to survive and re-establish following the heavy extermination rate in Soviet times. However, it should be considered that the real number of wolves in Yakutia has been never counted. I suggest that predators have always cohabitated with humans in the remote taiga/tundra areas and mountainous landscapes by utilizing opportunities to hide from persecution, breed, re-establish and predate.

3.10 Conclusions

In this chapter, I examined the historical background of social relations between humans and predators in Yakutia during the Soviet period. I demonstrated that the aggressive atheistic Soviet ideology was aimed at exterminating wolves (also other predators) as well as at the annihilation of the animistic perception of indigenous people about animals as non-human beings. The local inhabitants of Yakutia hadn't killed predators massively before the Soviet times, as they didn't have the resources, measures and helicopters brought by the Soviet state. Besides, the perception of animals as beings other than humans and a belief in punishment from the spirits for disrespectful treatment of predators restrained hunter/herders from killing predators in excess. Meanwhile, the Soviet state by launching an enormous campaign of predator extermination in Yakutia strove to involve reindeer herders/hunters by propagating extremely negative attitudes toward wolves as

agricultural pests. I showed that to accuse the wolves of the destroying the agricultural economy, Soviet ideology pronounced these predators as "enemies of the Soviet nation" [Rus. *Vrag naroda*]. This was the most aggressive conception commonly used in Russia from the times of Stalin to accuse contra revolutionists who were considered outlaws and, after being arrested and brought to trial, would be sent to the gulags where many of them died.

The main reason why human-predator relations became so negative in Soviet times was the predation of livestock. Since in the first part of the 20th century, the farms became one of the communist State's political-economic base grounds, thus livestock predation by wolves also became "a problem number one". Hence, the mass predator extermination in the YASSR should be perceived in the context of the Soviet industrialization, social construction and collectivization of the Russian North. Meanwhile, the wolves represented the untamed nature that the Soviet regime strove to conquer and master by waging "war" against the predators.

In this chapter, I demonstrated how the Soviet state's bodies and bureaucracy apparatus were involved in the waging of the war against wolves. I examined predator extermination practices in the YASSR which consisted of ideology and propaganda as well as extermination measures elaborated against wolves. Moreover, to encourage hunters, the Soviet state applied a system of awards and social competitions, which included various bonuses, prizes and bounties for killed wolves. Meanwhile, Soviet propaganda against predators was spread through newspapers, journals and special radio programs, as well as at special seminars with wolf extermination instructors. With such an enormous attempt to escalate the "war" against predators, the Soviet state strove to involve as many indigenous inhabitants of Yakutia as possible in this campaign.

As a result of the intention of the Soviet state to exterminate wolves, immense resources were thrown into organizing helicopters, poison and human involvement. Nevertheless, I also showed that although wolf extermination missions were quite well organized, human negligence and institutional bureaucratic obstacles sometimes led to the failure of such campaigns. These human failures gave wolves the opportunity to adapt and survive.

To demonstrate how many wolves in the YASSR were annually exterminated during the Soviet campaign against predators, I analysed the statistical data of Soviet and post-Soviet times on wolf culling and population size. The data show an average of 400 wolves were exterminated annually in the YASSR from 1958 to 1971 (the highest cull of wolves was in 1958 and

1959, respectively 957 and 680) and the population was reduced. However, I demonstrated that due to methodological errors in the census of wolves in Yakutia, an accurate assessment of the dynamics of the wolf population is impossible. Nevertheless, based on the expert judgment of my contacts, game managers, the wolf population in the 21st century has almost doubled (due to low predator control in the early post-Soviet years) in comparison with Soviet times. Moreover, I showed that the wolf cull after Soviet times was even bigger (on average 788 wolves in 2015 – 2018,) than in the Soviet period. This can be explained by the expanded wolf population and increased bounties for killed wolves in the 21st century, which resulted in a higher cull of the predators. Furthermore, the strategy of wolf hunting has also changed - at present wolves are hunted all over the Yakutia, while during Soviet times the most intense wolf extermination (especially with helicopters) was concentrated in farm areas where economic losses from wolves were highest. Meanwhile, wolves were exterminated less in the most remote mountainous and densely forested areas, as predation there was in less concern and it was difficult to shoot wolves from helicopters. Wolves naturally utilized the opportunities to adapt by hiding, breeding, re-establishing and preying in the remote taiga/tundra and mountainous landscapes. Thus, the high adaptivity and plasticity of wolves as a species allowed the predators to compensate for population losses and to re-establish themselves. I also showed that being highly adaptive, some wolves (the so-called "synanthropic wolves") managed to specialize to habituate near the human settlements and feed on the livestock despite the high persecution. Such adaptivity resulted from the ability of wolves to recognize the threat coming from humans (e.g. the sound of a helicopter or recognizing an armed man) and to flee, later returning when danger was over. I demonstrated that not only the adaptivity of wolves led to their survival in Soviet times, but people also deliberately or unintentionally created the possibilities for it to happen. I considered that "human factor" (the animistic worldview of herders/hunters and "Soviet man" negligence in the extermination of wolves) contributed to the adaptations of these predators. The animistic perception about predators, as well as identification with the certain features of the wolf, such as intelligence, stamina, the will to survive and bravery, as well as empathy with wolves, probably evoked respect for them. I showed that in some cases such perceptions moralized and restrained herders/hunters from killing predators. Meanwhile, "Soviet man's" negligence as a result of failures in wolf-killing missions, as well as negligent use of resources, seems to have also allowed wolves to adapt. For instance, people could use the opportunity to use cost-free resources for their purposes instead

of wolf extermination, e.g. poaching of wild ungulates, flying for vodka or transporting reindeers with a helicopter.

Hence, although the Soviet state with its aggressive ideology directed against predators made enormous attempts to eradicate not only wolves but also the animistic worldview of herders/hunters, the respectful perception of predators shown by indigenous people, as well as other reasons such as human failures in applying predator extermination measures and high wolf adaptation itself, led to adjustment of human–predator relations in the environment of Soviet times.

CHAPTER 4: IN THE NEIGHBOURHOOD OF PREDATORS

4.1 Introduction

This chapter is the centrepiece of my thesis in the exploration of human-predator cohabitation which could be paraphrased as neighbourhood relations. It focuses on how, by sharing the common landscapes of mountainous taiga and tundra, herders/hunters and predators engage in social relations based on aggressive interaction and peaceful existence which are an integral part of long-term cohabitation. In this regard, the previous chapter dealing with Soviet times (Chapter 2) is fundamental in understanding the historical processes of the relationships between humans and wolves and is thus linked to the further exploration of human–predator relations in this chapter.

The pattern which pervades the entire chapter and links humans and non-human beings into relations is the interspecific communication based on non-verbal signs. The idea of non-symbolic communication between beings was developed by Kohn (2002; 2013), who showed that beings can interact through icons and indexes as well as being able to read non-verbal signs in nature (see more on Kohn's non-symbolic semiotics in Chapter 1). To describe the two-way communication between herders/hunters and predators, I will apply non-verbal semiotics, particularly considering behavioural signs, signs of animal activity, warning signs, signs of revenge and ominous signs. For instance, behavioural signs are perceived mutually by observing, learning and reading the activity of predators/humans and corresponding with behavioural adaptations that lead to interspecific cohabitation.

The first half of this chapter shows how aggressive human–predator interaction is intermingled with peaceful existence. I will demonstrate that there is no concrete line between these two modes of interspecific relations, but rather one constitutes the other, or more precisely, one is the precondition of the other. For example, wolves' attacks on livestock and the killing of wolves by humans in response are inevitably intertwined with the mutual avoidance of collisions, maintaining distance from each other and also adjusting behaviours. I will show how such reciprocity can be perceived as the complexity of human-predator social relations that I call interspecific cohabitation in this thesis.

The second half of the chapter focuses on how human–predator cohabitation can be perceived from the perspective of the cosmology of herders/hunters. I will consider that the notion of predator revenge is the central idea in the animistic worldview of herders/hunters about predators (for the idea of reciprocal revenge/punishment from non-human beings, see also

Brandišauskas 2017, 204-213; Bronz and Willerslev 2013, 73-89; Willerslev 2007, 29-50). It is perceived by the herders/hunters of Arctic Yakutia that humans can be avenged not only by the predators directly, but also by their spirit-master *Baianai*. Thus, in the eyes of the spirit-master, the killing of predators will be considered a sin for which people can be punished. For instance, the unusual behaviour of animals (and birds) could be interpreted by herders/hunters as a bad sign auguring retribution from the spirit-master. It is believed that so-called "killer bears" could have been sent by Baianai to assassinate people as a sign of retribution for neglecting the respectful treatment of predators. I will show that to evade the misfortunes and to appease the spirits, herders/hunters perform predator honouring rituals which could be perceived as communication with the realm of the spirits through signs.

In this chapter I will also reveal that the tripartite relations between people, predators and *Baianai* are in their nature hierarchical. It is believed that while animals are subordinated to the spirit-master, human destinies are also influenced by *Baianai*. I will demonstrate that the communication of herders/hunters with the spirit realm cannot be perceived as equal because humans can not directly understand the meaning of spirit “speech”, thus herders/hunters interpret the manifestation of the will of *Baianai* according to signs, e.g. the behaviour of animals. I will also propose that the hierarchy and the subordinated relations within the spiritual world in some sense demonstrate the affinity of the human relations with the State.

4.2 Relations of neighbourhoods

The idea of a human–predator neighbourhood in the shared landscapes first came to my mind during fieldwork in the Republic of Tyva while visiting the encampment of Tozhus reindeer herders/hunters – the indigenous inhabitants of the eastern Saian mountains. In their taiga encampments, Tozhus experience an imminent closeness to predators that do not hesitate to approach and kill reindeers, with bears also sometimes posing a threat to people in the reindeer encampments. Predators usually appear under cover of darkness, often on rainy nights or misty mornings, to improve their chances of avoiding armed reindeer herders on their incursions into encampments. Anticipating this course of action, people would prepare to fight their predator neighbours, especially at such times (see also Jefanovas 2019).

In the following account of a neighbourhood predator, I attempt to demonstrate my experience of encountering a bear in the Tozhus reindeer herders/hunters’ encampment. With this story, I reveal what it means to feel

the presence of a predator in close proximity. This encounter with the bear was the most intimate during my entire fieldwork, so it deserves to be mentioned here as an example that I keep fundamental in the perception of human-predator cohabitation.

In early autumn, the nights had become cool and snow had appeared in the mountains, the mornings were foggy. On one such evening, as I was washing my clothes in the cold water of a stream behind the *chum*, I suddenly noticed by the reindeer herders/hunters, with rifles over their shoulders, rushing to a nearby lake. Recently, I caught some grayling there. I yelled "*what happened*?", to which people silently pointed to the other side of the lake. A bear was standing there, sniffing the air. A herder asked me to release the Laika dog that was loudly barking. After untying the leash, the dog sprinted onto the taiga following the bear. However, a while later, the herders returned to the camp without success, as the bear had escaped to the mountains. Herders supposed that the bear would return to the campsite after dark to attack the herd. They concluded: "*predators these days don't fear dogs or man*." Later that evening, the herders tethered their dogs closer to the herd, loaded their rifles and prepared a lamp for the night. I could not shake the feeling that the places I had become familiar with now appeared alien, dangerous and frightful. It seemed like the taiga had eyes and it was watching me and the herders. The mountains appeared to be concealing some threat behind their cliffs. I could feel the presence of another being nearby. I could read that presence in the stare of the dogs' faces and from their anxious barking. The herders' nervous movements and whispers only exacerbated this sense of an invisible presence. I was not terrified, but rather I felt a respectful kind of fear for the bear. At the same time, I wanted to be sure the herders got their shot were the bear to reappear. The bear never did show up that night (see also ibid.).

The case suggests that both the herders/hunters in the encampment and the bear in the mountains above perfectly knew about the presence and intentions of each other. It seems that the bear kept its distance from the campsite knowing that the barking dogs at the camp would signal the bear's approach. However, while the dogs barked almost incessantly throughout the night, the herders/hunters woke only when the barking became particularly intense. In other words, when the bear attempted to approach closer, people were immediately aware of it. The bear however stayed near the mountains where it likely anticipated a rainy night to silence its movement - such a strategy might have enhanced its chances of obtaining a reindeer and escaping to safety (see ibid.).

Thus, while reindeer herders/hunters are aware of their inability to fight all predators, predators seem equally conscious of the risks of being shot. This mutual awareness of keeping a distance from each other involves non-symbolic communication. One example of such communication is the territorial markings on trees. For instance, the Tozhu reindeer herders/hunters peeled bark from larch trunks (see Figure 33), claiming that bears could recognize such signs of people and that bears would generally avoid such places. People believed that bears could easily understand this communication as the places belonging to bears were similarly marked. Indeed, the bears would scratch or knock down trees, leaving bite and claw marks on the trunks to mark their territory. The bears knew to position their markings higher up to signal their strength and stature to other animals and to people who might compete with them over territory (see also Brandišauskas 2017, 156). Although herders/hunters mark trees, bears often ignore these warning signs by fearlessly entering the campsites. The Tozhu reindeer herders/hunters argued that predators were not so afraid of man as they were during the Soviet times when extermination levels were high. The example above reveals the intentions of a bear to approach a domestic place and explore the vigilance of people while attempting to utilize opportunities to attack livestock.

Figure 33. Larch with peeled bark as a warning sign for bears (photograph by Jefanovas 2017)

The account of a 62-year-old Eveny woman from Sakkyryr village also seemed to speak of this behaviour of predators that tried to observe humans and explore their character for strength and resistance with the purpose of assessing the possibility to attack the reindeers. The woman recollected how in her childhood she was watching over the reindeer herd of her parents and met with the wolves:

"when I was a child, my grandmother taught me that predators are creatures of God and should be respected. It is not good even to speak badly

about wolves. It is better not to talk about them at all, as they can take revenge. Wolves howl in the surroundings of a reindeer encampment, so we children sometimes scared them by beating loudly onto the griddle. Also, children were given a flare-gun to scare the wolves by shooting lights into the sky. Once, after guarding the reindeer at night, I was coming back to the encampment when suddenly I heard a rumble coming from the reindeer hooves. I jumped on my uchakh and rode to find out what the reindeer were running from. Suddenly I saw two grey creatures lurking around, I realized it was a couple of wolves. I became numb with fear. The wolves approached me and sat nearby, attentively staring at me. I was so scared, those eyes were so frightening, the teeth, the wolves were growling at me. I stood with the riding stick and thought that if I ran, the wolves would attack, if I approached them, they would attack me too, so I couldn't decide. Eventually, I lifted the stick and started to approach them, shouting, hitting the ground and making more noise by stomping my feet. The wolves sat there for a while, probably thinking "what a foolish girl". Then the wolves slightly stepped back, sat and gazed for a time, then they walked to the side and sat down to observe what I was doing from a distance. Eventually, the wolves run to the hillside. It seems that the predators attempted just to scare me, hoping that I would flee and leave the reindeers for them."

The account shows that reindeer herders perceive wolves to be God's creatures – soul beings, subjects that share a common living space with humans (for the Evenki of southern Yakutia, see also Brandišauskas in print). It also conveys a sense of being observed by other beings - predators that communicate with humans, watch and apprehend human actions. The interrelation between the wolves and the Eveny girl also demonstrates a genuine semiotic communication that took place "on an equal footing" without firearms or traps. The fact that eye contact is possible between the two types of beings shows that subjects can be aware of the other's point of view (see also Kohn 2002, 203-204). I mean that humans and wolves think, judge and react to each other's intentions apprehending the subject's will and character. Meanwhile, in the case above, the communication contained a series of non-symbolic signs, such as growling, teeth showing, gazing and making noise, with such non-verbal interaction the parties tried each other's vigilance and warned of keeping a distance from each other.

It can be assumed that it is important to keep a distance to exist peacefully, this maintained between people and predators by observing each other and communicating through signs. As Oehler (2016, 10-11) put it, physical distances between humans and animals could be understood in terms of collaborative and communicative intensity. On the other hand, to keep

predators at a distance, it also means to struggle against them to protect livestock as predators always try to violate the borders of domestic places. Indeed, Lescureux and Linell (2010) also showed that among the livestock breeders of the Republic of Macedonia, intrusions of wolves into domestic place created the impression of animals that are disrespectful of borders and norms and that they simply do not have the right to exist. However, according to the ethnography from my field research, peaceful existence with wolves could be established by the sharing of some reindeers with predators. For instance, Gavril Zadorov, a herder from Tomponskii district who owns a small herd of about 100 heads, considers that it is better to share a few reindeers with the so-called "local" or "our" wolves [Rus. *Svoi volki*] than killing them and thus vacating the area for new incoming predators that would take many more. According to the herders/hunters of Tomponskii district, their ancestors did engage in such kind relations with wolves, especially in pre-Soviet times when firearms were an exclusive rarity and people struggled with predators "on equals". Neighbour wolves are thought to be familiar wolves that realize that taking too many reindeers from humans is not good because the herders/hunters would then kill the predators in exchange. Humans are also aware that wolves need some prey for subsistence, thus predators are allowed to take a few reindeers. Moreover, it is believed that "local" wolves defend the territory by preventing intruders from entering, which are usually young wolves roaming in search of prey and area (for the Evenki of southern Yakutia, see also Brandišauskas in print). Consequently, the newcomer wolves are not familiar with this so called empathetic peaceful existence of humans and predators. My contacts, herders/hunters of Tomponskii district, illustrated the relationship with predators based on peaceful existence by comparing "local" wolves to humans, saying that even a thief does not violate his own household - such notion underlines the principle of familiarity.

However, the peaceful existence of a human and predator largely depends on the personal character and behaviour of the latter, it also presupposes intimate relations between two kinds of beings. Various stories about bears who engaged in personal relations with humans circulate among the reindeer herders/hunters of Eveno-Bytantaiskii district. A bear once became so insolent that he even joined the very migratory movements of the herd along with the reindeer herders. The neighbour bear was seen many times walking behind or to the side of the herd, preying on calves or weak reindeer. In this case, the herders aimed to shoot the bear right away, as the purpose of its perpetual proximity was evident. Meanwhile, in another case, an adolescent bear occupied the same area as reindeer herders pasturing the reindeers. Then, however, the bear kept a distance and people let the bear mature in the

neighbourhood. The herders were aware of the presence of the bear and the bear also seemed to be aware of the so-called peaceful existence, so he stayed away from the human livestock. Moreover, the bear in adulthood became a strong animal, "the master of the place", preserving territorial ownership and not allowing other bears to invade. Thus, the bear unintentionally also protected the reindeers of the herders from the attacks of "stranger" bears.

However, there is no concrete line between the peaceful existence of humans and predators and the killing of predators, but rather both are an integral part of human–predator cohabitation. Many reindeer herders I met during my fieldwork would not allow wolves to habituate in an area where reindeers are kept and protected from predators. For instance, the reindeer herder Afanasii Konstantinov from Eveno-Bytantaiskii district thought that it did not matter which wolf to kill, whether the "local" or "stranger", and that there were a lot of them around anyway and they definitely would come to take as many reindeers as they could. Afanasii shared the common notion of herders/hunters that wolves breed and concentrate in neighbouring areas separated by ridges where the taiga is thicker, the prey is abundant and there are fewer herders/herders, and thus the wolf numbers grow quickly. However, when the prey declines, predators spread from the mountains like a hungry army to the areas of domestic reindeers. Supposedly, such a notion also contributed to the discourse about the expansion of the predators after the collapse of the Soviet state which led to weak control over predators. It seems that the notion of an endless wolf population spreading to attack the livestock stands as an impetus to kill predators by the argument that people are just defending their property – domestic reindeers.

However, when asked whether they deliberately hunt predators, reindeer herders and hunters usually would say: "*no, we do not hunt predators on purpose, because it would be a sin"*. Why does killing predators cause such contradictory perceptions among the herders/hunters? Usually killing predators is associated with the threat of revengeful actions, a punishment that results in excessive predation or general misfortunes. For this reason, it is treated as a sin (I will return to this notion later in this thesis). However, it seems that what people say and what they do in this case do not always have the same meaning. During fieldwork, I observed the killing of predators (wolves, bears, eagles) which were explained by reindeer herders/hunters as not a hunt, but as a necessary defence. Usually, the explanation was "*we killed him (the predator) because it was himself guilty*", e.g. when a bear violated a log cabin or attacked reindeers. Thus, killing the predator is qualified as an exceptional right to execute an offender. Indeed, according to Lescureux and Linnell (2010), the ability to respond appropriately against predators that

cause harm can be perceived as the reciprocity necessary for the peaceful existence of humans and predators.

It seems that the herders/hunters of Arctic Yakutia are prone to kill predators by justifying the principle that "if someone without permission takes something of mine, he will become an enemy". In such a case, the "our" or "familiar one" would become a "stranger one". There are many accounts among herders/hunters of Eveno-Bytantaiskii and Tomponskii districts about the common principle that if a bear violates certain distance and breaks into a domestic place, it becomes a "guilty one" [Rus. *Sam vinovat*] and people have a moral right to kill the intruder. For instance, once the herders/hunters found that a bear had violated a cabin several days earlier. They said "*it is not allowed, the bear broke the rules*". Thus, the hunters went to find and kill the bear. Nevertheless, my contact Sleptsov (an ethnologist from the IHRISN) told me about a case when the Eveny of Momskii district (north-east of Yakutia) justified that if a bear just entered a log cabin and left things in place, not making a mess inside, or if he took only a few food products from the storage platform, then the hunters would consider the possibility to leave the bear alive. Indeed, I also heard herders/hunters of Eveno-Bytanstaiskii district sympathizing with bears, saying that a hungry bear should be allowed to take some food because he as well as a human, needs to eat something to be alive. However, killing the bear or not is also connected with taboo, as many Eveny consider the bear a mythical common ancestor of them, thus to kill a bear would also mean killing a relative (see also Sleptsov 2014). Many versions of the legend about the bear kinship circulate among Eveny reindeer herders/hunters today. Here I give one simplified example of the many I was told by the Eveny:

"once a girl was lost on the taiga during the wintertime. She would freeze and die if she didn't find shelter. She had walked for a while in a place she couldn't recognize when she found a den of the bear. The girl slipped in through the opening and was keen to overnight there. She was afraid the bear would eat her, but it was very cold outside thus she decided to stay. The bear in the den hugged her tightly, thus she got warm, but couldn't escape. They both spend a whole winter in the den and, as a sign of familiarity, the bear even shared his pawl with the girl to suck to (it is believed that the hibernating bear always sucks his pawl). *Those two had love relations while sleeping together and in the springtime the girl became pregnant. Eventually, she escaped from the bear to her village and gave birth to a human-bear infant, from which the Eveny kin has evolved"*

It is likely that a woman is considered closer to a bear than a man, seemingly the woman's body shape is somewhat reminiscent of the figure of

a bear (see also Sleptsov 2014). For instance, herders/hunters believe that a bear would not touch a woman if she bared her chest before him. According to Sleptsov (2014), a woman should turn to the bear with the words: "s*hame on you to attack a naked woman*". However, there is an opinion that hunters should not allow women to approach the carcass of a killed bear nor to even touch a knife used with the bear. It is believed that only a man has the right to slaughter a bear. Besides, it is taken that if a woman prepared a meal from a bear, certainly another bear would come to her house and take revenge by killing the inhabitants. Thus, it seems that the taboo on the excessive killing of bears regulates human–predator relations (for the taboo among the Chukchi on killing wolves with a rifle, see Sleptsov 2017). For example, the Eveny avoid eating bear meat, considering this act as a kind of cannibalism and disrespectful behaviour. Especially, the consumption of bear meat is forbidden for a pregnant woman, as it is believed that angry kids would be born in such case. In this sense, eating bear flesh could bring people back to the violent nature of the bear, from which the Eveny are believed to have originated. Besides, there is a practical reason for avoiding bear meat consumption - for example, to prevent infection by trichinellosis. It is believed by herders/hunters that for several weeks after hibernation, bears feed on special plants to cleanse the organism of worms accumulated during the bear's winter sleep. Thus, eating the bear's flesh in spring when the predators wake full of worms is especially dangerous. However, if people do eat bear flesh, the participants in the meal must say "*cuckoo*" or "*croak*", thereby misleading the bear into thinking the meat was not eaten by humans, but by birds (for the relations of humans and bears in circumpolar societies see also Dudeck 2018; Brandišauskas 2017, 207-213; Vainshtein 2016, 71-76; Scott 2006, 51-56; Gemuev et al. 2000; Ingold 1986, 243–276; Vasilevich 1971; Hallowell 1926). The Eveny say that it is not customary to simply bite off bear flesh from the bones. It is taken that for such a disrespectful act, the bear would attack a human and in return forcefully tear his flesh. So, a piece of bear's meat should be carefully cut off with a knife.

In general, contemporary herders/hunters do not always pay attention to the taboos on killing bears, in part because the indigenous people were influenced by the atheistic and rationalist ideology of the Soviet times. On the other hand, the idea of consumption in the market economy also plays a role in neglecting the taboo. Indeed, according to Gurvich (1977, 203), the herders/hunters of North Yakutia didn't eat bear flesh at all in the past, thus it was already not the case during the Soviet times. Moreover, the reindeer herders from Eveno-Bytantaiskii district argue that eating bear meat has been a custom of Sakha people, while it was taboo in the past for the Eveny and,

usually, the carcass of a killed bear was buried on a wooden platform raised above the surface. However, it seems, that at present times these customs of the Yakuts and Eveny have merged and there are no more strict borders between them, at least it depends on the person. For example, some Eveny elders distinguish between the Eveny and Sakha traditions of bear hunting, claiming that unlike the Sakha, the Eveny never killed bears in their winter dens. Consequently, at present, much depends on the skills of the hunter whether to hunt bears in dens or not. Finally, independently of nationality, the herders/hunters do adhere to certain hunting customs. For instance, hunters are keen to hide their intentions to hunt bears, by talking misleadingly that they are going to find lost reindeers. People believe that a bear could hear the words even if whispered from many kilometres away, thus it is better not to talk and to not even think badly about bears. Once I carelessly asked a hunter from Eveno-Bytantaiskii district to tell me stories about encountering a bear in the taiga. The man suddenly interrupted me and said "*it is not customary to talk about the bear when outside because he can catch the vibrations coming through the ground. You should whisper about it later in the log cabin, as the floor isolates the words".* The hunter also believed that bears have an organ at the side of their armpits that could catch the tiniest vibrations including distant human talk and even whispers. Furthermore, the hunter explained to me that to discuss bear hunting by sitting by the fire is dangerous since the fire could serve as a translator informing the bear about human intentions. Thus, if one talked openly about going to the bear's den to kill him, the bear would immediately flee away. Besides, the hunter thought that a bear is well aware of those braggarts who prattle sitting by the fire, the bear doesn't like it and would scare such hunters in advance. For this reason, herders/hunters of Arctic Yakutia restrain from overtly naming the bear and instead they use euphemisms, e.g. one that dwells in the forest [Yak. *Tyataagy*], the grandpa [Yak. *Ehe*], the elder [Yak. *Kyrdagas*], the uncle, the father's older brother [Yak. *Abaga*] (for bear euphemisms see also Sleptsov 2014; Gurvich YANTS SO RAN: F5. Op. 1, D.139, 1945; Ionov 1915). Thus, predators are believed by herders/hunters to possess the power to foresee things ahead or to read the minds of people. In some sense, the abstaining of openly talking about bears is justified because the bears are also known to be angered, chasing down people in retribution for having been wounded or for having crossed their tracks. It is believed that bears also could be challenged in their area by cutting with an axe above a bear's scratchings. A bear, by moving within its area, constantly checks on its territorial markings (see also Brandišauskas 2017, 156-157). Supposedly, when a bear notices human tracks or marks on the trees, he becomes cautious and prepares for an encounter, knowing that man

would follow to kill the bear. Indeed, Russian zoologist Krechmar (2005, 235-258) described bears as predators that being injured or disturbed may suddenly turn to attack their foes. The bigger the animal, the stronger his sense of entitlement to a given territory. For instance, an Eveny woman from Topolinoe village accounted for how she was picking berries right in the backyard of a local hospital built on the outskirts of the settlement surrounded by taiga. Suddenly she found herself crossing the bear's tracks. When she raised her head from the footprints, the woman spotted "the master of taiga" standing on his two legs and angrily staring at her. She immediately ran to the nearest house to take shelter, while the bear chased her to the threshold of the house. Although the bear attack took place in the village, the woman didn't seem outraged, claiming that it was human fault because people interrupted the animal home. Reindeer herders/hunters consider the bears to be the masters of the given place, it is said if a bear found some carrion or gets some prey, he will not allow others to step in his area. People say that a bear would think "*it's all my prey and I will attack anyone who approaches it, be it another bear or a human*". There are no equals to a bear because he feels master in his place, that's why the Eveny from Topolinoe believe that people invading areas ruled by predators provoke their attacks. This notion of the bear as the master of the taiga, supposedly, causes at least some people to withdraw from areas occupied by the bears (for Evenki of North Baikal see also Simonova 2011, 98, 106), which should be also considered an aspect of human–predator cohabitation

Hence, sharing the common landscapes, Siberian reindeer herders/hunters and their neighbour wolves and bears seem well aware of each other's habits and intentions. Where their divergent intentions collide, the human-predator interaction becomes entwined in a pattern of reciprocal aggression. However, reindeer herders/hunters living in close proximity with predators also engage in peaceful existence which is based on keeping a certain distance from each other. Thus, in acting aggressively against each other, as well as existing peacefully, humans and predators engage in daily cohabitation.

