

CHANGES IN HUNTING SYSTEMS AND STRATEGIES IN POST-SOVIET YAKUTIA: A STUDY OF THE EVENO-BYTANTAI DISTRICT

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1. INTRODUCTION

Hunting is the most important and prestigious activity for the indigenous peoples of Siberia and the Russian Far East. Though it can sometimes produce less food and materials necessary for daily life than can fishing, collecting, and farming, many people recognize it as a core element of their culture. The people, especially men, are proud to be considered good hunters, since hunting requires much knowledge and a deep sense of nature as well as excellent skills and stamina.

Methods for analyzing the hunting culture of the Siberian indigenous people have changed, following changes in perspectives and paradigms in anthropology. Hunting has often been associated with primitiveness, and so from the evolutionary perspective, their culture was classified into the most primitive category. Many explorers went on expeditions with skilled hunters, admired their bravery, kindness, and geographical, botanical, and zoological knowledge, but they still considered them to be primitive. So did even V. K. Arsen'ev¹, whose friendship with a Nanai hunter, Dersu Usala, is very famous. The policies of the socialist government concerning the indigenous peoples of Siberia and the Far East were based on this perception.

After the collapse of social evolutionism in the early twentieth century, a variety of anthropological methodologies were used to analyze the indigenous hunting culture in Siberia and the Russian Far East. Diffusionists split it according to cultural traits, which they then compared with other cultures, to build a model of its process of establishment. Structural-functionalists systematically analyzed the hunters' society to reveal its structure and clarify the mechanism whereby their traditional social order is maintained. Ecologists and ecological anthropologists focused on the way these hunters adapted to their natural environment. Soviet ethnographers enthusiastically set about trying to fit the hunters' society and culture into the framework of their socialist ideology. After the collapse of the Soviet Union, Many researchers developed an interest in the movement for land rights and

¹ One of the prominent Russian and Soviet ethnologists (1872-1930). He often conducted ethnological and geographical expeditions in the present Primor'e, Khabarovsk, and Kamchatka regions from the end of the 19th century to the 1930s. He contributed the construction of local museums in Khabarovsk and Vladivostok and worked as museum director. His friendship with Dersu Uzala is described in his representative works, "Dersu Uzala" (1925) and "In the Taiga of the Ussuri Region." (1926)

the restoration of traditional culture and original languages.

Though many anthropologists have begun to pay attention to the present situation of the indigenous peoples in Siberia and Russian Far East, no researcher has yet evaluated the role they have played in the regional or Russian/Soviet history. Most researchers have assumed that they could not have taken an active role in history, one of the characteristics of civilization. They were recognized as part of nature. However, it is inappropriate to think that their essential "primitiveness" prevented them from taking part in their regional or national history. The description of their primitiveness was an invention of modern researchers from Europe and elsewhere that was integrated into Soviet thinking and policies. The truth is that Siberian indigenous hunters played a decisive role in Siberian history, especially in the expansion of the Russian Empire to the east. During the Soviet regime they played an important role in supporting the socialist economy by providing fur, a valuable commodity for export to Western Europe and America.

The Siberian indigenous hunters had become so totally dependent on the Russian/Soviet economic system during the Soviet regime that when it collapsed, the consequences and damage were enormous. Uncontrolled capitalism raged throughout Russia destroying all socialist collective farms and state enterprises. Farms belonging to the indigenous people that managed hunting, fishing, reindeer breeding, and stock farming lost their protection and support from the central government, and were fragmented and privatized. However, no one could control the market economy. Many privatized farms, including those breeding reindeers and farming stock, which were not profitable went bankrupt. The fur production sector, which had been the main source of monetary income for indigenous farms, was particularly affected and lost its profitable status. Many farms terminated their hunting and fur breeding activities. Professional hunters were laid off, and were forced to sell their game on the black market. In order to survive these adverse socio-economic conditions, the people began to return to the concept of self-sufficiency in hunting and fishing, living off nature to make up for the shortage of monetary income.

How can we evaluate this behavior? Is it a return to the wildness of the foragers or just a temporary escape from the crisis? How should we evaluate their history of hunting? Is it a development process from subsistence hunting to market-oriented? What is the appropriate classification for their present activities: subsistence or market-oriented? Is it valid to classify their activities into subsistence and market-oriented?

In this brief paper, I would like to reevaluate the hunting activities of the Siberian indigenous people, and focus on their history and their relation to the Soviet and Post-Soviet society. The data analyzed here was collected during my field research in the Eveno-Bytantai district² located in the northern part of the Republic of Sakha (Yakutia) in

² Originally the district was called ulus in the Yakut language and *raion* in Russian. In this paper I will use the following terms to represent the present Russian administrative regional classification: The fundamental administrative unit of the Russian Federation is called an "oblast" or "krai" in Russian and here shall be referred to as a "region". A "republic" ("*respublika*" in Russian) is defined as a unit of equal status to a "region" but which also has the characteristic of ethnic autonomy. Regions or republics can be further subdivided into a smaller administrative unit called a "district".

the Russian Federation (Fig.1). I conducted research among hunters and reindeer breeders of the Evens and Yakuts in the villages of Batagai-Alyta (Sakkyryr) and Kustur in this district, during 1994, 1995 and 1998. This district has a population of about 3000. The Evens, who are defined as an ethnic minority in the Republic of Sakha as well as in Russia, represent 40% of the population, while the Yakuts 60%. The Russian population is negligible small in this region. The Even language originated from the Tungus-Manchurian language family. Today, it is however, nearly extinct in this region. All the people in the district speak the Yakut language - a branch of the Turkish family - as their mother tongue, and Russian as their second language.

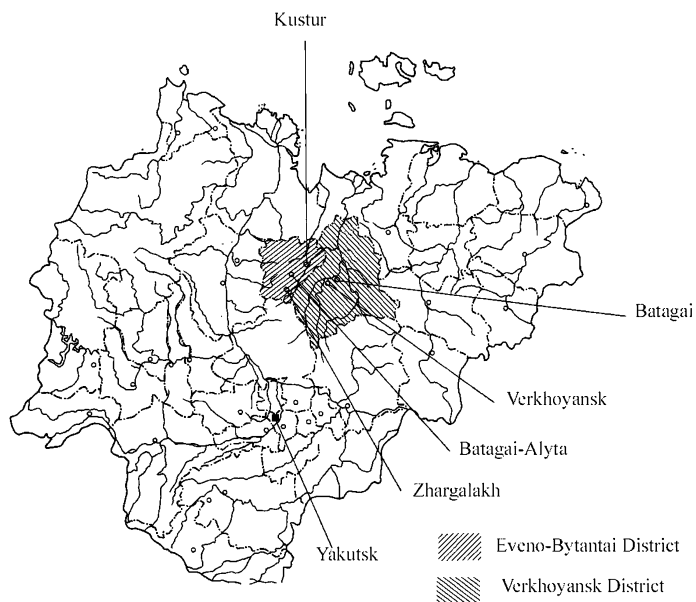


Fig.1 Republic of Sakha

2. THEORETICAL FRAMEWORK

Before analyzing specific cases from the Even and Yakut hunters of northern Yakutia, it is important to describe theoretical frameworks used to evaluate hunter-gatherer societies.

There are two opposing camps of opinion regarding the methods of evaluating hunter-gatherer societies, the “essentialists” and the “revisionists” camps. The former pursued the purity of these societies to construct theoretical models of the history of human society. In fact, “essentialist” researchers tried to extract pure elements from these hunter-gatherer societies in order to reconstruct models of prehistoric societies; unpolluted by agriculture, stock-farming, and commercialism. They often focus on subsistence

systems, the way egalitarian societies were maintained, non-commercial distribution of food, resources, and so on. The famous symposium "Man the Hunter" held in 1966 in Chicago was a holistic project, based on this viewpoint (Lee and Devour 1979 (1968)).

On the other hand, the "revisionists" or "historical revisionists" paid more attention to the historical process and context of their social and cultural activities. For example, they insisted that the egalitarian social system was not a fundamental characteristic of hunter-gatherer societies, but that it was a result of historical processes, which the societies shared with surrounding people. The famous dispute was conducted on the evaluation of the San society in the Kalahari in the 1980s and 1990s (Kent 1992; Kottak 1996; Ikeya 1996a; 1996b; Stewart 1996; Headland 1999).

In this paper, I will stand closer to the revisionist side, because I will pay more attention to the historical processes of the present hunter and reindeer-breeding society of the Evens and Yakuts and their relation to their surrounding people and nations (the Soviet Union, Russian Federation, and Sakha Republic).

The "essentialist" anthropologists often focus on the isolation, egalitarianism, self-sufficiency, and subsistence economy of the hunter-gatherers. Non-essentialists such as prehistoric archeologists and ethno-archeologists also construct their theoretical models of hunter-gatherer societies assuming them to be isolated and egalitarian (for example Binford 1980; 1982). This assumption is appropriate for their analysis, because they focus only on the relation between human activities and their natural environment. In other words, they analyze prehistoric hunter-gatherer societies using parameters from the natural environment.

