

Gathering and Releasing Animals : Reindeer Herd Control Activities of the Indigenous Peoples of the Verkhoyansky Region, Siberia

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Gathering and Releasing Animals: Reindeer Herd Control Activities of the Indigenous Peoples of the Verkhoyansky Region, Siberia

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追集と解放
——シベリア・ベルホヤンスク地域における
先住民のトナカイの群れ管理の実態——

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Arctic Anthropologists have conducted theoretical studies in order to understand methods of reindeer herd control in Siberia. However, little is known about how herders actually manage herds of reindeer in pasture on a day-to-day basis. Based on data collected through fieldwork in Northern Yakutia, Siberia from 1994–1997, this paper examines the concrete processes and distinctive features of reindeer herding activities as a case study. The object of analysis is the professional herding brigade of a former State farm. The rhythms of the seasonal migrations and their relationship to husbandry activities are described quantitatively. I also outline the day-to-day herding activities. Herding involves human-animal interaction: the herders' interventions are gathering, catching, placing and releasing. Animal behaviours corresponding to the human activities are moving-in, grazing, resting, and leaving. Taking into account the nature of the herd, I describe how the day-to-day herding pattern is related to the seasonal migrations. The general principle of herd control in this case study is that herders allow a part of the herd (riding reindeer) to supervise and lead (drive) the other animals.

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Key Words : human-animal relationships, herd control, appropriation of space, dual structure of herd, reindeer, Even, Sakha (Yakut)

キーワード : ヒト—動物関係、群れ管理、空間の領有、群れの二重構造、トナカイ、エヴェン、サハ (ヤクート)

The different human attitudes to animals in herding activities result in a dual structure of the herd, which appears to maintain a homeostatic spatial extension between animals and humans. It also corresponds to the herders' system of reindeer classification. Herders' gathering and releasing are crucial herding activities which enable a space to be appropriated where livestock can be freely pastured.

シベリア先住民にみられるトナカイ飼育の群れ管理を理解するため様々な理論的考察が極北人類学研究においてなされてきた。しかしながら、放牧地において毎日実際にどのように家畜の群れが管理されているのかそのことについての記述は少ない。本稿は、1994–1997年のシベリア・北部ヤクーチアにおける現地調査で得られた民族誌資料に基づき、群れ管理活動の具体的な過程とそこにみられる顕著な特徴を事例研究として検討するものである。分析の対象は、職業として牧夫が雇用されていた旧国営農場（ソフホーズ）のトナカイ飼育作業班（プリガーダ）である。まず季節移動の周期性そしてそれらと生殖管理活動との関係が定量的に記述される。ついで一日を単位とする放牧活動について明らかにされる。そこではヒト側による追集・捕獲・配置・解放という介入活動と、対応する動物側の移動・採食・休息・離散という行動からなるヒト—動物間の相互作用が伴っている。さらにトナカイの群の性質について考慮しながら、いかに一日を単位とする放牧活動パターンが季節移動と絡み合っているのか記述する。この事例研究においてみられる群れ管理の基本的な原則は、牧夫が群れの一部（騎乗トナカイなど）に、残りの家畜の監督と誘導を担わせるという点にある。放牧活動において様々な家畜への関わりが組み合わせられることにより、群れは二重構造となり、それは人と家畜の間の恒常的な空間の維持となって出現する。同時にそれらはトナカイの分類体系とも一致している。追集と解放という活動は、家畜が自由に放牧される空間の領有を可能にする根幹なのだ。

1 Introduction	5 Two Groups of Reindeer
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1 Introduction

Reindeer breeding¹⁾ is an important topic in Arctic anthropology. Research areas include the genealogy and typology of reindeer breeding (Sasaki 1985; Vainshtein 1970; 1971, Vasilevich and Levin 1951), reconstruction studies of traditional methods of subsistence (Krupnik 1993), and current issues regarding modifications to

reindeer breeding under political and economic transition. To date, ethnographic studies have devoted many pages to describing scales of herds, herders' strategies of herd control, seasonal migration patterns, and local reindeer sex and age classification systems related to husbandry activities (Bogoras 1975; Jochelson 1975; Paine 1994; Popov 1966; Shirokogoroff 1933; Zhigunov 1968). Recently studies have emerged of post-socialist reindeer breeding practices centered on social and ecological issues (Anderson 2000; Fondahl 1989; Gray 2000; Ikeya 1999; Klovov 2000; Konstantinov 1997; Krupnik 2000; Stammeler 2002; Takakura 1998; Vitebsky 1992; Yoshida 1997).

Whether studying traditional or modern settings, many anthropologists have presented theories to explain reindeer herd management methods. The reason for this is that reindeer are generally labeled as "half-tame," "half-wild," or "half-domesticated" animals in comparative research studies on nomadic pastoralism. Such animals are allowed to graze freely with less human intervention than fully domesticated animals. Reindeer herding is therefore usually regarded as more similar to hunting than other approaches to livestock husbandry, or as a form of free-range management or protective herding (Baskin 1991; Harris 1996; Ingold 1980).

Krupnik (1988; 1993) proposed two types of reindeer management: semi-nomadic hunting and herding in the taiga zone, and intensive reindeer herding in the tundra zone. Relating the tameness of the animals to the style of management, Ingold developed the symmetrical concepts of "milch pastoralism" in the taiga, in which humans and reindeer have an intimate relationship, and "carnivorous pastoralism" in the tundra, in which people and reindeer are unfamiliar with each other. In milch pastoralism reindeer are not "herded": the animals are encouraged to roam in the vicinity of humans through the deployment of attractants such as salt, human urine and smudges. In carnivorous pastoralism the reindeer are unfamiliar with humans and "may avoid human contact for years" (Ingold 1980: 97, 238). Herders exterminate predators, such as wolves, and select individual reindeer for slaughter. In neither case is daily herding necessary, and reindeer require less supervision in the pasture than domesticated animals (Ingold 1980).

In an overview of reindeer hunting and breeding in the Soviet/Russian North, Baskin outlined three systems of management used during the 20th century: (1) "close herding, defined as keeping reindeer in big herds" in the tundra and forest-tundra zones; (2) the "free-camp system, in which reindeer are kept in the vicinity of human settlements or camps"; (3) "loose herding, in which herders only periodically gather scattered animals and move them to fresh pastures" (Baskin 2000: 24). To account for these different systems, Baskin focused on differences between ethnic groups, ecological-geographical conditions, and regional (administrative) settings. To some extent, other researchers adopted a similar classification of systems of herd management (Preobrazhenskij 1968; Syrovatskij 2000: 17–23; Zabrodin 1979: 172–177).

Many typological studies devote relatively little attention to detailed descriptions of herd control practices. The purpose of this paper is to examine the concrete processes of reindeer herding activities as a case study by conceptualizing some distinctive features about that herding. The subjects of research are the current reindeer herders of the Even and the Sakha, two indigenous peoples who live in the Eveno-Bytantaysky District of the Sakha Republic in eastern Siberia. The term “herding” refers to the day-to-day activities that are performed while the herd is in a seasonal pasture and during seasonal migrations, which are different from husbandry activities related to the reproduction of the herd (Paine 1964). Herd control refers to how herders actually manage to manipulate aggregations of reindeer in pasture based on the relationship between human activities and animal behaviours (Tani 1986: 4). In particular, the term “herd control” emphasizes cultural aspects: the herders’ understanding, practice, and verbal expressions of herd management, rather than that of behavioural science²⁾.