4.3 Behavioural adjustments: "wolves change as ingeniously as humans adapt to new technologies"

In this part, I would like to demonstrate how wolves and humans adjust their behaviours by mutually reading non-symbolic signs and revealing the meaning of each other's actions. The mutual abilities to correspond adaptively to the behaviour of the other should be perceived as a result of the long-time cohabitation of humans and wolves in the shared living place. These features

lead wolves to adapt to the changing relations with humans, which in turn is influenced by the shifting socio-economic and ecological conditions. Reindeer herders and hunters argue that since the end of socialist times, wolves have been changing their behaviour as quickly as people acquire new skills and electronic technologies. Herders/hunters of Arctic Yakutia perceive wolves as *khitry'e* (cunning) creatures who, like humans, also utilize various opportunities to subsist. However, people are most concerned that predators have become unafraid of the signs of human activity. Indeed, Lescureux (2006) similarly showed that the upheavals of the post-socialist times in Kyrgyzstan also led the wolves to adapt to the new practices put in place by livestock breeders and hunters. Many Kyrgyz noticed that the wolves changed their behaviour after the fall of the USSR, becoming more numerous and approaching the villages without fear (ibid.). The notion about the changing habits of wolves also indicates changing human–predator relationships. At least two dramatic changes in human–predator relations can be distinguished, one that took place under the Soviet regime, and another has been occurring during the times of the market economy. Lescureux and Linnell (2013) also observed among rural Macedonians that the transition process from socialism to the market economy affected both livestock breeding and hunting practices and, therefore, had an influence on human-wolf relationships. Furthermore, Lavrillier, and Gabyshev (2018) also showed that Evenki, the nomads of Southern Yakutia (Aldan), noticed that wolves were behaving in a completely different manner than earlier: "*they have become insolent, aggressive, they are walking directly onto the roads and into the camps of humans, they are no longer afraid of humans, they do not have enough wild game to hunt, so they attack the reindeer herds"* (ibid.). However, some reindeer herders/hunters from Sakkyryr think that changes in human behaviour attract wolves closer to the settlements and pastures as people spend less time on the taiga and more in the village keeping animals closer to it. Besides predators accumulate in places where herders breed livestock, because people leave domestic animals on their own on the taiga most of the time and they become easy prey for predators. For this reason, predators have spread to places where they were absent before and, in this sense, humans have led to the expansion of the predators. For example, around 100 km from the Sakkyryr along the riverhead of Bytantai, bears accumulate and attack foals, but herders do not have enough fuel to arrive from the village to watch over the horses constantly. In the past, the indigenous people lived constantly on the taiga watching over their livestock. Consequently, with the purpose of avoiding predators, contemporary herders are even forced to cull their foals for meat much earlier (at the end of summer) than was usual (in late autumn).

Other common discussions among reindeer herders/hunters about the changing behaviour of predators also touch on the issues of increasing taiga fires. Frequent fires on the taiga reduce the amount of natural habitat for predators, which then leads to the migrations into other areas, including areas occupied by the nomads (see also Brandišauskas 2007; Lavrillier and Gabyshev 2018). For example, during my fieldwork in Eveno-Bytantaiskii district, taiga fires caused huge amounts of smoke in June 2019, making the day as dark as night, even most of the regular flights were cancelled. People argued that the taiga had never burned on such a scale before. People adhere to the opinion that taiga fires are mostly human fault, since illegal loggers trying to hide massive clearings set the violated areas on fire. Meanwhile, predators fleeing the burning taiga areas congregate closer to villages where the fires are kept under control. Furthermore, mining activities on the taiga, road building and gas pipeline construction also disturb predators. Geologists driving high-mobility all-terrain vehicles on the taiga wake hibernating bears up by destroying their dens. According to herders/hunters, there have been cases when bears fleeing from hibernating area have approached human settlements and tried to sleep in stacks of hay or dumps. Moreover, human activities on the taiga affect the migrations of game animals which are pushed closer to human settlements. By following the prey, predators also migrate from remote taiga places closer to humans. Furthermore, the growing road network on the taiga enables city hunters and poachers to easily reach taiga corners that lead to the depletion of natural wolf prey – wild ungulates. Wolves are then forced to look for an additional source of food, i.e. that of human livestock. The new roads also give the opportunity for wolves to easily move to domestic places, as it is more convenient for predators to follow vehicle paths as it saves energy compared to moving in deep snow or thick taiga. Wolves are not afraid of vehicles nor the scent of fuel, they also ignore the noise of the snowmobile as nowadays everyone drives snowmobiles. These so-called (by game managers) synanthropic wolves adjust to recognizing and understanding the signs of human activity, distinguishing between those which can cause a threat and others that can be ignored. As Lescureux (2006) put it, wolves must consequently find a compromise between the availability of livestock and the risks related to it since they must approach humans.

Moreover, herders/hunters also complain that wolves sometimes become so insolent [Rus. *Sovsem obnagleli*] that even when persecuted with vehicles they seem to tease people by trampling around, urinating and defecating on the vehicle's tracks. People also argue that even not useful things thrown away by humans can immediately attract the attention of predators. It was once noted that wolves stopped on a road to lick a bottle full of motor oil, while at

other times predators were seen on roadsides scratching at rubbish such as cigarette packets or plastic bags frozen under the snow. However, the most intriguing account I heard from herders/hunters was about bears that even bit into gasoline canisters to smell gasoline for their pleasure. A hunter from Tomponskii district argued that the bears are addicts, they are fuel snuffers [Rus. *Taksikomani konkretnija*]. According to him, it sometimes happened that the bears damaged fuel barrels stored in the taiga encampments for refuelling vehicles (SUV or snowmobiles). The hunter commented on one such case: "*you would become very furious to find that the gasoline storage was destroyed by a bear, that means you cannot move on as planned".* Once, while travelling through the taiga with a *volchatnik*, he showed me a plastic canister full of holes that had been bitten by a bear. It turns out that the *volchatnik* had hidden a canister full of fuel near the road on the taiga in order to refuel the vehicle next time, but he found the canister empty. The *volchatnik* claimed that the bear was guilty since the traces of his fangs were visible on the canister (see Figure 34). Astonishing, but bells and other sound-making tools[15] [Rus. *Kolotushka*] (see Figure 35) mounted on reindeer necks to drive away the wolves could have the opposite effect because wolves have changed their habits, as the following

Figure 34. A fuel canister bitten by a bear to sniff the gasoline (photograph by Jefanovas 2019)

[15] Traditionally for scaring away wolves, various sound-making tools - *kolotushka* - were used. Reindeer herders used to make the so-called *lohur* from the wooden plate carved in an oval shape and tied to it the drilled reindeer joints or thick parts of the antlers cut in cylindrical shape. These bone parts (the mallet) striking wood (the anvil) would make a high sharp sound. During my fieldwork in Sakkyryr, I saw a similar tool which the Eveny called *khangalda*. It was used as a musical instrument during traditional performances. Furthermore, for scaring the wolves, the reindeer herders also utilized cans heated over a fire claiming that this technique makes the cans sound sharper. These handmade tools are put on the reindeer antlers so that animals moving and grazing will sway the heads making noise.

example illustrates. A reindeer herder from Eveno-Bytantaiskii district had a very strong and beautiful white reindeer, he was very proud of him. The herder trained the reindeer as a leader to harness in the front of the sledges. Such reindeers have a high value, thus the herder put many bells on the reindeer's neck to protect him from wolves. However, wolves attacked and killed the reindeer. The man got angry and he was surprised that the wolves hadn't been afraid of the bell sound. Meanwhile, reindeer herders from another district (Verkhoianskii) argued that they didn't use bells any more since it attracted wolves to follow the reindeer herd. It seems that wolves have adapted to recognize the bell sound as the sign of prey location and have taught it to their offspring. If young wolves see their parent wolves killing reindeers with bells, they will do the same.

Figure 35. The Khangalda (Lohur) traditional sound making tool "Kolotushka" (photograph by Jefanovas 2018)

During my fieldwork, I received various explanations from herders/hunters about how wolves adapted their behaviour and taught these habits to their offspring. For example, my contact, the predator hunter (zoologist) Egor Nikolaev, referring to his observations of the behaviour of wolves, suggested that an adult pair of experienced wolves would walk with their offspring and teach them until the pups are about eight months old. At the end of the autumn, the adult pair would separate from the already aged youngsters and they would go their own ways to find the scarce winter prey. In all cases, in early spring, a mature pair would separate from the pack to breed and raise the new generation, but before this time, the adult wolves would introduce the youngsters to their sisters and brothers, and sometimes to cousins. Doing so, the pair seeks to stimulate cooperation between relatives so that young wolves could learn and share survival skills with others. Also, such a web of wolf relations could provide support during times of scarcity or severe persecution by people. Indeed, the experience of the reindeer herders/hunters of Eveno-Bytantaiskii district in observing (usually by reading footprints or looking through binoculars) the behaviour of wolves seems to confirm the above idea. Herders/hunters noticed huge packs of 10 or even 20 wolves coming together

in about October. However, in November these clusters would disseminate, and wolves in groups of two or three individuals would disperse in different directions.

Moreover, from another case, when hunters couldn't catch a large wolf pack (for 10 individuals) for weeks, I learned how the predators acquired the habits to read the signs of humans and to connect it with the hunters' intentions. During the hunt, the wolves were not caught by the traps and snares, but skilfully passed the red flags fixed on string with which the hunters had used to fence a large territory to capture the wolves inside. It was unusual behaviour as wolves are usually afraid to pass the flags and tend to stay inside the fenced area. By observing the tracks of the wolves, the hunters revealed that the whole pack was driven by a mature pair of experienced wolves, who had quickly comprehended the intentions of people, sensed traps set under the deep snow and had bypassed the snares. Most likely, the adult wolves had got caught in traps before, but had managed to escape, the wolves thus gaining experience in perceiving human intentions and adapting their behaviour. Meanwhile, the young less experienced wolves followed behind and learned from these elder animals. However, the hunters by carefully observing the behaviour of wolves managed to trap the adult pair of wolves. Consequently, the young wolves without the guidance of the adult pare, scattered in panic and were all immediately trapped.

The way how predators learn to read human signs and understand the pattern of people's behaviour is by watching from a distance. This idea certainly resembles what Oehler (2016) referred to as mutual reading. Reading of each other's (human-wolf) movements in the landscape frames wolves as keen learners who compete with humans in their ability to anticipate the other's next move. This is perceived by locals to make predators dangerous beings (see Oehler 2016, 18-19, 190 - 213). Meanwhile, reindeer herders and hunters of Eveno-Bytantaiskii district would point to the southern part of a certain mountain and say that probably wolves are laying at sunset and purposefully watching the herders pasturing reindeers below, thus assessing the opportunities to attack at night. This is a very cunning strategy to safely observe and hear the sounds of people below, especially in winter when sounds travel far in the cold. Hunting wolves in mountainous areas is challenging as the predators keep an eye on people who set traps. Observing people, wolves learn their strategy and avoid getting trapped. Besides, in the mountains, it is difficult to access the predators with the snowmobiles as wolves can easily spot the hunters and escape. Predators purportedly run between huge boulders in the mountains because they are aware that the snowmobiles can't get through.

Although the wolves can read and apprehend the subtle signs (index) of human activity and associate them with the following actions of man, people also comprehend the behaviour of the predators and use various strategies leading wolves to the hook. It is said by wolf hunter that to overcome the cunning wolf is like a game of chess. However, setting traps does not necessarily end with the capture of a wolf, as traps can also signal to the wolves the meaning of the human attempts to remove predators from the area. Not all reindeer herders are skilful wolf hunters. Having to watch over reindeers and having no time for chasing after wolves, people tend to leave traps without accuracy. At first glance, it could be seen as negligence, but the traps can scare away the predators. Understanding the danger coming from traps, wolves often (but not necessarily) move out of the area, or at least keep a distance from the domestic place.

Avoidance is one more strategy that I prescribe to the precondition of peaceful existence. The herders/hunters of Eveno-Bytantaiskii district make predators flee using warning signs. During the reindeer calving period in the spring, the herders separate pregnant reindeer females from the herd and drive them to a remote place in the mountains called a "kindergarten". This is done for the purpose of guarding the new-born reindeer calves. All kinds of predators pose a danger to the reindeer calves: wolves, bears, eagles, wolverine and even crows, all of which would certainly come for the prey. To counter this, people repeatedly circle the "kindergarten" [Rus. *Detskii sad*] on snowmobiles to leave a trace that indexes the proximity of humans and their intentions to fight predators. The reindeer herders also use the practice of building a tent right in the centre of the herd to protect the reindeers. To scare off predators, the herders burn deadwood around the herd and fire their guns into the air, signalling the wolves to stay away. Fijn (2011, 209-210) also showed that Mongolian herders use strategies to deter wolves that venture near the encampment by cutting up plastic bottles into mini-windmills that move and spin on poles near the pens. Besides, Mongolian herders also hang a smelly mustelid tail from a pole to one side of the pen to act as deterrent against wolves, as the wolves can detect the pungent smell (see ibid.). Brandišauskas (in print) described how Orochen Evenki of Zabaikal'ia used old videotapes that flashed and made noise to scare wolves. Trying to distract the wolves from the reindeer, Orochen Evenki also sprayed reindeer with cheap perfume or insects killing spray (see ibid.).

Meanwhile, reindeer herders/hunters of Arctic Yakutia used to state that "*if predators don't touch us, we won't touch them*". However, such reciprocity between humans and predators has become rare, at least in the present, because predators have become numerous and they don't keep a distance from

domestic reindeers. There are cases whereby herders drive their reindeers to places not frequently visited by wolves, for example avoiding certain river valleys that are common trajectories of wolf migrations. Usually, people evaluate the concentration of wolves by observing footprints in the area. The close presence of wolves or bears in domestic places indicates their intentions to attack livestock. Herders suppose that predators do not pass nearby by accident, thus if the footprints of a wolf or bear appear in the area, people may follow it until they can shoot it before it causes harm.

However, the presence of a bear too close to human settings can signal the insane behaviour of a predator. There is a widespread notion among reindeer herders and hunters that such behaviour of predators expresses their volition to be killed as animals become sick or become too weak to live. It is usually proposed that a bear seemingly was thin and seriously infested with worms, thus he had come to ask people to end the suffering. To illustrate how people perceive the strange behaviour of a bear that didn't avoid human presence, I present here an account of a hunter from Topolinoe village. In the late autumn, a group of hunters, one of whom was an elder, went to the taiga to hunt. After a successful hunt, the men stayed in a log cabin on the riverbank to butcher the prey and to rest. Suddenly, the hunters heard something rustling outside the house, knocking on the windows and trampling around. People thought the elder was busy with his affairs, thus no one paid attention to the noise. After a while, the elder came from the riverside to the hunters who were surprised that he had been absent so long. The men then asked, "*who was making that noise outside the hut*?" It appeared that a bear had been hanging around. The bear had tried to remove a sack with old dry bread was hanging on an iron nail on the other side of the hut. The bear was old without teeth, was very slim and his nails were blunt, thus he padded at the bag and salivated as it couldn't even chew the bread. Usually, bears fatten up in the autumn and prepare for hibernation, but that one seemed terrible for the hunters. The hunters decided that the bear had come to the people to die, thus the hunters shot him. When butchering the bear, the men found the bear was full of worms.

Hence, the above example demonstrates that herders/hunters living with predators in the neighbourhood perceive the predators' adaptability as a high awareness to act deliberately by adapting to the proximity to people, as well as responding to signs of threat. Meanwhile, the loss of such sensitivity in predators is taken with caution by humans, since unusual behaviour of predators can signal danger to livestock as well as people, e.g. by a rabid wolf or insomniac bear. Thus, the action of the herder/hunter would be to kill predators behaving unusually.

4.4 The punitive agency of predators

Although predators have been hunted by the herders/hunters through the ages to protect reindeers from wolf attacks or for the sake of self-defence in encounters with bears, it has been considered a dangerous and also sinful act. Despite that, people justify such predator killings and they also believe that a person enters into an aggressive interaction with a predator, his soul and the spirit-master *Baianai* which could then reciprocate for the sin with various misfortunes, hunting failures, illness and even death. At the time of my fieldwork, people used the Russian Orthodox word *grekh*, which means sin (for the notion of sin and sinful behavior among Orochen Evenki, see also Brandišauskas 2017, 106, 112), but, as Vitebsky also noticed (2005, 122), most probably people had in mind a violation of a taboo. The notion of sin in killing predators is primarily associated with killing other beings who, like people, have a soul. The ambulation of the soul of a predator, that falls into anger because he was killed, is considered dangerous since the soul could converse with the spirit *Baianai* asking for revenge on the person. A man could be also punished by the spirits for mocking animals and, even more so, for excessive and crude killing of predators or non-observance of predator honouring rituals. Accordingly, I will return to the notion of interaction with the spirit realm repeatedly throughout this chapter.

It is also believed by herders/hunters that predators themselves can take revenge on humans who have killed one of their family. The revenge of wolves is considered as a purposeful attack on the livestock owned by the certain human responsible for predator killing. This means that wolves can trace a wolf-killer man and harm his property in exchange, e.g. killing reindeers in excess by just attacking the prey and discarding the carcasses. It could be proposed that by devastating the reindeers in excess, wolves communicate with humans by leaving a sign of retribution. For instance, reindeer herders (especially former workers of the sovkhoz) of Tomponskii district believe that intense attacks of wolves on domestic reindeers are due to the retribution of the predators for their mass extermination during the Soviet times. It seems that people perceive the high rates of reindeer predation by wolves at present as a result of man's sins that accumulated during the Soviet times when predators were killed on mass. The predators “postponed” their revenge because, the number of wolves was reduced so greatly during the Soviet times by the extermination campaigns that there were almost no predators left who could avenge for their killed brothers and sisters. However, when Soviet state collapsed and intensive predator extermination ceased, the wolf population re-established and, according to herders/hunters, “the

predators have not forgotten[16] what people did with wolves" [Rus. *Khorosho pomniat grekhi liudei*]. Hence, the attacks of predators on livestock seem to stand as a sign of the memory of the humans' past sins in terms of excessive animal killings. Furthermore, the herders/hunters of Tomponskii district believe that predators can take revenge not only on a certain person who sinned, but also on his kin members (other generation) especially if the sin was great (e.g. the killing of a huge number of predators without honouring their souls).

However, how can predators be sensitive enough to recognize a "sinful" person and, for example, find his reindeers to take revenge? Herders/hunters think that wolves can remember the human odour or the smell of his horse or reindeer *uchakh*. By following the smell, the wolf could find the person and his livestock. However, many such cases remain unexplained fully by herders/hunters. There was a widespread belief among herders/hunters in my fieldwork sites that herders who owned the livestock shouldn't kill wolves or participate in predator persecution. It was believed that the killing of wolves should be entrusted to the *volchatniki*, who did not keep livestock, or at least came from another district so that the wolves could not track them down and take revenge. I noticed that there were differences in the perception of the revengeful nature of the predators among inhabitants of the taiga, village and city. Seemingly it reflected the different attitudes and relations with predators that depended on the intimacy of interspecific interaction. Taiga reindeer herders and hunters experiencing daily encounters with predators perceived them as non-human beings possessing the power to avenge humans. Also, *volchatniki* who engaged in a very personal relationship with wolves adhered to rituals applied against predators as well as to honouring their souls after the killing (for relations of *volchatniki* and wolves, see Chapter 5). Meanwhile, another contact of mine, a game manager from Yakutsk (city dweller), didn't take the perception of local herders/hunters about the wolf's power to take revenge for real. The game manager stated: "*of course, there are many stories*

[16] During the interviews and conversations with reindeer herders and hunters of Eveno-Bytantaiskii and Tomponskii districts about predator revenge to humans, the contacts of mine gave not equal explanations how wolves can remember the extermination of predators back in Soviet times (some 50 or more years ago). Some herders/hunters claimed that the deity *Baianai* remembers everything, what people did wrong or right with animals and can "send" wolves (bears) in retribution to people for their sins, regardless of time. Other contacts talked about predator revenge emitting "directly" from wolves or bears. For example, a predator hunter (zoologist) even suggested that the memory of the extermination of wolves in Yakutia by people is "inscribed" in the genes of wolves.

about predator revenge and local inhabitants believe in it, but it is barely possible that wolves could determine where a man was living and which reindeers belonged to him. Even people couldn't usually do such things". Thus, spending many hours in the office and having fewer contacts with predators (game managers do take part in wolf hunting, but this does not happen on a daily basis), the game manager is not inclined to believe in the wolf's "supernatural" abilities to take revenge. Meanwhile, Innokentii Ammosov, the manager of the ADEBD (inhabitant of the Sakkyryr village) who was charged to organize measures of predator control in the district, admitted that, on the one hand, he was likely to think that the notion of wolf revenge was based on coincidences, while on the other hand, based on his personal experience with predators, he viewed this phenomenon with caution. Once, predators killed the manager's three best horses which grazed near the village of Sakkyryr, and he wondered if it could be that the predators had punished him for his active participation in the killing of wolves. Another local inhabitant of Sakkyryr, who in Soviet times had been a prominent farm hunter, had killed more than 27 wolves during his life and, according to him, hadn't been avenged by predators. The hunter argued that if one was going for wolves, he had to be able to destroy the whole pack without leaving any "witnesses" [Rus. *Ne ostavliaia svidetelei*], which would mean that no predator could take revenge. If the hunter didn't kill the wolf female, it was better not to touch the den with her cubs, because the mother wolf definitely would devastate livestock in exchange. The hunter pointed out that wolves, like dogs, are instinctively attached to their children during lactation, thus killing the cubs would evoke "grief" [Rus. *Budet pechalitsia*] in the wolf female. The fact is that hunting for wolves usually begins in the winter and continues until the spring, during the raising of cubs. Thus, hunters strive to eliminate first a wolf female and then her offspring, the male would then abandon the area and go away in search of another female. Indeed, according to Oehler (2016, 207-208), although all wolves represented a threat to domestic stock, it was the wolf-mother that would be hunted preferably as it was seen to hold ties to a particular territory and its dens.

Thus, although the phenomenon of predator revenge is perceived from many points of view, most of the indigenous hunters/herders with whom I interacted during field research in the taiga perceived predators with caution. For example, people were very careful about not taking the prey of wolves, especially the carcasses of predated reindeers that had become victims of wolf revenge. For example, my contact *volchatnik* Vadim Nikolin (for his biography, see chapter 5) recalled an extraordinary case of a revenge action of wolves that killed more than 50 reindeers in one go in the *Sebian-Kiuël* rural

locality (North Yakutia). A pack of three wolves separated part of the herd and drove the frightened animals to the edge of a cliff, from where the reindeers fell to their death. The wolves discarded the carcasses, so people took it as a sign of revenge. Herders of *Sebian-Kiuël* believe that taking the meat, skins or any part from the prey of predators would be a sin, thus the 50 carcasses of the reindeers were left to rot. Indeed, during my visit to the reindeer encampment of Daria Starastina (Eveno-Bytantaiskii district), predators killed reindeers, but herders didn't even dare to cut off the *kamus* from the pawls of predated reindeers, these which are traditionally used to make *unty* fur boots. Herders believe that using reindeers killed by wolves would look as if predators were hunting for your needs, so a human would become a participant in the predation or, in other words, a predator like a wolf. On the other hand, herders/hunters also claim that wolves need food to feed themselves and their cubs, thus it would be not honest to take away the prey. If so, in revenge, predators may grab the hunter's prey the next time, especially in times of scarcity when people might starve. The taboo of "not taking a wolf's prey" is probably also based on the assumption that taking prey away from wolves could be immediately followed by another attack of the predators on livestock, besides, people wish to avoid predator-borne rabies. From another perspective, it could be also proposed that as many herders/hunters keep their notions to leave the prey of wolves for wolves, so the more opportunities the predators have to feed on livestock.

The cohabitation with predators also involves the notion of engagement in a relationship with the spirit *Baianai*. For instance, Vitebsky (2005, 263–265) wrote that, according to the Eveny, the bear embodied *Baianai's* most intense concentration of power. Many herders/hunters were so afraid of killing bears that, for example, they denied the act of killing by telling the dead bear that it was killed by the Russians (see ibid.). The following account of the predator hunter Egor Nikolaev (for his biography, see chapter 5) regarding the case of the so-called "killer bear" sent by the spirits to punish people (for killing predators excessively) will shed light on the understanding how predators are associated by herders/hunters with the realm of the spirits. The story took place back in the Soviet times in Tomponskii district. The chairman of the *sovkhoz* "Tomponskii" initiated a large-scale campaign of predator extermination by shooting wolves and bears from helicopters in huge numbers. There were so many corpses of bears that the *sovkhoz* chairman decided to run a facility for the production of smoked sausages and fats made from bear meat. The zootechnician of the farm was put in charge of organizing the shooting of the predators from the helicopter, thus, while working on the sovkhoz he killed a hundred bears. Twenty years after the disappearance of

sovkhoz "Tomponskii", when the zootechnician was already dead, the bear took revenge by killing the zootechnician's daughter who lived in a village 500 km from Tomponskii district. After finishing school, the daughter of the zootechnician had gone to live in another district and had not returned to her homeland for many years. According to Egor, the local spirits had "forgotten" that the zootechnician had a daughter. However, just after visiting Tomponskii district, she was attacked by a bear. Egor believed that by visiting Tomponskii district, the woman announced herself to the spirits of that locality. Thus, the spirits of locality detected her and informed *Baianai* who, in turn, sent a bear to kill the women in the village where she lived. The account starts with a villager who was going through the empty settlement in the early morning while most of the residents were still sleeping when suddenly, in the middle, he noticed the bear sitting on the killed woman. The hunters of the village were sent immediately to shoot the bear. However, the bear kept sitting there as if waiting his time to be killed. It was strange that dogs hadn't noticed the bear and hadn't barked that night, as if the bear was a ghost. It turned out that the bear had come at night and had tried to bite through the door of the woman's house, right in the middle of the village. The women had locked the door, but the bear climbed onto the roof and, destroying the chimney, fell inside the house. The woman ran out through the door but the bear caught her in the middle of the village and killed her. The villagers judged that the bear was a killer sent to execute the revengeful mission as ordered by the spirits.

The above account suggests that the taboo on the excessive killing of predators was severely violated by a hunter and, furthermore, the corpses of bears were disrespectfully made into sausages, instead of treating them with respect. By killing a hundred bears, the zootechnician of *sovkhoz* "Tomponskii" had disregarded predator honouring rituals and that (according to the animistic worldview of herders/hunters) had evoked the anger of the spirits. In Soviet times, the animistic worldview (including rituals) of indigenous people was dominated[17] by the atheistic ideology of the Soviet state (see Alekseev 2008, 211; Vitebsky 2005, 231-235). According to my contact, a former game manager, it was common in Soviet times for indigenous people with a Soviet atheistic upbringing (especially government

[17] Of course, it cannot be argued that the ritual practices of Siberian herders/hunters were completely absent during Soviet times. For instance, according to Anderson (2011, 87-92), the forms of local belief in Buryatia blended well with Soviet modernity. Local forms of ritual seemed to survive in much more robust form in embodied forms of actions – forms that were not visible to the Soviet state (Long 2005, quoted by Anderson 2011, 87).

officials, farm chairmen, party members and other farm workers) to ignore the honouring of the souls of killed animals. Furthermore, as the case with the zootechnician of *sovkhoz* “Tomponskii” showed, many bears were killed without demonstrating respect to them. Therefore, in the context of ritual communication with the spirit realm, it can also be claimed that no signs were sent to the spirits announcing the hunter's attempts to participate in a reciprocal ceremony of honouring the predators. Accordingly, the sins (for excessive killing of predators) only accumulated, but revenge from the spirits was not countered by the performing of predator honouring rituals that had been an integral part of the daily subsistence of herders/hunters in Yakutia (for bear honouring traditions in Yakutia, see also Alekseev 2008, 50-53).

With the following examples of predator honouring rites, I will illustrate the variety of performances supposed to calm the bear's spirit and avoid the risk of revenge. Although the predator honouring rites are performed in very personal ways, the ceremonies did not take place every time by every man during the time of my fieldwork. There were cases when bears were snared and disrespectfully killed for fat, gallbladder, paws, kidneys and teeth, as it is believed that these have medicinal power. There is always a business opportunity for locals to sell bear’s parts on the black market for traditional Chinese medicine. Thus, it sometimes happened that the bodies of bears were just thrown aside at the place of the kill on the taiga without any sign of respect, especially by the city hunters who had less connection with certain landscapes. However, it depended on the person. On one hand, it seems that the younger generation of herders/hunters who are technologized modern people sometimes looked at these rituals with doubt as to "old tales". On the other hand, with the disappearance of the atheistic Soviet regime, predator honouring rituals had again become an “open” practice (not hidden, ignored or avoided due to the regime) among modern indigenous peoples. For instance, the reindeer herders-hunters of Eveno-Bytantaiskii district, after having shot a bear which had attacked reindeers, butchered the predator at the place taking off the pelt and cutting off pieces of meat for consumption and also taking internal fats. Meanwhile, the bear’s head taken with the trachea and heart was mounted on the nearest larch so that the bear’s gaze was directed eastward (see Figure 36). People also stuck a reindeer bone in the bear’s jaw. This ceremony was to serve as a sign for the spirit of the killed bear so that he realized his guilt in killing the reindeer and did not inflict people with vengeful actions. However, the bear honouring ceremony varies among herders/hunters and also in different districts. For example, in some cases, the skulls of bears were mounted either on a larch or raised on a pile of stones, also the skulls were placed with the trachea and heart or were without these parts. Also, there

are many explanations among indigenous people about the purpose of the orientation of the bear's gaze eastward. According to a reindeer herder/hunter from Sakkyryr, the bear honouring ceremony apologies for having killed a great predator and asks the rising sun to take the soul of the animal to the land of death. However, the gaze of the bear also could be turned not eastward, but directly at the traces of the hunter. It is believed that the spirit of the bear would see that the hunter had killed the bear honestly by facing him directly, without sneaking up from behind. This would demonstrate to other bears that the hunt was fair and that the bears should not "play tricks" with the hunter and attack him from behind.

Figure 36. The ceremony performed by hunters by ritually mounting the head of the bear on a larch, Eveno-Bytantaiskii district (photograph on the left by Jefanovas 2018, photograph on the right by Serafim Sleptsov 2018)

It seems such belief coincides with the customs of herders/hunters of Arctic Yakutia to warn the bear with a scream or whistle at the very last moment before firing. In such way, a bear would know he was killed honestly without cheating. In Tomponskii district, there is another custom of negating the act of killing the bear - according to the reindeer herder/hunter Gavril Zadorov, the eyes of a killed bear are taken out of the skull and thrown aside. Gavril explained that the eyes of a killed bear could store the images of the very last moments of his life, this was something similar to a camera loaded with images. Thus, another bear could approach the skull of the killed bear to transcribe the images from his eyes. In such a way, seeing the bear killers,

another bear would recognize them and kill in revenge. Gavril also claimed that according to the hunting customs of herders/hunters of Tomponskii district, the eyes of the killed bears are taken out by tying them together with the ocular blood vessels and throwing them over their shoulders without turning away. A similar custom to evade the bear's revenge was also observed among the Eveny of Momskii district (north-east of Yakutia). According to Sleptsov (2014), the Eveny of Momskii district pulled out the eyes of a bear replacing them with round stones or moss, so that the bear couldn't detect his killers. The true eyes of the bear were placed inside the bear's internal organs. Overall, turning the bear's gaze to the east side demonstrates deep respect equal to that shown to the human dead, looking to the rising sun that symbolizes the world of souls and also the rebirth in a new body[18]. Indeed, before Christianity, which was spread in Yakutia by Orthodox missionaries in the 18th century, people were traditionally buried on a wooden platform "*arangas*"[19] (aerial burying) by placing the deceased with the head to the east (see Alekseev 1993, 19-23). Thus, ritually mounting the bear's skull eastward is also linked to the belief of herders/hunters that killed animals will appear again from the east, like the sun (see also Sleptsov 2014; Vitebsky 2005, 263-264).