However, I would like to analyze the hunter-gatherer societies of the Evens and Yakuts using social and historical parameters. Then, one cannot assume that the societies are isolated. Particular attention is focused on the relation between the society and the outside world at various levels; such as the individual level, the family level, and the community level. I will seek to investigate reasons and causes of social phenomena observed in a hunter-gatherer society, as a factor of the economic and political movements of an area or country enclosing that society.

At the same time, the diversity within the society must not be ignored. Each member has different abilities and roles, and each person counterbalances the other. Moreover, such supportive networks are not limited to each society; they often extend beyond their borders. Sometimes the society has important roles to play within a broader socio-economic system. A change of hunter's equipment is not always due simply to a change in the natural environment. A hunter might change his equipment and techniques because he is influenced by changes in taste of consumers living outside the society.

The Even and Yakut hunters from northern Yakutia are now making every effort to survive the serious economic crisis facing them, and are depending more on subsistence hunting and fishing. They hunt big horns (a species of wild sheep) and wild reindeer, and share the meat with their relatives and friends. They even put nets under icy rivers and

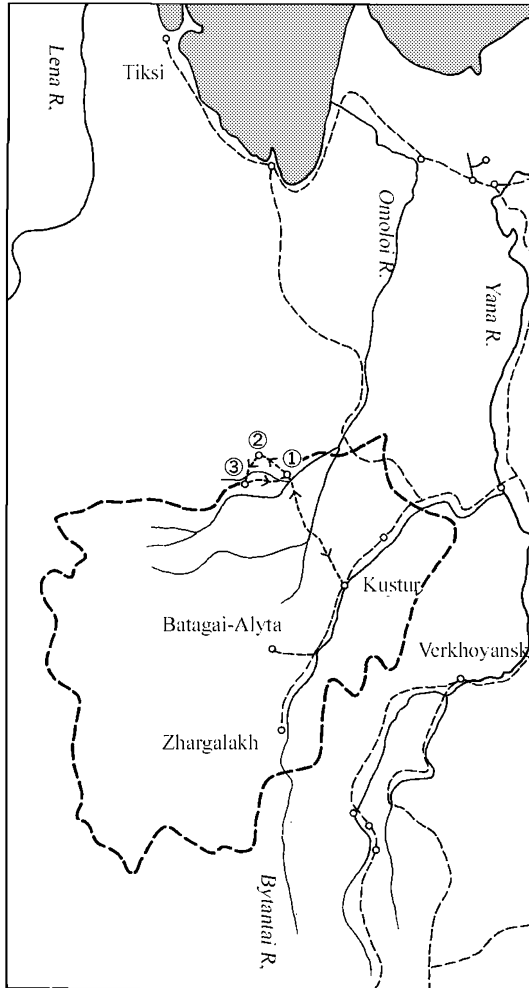


Fig. 2 Eveno-Bytantai district

- Base camp of the nomadic clan community managed by Sleptsov Family
- Hunting hut
- Hunting hut
- Roads
- Expedition route in 1998

lakes to fish kharius (a species of salmon) during the coldest season in winter. Though sometimes parts of wild reindeer and kharius meat are sold to merchants or commercial enterprises dealing in hunting and fishing products, most of their catch is distributed through their network of relatives and friends and consumed within the village.

This is not because the people in this district are “essentially” fond of isolation and subsistence economy, it is more due to the collapse of the Soviet Union and socialist economic system which cut them off from the outside world. They have lived under the socialist political, economic, and social system for more than 70 years. During the Soviet regime, they fed many people and provided them with meat and fur, the products of hunting and reindeer breeding. Therefore, one should evaluate their present subsistence hunting as a strategic attempt for surviving these severe conditions until the economy and commercial networks are restored in this region.

In order to demonstrate the validity of this hypothesis, I will analyze the change of the hunting system and strategy of the Even and Yakut hunters in Northern Yakutia during the 1990s. Their “hunting system” consists of systematic relationships between games, equipment, techniques, seasons, and places, while the “strategy” implies the selection of items to survive a given social condition.

There have been many Ethnological studies of the people in the Eveno-

Bytantai district. During the Soviet regime, I. S. Gurvich conducted research and wrote a brief sketch about the culture and life of the Even people (Gurvich 1956). After Perestroika and the collapse of the Soviet Union, local researchers such as A. A. Alekseev, A.I. Kuznetsov, and L. I. Missonova revitalized field research in northern Yakutia (according to Takakura (2000: 39-40)). At the same time, permission was increasingly granted to foreign anthropologists and ethnologists to conduct ethnological research in northern Yakutia, and their results have been published since the 1990s (Vitebsky 1989; 1992; Takakura 1996; 1998; 1999; 2000, 2001, 2002; Sasaki 1996; 1998a; 1998b; 2000a; Ikeda 1996; 2000; Taguchi 2000a; 2002). However, no one, apart from recent Japanese researches has used the economic and historical perspective to study the hunting activities of the people in this district. Therefore, I will analyze and describe changes in the economic and social functions of hunting activities in this district, using the materials collected by Japanese researchers such as H. Takakura, T. Ikeda, and H. Taguchi, as well as my own field data.

3. BRIEF HISTORY OF THE EVENO-BYTANTAI DISTRICT

Geographically, the present Eveno-Bytantai district consists of the valley of the Bytantai River (a tributary of the Yana River) and the mountainous region ranging over to the Verkhoyansk Mountains (Fig.2). A vast fertile plain spreads over the valley in the Bytantai area, while forest and forest-tundra cover the mountains. The climate is arctic and continental. This district is one of the coldest areas in the northern hemisphere. It is cool in the summer and extremely cold in winter. The temperature often reaches lower than -50°C during mid-winter.

Since the immigration of the Yakut people to the Bytantai valley, land from this district has been shared by Yakuts and Tungus-speaking people (ancestor of the present Evens), though the Yukagirs were the original dwellers of this region. The expansion of power of the Russian empire to Siberia in the 17th century caused large movements of the inhabitants and serious changes in the ethnic component of Yakutia. The Yakuts spread their dwelling areas to the north, while many subgroups of the Tungus-speaking people changed their territories to adapt to the new socio-economic situation. Some groups escaped from Russian control, while others sought to join it. However, many Yukagirs were unable to adapt and were purged from their territories or assimilated by Yakut or Tungus people. By the 19th century, there were no Yukagirs in this area (Patkanov 1906:129-130), though many Yukagirs had been counted in the Russian tax notes in the 17th century (Dolgikh 1960:385).

Since their immigration to this district, the Yakuts have mostly lived in the valley plain and been engaged in stock farming, trade activities, and regional administration. When the Russian empire extended its power here, they sometimes played the role of

mediators, acting as links between the empire and remote marginal people such as the Tungus and Yukagirs.

The Tungus-speaking people in this district, who were called the Lamuts until the socialist revolution, were essentially nomadic hunter-gatherers. They were engaged in hunting, fishing and gathering, and bred a small number of reindeer for transportation. They used stock animals for packing and riding, and sometimes for driving sledges. They provided the Yakut traders with pelts, fur, deer horns, and other hunting and reindeer breeding products, and acquired clothes, metal tools, and other daily utensils in turn from the Yakuts.

During the Civil War after the October Revolution in 1917, some Yakut leaders, including Lamut hunter-reindeer breeders, began a counter-revolutionary rebellion against the socialist government. After its suppression, the socialist government established the Sakkyryr district (*raion*) in 1931 and organized collective farms (*kolkhoz*) from Yakut stock farmers and Lamut hunter-reindeer breeders. At the same time, the government built villages for the nomadic hunter-reindeer breeders to settle down there. Though it was not easy for the government to carry out the collectivization and nationalization of stock animals and domesticated reindeers during the 1930s and 40s, their progress was accelerated after the Second World War. As H. Takakura has indicated in the case of reindeer breeders, the number of nationalized reindeer began to exceed that of private in the Sakkyryr district only after the second half of the 1940s, because the government of the Yakut Autonomic Republic decreed limitations for possession of private animals in 1940 and really confiscated a number of private reindeer (Takakura 2000: 98).

In the 1960s, the Soviet government advanced a policy to enlarge and nationalize collective farms. In the Sakkyryr district former collective farms had been consolidated into two large state farms (*sovkhos*), called "Lenin" and "Kirov". The whole district was then split into two in 1963, and the territory of the state farm "Lenin" was included into the Verkhoyansk district, while that of "Kirov" became a part of the Kobyai district. While the collective farms were being thus consolidated, villages which had been established since the 1930s in territories of clan groups or reindeer herders were also integrated into three villages; Sakkyryr (or Batagai-Alyta), Kustur, and Zhargalakh, in which branches of the state farm "Lenin" were located. During the 1960s and 70s, reindeer breeding in the forest-tundra zones developed into a stock farming industry, heads of reindeer gradually increased, and herdsman produces meat and other reindeer products according to the state plan (*Gosplan*).

During those years the status of hunting gradually developed from a subsistence or commercial activity to an industry or a sport. State farms established a department of hunting, employed professional hunters qualified by central government authority, and promoted trapping animals with fur in order to fulfill the state plan for fur production. Precious fur such as sable, fox, polar fox, and ermine were important exportable products of the Soviet Union to Europe and America. The army as well as in people used hare and

squirrel fur, which could be produced in large quantities. In order to supply more fur to the country, farms often bought fur from amateur hunters as well. Therefore, hunting was recognized as an activity that could provide an income for the people.