What I describe is a principle of human-animal relationships that will quantify the behavioral interactions between herders and reindeer. This principle will take into account the relationship between external interactions and systems of management. Birch’s idea of “follow the herds” (1991: 440) could be borrowed with some modifications. The herders in my field study obviously attempted to keep up with particular sets of reindeer, and therefore moved in a timely manner from the spring to the winter pasture. The core of this paper is to present and examine the herders’ principle of “follow the herds” which maintains seasonal rhythms and patterns as its foundation. To this end, I will examine the observed behavioral data reflecting the herders’ ecological knowledge and their attitudes toward the animals. During my field observations in Northern Yakutia, reindeer herders rarely undertook the day (or night) trip herding seen with other livestock raising systems involving fully domesticated animals³⁾. However, they did have a kind of day-to-day herding pattern of their livestock. To examine the herders’ principle of “follow the herd” is to define the day-to-day herding pattern. It may form a distinct pattern or it may, at first glance, seem to be merely a series of inconsistent actions. To my mind, understanding their pattern of day-to-day herding will integrate complex and seemingly contradictory activities into one complete process.

2 The Verkhoyansky Reindeer Herders

Methods of Research

Data were collected during my fieldwork in the administrative area belonging to the village of Batagay-Alyta in the Eveno-Bytantaysky District⁴⁾ in the northern part of the Sakha Republic (Yakutia) in Russia. Fieldwork was carried out from August to October 1994, from May 1995 to April 1996, and in August 1997. The primary field data were gathered through participant observation and interviews in

the herders' camp of the No. 3 reindeer breeding brigade of the former state farm. My direct participant observation of that brigade lasted 170 days. The field surveys at the camp of the No. 3 brigade took place from August 28 to October 10, 1994; May 26 to September 12, 1995; November 4 to 12, 1995; November 29, 1995; December 3 to 4, 1995; February 28, 1996; and March 5 to 7, 1996. At that time six officially employed herders and one professional housewife worked in the brigade, and some families of herders occasionally came to and left the brigade camp. I also interviewed herders in other brigades, as well as villagers.

My focus is on herders' collective activities toward the herd of livestock that belonged to their brigade. A herder is, essentially, an independent individual who can work alone; each herder might engage in different herding activities and approaches to the individual animals. We recognize the herder's independence both in herding and, in particular, husbandry activities because they are directly related to individual property relations. The collective performance of herding can be conceptualized in a similar way.

People and history

In 1995 the village of Batagay-Alyta had a population of 1,734. The Even and the Sakha, two indigenous peoples, made up more than 90 percent of the population in a ratio of two to three respectively. Both speak Sakha as their mother tongue. At the time of my field research it was difficult to find fluent speakers of the Even language even among the older generations. It is said that the Sakha and the Even lived in separate communities in this region before the Socialist revolution. According to aged informants, the Sakha, at that time known as horse and cattle breeders, lived in semi-nomadic settlements along the Bytantay River. At the same time the Even lived a nomadic way of life with reindeer herds and some hunting in the mountains. There were, however, a number of intimate cultural and social relations between the Sakha and the Even. For example, some of the former were reindeer herders and many of the latter could understand the Sakha language at the end of the 19th century. The Socialist regime changed traditional life in the latter half of the 1930s. The regime established collectivization, Cultural Revolution and resettlement policies. These changes brought the two ethnic groups together into administrative villages. These policies were introduced both in Sakha and Russian and brought about the contemporary language situation (Amosov 1997; Alekseev 1994a. See also Turaev 1997; Popova 1981).

The herders and villagers regard reindeer breeding as part of the culture of the Even. They also insist that the reindeer breeding terminology is in the language of the Even. In fact, it is a mixed vocabulary of the Sakha and the Even languages. It is easier to identify the meanings of the terminology in a Sakha dictionary than in an Even one (Ugarova 1993; Dutkin 1990). Russian terms are also included in their idioms. In short, herders speak such a mixture in the context of the local

Sakha language.

The Even and the Sakha together have been engaged in meat production oriented reindeer breeding since collectivization was implemented in the early 1940s (See Kuriliuk 1969, 1982). Most reindeer breeding in this region is now managed by a profit oriented agricultural enterprise, which used to be the state farm⁵⁾. In 1995, 42 people were employed by the enterprise as reindeer herders. Work organization, and property relations of animal stocks and pasture basically follow the former state farm system. Reindeer herders usually have a residence in the village. Most of their families also live in the village, but herders set out to the pastures on long-term journeys to manage their livestock⁶⁾.

Reindeer herding in this region corresponds to a “loose herding” type of management (Baskin 2000). The herders belong to brigades (*brigada/r/*)⁷⁾, working teams of reindeer breeders of six to seven male adults each, supervising reindeer herds owned by the enterprise. Each brigade usually includes a woman to serve as a “professional housewife” (*chumrabotnitsa/r/*), carrying out domestic activities and milking the does. There were six brigades, which were each insipidly designated by a ordinal number in the enterprise at the time of my field study, and each team managed approximately 1,500 head of reindeer. *Brigada/r/* is an official term and people instead use the expression *stado/r/* in conversation, a general term meaning herd or flock in Russian.

Not all reindeer are owned by the enterprise. Individuals own a small percentage of the herd. According to herders, even in the Socialist period herders had personal livestock. In the correct legal terms, however, during the socialist period this was called individual possession (*lichnoe vladenie/r/*), which meant only the right of use (Kuriliuk 1969: 20), while during the post-socialist period it is called private property (*chastnaia sobstvennost'/r/*). The herders took both of these legal terms to mean that the reindeer were their own property (*sobstvennost'/r/*). The individual herder's own livestock⁸⁾ were mixed into the state herd. This practice continues today. There are no individual/private herds as separate groups or any individual/private plots of pasture in the territory of the state farm/enterprise. The system instituted by the former government, where each territory had working teams outside the village and specified pasture usage was still in use at the time of my fieldwork.

Village and pasture

The Verkhoyansky Mountains are located in the western part of the Eveno-Bytantaysky District. Taiga covers the hills and mountains, as well as the plateaus in between. The altitude ranges from about 500 m to 1,500 m. Pastures are located in the area of plateaus and mountains, while the villages are on a plain. The annual mean temperature in this region in 1995 was 13.4 degree below zero and the annual precipitation was 173.9 mm. The monthly mean temperature and precipitation in the same year were -47.3C. / 6.1 mm in January and 16.8C. / 44.3 mm in July (these data

were observed at the Verkhoyansk station, 67.6° N 133.4° E, which are provided by All-Russian Research Institute of Hydro-meteorological Information—WDC).

The village of Batagay-Alyta, which literally means the long narrow valley of the Batagay⁹⁾, is located on a river terrace. The local population regards the settlement as embodying the modern material culture of Soviet civilization as evidenced by its central heating system and the House of Culture. The pastoral landscape surrounding the village is referred to as *ojuur*, which literally translates as “dense forest.” According to the vice-director of the agricultural enterprise (the head of the department of reindeer breeding), the pastoral landscape in the administrative area of the village was divided in the 1960s into six pastures, with boundaries corresponding to each brigade. A “Map of Reindeer Herders’ Routes” (*Karta marshrutov olenevodov/r/*), drawn up by the institution “ROSGIPROZEM” in the 1970s, contained information on the seasonally-divided parcels for animal grazing, and the area, grazing capacity, desirable period of use, and so forth for each of the six pastures (See also Kuriliuk 1969: 47–51). The leader (*brigadir/r/*) of each brigade decides the annual route of his team and submits his plan to the vice-director and the office of the enterprise, as was also done during the Soviet period. The plan usually consists of a list of names of rivers or place names with the anticipated length of stay. Each brigade, however, can change its route inside the boundaries of its pasture.