A bear's carcass also deserves respectful burying and, the bones of the bear are usually cleaned of meat and placed on the *arangas* (see Figure 37). According to the customs of herders/hunters of Arctic Yakutia, the bear's

[18] According to Vitebsky (2005, 328-330), the older belief was that people would be reborn, usually in the same family. This was the reason why Eveny were buried with their heads pointing east, just like in the cases with the animals. Although the animals are still thought to be reincarnated, the ideas of human reincarnation had faded and not many herders/hunters followed them. Christianity thought that humans had souls but animals did not, while communism insisted that nothing had souls, but distinguished people from animals because of their political significance as citizens of the State.

[19] *Arangas* was traditionally made from three larch poles with a wooden platform overhead. The *Arangas* was traditionally used by the Eveny as a form of aerial burying of human dead till the Christianity church influence in the end of XVIII century. However, traditional features of such funerals are present to our days. For example, near the grave of the deceased, people built a platform and place things such as accessories and reindeer saddles that belonged to the dead one. Additionally, the riding reindeer of the deceased is traditionally slaughtered and placed on the platform near the grave (see also Alekseev 1993, 16-24). Nevertheless, *Arangas* is also used as a respectful burying place for various animals, especially predators (bear, wolf, eagle) (see also Alekseev 2008, 49-55).

joints are carefully split with a knife and the bones are not crushed with an axe (see also Alekseev 2008, 50). However, at the time of my fieldwork in Eveno-Bytantaiskii district, it was not always the case, because many hunters for convenience split the bear's bones and flesh with an axe, thus ignoring the traditions. I also heard from the herders/hunters of Eveno-Bytantaiskii district, various examples of burying the bodies of killed bears - for example, a middle-aged hunter from Sakkyryr claimed that after removing the skin from a bear, one could burn the entire carcass and not necessary put the bear's body on *arangas*, since burning was also considered as the right way of handling the body of a bear. He also noted that parts of a bear carcass could be spread in different directions across the taiga, so that nature would utilize it as the consumption of the bear's body by other animals is natural but not violent. However, the reindeer herder/hunter Gerasim Bochkarev from Eveno-Bytantaiskii district considered that throwing negligently the carcasses of killed predators (as well as wild ungulates) to rot on the ground would be disrespectful to these spiritual beings. Thus, from his point of view, the way of respectfully burying bears would be to place their remains on the *arangas*. According to my contact, an elderly Eveny woman from the village Topolinoe, who had lived in the *stado* since her childhood, some parts of the bear (for example, the skin) could be used if people treated it respectfully. The woman recalled how in her childhood she wasn't allowed to step on the skin of a bear nor to sit on it because that was considered a sin and disrespect for a great animal. Improper behaviour with the bear pelt could bring illness to people. According to the women, the skin of the bear was used only as a blanket and, in addition, children with pneumonia were wrapped with the bear's skin as a cure. However, it was forbidden to expose the skin to the sun, because this action could cause a fire and the dwelling could burn. Thus, the pelt of the bear was stored wrapped and hidden from daylight.

Figure 37. The burial of an animal on an arangas, Tomponskii district (photograph by Jefanovas 2019)

Besides, if one shook the pelt to clean it of dust, it would also bring a blizzard or rainy storms.

Hence, it could be proposed that the animistic perceptions of herders/hunters concerning the respectful treatment of predators through rituals and believing in the power of predators to revenge on people regulates the excessiveness of predator killing. Meanwhile, communication through signs with the realm of the spirits could be perceived as the attempts of people to establish peaceful existence with the spirit realm.

4.5 Cohabitation from the perspective of the cosmology of herders/hunters

Based on the perception of reindeer herders and hunters about the agency of the predators, it could be suggested that predators act as mediators between the human world and the realm of the spirits. Indeed, Brandišauskas (2017, 210-211) also demonstrated that the Orochen Evenki of Zabaikal'ia perceived a bear as an intermediary between people and the spirit-master. Orochen hunters and herders believed that the spirit-master always sent the bear as a powerful animal to deal with a sinful person. Bears, they said, brought messages or came with the intention of taking a person's strength. Therefore, a bear's visit (to the taiga encampment) was believed to foretell illness or death of a certain person (ibid.). Meanwhile, the reindeer herders/hunters of Arctic Yakutia believe that all animals have their spiritual chiefs [Rus. *Nachal'niki*] to whom they refer, e.g. a hunter from Sakkyryr said: "*if you treated a wolf or bear badly, they would complain to Baianai asking to punish you*". Thus, *Baianai* is perceived by herders/hunters as a master of wild animals [Rus. *Khoziain zverei*], as well as the deity of hunting [Rus. *Bog okhoty*]. *Baianai* is described as an old man with a long white beard (see Figure 38) and a wooden stick, usually surrounded by various animals. Outwardly, he looks like the Yakut or Tungus (see also Alekseev 2008, 59). Although during my fieldwork in Eveno-Bytantaiskii district, some herders/hunters who identifies themselves as Eveny admitted that *Baianai* is more related with Sakha traditions, they said that nowadays everyone (Yakuts and Eveny) equally recognizes *Baianai* as the spirit-master of animals. According to my contact, a hunter from Sakkyryr, the Eveny referred to the hunting spirits in their own way in ancient times, e.g. *hinken* (see also Alekseev 1993, 11-24), but during the ages of joint life, the Yakuts and Eveny mixed their worldview, therefore *Baianai* acquired the same meaning for both nationalities (for the fusion of the notions of hunting spirits among Northern Yakutia herders/hunters and Sakha people, see also Gurvich 1977, 206-207).

Indeed, the worldview of Eveny was strongly influenced throughout their ethnic history of the nation by numerous migrations and cultural exchanges with other nationalities, such as the Sakha, Evenki and Yukaghirs (see also Alekseev 1993, 16-24).

Figure 38. Carved wooden face of the spirit Baianai (photograph by Jefanovas 2018)

The relations with *Baianai* could be described as an engagement in reciprocity. Although it is assumed by herders/hunters of Arctic Yakutia that wild animals are subordinated to and managed by the spirit-master *Baianai*, whether to give the animal to the hunter or not is a matter of exchange. Reindeer herders/hunters in Eveno-Bytantaiskii district (as well as Tomponskii district) adhere to the notion that *Baianai* sends an animal to the hunter who in exchange treats the wild animal's body and soul respectfully. Indeed, according to Vitebsky (2005, 261-263), the Eveny hunter could kill a wild animal if *Baianai* decided whether to give an animal or withhold it, whether to place it in the hunter's path or send it off in another direction (ibid.). However, comparing to other large game animals, predators occupy a special place in the cosmology of herders/hunters of Arctic Yakutia and killing predators (especially in excess) is associated with a sin. It seems that such a notion derives from the intelligence of the predators and their intentions to act cunningly and deliberately, thus predators are perceived to share many behavioural qualities with people, considering them the closest beings to humans. Once, my contact, a hunter/herder from Sakkyryr, said that killing such a great and intelligent animal as a bear can make a hunter feel guilty, as if he had sinned by killing a human person. Furthermore, herders/hunters of Arctic Yakutia admitted that the most powerful predators such as bears and wolves are sometimes perceived as *Baianai's* embodiment, thus killing them can insult the spirit-master the most. Indeed, Vitebsky (2005, 264) also mentioned that the Eveny believed that the bears embodied the most intense concentration of *Baianai's* power. *Baianai* can also influence human destiny as it is perceived by herders/hunters of Arctic Yakutia to have the power to punish people for their

sins. As soon as entering the taiga place, a human falls into the potential power of *Baianai*, thus a hunter must show respect to the spirit by feeding the fire and giving offerings (a piece of meat, tobacco or tea). As Vitebsky (2005, 262) perfectly described, "the old man's" (*Baianai*) power is an elemental force that pervades animals and landscape alike and can wax and wane, surge or retreat at different moments, in different locations or for different hunters. Hence, the power of *Baianai* can be perceived as pervading the common landscapes where human-predator interactions take place, while the relations with the spirit realm can be described as manifold. Two further examples from my fieldwork are fundamental in understanding the very principle of the interconnection of humans, predators and spirits. Although the following two accounts are not about predators but about the birds, they reveal the tripartite nature of relations that are similarly perceived in cases with the predators. The example below describes the appearance of an inauspicious bird (black woodpecker) which indexes the misfortunes meted out by the spirits.

Figure 39. Black woodpecker ritually hanging on a larch, purpose to avoid misfortune sent by the spirits (photograph by Jefanovas 2019)

Once during my stay with the family of the reindeer herder Afanasii Konstantinov in the taiga encampment, I was suddenly roused by a gunshot nearby. I ran outside the cabin and saw Afanasii with a rifle and a dead black woodpecker in his hands. Surprised, I asked what was happening with that bird. It was explained to me that the black woodpecker was unafraid of people and had been screaming and flying around the log cabin unusually for a whole week. This was strange behaviour because woodpeckers usually hide from people so that you can only occasionally spot them from behind a tree trunk in the forest. Afanasii believed that the close presence of the black woodpecker was a sign of retribution for the *grekh*. However, none of the herder's family could explain for which kind of sin the spirits would send the

punishment, e.g. negligence for hunting rituals, or for being too loud or angrily talking in the mountains, these of which would have disturbed the spirits. It could be even the sins that had been done long ago by already dead relatives, e.g. a father or grandfather. For example, a hunter from Sakkyryr, a distant relative of Afanasii, believed that the brothers of Afanasii, as well as his sister and father, died a grave death because the brothers had killed too many animals, including sacred eagles[20], without respecting them. Thus, the appearance of the black woodpecker which augured misfortune seemed most alarming for Afanasii. It was perceived that the sign meant that someone from the Afanasii family could get ill soon or even die. Following traditions passed on to him by his grandfather, Afanasii hung the black woodpecker head down on a larch by bounding the bird's legs to a branch (see Figure 39). Similarly, Brandišauskas (2017, 257) also showed, that among Orochen Evenki, any kind of misfortune and unexpected death or revenge that may lie ahead can be predicted and known through awareness and observation of various predictive signs and avoided by means of rituals.

Taking a look closer at the bird killed by Afanasii, I noticed that the woodpecker's feathers were put in its beak. Afanasii explained that he put the feathers into the bird's beak, so that the bird couldn't speak to *Baianai* about being killed. Likewise, a herder who worked at Afanasii *stado* told me that sometimes even the tongue of a bird could be cut off for this reason. Hence, by "shutting" the beak of the bird, Afanasii tried to avoid the punishment of *Baianai*. The herders from Afanasii encampment believed that if a taiga bird such as a crow or Siberian jay [Rus. *Kuksha*] was killed, the feathers from its tail had to be put in its beak. Usually, the number of feathers depended on how many people had participated in the bird's killing. Moreover, Afanasii said that the black woodpecker, as well as the crow and the loon [Rus. *Gagara*] was a creature linked to the bottom level of the spirit domain. These birds are associated with black shamanic powers because it is believed that black magic shamans can interact with the evil spirits of the bottom realm from where various diseases originate (see also Gurvich 1977, 193-197). Indeed, the Eveny believe that the shaman could turn into the diving bird *Gagara* to enter

[20] Although the reindeer herders/hunters consider eagles (white-tailed eagle and Berkut - golden eagles) as most sacred and also as most revengeful birds (see also Sleptsov 2017), sometimes they shoot them if the birds attack reindeer calves. It is believed that if one would kill the eagle and not bury him correctly, then the hunter's family would face misfortunes. According to Yakut traditions, eagles are buried on the *arangas*, directing the eagle's head towards the summer sunrise (to the north-east) and wrapping the bird in hay (see ibid.).

the bottom realm of the spirits through the bed of a lake or river (see also Alekseev 1993, 19; Gurvich 1977, 218). As an omen of misfortune or death, the harsh voice of the black woodpecker reminds herders/hunters of the scream of a child, an expression of trouble or pain, the cry of a dying man. Furthermore, inhabitants of Sakkyryr also believe that a black woodpecker shouldn't land on the house roof or table, not to knock or scream around. If it does, misfortune was sent to this house by the spirits. For the bird not to augur trouble, people have to kill it. Consequently, the punishment from the spirits can be sidestepped by deceiving them. To disrupt the communication between the bird and the realm of the spirit, herders/hunters "shut out" the bird's beak so that the bird would not transfer the message to *Baianai*, and this means overcoming the spirit's will. I will illustrate this point with another example, this told to me by the predator hunter Egor Nikolaev. This example shows how herders/hunters can mislead [Rus. *Perekhitrit*] *Baianai* during negotiation.

Once a hunter shot a raven and the bird died. The raven complained to the spirit-master that the man had killed the bird dishonestly without a reason. During the hunter's dream, *Baianai* summoned the human soul and the soul of a raven to find out the truth. It is perceived that during sleep the soul of a human separates from the body and could interact with the other spirits. Thus, *Baianai* asked the human "*why did you kill that bird?*" The hunter misleadingly replied "*because the raven was stealing rabbits from my traps*". *Baianai* said to the men "*prove your claim or I will punish you*". Thus, the hunter put a piece of the rabbit meat into the dead raven's beak so that the bird couldn't deny holding evidence of its guilt. Another time, when called by *Baianai* again, the hunter said that the raven holds in his beak the rabbit he had stolen. *Baianai* referred to the raven "*well it seems you were cheating with the man* [Rus. *Shkodnichal*] *that's why you were punished, the hunter was right, it was your fault, raven*".

Hence, both accounts show that reindeer herders/hunters ritually communicate with the spirit realm through signs by inserting a woodpecker's feathers into his beak or by putting a piece of meat into a raven's beak. Following the logic of the accounts, it seems that the herders/hunters believed that *Baianai* would read these signs and "think" that the hunter was innocent in killing the other beings. From this perspective, the placement of feathers in a bird's beak can also mean that the bird had bitten itself and had died or, in other words, people ritually negated the act of killing as if there was no human fault.

Along with bird rituals, the performances applied to negate the act of killing a bear have very similar meanings in their communication with the spirit domain. For instance, the hunters/herders of Eveno-Bytantaiskii district

put the bone of reindeer in a bear's jaws striving to evade the bear's revenge, the people in such way ritually sending a sign to *Baianai* showing that the killing was the bear's fault. Meanwhile, hunters from Topolinoe village also performed the ritual to mislead the spirit of the bear, e.g. while butchering a bear, the locals said the opposite "*don't get angry Abaga, we do not disassemble your bones, but on the contrary, we collect you* ". Thus, the instances above indicate that, in some cases, the spirits can be perceived by hunters/herders as "naive" and incapable of distinguishing performance from reality. Indeed, Stepanoff (2009, 283–307) also discussed that the Siberians sought to deceive the "idealists" spirits who were unable to distinguish between reality and appearance. The spirits had no idea of a reality independent from its ideal and perceptual representations (ibid.). According to Stepanoff (ibid.), all specialists of North Asia could cite many examples of human actions which influenced non-human (spirits) perspectives: imitating raven's cawing while eating bear meat, orientating a bear's skull to divert its revenge, dressing a boy or doing his hair in a feminine way and vice versa. Idealist spirits could not guess an essence beyond its appearance. However, humans do distinguish between reality and perceptions, hence they seek to act on the spirits' perception of reality, which is not to change the reality itself (e.g. making one's son become a girl). Furthermore, in my opinion, the quality of the herders/hunters to deceive others has been integral to indigenous peoples' subsistence on the taiga. The interaction of indigenous people with the taiga seems to have been based on taking advantage of opportunities in the adverse environments. This meant acting "slyly" [Rus. *Khitro*] against others, be it a bear, the spirit-master *Baianai*, the tsarist Cossacks or the Bolsheviks.

However, besides the deceiving the spirits, another example of how hunters/herders engage in tripartite interaction with the domain of the spirits can be revealed from the examination of the reciprocity rites aimed at establishing peaceful existence with *Baianai*. In exchange for performing predator honouring rituals, a hunter is trying not only to evade punishment, but also to receive success in hunting from the spirit-master. For instance, the reindeer herder/hunter Gerasim Bochkarev from Eveno-Bytantaiskii district, who is also involved in the wolf hunting, would grease the nose of a wolf with butter before taking the pelt from the killed animal (see Figure 40). This practice seems to have derived from an old hunting tradition dating back to pre-revolutionary times (see also Alekseev 2008, 52-53). Indeed, according to a former reindeer herder from Sakkyryr village, hunters in the past adhered to the custom of bringing a killed wolf into a hut if it was blindfolded with a piece of cloth. Before taking the wolf's pelt off inside the hut, the nose of the wolf was greased with butter or blood and it was said "*don't get angry for*

being killed, taste the food and come in again next time". It meant that people were benevolent by feeding the wolf with butter or blood. However, in my opinion, blindfolding the predator before carrying him into the hut demonstrates the caution of people (just in case if the wolf spirit gets angry) to exposing themselves to the eyes of a wolf that could recognize his killers and "tell" *Baianai* to punish the people. However, showing a sign of respect to the wolf (feeding with butter or blood), the hunters expected that the wolf spirit would tell *Baianai* about the hospitality of the people. In exchange, the hunters also expected that they would be granted with prey (a wolf) during the next hunt.

Figure 40. Wolf killed by a hunter who ritually greased the nose of the wolf with butter as a sign of communication with the spirits (photograph by Varvara Sotrudnikova 2018)

From the examples above, it is evident that the relationships between people, predators and the spirit-master are, in some sense, hierarchical. The souls of the killed predators cannot affect the humans directly, but they can ask their spirit-master *Baianai* to influence the destiny of the hunters. Furthermore, the herders/hunters working in Afanasii's reindeer encampment explained to me that all animals have their personal spirit-masters who, in turn, are subordinated and can refer to the higher deity *Baianai*. Indeed, according to Alekseev (2008, 59 – 71), Yakuts believe that the god *Baianai* has many auxiliary spirits, the masters of the locality who influence the breeding of certain animal and bird species. Moreover, the hierarchy of the spiritual universe is also reflected in the cosmology of the Eveny[21] and

[21] The traditional worldview of the Eveny represents a vertical hierarchical system of layered worlds: the upper sky, middle earth and bottom realm (see Alekseev 2008, 206-207; 1993, 11-24). The middle world consists of one layer inhabited by humans, animals, plants and various spirits, e.g. the spirits of the earth, water, fire, forest, mountains, lakes and rivers, as well as master of the place (see Alekseev 1993, 11-24). The upper and bottom worlds both contain many layers with the different powers

Yakuts[22], e.g. the upper, middle and lower worlds of the universe are composed of many layers [Rus. *Iarus*] with different powers of gods and spiritual beings, hierarchically linked to each other and subordinate to the highest god who resides in the upper realm (see Alekseev 2008, 206-207; 1993, 11-24). However, what position does a human take in the hierarchy of relations with the realm of the spirits?

To better illustrate the idea of hierarchical relations between humans and non-humans (spirits and animals), I give an example of the indigenous peoples of the Amazon and their relations with non-human beings, as described by Kohn (2002, 219-264; 2007). I must to note that the ways of interaction between humans and non-human beings (including communication with deities and spirits) in Siberia differ from the Amazonia case, but nevertheless, theoretically, the model described by Kohn gives the principal idea of how the hierarchical interaction between humans and non-humans can be perceived in the means of communication. Kohn (ibid.) showed that, due to the hierarchical nature of the relationship between the different realms inhabited by different beings, communication is not equivalent in the sense of a direct understanding

---

of gods and spiritual beings. For instance, the upper word has nine layers where reside the gods of the sun, moon, thunder and lightning, as well as the gods' patrons of animals, birds and humans and also the patron of the hunters and the master of the animals *hinken* (see ibid.). The highest god *hövki*, who gives life for people, all animals and plants, is depicted as an old man residing at the top of the upper world. In the world of the bottom dwell the evil spirits bringing death and illness to people. Thus, the traditional cosmology of the Eveny consists of gods, beings and spirits hierarchically related to each other and subordinated to the highest god *hövki* (see ibid.).

[22] According to Sakha cosmology, the upper world (sky) also consisting of nine layers and is inhabited by "light" spiritual beings *aiyy*, who are perceived as the highest gods of the Universe, influencing the well-being of people (see Alekseev 2008, 206-207). The supreme god *Iuriung Aiii Toion* resides at the top of the sky (ninth layer) and is perceived as the creator of life on earth. The relationship of the gods *aiyy* is set by a hierarchy in which each god performs certain functions (see Bravina, 2018, 40-45). However, in contrast to the Eveny notion of the Universe, according to the Yakut worldview, the ambiguous spirits *abaasy* also live in the upper sky, which, on the one hand, are creators and on the other, ruthless punishers of sinful humans, Furthermore, *abaasy* are the patrons of the most powerful shamans (see ibid.). In the middle world (earth) live humans, animals, plants and various spirits *ichchi* (which are perceived as the masters of the place, forest, rivers, lakes, mountains, roads) and *Baianai* who is the patron of the hunters and master of the animals (see Alekseev 2008, 206-207, 271-276). The underworld is inhabited by the tribes of evil spirits *abaasy*, hostile to people. It is believed that evil spirits appear on the earth from the underworld and harm people and other living creatures by bringing illness and misfortunes (see ibid.).

of the meaning. For example, dogs are perceived as lower beings subordinated to humans, therefore dogs cannot understand the full range of symbolic human language nor speak it. At the same time, the indigenous people of Amazonia feel that they can readily understand the meanings of their dogs' vocalization (see ibid.). The hierarchical relationship between dogs and humans is analogous to that between humans and the spirit-master. Thus, just as dogs cannot understand human speech fully, so people cannot directly understand the talk of the hierarchically dominant spirits (ibid.). However, it is taken by Amazonians that the spirits (game masters) can readily understand the speech of humans who need to talk hoping that the spirits will consider people's requests. A way in which the spirits could be understood is by interpretation of human dreams (ibid.). Vitebsky (2005, 265) also showed that Eveny reindeer herders/hunters of North Yakutia sometimes dreamt of sexual intercourse with a young woman, who was perceived as *Baianai*'s daughter. Meanwhile, wild animals may also be perceived as pets or children of spirit *Baianai* who decided whether to share animals with people or not (see Vitebsky 2005, 261-263). Thus, the dream as an omen augured that a hunter would be favoured by *Baianai* and would have a successful hunt the next day (ibid.). Furthermore, Kohn (2002, 206-217) also described dream interpretation among the Amazonians, who perceived that the spirit's daughters, appearing in the hunter's dream as mistresses, helped to establish a connection between hunters and game masters who in turn gave access to wild animals.

As I have shown, another way for the herders/hunters of Arctic Yakutia to communicate with *Baianai* is to take the initiative to interact through signs that are ritually sent to the spirit realm through the mediation of animals. Hence, the performance of the predator honouring rituals signals the intention of the person to participate in a successful exchange with *Baianai*. Although it is believed by herders/hunters that the spirits may be negotiated with and asked for a favour, I argue nevertheless that the spirits' response can be interpreted as an influence on the fate of herders/hunters, for example in the form of various misfortunes, revenge by predators or success in subsistence. I would like to dwell on the example that will further give a glimpse of how herders/hunters perceive the position of humans in the spiritual universe and how they negotiate with the spiritual beings within it. The contact of mine, a hunter of predators Egor Nikolaev, claimed that wolves were killed almost everywhere and all the time during the Soviet period, but it was impossible to exterminate them totally because this was not the human decision, but that of *Baianai*:

"*the higher force supervises from the top over animal destinies, otherwise, the wolf population wouldn't survive such extermination pressure. However, it would be possible to reduce wolf numbers greatly if a very powerful shaman would send such request to the highest layer of the sky where the god of all gods resides ".*

The account shows the belief that only extraordinary persons can perform such powerful rituals to destroy wolves. However, to influence the decision of *Baianai* regarding the wolves, the shaman must ritually send his request to the upper sky where a god hierarchically higher than *Baianai* can decide. According to Egor, the shaman couldn't do this without his auxiliary spirits as the request had to be carried through many levels of the sky domains which could not be trespassed by humans themselves. However, the god of the highest sky could also refuse the request of the human as eventually everything depended on the supreme god's will. Egor also compared the sending of a request through the hierarchy of spiritual domains to the supreme god as not different in meaning to sending a letter through State bodies subordinated to the Head of the Ministry, which, in turn, is subordinated to the Head of State, who would decide on the request. From this perspective, a powerful shaman could be compared to a "big man" figure capable of effectively mediating between the rural population and the State. Hence, the account suggests that the principle of the relations of indigenous people with the realm of the spirits resembles, in some sense, the interaction of people with State institutions (in the socio-economic and political meaning) which also have hierarchical structure with different levels of the power. Thus, I suppose, the way the herders/hunters of Yakutia perceive the properties of State institutions can be paralleled to their perception of the world of the spirits. In this sense, the hierarchical structure and the power of the realm of the spirits could be compared to the power of the State. Furthermore, as I have shown in this thesis, both are perceived by herders/hunters as regulating the relations of humans and predators. However, *Baianai*, as a spirit-master of the animals, occupies a certain place in the hierarchical organization of the cosmology of herders/hunters. In this sense, the cohabitation of humans and predators in the shared landscapes can also be perceived as regulation based on cosmology. In other words, hunting predators is "controlled" by the "watchful eye" of *Baianai* which pervades the animals and landscapes, as well as influences human destinies. In this regard, the excessive killing of animals, the mocking of them or the neglecting of rituals to honour killed predators are perceived by herders/hunters as sins for which people can be punished. On another hand, herders/hunters who adhere to these beliefs maintain a habitable environment for predators that live in the neighbourhood with people.

4.6 Conclusions

This chapter provides ethnographic material that talks about the complexity (based on aggressive interaction and peaceful existence which are intermingled) of social relationships between herders/hunters and other non-human beings (predators and spirits) and analyses these interactions in terms of interspecific communication based on non-symbolic signs. The first facet of the text of this chapter deals with the idea that, living in the same neighbourhood, humans and predators recognize the behavioural signs and intentions of each other and respond adaptively. I showed that mutual awareness of keeping a distance from each other is the precondition of peaceful existence. An example of establishing peaceful existence between humans and predators is the mutual avoidance of encountering each other by comprehending warning signs. Setting traps can also signal to wolves the human attempts to push predators from an area. Likewise, burning deadwood around a reindeer herd, firing arms into the air and leaving snowmobile tracks all index the proximity of humans and the intention to fight predators. Although humans can make predators flee, abundant footprints of wolves can also make herders avoid areas densely occupied by wolves. I also demonstrated that some herders establish peaceful existence with so-called "local" or "familiar" wolves by sharing a few domestic reindeers with them. It is thought that local wolves will defend their area by preventing the intrusion of stranger wolves that would take many more reindeers.

Due to their nature however, while exploring the vigilance of humans, predators will also attempt to utilize opportunities to attack livestock. In this sense, to keep predators at a distance also means to aggressively struggle against them to protect livestock. Therefore, considering this as an integral part of daily cohabitation, it is impossible to draw a concrete line between peaceful existence with predators and their killing. Thus, the aggressive response of humans against predators could be also taken as the reciprocity necessary for peaceful existence. From this point of view, killing a predator is qualified by herders/hunters more as an exceptional right to execute an offender rather than purposeful hunting. Furthermore, I demonstrated that excessive killing of bears is also regulated by taboo because the Eveny consider the bear a mythical ancestor, thus to kill a bear means, in some sense, killing a common relative. Hence, herders/hunters usually restrain from killing bears without a purpose (such as when bears attack reindeers or people, or hang around causing a potential threat). However, I showed that under the influence of Soviet atheistic ideology, as well as under the influence of ideas of consumption in the modern market economy, the animistic perception of

predators and taboos is not always adhered to. Furthermore, along with changes in human habits, the behaviour of predators seems also to be changing. I argue that predators and humans mutually adjust their behaviour by understanding the meaning of each other's actions. Consequently, compared to Soviet times when the extermination of predators was intense, wolves are now less afraid of vehicles, the smell of fuel and other signs of human activity. Wolves have adapted to understand and distinguish between those signs that mean a threat and others that can be ignored. Predators comprehend the pattern of people's behaviour by watching, learning and teaching adaptive skills to their offspring. Additionally, the changing activity of people attracts predators closer to domestic places which increases the likelihood of attacks on livestock, e.g. herders staying longer in the village and keeping livestock closer to those villages, as well as mining, road building, gas pipeline construction on the taiga and increasing taiga fires, all of which disturb predators and push them closer to human settlements. Herders/hunters respond to the actions of predators by accurately observing and learning their behaviour and, accordingly, adapting their trapping devices, thereby engaging in intimate hunting of predators. I also showed that human–predator cohabitation could be perceived as constantly changing relations that are framed by the shifting socio-economic and ecological conditions.

The text goes on to suggest that the perception of human–predator cohabitation could be extended to the tripartite communication between humans, animals and spirits. I demonstrated that according to the cosmology of herders/hunters, the notion of predator revenge is the central idea in human–predator relations. It is believed that predators grieve for their brethren or offspring killed by humans and therefore attack livestock in revenge. The revenge of wolves is considered the ability of predators to purposefully attack livestock owned by the concrete human responsible for predator killing. Thus, livestock predation by wolves could be perceived as communication of predators with humans through the sign of retribution. Such a perspective of herders/hunters regulates the excessiveness of predator killing, as people view such actions with caution. Furthermore, I demonstrated that killing predators is considered by herders/hunters as a sinful act leading a person into aggressive interaction with a predator's soul and the spirit-master *Baianai* (the owner/master of animals, deity of hunting) who punishes humans with various misfortunes or even death. I showed that the relationships between people, predators and spirits are perceived as hierarchical. It is taken by herders/hunters that the souls of killed animals may refer to the spirit-master *Baianai* asking him to take revenge on humans. Thus, predators are perceived as mediators/messengers between the human world and the realm of the

spirits. To avoid retribution and to appease *Baianai*, hunters/herders perform predator honouring rituals that signals a person's intentions to establish peaceful existence with the spirit realm. However, negotiation with the spirits may also contain notions such as deceiving the so-called "idealistic" spirits that do not distinguish between reality and appearance (performance), as well as engaging in reciprocity with *Baianai* to ask for success on the hunt. The given modes of interaction of the herders/hunters with the spirit realm demonstrate ambiguity. On the one hand, people treat killed predators with respect by honouring their souls, but on the other hand, they also can deceive the spirits by denying the act of killing or blaming others for that. However, these beliefs of the indigenous peoples do not contradict each other, as they are all considered valid means to avoid punishment (potential misfortunes) sent by spirits to avenge human sins (killing predators).