However, the political and economic systems of the Soviet Union began to collapse by the middle of the 1980s. Though M. S. Gorbachov designed the Perestroika policy to encourage the Soviet systems, he was not able to revitalize the country. In 1991 the Soviet Union crumbled and the nascent Russian Federation was confronted with very serious economic and political difficulties.

In 1989, halfway through Perestroika, the territory of the state farm " Lenin " was made into an independent district, known casually as Eveno-Bytantai, and officially " Eveno-Bytantai National district ". This was part of a trend from a political movement of the Even people aimed at revitalizing their ethnic identity and culture in this district. In the same year, trends aimed at revitalizing the ethnic culture and language, and restoring land rights, sprung up from all the ethnic minorities in Siberia and the Russian Far East. They established local associations to achieve their demands, and integrated them into an all-Soviet organization called " The Association of the Ethnic Minorities in the North ".

These movements bore some valuable results. To begin with, they brought the existence of ethnic problems in Siberia and the Far East to the attention of the Soviet government. Secondly, the Soviet government agreed to establish programs for revitalizing their ethnic culture and languages and started to implement some of them. Thirdly, the government allowed ethnic minorities to send their representatives to the Supreme Soviet (after the collapse of the Soviet Union they sent their representatives to the Senate of the Russian Federation). As a part of the revitalization programs, the government allowed these minorities to extend their autonomy and to designate special areas for conducting their traditional activities. These areas were called " Territories for Traditional Wildlife Management " (in Russian " *Territorii Traditsionnogo Prirodopol'zovaniya* ", or TTP). The independence of the Eveno-Bytantai district from the Verkhoyansk district is an extension of this autonomy.

However, though the district was considered to be an autonomous Even organization, leaders of the movement were not able to rally all of the people of their surrounding districts to their cause. Even the people who lived in the territory of the state farm " Kirov " that had been included in the former Sakkyryr district, did not join in and the plan for reconstructing the Sakkyryr district was not successful. Therefore, though it was supposed to be a national district of Even people, they were a minority compared to the Yakut population and the political leadership fell into the hands of the Yakut elites. Moreover after the structural change in Russia, the economic crisis was so serious that no one had time for the problem of Even autonomy.

4. HUNTING TECHNIQUES AND EQUIPMENT OF THE PEOPLE FROM THE EVENO-BYTANTAI DISTRICT

Hunting activities can be categorized in several ways. For example, focusing on the way hunters attack an animal, they can be categorized as “ active ” and “ passive ” hunting. As F. M. Zykov who described the Yakuts’ hunting equipment wrote, active hunting involves methods such as stealing, chasing, and waiting, while passive hunting corresponds approximately to trapping. Zykov further classified passive hunting into two sub-categories according to the types of traps used: portable or non-portable. Snares, jaw traps, cherkans, and automatic bows were considered to be portable, while dugout traps, dead fall traps, and snares based on heavy devices non-portable (Zykov 1989: 65).

However, I do not wish to categorize them according to these criteria, because the purpose of this paper is more to clarify how the economic and social aspects of the hunting activities changed, not the description of ethnological elements of an ethnic group. Therefore, I will use the criteria of “ subsistence (or self-supplying) hunting ” and “ market-oriented (or commercial) hunting, ” to classify them, which allows me to focus on their socio-economic purpose. Subsistence hunting includes activities that guarantee a basic standard of living. This provides food for the people plus any other material required for the community to be self-sufficient. On the other hand, market-orientated hunting covers activities where the animals are not captured for personal consumption within the community, but rather as saleable items to the outside world. This sort of commercial hunting extends people’s network beyond their community boundaries so that they enrich their lives with supplementary goods from other communities, regions, and countries.

The above differences in socio-economic aims determine the type of hunting techniques employed and equipment used. Therefore I will describe the hunting activities of the Evens and Yakuts in the Eveno-Bytantai district, using these criteria.

4.1. Techniques and Equipment used in Subsistence Hunting

Historically the Evens and Yakuts used spears, bows and arrows in their active hunting, as F. M. Zykov described (Zykov 1989: 66-81). They hunted bears, reindeer, and elk with spears, and shot birds with bows and arrows. Brave hunters often fought bears with long spears. During the migration season of wild reindeer (spring and autumn), hunters gathered under a prominent leader to catch the reindeer at their regular seasonal river crossing points. They were able to kill many deer as they crossed the river, spearing them from boats and from this produced large amounts of dried and smoked meat (Gurvich 1977: 37; Zykov 1989: 66). It was often a very dangerous hunt because hunters more often than not were not able to swim. If they fell into the water, they had to either hope to be rescued, or drown.

However, such equipment and hunting techniques are now just old memories and legends. Spears, bows, and arrows can only be found in museums as ethnological relics of the past. Nowadays hunters use guns and rifles. They use motorboats and snowmobiles as well as horses and reindeer sledges. As their equipment has modernized, so have their hunting methods and techniques radically changed. Hunters no longer need to wait or silently stalk reindeer as they cross the river. With their rifles they can now shoot game with more accuracy and from a greater distance without being noticed by the animals. Snowmobiles and motorboats can bring them much faster to their hunting places and allow them to chase the animals with less effort.

It is estimated that guns were first distributed in the nineteenth century in northern Yakutia. For example, I. A. Khudyakov explained that people in the region around Verkhoyansk had suffered much from the shortage of bullets and gunpowder from 1868 to 1869 that many hunters were unable to pay the *yasak* (tax by fur) and it had even resulted in food shortages. Though people returned to their storerooms to bring out their old bows and arrows again to hunt geese and duck, it was so long since they had last used them that they had almost forgotten how to use them. He wrote, " Now animals know that men no longer represent any danger to them and wild ducks relax on the lake as if they are laughing at the incompetence of the hunters. " (Khudyakov 1969: 66-67)

In the nineteenth century, the hunters used flintlock type guns. Even though revolver and volt action type guns and rifles were first used in the second half of the nineteenth century by the military, these were only distributed to hunters from the twentieth century onwards. Our research in the Republic Museum in Yakutsk (conducted by H. Taguchi, T. Ikeda, and me in 1997) showed that flintlock guns were the main type of weapons used by Yakut hunters at least until the end of the nineteenth century.

Even though guns and rifles are the most common weapons used by present day hunters in the Eveno-Bytantai district, they still use the same basic methods for hunting as those their ancestors used, regardless of the type of weapon. Basically hunters capture large mammals by tracking, stealing, chasing, driving, and waiting.

For example, Even and Yakut hunters in the Eveno-Bytantai district basically capture big horns (Siberian big horn is a species of wild sheep) by stealing in autumn and winter (from the end of August to November). Big horns often take a rest on the southern slopes of a mountain during the daytime. Big horn hunting is frequently conducted by one or two hunters. However, recently more hunters are participating in such hunts. When they spot a flock of big horns on a mountainside, they go to the foot of the mountain on reindeer sledges, to avoid being noticed by the animals. Then usually one or two hunters climb to the top or ridge of the mountain via different slopes. The hunters usually find a hideout uphill from the animals, because sheep instinctually climb up the slope when confronted with danger. Of course, they hide on the leeward side behind a rock or something. When the timing is right, they start shooting. During my first experience with them, one hunter climbed up a side slope, shot a flock from a ridge and caught two sheep.

During my second escapade, two hunters climbed and shot down three animals (Sasaki 1996).

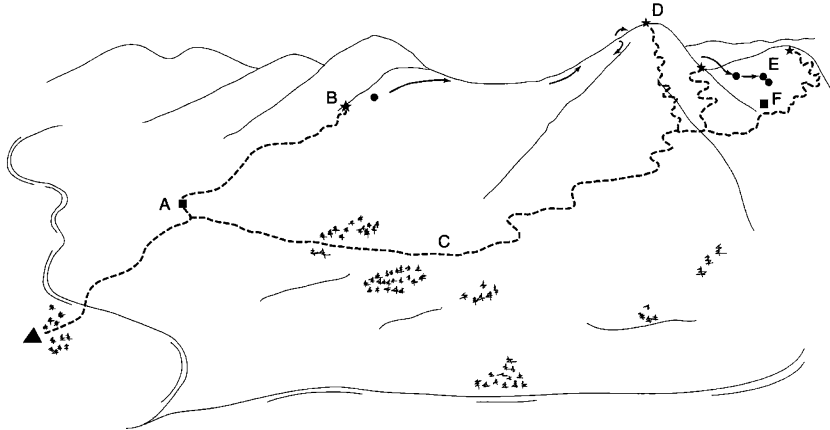


Fig. 3 Scheme of the Siberian big horn hunting (Taguchi 2002: 201)
: Animals' movement
----- : Hunters' routes for surrounding and chasing animals

When four or more hunters hunt, they try to catch sheep by surrounding them (see Fig.3). The leader, snipers, and assistants are chosen and they take preplanned positions to ambush the animals. Usually the leader approaches the animals from the foot of the slope or from the leeward side, and snipers wait for them at the top of the slope or other ridges extending from the slope. When the leader confirms that everyone is at their respective positions, he begins to fire his gun to drive the animals up to the snipers, while the snipers concentrate on shooting the animals. However, the animals often run away or scatter unpredictably and therefore, during these group hunts, hunters are sometimes able to catch only a few animals, or occasionally none at all. In the expedition in which I participated in 1998, the eight hunters were well organized, but the animals noticed them as they set up positions and finally all the animals escaped.