Figure 1 shows a map and Table 1 a list of the pastures for the seasonal migration plan of a brigade from April 1995 to March 1996. It is the 3rd brigade whose herders I stayed with. The Verkhoyansk Mountains form a boundary between two types of pastoral terrain. The first type ranges over most of the area at the eastern foot of the Verkhoyansk Mountains. People call this type of pasture *d’üönde*, that is a bottomland with bushes, hills with grassland and small mountains. Herders can use it in all seasons. On the other hand the term *edjgeen* refers to a landscape of bottomland with larches and high mountains, such as we find at the western foot of the Verkhoyansk Mountains. According to A. Alekseev (1994b: 43), who conducted research on the Southern Verkhoyansk Even, their local terms differ slightly: they use *d’üönd’e* and *mein*, respectively. Herders usually use this *edjgeen* or *mein* area in the summer. The herders’ seasonal migration lies in east-west extensions, and the summer pasture is at a higher altitude than the other pastures. It resembles transhumance in a narrow sense, as a seasonal migration between lower and higher latitudes. However, this summer-winter migration pattern can only be applied to some brigades. Other brigades move seasonally only inside the first type, *d’üönde*. The difference depends on the location of the pasture of each brigade.

When herding outside the village, herders set up camps along a river and usually refer to them by the river or stream name, or a particular place name. A camp consists of the living-quarters, an area called *surt* where the tents (*palatka/r/*, *chuora*, *ylymy*) are assembled, and the yard for domestic animals, called *tiergen*.

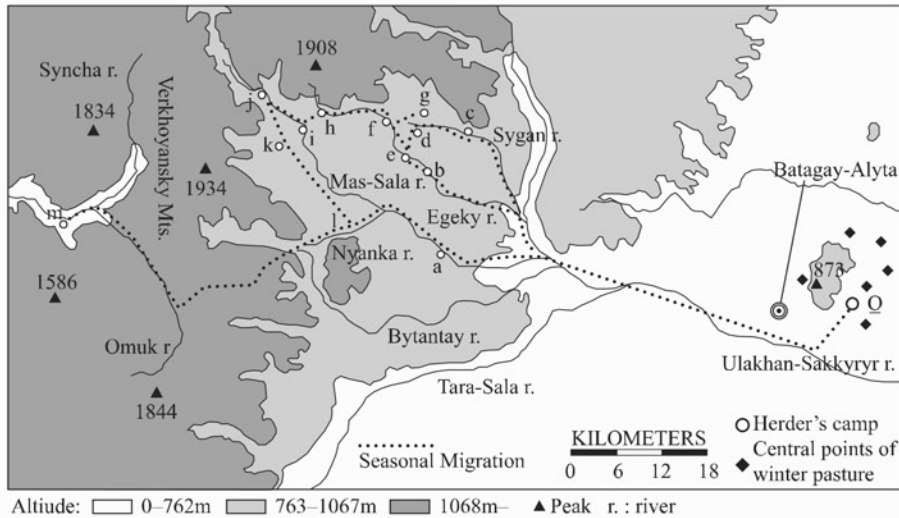


Figure 1 The pasture and seasonal migration of the 3rd reindeer working team of the agricultural enterprise in Eveno-Bytantaysky district of Sakha Republic from April 1995 to March 1996: The herder's camps are the circle marked with letters of the alphabet, and there are fifteen or sixteen campsites used in the course of the year (Table 1). The dotted line signifies a seasonal nomadic migration route to the herders' camps.

The yard is a small plot for livestock that may or may not be enclosed. The two terms, *surt* and *tiergen* are not distinguished by location but rather are functional divisions in camp.

3 Seasonal Migration and its Related Labour

While the average size of the herd per brigade was 1,500 head, the number managed by the 3rd brigade was 1,416 head as of 15 October 1995. In addition, there were about 170 head owned privately by herders and villagers. At the time of the "Map of Reindeer Herders' Routes", the pasture allotted to the 3rd brigade covered an area of 84,063 hectares. It was divided into a winter pasture east of the village and a pasture for the other seasons west of the village. The length of the route through all the 15–16 camps used in the course of the year (Table 1) is about 340 km¹⁰). The herders start the year's herding activities in a place known as Mongol at the beginning of April. They then move westward and climb over the Verkhoyansky Mountains in summer. They return the other way around in autumn, and stay in the winter pasture until the end of March.

When the herders migrate seasonally, members of the brigade travel together. Some ride reindeer (*uuchakh*, a riding reindeer) and others harness animals (*n'ougguhut* or *khos*, a sledding reindeer) to a passenger-sledge (*olokh syargga*) or a cargo-sledge (*kötöl syargga*). In addition, some draft reindeer (*undyy*) with baggage

Table 1 Seasonal migrations of reindeer herders

	<i>index</i>	<i>campsites 1</i>	<i>campsites 2</i>	<i>Length of stay</i>	<i>N. Lat.</i>	<i>E. Long</i>	<i>Notes</i>
1	a	Mongol		1 Apr.*–15 Apr.*	67.52.390	129.24.555	
	b	↓	Egeky 1	15 Apr.*–5 Jun.*	67.58.060	129.21.885	Group of fawning females
2	c	↓	Sygan 1	15 Apr.*–29 May	68.00.840	129.29.736	Group of the rest
	d	↓	Sygan 2	29 May–4 Jun.	68.02.758	129.20.180	Group of the rest
3	e	↓	Egeky 2	4 Jun.–17 Jun.	67.59.171	129.17.875	
4	f	↓	Egeky 3	17 Jun.–18 Jun.	68.01.600	129.14.425	
5	g	↓	Sygan 3	18 Jun.–28 Jun.	68.02.185	129.21.495	
6	f	↓	Egeky 3	28 Jun.–7 Jul.	68.01.600	129.14.425	
7	h	↓	Egeky 4	7 Jul.–11 Jul.	68.02.221	129.02.203	
8	i		Kreschakh 1	11 Jul.–13 Jul.	68.01.040	128.58.725	
9	j		Kreschakh 2	13 Jul.–18 Jul.	68.03.420	128.51.012	
10	k		Mas-Sara	18 Jul.–25 Jul.	67.59.900	128.54.485	
11	l		Nyanka	25 Jul.–1 Aug.	67.54.192	129.07.69	
12	m		Omokchan	1 Aug.–15 Sep.*	67.54.375	128.14.042	
13	l		Nyanka	15 Sep.*–31 Oct.*	67.54.192	129.07.69	
14	a		Mongol	31 Oct.*–6 Nov.	67.52.390	129.24.555	
15	o		Chay-Yuria	6 Nov.–1 Apr.*	67.48.159	130.38.607	

Note: Day with * represents the date acquired from my interview to herders and the rest is the one from my observation. The Egeky 1 signifies the first camp at the Egeky River. Even though the campsites may be established at several different points along a river, herders do not verbally distinguish between the camps but, instead, refer to them using the same river name. In order to make it clear which camp I was referring to in camps of the same name, I named each camp with the river name and a number indicating the order of the stay.

are harnessed to riding reindeer or to a sledge. Even during the warmer seasons without snow, the cargo-sledge is used for carrying the herders' belongings and equipment. The type of domestic reindeer featured in this paper is the "Evenskie" type (Zabrodin 1979: 89). The indigenous people in my research area also use this term. They distinguish it from the "Khargin" type saying that the Khargin type is smaller and has a darker colour on the back than their own Evenskie type.