Finishing this chapter, I also discussed how the hierarchical structure and the power of the realm of the spirits could be compared to the power of the State, as both are perceived by herders/hunters as hierarchical in their structure and regulating the relations between humans and predators. Consequently, I would like to conclude that it is also possible to consider human–predator cohabitation in the shared landscapes from the perspective of regulation based on the cosmology of herders/hunters.

CHAPTER 5: THE PHENOMENON OF THE *VOLCHATNIKI*

5.1 Introduction

This final chapter of my dissertation complements the ideas of the previous two chapters and develops them further by exploring how the animistic perceptions of predators and wolf regulation practices intertwine in the daily relationships between contemporary wolf hunters – *volchatniki* – and wolves. Moreover, this chapter also provides new insight into human-wolf cohabitation by examining the intimate relations between the *volchatniki* and wolves that include such aspects as perspective taking (putting oneself in the wolf's position in order to explain how he may operate) as well as showing empathy for wolves, this in turn leading to a respectful attitude towards them.

Figure 41. Skins of wolves and smaller predators in the backyard of a volchatnik's house (photograph by Vadim Nikolin 2019)

The image of highly specialized wolf hunters - *volchatniki* - was exalted during Soviet times as a response of the Soviet state to the massive levels of livestock predation by wolves. I will show that although the *volchatniki* were in privileged positions on the Soviet farms, specialized wolf hunting has become more a way of life rather than a basic source income since the collapse of the Soviet state. Some reindeer herders and hunters adhere to the notion that not everyone is destined to become a *volchatnik* as it is predetermined by *Baianai*. Due to the revengeful nature of predators, it is believed that the strength to kill them is only given to special people who possess the spiritual power to evade the anger (revenge) of *Baianai*. However, while some wolf hunters believe that this predestination of *volchatniki* by the spirits is an important prerequisite, others believe that choosing or not choosing a *volchatnik's* lifestyle is down to individual decision. To analyse the different lifestyles of contemporary wolf hunters, this chapter will look at biographies

and also show the role that *volchatniki* play in the State's established system of wolf population management in Yakutia.

To demonstrate the interlocking perceptions of wolves, one based on the notion of wolves as non-human beings possessing spiritual power and the other on biology/ecology, I will provide cases analysing the different wolf hunting practices and the perceptions of two *volchatniki*. In one case, this emphasizes the ritualistic practises used against wolves, while in the other the high-tech skills and tools of trapping wolves. However, considering that these practices are distinguished more due to the analytical purpose to examine wolf hunting tactics, both sides of these interactions should be taken as a whole. Furthermore, I will demonstrate that wolf trapping does not always work and that the rituals against wolves can be applied (by *volchatniki*) along with trapping (or as an alternative) since both have the same goal of controlling wolves. This chapter also shows that hunting wolves relies not only on the trap setting skills of *volchatniki*, but also on reading the behaviour of intelligent beings (wolves) possessing spiritual power. In other words, *volchatniki* read wolf behaviour and the wolves, in turn, read *volchatniki's* intentions (to kill/trap the wolf). Both respond adaptively by trying to outwit the other and succeed against the other. In this regard, traps can be also perceived as a device of interspecific communication through which *volchatnik* - wolf relationship is enacted. I will show how wolves try to comprehend the threat in traps to bypass it safely. Meanwhile, the *volchatnik* by taking the perspective of the wolf gets an opportunity to adjust traps. I will show how the *volchatnik* also empathizes with wolves by perceiving the predator's suffering in traps and the struggle to survive. Hence, this chapter shows how trapping, perspective-taking and empathizing with wolves are indeed interconnected with respectful attitudes toward them. Empathizing with wolves, *volchatniki* perceive human-like features in certain behaviours of predators that invokes respect. I will demonstrate how respecting wolves, the *volchatniki* sometimes give opportunities for predators to survive.

5.2 *Volchatniki* - a relic of Soviet power

Beginning this chapter, I would like to briefly turn back to the Soviet times showing the role of the *volchatniki* in the historical context of human–predator relationships. *Volchatniki* as the prominent wolf hunters became famous across Siberia especially in the post-war period of the 1950s (see Gaidin et al. 2018, 35-44). After WWII, the development of the Soviet rural economy (based on the establishment of farms, collectivization and livestock development) faced predation by wolves which led to economic losses. The

reason was that during the war years many men had been recruited into the army and the normal economic life of people had been disrupted. Additionally, the regulation of wolves in Siberia was unorganized (see also Gaidin et al. 2018, 39). Hence, during the war period and the early post-war years, the wolf population in Russia greatly expanded in numbers which resulted in frequent attacks on livestock (see Bibikov 1985, 374-377). As a response, the Soviet authorities for agricultural development and wild fauna management organized mass predator extermination campaigns that also involved the formation of the brigades of professional wolf hunters. At the same time, the positions of the *volchatniki* were established on the farms (see Chapter III). In the YASSR, *volchatniki* were encouraged in multiple ways, for instance through the receiving of stable State salary, the possibility of bounties for wolves, the giving of awards for active wolf killing and the awarding of medals of the hero of socialist labour (see ibid.). As an example, in another region of Siberia (Yenisei North) in 1983, *volchatniki* were given the priority to buy a car or scarce consumer goods (see Gaidin et al. 2018, 41-42). Thus, *volchatniki* became the prominent hunters who were even compared to Soviet soldiers fighting against the Nazis. For instance, in the post-war period (1945), inhabitants of Yenisei North would refer to the "wolf problem" with the slogan "*we have cleared our lands of the fascist infection, now we clean it of wolfish adversity*" (ibid.). Hence, after strict measures of the Soviet state against predators, the wolf population across Russia was reduced to a minimum, especially during the period from 1950 to 1970 (see Bibikov 1985, 374-377). In this context, during the Soviet period, *volchatniki* were seen as the socialist heroes and liberators from the so-called national disaster of wolves (see also Pavlov 1990, 172-173). However, after the collapse of the planned economy of the Soviet Union, this marked by a shortage of resources and disorganization of Soviet farms, the position of *volchatniki* as State hunters became disorganized along with the communist State. Besides, by the 21st century, ecological attitudes towards nature had changed and the management of the wolf population also changed - the use of poisons was banned and the communist times idea of mass extermination of predators was abandoned, thus the role of *volchatniki* as predator exterminators also changed.

At the time of my fieldwork, 25 mobile brigades of *volchatniki* were organized by the game management authority of Yakutia (according to the game manager of the MEFRS). However, these wolf hunters were not State employees, but hunters who were regulating predators in the districts of Yakutia under a volunteer agreement with the MEFRS. Meanwhile, the proportion of *volchatniki* in relation to the size of the 34 districts of Yakutia

(an average size of about 90 thousand km^2 (see Gaevaia et al. 2019, 21-22)), is too low to properly control wolves in the country.

5.3 On being a *volchatnik*: the biographies

At the time of my fieldwork in Eveno-Bytantaiskii district, there were two *volchatniki*, Aleksei Rozhin and Gerasim Bochkarev. Their lifestyles were quite different - the hunter Aleksei resided in Sakkyryr village, whereas the reindeer herder/hunter Gerasim rarely left the taiga where he lived and worked permanently with the reindeer herd.

I met 45-year-old Aleksei (he identifies himself as Eveny by nationality) at his house in Sakkyryr where he lives with his family. The v*olchatnik* explained that wolf hunting for him was more like a lifestyle than a source of basic income. Aleksei usually tried to help local people to solve problems with wolves when the reindeer or horse predation was becoming a critical issue to herders' subsistence. Aleksei would drive his Russian snowmobile *Buran* to the taiga to set the traps and snares near the encampments of herders who would have asked him to assist. Reindeer herders believing in wolf revenge preferred to trust predator hunting to the hands of Aleksei rather than killing wolves by themselves. In return, people usually gave fuel to Aleksei so that he could trap wolves and hunt wild ungulates on the way. Additionally, Aleksei trapped wolves on his own initiative in the surroundings of the village and delivered the pelts of the hunted predators for the bounties in order to obtain some cash. With this extra money, the *volchatnik* could buy spare parts or fuel for his snowmobile. However, Aleksei confessed that it would be impossible for him to subsist on wolf bounties as he had to sustain his family. Thus, the *volchatnik* generally engaged in wolf hunting during the cold season from autumn till spring, but additionally worked as a dentist in the village. Without the work of a dentist, the *volchatnik* couldn't allow himself to waste time pursuing wolves. Furthermore, against the notion that *volchatniki* shouldn't keep livestock because of predator revenge, Aleksei also owned a small herd of horses and reindeers. He kept his reindeers along with another herd attended by the reindeer herders, while he let his horses freely graze on the taiga.

Aleksei told me a story about how he became a *volchatnik* by killing a wolf that, according to him, was sent by *Baianai* as a sign that Aleksei should become a wolf hunter. At the very beginning, as a regular hunter, Aleksei set traps for Arctic foxes [Rus. *Pesec*], but Alexei one time discovered that, instead of an Arctic fox, a wolf had been caught in the trap. However, it was a small trap unsuitable for hunting wolves, thus the predator was able to easily

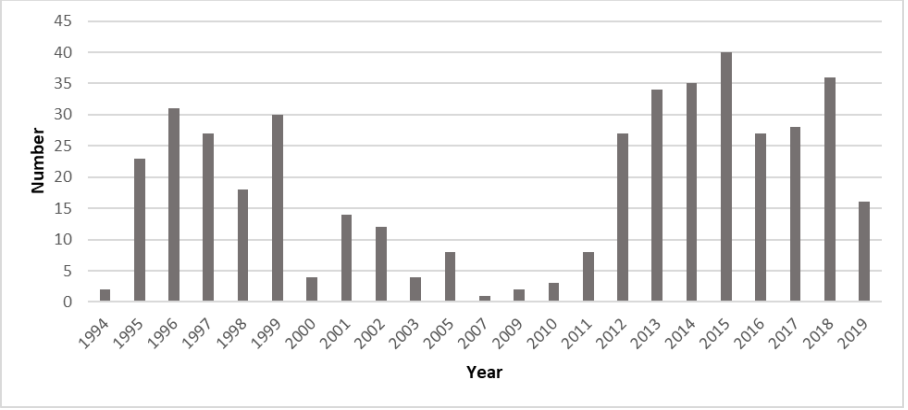
run with that trap on his leg. Aleksei followed the wolf for many days until the predator cunningly ran onto a hill and vanished under the snow to hide, thus the wolf's footprints suddenly disappeared. Finally, the hunter noticed the wolf rump sticking out from under the snow and shot him. From that first wolf, Aleksei continued hunting wolves and still, 20 years later, did so at the time of my fieldwork. Aleksei adheres to the notion which is common among indigenous herders and hunters that being a *volchatnik* is predetermined by the spirit-master *Baianai*. From this perspective, a hunter is chosen to become a *volchatnik*. Aleksei believes that although he was destined to kill wolves, he had to be scrupulous in treating predators with respect since his actions were under *Baianai's* watchful eye. In his garage, Aleksei showed me the pelts of wolves that he had recently hunted. The bloody canvas that the wolves had been wrapped in while transporting them on the snowmobile as well traps spotted with blood, were nearby. While the skins of wolves were in the garage, the carcasses were left outside on the snow as Aleksei was going to drive them to a place on the taiga that he called the cemetery of wolves [Rus. *Kladbishche volkov*]. He explained that he took only the pelts from the wolves (to get the bounties), but buried the carcasses with respect by placing them above the ground on the wooden poles stretched between trees. A volchatnik never discards killed wolves as garbage, nor does he take a canine tooth from the wolf skull, even if someone requested it as a trophy. For these acts, it would be considered a big sin for which *Baianai* would punish the *volchatnik*. Overall, Aleksei believed that the life of the *volchatnik* was risky and dangerous. For instance, several years earlier, Aleksei had almost gone bankrupt [Rus. *Pochti obankrotilsia*] because wolves had destroyed almost all his reindeers and horses in, as he believed, revenge. Furthermore, a tragic event in Aleksei's life, his boy child had died from disease. Aleksei took these misfortunes as a punishment of the spirits for he sinned by killing too many wolves, thus for several years he stopped hunting wolves.

Meanwhile, another *volchatnik*, 35-year-old Gerasim Bochkarev, had been hunting wolves ever since he had started to live and work as a main reindeer herder in the taiga encampment of the *obshchina* "*Sagakh*", which is headed by the indigenous woman Daria Starastina. At the time of my fieldwork, Gerasim, having shot 19 wolves during the 2018 winter, came second in the Republic of Sakha wolf hunting effectiveness competition. Having killed 19 out of the 36 wolves hunted in 2018 in Eveno-Bytantaiskii district, Gerasim was singly responsible for more than half of the annual cull of wolves (for wolf cull figures in Eveno-Bytantaiskii district, see Figure 42).

Gerasim himself came from a prominent family of horse breeders, his father was a brigadier of a big herd of horses [Rus. *Tabun*] during Soviet times

in the Sovkhoz. His father trained Gerasim from a young age to hard work with horses, but he chose instead to live on the taiga and watch over reindeers and hunt wolves. It was not his father who taught Gerasim to became a *volchatnik*. At first, he tried to manage wolf hunting methods by learning from various Russian books about wolf hunting. However, he did not succeed right away, as cunning wolves avoided his traps. Later though, a prominent hunter visited Gerasim from the city and suggested to hunt wolves by pursuing them with a snowmobile until they collapsed from exhaustion. The defeated predators could then be easily approached and shot with a rifle.

Figure 42. Annual cull of wolves in Eveno-Bytantaiskii district (1994-2019)



Source: Report on the annual wolf cull in the Eveno-Bytantaiskii district. Provided by the ADEBD

Such practice of wolf hunting had been successfully applied on the open tundra regions since Soviet times (see Pavlov 1990, 296-302). The mountainous semi-open forest-tundra landscapes of Eveno-Bytantaiskii district are suitable for such a method and Gerasim adapted to it well. The *volchatnik* explained that it is not so easy to drive a wolf from the mountainous taiga to an open area to take him, as wolves use every fold of the terrain utilizing opportunities to escape from the snowmobile in the mountains. Besides, the *volchatnik* needs to know if a wolf has just eaten as it would not be able to run far with a full stomach. If a wolf was hungry however, a hunter could easily chase him for 10 hours or more. Thus, Gerasim recalled, sometimes wolves very wisely vomited out meat in their stomach in order to run fast and easily. Gerasim learnt how to read the manoeuvres of wolves from their footprints, e.g. if the footsteps stretched regularly inline it meant a wolf ran calmly and you were a distance from him. However, when closer to the predator with your snowmobile, the footprints would show the wolf running

and jumping big leaps. After killing wolves, Gerasim treated the carcasses with respect in a similar manner to that of Aleksei by putting the bodies of the wolves on a tree. Moreover, Gerasim never cut off the head of the predators, except for bears in which case it was needed for ritually mounting on a tree. According to a *volchatnik*, cutting the head of a wolf would be a sin in the eyes of the spirit-master *Baianai*.

Another contact of mine, Egor Nikolaev, although having a strong scientific background in biology as well as experience as a former State game manager, also adhered firmly to the animistic worldview. Egor claimed that his ancestors, the Yakuts from the central part of Yakutia, were prominent predator hunters chosen by *Baianai*. He believes that he inherited from his father and grandfather a high ability to hunt predators. Apart from hunting bears and wolves all across Yakutia (including Eveno-Bytantaiskii district), Egor also investigated the predators. He conducted his doctoral studies at the Institute of the Biology of Yakutia by applying animal telemetry. With the contribution of Japanese and American ecologists, he mounted collars on 20 bears and 10 wolves to investigate their migrations and behaviour. In post-Soviet years, Egor had also worked in the MEFRS as a deputy director and general State game manager. At the time of my fieldwork, Egor was the head of the administration of *Nasleg* - a rural locality in the district of central Yakutia. With many responsibilities for administering the *Nasleg*, Egor was also active in hunting predators. Egor believed that not everyone was destined to be a *volchatnik* and, furthermore, predator killing is not just for sport and entertainment it is a very dangerous job. According to Egor, he, as well as his father, inherited the power to kill predators from their ancestors, who were prominent bear hunters and *volchatniki*. Many people in Yakutia knew about his family mission to control predators and they asked Egor to go to solve problems with wolves and bears. Egor believed that killing predators was not as sinful of him as it would be for others because *Baianai* had given the job for him and his kin to protect people from predators. Egor characterized his power in killing predators as follows:

"*wolves and bears recognize the power of the predator killer in me. On my arrival on the taiga, wolves are terrified, trying not to show themselves, refraining from attacks on livestock, hiding or fleeing out. Predators feel I am a killer to them, they understand it. While hunting wolves, I strive to keep hidden, to avoid leaving my prints and scent and to not even urine wherever possible. I change my boots to mislead wolves. If wolves recognize me, that's it, they vanish. Sometimes I even avoid going to bring firewood or ice for melting water, thus I ask others to do it. Meanwhile, being in the city, my power also affects the dogs, e.g. I can enter any backyard of house no matter*

what kind of dogs are guarding it. Citizens are amazed at how I can trespass without upsetting the dogs. People sometimes even come to check if the dog is still in the backyard".

Striving to underline the importance of the given power to kill predators, Egor explained that it is not wise for ordinary people to kill predators, as the predators may harm humans by evoking the anger of the spirits. However, even Egor had to observe precisely the rituals of honouring spirits. The local spirits that dwell in each location may have different intentions and characters. If someone arrives in an unfamiliar place where he was not born, he is a stranger in that area and must make offerings to enter into a relationship with the spirits of that locality. Otherwise, the spirits could become furious and the *volchatnik* would not succeed in hunting wolves or, even worse, he could even die there [Rus. *Mozhet tam ostavit' svoi kosti*].

However, as with the example of Vadim Nikolin, a local Russian, not all wolf hunters consider the idea of the designation of *volchatniki* by *Baianai* as a necessary rule. Vadim considered hunting wolves as an individual decision that anyone could make in choosing or not the lifestyle of the so-called taiga man [Rus. *Taëzhnik*]. Attempting to demonstrate his deep engagement in the *taëzhnik* life, Vadim gave a story of one of his acquaintances who had died on the taiga. Vadim considered that such a fate would be acceptable for a person who had dedicated his life to the taiga.

"I had a friend, he was a successful man having a good family, profitable job and many things he wanted, a large country residence, luxurious cars. However, he became tired of everything, thus he decided to give up his job and spend more time fishing and hunting on the taiga. Once, in late autumn, while he was fishing in the middle of a river, ice particles mixed with the snow [Rus. Shuga] and moved down the river trapping him. He was found right there frozen to the death in his boat. If I died like that, I would be grateful for my fate. I believe it is better than to die helplessly in bed serviced by your wife and children. I just need to be on the taiga."

At the time of my fieldwork, Vadim was over 70 years old and, it seemed, he felt that soon it would be difficult for him to lead a taiga lifestyle. However, his connection with the taiga was the most important thing in his life, even stronger than the risk of dying there. To reflect his concerns about abandoning taiga life, Vadim joked that even doctors warned him that he check in his passport to make sure he was no longer a youngster. Vadim was born into a Russian family who settled in a rural area with a harsh Arctic climate near the East Siberian Sea in the north eastern part of Yakutia. His ancestors were Cossacks who settled in Yakutia in Imperial times. However, Vadim with his parents moved to Yakutsk and had lived there from childhood. Vadim

attended city school and grew up immersed in the culture of Yakuts with Yakut classmates and friends. After finishing school, Vadim studied river shipping and began working as an engine specialist on coal-fired ships on the Lena River. Later, he changed jobs and became police [Rus. *Militsiia*] driver. After the collapse of the Soviet Union, Vadim began his own business, becoming a successful car service entrepreneur. As a hunter, having received a hunting license at the age of 19, Vadim began his activity back in Soviet times. His father took Vadim to hunt ducks in the fall and hares in the spring, but Vadim wanted to hunt big game. Soon after receiving a hunting license, Vadim was involved in moose hunting to provide meat for governmental orders. According to Vadim, there was an unspoken practice in Soviet times for a hunter to deliver to the game management authority more moose than was officially demanded, "otherwise what hunter are you". The pay for such a job was misery, but hunters were unofficially allowed (by the game management authority) to take some meat of the moose for personal disposal. Sometimes Vadim even received two moose (as an unofficial bonus) from the authority. As meat was in high demand, Vadim used it as a kind of currency for bartering, for example to exchange for diesel or to offer to officials in exchange for a favourable decision in personal deals. Furthermore, in return for good hunting results, moose hunters were awarded moose licenses for personal disposal - this was a privilege in Soviet times as moose licenses were always in short supply. Vadim hunted mostly in the central part of Yakutia in the Kobiaiskii district as far as about 400-600 km from Yakutsk. During the moose hunting, Vadim often saw the footprints of wolves, but he didn't hunt predators intensively till 2009 when he became a *volchatnik*. During that year, the MEFRS announced a state of emergency due to a dramatic increase of wolves and livestock predation. State game managers suggested that Vadim should establish a mobile brigade of *volchatniki* who would be sent to certain districts of Yakutia to regulate wolves. However, for Vadim, the main economic stimulus of becoming a *volchatnik* was to retain the privilege of obtaining the moose licenses – the MEFRS had determined that a *volchatnik* would receive one license for moose, in priority order, for every two killed wolves. Besides, another important thing to Vadim was to retain prestige among hunters and officials by proving his superiority in hunting such an intelligent predator as a wolf. Furthermore, according to Vadim, the high respect shown to *volchatniki* in Yakutia opened for him many "doors" of bureaucrats and decision-makers.

Despite the various social privileges that Vadim gained through his status as a prominent hunter, the *volchatnik* also perceived that success on the taiga depends largely on the hunter's connection with the landscape. Most of

Vadim's hunting companions were Yakuts, Eveny or Evenki with whom Vadim performed rituals of honouring *Baianai* by feeding the fire or sprinkling vodka, thereby asking the spirit-master for success in the hunt. Besides, living as *taëzhnik*, travelling through the taiga and facing various challenges on the trip, Vadim left offerings for landscape spirits as a sign of respect. For instance, one cold winter day on the taiga, a tree fell on Vadim's shoulder and broke his arm. Fortunately, his comrades took him to a hospital on time. Also, many times his truck broke down on the taiga and he had to repair it in the extreme cold or, otherwise, he would have frozen to death in the remoteness.

5.4 Economy and policy of wolf regulation

To better understand contemporary economic peculiarities of hunting wolves, I shall outline the State-established scheme for organizing predator regulation and for stimulating *volchatniki* in Yakutia. The MEFRS delegates the function of administering wolf bounties to the agro-industrial concern "Sakhabult" which produces fur and leather. The company is responsible for the reception of wolf furs, paperwork and payment of the State's provided money to hunters. The established governmental bounty during my fieldwork in 2018 and 2019 was 20,000 roubles per wolf. In addition to Republican rewards, local municipalities also have the power to establish bounties for killed wolves. For example, in Eveno-Bytantaiskii district in 2019, an additional 700,000 roubles were allocated to pay bounties of 20,000 roubles per wolf. Thus, the administration of Eveno-Bytantaiskii district could subsidize awards for up to 35 killed wolves. In the five years prior to my visit, hunters of Eveno-Bytantaiskii district had killed between 30–40 wolves per year (see Figure 42), thus if these numbers exceeded the available payments, then the debts to the hunters would be paid the next year. The bounties established for wolves in Eveno-Bytantaiskii district are the highest of the municipalities of Yakutia. In other districts, bounties were set from 10,000 to 15,000 roubles per wolf on average, but no money at all was assigned to his purpose in some districts. Thus, in total, a *volchatnik* could receive from 20,000 to 40,000 roubles per hunted wolf. It is quite high income for stimulating wolf hunting, equating to the same or twice the average monthly salary (19,160 roubles) of reindeer herders in Yakutia (for wages of reindeer herders in Yakutia see Neustroeva et al. 2020, 220-245). However, to legalize the bounties, herders/hunters were required to submit certain documents to the "Sakhabult" as well as to the municipality and that is a quite bureaucratized process according to the people. First, a wolf hunter must skin the wolf, clean

it of meat and fat, dry it and then deliver it to a veterinarian to get a certificate that the wolf was not infected with rabies. Additionally, the hunter must hold a license as well as a special certificate for taking wolf from nature issued by the local game management authority. Having these documents, the wolf hunter must then deliver them together with the pelt to the "Sakhabult", which in return obliged to issue two copies of a certificate. One of the certificates remains in the "Sakhabult" as the basis for the payment of the State bounty, while the other must be delivered by the hunter to the municipality to receive an additional award.

However, *volchatnik* Vadim honestly admitted that he didn't know anyone who could flourish from predator hunting, as money received for wolf bounties did not always cover the expenditures for organizing wolf hunting trips. Moreover, the rewards for wolves were often delayed. For instance, at the time of my fieldwork, Vadim had received money for four of the total six wolves he had killed a year earlier. For the remaining unpaid two wolves, he would receive the bounty later. Meanwhile, there are many expenditures in self-organizing wolf hunting. First, taiga trips, the length of which can be up to 1000 km, require a lot of fuel. Furthermore, it should be considered the consumption of oil and need for spare parts to the vehicle's transmission and engine are also high, many parts must be replaced after each trip. It would be too expensive for *volchatnik* Vadim to organize wolf hunting trips if he did not run a car service where he could repair some broken parts of his truck by himself. However, despite trying to cover at least some of the costs of hunting wolves, his regular brigade of three *volchatniki* fell apart as the money they received from wolf hunting was too small to support the team. Moreover, the meat of the moose that they hunted while on the trip also did not fulfil the needs of income of the people. Thus, at the time of my visit, Vadim only occasionally took fellow hunters or some of his relatives to accompany him on trips to the taiga.

Differently to Aleksei and Gerasim from Eveno-Bytantaiskii district, who are *volchatniki* on their own, Vadim by organizing a mobile brigade of *volchatniki* has signed a volunteer agreement with the MEFRS to conduct free regulation of the wolf population on public hunting grounds. Vadim is permitted by the authority to regulate wolves in eight out of the 33 districts of Yakutia. However, the agreement doesn't give the right to perform predator regulation in the specially protected areas, nor does it validate predator control on leased hunting grounds. Public and leased hunting grounds usually intercept each other, thus *volchatniki* agree with the users of hunting grounds to trap wolves in those area. However, killing wolves on leased hunting grounds sometimes causes various conflicts between people. Hunters argue

that there are many false *volchatniki*, so to say, "written on the papers", as many shooters seek the opportunities that are officially given to *volchatniki* by the government, such as permits to hold rifles loaded while in vehicles, an allowance to open fire "in the vehicle's headlights" and also to shoot from any kind of vehicles, including helicopters. It is also legal for *volchatniki* to use all kinds of traps, snares and lures for wolf control. Thus, users of hunting grounds are concerned that such privileges in hunting could become a good chance for some persons as cover for poaching, especially the poaching of moose at night in the lights of vehicles. Meanwhile, the goal of the authorities by giving *volchatniki* various advantages in hunting is to make them representatives of the State in predator regulation. Although Vadim was free to hunt wolves on his own right, since he didn't receive any official salary from the government, he did, by signing an agreement, undertake to represent the State by encouraging and instructing local inhabitants to fight with wolves themselves. The main issue of the government is to stimulate rural inhabitants to hunt as many wolves as possible by agitating people to apply for wolf bounties.

To demonstrate the role of *volchatniki* as representatives of governmental policy in predator control, I will describe the following case of a wolf regulation mission conducted by Vadim in the rural locality Sebian-Kiuël of the northern part of Kobiaiskii district. The main economic activity of the inhabitants of Sebian-Kiuël (mainly Eveny) is based on reindeer herding, therefore the frequent attacks of wolves on reindeers are perceived as the main threat to human subsistence. However, perceiving wolves as very revengeful beings, most of the indigenous inhabitants refrain from killing them. Thus, at a time when the predation of reindeers by wolves had become uncontrollable, the local municipality asked the government for support in predator regulation. *Volchatnik* Vadim, accompanied by his hunting partner, was sent by the MEFRS to Sebian-Kiuël on a month-long wolf mission in January, the coldest month of the winter. Getting to this rural locality from Yakutsk by truck at other times of the year would have been almost impossible. The winter roads, partly along frozen rivers, are closed from March due to flooding from the mountains. Meanwhile, the winter temperature in Sebian-Kiuël drops to lower than -50 °C making wolf hunting extremely hard to perform. It was so cold that to run snowmobiles in the morning, Vadim had to pour boiling water onto the carburettor and then cover the engine with reindeer skin and then leave it to warm up while drinking tea in the hut. Besides the extreme weather conditions, Vadim also faced another obstacle: some reindeer herders were sceptical about the job of the *volchatnik* arguing that he would not catch any wolf and only waste fuel and time. Consequently, some of the local inhabitants

stole the fuel stored by Vadim in the village to refuel the snowmobiles. Similarly, as in Soviet times, some local inhabitants adhered to the wolf control missions negligently. Thus, people saw the supply allocated by the State for control of wolves as an opportunity to utilize cost-free resources for their needs. It seems that obtaining resources is considered by local inhabitants as a priority over wolf regulation, given that they also think that the occasional attempts to kill wolves by strangers who are not familiar with the landscape will fail.

At least, by accommodating in the herders' encampment, Vadim managed to cooperate with locals who perfectly knew wolf habits and could advise Vadim where to set traps and where not. However, it seems that Vadim's experience in wolf trapping on the taiga in the middle parts of Yakutia didn't work in the north, as predators behaved differently. Attempting to hunt the wolves and protect the reindeers, Vadim tried many strategies that he had used elsewhere, e.g. he fenced the reindeer pastures with old videotapes, expecting that wolves would be scared by the sound made by the tapes fluttering in the wind. He also made bait by soaking paper with melted fat and wrapping the drug *Adilin* (the substitution of prohibited poisons) inside. The toxic bait with the smell of fat dropped on the wolf path was supposed to lure the predators. However, nothing worked and the wolves were not trapped, but meanwhile the attacks on reindeers continued.

Volchatnik Vadim and his hunting partner attempted to set traps near freshly predated reindeer carcass, but the wolves didn't show up. Seeing Vadim's failure, the reindeer herders explained that if wolves hadn't opened the abdomen of the reindeer, they wouldn't return to the fallen animals. Thus, the herders advised Vadim to set traps next to the old frozen remnants of reindeers from the previous table of the wolves. To the amazement of the *volchatnik*, although wolves returned and ate almost all of the reindeer remnants, they continued to elude the traps. Moreover, it seemed that the wolves were also inspecting the actions of the *volchatnik* by following his footprints, sniffing around and urinating on the traps as if the wolves were teasing the hunter.