The hunting of other large game such as wild reindeer and elk is basically the same as big horn hunting. However, there are small variations: adaptations to differences in habitat and range of the animals' movement. Elks usually migrate as a family, or in a small group, or alone in the forest or forest-tundra zones. First hunters search for elk foot prints. This can tell them the number of animals, their sex, age, and where they went. From this information, the hunters can estimate where and when they will be able to encounter them. The leader decides on the best position for each hunter, which they take up and wait the animals. The leader himself often follows the tracks, and when he finds the animals, drives them to the snipers.

Wild reindeer usually move in groups of various sizes along river basins or plains. They migrate " en masse " from north to south every year, spending summer along the coast

of the Arctic sea and moving south in autumn. They can usually be seen in the Eveno-Bytantai district from the end of October to December. Therefore, the main wild reindeer-hunting season is from November to early December, i.e., after the big horn hunting season. Though they cross large rivers in big flocks, they usually move into this district in small groups. When the hunters spy such groups from a distance, or identify them from their foot-prints, they allocate roles and positions, and then drive the animals into pre-decided places using snowmobiles or reindeer sledges, so that the snipers can then shoot them. These three kinds of big games (Siberian big horns, elk, and wild reindeer) are the main animals that the Evens and Yakuts hunt every year for their survival. They provide the people with large amounts of meat and skin, which can be used as the staple food and materials for winter clothes. Apart from these, Even and Yakut hunters sometimes hunt bears (brown bear) if they can find its den. Rituals and festivals held after the bear hunt are often mentioned in ethnological reports on the peoples in Siberia, but none of the Even hunters from this district ever mentioned them. They said that they had not held such rituals in a long time.

When I went on search parties with the hunters, I could observe them constantly looking for foot prints and tracks on the snow and looking at tops and slopes of mountains through binoculars, searching for evidence of animals. Though they use many modern equipment such as guns, rifles, snowmobiles, and binoculars, the basic methods and techniques, i.e. stealing, tracking, chasing, driving, and waiting, are the same as in the pre-modern age when hunters used bows, arrows, spears, skis, and reindeer sledges.

Traps are also used in subsistence hunting; the most commonly used is the automatic bow. Though the government has legally prohibited its use on a number of occasions since the time of Imperial Russia, it was still in use at least until the 1930s. During my research, I was shown some examples of traps made during those years. This type of trap can be used both for hunting large mammals and for small animals. As described later, Even and Yakut hunters in this district used these automatic "Yakutia type" bows. Notches are carved on a shaft, which holds the bow, allowing one to vary the strength of the bow tension. Therefore it can be used to attack any size of animal. When used for elk or bear hunting, the bow is strongly drawn and an arrow with a triangular point fixed to it. Of course the automatic bow is now prohibited by law because it is so dangerous for non-hunters.

Snares are still used to hunt small animals and birds. Mainly made of horse tail, snares fixed to a round frame can be sometimes seen in villages. It is a trap designed for hunting a snow grouse (Fig. 4). These traps are set by children; it is their work and a part of their play. Taught by a grandfather or other retired elder hunters, children set them around the village and thus begin to learn their elementary course in hunting.

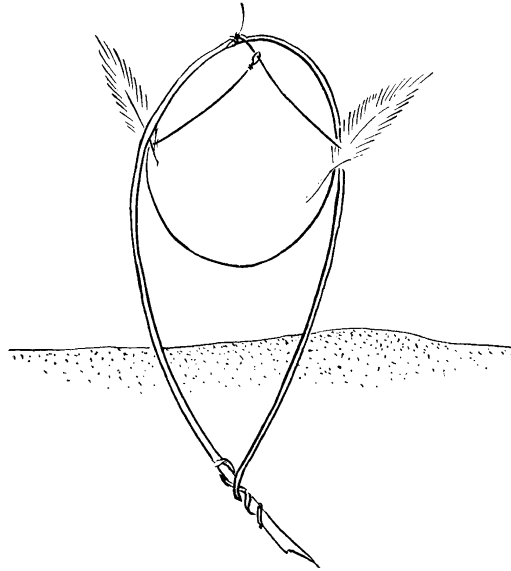


Fig. 4 Snare for snow grouse hunting (Zykov 1989: 82)

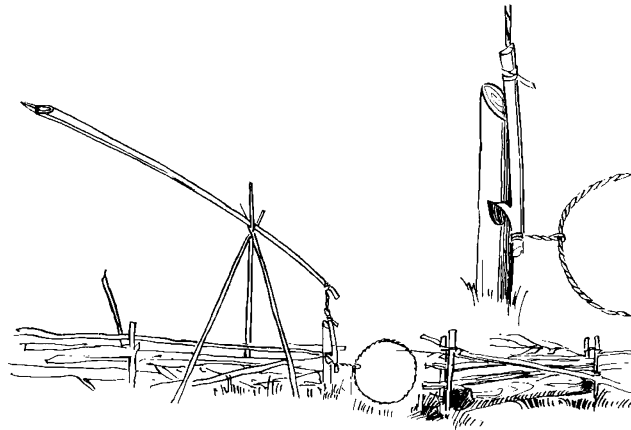


Fig. 5 Snare for hare hunting (Zykov 1989: 83)

4.2. Techniques and Equipment of Market-oriented Hunting

The most important characteristics of market-oriented hunting techniques are devices for capturing high quality animals without damaging them. Any damage would reduce the value and price of the commodity. If the animals are selected for their quality, they will make more money for the hunters. In order to reduce damage and to raise the

price, in market oriented hunting traps are more often used than guns and rifles. It is easier to control and adapt the size and strength of a trap to the game. Traps are far superior to fire arms in their ease of use and the quality of the resultant produce, especially when hunting fur bearing animals. Fire arms always make a hole on the body of the game, which seriously damages the fur. The only way to shoot an animal without damaging its fur is to hit it in the eye. Though it is not so rare to meet hunters who can hit a squirrel's eye, it requires an extremely high level of shooting skill.

Traps are the typical equipment of passive hunting, as F. M. Zykov indicated (Zykov 1989: 65). Though he classified them into two groups; the portable type and fixed type, one can classify the traps used in the Eveno-Bytantai district into the following five types according to their method of capture: a) snares, b) dead fall traps, c) spring traps, d) automatic bows, and e) jaw traps.

a) Snares

Snares are the most popular traps in the world. There are so many varieties, from simple ones to snares with complex devices. One of the simplest snare traps is commonly used for hare hunting. It consists of a loop of horse hair, or as is used these days, a wire. A hunter simply sets the snare in the hare's path. This type of hunting is usually a child's job, often used for hunting snow grouse. As mentioned above, snares for hunting snow grouse are very simple.

Hunting hare requires a more complicated snare trap. This consists of a snare, a tripod, and a pole (Zykov 1989: 83) (Fig.5). The snare is connected to the pole (about 2-3m) with a string and is then set on the hare's path. The string is attached to a stick stuck into the ground. The pole is set on the tripod like a balance. When a hare is caught in the snare, the string is released from the stick, and the pole turns like a lever to hang the animal. Though traditionally horse tails and strings were used to make such a snare, now they are made of steel wire.

The hare was one of the most important hunting targets during the Soviet Regime. One informant, who lived in Kustur, told me that the Soviet government had recommended and required hunters to be engaged in the hare fur production. Hare fur is the most popular material for winter clothes, and more specifically, they are often used to line mittens, caps, and winter shoes. Though much more analysis still remains to be done, I suspect that the Soviet army may have demanded a large amount of hare fur for the soldiers' and officers' winter clothes, judging from H. Taguchi's study on the Japanese army before the World War II (Taguchi 2000b).

The informant was a specialist in trap hunting who had never hunted large mammals with rifles or guns. He only used a small gun when hunting squirrels. But he was such a skillful trapper that he often captured over 1000 hares a month. His family worked late into the night to process hare pelts every day. Hares provide the people with meat and fur. Though their unit price was not particularly high, a hunter who accomplished the norm

required by the government earned enough money to live on. During the Soviet regime, there were many hares in the district. Now one can rarely find hare footprints or tracks. I have often heard people say that hares have emigrated elsewhere, but that they would come back some day. However, my informant was worried that the hare hunting cannot be restored because of both climate change and because they had been overexploited. A snare trap can capture a more precious fur bearing animal such as an ermine. In my field research, I was able to observe snares attached to wooden frames. The ermine hunter who used these types of traps told me that originally they were made from horsetail but that he had made them from fishing line. He placed it in the animal's path and, though I was not able to see it close up, the process was basically the same as when setting jaw traps.