Figure 2 shows the length of stay at each camp from April 1995 to March 1996. The length of stay varies widely. Looking closely at the second phase, which lasts from the beginning of June to the end of July, it can be seen that there were many campsites in that period, signifying that herders moved quite often. They changed their campsites an average of every 6.4 days and the average distance between the camps was 7.2 km. The other phases of annual activity, with fewer camps, indicate less moving: herders stayed at camps in the first phase for an average of 33 days, 45 days in the third, 26 days in the fourth, and 145 days in the fifth. The frequency of changing campsites signifies the tempo of migrations, which is shaped by the seasonal herding and husbandry activities being performed.

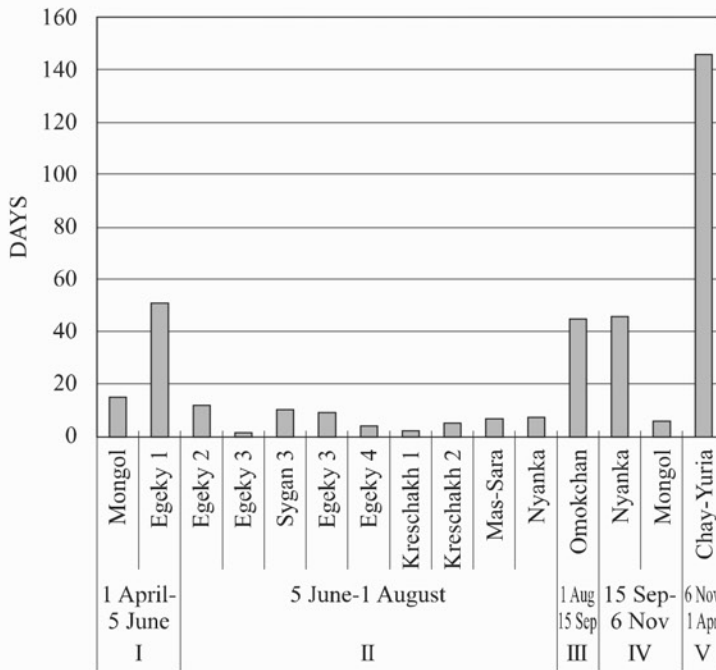


Figure 2 Campsites and the length of the stay

The Roman numerals along the bottom of the graph divide the year and camps into the types of seasonal labor performed: I) counting and spring fawning; II) moving to summer pasture; III) releasing to graze in summer pasture; IV) counting and slaughter; V) releasing to graze in winter pasture.

At the beginning of spring, herders first count the number of livestock in every sex-age grade and they divide the fawning females (*suuma vazhenka*) from the other reindeer (*suuma muojka*). This occurred at the Mongol campsite, which is equipped with a huge complex corral. The fawning females were driven on reindeer-back to the campsite, Egeky 1, separate from the main herd. The herders keep watch to protect the reindeer during fawning, and when it is over, they drive the unit to the campsite, Egeky 2, and merge it with the others, *suuma muojka*. While frequently changing campsites during this second phase of reindeer herding, members of the brigade worked during day and night shifts to keep all the livestock together until they drove the herd into the Omokchan campsite, from which the summer pasture extends. The third phase of the annual cycle is characterized by less livestock supervision. The herders released all the reindeer out to pasture and animals grazed, freely, without human intervention, except for some minimal riding reindeer. From early September, herders started to gather the reindeer which had scattered in all directions during the summer, collecting them into a single herd.

The fourth phase of the seasonal migration begins in the middle of September. The herders staying at the Omokchan campsite drove the herd to the Nyanka campsite. Moving the campsite from Omokchan to Nyanka, herders began searching for the animals which they had not been able to collect earlier. This continued until the end of October. Herders then drove their single herd to the Mongol campsites, where there is a corral. Livestock were counted again and some animals were selected for slaughter. Finally, in the fifth phrase, herders moved the herd to the winter pasture at the Chay-Yuria campsite, where the reindeer and herders spend the winter. While herders stayed at one lodge, they designated six winter pastures. The reindeer are driven to each pasture, one after another, during winter.

Herders' moving with livestock between the winter pasture and the summer pasture is, needless to say, a seasonal migration. They drive a single reindeer herd into different pastures. It is fairly easy to understand how herders keep the herd together during the drives. On the other hand, it is difficult to imagine how herders control the herd of reindeer when they are allowed to graze freely. During spring fawning, the selection for slaughter in the autumn, and summer/winter grazing, the herd is at the same campsite for an extended time. The question is, how do herders supervise or intervene to control the animals at these times? The reindeer number about 1,500 head. Do they try to keep them together as a single unit? Or is there an alternative herd control technique for such a large herd of reindeer? To ask the question is to examine a basic principle of day-to-day herd control on which seasonal herding and husbandry are based. In previous studies this pattern of herd control has been referred to only as a method needing less supervision, or as a method without day-trip herding, but a few illustrative examples will clarify the issue.

4 The Day-to-Day Pattern of Reindeer Herding

When the herders wake up in the morning, one or two of them go out from the camp in order to look for (*kördöö*) their herd. Herders find their animals grazing not far from the camp and drive (*üür*) them to gather (*khomuj*) in camp. Riding reindeer, herders drive them to camp (*kel*). Upon arrival, the animals rest or begin grazing in the unfenced yard (*tiergen*) of the camp. After a period all the herders leave their tents with lassos to catch (*tut*) their riding, draft and sledge reindeer (henceforth refer to as vehicle reindeer) and milkers (*tyhy*)¹¹). Captured animals are brought from the yard to the living-quarters. Herders use these animals to conduct their tasks for the day, which vary depending on the day, the month and the season. The rest of the animals are left (*khaal*) to rest or graze (*mechchij*) around the yard. Herders sometimes walk around the animals to surround them and prevent them from leaving (*khaaj*). While the animals are in the yard, the milkers are returned to the herd after milking. Later on the animals are allowed to leave (*bar*) the yard, usually in the evening. When the animals are moving, they sometimes disperse in all directions or head in what herders believe is an undesirable direction. In that event, the men surround the animals on foot or on reindeer to lead (*salaj*) them into a desirable direction. Except for this kind of intervention, the reindeer are allowed to go their own way from the camp. When the vehicle reindeer return to the camp after working with the herders, they are also released (*yvt*) in the direction the herd has taken.

When herders leave camp to gather the herd in the morning they use riding reindeer, but even these reindeer are not tied in camp at night. Herders catch some riding reindeer on Monday, for example, for work both for that day and the next day, Tuesday. After finishing the day's work, herders lead reindeer both for that day and the next from camp in the direction in which the rest of the herd was released. A few kilometers from camp, herders release animals that were used on that day. However, those that were caught for the next morning may be tethered to a tree, bush or stones there. Herders sometimes fetter them with a tool called a *chenki*, or if there are more than three head, they tie a rope around the neck of each animal and then tie all the ends of the ropes together. According to herders, animals cannot move far with the use of such devices. The next morning herders retrieve those riding reindeer from the night before and then set about the daily gathering of the herd.

These herding activities are repeated, in general, throughout every season. The fundamental feature of this system of reindeer herding is that the herd is driven to a place in the vicinity of humans in the morning and then released from that place in the evening.