After a month, Vadim returned from Sebian-Kiuël to Yakutsk without success, but he played the role he was sent for by the MEFRS. While hunting wolves in Sebian-Kiuël, Vadim also organized seminars for local authorities and reindeer herders/hunters to demonstrate the experience of hunting wolves by using modern snowmobiles as well as various trapping devices and the substitutions of prohibited poisons. Vadim believed that the local inhabitants of Sebian-Kiuël knew little about the methods of fighting predators, thus they needed to be explained. Besides, as many herders/hunters didn't apply for

wolf bounties thinking that it was hard to obtain due to the level of bureaucracy, Vadim also gave instructions on how to receive such awards. The *volchatnik* also encouraged herders/hunters by arguing that local taiga people were perfectly familiar with the landscape, as well as with wolf behaviour, thus they would be the best specialists in predator hunting in a given area. As a result of Vadim's agitations, a local veterinarian quit his job in veterinary service and became a *volchatnik* in Sebian-Kiuël. Knowing the area well and also the migratory paths of wolves, he believed in the success of the hunt and decided to take the opportunity to earn money from the bounties.

Although local inhabitants may expect the government to make attempts to re-establish the Soviet time order in predator control, the present State is not capable to conduct such mass scale wolf regulation as in the past. Meanwhile, by sending *volchatniki* to rural areas, the State seeks to demonstrate its concern for the affairs of indigenous people in the protection of livestock and wolf regulation.

5.5 Case study 1: *volchatnik* empowered by the spirits

With this case study, I present a story that took place in 2013-2015 in the village of Kustur, located on the left bank of the Bytantai river in Eveno-Bytantaiskii district, 100 km from Sakkyryr. Mass livestock predation by wolves had taken place in Kustur village and was an event that still resonated prominently during my fieldwork in Eveno-Bytantaiskii district. During interviews with residents of Kustur who visited Sakkyryr (the administrative centre of Eveno-Bytantaiskii district) at the time of my stay, people vividly recalled many details of the wolf attack, these allowing me to reconstruct the event. The manager of the ADEBD, Inokentii Ammosov, also explained to me how wolf hunting in Kustur was organised. Furthermore, my contact, predator hunter Egor Nikolaev, who participated in the pursuit of wolves in Kustur, described the ritual he used to protect the village inhabitants' livestock from wolf attacks. The following case shows that skills in wolf trapping do not always lead to the capture of a predator, but rituals can be perceived as a way of controlling wolves that were sent by the spirits to punish the inhabitants of Kustur.

5.5.1 Village under attack

In the summer of 2013, wolves attacked the livestock of Kustur villagers, destroying about 20 horses and over 40 cattle. As owners usually take their horses from the taiga to the outskirts of the village in early summer, nobody

knew exactly how many horses were predated by the wolves, because during the cold period of the year, horses are let free to graze on their own on the taiga. In this case, some villagers thought that their horses were still grazing on the taiga until wolf hunters later found horse carcasses predated by wolves. Able to withstand extremely low Arctic temperatures, the endemic breed of Yakut cattle [Yak. *Sakha Yanaga*], are also grazed semi-freely in Kustur and the specific habits of these cattle to graze in forested areas seems to make them vulnerable to frequent and destructive wolf attacks so. According to villagers, the cattle don't group in big herds, but graze scattered in small units on the outskirts of the village. Thus, it is difficult for people to watch over the dispersed livestock in the summer. However, the cattle usually keep close to people's houses after snowfall as it becomes difficult for the cattle to find food. Thus, villagers let the cattle into cowsheds [Yak. *Khoton*] and feed them with hay prepared in the summer. For this reason, most wolf attacks on cattle happen at the end of the summer or the beginning of the autumn before snowfall, as in winter the cattle are almost unavailable for predators.

At that time, the livestock keepers of Kustur had been hearing the howling wolves on summer nights near the river Bytantai as far as 4 km from the settlement. One morning, after the wolves had howled at night, villagers found their cattle had been attacked. Indeed, my contacts (villagers and Egor, a predator hunter) showed me the pictures of the cattle predated by wolves. The hindquarters of the cattle were with ruptured wounds on the upper and lower parts of the thighs. Some of the cattle looked terrible with torn pieces of flesh and visible bones, others with gutted bellies and falling intestines. A few were half-dead with torn udders.

At first, people misleadingly thought that dogs had attacked the cattle as dogs were found feeding on the remnants during the day, while the wolves had attacked unseen during the night. It was a scandal as villagers demanded from each other compensation for the losses, for evidence taking pictures with the dogs biting the dead cows. Only a year later, cattle owners understood that livestock had been destroyed by wolves. Villagers couldn't believe that wolves had been so fearless to approach the village so close and, in some cases, kill cows almost under the windows of the houses.

After the attacks of wolves on the livestock, the herders put in more efforts to watch over their cattle in the pastures. Additionally, a local hunter specializing in wolf trapping was asked by the district's authority to eliminate those wolves. As a background to this event, and which would become important factors, the local wolf hunter had been trapping wolves for many years in Kustur surroundings, e.g. during the six years before the mass livestock attack, he had killed 40 wolves. Furthermore, the hunter had caught

six male wolves just a year before the attack on the cattle. There had also been more “executions” of wolves, which from *Baianai's* point of view could be considered a sin. For example, having heard a wolf howl about 60 km from village, villagers found a wolf's den on the bank of the river, from where wolf cubs were had been pulled out by Kustur hunters every year.

5.5.2 Black wolf-dog hybrids

When the attacks on Kustur livestock began, villagers saw a wolf female with her four black offspring about 4 km from the settlement. The wolf male was absent. It seemed that the wolf female had placed her den close to the village as her previous den place on the riverbank had been under constant attack by people. However, a local wolf hunter found the den near the village and trapped one black four-month-old wolf. It was strange as the Kustur hunters hadn’t seen black wolves before, thus people had doubts as to whether it was a pure wolf. Meanwhile, the wolf female with the remaining three offspring started to attack livestock more intensively, but no more wolves were trapped at that time. As the livestock predation by wolves grew out of control, Kustur villagers flooded the municipality office with complaints demanding they took effective measures to control the wolves. Thus, the local authority asked the MEFRS to send *volchatnik* from Yakutsk to the village. However, even spending a month there, the *volchatnik* didn't succeed to trap the female wolf and her offspring. Before leaving Kustur, the *volchatnik* took a specimen of the black wolf killed by a local wolf hunter to transfer it to the Yakutsk Institute of Biology for analysis. Consequently, the wolf specimen appeared on the work table of the biologist and predator hunter Egor Nikolaev. As a scientist at the Institute of Biology, Egor sent samples of the wolf tissue for genetic analysis to Poland and Moscow. The tests showed that the specimen was not a pure wolf, but a wolf-dog hybrid.

While the genetic analysis was conducted, the three other black wolf adolescents were trapped by Kustur hunters. However, left without her offspring, the female wolf desperately attacked livestock, they believed, in revenge. Thus, the confused authority of Kustur invited Egor to the village, expecting that he would solve the problem with the wolf female. Arriving in Kustur, Egor found the black dog male he supposed it was a father of those wolf-dog hybrids. To test his hypothesis Egor took a sample of the dog’s blood to make genetic analysis. Consequently, the test confirmed the dog’s paternity. Meanwhile, the predator hunter had his own idea of how it could have happened that a wolf mated with a village dog.

5.5.3 The spoiled village

Egor thought he had figured out the full picture of the incident with the wolves in the village of Kustur. It seemed that the local wolf hunter of Kustur had killed all the wolf males in the area and thus left the wolf female without a mating partner. Thus, the wolf female chose a black dog from the village to breed with. Additionally, as villagers had destroyed the wolf female's den each year away from the village, she had moved her den closer to the Kustur, this also making the attacks on livestock more convenient.

One explanation given by villagers on why the attacks of wolves on cattle were so intense at the end of the summer is because the wolf female was teaching her cubs to hunt. The female wolf did not kill the livestock right away, allowing her cubs to practice their killing skills by biting, scratching and tearing flesh from the back of the livestock. However, a hunter from Kustur also gave another explanation, arguing that there had been a large number of the hares about 10 years earlier in the district and wolves had preyed upon them. After a sudden drop in the hare population, wolves switched to the livestock. It seems that such explanations were not sufficient for Egor who tended to believe that the village was cursed by the spirits. Furthermore, Egor also supposed that the spirits of the locality sent wolves to Kustur to punish the people for their wrongdoing, e.g. they hadn't performed the honouring rituals for the killed predators or they had killed too many wolves in the district. The Kustur incident seemed strange for the predator hunter because cattle are not common prey for the wolves, but rather for bears. Thus, it was not a usual case that wolves attack cows and so near to the village. Moreover, predators usually have enough natural prey to subsist on the taiga. So why, Egor raised the question, after many years of existing peacefully, should it sudden happened that a wolf had the idea to act against humans by causing such a level of predation of cattle. Such assumptions were enough for Egor to conclude that the attacks of the predators on livestock were driven by the spirits in order to punish Kustur inhabitants.

Meanwhile, just before Egor arrived in Kustur, the events with wolves seemed to have taken an unexpected turn. The wolf female had coupled with a wolf male that had migrated to the Kustur area soon after the female's offspring – the black wolf-dog hybrids – had been killed by the locals. The pair were attacking the livestock of villagers with greater intensity. However, according to Egor, shortly after he began the pursuit, the wolves recognized him as a killer of predators and, frightened, fled from the village to another area. However, pursuing the wolves, Egor didn't succeed in hunting them,

thus he switched to ritual practice that remained the last opportunity to fight predators driven by the spirits.

5.5.4 Fleeing wolves

Before going into details about the rituals against predators, I am giving here Egor's recollection about the pursuit of the wolves along the Bytantai river that illustrates a transition from ordinary predator hunting methods, such as setting the traps, to ritual. It was April already, but snow was still deep and nights were cold, thus it was convenient to trace the wolves with the snowmobile. Moreover, the head of Kustur authority had promised to Egor the contribution of local guides-hunters, who had set traps for wolves throughout the winter and knew the paths of the predators well. However, unexpected events took place - one man died in the village and all his fellow hunters, including the guides, attended the funerals and drank vodka to toast the deceased. It was a bad omen auguring bad luck for hunting wolves. Furthermore, following customs, one needed to refrain from hunting and fishing for 40 days after a funeral.

Thus, the intoxicated guides-hunters didn't show up in the morning and, though Egor wasn't familiar with the area, he decided to go to the taiga alone, taking a sketch of a map that the guides had given him before the funeral with the wolf paths marked. In the evening, he reached the day-old footprints of wolves. The predator hunter settled into a log cabin and set the traps. Suddenly, 10 snowmobiles approached the hut. The drunken hunters with the head [Rus. *Nachal'nik*] of Kustur in the lead arrived to participate in the wolf hunting. Egor got angry, scolding the hunters for doing everything wrong as the people had sinned by violating funeral customs and, thus, the spirits would get even angrier. Egor was about to turn back home, but the *nachal'nik* asked him to pursue the wolves, promising that the hunters would stay in the cabin and finish the vodka. Thus, in the morning, Egor followed the footprints of the wolves that had now fled. Egor described the pursue as follows:

"the wolves came at night to sniff my prints and, recognizing a predator killer in me, immediately fled away across the ice of the river. I moved 40 km forward following wolves, while in the evening reached the next log cabin to overnight. Meanwhile, the wolves ran ahead. In the morning, I tracked the wolves for another 30 km along the river. At that time, the wolves settled for a night in a valley near my stay in another cabin, thus it was a good chance to hunt them. However, the hunters were following me behind, thus they arrived at the cabin in the late evening. I asked them not to walk from the log cabin, not to cough or make noise, and not to shoot at all. Because it seemed

that the wolves had figured out that they were being persecuted and had now fled 70 km from me. On the next day, I noticed that the wolves moved onto the mountains to observe what we were doing. I supposed that if we stayed, wolves would move forward, but if we went further, then wolves would remain, feeling safe. Thus, I tried to trick them by going with everyone to an abandoned village 30 km ahead, so that the wolves would think that we had all left. I came back the next morning, but the wolves seemed to have comprehended the threat and fled towards the mountain range. I followed them 50 km more, but wolves traversed the mountain ridge and disappeared in the vast area of Verkhoianskii district. The pursuit of those wolves was over".

Thus, in total, Egor pursued the wolves for 120 km, but the predators escaped to the mountains and didn't return till the autumn. Egor believed that it was the hunters' fault as they didn't listen to stay in the village, but instead arrived on the taiga and scared the wolves away. It seems that, from the *volchatnik's* perspective, wolf hunting is an intimate activity based on taking the wolf's perspective and sensitivity in comprehending the next move of wolves. Thus, by arriving, the hunters disrupted the very personal relations between the predator hunter and wolves. In this case, wolves had the advantage to comprehend a threat from people and flee. Thus, the predator hunter Egor couldn't hide his intention from the wolves to kill them, as other hunters left too many signs of their activity which the wolves could easily read. Besides, the intimacy of the wolf hunt was also disturbed by the violating of the taboo of funeral customs. The death of a man in the village at the time of Egor's arrival was perceived as a bad sign itself. This could be taken as a manifestation of the will of the spirits to determine the killing of wolves so that the wolves could survive and continue to attack livestock, thereby to keep punishing people.

5.5.5 Ritual against wolves

Some villagers doubted Egor's explanations about the wolves' sensitivity to figure out human intentions to kill predators. Villagers thought it strange that the wolves should suddenly flee frantically from Egor, considering that for several years predators had been living near Kustur and fearlessly attacking cattle near the houses of people. Thus, villagers argued that it was just an Egor's excuse that he hadn't managed to catch the wolves. People were tired of predator attacks on livestock and didn't want to rely on *volchatniki* who had arrived from Yakutsk and left the village without results. Some villagers argued, that "*by setting traps here and there to no avail, volchatniki only told tales of wolves*". Indeed, Egor confessed to me that some Kustur

hunters accused Egor of acting similarly to previous *volchatniki* who "spread tales" about predators, justifying their failures. Thus, Egor felt hurt [Rus. *Obidno*] after pursuing the wolves for 120 km without results. Before leaving the village, Egor decided to perform the ritual to make the wolves never return to the village and not attack livestock. Hence, the predator hunter asked for a vehicle and snares so he could go on his own for a day to make a ritual against wolves on the river Bytantai. According to Egor, the meaning of the ritual was to establish a boundary in a narrow crevice of the valley so that no wolf would ever cross it. Egor ritually drew a line between the ridges on both sides of the river and additionally set two snares on the riversides. In case if the wolves still tried to cross the line, they would be driven directly into the snares. Egor believed that the exact ritual he performed had to be kept secret, otherwise it would lose its power. However, Egor didn't consider that general explanations of the ritual could disrupt its action, so he gave the principle of the ritual and how he managed to carry it out. The ritual itself was not inherited, but Egor had an intuition of how it should be performed. Egor's ancestors had been doing rituals against wolves for generations and his kin members inherited this ability. Each ritual against wolves was unique depending on the particular place and the circumstances. The ceremony worked similarly as an individual amulet [Rus. *Obereg*], protecting a person from the "bad eye". To illustrate how an *obereg* protects a person, Egor gave an example with a thief: "*if a thief sees a wealthy-looking man with an expensive watch on his wrist and expensive clothes, he will consider robbing this rich man. However, if a person wears an amulet charged with a protective spirit, the thief's consciousness will be affected by the dispersal of his bad intentions"*. Thus, a thief, though eager to rob that rich man, would not be able to do so because the *obereg* would not allow the thief to focus his thoughts on the action because he would feel confused. Similarly, shamans perform powerful rituals against certain illnesses and, likewise, there are also shamanistic rituals to protect cattle from diseases as well as from predator attacks (see also Alekseev 2008, 149-172; Popov 2006, 164-188). Hence, if a wolf's attention is diverted by an *obereg* when approaching to attack cattle, the predator will be driven out from the livestock. In this sense, the *obereg* against predators could be perceived as a ritual that distracts the minds of the predators. Hence, the ritual guards the borders on the river in order to not let wolves pass it and at the same time deflecting the minds of predators from attacking the cattle in the village. However, based on Egor's explanations, if the wolves tried to cross the line, then the power of the *obereg* would lure the predators right into the traps. Indeed, Egor thought that this was exactly what had happened - according to villagers, the wolves hadn't attacked livestock in the village for

the five years following Egor's ritual. However, just after Egor departed from Kustur, the villagers kept worried that wolves would resume the livestock attacks. Hence, in spring, a month after Egor's visit, he received a call from *nachal'nik* of Kustur informing Egor that local hunters had seen two wolves near the mountain passage to Verkhoianskii district where the predators had escaped last time. The hunters, sitting near a lake under cover camouflaged during their spring duck hunting, saw a wolf male with a female approaching the carcass of a fallen horse. However, the wolves were scared by the hunters' shots and escaped to the taiga. The hunters noticed that the female was lactating as her udders were reddish and swollen. The news about wolves quickly spread among the villagers causing a panic that wolves would return to the Kustur with a new litter. Thus, the *nachal'nik* of Kustur asked Egor to return to finish the job with those wolves. However, Egor decided to wait until the wolves crossed the border he had ritually made on the river. It appears that wolves didn't show up again in Kustur, Egor believed that trying to cross the *obereg* both wolves were snared and the cubs also died without their parents' care. However, nobody from Kustur knew exactly the fate of those wolves as people hadn't checked the snares as these were set in a place known only to Egor. Additionally, the predator hunter had not returned to the village to check on his snares since the predation in Kustur ended.

Thus, on one hand, the case demonstrates that livestock predation by wolves could be perceived as a natural flow of a predator's adaptive response to human persecution. It could be claimed that by intensively killing predators and exterminating wolf litters, villagers destroyed the wolf packs in the area. Thus, the wolf female alone could not hunt on wild prey as effectively as a pack, so she adapted to attack the livestock as easy prey. On the other hand, the unusually intense predation of livestock by the wolves, as well as the elusiveness of the predators, were also perceived by the predator hunter as a sign of spirits' power acting against the people of Kustur. However, as can be seen from the above story, some villagers were sceptical about the idea proposed by predator hunter of wolves acting on behalf of spirits. Thus, people's perception of the behaviour of wolves indicates a multifaceted attitude towards predators. It seems to me that villagers having less intimate relation with wolves than *volchatniki* tend to see in livestock predation by predators as the violent nature of wolves rather than the will of the spirits. Meanwhile, *volchatniki* who engage in daily relations with wolves tend to perceive predators as powerful spiritual beings, which can be driven by *Baianai* as his agents send in retribution to people for their sins.

5.6 Case study 2: sensitive trapping of wolves

To show more precisely the complex relations of the *volchatnik* and wolf, this case aims to introduce the predator trapping tools and methods exercised by the *volchatnik* Vadim Nikolin. The case will show that trapping wolves requires good knowledge from the *volchatnik* in the fields of ecology and biology, as well as sensitivity to predators' behaviour and skills in positioning the traps to make them effective. Furthermore, the account will reveal that traps could be perceived as devices of communication between human and non-human beings – wolves – with whom the *volchatnik* engages in intimate relations based on respect and empathy.

5.6.1 The trip to the taiga with *volchatnik*

November 2019, it was the beginning of the winter in Yakutia and it was already cold. Snow had permanently covered the Yakutia landscapes from the beginning of September and it would not melt at least until the end of May. The hunting season for wolves was open and *volchatniki* had been making trips to the taiga to set the traps. It was a good time for hunting wolves as the predators would be saving energy by utilizing paths beaten in deep snow. For this reason, hunters may easier detect wolves after snowfall, while at other times of the year it is difficult.

I had known *volchatnik* Vadim Nikolin from the previous spring when we had met in Yakutsk to talk about wolf hunting after his trip to the taiga. After a long talk about the *volchatnik's* lifestyle, as well as about wolf biology, ecology and behaviour, Vadim suggested I go with him to the taiga next time. It was a great opportunity to see the everyday practice of contemporary wolf hunters, considering that *volchatniki* usually refrain from taking strangers as it is believed could bring non-success in hunting. Seemingly, Vadim trusted my experience of living on the taiga and also in my background in predator ecology. Supposedly, we shared something similar in our feelings of being on the taiga. Trust in taiga relations between people plays a significant role, concerning such features as cooperation and sharing, which sometimes is more important than money (more about the matter of trust on taiga relations, see Brandišauskas 2017, 111-125).

Thus, in the early cold morning, the *volchatnik* arrived with an all-road truck to take me on a 600 km trip from Yakutsk to the taiga of Kobiaiskii district to check traps for wolves that Vadim had set a month before. Since his regular brigade of *volchatniki* had broken up due to low earnings, his relative, a former truck mechanic–driver, often became a companion on such trips.

There was a room in the vehicle for three people to overnight, thus Vadim suggested me to join the trip. Probably, Vadim also considered that moving through the taiga by truck is safer with companions, thus this might also have been a second reason why he took me together. The truck, which Vadim had constructed himself, was a second home for the *volchatnik*, a vehicle to drive in the taiga and a shelter for spending cold winter nights while hunting wolves (see Figure 43).

Figure 43. Truck built for wolf hunting (photograph by Jefanovas 2019)

As a manager of a car service and a good mechanic, Vadim transformed a Russian truck "GAZ-3308 Eger", changing it completely by widening the cabin and welding new constructions that strengthened the vehicle's transmission. He also replaced the original Russian engine with a fuel-efficient Toyota diesel motor he had bought and transported 3000 km from Vladivostok to Yakutsk. Of course, such a handcrafted non-standard truck was almost impossible to legalize in the Yakutia State car registration facility. However, after Vadim put huge efforts into visiting many institutions, spending money and time, finally he legalized the truck thanks to his old connections in the police. I shall briefly outline here the exterior and interior of the vehicle as it provides a context to the *volchatnik's* everyday practice in wolf hunting. The outside equipment of the truck was adapted to wolf hunting, e.g. the additional frontal and sidelights make it possible to move through the taiga and hunt wolves overnight. A rifle could be shot at any time from the cabin by opening a hatch from above, while a specially equipped, easy-to-operate searchlight could be directed on any side to illuminate the target. Besides, during the trip to the taiga, a rifle was mounted on a stand on the driver's side to be ready to immediately fired if a wolf appeared. However, according to Vadim, wolves are highly cautious animals, thus he hadn't yet shot any wolves from the vehicle. All the wolves he had ever shot were trapped. The hatch from above the vehicle's cabin also provided the entrance on to the roof with many containers and compartments, where wolf hunting equipment was stored, as well as spare parts for the vehicle and various tools. The roof also served as a

natural freezer for the storage of hunted game, as well as various parts of small animals and birds used for luring wolves. Meanwhile, inside the vehicle, everything was adjusted to spending a long time on the taiga trip. Folding beds for three persons, an assembly table and the iron stove with the removable chimney outside make acceptable living conditions during the cold Arctic winters. The iron stove was made ingeniously to supply the reservoir with antifreeze that circulated through the tubes to keep the vehicle's engine warm all night. Keeping the vehicle's engine warm was vitally important as during winter nights the outside temperature may drop to - 50 °C. Underlying the importance of the heating system, Vadim recalled a case when on a cold winter morning the fuel tanks and the truck's engine completely froze, so that people had to light a fire under the bottom of the truck to start it.

However, there were a few peculiarities spending a night in Vadim's vehicle. First of all, the fire in the iron stove of the truck had to be kept going all night by dropping firewood in it. Yet, sometimes the fire went out and in the middle of the sleep, it was necessary to wake up and squash through the others sleeping to light the fire in the stove again. Meanwhile, smoke filled the cabin. Second, the door of the truck had to be opened for a while to let the fresh air inside. One of us had to stay awake to close the door so we wouldn't freeze at night. Hence, after such nights, some mornings were marked by a lack of sleep and with headaches. Usually, we woke up at 7 a.m. while it was still dark outside. At breakfast, Vadim told me different stories about hunting wolves and I discussed the ecology of predators. At dawn, we slowly moved along taiga roads, but the *volchatnik* often turned off the road to check for fresh wolf footprints. Besides, Vadim had a license for moose hunting, thus he also wanted to trace game on the way. It was not so much driving, but rather slow-moving swaying from one side to the other across frozen hillocks of the bogs or windfalls in the forest. The taiga there seemed ghostly since huge areas were covered with deadwood and, in some places, there were black burned trunks. Furthermore, many open areas with thick scrub, frozen bogs, wetlands, streams and rivers interrupted the taiga making driving challenging. Vadim said that the truck got stuck many times in swampy places, this often taking a whole day to pull the vehicle out, this only possible because of the powerful winch he had installed in the truck.

5.6.2 Snaring wolves

We gradually reached the places where Vadim had set the snares. One morning, he stopped the vehicle and pointed to red rags which were tied on trees - the rags signalled that the snares were set nearby. Knots on the rags

showed how many snares were set in a certain place. Vadim took his field diary where he had noted what kind, how many and when traps had been set, also, whether wolves had been taken last time and what kind of animals were around. Vadim took field notes about each trap he set, so he could always reconstruct events if questions arose. Thus, according to the diary, there were set three snares which we checked.

I asked Vadim whether he thought that the red rags that he tied on the trees could scare the wolves by signalling about the presence of humans. According to the *volchatnik,* the rags didn't scare wolves, but diverted the predator's attention from the traps, as well from traces left by a human. Vadim reflected on how wolves could recognize the traps: "*wolves routinely move through the scrub and tree branches which drag the fur and muzzle of the wolf. Then, suddenly a slight lustre of the iron traps in the thickness attracts the wolf's attention. A wolf would stop, step back suspiciously, sniffing around and then, recognizing the traps, would sharply turn to the side and flee*". Vadim thought that wolves are very sensitive beings capable of noticing the smallest details even in the dim night light. Thus, by looking at rags flickering on the tree branches, wolves would be less attentive to the traps which were set on the paths of the predators. After checking these first traps, the trip continued. Crossing a swampy area, the truck made a sudden stop as other rags on a larch showed there to be four snares at the place. It was strange to me that Vadim was looking for snares he had set on the old prints of the truck. At first, I took this practice sceptically, as I believed wolves were not fools in comprehending the signs of human activity and, furthermore, would connect it with the intentions of humans to kill the wolves. However, Vadim thought that wolves had long been accustomed to move along human paths. It is much easier for wolves to move over the solid paths than to get bogged down in the snow and from this perspective, predators are not fools. Vadim could not find the traps he had set, as it appeared that other hunters (hunting ground users) had followed after *volchatnik* and hit the snares with their vehicles. It seems that the hunters had checked whether the *volchatnik* had hunted wolves or poached moose. However, could it be, that by destroying the *volchatnik's* traps, the hunters were trying to avoid wolf revenge which would befall their livestock? Vadim thought that other hunters were simply envious of him. According to him, there were cases when hunters simply robbed a wolf right from the *volchatnik's* traps.

Having searched for the snares, Vadim brought a stick with a mounted magnet to retrieve the trapping devices from under the snow. After a short search, he found the iron snares with the magnet and he decided to set the snares in another place, where a few years earlier wolves had killed a moose,

and whose bones were still rotting there. It was a suitable place to set the snares as, according to Vadim's observations, wolves returned to the remnants of old prey to gnaw the bones even after three years. By setting snares in a new place, the *volchatnik* rolled tracks in the snow by driving the truck backwards and forwards. When I jumped out of the truck, Vadim warned me not to walk around except on the newly created tracks and, besides, to not urinate in any case. There was no concern that the wolves would recognize the human scent and be alert, but the scent could distract the wolves' attention from the path. The idea was to set the snares at the end of the rolled path so that the wolves would move along it and be caught in the snares.

Figure 44. Self-shooting snares with ground anchor set for wolves (photograph by Jefanovas 2019)

It was unusual to see that Vadim didn't even try to hide human traces. At the time of my fieldwork in Eveno-Bytantaiskii district, I observed the practice of other *volchatniki* who were striving to hide their footprints from wolves by pouring snow from a sack onto their traces while walking backward. However, Vadim's practice was different, he didn't worry about human smell and traces since the cold, snow, wind and sun would soon naturally wipe all traces on the surface. It seems that the behaviour of wolves differs according to their adaptations to certain environments. Meanwhile, the *volchatnik* considers that it is most important to camouflage trapping devices, as wolves could easily see and smell the iron and figure out the threat. To hide the smell of the iron, Vadim boiled snares and traps with larch branches for about two hours in a bowl. Additionally, the traps were placed on the roof of the truck as larch branches falling on the traps made them smell more natural. Camouflaging the snare on the ground between the bushes, Vadim cut several thin stems to mount the oval-shaped loop on (see Figure 44). According to

Vadim, the loop had to be mounted at a certain height from the surface so that the wolf would fall head forward for the loop to strangle his neck behind the ears, killing him at once. The point is that a vital artery of the wolf is located immediately behind its ears. However, if the loop slips further, tightening the wolf's neck in the area of shoulders, the predator will flee with the snare or even destroy it. It is believed that the wolf's neck muscles are strong enough to break a trap. Vadim also showed the construction of snares, saying that usual snares were made very simply from a tightening wire cable that could easily loosen to allow a wolf to escape. Many wolf hunters still used these simple construction snares, but Vadim applied snares with a sliding lock designed to prevent the snare loop from loosening again after it had tightened on the neck of a wolf. The *volchatnik* argued, that the nuances in setting traps are very important, even the diameter of the wire cable could be critical, e.g. wolves can bite through a 4 mm wire cable, while a 3 mm cable is more suitable because it slides between the teeth so that predators cannot bite it off.

Furthermore, it was common practice among *volchatniki* to fasten the traps to a weight: a heavy log, iron plate or ground anchor (see Figure 46) which allows the captured predator to move away from the capture site until it becomes exhausted and entangled. The reason why traps shouldn't be tightly mounted to a tree is that a wolf being chained to the spot could gnaw off his trapped leg and free himself. Especially when a pinched leg freezes, a wolf may bite it off as a dead part of the body. A mistake of wolves is usually that being trapped and trying to escape, they run to hide into the forest, but then the anchor clings to trees and bushes and the wolf tangles himself. However, the *volchatniki* accounted for many cases when a wolf with a trap on his leg was capable of running incredible distance. Such accounts became legends reflecting the amazing stamina and bravery of wolves. For instance, during my fieldwork in Tomponskii district, hunters talked about the trapped wolf male who had run 50 km across the taiga while hunters were trying to reach him with snowmobiles. The hunters sometimes lost the wolf from their eyes, seeing only footprints, one of which was the stamp of a huge trap. Finally, the exhausted wolf surrendered by lying on a hill till the hunters approached and finished him.

5.6.3 Hooking on the taiga

Besides snaring wolves, Vadim also used another wolf trapping method, the so-called (by Vadim) "hanging hook bait" [Rus. *Podvesnye kriuchki s primankoi*] which I didn't observe elsewhere during my fieldwork.