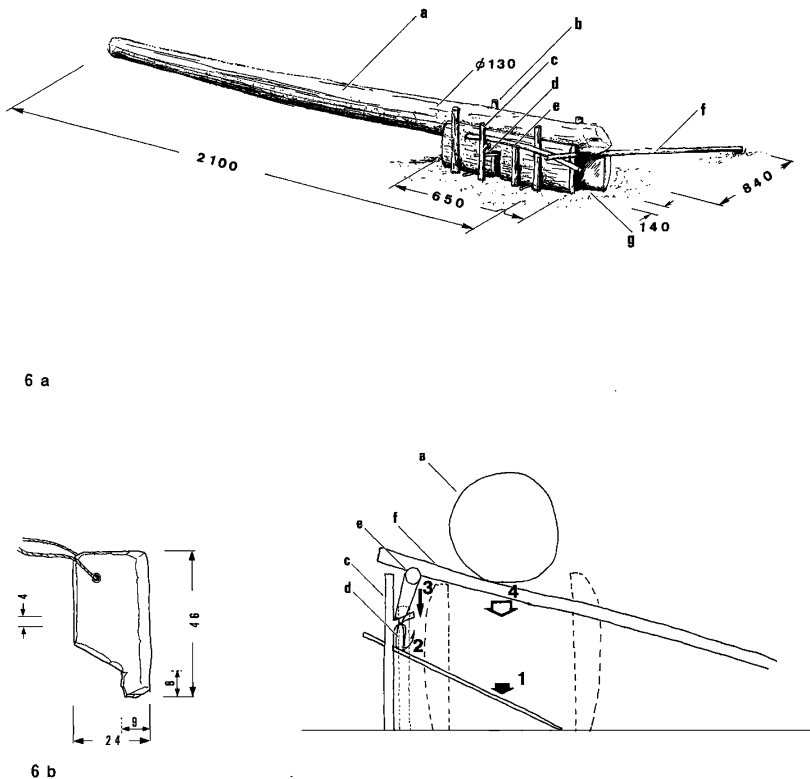


Fig. 6 Dead-fall trap (Taguchi 2002: 203)

6a *sokso*: a: *battakmas*, b: *tokhogo*, c: *archakh makha*, d: *tungkrai*, e: *tungkrai makha*, f: *uragas*, g: *sokso ikhe*

6b *Tungkrai* (left) and a log supporting system (right): The log (*battakmas* (a)) is supported by *uragas* (f), *tungkrai makha* (e), and *tungkrai* (d). The *tungkrai* is fixed to *archakh makha* (c) by a stick, to which bait is attached. When an animal touches the bait, the stick releases the *tungkrai* and the log, losing all the supports, falls onto the animal and captures it.

b) Dead-fall traps

The dead-fall trap is one of the best ways to capture fur bearing animals without damaging their fur. It can kill an animal instantaneously as a heavy log falls down on the animal and the animal cannot thrash about and injure its precious fur. However, these days, few hunters use these types of traps, because they require more skill and work from the trappers than other traps such as snares, jaw traps, and so on. Moreover, since the Soviet regime, the government has distributed jaw traps to accelerate fur production.

The hunter who lives in Kustur and demonstrated various types of traps still uses dead-fall traps. His favorite type of trap for capturing ermines and polar foxes is called *sokso* in the Yakut language. Its structure is complicated (Fig.6). First, he uses wooden boards to construct a long box. Its ceiling is made from a heavy log (Fig.6b-a), which is supported by a bar horizontally crossed under the log (Fig.6b-f). When an animal goes into the box, the log ceiling falls onto it. The bar supporting the log is supported by a stick (Fig.6b-e), which is balanced by another stick stuck vertically on the ground from the weight of the log. This is held by a string whose tension is maintained by a trigger. The trigger consists of a piece of wood (Fig.6b-d) and a pin. The hunter attaches meat which ermines and polar foxes are fond of as bait at the end of the pin. The pin and its bait are placed in the box through a hole of a wall of the box and the other end of the pin is fixed by the wood piece to which the string is also fixed. When an animal attracted by the bait goes into the box and touches the bait, the pin is released, the bar supported by the weight of the log and the tension of the string is unbalanced, and the log thus loses its support and falls onto the animal to kill him (See Fig.6b).

The trap can be of various sizes, depending on the size of the target. The one I observed was a small one for capturing ermine. When the hunter wants to capture a larger animal like a hare and a polar fox, he has to construct a larger box and set two or more logs as the ceiling. This type of trap for catching hares has been described and drawn by F. M. Zykov (Zykov 1989: 89, 91).

According to the hunter and other informants in this district, their ancestors once used simpler versions of this dead fall trap. They consisted of a heavy ceiling, a prop supporting the ceiling, and bait. They often used ice and rocks instead of a log for a ceiling. The prop was made of two short sticks and a pin to which the bait was attached. Piling up two sticks vertically and setting a pin between them, the hunter sets a ceiling on the prop. As soon as an animal, attracted by the bait, touches it, the prop collapses, and the heavy ceiling kills it on impact. Though such traps were widely distributed in northern Yakutia, no one uses them today, except for people catching rats in their own houses.

c) Spring trap

This type of trap captures an animal by biting its neck or body through the power of a spring. In this sense it resembles a jaw trap that will be mentioned later. However, it differs from the jaw trap in that first, it is usually made of wood, leather strings, and horse

tail. Only the spring can be made of metal, whereas the modern jaw trap is completely made of steel. Secondly its bite to the animal's neck or body kills it instantaneously, whereas the jaw trap usually only bites its paw and so allows it to thrash about for a while.

The typical spring trap is known as a *cherkan* in Russian (Fig.7). This type of trap was widely distributed in Siberia and northeastern Asia. I was able to observe its use among the indigenous peoples on the Amur basin and in the Primor'e region of Russia (Nanais, Ulches, Nivkhs and Udeghes) and in the northern region of Inner Mongolia in China (Evenks and Orochons) as well as in northern Yakutia. It consists of a bow, a rectangular frame, a bar like a letter " T ", and a release mechanism. Basically the bow, frame, and bar are made of wood (larch is often used in northern Yakutia), but I could observe some examples, in which a steel board spring was used instead of a wooden bow, in the Republic Museum.

The *cherkan* that I observed in the Eveno-Bytantai district was typical. The animal is caught as the " T " bar and the lower part of the frame bites it, powered by the bow. This trap is often set on a tree for squirrel hunting. However, when I was there in 1995 and 1998, it was no longer in use. Instead, hunters caught squirrels with a dog and a small gun.

d) The automatic bow

The automatic bow is also widely distributed all over the world. Despite being prohibited by governments, it was very popular among hunters and very dangerous for those who walk about unaware that a trap has been set. In fact, there were many accidents when migration first started from Russia to the present Khabarovsk and Primor'e regions, as well as to northern Yakutia. Local indigenous hunters usually put up a sign informing people that an automatic bow has been set nearby and people knew what the sign meant. Local people were therefore almost never injured by the trap. In fact, one could say that

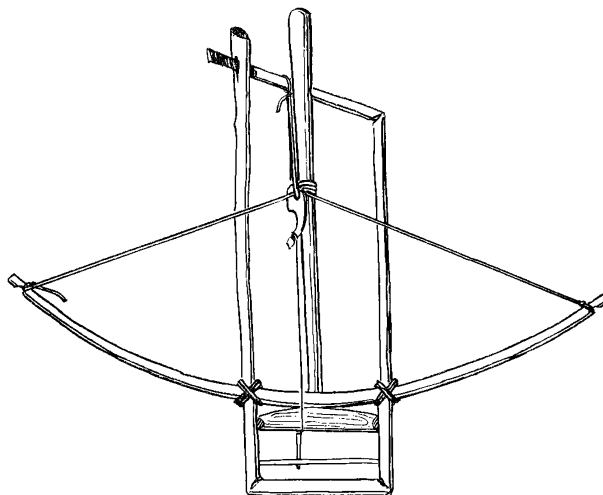


Fig. 7 *Cherkan* (Zykov 1989: 85)

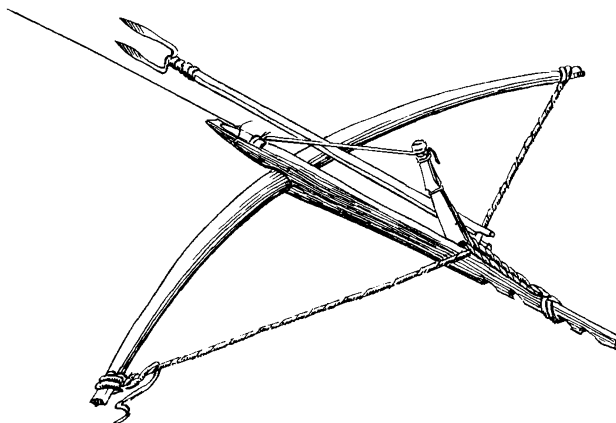


Fig. 8 Automatic bow for the hunting of fur bearing animals
(Zykov 1989: 87)

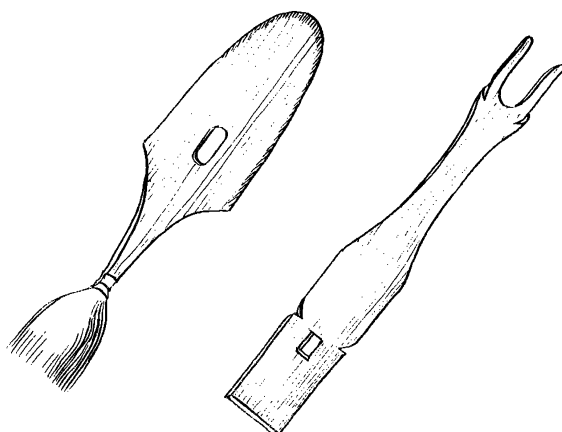


Fig. 9 Trowel, *irbiir* (Zykov 1989: 88)

accidents were caused by new comers disturbing local rules.