I will try to put some of these concepts in order so that the herders' activities are more easily understood. In the order that they are performed they are (a) "gath-

ering” reindeer from pasture into the herders’ camp, (b) “catching” some vehicle reindeer and milkers, (c) “placing” animals in a certain space, that is, letting reindeer graze or rest in the yard of the camp, and (d) “releasing” animals to move away from camp. Herders’ intervening activities are conceptualized as gathering, catching, placing and releasing; while the animal behaviour corresponding to the human activities is moving-in, grazing, resting, and leaving. These activities and behaviors are the primary ideas necessary in order to analyze herd control. After being released in the evening, the herd tends to break up into many sub-groups; in extreme cases, these contain only a few reindeer. In the morning the herders have to find those sub-groups, round them up, and then drive them to the camp. This is the first daily activity of gathering and is followed by the activities of catching, placing and releasing. To repeat the day-to-day herding activities prevents a herd from dissolving into sub-groups and collects the sub-groups into a herd. It is through supervision of the herd of reindeer that herders keep animals in a certain space, a zone extending between camp and pasture.

Herders rely on riding reindeer to carry out the daily activities, including controlling the reindeer herd by gathering and driving them. Riding reindeer also play a role in releasing the herd. Herders use the passenger-sledge, which is specially constructed for carrying people, for day-to-day herding during the colder seasons when the ground is covered with snow. However, the passenger-sledge is rarely used for driving a herd. When possible, there should be a number of herders in the area and at least one herder mounted on a riding reindeer who primarily drives the herd. A single herder never leaves the camp for this work with a sledge. The purpose of using the passenger-sledge is not to steer the herders’ reindeer controlling activities but to support them¹²⁾.

5 Two Groups of Reindeer

As stated above, there are about 1,500 reindeer in each brigade’s herd. Is it possible to supervise so many reindeer in one group through day-to-day herding? The answer is yes: there are certainly periods when this can be done, such as during seasonal migrations. However, in the process of day-to-day herding, herders usually gather only a part of their herd. The purpose of “gathering and catching” is to secure their vehicle reindeer for the workday. Herders use those animals to leave camp to identify the rest of the herd, which was not caught that morning.

Herders divide their animals into two functional groups: a home group and a reserve group. They call the former *d’ie tabalara*. The Sakha word *d’ie* means home or house, and the word, *tabalara* is the plural form of reindeer. The home group contains, for the most part, vehicle and milking reindeer and is placed closer to the herders’ camp. Herders perform the day-to-day herding pattern on the home group every day, which results in these animals staying near camp.

The reserve group is called *suuma*, which is a loan-word from Russian, *summa/r/*, literally meaning a sum. The *suuma* consists of mainly meat-reindeer (*idehe* or *byrakh*¹³⁾). The meat reindeer are not as highly valued as work reindeer. Herders can recognize individual work reindeer, but they do not bother to recognize individual meat reindeer. The reserve group ranges more freely than the home group. Left without daily intervention by herders, the reserve group breaks up into sub-groups and disperses in many directions. In other words, the reserve group is not a single aggregate but instead a constantly shifting number of small groups. Using the vehicle reindeer, a herder can approach only some of the sub-groups among the reserve group in a single day.

Figure 3 provides a spatial model to illustrate the idealized relationship between herders' pasture use and the herd. Once the camp is formed after a seasonal migration, two levels of space use in a circular pattern around the camp are gradually formed. Herders merely refer to "near (*chugas*)" and "far (*yraakh*)" to from camp. The inner circle is used for the home group and this is where herders conduct the day-to-day herding. No matter where the home group may roam after being released in the evening, as long as it is within the envisioned inner circle, it is not considered a problem.

On the other hand, the reserve group occupies an outer circle surrounding the home group. As stated above, the reserve group is not a single unit, but instead

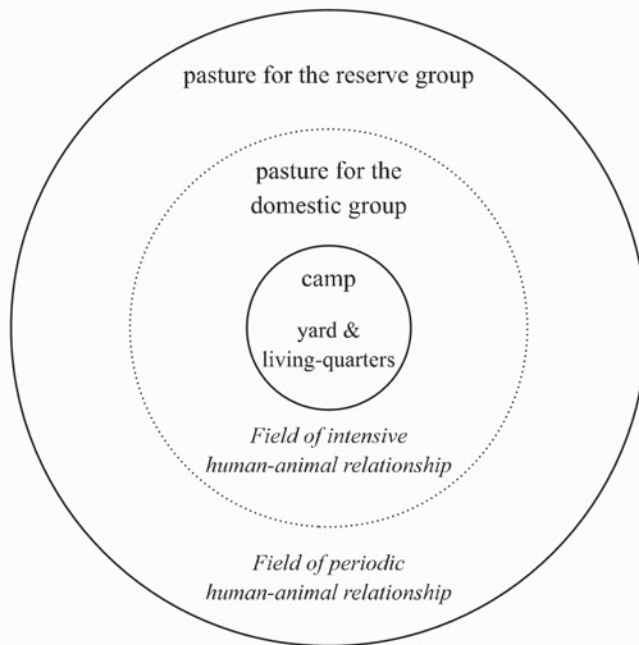


Figure 3 Spatial model of pasture and camp.

many shifting sub-groups. Herders in the outer circle find some sub-groups among the reserve group and then either leave them where they were found or integrate them into a larger sub-group. Since sub-groups are located in all directions, it is impossible to account for all reindeer in the remote pasture every day.

The daily herding activity in the inner circle establishes an intensive human-animal relationship, while the human-animal relationship in the outer circle is of a weaker and intermittent nature. Keeping the home group in the vicinity of camp means that herders always have a means of transportation nearby that can be used to keep the reserve group within a defined territory. Thus, herders establish two groups of livestock, employing one to control the others.

It is also important to emphasize that the residential sphere of humans and the home range of animals are located in different areas. The day-to-day pattern of reindeer herding is, therefore, a sequence of techniques to set animals free in a pasture or to keep them in a defined territory.

6 In Between Gathering and Releasing Herds: A Way of Appropriating Nature

The most important factor in reindeer herding activities lies in maintaining a homeostatic spatial extension between animals and humans. A herder expresses this simply as “we need to go to look (*kör*)” and “we need to drive (*üür*)” reindeer everyday. As stated above, some animals are gathered in the morning and released in the evening. Others roam either in the inner or in the outer circle. It is the herders’ job to keep track of their livestock within the inner and the outer circles. There should, however, always be maintained a certain space between herders and reindeer, except for the human acquisition of vehicle reindeer or activities related to husbandry. To prevent animals from wandering too far afield, herders repeat day-to-day herding and keep their livestock in a set territory. Herders can identify the geographic boundaries of the defined pasture by focusing on the innumerable rivers or streams. When herders ride on the back of reindeer, they are also able to move around in those areas. They appropriate the spatial extension to animals. In other words, herders need to be able to shorten the distance between humans and animals at any given moment.