The first things that caught my eye when approaching the place with hanging hook baits were the feathers, legs, wings and heads of birds (capercaillie, black grouse, partridge) tied on trees above the taiga roads. Vadim called these a lure [Rus. *Privada*] which were used to guide the wolves to the direction where hooks were mounted. For luring the wolves, the *volchatnik* uses various parts of animals that he had hunted during the taiga trips. It could be parts of birds, as well the head of a moose or fox carcass. Besides, the *volchatnik* also collected the carcasses of dogs on roads that had been accidentally hit by vehicles. He argued that the bodies of dogs were the most preferable prey for wolves. The *volchatnik* cut the frozen carcasses of the game animals and birds into pieces and threw them around the traps.

After observing the place with hooks, the *volchatnik* found that most of the *privada* had been consumed by wolves. Many footprints around indicated that wolves had actively visited the place many times, but the hook with the lure simply hanging on the tree seemed suspicious to the wolves and they hadn't touched it. Although the hook was a simple catching device, it had taken time for Vadim to adapt it for wolf trapping. The frame of hanging hook bait was made of a pole horizontally fastened between two tree trunks. In the middle of the horizontal pole, there was a groove for attaching a cable with a trident hook (see Figure 45). The trident hook was made by soldering three

Figure 45. Handcrafted traps for wolves - hanging hook baits (photograph by Jefanovas 2019)

big fishing hooks. The bait was placed on the hook in a special way. A small piece of meat for the bait had to be sliced in a very thin layer and carefully wrapped around the trident hook. The idea was that the wolf by stretching on

his hind legs or jumping up to reach the bait would devour it at once and hang by his mouth remaining in this position until he froze.

However, according to Vadim, for the trap to work the bait had to be mounted at a certain height from the ground, so that a hooked wolf would not be able to touch the ground with his forelimbs – in such case, wolves are strong enough to break the whole structure. Additionally, the bait also had to be centred on the horizontal pole in such a way that a hooked wolf would not reach the tree trunks on the sides, as this could also allow the wolf to break the traps. Although the *volchatnik* had tried various methods to make wolf hunting effective, he had had only one case when a wolf had been hooked, but managed to escape. In this case, Vadim found that the horizontal pole was broken and the wolf had escaped with the wire cable and trident hook. According to the *volchatnik,* it seemed that the pole was too dry and weak. Besides, the groove carved in the middle of the pole for mounting the wire cable appeared too deep, thus weakening the pole. Vadim thought that the wolf had reached the crossed pole with his front legs and had broken it easily.

Although the hanging hook baits seemed a suitable wolf hunting method for Vadim, most of my contacts (herders/hunters) from Eveno-Bytantaiskii and Tomponskii districts took it as non-respectful treating of predators. Besides, herders/hunters consider hooks as a non-traditional method and, furthermore, they didn't think it could be effective. People argued that it was wrong to think that wolves are such fools that they cannot recognize a hook hidden in a hanging piece of meat. However, according to Vadim, he learned this method with hooks from an indigenous inhabitant of Verkhoianskii district who was a local *volchatnik* there. It is not a surprise, however, that local inhabitants could also apply such methods in wolf hunting, bearing in mind that since Soviet times hunters had been taught practices of predator extermination that were commonly used throughout Russia. Besides, in many Russian books about hunting, one could simply read instructions for making various devices for trapping wolves (for wolf trapping, see Sugrobov 2004; Iadrikhinskii 1998; Dvorianov 1948).

5.6.4 Reading behavioural signs of wolves

The tracks of a wolf pack crossed the taiga road along which we were travelling. Vadim sent me forward to determine the freshness of the footprints, the number of animals in the pack and the direction in which the wolves moved. The wolf trails were covered with a thin layer of snow, resembling small depressions extending in a straight line. To carefully read the footprints, I bent over them and blew off snow particles until a typical wolf paw shape

with the claws appeared. Following it till the sharp turn of the road, where wolves dispersed, I determined four wolves had passed through the area about a week before. The footprints showed that the wolves were moving towards a place where, according to Vadim, four traps [Rus. *Kapkany*] were set and many lures dispersed.

It was not the first time that the *volchatnik* trusted my experience in tracking animals and determining what kind of game were in the area. It seems that my knowledge in the field of ecology and the biology of wolves contributed to the fact that our relations became more familiar. Seeing my interest in human-wolf relations, Vadim shared his experience in wolf hunting by revealing various peculiarities. Thus, I had the opportunity to observe a *volchatnik's* practice in trapping wolves and to receive explanations of subtle details in the *volchatnik's* perception of wolf behaviour, which I am reveal in the following paragraphs.

Figure 46. Wolf traps (Kapkany) with the ground anchor (photograph by Jefanovas 2018)

By approaching the place with traps, Vadim noticed a lot of unusual behavioural signs of wolves: many intersecting tracks, ground scratching and urinating on roadsides and trees, all these indicating that something happened there to make the wolves anxious. *Volchatnik* claimed that he could recognize from a distance if a wolf had been caught by a trap. Usually, shrubs and trees up to 10 cm in diameter would be gnawed and devastated by a wolf in the trap area. Such behaviour indicated that the trapped wolf had dragged the ground anchor behind it, which got stuck in trees and shrubs forcing the wolf to gnaw them to try to free itself (for trapping devices with ground anchor, see Figure 46). Furthermore, the rest of the pack of wolves would nervously run back and forth at the place where their fellow wolf had got into trouble, not abandoning it for some time. As Vadim put it, such a high excitement of wolves showed that they "missed" someone of theirs [Rus. *Poteriali kogo to iz svoikh*]. The expression of "someone of theirs" could be paraphrased as "someone of ours" [Rus. *Svoi* or *Nash*], which is often used by indigenous herders/hunters, as well as by Russians to distinguish others

(outsiders) from their fellows, clan or family members. Thus, *nash or svoi* means someone who is less strange or alien, belonging to a certain group of people. For instance, when I arrived for the first time in Sakkyryr, local people related to me as an outsider, referring to me as an "*aspirant*", or an anthropologist. However, after some time living together with them, I became "our Aivar" [Rus. *Nash Aivar*], the familiar one. Hence, by adopting a similar notion to the wolves, Vadim demonstrated his attitude towards the wolf pack as a family unit with close relationships comparable to humans. Indeed, I heard many times other wolf hunters describing the wolf social structure in the pack as human-like. For instance, calling a wolf male a father, a wolf female a mother and the cubs as children or adolescents.

Shortly before checking the traps, Vadim told me a case about a trapped wolf female and her "faithful" male, this story revealing how the *volchatnik* "humanizes" the behaviour of wolves. Vadim told this case seemingly attempting to demonstrate that wolves are highly social beings and this perception, in some sense, brings wolves closer to humans. According to the *volchatnik*, a female wolf had got caught in one of the traps a year ago at the place we had just arrived. She spent two weeks trapped alive until she froze to death, but her partner, a wolf male, spent the whole time howling and repeatedly visiting the trapped female until her death. Vadim read the footprints of the wolf male and judged his mood, revealing that the wolf male was very nervous scraping the ground everywhere, as well as biting bushes and marking trees and stumps with urine. It seems that the wolf male felt very upset about his female suffering in traps.

While listening to Vadim's account, I empathized with the wolf male - I felt how I would feel if I lost my female, watching how she slowly dying in the trap, unable to do anything to get her out. Could *volchatniki* also respond empathically to the sufferings of other than human beings, wolves? In fact, much research in psychology has focused on human-animal empathy, which has been considered to apply equivalently to human and animal targets (see also Eisenberg 1988; Signal and Taylor 2007; Angantyr et al. 2011). Thus, if *volchatniki* empathize with wolves, then I suppose this perception makes the relations with predators even more intimate, and I will soon perceive it through my own experience by taking the perspective of the wolf.

While I was in the middle of my thoughts, events took an unexpected turn. Coincidence or not, when Vadim approached the traps that he had set in the place of this story, another extraordinary event occurred. It appeared that other hunters had been there before and had attached a note on a stick next to the trap. According to the hunters, they found a dog in the *volchatnik's* trap, thus they had freed the dog out and fed him with bread. It sounded ridiculous, what

did it mean to feed a trapped dog with bread? Was it a joke or was it a mockery of Vadim? Anyway, it didn't look to be true. Besides, how could there be a dog in the middle of the taiga? Footprints of wolves in the area suggested that one of the wolves had caught in the trap and Vadim believed that the hunters had brazenly stolen a wolf from the traps to utilize the opportunity to receive the bounty. Examining the traps, we discovered that one trap was triggered and had thrown to the side by the hunters. Frozen drops of blood with a tiny piece of tissue on the trap showed that a wolf had been caught in the trap and had been taken out. Vadim argued that it was not the first case that a wolf was stolen by other hunters (hunting ground users) from his traps. This event revealed to me that there was a certain amount of competition between hunters and *volchatniki*, because not all people see *volchatniki* as the "heroes" liberating people from wolves. Some hunters are suspicious of the *volchatniki*, believing that they are utilizing the opportunity to poach wild ungulates. However, the disagreements between *volchatniki* and other hunters at least sometimes may favour the wolves. By hindering *volchatniki* from hunting wolves and destroying traps, other hunters unintentionally allow wolves to survive. Furthermore, by inspecting the actions of *volchatniki*, the hunters disturb the trap sites, therefore leaving signs of human activity which make wolves even more cautious and adaptive.

Meanwhile, the sequence of events leading to the incident with the theft of the wolf seemed suspicious to Vadim, he took it as a bad omen, auguring a failure in the following hunt for wolves.

5.6.5 Communicating through traps

The footprints of three wolves stretched down to the river "Sitta", another place where Vadim had set traps. Having observed the movements of wolves in the area for many years, Vadim knew the paths of predators and how they moved, therefore it was not surprising that the locations of the traps had been chosen based on wolf routes. Vadim and I judged that the footprints of the three wolves of the previously identified four indicated that one wolf had disappeared after getting caught in the trap from which he had been taken by the hunters. However, Vadim seemed concerned that the hunters might have also touched his traps on the riverside. Besides, the *volchatnik* felt that there could be more incidents with wolves, as we were going to a place where non-ordinary events with wolves had occurred for many years.

From my perspective, the riverside seemed a very nice taiga corner compared to the ghostly areas seen before with deadwood and black burned larch trunks. Although the past days had been cloudy, the sun suddenly shone

through the canopy of trees, making the snow particles on the river ice sparkle in the coldness. Many old and fresh paths of wolves deep in the snow stretched backwards and forwards across the river ice indicated that the place was frequently visited by predators. It seemed that the wooded valley with intrusions of bogs provided suitable habitat for wolves to stay for a day's rest during a long journey across the taiga.

Having reached the riverbank, we noticed the tracks of the vehicle of the hunters that had been there, apparently examining the movements of the wolves or following the old prints of Vadim's truck. Fortunately for Vadim, the hunters had turned back without crossing the river to where the traps were set. Meanwhile, wolf footprints passed to the opposite of the riverbank. Following them, Vadim and I approached two *kapkany*. Amazingly, I couldn't see any signs in the snow indicating the kapkani, only the red rags on the trees that signalled the presence of the traps. However, the wolves seemed to have somehow got aware of the deadly iron devices hidden under the thick snow. According to the tracks, the wolves approached the *kapkani* and stopped about 20 cm from them, then the predators turned abruptly to the side and bypassed the traps. According to Vadim, wolves could supposedly catch an ultrasound emitting from under the snow from the stretched iron springs of charged traps. Thus, the signal that we cannot hear evokes caution and avoidance in predators. From this point of view, the traps could be perceived as a perceptual and communicative device intermediating in *volchatnik*–wolf relations (for an idea of human-made objects signalling to animals of human intentions, see also Anderson 2017, 398-418). Traps, as man-made catching mechanisms, communicate the intentionality between the *volchatnik* and wolf, with the latter striving to identify the danger inherent in these objects and the former trying to conceal his intentions from wolves by adjusting the traps according to the predator's behavioural responses. In this kind of reciprocity, two (one of the *volchatnik,* another of a wolf) competing intentions could be distinguished which try to overcome each other. Vadim calls such interspecific communication as a "*play in chess with the wolves*". Meanwhile, the ability of wolves to comprehend the concealed threat in traps has become one of the legends dealing with the spiritual power of predators. During my fieldwork, reindeer herders and hunters even linked the extraordinary sensitivity of wolves to feel the traps with the spiritual power of shamans to know things ahead.

Meanwhile, the following events revealed even more puzzling behaviour of wolves, which Vadim linked to the supernatural. The footprints of wolves showed that the predators moved towards two snares that Vadim had set on the wolf path, but we found that the wolves had passed the point with snares

by making a loop and suddenly turning to a huge marsh nearby. The predators had spread across the marsh by strangely looping, running backwards and forwards- and digging the snow around. Vadim decided to look around carefully as such behaviour from wolves often signalled that one animal from the pack had got into trouble. Suddenly, the *volchatnik* noticed that one of two snares had disappeared without a sign. It was strange as we didn't detect gnawed or broken trees, nor signs on the ground of a dragged anchor nor signs of a struggle, blood or the imprint of the body of a wolf in the snow. These were no indications of a trapped wolf. We also tried to dig the snow and search for the snare with the magnet, but we found nothing. Furthermore, there were no footprints of human, moose or other big animal that could be blamed for the disappearance of the snare. However, after careful re-examination of the snare place, I found that one thin stem was sharply cut off. Although the stem was barely noticeable, Vadim suggested that it had been gnawed by a wolf. Besides, the stalk was still fresh and green indicating a recent event. Not finding a rational explanation for the event, Vadim commented: "*very strange, it is as if a wolf had risen into the air with the snare and flown away, or perhaps Baianai removed the snare from the wolf and freed him*".

While we sat on a fallen larch to rest after walking in the snow and to think about the missing snare, Vadim, trying to portray this place as unusual, shared another story that revealed his perception of the wolf as a powerful spiritual being, whose abilities transcend biology.

"A year ago, I arrived to check the traps and saw marks of drama on the ice of the river. A wolf had been trapped and desperately struggling for his survival. I saw the bloody footprints on the snow. The wolf had been pulling the iron trident anchor behind, which was attached to the trap. I don't know how long he had spent running backwards and forwards, jumping huge leaps, spinning on his back and shaking his trapped leg, but eventually he ran into the forest. I found the traps with the ground anchor thrown on bushes as high as one metre. The trap was severely deformed by the bites of a wolf. However, the wolf's footprints had vanished. I can't explain what force could make such things."

The account led me to understand that although Vadim strongly relied on high-tech skills in crafting traps and used rational explanations of animal behaviour based on biology and ecology, he also immersed himself in the world of spiritual beings by interacting with wolves daily and communicating with them through signs. Moreover, it seemed that the wolves strongly tied Vadim to the taiga, making him feel what he called to live as a *taëzhnik*. Wolves were the main reason why Vadim, who was already over 70 years old at the time of my visit, still dwelt in the wilderness. Engagement in long-

lasting relations with wolves also made Vadim respect them. For example, Vadim recollected how once a trapped wolf was fighting for his life while hopelessly tangled in a huge ball of sticks and various river debris. At night, the *volchatnik* heard how the wolf was howling and banging his teeth trying to gnaw the trees to free himself. Vadim spotlighted under the trees when suddenly something shone in a greenish colour. It was the eyes of the wolf and it immediately hid its gaze and kept silent. The wolf lay curled up, keeping his head on his front legs and covering his muzzle under his tail, he surrendered conceding defeat. The predator didn't show aggression nor pay attention to the *volchatnik*, the wolf just waited for death. Vadim made a shot. After that, the *volchatnik* felt deep respect for the strong spirit of the wolves that strove to survive until the very last moment.

By telling these stories, Vadim seemingly wanted to show me that hunting wolves had a multifaceted meaning to him, he also demonstrated empathy for wolves which had arisen in response to the impression of the wolf's character, suffering and strong spirit. As well as explaining wolf behaviour, *volchatnik* was also probably trying to raise my interest in his lifestyle. Thus, finishing his story, Vadim sent me to follow the wolves' footprints and observe the whole area, hoping that something new would result.

I started to read the wolves' footprints from the point of the snare's disappearance. The tracks were several days old. Passing the snares and trampling in the marsh, the wolves had run through the forest down to the river. Further, the tracks stretched along the ice and, mixing with older tracks of various animals, soon became indistinguishable. Meanwhile, I couldn't find any signs of a dragging anchor or any other indication that the wolf was trying to free itself from the trap. Finally, the wolves' footprints separated from the path of other animals and lead from the river to the forest. By following it and passing through windfalls, squeezing under thick tree branches and looping through bogs I couldn't shake the feeling of looking from the wolves' eyes. Walking after the wolves backwards and forwards, I perceived as if I was wandering for someone absent, e.g. for my brother, sister or close fellow who was lost in a trap. For a while, I immersed myself in this perspective by imagining the place where the wolf with a snare on his neck lay tangled in debris and of the howls of his calling pack fellows. I tried to predict a possible place where the trapped wolf could be, but I found nothing. The footprints lead me to a cliff where I read through the prints that two wolves had jumped down and ran far away up the river, abandoning the area. At that moment, I thought that *volchatniki* by reading the signs of wolves adopt their point of view to determine the movement, mood and behavioural habits of predators. Indeed, according to Brandišauskas, the Orochen Evenki hunters of *Zabaikal*

Kray, by observing tracks, scrapes and marks found imprinted on the surface, eventually glean information about an animal's personality, character, social life and preferences (see Brandišauskas 2012). In this sense, the hunting is "perspective-taking", as reading the signs of game animals and looking from their point of view, the hunters gain an advantage in comprehending the very next move of the prey. However, it seems that while reading the signs of wolves in the snow, *volchatniki* also see human-like drama (feeling as if they instead of a wolf were looking for someone close lost in a trap) which disturbs the *volchatniki* sufficiently to evoke a similar emotional state to that of another being. However, in these *volchatnik*-wolf relations, the self/other distinction is certainly maintained. Thus, the *volchatnik* is not necessarily concerned for the wolves, because empathizing with other beings does not mean compassion for them, but rather a perception of the feelings of the other person through perspective-taking (for the definition of empathy, see Cuff et al. 2014; for empathy and perspectivism in hunting see also Willerslev 2004, 629–652; Brandišauskas 2017, 88). Moreover, empathy with others can be experienced unintentionally/automatically without feeling affection, compassion, positive regard or the desire to help (see also Chismar 1988). Thus, the act of killing wolves from *volchatnik's* perspective is compatible with empathy for them.

Consequently, empathy and attitude towards wolves are linked and provide a bridge between the self and other beings than humans. Thus, the feeling of connectedness to the certain behaviour of wolves which resembles respectable human traits (bravery, stamina, fidelity, strong will) also evokes a sense of respect for predators. However, respect for wolves does not prevent *volchatniki* from killing predators, just as killing wolves does not mean disrespect for them. In this regard, the relations of *volchatniki* with wolves always represent multifaceted perspectives. Indeed, Nadasdy (2005, 291–331) also showed that although American Yukon indigenous have great respect for wolves, this doesn't mean that they do not kill them if they threaten people's subsistence.

However, at least sometimes, human respect for wolves does "work" in favour for them, because *volchatniki*, seeing the desperate attempts of wolves to survive, can "give" them an opportunity. For instance, once a wolf managed to free himself twice from traps that Vadim had set, but the wolf did not leave the area. Although the *volchatnik* could have set traps again to try to kill the wolf, he didn't. Vadim just waved his hands and before abandoned the area said: "*he* (the wolf) *is not ours, let's leave him free*" [Rus. *On ne nash, puskai ukhodit*]. In that case, the *volchatnik* wasn't so ambitious to destroy the wolf because he didn't perceive this as a personal failure or dishonour in hunting, but rather as the wolf's luck and high ability to survive which deserved

respect. Of course, such morality regarding wolves is more the exception than the rule, as *volchatniki* always strive to use their efforts and skills to trap wolves as much as they can.

Figure 47. Volchatnic pulling "privada" behind his back to lure wolves (photograph by Jefanovas 2019)

Hence, returning from observing the wolf' tracks, I found Vadim was walking along the wolf path and dragging a piece of moose meat tied to a rope behind his back (see Figure 47). It appeared that Vadim had not given up on his attempts to overcome the predators and had decided to set more traps in the given area and to attract the wolves with the smell of moose meat. Applying his skills in trap setting, the *volchatnik* dug a pit right on the wolf tracks, so to say "under the wolf footprint". While setting the trap, Vadim carefully put it over the pit so that the wolf would step deeply into the trap and be caught strongly. *Volchatnik* strove to trap the wolf's leg as high as possible or otherwise the predator could be caught by just his paws. That would allow the wolf to escape, as wolves are known to even gnaw their leg. Wolves can survive with missing parts of their limbs and such predators can be recognized from their footprints. The *volchatniki*, by constantly observing their hunting areas, recognize wolves personally by distinguishing lame individuals some of whom have lost their legs, toes or paws. These signs show that the wolf had been once trapped, but had freed itself and thus it signals the presence of experienced individuals who are very cautious, this making it difficult to trap them.

To prevent the escape of wolves from traps, Vadim made the catching devices as effective as he could. For instance, he put a doily on a trap so that the trigger of the device would be very sensitive because the doily allowed a thin layer of snow to be sprinkled to mask the trap. Furthermore, the *volchatnik* additionally set a snare over the *kapkany*, thinking that a wolf falling into a trap would jump up and the loop would tighten on his leg. Vadim's idea was that both the *kapkany* and snare would be equipped with

ground anchors and thus a wolf would become doubly trapped. To disguise the traps, Vadim used a special tool - a carved wooden shovel with a wolverine tail attached to the opposite end, called a "*rassomakhin khvost*" in Russian (see Figure 48). The tool had a double use: to dig a pit in the snow for setting a trap and to wipe out signs of it. The *rassomakhin khvost* is a common tool for *volchatniki* and it is usually carried in the *volchatnik's* vehicle. Having disguised signs of traps, Vadim used another tool - a wolf's paw mounted on a long stick - to stamp false wolf footprints to imitate the pass of a wolf leading over the *kapkany* hidden under the snow. Moreover, to distract wolves' attention from the traps, Vadim sprinkled wolf urine around, which had been collected in a plastic bottle from territorial marking points of the wolves. Thus, by smelling the urine of a stranger wolf, wolves would respond with the nervous marking of trees and the scratching the ground, instead of carefully examining traps. These tricks were designed to mislead wolves and drive them right into the traps.

Figure 48. Volchatnik's tool "rassomakhin khvost" (wolverine tale) (photograph by Jefanovas 2019)

Observing the process of trap setting, I perceived how sensitive wolves must be to recognize the human intentions concealed in the trapping devices, as well as to determine through signs the precise location of traps. As confirmation of my thoughts, Vadim by stepping slightly back accidentally kicked a trap he had just loaded. Although the traps had only been camouflaged under the snow a few minutes earlier and the wind and snow hadn't yet fully hidden the signs of human activity, it was already difficult to detect the traps between the intermingling wolf and human prints. Of course, it was already evening and we were tired after the day's activity, so losing his vigilance Vadim didn't spot the traps under his feet. However, wolves routinely move across the taiga day and night and, when encountering traps on their paths, they still manage to pass them in an almost inexplicable way.

As our trip was coming to an end, these events marked the ending of the time I spend on the taiga with Vadim. In the morning before leaving, Vadim decided to make *privada* on the river ice. Making the hole in ice, the *volchatnik* half-drowned a sack filled with the remnants of birds and game animals. The idea was that two-thirds of the sack would freeze under the ice, while the other part would remain on the surface. It would take time for the wolves to dig up the remains from under the ice, so the predators would return many times until some of them, losing their vigilance, fell into traps set nearby. This idea came to Vadim while observing wolves that preyed on muskrats by destroying the rodents' houses build from branches on the ice of a lake. The wolves patiently returned to check if the muskrat would appear at the site of the destroyed house. Analysing the behaviour of the wolves, Vadim perceived how to make a lure. Thus, the *volchatnik* again demonstrated that he was able not only to set traps but also to look from the wolf perspective to predict their behaviour.

5.7. Conclusions

In this final chapter, I showed how human–predator cohabitation is reflected in the relations of professional wolf hunters – *volchatniki* - and wolves. Throughout the chapter, I adhered to the notion that the interaction between *volchatniki* and wolves embodies a complexity of interspecific relations based on intermingled notions of aggressive interaction and peaceful existence. Introducing wolf regulation practices exercised by *volchatniki* in Yakutia, I showed that the notion of prominent wolf hunters originated in the Soviet times as part of the Soviet state's system of predator extermination. Although the position of *volchatniki* as State hunters vanished together with the Soviet Union, *volchatniki* still play important role in wolf regulation. I showed that bounties for wolves have become the government's main strategy to stimulate wolf regulation at the initiative of wolf hunters. Meanwhile, some *volchatniki*, based on voluntary agreements, cooperate with governmental authorities to conduct wolf regulation and, on behalf of the State, encourage local residents to take measures against predators. However, bounties for wolves do not always fully cover the expenditures of *volchatniki* in organizing predator hunting. Thus, *volchatniki* consider wolf hunting as a way of life rather than a profitable income. Enacting *volchatniki* to conduct predator control measures and establishing bounties for wolves, the government strives to maintain the presence of its regulation in rural landscapes and to demonstrate its concern for the protection of livestock.

In exploring the complexity of the *volchatnik*-wolf relationship, I sought to demonstrate that intimate relations with wolves, in which the *volchatniki* engage as a result of long-term interaction, lead them to perceive predators as a complex of signs representing sensitivity, cunningness, bravery, elusiveness, violence and strong will to survive. In this regard, *volchatniki* are perceived by inhabitants of Arctic Yakutia as non-ordinary hunters, some of whom *Baianai* endowed with spiritual power to act against violent and revengeful predators by applying ritualistic and trapping practices.

In this chapter, I presented two cases demonstrating different perceptions of wolves by *volchatniki*, as well as hunting tactics that combine rituals and trapping techniques to different degrees. One case emphasized the rituals against wolves performed by the predator hunter, and the other the practice of the *volchatnik* who used his high-tech skills and tools to trap predators. Although I demonstrated these wolf hunting strategies as separate cases, both nevertheless involved trapping devices and techniques and the perception of wolves as non-human beings, as well as the perception of a wolf based on biology/ecology. Overall, engagement in wolf hunting (from the perspective of *volchatniki*) in a sense means the dealing with spiritual forces. This is because the extraordinary sensitivity of wolves to comprehend the concealed threat in traps, as well the wolves' high elusiveness, is often linked to spiritual power that transcends biology/ecology. Indeed, cases showed that wolf trapping is not always successful, so rituals can be enacted along with trapping or as an alternative tactic to regulate the wolves.

Thus, perceiving wolves as both spiritual beings and biological ones, *volchatniki* engage in the sensitive reading of the behaviour of predators. First of all, wolf hunting is perspective-taking, as by reading the behavioural signs and looking from the eye of the predator, the *volchatnik* gains an advantage when adjusting traps. Meanwhile, wolves strive to identify the danger inherent in traps to overcome human intentions. Thus, the traps stand as the perceptual and communicative device intermediating *volchatnik*-wolf relations. Second, reading the signs of the wolves sensitively and taking their perspective, the *volchatnik* also perceives the suffering of trapped predators, as well as certain behaviour resembling respectable human traits (e.g. bravery, resistance, strong spirit). Hence, experiencing a similar emotional state as that of other beings (wolves), the *volchatnik* responds empathically. However, though empathizing with wolves, the *volchatnik* doesn't necessarily feel compassion for them, but rather respect. I also demonstrated that, in some cases, when perceiving the desperate attempts of a wolf to survive, the *volchatnik* might give the opportunity for the wolf to go alive. Of course, respectful attitudes toward wolves do not restrain *volchatniki* from killing predators, just as killing

wolves does not mean disrespect for them. The intimate interaction between the *volchatnik* and the wolf shows that the multifaceted (and even opposite) perception of predators does not provoke contradictions, but rather that these points of view constitute each other. Importantly, these human-wolf relations embody the intermingled modes of interspecific relationships based on aggressive interaction and peaceful existence which I seek to reveal throughout the dissertation by applying an analytical concept of cohabitation.

CHAPTER 6: CONCLUSIONS

This dissertation is the result of nearly 10 months of ethnographic study based on participant observations that took place mostly in Arctic Yakutia (approximately nine months) and the Tyva Republic (six weeks). This thesis investigates the social relationships that exist between reindeer herders/hunters and non-human beings, specifically wolves, that share the mountainous landscapes of Siberian taiga and tundra. The main purpose of this dissertation is to demonstrate how the modes of interspecific relations, namely aggressive interaction and peaceful existence, can be framed by a concept of human-wolf cohabitation. The term cohabitation in this thesis is applied as an analytical concept recognizing human-wolf interactions not as mere opposition or conflict but as a complexity of intersubjective social relations that have arisen from the long-term history of living together and adapting to do so in the shared landscapes in Arctic Yakutia.

This study began by outlining the socio-economical background of the daily life of contemporary reindeer herders/hunters and showing the socio-economical role that wolves play in human subsistence. Continuing with chapter 2, *Opportunistic subsistence of contemporary reindeer herders/hunters*, I characterized this concept as an adaptive everyday practice of herders/hunters who utilize various economic and social possibilities to succeed in the changing socio-economic and ecological environment of market capitalism. Adapting to modern living conditions and utilizing communication technologies, herders/hunters establish cooperative social networks between themselves and urban and rural kin and acquaintances that provide a platform for the distribution and exchange of reindeer products (meat, hides, antlers) and for obtaining various supplies (commodities, fuel, equipment). The social networks that the indigenous people utilize go far beyond the villages and cities of Yakutia and even extend to foreign countries for the development of so-called reindeer tourism. In addition, herders/hunters seize opportunities to participate in social events such as the "Reindeer Herder's Day" festival to win monetary and material prizes of high economic value. The social events are also an expression of "traditional culture" in which indigenous identity based on reindeer symbology is celebrated. However, despite income from reindeer products and winnings at social events, the main sources of monetary income for reindeer herders are government subsidies paid per reindeer head. As a result, some herders simply equate that the more reindeer the wolves eat, the fewer subsidies people get. According to reindeer herders/hunters, they perceive their subsistence as a struggle for survival in the post-Soviet environment. Following the collapse

of the Soviet Union, the post-socialist period was associated with a harsh transition into the global market system. It was marked by political upheaval, the collapse of Soviet farms, a shortage of resources and diminishing numbers of domestic reindeers. To show the connection between the reindeer economy and predators in the period after the end of Soviet times, I outlined how reduced control led to an increase in the population of predators, while, at the same time, the number of domestic reindeer decreased. Although there are many socio-economic reasons for the decline in reindeer numbers, such as insufficient government support, people often accuse wolves of destroying the reindeer herding economy on which the culture and identity of herders/hunters depend. In a sense, the wolf serves as a "scapegoat" absorbing the frustration of the people regarding current socio-economic conditions. To illustrate how contemporary herders/hunters adapt to the unstable socio-economic environment brought by the collapse of the Soviet state, the transition period and the subsequent life in market capitalism, I focused on four life stories of herders/hunters that also reveal different property models of reindeer management: namely a mixed property of private and municipality own reindeers, a clan community *obshchina*, a large scale agricultural cooperative and a small-scale privately-owned herd.