As mentioned above, the automatic bow in Yakutia consisted of a bow, a shaft, an arrow, and a release mechanism. Some notches are carved on the shaft to vary the power of the bow. This is the most prominent characteristic that distinguishes it from automatic bows from other regions. This type of automatic bow, known as the “Yakutia type”, was distributed from Yakutia (present territory of the Republic of Sakha) to the Amur basin (Fig.8).

The release mechanism consists of sticks and strings. The stick fixes a bowstring, and the strings are used to fix the sticks and a switch in the trap. The mechanism is triggered by a string set over the animal track and this also aims the arrows' orientation. Yakut and

Even hunters use a wooden trowel (called *irbiir* in Yakut language) (Fig.9) to decide the height at which the arrow should fly. They also use a brush made of reindeer beard attached to this trowel to erase their own footprints around the trap and to clean around the animal's footprint. This trowel is used as a sighting for their automatic bow. Some small notches are carved on the side of this tool, depending on the size of the animal intended to be trapped. When they set the automatic bow, the notches on the trowel determines the height of the line of sight. However, hunters today do not make notches on their trowels, because they no longer use them as a sighting tool for their automatic bows.

e) Jaw trap

The jaw trap is the most popular tool used in passive hunting or trapping today. The Soviet and present Russian governments recommend hunters to use it to accelerate fur production, while prohibiting the use of the automatic bow and other traditional indigenous traps. The government provided hunters with this kind of trap through the former collective and state farms at a low price. When I was in the Eveno-Bytantai district in 1995 and 1998, I found jaw traps being sold for low prices at a kiosk in the village. Of course even if I had bought one of them, I would not have been allowed to hunt with them because I had no license.

There are several sizes of this type of trap, from the smallest for trapping ermines and squirrels to the largest ones for wolves. Though the equipment is modern, many traditional techniques are necessary when setting them. The situation in northern Yakutia is the same as for Udeghe hunters in Primor'e region in this respect (Sasaki 2002).

This trap is set on the animal's path or near its burrow. When hunting ermine, I was able to observe that when the hunter identified an ermine's tracks in the snow, he approached it carefully and tried to ascertain whether it was a commonly used path or not. If it is judged to be the animal's usual route, he made a small burrow-like hole near it using his trowel, and set the trap under this hole. Of course, afterwards, the hunter covered the trap with snow and cleaned the place near the trap with his trowel. If he erased some of the animal's footprints by mistake, he made new ones with the trowel. There is no need to use bait because the ermine is fond of sleeping in a burrow-like hole in the snow. The animal is attracted by the comfortable burrow and caught in the trap.

The jaw trap is portable, almost maintenance-free, and easy to set. It accelerated fur production because many traps can be set in a short time. However, as I have often pointed out in relation to the hunting styles of the Udeghe people in Primor'e region (Sasaki 2000b; 2002), there is a danger of over-exploiting resources when using this type of trap. Also it always damages the fur or body of the animal since it bites the animals paw. The animal often tries to escape from the trap but cutting off its paws and thrashes about on the ground. If the fur is damaged, it is evaluated as lower quality and fetches a lower price. Therefore, in order to retain an acceptable level of income, the hunter has to catch more animals. In other words, he must make up for lack of quality through increased quantity.

This is one of the prime causes of overexploitation of animal resources.

Of course I cannot describe all the equipment and techniques of the Even and Yakut hunters in the Eveno-Bytantai district, because I was not able to observe all their activities. However, I can provide some conclusions about their hunting techniques and equipment.

For a start, both subsistence and market-oriented hunting require the same basic skills. In other words, they are inter-exchangeable. One can hunt squirrels and ermines by chasing and tracking them with a gun, while elks can be shot with automatic bows. As mentioned above, according to F. M. Zykov, hunting activities in the Eveno-Bytantai district can be classified as either active hunting with weapons or passive hunting with traps. These criteria apply regardless of whether the hunters are subsistence or market-oriented. Moreover, the distinction between subsistence hunting and market-oriented hunting is not sharp. Hares can be hunted both as meat for personal consumption or fur for commodity.

Secondly, as H. Taguchi, one of my colleagues investigating the northern Yakutia, has already pointed out (Taguchi 2002), the skills necessary for subsistence hunting are common to all kinds of hunting, including commercial and market-oriented hunting. This can be demonstrated by the fact that there is a greater diversity of techniques and equipment related to subsistence hunting than from commercial hunting.

Thirdly, the skills and equipment must have been extremely flexible to survive the radical changes in the social systems since the conquest of Yakutia by Russian Cossacks. When the hunters were requested to produce more fur, they adapted their traditional techniques and equipment for hunting fur-bearing animals, and integrated these with imported techniques and tools, devising new techniques that resulted in greater productivity. However, they have never solely specialized in fur production. Thanks to their multiple techniques and equipment that they could apply to both subsistence and commercial hunting, the hunters retained the potential for catching both large mammals and fur bearing animal, in spite of the sudden change in social and economic conditions.

5. THE COLLAPSE OF THE SOVIET UNION AND CHANGES IN THE HUNTING SYSTEM

The collapse of the former Soviet Union and the consequent enormous changes in the social and economic systems seriously damaged all the people of Russia. The people in northern Yakutia, which is recognized as one of the most peripheral areas in Russia, were no exception. As mentioned above, in 1989 the territory and people of the former state farm " Lenin " in the Verkhoyansk district was reorganized into a new district, called the " Eveno-Bytantai National district ". However, the turbulence arising from the structural changes within the country, increased democracy, capitalism and privatization of state

enterprises, washed out the new district only two years after its birth.

Following the new policies whereby state farms were privatized, the state farm "Lenin" was divided into three, according to the location of each center and reorganized into non-state organizations. For example, the former branch in the village Batagai-Alyta (Sakkyryr) was reorganized into an agricultural enterprise named "Agrofirma Lenin". The branch formerly in the village Zhargalakh was reorganized into a nomadic clan community (*kochevaya rodovaya obshchina*) "Zhargalakh", while the former state organization in the northern village Kustur could not be reorganized, so was simply renamed as "Kolkhoz Bytantai."³ However, though there were many types and names of organizations, the ways they were managed did not change and remained equally ineffective. There were three sections which all three organizations shared; reindeer breeding, stock farming, and hunting. Once these sections were established, members were allocated to each and given specific duties. In principle each organization inherited their managing system from what was the former state farm. Reindeer breeding was conducted by specialists (reindeer herders). They controlled huge flocks of reindeer, each flock consisting of one or two thousand heads of reindeer, and produced meat and fur according to the organization's annual plan. Stock farmers took care of cows, bulls, and horses and produced meat and milk. The hunting section employed a few professional hunters to capture fur-producing animals such as ermines, polar foxes, muskrats, badgers, and so on. In an attempt to keep fur production more constant, the state farm also bred polar foxes and such furs and pelts were their most profitable products during the Soviet regime. They concentrated all their efforts on the state plan, which even recommended buying fur from amateur hunters.

H. Takakura has already provided a detailed description of the process of change in reindeer breeding and stock farming in this district (Takakura 2000), so I will only mention the hunting section here.

In a nutshell, in 1995 each organization's hunting section was closed leaving all their professional hunters unemployed. Polar fox breeding farms were also closed in 1996. These facts imply that the fur industry collapsed in this district in the middle of the 1990s, during which the wave of collapse of the hunting industry among the indigenous peoples spread over Siberia and the Far East. This led to a serious crisis in the hunting enterprise in general at this time. The privatized enterprise of the Udeghe people in Krasnyi Yar in the Primor'e region was luckily able to survive the crisis, but it was an exceptional case (Sasaki 2002). The decrease in number of fur bearing animals sold by the enterprises in Batagai-Alyta (Table 1; Fig.10) and in Krasnyi Yar (Table 2; Fig.11) reflects this trend.

³ One ambitious family in the village Kustur established an independent enterprise of the type of nomadic clan community (*kochevaya rodovaya obshchina*) in the same year. They made every effort to survive the severe economic conditions at the end of the 1990s, breeding 250 heads of reindeer and conducting commercial hunting and fishing, while the kolkhoz already started to malfunction in 1998. The head of the enterprise was an excellent hunter and collaborated with us as an informant and hunting leader.