On the other hand, following natural behaviour patterns, the animals tend to disperse into sub-groups after being released. This behaviour can be observed in both the reserve and the home groups. The home group consists mostly of trained animals (*symngaggas*) but there are always some that are not trained (*khangyl*) (Takakura 1999b). Such additions to the home group may cause them to scatter as far as the outer circle after being released in the evening. *The result is that the number of reindeer in the home group cannot be fixed.* Herders focus on securing and maintaining the several trained reindeer required among those in the home group. They can

find most of the animals that were released the previous evening, but some animals may not be found in time to be gathered into camp in the morning. Possibly such animals are grazing, resting, or wandering away. When they reach the point where the reserve group is located they may join it. On the other hand, some sub-groups in the reserve group move closer to the camp and the herders may inadvertently gather those animals in the morning along with the home group. The purpose of the gathering activity in the day-to-day herding is to secure most members of the home group, but not necessarily all of the members of the group. *The membership both of the home group and the reserve group is not strictly defined.*

The day-to-day herding that keeps the livestock in a defined territory makes it possible to have a ready means of transportation, even when the two groups are not clearly defined. As long as herders can access some riding reindeer, they can appropriate the spatial extension to other animals. In other words, herders with riding reindeer are able to locate the animals in space, and either to shorten or extend the spatial extension. During the seasonal migrations, the home group absorbs the reserve group, and the spatial extension between humans and animals becomes the shortest. After first gathering the home group in the morning, herders drive sub-groups of the reserve group into the campsite in the daytime, and then release both together in the evening. By repeating these activities, herders finally form the single unit herd. Once the seasonal migration ends, humans release the herd, and the daily tasks change. It becomes necessary to secure the home group and prevent animals from wandering too far beyond their patrols. The period of looser supervision of the reindeer both in late summer and winter (third and fifth phase) characterizes the greatest extension between humans and animals. Except for some minimal requisite number of the home group, herders leave the reindeer completely free for a certain period.

The maintenance of the animals in the defined spaces is supported by the protective arrangement of the pasture. In order to protect the safety of the animals, herders and other workers in the state farm/enterprise need to exterminate harmful animals such as wild reindeer, wolves, and bears inside each pasture. Under such conditions, herders can conduct the migrations of their herd to each seasonal pasture, and let animals roam freely so that they can graze and find water snow by themselves. The reindeer herders do not need to drive their livestock to graze and water.

I will reexamine these activities in light of the typological considerations mentioned above. On the matter of the classification system of herd management by Baskin, these herders can certainly be assumed to be practicing loose herding. By his definition, loose herding is a practice in which “herders only periodically gather scattered animals and move them to fresh pastures” (Baskin 2000: 24). My ethnographic descriptions could be abstracted in this way. However, this typological account is not enough to describe the herding activities which I report here. First of all there is the nature of the reindeer herd: a herd does not consist of a permanently

scattered aggregate, but is rather organized into two functional groups, the home group and the reserve group. More precisely, the home group is formed primarily in order to secure means of transportation. Humans affiliate intensively with this group. By comparison, herders intermittently (extensively) relate to the rest of the animals; these are reserved mainly for meat-production. The two functional groupings of the reindeer herd and the herders' differing attitudes to them are maintained throughout the periodic gathering of scattered animals and the occasional (seasonal) movements. In addition, the familiar and unfamiliar attitudes toward animals which are part of Ingold's symmetrical concepts (milch pastoralism and carnivorous pastoralism) are generally descriptive of the home group and the reserve group respectively.

The Verkhoyansky principle of herd control lies in the gathering and releasing of livestock with the use of transportation (riding reindeer), and then the patrol to supervise the remaining animals¹⁴⁾. In other words, the riding reindeer that are mainly organized into the home group lead (drive) the rest of the animals who mostly comprise the reserve group. This principle is basically repeated throughout the year¹⁵⁾. In the previous section, I note that herders divide all the animals into two units: the fawning females (*suuma vazhenka*) and the others (*suuma muojka*) in the spring fawning season (the first phase). According to this separation, the brigade is also divided into two. Each part of the brigade has a home group and patrols to supervise: one part for the fawning females, and the other for the remaining reindeer.

Generally speaking, the home group tends to have a consistent membership, while the reserve group tends to be composed of scattered sub-groups. During the day-to-day herding, herders always try to gather more members of the home group. However, it is certain that they periodically gather members of the reserve group. The *loose* membership of both groups is also important, because when they begin seasonal migration, they combine the home group with the reserve one. The day-to-day gathering and releasing maintains these herd control activities, and the repetition of daily work actualizes the herders' appropriation of the spatial extension between humans and animals.

The herders' herd control corresponds to their recognition of the animals. The livestock are categorized into individual trained reindeer, a home group, and a reserve group. As shown in the previous section, the trained reindeer such as those used for riding are caught daily and brought to the living quarters from the yard. The criterion for classification of the reindeer lies on two axes: the permitted distance of the homeostatic spatial extension between animals and humans, and the familiarity between human and animal. Figure 4 indicates the classification of reindeer and the corresponding spatial relationship of the animals to the humans. It represents the asymmetrical, nested structure of the classification of reindeer groups from the viewpoint of herd control. The categories branch out based on increasing distance from camp, and increasing familiarity between animals and humans. The permitted

spatial extension is in proportion to the familiarity, and vice versa. According to the degree of familiarity, reindeer as a species are first divided into wild deer and livestock; then the livestock are split into the reserve group and the home group; finally, the home group is divided into the untrained and the trained¹⁶⁾. These categories reflect the dynamism of the multi-layered, nested structure of the relationship between nature and culture, rather than a mere dichotomy between them. In other words, the structure represents the graded order of a herder's recognition of animals and the spatial disposition of animals corresponding to degree of familiarity. The maintenance of this dual structure in the pasture is based on the gathering of riding reindeer first thing in the morning and releasing them in the evening or after the end of work. The day-to-day herding of the Verkhoyansky herders, in this sense, is a technique to appropriate nature: the dominance and control over space where animals will be placed. It may be inferred that one factor in herd control is the herders' attitude toward the animals and how close their relationship is (Tani 1989: 187). However, the importance of the space cannot be overlooked; reindeer herding is embedded in a tripartite relationship that includes humans, animals and space, rather than merely a human-animal relationship.

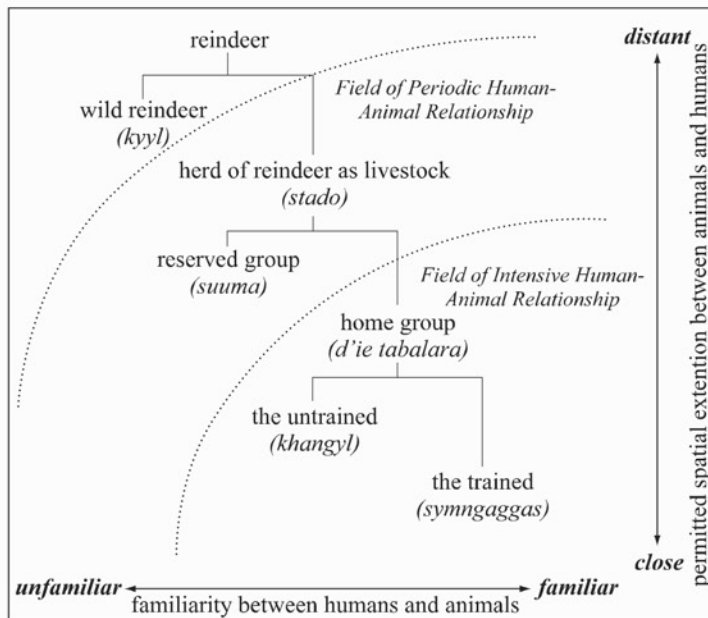


Figure 4 Classification of reindeer and the spatial disposition of the animals

7 Conclusion

The free pasturing of domestic ungulates without human control has a number of practical implications for the keeping of reindeer, yaks, camels and horses. (Baskin 1974: 540)

The first goal of this paper was to examine the concrete processes of reindeer herd control as a case study by describing some distinctive features of that herding. In pursuing this aim, I presented behavioural data on humans and animals while including herders' concepts of their working activities and the classification of reindeer.