In the first account, I described the lifestyle of Afanasii Konstantinov, an indigenous man from Eveno-Bytantaiskii district who was the brigadier of a reindeer herd of combined property: both reindeers owned by his family and reindeers of a municipal enterprise. Managing a total of over 1000 reindeers, Afanasii received income from State subsidies for his reindeers and also a salary from the municipal enterprise. Such a subsistence strategy was quite sufficient to meet the needs of his nomadic family. I consider Afanasii's lifestyle a special case as families of reindeer herders have become a rarity on the taiga since the times of the Soviet policy to "civilize nomads" and sedentarize them in Soviet villages. However, to keep up with modern life and reconcile the needs of his family, the herder would constantly move between the village and taiga, sometimes leaving reindeer unattended and exposed to wolves. Such practice was unusual during the *sovkhoz* times. Some elders from Sakkyryr even argue that contemporary herders negligently look after reindeers leaving them, as they say, "*to be herded by wolves*" [Rus. *Olenei pasut volki*]. I demonstrated that the "Reindeer Herders Day" festival that takes place annually in Sakkyryr village was part of the opportunistic subsistence that complemented Afanasii's family budget with profitable prizes won in races with reindeers. Through the various exhibitions and conquests based on reindeer symbology, the festival also allows the prestige and identity of herders/hunters to be expressed. From the perspective of

herders/hunters, predation by wolves together with the difficult contemporary socio-economic environment threatens both the traditional lifestyle and the identity of indigenous people.

The second lifestyle I focussed on was that of the indigenous woman Daria Starastina from Eveno–Bytantaiskii district, the owner of a private reindeer herding enterprise, an *obshchina.* She managed one of the biggest reindeer herds (2000 heads) in the district and, among the inhabitants of the district, she was known as an ambitious leader who put a lot of effort into protecting the herd from predators. Through attentive breeding of reindeers, she had become an economically strong and fairly rich person, she also had property in the city and village. Unlike Afanasii, Daria spent most of her lifetime on the taiga attending her reindeers, only rarely visiting the village or city. To successfully manage the large reindeer herd, the woman engaged in reciprocal cooperation with a network of her relatives and acquaintances. In this account, I also demonstrated that to carry out labour-intensive seasonal jobs with reindeers, the herders cooperated and visited each other's herds, receiving in exchange equal support or reindeer meat as payment for the work. It can be considered that such adaptation became common practice with the collapse of the Soviet farms that managed huge reindeer herds through the State.

To analyse how the reindeer herding economy is organized by owners of small-scale reindeer herds, as well as by large scale enterprises, I went to Tomponskii district to visit herders/hunters, villagers and managers of the agricultural cooperative “Factoria Tompo” which was set on the ruins of the formerly well-known in Yakutia *sovkhoz* “Tomponskii”. I found that the reindeer number in “Factoria Tompo” had been gradually diminishing and, at the time of my fieldwork, had dropped to its lowest level since the *sovkhoz* times. Herders/hunters were of the opinion that there were two main reasons for such decline: - first, it was impossible to maintain the reindeer economy at the level of *sovkhoz* times without strong governmental support; second, reindeer predation by wolves and bears had increased dramatically since the rate of predator extermination had dropped since the end of the Soviet state. As a response to the weakening reindeer economy, the herders/hunters ran so-called reindeer tourism businesses. Locals had adapted to using social networks and offered trips to the reindeer encampments to people from abroad. Describing a case of an owner of a small reindeer herd in Tomponskii district, I also demonstrated that some reindeer herders/hunters had separated from “Factoria Tompo” and now relied on the incomes they obtained from a combination of sources, such a governmental subsidies per reindeer, hunting of fur animals/wild ungulates, reindeer-tourism and winnings of prizes during public events.

In Chapter 3, *Soviet state regulation and ideology of extermination of wolves*, I stepped back from the contemporary life of herders/hunters and explored the historical background to the relationship between humans and predators in the YASSR. This chapter introduced the herders/hunters' perceptions about wolves and showed how these perceptions were affected by the atheistic ideology of the Soviet state. The main aim of chapter 3 was to analyse how the aggressive atheistic ideology of the Soviet state was designed to both exterminate wolves (also other predators) and annihilate the animistic worldview of indigenous herders/hunters about animals as non-human beings (the animistic perception about predators is presented in Chapter 4). The main reason why the Soviet state launched a campaign of predator extermination in the YASSR was that, in line with the industrialization and collectivization of the Russian North after WWII, the development of the farms became the economic strategy of the State in rural areas, while livestock predation by wolves was considered harmful to the agricultural economy. Thus, to introduce very negative attitudes toward predators, the Soviet state announced wolves as "enemies of the Soviet nation" [Rus. *Vrag naroda*]. Although all predators (wolves, bears, eagles, lynx, wolverine) were strong regulated in Soviet times, wolves were exterminated most intensively, since the damage they caused to the agriculture of the USSR was the highest.

I showed that State bodies and the bureaucratic apparatus were actively involved in large-scale campaigns to eradicate predators in Soviet Yakutia. The State utilized two interrelated strategies. The first was to annihilate animistic beliefs about predators through aggressive ideology and propaganda against predators, as well as by encouraging hunters with bounties for wolves, rewards, social competitions and training seminars with predator extermination instructions. This ideology was so penetrating that it affected the vernacular perception of herders/hunters about predators. The second strategy was to throw tremendous amounts of resources at organizing wolf shooting from helicopters, trapping and poisoning. I demonstrated that the campaigns of predator extermination in the YASSR reduced the wolf population and this resulted in lower levels of predation of livestock. However, the goal of the Soviet state to exterminate wolves as a species was never achieved. Although many indigenous people of Yakutia were involved in predator extermination campaigns, the animistic worldview of herders/hunters was not eradicated, but rather coexisted along with the wolf extermination practices introduced by the Soviet regime. By adhering to animistic perception, as well as respecting wolves for their intelligence, stamina and bravery, and through empathizing with wolves, herders/hunters in some cases gave wolves a chance to survive (the intimate relations with

wolves based on empathy and respect are discussed in Chapter 5). I also showed that negligence in wolf extermination and bureaucratic obstacles sometimes led to the failure of predator extermination campaigns in Soviet times, this also contributing to the adaptation and survival of wolves. Hence, although many resources were thrown by the Soviet state at organizing wolf extermination, herders/hunters of Arctic Yakutia deliberately or unintentionally gave opportunities for wolves to survive and adapt. Furthermore, the high adaptivity and plasticity of wolves as a species also allowed them to survive by hiding from persecution, breeding, re-establishing and hunting on remote taiga/tundra landscapes.

If Chapter 3 on Soviet times is fundamental to understanding the historical processes of the relationships between humans and predators, then Chapter 4, *In the neighbourhood of predators*, is the centrepiece of this thesis as it studies the complexity of the social relations of humans and non-human beings that are an integral part of extended interspecific cohabitation in the shared landscapes. This chapter focused on describing the communication between reindeer herders/hunters and predators (through behavioural signs, warning signs, signs of revenge), as well as between humans and the spirit realm (through ritualistic performances). The first half of Chapter 4 is dedicated to analysing how signs of human/predator activity, as well as their intentions, are perceived mutually by observing, learning and reading the behaviour of each other and corresponding adaptively. For instance, I demonstrated that mutual awareness of keeping a distance from each other and avoiding conflicts are the preconditions of peaceful existence of humans and predators. In this sense, traps, signs of a snowmobile and activities such as firing into the air can all be perceived by wolves as warning signs which index human attempts to eradicate the predators from the area. Meanwhile, an abundance of wolf footprints as a sign of potential reindeer predation may also make herders avoid areas densely occupied by wolves. Another way to keep a distance is to communicate through territorial markings which index the intentions of humans/animals to respond aggressively against intruders into the area. For instance, a bear that is perceived by herders/hunters as the master of a given place can attack people who disturb him in his area which is marked with territorial signs (scratching, biting on the trees). Likewise, the aggressive response of herders/hunters to predators causing harm to the livestock or humans in the taiga encampments (bears sometimes attack people) could be also taken as reciprocity necessary for peaceful existence. Indigenous people of Arctic Yakutia perceive the killing of predators not as purposive hunting or extermination, but rather as an exceptional right to kill a certain predator that does not respond to warning signs and violates distance limits from a domestic

place. Furthermore, the excessive killing of bears is, to some degree, regulated by taboo, as according to Eveny legends the bear is considered a common "ancestor" or consanguineous with the Eveny. Thus, killing bears excessively or without an urgent matter is usually perceived by the Eveny as a sin, as disrespectful treatment of a mythical, common ancestor. Therefore, it is impossible to draw a concrete line between peaceful existence with predators and aggressive interaction by killing them, but both modes of interspecific relations should be considered as a part and parcel of daily cohabitation. Predators and humans adjust their behaviours by observing each other's actions and revealing the meanings. Wolves have adapted to understand and distinguish between those signs of human activity that carry a threat and others that can be ignored, consequently the predators adapt to the changing activity of people. I showed that compared to Soviet times when predators were exterminated intensively, wolves were now less afraid of vehicles, the smell of fuel and other signs of human activity that wolves in the past associated with death. Additionally, the changed behaviour of contemporary herders, who now spend more time in the village and thus leave unattended reindeers, attracts predators closer to domestic places and livestock. Humans respond to the actions of predators by carefully observing and learning their behaviour and accordingly adapting trapping devices, thus engaging in intimate predator hunting (the intimate relations of *volchatniki* and wolves are specified in Chapter 5). Hence, from the perspective of behavioural adjustment, human–wolf cohabitation can be perceived as that of constantly changing relations which are framed by the shifting socio-economic and ecological conditions.

In the second half of Chapter 4, I explained of how human–predator cohabitation can be perceived from the point of view of the cosmology of herders/hunters. In this regard, the notion of predator revenge is the central idea based on the belief that predators seek revenge for the loss of their brethren or offspring on the herders/hunters responsible by destroying their livestock. Thus, livestock predation by predators could be perceived as a sign of retribution. It could be concluded that these animistic beliefs of indigenous people also regulate against excessive killing of predators and this should be considered as an integral part of human–predator cohabitation. However, according to the cosmology of herders/hunters, the relation of humans and predators also involves the dimension of the spirits. The killing of predators is considered by herders/hunters as a sin that evokes the anger of the soul of the predator as well as the spirit-master *Baianai* who, it is believed, can also act on the destiny of the people by punishing them or even causing death. From this perspective, predators are perceived as mediators between humans and *Baianai* to whom the souls of killed animals can refer asking for revenge on

people. The important idea of this thesis is that the tripartite relations (humans-animals-spirits) can be viewed as hierarchical as animals are subordinated to *Baianai,* while humans negotiate with the realm of spirits through signs. I explained that the communication of herders/hunters with the spirit realm is not as an equivalent, humans cannot understand the "speech" of the spirits directly, but interpret it. For instance, the unusual behaviour of animals (including birds) could be interpreted as a bad sign auguring retribution from the spirits. Bears that kill people are perceived as an embodiment of the power of *Baianai* to punish people for neglecting the respectful treatment of predators. To avoid retribution and to appease *Baianai,* hunters/herders perform predator honouring rituals that signal human intentions to establish peaceful existence with the spirit realm. Through ritually feeding fire and making offerings, herders/hunters strive to engage in peaceful exchange with *Baianai* and achieve success on subsequent hunts. However, I also discussed that apart from negotiating with *Baianai,* herders/hunters sometimes ritually "deceive" the spirit-master by denying an act of killing a predator or blaming others, as well as imitating a raven's cawing while eating bear's meat for instance. Such playing on the spirit's perception of reality can be explained by the perception of herders/hunters that spirit is unable to ascertain an essence beyond imitations and performances. Moreover, it is also believed that extraordinary powerful people (shamans) can perform rituals to appeal to the supreme deity with the purpose of acting against the decisions of *Baianai,* who is believed to be subordinated to the highest deity. To reach the deity, the shaman "sends" his message through a hierarchy of spiritual domains with the help of auxiliary spirits. In a sense, sending a request through the hierarchy of spiritual domains to the highest deity is not dissimilar to sending a letter through the system of State institutions. In this thesis, I argue that the notion of hierarchy and the power of the spirit domain resembles the power of the State with its submissive bodies. Thus, both powers can be perceived as regulating human-predator relations. In this regard, human–predator cohabitation in the shared landscapes can also be perceived from the perspective of the regulation of the State as well as by the worldview of the hunters/herders of Arctic Yakutia.

The final chapter, *The phenomenon of the volchatniki*, turns more specifically to human-predator cohabitation by examining the intimate relations between prominent wolf hunters - *volchatniki* - and wolves, these relations the result of extended interspecific interaction. The ethnography on the intimate relations of wolf hunters and wolves obtained through the course of this study is, perhaps, unique in anthropological investigations of human–animal relations. In addition to developing in-depth the ideas of the previous

chapters, this fifth chapter also reveals how the wolf hunting practices of the *volchatniki* are interconnected with perspective-taking, empathetic engagement with wolves and respectful attitudes toward them. In this thesis, all these are considered an integral part of the interspecific cohabitation. In the first half of the Chapter 5, I briefly described the role of the *volchatniki* in the human–predator relations in the Soviet times in Yakutia, as well as presenting biographies of the different lifestyles of contemporary wolf hunters and analysing what role the *volchatniki* play in the predator regulation established by the current government of Yakutia. I showed that the notion of prominent wolf hunters - *volchatniki* - originated in the Soviet times as part of the State's system of predator extermination. Although the *volchatniki* were in privileged positions in the Soviet farms, the collapse of the Soviet state has led to specialized wolf hunting becoming more of a way of life rather than a main source of income. I showed that many *volchatniki* run their own businesses that cover the expenditures of organizing wolf hunting. Nevertheless, the *volchatniki* do play an important role in wolf regulation. I demonstrated that the government lacking the resources to organize such mass regulation of wolves as in Soviet times has the goal of encouraging wolf hunters to kill predators for bounties. While some *volchatniki* trap wolves on their own initiative, another kind of *volchatniki* cooperate voluntarily with governmental authorities to conduct wolf regulation and, on behalf of the State, agitate residents to take measures against predators. Hence, both by enacting *volchatniki* to conduct predator regulation measures and by establishing bounties for wolves, the government strives to maintain these regulations in rural landscapes and to demonstrate its concern for the protection of the livestock of indigenous inhabitants. Among the indigenous people of Arctic Yakutia, there is a belief that *Baianai* gives spiritual power to non-ordinary *volchatniki* to kill violent and revengeful predators, these *volchatniki* capable of applying special rituals against the predators. Other wolf hunters, however, believe that hunting predators is everyone's personal decision and anyone can choose the lifestyle of *volchatnik* or not.

The second half of Chapter 5 focuses on two cases examining different wolf hunting tactics, as well as perceptions of predators, exercised by two *volchatniki*. While one case emphasizes rituals against predators, the other focuses more on the application of high-tech skills in the use of various wolf trapping devices. Although distinguished for analytical purposes, both tactics in wolf hunting should be considered together as they both consider the application of tools for predator trapping as well as rituals as a tactic against predators. Furthermore, they both deal with perceptions of wolves as non-human beings possessing spiritual power as well as "biological species". I

demonstrated that trapping wolves can sometimes fail and rituals can be used alongside or instead of the former as they both have the same purpose - to control wolves. Another point made in Chapter 5 is that hunting wolves relies not only on the trap setting skills of the *volchatniki,* but also on the sensitive reading of the behaviour of intelligent spiritual beings, the wolves. I showed that wolf hunting is effectively perspective-taking as, when reading the behavioural signs of wolves, the *volchatnik* adopts their point of view to determine the movement, mood and behavioural habits of the predators. Such an ability of the *volchatniki* gives them an advantage in comprehending the very next move of the predators and to adjust their traps accordingly. Meanwhile, the wolves, in response to the *volchatnik's* intentions, read the signs of human activity to identify the danger inherent in traps. The traps appear as perceptual and communicative devices intermediating *volchatnik*-wolf relations which could be perceived as two competing intentions striving to overcome each other. Another key insight made in Chapter 5 is that the *volchatnik,* by taking the perspective of wolves, also empathizes with them by experiencing a similar emotional state as that of other beings suffering in traps and struggling for survival. Furthermore, from this perspective, the *volchatniki* also see a certain behaviour in wolves that resembles respectable human traits, such as courage, resistance, strong spirit and concern for close ones in trouble (in traps). Empathizing with wolves, the *volchatnik* doesn't necessarily feel compassion for them, but the empathy allows the hunter to take the perspective of its prey in order to make the hunting successful. However, I do not exclude the ability of the *volchatnik* to feel compassion for wolves, considering that compassion and killing of wolves do not contradict each other. I also showed that empathy for wolves and perspective taking can lead to a respectful attitude towards these predators. However, respect for wolves does not restrain the *volchatniki* from killing predators as killing wolves does not mean disrespect for them. Nevertheless, in some cases described in Chapter 5, the *volchatnik* perceiving with respect the desperate attempts of the wolf to survive might leave an opportunity for a wolf to go alive. Hence, the instances given in Chapter 5 reflect what I call throughout this thesis the complex interspecific relations that assemble multifaceted tendencies, namely aggressive interaction and peaceful existence, these constituting an integral part of the long-term cohabitation of reindeer herders/hunters and wolves in the shared landscapes of Arctic Yakutia.

The significance of this dissertation regarding the timely investigations of human-animal relations in sociocultural anthropology can be assessed in terms of three aspects. Firstly, the broad ethnographic materials collected during the extensive field research complement Siberian ethnographies dealing with

human-animal sociality. Discussing human-wolf cohabitation as a complex of interspecific social relations, this study also contributes to ongoing anthropological conversations regarding the theoretical models of human-animal interactions in the circumpolar herding/hunting systems (for such studies, see Anderson 2017, 133-149; Stepanoff et al. 2017, 57-81; Brandišauskas 2017; Willerslev et al. 2015; Charlier 2011).

Second, although this study strongly relies on the animistic worldview of reindeer herders/hunters as well as their conceptualization of predators, this thesis considers wolves as active agents, self-conscious, intentional and social non-human beings who can communicate with humans as well as observe, learn and comprehend signs of human activity and respond to them adaptively. In other words, this study tries to make the animals, so to say, "participating research informants" (for more on this notion, see Locke 2017, 356) rather than only symbolic representations by herders/hunters. In doing so, this thesis also puts an emphasis on the observation of predator behaviour, somewhat akin to the science of animal behaviour, i.e. ethology. However, this thesis does not try to focus solely on behavioural biology (about this discipline, see also Candea 2012, 118-135), but, to some sense, combines ethnography with description of predator behaviour. Such an interdisciplinary approach in human-animal relationship studies is also known as ethno-ethology (for definition of ethno-ethology, see Lestel et al. 2014; Candea 2012, 118-135; Lestel et al. 2006). As such, by focusing on disciplinary knowledge from both fields, my work seeks to contribute to studies into the relationship of humans-animals in anthropology which attempts to overcome the limiting divisions of the natural sciences and humanities (see also Locke 2017, 353-376). Indeed, Lestel et al. (2014) argue that ethology ought to be incorporated into the social sciences or, at least, a version no longer exclusive to humans (quoted by Locke 2017, 353-376). Recognising wolves as active, communicative subjects, this dissertation attempts to "steer away" from so-called "human exceptionalism" in which the human representation of animals and human language plays a dominant role. Conceptual directions in recent sociocultural anthropology have considered whether humans alone are central actors of socio-cultural systems or whether anthropologists should pay equal attention to non-human beings in their studies of culture. Such studies are designated as "multispecies ethnography", "human-animal studies", "anthropology beyond humanity" and "animal turn" (see also Fijn and Kavesh 2020; White and Candea 2018; Ingold 2013; Kirksey and Helmreich 2010). According to Haraway (2008, 11), human exceptionalism is evident in humanist scholarship that suggests humans alone can be disregarded from the webs of interspecies dependency by which we understand other life (quoted by Locke 2017, 353-376). Noske

(1996) discusses that ethological studies of primates, elephants and wolves have proven that qualities usually considered uniquely human, such as sociality, intentionality, self-awareness, tool use and even language, can also be found to varying degrees in our nonhuman relatives (quoted by ibid.). Thus, focusing on interspecies ethnography, this thesis echoes that of modern post-humanist studies. In this regard, trying to venture beyond human symbolic and linguistic communication, I follow the idea of Kohn (2013) who showed in his Amazonian ethnography how interspecific communication can be based on non-symbolic signs in ecological systems. Although this concept is by no means novel in human-animal studies, this thesis relying on original ethnography from Arctic Yakutia adds new insights into the means of interspecific communication by arguing that reciprocal "reading" of behavioural signs links reindeer herders/hunters of Arctic Yakutia and wolves into intimate social relations which are analysed here from the perspective of cohabitation. Thus, my research focuses primarily on the understanding of human-wolf cohabitation as a reciprocal interaction based on non-symbolic communication and behavioural adaptation. Specifically, this thesis argues that cohabitation is a combination of aggressive interaction and peaceful existence based on mutual communication and adaptive behaviour. As a novelty, my thesis takes an in-depth look at the intimate relations between wolves and wolf hunters (volchatniki), revealing wolf hunting as a form of interspecific communication through which mutual agency as well as reciprocal behavioural adjustments are enacted and the multifaceted attitudes of hunters towards wolves are expressed. In a sense, this study looks at the wolf hunting process as a highly personal, intimate human-predator relationship rather than the mere aggressiveness of animal killing. An intriguing claim of this thesis is that, while involved in purposeful wolf trapping, volchatniki are also able to take the perspective of the predator, empathizing with the wolves and showing respect for them. From this perspective, the traps can be seen as intersubjective communication devices.

The third aspect concerning the significance of this theses is that, having examined archival materials of Yakutia from Soviet times (also relying on the recollections of people of Yakutia), it shows the historical context of human–wolf relations, considering the interrelation continuities and how their relations have been jointly configured through social, historical and ecological intersections. Analysis of the archives allows us to better understand how the animistic perceptions of Arctic reindeer herders/hunters were influenced by the regulations of the Soviet state and the atheistic ideology, as well as what effect it had, and continues to have, on human-animal relations in circumpolar Siberia.

REFERENCES

1. Alekseev, A.A. 1993. Zabytyi mir predkov: ocherki traditsionnogo mirovozzrenie Severo-Zapadnogo Verkhoiane (The Forgotten World of Ancestors: Essays on the Traditional Worldview of the North-West Verkhoiansk). Yakutsk: KIF “SITIM”.
2. Alekseev, N.A. 2008. Etnografiia i folklor narodov Sibiri (Ethnography and folklore of the peoples of Siberia). Seriia SO RAN. Izbrannye trudy. Novosibirsk. Nauka.
3. Anderson, D.G. 2000. Identity and ecology in Arctic Siberia: the number one reindeer brigade. Oxford: Oxford University Press.
4. Anderson, D.G. 2011. Shamanistic revival in a post-socialist landscape: luck and ritual among Zabaikal’e Orochen-Evenkis. In: Landscape and culture in northern Eurasia. Edited by P. Jordan, pp. 71–95. Walnut Creek, CA: Left Coast. [DGA].
5. Anderson, D.G. 2014. Cultures of reciprocity and cultures of control in the Circumpolar North. Journal of Northern Studies 8 (2), pp.11–27.
6. Anderson, D.G. 2017. Humans and Animals in Northern Regions. Annual Review of Anthropology 46 (1), pp. 133-49.
7. Anderson, D.G., Loovers, J.P.L., Schroer, S.A. and Wishart, R.P. 2017. Architectures of Domestication: On Emplacing Human-Animal Relations in the North: Architectures of Domestication. Journal of the Royal Anthropological Institute 23 (2), pp. 398–416.
8. Angantyr, M., Eklund, J. and Hansen E.M. 2011. A Comparison of Empathy for Humans and Empathy for Animals. Anthrozoös 24 (4), pp. 369–77.
9. Ballard, W.B., Ayres. L.A., Krausman, P. R., Reed, D.J. and Fancy, S.G. 1997. Ecology of wolves in relation to a migratory caribou herd in northwest Alaska. Wildlife Monographs 135, pp. 5 - 47.
10. Beach, H. and Stammler, F. 2006. Human–Animal Relations in Pastoralism. Nomadic Peoples 10 (2), pp. 6–30.
11. Belianskaia M.K. 2014. Etnokulturnye osobennosti Evenov Yakutii (Ethnocultural features of the Eveny of Yakutia). Vestnik Moskovskogo universiteta 4 (136), seriia 8. Istoriia.
12. Bibikov, D.I. 1975. The wolf in USSR. In: Wolves. Proceedings of the First Working Meeting of Wolf Specialists and of the First International Conference on the Conservation. Edited by H. D. Pimlott. IUCN Publications, Supplement 43, pp. 29-36. Stockholm, Sweden.

13. Bibikov, D.I. 1985. Volk. Proiskhozhdenie, sistematika, morfologiia, ekologiia (The wolf: History, Systematics, Morphology, Ecology). Izdatel′stvo nauka Moskva.
14. Bibikov D.I. and Shtilmark R. 1993. Vrag naroda ili pushnoi zver? (The enemy of the nation or fur animal?) Zelenyii mir 2. Moskva.
15. Bird-David, N. 1999. Animism' Revisited: Personhood, Environment, and Relational Epistemology. In: Current Anthropology 40, special supplement, pp. 67-91.
16. Boiakova, S.I. and others. 2012. Eveno-Bytantaiskii Natsionalnyi Ulus, istoriia, kultura, folklore. IKI Bichik RS(IA).
17. Boitani, L. 1995. Ecological and Cultural Diversities in the Evolution of Wolf–Human Relationships. In: Ecology and Conservation of Wolves in a Changing World. Edited by L.N. Carbyn, and D.R. Seip, pp. 3–11, Alberta: Canadian Circumpolar Institute.
18. Boitani, L. 2003. Wolf conservation and recovery. In: Wolves: Behaviour, Ecology, and Conservation. Edited by L.D. Mech and L. Boitani, pp. 317-341. University of Chicago Press.
19. Bolotova, A. 2014. Conquering Nature and Engaging with the Environment in the Russian Industrialized North. PhD dissertation, University of Lapland, Rovaniemi.
20. Brandišauskas, D. 2007. Symbolism and Ecological Uses of Fire among Orochen-Evenki. Sibirica, 6 (1), pp. 95-109.
21. Brandišauskas, D. 2009. Leaving footprints in the Taiga: enacted and emplaced power and luck among Orochen-Evenki of the Zabaikal region in east Siberia. PhD dissertation, University of Aberdeen.
22. Brandišauskas, D. 2012. Making a Home in the Taiga: Movements, Paths and Signs among Orochen-Evenki Hunters and Herders of Zabaikal Krai (South East Siberia). Journal of Ethnology and Folkloristics 6 (1), pp. 9–25.
23. Brandišauskas, D. 2017. Leaving Footprints in the Taiga: Luck, Spirits and Ambivalence Among the Siberian Orochen Reindeer Herders and Hunters. New York: Berghahn Books.
24. Brandišauskas, D. In print. From relatives to enemies: emplaced Evenki relationships with wolves in the changing environment of East Siberia and Russian Far East. In: The benefits of the cold and domestication: a new understanding of human - animal partnerships for survival in extreme environments. Edited by F. Stammler and H. Takakura. Routledge Press.
25. Bravina, R. 2018. Shamany - izbranniki nebes i dukhov (Shamans – the chosen ones of heaven and spirits). Yakutsk, Bichik.

26. Brightman, R. A. 2002 [1993]. Grateful Prey: Rock Cree Animal-Human Relationships. Regina: Canadian Plains Research Centre.
27. Broz L. and Willerslev R. 2012. When Good Luck Is Bad Fortune: Between Too Little and Too Much Hunting Success in Siberia. Social Analysis 56 (2), pp. 73-88.
28. Busch, R.H. 1995. The wolf almanac. Lyons and Burford, New York.
29. Burykin A.A. 1992. Istoriia i kultura Evenov (History and culture of Eveny). Sbornik statei. Magadanskoe Knizhnoe Izdatelstvo.
30. Candea, M. 2012. Different Species, One Theory: Reflections on Anthropomorphism and Anthropological Comparison. Cambridge Anthropology 30 (2), pp.118–135.
31. Charlier, B. 2015. Faces of the Wolf: Managing the Human, Non-human Boundary in Mongolia. Brill.
32. Chismar, D. 1988. Empathy and Sympathy: The Important Difference. The Journal of Value Inquiry 22 (4), pp. 257–66.
33. Cuff, B.M.P., Brownet S.J., Taylor, L. and Howat, D.J. 2016. Empathy: A Review of the Concept. Emotion Review 8 (2), pp. 144–53.
34. Davydov V. N. 2013. Borʹba s khishchnikami i povsednevnye praktiki sovremennykh olenevodov: otnosheniia cheloveka i zhivotnykh na Severnom Baikale (po rezulʹtatam polevykh issledovanii 2007–2012) (Struggle with predators and everyday practices of modern reindeer herders: the relationship of humans and animals in North Baikal). In: Materialy polevykh issledovanii MAĖ RAN 13. Edited by G. E. Fedorova, pp. 23–42.
35. Davydov V. N. 2014a. Issledovanie otnoshenii cheloveka i olenia v iuzhnoi Yakutii (Research on the relationship of human and reindeer in southern Yakutia). In: Materialy polevykh issledovanii MAE RAN 14. Edited by E.G. Fedorova, pp. 95-117. St Petersburg: MA E RAN.
36. Davydov V. N. 2014b. Coming back to the same places: the ethnography of human-reindeer relations in the Northern Baikal region. Journal of Ethnology and Folkloristics 8 (2), pp.7–32.
37. Deacon, T.W. 1997. The symbolic species: the co-evolution of language and the brain, New York: Norton.
38. Deleuze, G. 1990. The Logic of Sense. Columbia University Press.
39. Descola, P. 1992. Societies of Nature and the Nature of Society. In: Concep alizing Society. Edited by A. Kuper, pp. 107–126, London and New York: Routledge.
40. Descola, P. 1996. In the Society of Nature: A Native Ecology in Amazonia. Cambridge: Cambridge University Press.