Table 1. The number of hunters and fur bearing animals sold by the “Agrofirm Lenin” in Batagai-Alyta in northern Yakutiya (Republic of Sakha)

| | <i>hunters</i> | <i>hare</i> | <i>ermine</i> | <i>squirrel</i> | <i>sable</i> | <i>fox</i> | <i>polar fox</i> | <i>wild cat</i> | <i>badger</i> | <i>wolf</i> |
|------|----------------|-------------|---------------|-----------------|--------------|------------|------------------|-----------------|---------------|-------------|
| 1985 | 26 | 97 | 1385 | 2791 | 10 | 1 | 4 | 0 | 0 | 0 |
| 1987 | 18 | 4087 | 1127 | 3179 | 8 | 1 | 35 | 0 | 0 | 0 |
| 1988 | ? | 9329 | 3434 | 5711 | 19 | 1 | 1 | 2 | 3 | 0 |
| 1990 | 27 | 5857 | 595 | 3501 | 41 | 0 | 10 | 0 | 0 | 0 |
| 1991 | 29 | 6751 | 259 | 3462 | 9 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 15 | 1156 | 60 | 1012 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1994 | ? | 1843 | 66 | 1021 | 0 | 0 | 0 | 0 | 0 | 6 |

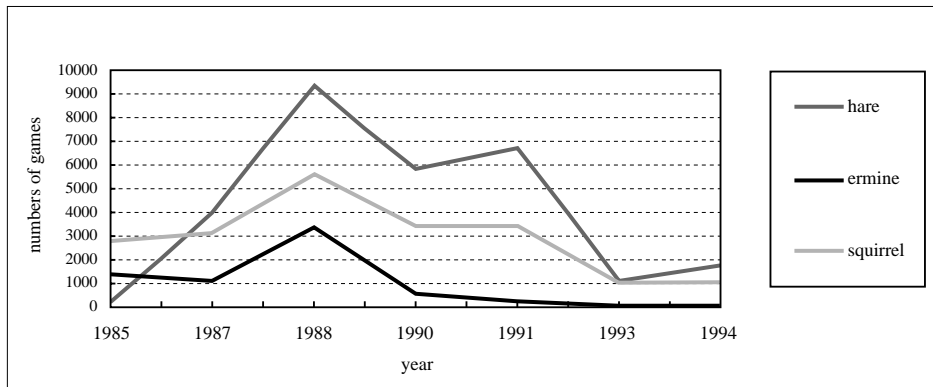


Fig. 10. Annual change of the number of main fur bearing animals sold by the “Agrofirm Lenin” in Batagai-Alyta

Table 2. The number of hunters and fur bearing animals sold by the ethnic enterprise in Krasnyi Yar in Primor’e

| | <i>Sable</i> | <i>Mink</i> | <i>Weasel</i> | <i>Squirrel</i> | <i>Hare</i> | <i>Hunters</i> |
|------|--------------|-------------|---------------|-----------------|-------------|----------------|
| 1991 | 607 | 74 | 198 | 2206 | 11 | 50 |
| 1992 | 745 | 199 | 133 | 1340 | 6 | 50 |
| 1993 | 408 | 246 | 152 | 4597 | 2 | 47 |
| 1994 | 498 | 161 | 222 | 5884 | | 44 |
| 1995 | 348 | 50 | 218 | 1393 | | 43 |
| 1996 | 224 | 60 | 129 | 1221 | | 45 |
| 1997 | 295 | 65 | 79 | 535 | | 34 |
| 1998 | 243 | 104 | 93 | 468 | | 32 |
| 1999 | 198 | 89 | 56 | 333 | | 34 |
| 2000 | 600 | 220 | 60 | 328 | | 28 |
| 2001 | 158 | 15 | 62 | 320 | | 24 |

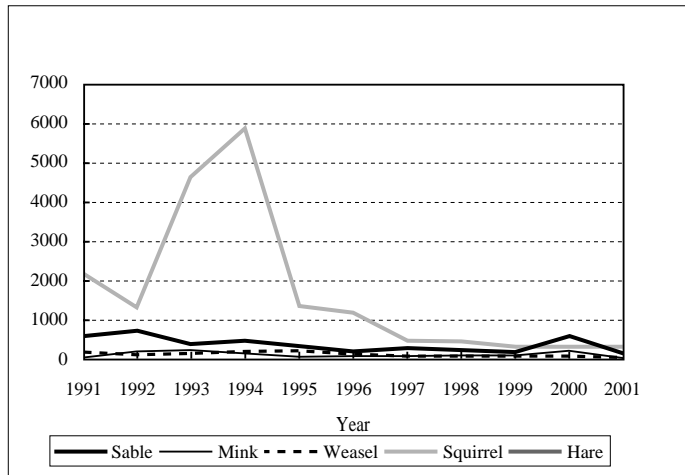


Fig. 11. Annual change of the number of main fur bearing animals sold by the ethnic enterprise in Krasnyi Yar in Primor'e region

One of my informants in the Eveno-Bytantai district, who worked as one of the deputy mayors of the village Batagai-Alyta, pointed out three reasons for the collapse of the hunting industry. The first was the collapse of the socialist system, which could no longer support them. Like reindeer breeding and stock farming, management of the hunting industry was also largely dependent on the support of the government. During the Soviet regime, the government, via state farms, provided hunters with easy access to guns, bullets, gunpowder, motor vehicles (trucks, snow mobiles, and motor boats), plus low priced fuel. The state farm bought their products for a good price⁴, and often supplemented the hunters' salary with an extra bonus if they fulfilled their quota. However, this system disappeared with the collapse of the Soviet Union. Prices of equipment and fuel rose up steeply during the hyperinflation of the first five years after the establishment of the new Russian Federation, while fur and pelts prices did not. It was left to the hunters, and what was left of the hunting sections of the reorganized farms, to fend for themselves, find fuel and equipment, contact merchants, and grapple with the markets in order to sell their products at reasonable prices. Despite their valiant efforts, their results were poor and they were forced to close down their hunting sections.

The second reason given to me by my informant was the decrease in demand for fur consequent to the anti-fur campaign in Europe and America, and the development of alternative synthetic cold resistant materials. Though it is still difficult to live in northern Yakutia, one of the coldest areas in the northern hemisphere, without fur, there are many

⁴ According to my informants, the fur bought by the state enterprise used to be gathered in Batagai-Alyta, the center of the state farms, and then sent to Irkutsk, the largest fur market in Siberia dating back from the 17th century.

other less cold areas where temperatures reach no more than -30 to -40 even during the coldest season, where light and warm synthetic materials are sufficient and are widely used. Thus synthetic materials quickly took over the fur market. The anti-fur campaign peaked in the middle of the 1990s boosted by the campaign for the protection of nature. However, European countries had already begun to reduce their imports of fur from the start of the 1980s. According to N. Kishigami (Kishigami 2001), they stopped importing seal fur from America and Canada in 1982, and this policy seriously damaged the Eskimo and Inuit economies in Alaska and Canada respectively, who had been largely dependent on seal hunting and fur export. Therefore, even as far back as the 1980's, the future of the Soviet, and present day Russian fur industry was already showing signs of decline. Though fur production in the Eveno-Bytantai district reached its peak by the end of the 1980s (see Fig. 10), its destiny was already determined.

The third reason for the decline of the fur industry was the fierce rivalry in the fur market within Russia. Because the demand for fur diminished in European countries, the only remaining, worthwhile, markets were those in Russia, especially those in Siberia and the Far East, where fur products were still indispensable. Producers and dealers who lost their foreign markets rushed back to Russian markets, which compounded the rivalry. Moreover, after the collapse of the Soviet Union, foreign traders also joined the rivalry of the Russian fur trade, especially Italian and Chinese traders. The reputation of quality that Italian fur enjoyed and cheap prices of Chinese fur were too much of a disadvantage for Russian dealers. So defeated by both foreign and domestic fur traders, the indigenous enterprises in Siberia and the Far East lost the position of dominance which they had long enjoyed in the fur market during the Soviet regime.

After the collapse of the hunting sections of the indigenous enterprises, the government of the Republic of Sakha began to reconstruct the fur industry. They had defined fur as one of their main products, and it was their responsibility as an autonomous administrative organization of the northern peoples, to support the indigenous minorities (the Evens, the Evenks, the Yukagirs, and the Chukchas). Therefore, the government established a company named "Sakha Bult," to monopolize the trade of precious fur. They started to manage all the former professional hunters within their jurisdiction, and made them signatory of a contract with the company.⁵ The contract obliged the hunters to sell all the fur they produced to the company and the company was obliged to support the hunters by providing them with guns, bullets, powder, traps, gas, and other equipment in comparatively low prices; and to facilitate the issuance of necessary hunting licenses.

In order to revitalize the indigenous hunting enterprises and to promote the protection and sustainable usage of natural resources, the republic government established a license system for hunting in accordance with federal laws. In principle, a license permits

⁵ According to our research in 1997 in Yakutsk, the government of the Republic of Sakha registered over 6,000 hunters. Of these, 2200 were recognized as professionals who had signed a contract with the "Sakha Bult," and the rest were put down as amateurs (Taguchi 2000: 128).

the hunt of a specific species of animal in a specific quantity. The hunter must apply and pay for as many licenses as the number of types of animals he wishes to hunt, with prices depending on the species and number of animals. However, the indigenous minorities of that republic (the above mentioned four ethnic groups) are entitled to free licenses for hunting certain animals. These licenses allow the hunting of wild reindeer, elk, and Siberian big horn. On top of this, indigenous people are also entitled to hunt a limited number of protected animals both for personal consumption and for selling. For example, the hunting of wild reindeer is officially restricted so as to protect this resource, but Even or Yukaghir people can hunt 100 heads without a license and 100 heads with a license⁶.