The most fundamental and important aspect of herd control is the maintenance of homeostatic spatial extension between animals and humans. It could be seen in the day-to-day herding: the herd of animals is driven to a place in the vicinity of humans in the morning, and then is released from that place in the evening. In order to comprehend the herders' activities, I proposed four concepts: (a) "gathering" reindeer from pasture into the herders' camp, (b) "catching" some vehicle reindeer and milkers, (c) "placing" animals in a certain space, that is, letting reindeer graze or rest in the yard of the camp, and (d) "releasing" animals to move away from camp. Herders' intervening activities are conceptualized as gathering, catching, placing and releasing; while the animal behaviour corresponding to the human activities is moving-in, grazing, resting, and leaving. The implementation of seasonal migrations is supported by the skills and techniques of the day-to-day rhythms of reindeer herding.

Herders' gathering and releasing activities are fundamentally featured both in the yearly migrations and in the day-to-day control of the herd. The distinction lies in the nature of the herd: the yearly migration is applied to a whole (single) herd, and the day-to-day controls are applied to part of the herd. The composition of the herd of reindeer in the day-to-day herding pattern is the most important element in understanding the herding activities. We can recognize two functional groups: the home group and the reserve group. Herders secure the home group and let it lead the reserve group, which is how humans form the reindeer into a herd based on the relationship between human activities and animal behaviours in this region. Figure 5 shows a model relationship between herd control and the seasonal dynamics of homeostatic spatial extension between humans and reindeer. The day-to-day herding over the year, when herders gather most of their home group in the morning and release them in the evening, allows the basic minimum spatial extension to be maintained. When the number of reindeer gathered in a day outnumbers those released, and the extension between humans and reindeer attains its shortest range, the two groups are united for seasonal migrations; on the other hand, the reserve group in the summer and winter pastures could be permitted to spread to the longest exten-

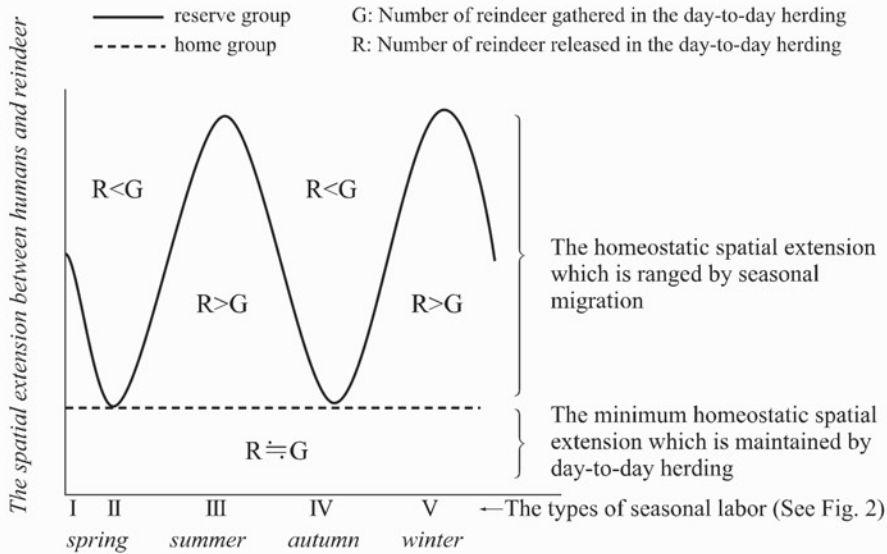


Figure 5 Herd control and seasonal dynamics of homeostatic spatial extension between humans and reindeer

sion provided that the number of head released exceeds those gathered.

It might be important to draw attention to the herders' emic recognition of those two types of group. The Sakha expressions for "home group" and "reserve group" are suggestive: the first is the plural form of "home reindeer" (*d'ie tabalara*), the other is a Russian loan word (*suuma* in Sakha, *summa* in Russian), literally meaning "sum." These local words signify a group or aggregation but do not signify a herd. Therefore, herders use riding (vehicle) reindeer (organized into the home group) to supervise and lead the rest of the animals (mostly organized into the reserve group). To preserve the loose separation between the home group and the reserve group means that the herders must keep up with particular sets of reindeer. The daily herding and seasonal migration are the process for herders to "follow the herd" in this sense.

We also need to bear in mind that the herding terminology comprises both Sakha and Russian terms. Besides the institutional terms like *brigada/r/*—a work team, and *chumrabortnitsa/r/*—professional housewife, some crucial ideas in reference to herd control are expressed by Russian words. As well as *suuma* mentioned above, there is a term, *suuma vazhenka*, which is a seasonal (spring) formed subgroup of the reindeer herd, consisting of fawning females. *Vazhenka* is the Russian word for a female reindeer. These facts denote not only the local sociolinguistic situation but also a present phase of reindeer herding practice experienced in socialist development.

The maintenance of homeostatic spatial extension between animals and humans,

and the nature of the herd of reindeer, which are seen in herders' activities, are the two most important points in this case study. My quotation from Baskin at the beginning of the conclusion is stimulating because "free pasturing of domestic ungulates without human control" could be rephrased in my view by "maintenance of homeostatic spatial extension". The nature of the herd is also a crucial matter in this activity. Needless to say, a herd is a unit of livestock which should be managed by a particular herders' working group. This study further highlights the necessity of adding another definition: a herd is a unit of livestock which could be permitted to disperse extensively in a space, on the other hand, once the herders have decided, the animals could (should) be assembled together into one. It denotes a tripartite relationship in herding activities that includes humans, animals and space. One may not recognize at a glance some scattering of reindeer as a herd, in which herders have devised two functional groups to set up the dual structure in their herd. Herders' gathering and releasing of animals in this structure enables them to control a space where livestock are freely pastured.

Formerly, typological approaches to reindeer herding tended to discuss this kind of issue within a framework of "half-tame" animals or similarity to hunting. The lack in the previous studies was a consideration of the nature of the herd in terms of the human-animal relationship. All past typological studies, in general, assumed a degree of tameness or wildness in individual animals and applied it to the whole herd. However, the relationship between herders and reindeer should not to be considered as homogenous: some animals are quite tame and others are cautious, distant or even cold, because herders certainly need some useful vehicle livestock, riding or sledging reindeer for herd control, regardless of any typological distinction. If one takes account of such distinctions in the herd and the tendency to fluidity, it is difficult to accept that the number of head in a herd (large or small) is the decisive differentiation in herd control. This paper, unlike previous studies, focuses on the relationship between the heterogeneity of a herd and herd control. The combination of different human attitudes to animals in herding activities results in the dual structure of the herd in which the home group leads (drive) the reserve group, and which appears to be the maintenance of homeostatic spatial extension between animals and humans. I believe that the relation between herd heterogeneity and herd control would be worth examining in other regional and typological variations.