41. Doianova G.I. and others. 2017. “Metodika sostavlenie tekhnologicheskoi karty rascheta normativnykh zatrat po stadnomu soderzhaniiu olenei v Respublike Sakha (Methodology for drawing up a technological map for calculating standard costs for reindeer herd keeping in the Republic of Sakha). Metodicheskoe posobie. Gos. komitet RS(IA) po delam Arktiki – Yakutsk.
42. Donahoe, B. 2012. Trust or domination? divergent perceptions of property in animals among the Tozhu and the Tofa of South Siberia. In: Who owns the stock? collective and multiple property rights in animals. Edited by A. M. Khazanov and G. Schlee, pp. 99–120. New York: Berghan.
43. Donahoe, B. 2004. A Line in the Sayans: History and Divergent Perceptions of Property among the Tozhu and Tofa of South Siberia. PhD diss. Indiana University.
44. Dudeck, S. J. 2018. Dialogical Relationships and the Bear in Indigenous Poetry. Sibirica: the Journal of Siberian Studies, 17 (2), pp. 114–120.
45. Dvorianov, F. 1948. Borba s volkami (Struggle with wolves). Publications of the department for hunting management of the Penza regional executive committee. Penza.
46. Eisenberg, N. 1988. Empathy and Sympathy: A Brief Review of the Concepts and Empirical Literature. Anthrozoös 2, pp. 15–17.
47. Fijn, N. and Kavesh M.A. 2020. A sensory approach for multispecies anthropology. In: The Australian Journal of Anthropology 32, p.p. 6–22.
48. Fijn, N. 2011. Living with Herds: Human-Animal Coexistence in Mongolia. Cambridge University Press.
49. Fitzgerald, E.A. 2009. The Alaskan wolf war: the public trust doctrine missing in action. Animal Law 15, pp. 193–236.
50. Forsyth, J. 1992. A History of the Peoples of Siberia: Russia’s North Asian Colony, 1581-1990. Cambridge University Press.
51. Gaevaia, I.K., Batozhergalova, I.I. and Konstantinova V.A. 2019. Statisticheskii ezhegodnik Respublika Sakha (statistics of the Sakha Republic) , pp. 21-22. Yakutsk.
52. Gaidin, S.T. and Burmakina, G.A. 2017. From the history of fighting with wolves in the Yenisei region in XIX–XX centuries. In: Humanitarian aspects of hunting and game management 5. International Scientific and Practical Conference. Edited by A.V. Vinober, pp. 35-44. Irkutsk.
53. Gemuev, I. N., Alekseev, N. A. and Oktiabrskaia I. V. 2000. Narody Sibiri: istoriia i kul’tura. Medved’ v drevnikh i sovremenykh kul’turakh Sibiri (The nations of Siberia: history and culture. A bear in ancient and modern cultures of Siberia). Novosibirsk: SON RAN.

54. Gieser, T. 2020. Beyond “Natural Enemies”: Wolves and Nomads in Mongolia. In: Encounters with wolves: dynamics and futures. Edited by M. M. Heyer and S. Hose, pp. 50-62. Bautzen: Sorbisches Institut.
55. Ginsberg, J. R., Macdonald, D. W. 1990. Foxes, Wolves, Jackals, and Dogs: An Action Plan for the Conservation of Canids. Morges, Switzerland: IUCN/SSC Canid Specialist Group.
56. Granberg, L. 2010. The interrelationship of sociodiversity and biodiversity: Experiences from a Post-Soviet Siberian village. In: Good to Eat, Good to Live with: nomads and animals in Northern Eurasia and Africa. Edited by F. Stammler and H. Takakura, pp. 179-193. Northeast Asian Study Series 11, Sendai: Center for Northeast Asian Studies, Tohoku University.
57. Gurvich S.M. 1977. Kul′tura severnyx Yakutov – olenevodov (Culture of northern Yakuts - reindeer herders). Izdatel′stvo nauka, Moskva.
58. Hallowell, A.I. 1926. Bear Ceremonialism in the Northern Hemisphere. American Anthropologist 28 (1), pp. 1–175.
59. Hallowell, A.I. 1960. Ojibwa Ontology, Behaviour, and World View. In: Culture in History: Essays in Honour of Paul Radin. Edited by S. Diamond, pp. 19–52, New York: Columbia University Press.
60. Haraway, D. 2008. When Species Meet. Minneapolis: University of Minnesota Press.
61. Harper, J.L., Clatworthy, J.N., McNaughton, I.H. and Sagar, G.R. 1961. The Evolution and Ecology of Closely Related Species Living in the Same Area. Evolution 15 (2), pp. 209-227.
62. Humphrey, C. 1983. Karl Marx Collective: Economy, Society, and Religion in a Siberian Collective Farm. Cambridge University Press. Editions de la Maison des Sciences de l’Homme.
63. Iadrikhinskii, V.V. 1998. Sposoby istrebleniia volkov (Methods of wolf extermination). Yakutsk.
64. Ingold, T. 1986. The Appropriation of Nature: Essays on Human Ecology and Social Relations. Manchester: Manchester University Press.
65. Ingold, T. 2000. The Perception of the Environment: Essays on Livelihood, Dwelling & Skill. Routledge.
66. Ingold, T. 2013. Anthropology beyond humanity. Suomen Antropologi, Journal of the Finnish Anthropology Society 38 (3): 5–23.
67. Ionov, V.M. 1915. Medved′ po vozzreniiam Yakutov (The bear according to the perception of Yakuts). Zhivaia starina, prilozheniia № 3, pp. 51-58.
68. Jefanovas, A. 2020. Predatory Relations of Tozhu Hunters-Herders. In: Multispecies Households in the Saian Mountains: Ecology at the Russia-

Mongolia Border. Edited by A. Oehler and A. Varfolomeeva, pp. 29-50, Lanham: Lexington books.
69. Kirksey, S. E. and Helmreich, S. 2010. The Emergence of Multispecies Ethnography. Cultural Anthropology 25 (4), pp. 545-576.
70. Kohn, E.O. 2002. Natural Engagements and Ecological Aesthetics among the Avila Runa of Amazonian Ecuador. PhD dissertation, Department of Anthropology, University of Wisconsin–Madison.
71. Kohn, E.O. 2007. How Dogs Dream: Amazonian Natures and the Politics of Transspecies Engagement. American Ethnologist 34 (1), pp. 3–24.
72. Kohn, E.O. 2013. How Forests Think: Toward an Anthropology beyond the Human. Berkley: University of California Press.
73. Kozlov, V.V. 1955. Volk i sposoby ego istrebleniia (The wolf and methods of his extermination). M.: Selkhozgiz.
74. Krechmar, M. 2005. Mokhnatyi Bog (Hairy God). Moscow: Izdatel'stvo ID Bukhgalterii i Banki.
75. Laugrand, F. and Oosten, J.G. 2014. Hunters, Predators and Prey: Inuit Perceptions of Animals. Berghahn Books.
76. Lavrillier, A. and Gabyshev, S. 2018. An emic science of climate. Reindeer Evenki environmental knowledge and the notion of an "extreme process", Études mongoles et sibériennes, centrasiatiques et tibétaines 49.
77. Lawson, L.A. and Nguyen-Van, P. 2020. Is There a Peaceful Cohabitation between Human and Natural Habitats? Assessing Global Patterns of Species Loss. Global Ecology and Conservation.
78. Lescureux, N. 2006. Towards the Necessity of a New Interactive Approach Integrating Ethnology, Ecology and Ethology in the Study of the Relationship between Kyrgyz Stockbreeders and Wolves. Social Science Information 45 (3), pp. 463–78.
79. Lescureux, N. and Linnell, J.D.C. 2010. Knowledge and Perceptions of Macedonian Hunters and Herders: The Influence of Specific Ecology of Bears, Wolves, and Lynx. Human Ecology 38 (3), pp. 389–99.
80. Lescureux, N. and Linnell, J.D.C. 2013. The Effect of Rapid Social Changes during Post-Communist Transition on Perceptions of the Human - Wolf Relationships in Macedonia and Kyrgyzstan. Pastoralism: Research, Policy and Practice 3 (1), pp. 4.
81. Lestel, D., Brunois, F. and Gaunet, F. 2006. Etho-ethnology and ethno-ethology, Social Science Information 45 (2), pp. 155–78.
82. Lestel, D., Bussolini, J. and Chrulew, M. 2014. The phenomenology of animal life. Environmental Humanities 5 (1), pp. 125–148.
83. Lévi-Strauss, C. 1968. The Savage Mind. Univ. of Chicago Press.

84. Locke, P. 2017. Elephants as persons, affective apprenticeship, and fieldwork with nonhuman informants in Nepal. HAU: Journal of Ethnographic Theory 7 (1), pp. 353-376.
85. Long, J. 2005. Cultural Politics, Ritual and Performance in Buriatiia. PhD dissertation, University of Aberdeen.
86. Lopez, B. H. 2004. Of Wolves and Men. Scribner Classics, New York.
87. Makhatyrov, M. 2002. Okhota na volkov: ty ser, a ia priiatel′, sed (Hunting wolves). Tomponskii vestnik, № 22.
88. Maruyama, N., Gao, Z. And Shi, K. 1996. Decline of gray wolves in Xinhaerhuyougi and Ewenkegi Districts, Northern Inner Mongolia. Abstract, pp. 90. Proceedings of the 2nd International Symposium on Coexistence of Large Carnivores with Man. Ecosystem Conservation Society, Saitawa, Japan.
89. Mech, L.D. and Boitani, L. 2003. Wolf social ecology. In: Wolves: Behaviour, Ecology, and Conservation. Edited by L.D. Mech and L. Boitani, pp. 1-35. University of Chicago Press.
90. Nadasdy, P. 2003. Hunters and Bureaucrats: Power, Knowledge, and Aboriginal-State Relations in the Southwest Yukon. UBC Press.
91. Nadasdy, P. 2005. Transcending the Debate over the Ecologically Noble Indian: In: Indigenous Peoples and Environmentalism. Ethnohistory 52 (2), pp. 291–331.
92. Nadasdy, P. 2007. The Gift in the Animal: The Ontology of Hunting and Human-Animal Sociality. In: American Ethnologist 34 (1), pp. 25–43.
93. Naimark, N.M. 2010. Stalin's Genocides. Princeton University Press.
94. Nakada, A. 2018. Reindeer Herding and Environmental Change in the Tompo District, Sakha Republic. In: Global Warming and Human - Nature Dimension in Northern Eurasia. Edited by H. Tetsuya and H. Takakura, pp. 161-178, Springer Singapore.
95. Noske, B. 1996. Beyond boundaries: Humans and animals. Montreal: Black Rose Books.
96. Neustroeva A.B., Samsonova I.V., Malysheva M.S. and Semenova L.A. Sovremennoe polozhenie traditsionnykh khoziaistv korennykh malochislennykh severnykh narodov v Respublike Sakha (Current traditional households of the indigenous small-numbered northern peoples in Yakutia). Zhurnal sotsiologii i sotsial′noi antropologii, 23 (3), pp. 220–245.
97. Nikolaev, N.S. 2015. Tomponskii Nasleg, Selo Topolinoe (Tomponskii Nasleg, village Topolinoe). RIO media–kholdinga.
98. Oehler, A.C. 2016. Being Between Beings: Soiot Herder-Hunters in a Sacred Landscape. PhD dissertation, University of Aberdeen.

99. Oehler, A. 2020. Beyond Wild and Tame: Soiot encounters in a sentient landscape. Oxford, Berghahn.
100. Packard, J.M. 2003. Wolf behaviour: Reproductive, Social and intelligent. In: Wolves: Behaviour, Ecology, and Conservation. Edited by L.D. Mech and L. Boitani, pp. 35-66. University of Chicago Press.
101. Pakendorf, B., Novgorodov, I.N., Osakovskij, V.L., Danilova A.P., Protodjakonov, A.P. and Stoneking, M. 2006. Investigating the Effects of Prehistoric Migrations in Siberia: Genetic Variation and the Origins of Yakuts. Human Genetics, 120 (3), pp. 334–53.
102. Pakhomov, E.A. 1999. Respublika Sakha. Administrativno-territorialnoe delenie na ianvaria 1999 goda (Administrative division of Yakutia in 1999). Yakutsk: NIPK Sakhapoligrafizdat.
103. Pavlov, M.P. 1990. Volk (The wolf). Agropromizdat, Moskva.
104. Pedersen, M.A. 2011. Not Quite Shamans: Spirit Worlds and Political Lives in Northern Mongolia. Ithaca: Cornell University Press.
105. Peirce, C.S. 1931. Collected Papers of Charles Sanders Peirce. Cambridge, MA: Harvard University Press.
106. Peterson, R.O., Woolington, J.D. and Bailey T.N. 1984. Wolves of the Kenai Peninsula, Alaska. Wildlife Monographs 88.
107. Petri, B.E. 1927. Olenevodstvo u Karagas" (Reindeer herding among the Karagas). Irkutsk.
108. Popov, A.A. 2006. Kamlaniia shamanov byvshego Viliuiskogo Okruga (teksty)" (Rituals of shamans of the former Vilyuisk District (texts)). Novosibirsk, Nauka, pp. 164-188.
109. Safonova, T. and Sántha, I. 2013. Culture Contact in Evenki Land: A Cybernetic Anthropology of the Baikal Region. Leiden, Netherlands: Brill.
110. Scott, C. 2006. Spirit and practical knowledge in the person of the bear among Weminji Cree Hunters. Ethnos 71 (1), pp. 51-66.
111. Sedalishchev, V.T and Odnokurtsev, V.A. 2016. Rol volka v biotsenozax i oxotnichem xoziaistve Yakutii (The role of the wolf in biocenoses and hunting economy of Yakutia). Materials of the 5 International Scientific and Practical Conference "Climate, ecology, agriculture of Eurasia", p.p. 255-261. Irkutsk.
112. Semenova, V.V. and others. 1989. Pravila okhoty v Yakutskoi ASSR (Hunting rules in the YASSR) Yakutskoe knizhnoe izdatel′stvo, Yakutsk.
113. Shirokogoroff, S.M. 1929. Social organization of the Northern Tungus, Shanghai: Commercial Press.
114. Shirokogoroff, S.M. 1935. Psychomental complex of the Tungus. London: Kegan Paul, Trench, Trubner and Co. Ltd.

115. Signal, T.D. and Taylor, N. 2007. Attitude to Animals and Empathy: Comparing Animal Protection and General Community Samples. Anthrozoös 20 (2), pp. 125–30.
116. Simonova, V. 2011. Living Taiga Memories: How Landscape Creates Remembering Among Evenkis in the North Baikal, Siberia. PhD diss. University of Aberdeen.
117. Sleptsov, Y. A. 2014. Kult medvedia u evenov Yakutii i Kamchatki (The cult of the bear among the Eveny of Yakutia and Kamchatka). Filologiia i chelovek 2, pp.145 –150.
118. Sleptsov, Y. A. 2017. Pochitanie orla u severnyx Yakutov (iz arxivnyx materialov) (Veneration of eagle among northern Yakuts). Gumanitarnye aspekty okhoty i okhotnich′ego khoziaistva 3, pp.81-82.
119. Sleptsov, Y. A. 2017. Starinnye metody okhoty na volka na Chukotki (Ancient methods of wolf hunting in Chukotka). Gumanitarnye aspekty okhoty i okhotnich′ego khoziaistva 1, pp. 14-15.
120. Ssorin-Chaikov, N. 2000. After Capitalism: Soviet Construction of the State of Nature in Sub-Artic Siberia. Anthropology of East Europe Review 178, pp. 45–57.
121. Ssorin-Chaikov, N. 2016. Soviet debris: Failure and the poetics of unfinished construction in Northern Siberia. Social Research: An International Quarterly 83 (3), pp. 689–721.
122. Stammler, F. 2004. When Reindeer Nomads Meet the Market: Culture, Property and Globalization at the End of the Land. PhD dissertation, Max Planck-Institute for Social Anthropology/Martin Luther Universität, Halle.
123. Stepanoff, C. 2009. Devouring Perspectives: On Cannibal Shamans in Siberia. Inner Asia 11, pp. 283-307.
124. Stepanoff, C. 2012. Human-Animal Joint Commitment in a Reindeer Herding System. HAU: Journal of Ethnographic Theory 2 (2), pp. 287–312.
125. Stepanoff, C., Marchina, C., Fossier, C. and Bureau, N. 2017. Animal Autonomy and Intermittent Coexistences: North Asian Modes of Herding. Current Anthropology 58 (1), pp. 57–81.
126. Stepanova, V.V. and Nikolaev, E.A. 2015. Ekonomicheskie pokazateli dobychi volkov v Yakutii (Economic indicators of wolves hunting in Yakutia). Materials of the 4 International Scientific and Practical Conference "Climate, ecology, agriculture of Eurasia", pp. 189-195. Irkutsk.
127. Steven, H.F., Stephenson, R.O., Hayes, R.D. and Boitani, L. 2003. Wolves and Humans. In: Wolves: Behaviour, Ecology, and Conservation.

Edited by L.D. Mech and L. Boitani, pp. 289-317. University of Chicago Press.
128. Strathern, M. 1980. No Nature, No Culture: The Hagen Case. In: Nature, Culture and Gender. Edited by C. Mac Cormack and M. Strathern, pp.174-222. Cambridge: Cambridge University Press.
129. Sugrobov, V. 2004. Volk i okhota na nego (The wolf and the hunt for him). Advice from former hunters. M.: OOO AkvariumPrint.
130. Takakura, H. 2002. The Formation of Even's national Autonomy in the Sakha Republic: An Experience of Socialism and the Populations of Northern Yakutia in Siberia. In: Northeast Asian Studies 6, pp. 27-50. Sendai: CNEAS, Tohoku University.
131. Takakura, H. 2015. Arctic Pastoralist Sakha: Ethnography of Evolution and Micro adaptation in Siberia. English edition, Trans Pacific Press.
132. Tanner, A. 1979. Bringing Home Animals: Religious Ideology and Mode of Production of the Mistassini Cree Hunters. St John's: Memorial University of Newfoundland.
133. Tylor, E.B. 1929. Primitive Culture (vol-1) John Murray, Albemarle Street, London.
134. Uola-Aian, A. 2004. Ekologiia burogo medvedia v Yakutii (Ecology of the brown bear in Yakutia). Abstract of dissertation for the degree of candidate of biological sciences – Petrozavodsk.
135. Vainshtein, S.I. 1961. Tuvintsy-Todzhintsy. Istoriko-Etnograficheskie Ocherki (Tyvans-Todzhinians: Historical and Ethnographic Essays). Moscow: Izdatel'stvo Vostochnoi Literatury.
136. Vainshtein, S.I. 2016. Zagadochnaia Tuva (Mysterious Tyva). Abakan: OOO IPP Zhurnalist.
137. Vakhtin, N.B. 1992. Native people of the Russian far North. Polar peoples: self-determination and development, pp. 29-80. London: Minority Rights Group.
138. Vasilevich, G. M. 1971. O kul'te medvedia u Evenkov (Of the cult of the bear among the Evenki). Sbornik MAE 27. Leningrad: Nauka, pp. 150–169.
139. Ventsel, A. 2004. Reindeer, Rodina and Reciprocity: Kinship and Property Relations in a Siberian Village. PhD dissertation. Martin-Luther-Universität Halle-Wittenberg.
140. Ventsel, A. 2006. Hunter–Herder Continuum in Anabarski District, NW Sakha, Siberia, Russian Federation. Nomadic Peoples 10 (2), pp. 68–86.
141. Vitebsky, P. 1990. The Yakut. In: The nationalities in the Soviet Union. Edited by G. Smith, pp. 302-317. London: Longmans.

142. Vitebsky, P. 1992. Landscape and self-determination among the Eveny: the political environment of Siberian reindeer herders today. In: Bush base: forest farm. Culture, environment, and development. Edited by E.L. Croll and D. Parkin, pp. 223-246. London: Routledge.
143. Vitebsky, P. 1996. The Northern Minorities, in The Nationalities Question in the Post-Soviet States. Edited by G. Smith, pp. 94-112. New York: Addison Wesley Longman.
144. Vitebsky, P. 2005. Reindeer People: Living with Animals and Spirits in Siberia. London: Harper Collins.
145. Vitebsky, P. and Alekseev, A. 2015. What Is a Reindeer? Indigenous Perspectives from Northeast Siberia. Polar Record 51 (4), pp. 413–21.
146. White, T. and Candea, M. 2018. Animals. In: The Cambridge Encyclopedia of Anthropology. Edited by F. Stein, S. Lazar, M. Candea, H. Diemberger, J. Robbins, A. Sanchez and R. Stasch, p.p. 1-17.
147. Willerslev, R. 2004. Not animal, not not-animal: hunting, imitation and empathetic knowledge among the Siberian Yukaghirs. Journal of the Royal Anthropological Institute 10 (3), pp. 629–52.
148. Willerslev, R. 2007. Soul Hunters: Hunting, Animism, and Personhood among the Siberian Yukaghirs. Berkeley: University of California Press.
149. Willerslev, R., Vitebsky, P. and Alekseyev, A. 2015. Sacrifice as the Ideal Hunt: A Cosmological Explanation for the Origin of Reindeer Domestication: Sacrifice as the Ideal Hunt." Journal of the Royal Anthropological Institute 21 (1), pp. 1–23.
150. Zherelina, I. 2003. In a turn to the past, Moscow proposes to reverse Siberia's rivers". Give and Take 6, pp. 10-11. A journal of Civil Society in Eurasia, Siberia's environmental movement.
151. Zvorykin, N. A. 1936. Volk i borba s nim (The wolf and the fight against him). M.: KOIZ.

APPENDIX 1

Archival sources

NARS - Natsionalnyi arkhiv Respubliki Sakha (National Archives of the Republic of Sakha)

1. F. R976, Op.3, D.33 (1965). Materialy po istrebleniiu volkov, medvedei, rosomakh i drugikh khishchnikov, i vydachi iadokhimikatov, pp. 165.
2. F. R976, Op.3, D.82 (1968). Materialy po istrebleniiu volkov, medvedei, rosomakh i drugikh khishchnikov, i vydachi iadokhimikatov /usloviia konkursa, akty, svedeniia i dr., pp. 29.
3. F. R976, Op.3, D.121 (1970). Materialy po istrebleniiu volkov, medvedei, rosomakh i drugikh khishchnikov i vydachi iadokhimikatov/usloviia konkursa, akty, svedeniia, otchëty i dr., pp. 205.
4. F. R976, Op.4, D.34 (1972). Materialy po istrebleniiu volkov (resheniia, otchety, spravki, akty), pp. 81.
5. F. R976, Op.4, D.44 (1973-1974). Materialy po istrebleniiu volkov (protokoly, otchety, spravki i dr.), pp. 64.
6. F. R55, Op.15, D.93. (1925). Perepiska s Yakutskim predstavitelstvom o vydelenii sredstv dlia borby s volkami na territorii YASSR, pp. 8.
7. F. R55, Op.16, D.52 (1928). Otchet veterinarnykh punktov YASSR o kolichestve strikhnina, izraskhodovannogo na istreblenie khishchnikov, pp. 6.
8. F. R55, Op.16, D.61 (1936). Dokumenty (prikazy, polozhenie, shtatnoe raspisanie) o rabote okhotnichikh inspektsii v respublikakh RSFSR, ob organizatsii pri apparate NKZ YASSR otdela okhoty i borby s khishchnikami, o meropriiatiiakh po istrebleniiu khishchnikov v raionakh Yakutii, pp. 17.
9. F. I12, Op.1, D.10656. (1892-1896). Delo o vydache strikhnina dlia borby s volkami v Verkhoianskom okruge, pp. 64.
10. F. R84, Op.1, D.45. (1920-1921). Postanovleniia zemotdela ob organizatsii komissii po borbe s volkami, pp. 49.
11. F. R50, Op.10, D.190 (1929 - 1934). Plan meropriiatii po borbe s volkami v YASSR, pp. 4.

YANTS SO RAN - Arkhiv Yakutskogo nauchnogo tsentra Sibirskogo otdeleniia RAN (Archives of the Yakutsk Scientific Centre of the Siberian Branch of the Russian Academy of Sciences)

1. F5. Op. 1, D.258 (1953-1954). Gurvich, I.S. Predvaritelnyi ochët o rabote etnograficheskoi ekspeditsii instituta IaLI Yakutskogo filiala AN SSSR v Verkhoianskom, Sakkyryrskom, Ustianskom, Bulunskom i Zhiganskom raionakh IaSSSR, v 1953-54 godov, pp. 190.
2. F5. Op. 1, D.139 (1945). Gurvich, I.S. Okhotnich′i obychai i ritualy u naseleniia Olenekskogo raiona, pp. 27.

APPENDIX 2

Glossary of Russian and Yakut terms/expressions used

Russian/Yakut	**English**	**Russian/Yakut**	**English**
Stado	Reindeer herd	*Khoziain zverei*	The spirit-master of the game animals
Tabun	Herd of horses	*Bog okhoty*	God of hunting
Obshchina	Clan community	*Ichi, sibien*	Spirit-master of the given place
Chastnik	Privat owner	*Perekhitrit*	To overcome someone
Kolkhoz	Collective farm	*Shkodnichat*	Cheating or being harmful, mischievous
Sovkhoz	State farm	*Grekh*	The sin
Nachal'nik	The chief	*Mozhet tam ostavit' svoi kosti*	Could die there
Khamnachchyt	A servant	*Borba za vyzhivanie*	Struggle for survival
Brigadier	The head of brigade of group of reindeer herders. Each brigade looks after a herd of reindeer.	*Obereg*	Amulet or ritual protecting against evil spirits
Uchakh	Reindeer trained for riding	*Kuksha*	Siberian jay
Koral	Wooden fence-corral for reindeers	*Gagara*	Loon - diving bird
Koralizatsiia olenei	Temporal reindeer fencing for selection, recounting.	*Kuropatka*	Arctic partridge
Otel	Reindeer calving	*Chubuku*	Mountain sheep
Arkan	Lasso	*Sokhatyi*	Moose
Boi rogov	Cut antlers	*Abaga*	The uncle (bear euphemism)
Panty	Velveted antlers	*Tyataagy*	Forest dweller (bear euphemism)
Kamus	Reindeer leg pelt	*Kyrdagas*	The elder (bear euphemism)

Russian/Yakut	English	Russian/Yakut	English
Unty	Fur boots made from reindeer leg pelt	*Ehe*	Grandpa (bear euphemism)
Torbaza	Thick fur boots made from reindeer leg pelt	*Svoi (Nashi) volki*	Local or our - means familiar wolves
Ovod	Warble-fly	*Poteriali kogo to iz svoikh*	Missing someone of their (talking of wolf pack)
Rovduga	Suede of reindeer	*On ne nash, puskai ukhodit*	He is not ours, let's leave him free (talking of wolves)
Kukhlianka	Traditional reindeer fur coat	*Sovsem obnagleli*	Became so insolent (talking about predators)
Olenei pasut volki	Reindeers are grazed by wolves	*Kolotushka (Lohur, Khangalda)*	Sound-making tools to scare predators
Den' olenevoda	The annual festival of reindeer herders	*Sam vinovat*	It's his fault (moral right to kill the offender: wolf or bear)
Ulus	The district of the Republic of Sakha	*Vne zakona*	Outlaw - an expression used to refer to wolves
Nasleg	The rural locality of the Republic of Sakha	*Obshchestvennaia iazva*	Public ulcer - an expression used to refer to wolves
Chum	Traditional conical dwelling	*Vrag naroda*	The enemy of the Soviet Nation, an aggressive concept, is also used to name wolves
Elbyn	Traditional dwelling of reindeer herders	*Otmazki*	An excuse, blaming the other to eliminate someone's fault, duty, responsibility
Ostov	Traditional winter dwelling	*Orden Druzhby narodov*	Reward for great labor

Russian/Yakut	English	Russian/Yakut	English
	of reindeer herders		achievements in the Sovkhoz
Chuara	Traditional summer dwelling of reindeer herders	*Glavokhota*	General Directorate of Game Management under the Council of Ministers of the Russian Soviet Federative Socialist Republics
Arangas	A tripod wooden platform traditionally used for burying humans and animals	*Okhotupravlenie*	Game Management Authority
Labaz	Storage in the taiga	*Volchatniki*	Specialized wolf hunters
Khoton	Cowshed	*Taëzhnik*	Taiga man
Sakha Ynaga	Endemic breed of Yakutia cattle	*Kladbishche volkov*	Sanitary of wolves
Potrokha	Boiled reindeer guts - traditional dishes	*Kapkany*	Leg catching traps
Stragonina	Sliced frozen fish - traditional dishes	*Privada*	Lure for wolves
Zherebiatina	Raw-salted foal meat - traditional dishes	*Podvesnye kriuchki s primankoi*	The lure with a hook for wolf trapping
Oladi	Pancakes, also used as offerings to the spirits	*Rassomakhin khvost*	Wolverine tail (used to sweep traces)
Salama	Rags tied to trees o ask spirits for success	*Tochka*	Illegal bootlegger trading point
Baianai	Spirit-master of animals and landscapes, a hunting god	*Kyspa*	Kindling (shavings) for stove
Khoziain mestnosti	Spirit-master of the given place		

LIST OF PUBLICATIONS

Jefanovas, A. 2018. Tuvos elnių augintojų ir medžiotojų socioekonominės praktikos bei strategijos posovietinėje aplinkoje - I dalis (Socio-economic practices and strategies of reindeer herders and hunters of Tyva in the post-Soviet environment - Part I). Liaudies kultūra, Nr. 5, pp. 66-75.

Jefanovas, A. 2018. Tuvos elnių augintojų ir medžiotojų socioekonominės praktikos bei strategijos posovietinėje aplinkoje - II dalis (Socio-economic practices and strategies of reindeer herders and hunters of Tyva in the post-Soviet environment - Part II). Liaudies kultūra, Nr. 6, pp. 58-65.

Jefanovas, A. 2019. Po sosedstvu s khishchnikami: vzaimodeistvie olenevodov - okhotnikov severnoi Yakutii s inochelovecheskimi sushchestvami posredstvom znakov (In the neighborhood of predators: interaction of reindeer herders/hunters of northern Yakutia with non-human beings through signs). In: Collection of materials of the All-Russian scientific and practical conference with international participation: Echo of the arctic odyssey: the fates of ethnic cultures in the studies of northern scientists. Edited by E. N. Romanova, pp. 129-134. eLibrary.ru.

Jefanovas, A. 2020. Predatory Relations of Tozhu Hunters-Herders. In: Multispecies Households in the Saian Mountains: Ecology at the Russia-Mongolia Border. Edited by A. Oehler and A. Varfolomeeva, pp. 29-50. Lanham: Lexington books.

NOTES

NOTES

Vilnius University Press
9 Saulėtekio Ave., Building III, LT-10222 Vilnius
Email: info@leidykla.vu.lt, www.leidykla.vu.lt
Print run copies 15