Regardless of the policy for the revitalization of hunting in Yakutia, fur production in the Eveno-Bytantai district continued to decrease towards the end of the 1990s. During our research in this district in 1998 (12 Nov. - 3 Dec. 1998) I often spotted ermine tracks and sometimes even saw the animals themselves, while this was impossible in 1995 during our previous research in the same district (15 Oct. - 2 Nov. 1995). This fact illustrated how ermine as a resource gradually had recovered over these three years, as well as how fur production had decreased. Apparently fur hunting was no longer a profitable occupation. My informants showed me how to capture ermine using a snare and a dead-fall trap. I can still remember their brilliant faces when the trap hunting was successful. It was the satisfaction of a successful hunt that lit up their faces, not the expectation of money.

On the other hand, many people began to hunt large mammals. Nowadays there are two types of large mammal hunting: subsistence and commercial. When an individual goes to hunt big horns, wild reindeer, or elks, usually he catches the animals to get meat for his family, relatives, and to share it with friends in his village. Such hunting can be defined as subsistence hunting. It can also be a sport or hobby. On the other hand, however, recently people often hunt wild reindeer to sell their meat to merchants for monetary income. This kind of hunting is commercial.⁷

For example, the independent enterprise of the nomadic clan community type in the village Kustur would catch 50-60 heads of wild reindeer every year to sell their meat to merchants instead of the domestic deer meat. When I was there in 1998, the leader of the enterprise told me how he had sold the meat of 60 heads of wild reindeer the previous year, but that he was unable to catch any deer that year, possibly because they changed their migration route. This was a serious setback for his enterprise. The leader explained his enterprise did not have enough reindeer to sell. To make up for the shortage of income,

⁶ This amount is based on the interview with Even and Yukaghir hunters in the Nizhnekolymskii district in 1994. Since then, the rules might have changed. Though I have certainly not heard about the existence of such a rule in the Eveno-Bytantai district, one enterprise (nomadic clan community or *kochevaya rodovaya obshchina* in Russian), which happened to be led by one of my informants, captured 60 wild reindeer and sold their meat to traders in 1997. The leader said that the enterprise made every effort to increase their domestic reindeer and that tried to survive the economic crisis by selling wild reindeer meat instead of domestic animals until their number rose sufficiently.

⁷ It may be inappropriate to call it "market-oriented hunting," because the range of business of reindeer meat is so small that no "reindeer meat market" can be established.

they needed to hunt wild deer and fish *kharius* (a fish of the salmon family).

Why is hunting wild reindeer being commercialized, even though it is a protected species in northern Yakutia? The reason is because in the 1990's it has increased in number in the northern Yakutia, and because reindeer breeders often consider it as a pest. They say that biologically wild reindeer are nearly the same as the domestic variety and so both flocks can merge with each other. As a result, when a flock of domestic reindeer encounters that of the wild, the former are often taken away by the latter. I heard the leader of the enterprise in Kustur say that about 100 heads of his reindeer had been taken away by wild deer during the winter of 1995 to 1996. This seriously damaged the enterprise, which had only a small flock. People consider that hunting for wild reindeer is a justified extermination of pests, as well as a good source of meat. So one can conclude that wild deer hunting fulfils three criteria: subsistence hunting, commercial hunting, and extermination of pests.

The collapse of the socialistic system and the economic crisis during the 1990s seriously damaged the subsistence hunting of the people in the Eveno-Bytantai district. More and more people began to hunt large mammals in order to make up for the shortage of income and food, resulting in a serious overexploitation of natural resources. For example, when I conducted my research in that district in 1995, I was able to observe hunting activity in the territory comparatively near the village of Kustur. The territory known as Artyg Yulyakh is located equidistant from the villages of Kustur and Batagai-Alyta. I often met reindeer breeders from the village of Batagai-Alyta in the territory belonging to breeders from Kustur. This was an ideal place to conduct research on the hunting of the Siberian big horns, because no one disturbed the activities of my informants and collaborators.

However, in 1998 the conditions changed drastically. My informants from Kustur told me that the territory of Artyg Yulyakh was full of hunters from Batagai-Alyta and that already there was no more game. We went to the northern area of the territory of this village, which was bordering the other district, to see if it was less crowded, but here too it was full of hunters. As I mentioned above, I participated in a big horn hunt, accompanied by eight other people. But since there were so many of us, the animals easily spotted us and we were unsuccessful.

Why are the hunting spots and territories so crowded with hunters? This is because many people have lost their jobs in the large enterprises and were forced back into self-sufficiency. What happened to reindeer breeders was particularly serious. The reindeer breeding section of each enterprise in the Eveno-Bytantai district almost collapsed because of bad management combined with the economic crisis. It fell into a negative spiral. The fall in the price of reindeer products badly affected reindeer breeding because of bad management, the reindeer herdsman's wages fell into arrears, reducing their motivation further. As a result, the breeding system started to malfunction, many reindeer were lost, taken by wild deer or killed by wolves, and the breeding productivity declined. This further

worsened management and the enterprise had to lay off their breeders.

The reindeer breeding section of the “Kolkhoz Bytantai” was almost shut down. Many reindeer herdsman who were laid off had to rely on other more stable organizations or people. The nomadic clan community that was led by one of my most useful informants became the best place to work at that time. He was able to provide jobs such as hunting, river fishing, reindeer herding, and guiding people such as us

Given these conditions, methods used for subsistence, or large mammal hunting changed. More people became involved, and hunting scale and range increased. However, with more hunters participating, the larger was the risk of failure, and greater was the problem of overexploitation of natural resources. I heard that it is increasingly difficult to hunt big horn. In fact, during the 1995 hunts that I took part in, I was often able to see big horns standing on cliffs watching us. But it was rare to see them in 1998. The size of the flocks had also diminished. In 1995 I had witnessed a large flock containing over 40 heads of big horn, whereas in 1998 I could only see small groups of 10-20 animals, indicative of how the resource of big horns had diminished during these three years.

In conclusion, it appears that not only can commercial and market-oriented hunting be greatly influenced by social and economic changes in a country, but so can subsistence hunting. Though the equipment and weaponry of hunting has progressed from the spear, bow, and arrow to fire arms, itself subject to commercial influences of the 19th century, all hunting systems today are irrevocably entwined with the socio-economic systems of the outside world as the experience of seventy years of the Soviet Regime has demonstrated. Equipment, technology, methods, seasonal factors, species of games, and anything else related to hunting are highly sensitive to change in the social environment.

However, this is by no means specific to just post Soviet Yakutia. If one were to analyze archeological materials, or historical and ethnographic descriptions of hunting activities of other peoples, a similar link between the hunting strategy, equipment and techniques, and social factors in prehistoric, historical, and ethnographic ages would emerge.

6. CONCLUSION

As a result of this analysis, I can conclude as follows:

1) The hunting activities of the Even and Yakut hunters can be classified into the categories of subsistence and market-oriented (or commercial) hunting. What distinguishes each category is the purpose of the activity and use to which the hunted game is put, reflected by differences in equipment, techniques, and strategies of hunting.

2) However, the various hunting activities share the same fundamental elements or roots. Some equipment and techniques are interchangeable and can be adapted to each other. Hunters do not specialize themselves into exclusively subsistence or exclusively

commercial activities, on the contrary, they always retain the potential to carry out both activities in case of a sudden change in social environment.

3) Though the equipment has been modernized since the nineteenth century, such as fire arms replacing bows and arrows and jaw traps replacing dead-fall traps, some fundamental techniques remain the same even today.

4) The radical and fundamental changes in social and economic systems following the collapse of the former Soviet Union seriously damaged the Even and Yakut. Hunting of fur bearing animals, which had been the main way of earning a monetary income since the seventeenth century, has by no means been profitable for hunters and enterprises. The enterprises closed their fur production sections and fired their professional hunters. The government of the Republic of Sakha, which recognized that such a tendency represents a serious threat to the country's economy, established a company to monopolize and encourage fur production and to support the hunters. However, the world-wide recession of fur production and trade prevented that company from functioning as well as the hunters had hoped.

5) The reindeer breeding crisis had dire consequences on large mammal hunting. The herdsmen laid off by the enterprises began to depend on hunting, and swelled the numbers of hunters in each territory. This increase accelerated the overexploitation of natural resources, of which the Siberian big horn is a typical case.

6) Detailed analysis of archeological materials and historical and ethnographical descriptions will reveal that all hunting items (systems, equipment, techniques, and strategies) are sensitive to regional or state changes in political and economic conditions as well as to traditional ethnic culture.

Though it is true that some hunters from the Eveno-Bytantai district appeared to return to subsistence hunting and a self reliant lifestyle, one cannot assume that such a society is fundamentally closed to the outside world, self-sufficient, and egalitarian. Even subsistence hunting is highly sensitive to world scale socio-economic changes as is commercial hunting. Therefore, we can conclude that their activities, which I witnessed in 1995 and 1998, demonstrate the large potential and flexibility of their hunting system and survival strategies.

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