The quotation from Baskin, furthermore, leads to more intriguing questions. The free pasturing of livestock without human control appears not only in reindeer but also in yaks, camels and horses. In other words, homeostatic spatial extension can also be seen in herding those animals. According to my previous study on horse herding in Northern Yakutia, it is called "distant herding": the way herders continually enclose livestock within some crudely defined territory while the animals are kept away from human living quarters, or how the herders place and release livestock within pastoral territories which they define (Takakura 2002: 15). In this horse

herding, a herd consists of many horse-bands or one-male-units (harems) and the group of working horses (for riding). The horse-band is a strictly member-defined group and has its own territory which entirely differs from the nature of the reindeer herd in this study. However, the riding of working horses would contribute to the maintenance of homeostatic spatial extension which is a common feature in reindeer herding. Further analysis of this implication including that of other ungulates is a task for the future, but finally I would like to confirm the following point. I do not deny that the terms “half-tame” and “similarity to hunting” might be inspiring ideas for a theory of the origin of reindeer breeding, however, what we ought to recognize is the more productive possibility of comparative studies of the other large ungulates, taking account of the interrelation between the ethnographic accounts of “without human control” and the ecology of those animals rather than a consideration of the similarity of hunting to herding.

Acknowledgements

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Notes

- 1) I define “reindeer breeding” as a comprehensive idea, i.e. a set of herding and husbandry activities. It is a translation of the Russian word “olenevodstvo.” While the Russian word is translated as “reindeer herding” or “reindeer husbandry” in the English literature, the meaning of the term includes “herding,” “husbandry” and “breeding (*plemennaia rabota/r/*)” in the narrow sense which refers to managing the reproduction of different breeds of animals with or without the help of modern veterinary techniques.
- 2) L. Baskin presented the “technology of reindeer husbandry”(Baskin 1991: 219); the herders’ interventions with animals can be used to manage reindeer and their grazing patterns, and certain reactions from the animals can be described in terms of behavioural science (Baskin 1970: 39–45; 1974).
- 3) A typical activity of day trip herding was described in the case of the Nuer as follows: “The men wake about dawn at camp in the midst of their cattle and...They then...take them to pasture. The herders spend the day watching them graze...and then bring them back to camp” (Evans-Prichard, 1969[1940]: 36).
- 4) The district was newly organized in 1989, and separated from the Verkhoyansky district (Kuznetsov and Missonova 1993; Vitebsky 1990, 1992).
- 5) Some people engage in private reindeer breeding. The legitimized unit is called a clan commune, *rodovaia obshchina/r/*, but that is beyond the scope of this paper. See Yamskov (1999) on the historical background of this institution.
- 6) This type of nomadism could be called production nomadism (*proizvodstvennoe kochevanie/r/*). It is different from “nomadism as a way of life” (*bytovoe kochevanie/r/*) (Levin and Vasil'ev 1956: 774).
- 7) Some local terms are printed in italics with the sign, /r/. This denotes Russian words, while ones

- printed in italics without the sign are local Sakha words.
- 8) See my previous papers concerning the structure of private animal property in that village (Takakura 1998, 1999a, 2000: 217–219).
 - 9) This was a subordinate clan name of the Tiugyasir clan of the Lamut (the Even) at the beginning of the 20th Century (Gurvich 1956: 42–43).
 - 10) As I mention in detail later, the brigade separates the fawning females from the rest of the herd only in the spring fawning season. The brigade also divides and migrates separately with each group of reindeer. Therefore, the numbers of campsites do not coincide and the yearly distance of the migration ranges slightly between that of the former (336.8 km) and that of the latter (344.1 km).
 - 11) The word, *tyhy*, originally meant a mature doe, though herders also use the word for a milk-producing doe, or “milker” in husbandry activities. In that context, a milker is trained, because she needs to let humans close enough to milk her. Herders usually give an individual name only to the mature doe after training.
 - 12) Herders in camps all have dogs, but their dogs do not play a role in supervising the herd in this region. Rather, dogs are used during hunting.
 - 13) The local term, *idehe*, means a domestic animal raised for slaughter as the occasion demands for individual consumption both for herders in the camp and households in the village. The term, *byrakh* literally means feral livestock, and herders usually use these animals in the autumn large-scale slaughter especially for the state/enterprise’s meat production.
 - 14) This principle could also be applied to herd control for horse breeding. There are, of course, many differences between horse and reindeer breeding. One of the major distinctions is the nature of the herd (band) (Takakura 2002).
 - 15) Since the collapse of the socialist regime in the early 1990’s, individual or small-scale reindeer enterprises have emerged—mostly as a splitting of the state farm. Although the number of reindeer in such enterprises usually ranges from only 50 to 200 head, the herders still repeat this day-to-day herding pattern: gathering their livestock in the morning and releasing them in the evening.
 - 16) In order to draw this picture more precisely, one should examine the nature of the trained reindeer, taking account of husbandry activities. However, as this paper focuses on herding activities, I have omitted to draw the differentiation of the inside articulation from the trained.

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Appendix, Glossary of Local Terms

- bar* – a dictionary form of verb signifying to wander off, go away
- byrakh* – (non-good quality) livestock for slaughter, especially for mass (or market) consumption
- chenki* – a type of fetter
- chuora* – a tent of transitional form between the conical tent and the iaranga tent of Koryak and Chukchee covered with reindeer skins, but people sometimes called it as “iaranga”
- d’ie tabalara* – a plural form of domestic reindeer in the literal sense of the word, or a functional sub-group of reindeer herd which mainly consist of trained animals for riding, drafting, sledging, and milking
- d’ie tabata* – a general term of domestic reindeer or the trained one for riding, drafting, sledging or milking
- d’üönde* – a type of geographical features; a bottomland with bushes, hills with grassland and small mountains
- edjgeen* – a type of geographical features; bottomland with larches and high mountains
- idehe* – livestock for slaughter, especially for herder’s domestic consumption in pasture
- kel* – a dictionary form of verb signifying to come, arrive
- khaaj* – a dictionary form of verb signifying to drive in, drive home
- khaal* – a dictionary form of verb signifying to be left, remain
- khangyl* – a untrained reindeer
- khomuj* – a dictionary form of verb signifying to gather, assemble
- khos* – a supporting reindeer for *n’uogguhut*, and the literal sense of the word is the second, again
- kör* – a dictionary form of verb signifying to look, to see
- kördöö* – a dictionary form of verb signifying to look for
- mechchij* – a dictionary form of verb signifying to graze, to browse
- n’uogguhut* – a leading reindeer for sledging
- ojuur* – a dense forest
- palatka* – a general term of tent
- salaj* – a dictionary form of verb signifying to lead, guide

- stado* – a general term of herd or flock; a local word signifying a brigade (working team) of reindeer breeding in the agricultural enterprise or state farm (sovkhoz)
- surt* – a living quarters in the pasture
- suuma* – a sum, total in the literal sense of the word, or a functional sub-group of reindeer herd which mainly consists of meat-reindeer except for the trained animals
- suuma muojka* – a seasonal-made sub-group of the reindeer herd which consists of animals except of fawning females, and the literal sense of the word is a herd of fawn
- suuma vazhenka* – a seasonal-made sub-group of the reindeer herd which consists of fawning females
- symngaggas* – a trained reindeer
- takkana* – a reindeer in the training
- tiergen* – a yard for domestic animals both in pasture and village
- tut* – a dictionary form of verb signifying to catch
- tyhy* – doe or milker. The word, tyhy, originally meant a matured doe, though herders also use the word for a milk-producing doe, or “milker” in husbandry activities. In that context, a milker is trained, because she needs to let humans close enough to milk her. Herders usually give an individual name only to the mature doe after training.
- uuchakh* – a riding reindeer
- üür* – a dictionary form of verb signifying to drive, urge
- ylymy* – a conical form tent covered with reindeer skins, it is also called “chum”
- yndyy* – a reindeer carrying a load on the back or the draft
- yyt* – a dictionary form of verb signifying to release, let go, set free