



CENTER FOR ARCTIC  
CULTURAL RESEARCH

UMEÅ UNIVERSITY  
*Sweden*

---

## READINGS IN SAAMI HISTORY, CULTURE AND LANGUAGE III

Edited by

Roger Kvist



---

MISCELLANEOUS PUBLICATIONS

No. 14.  
ISSN 0283-9687

1992

## REINDEER HERDING ON THE KOLA PENINSULA - REPORT OF A VISIT WITH SAAMI HERDERS OF SOVKHOZ TUNDRA

Hugh Beach  
Uppsala University

### *Abstract*

This report presents the results of field interviews conducted in October, 1991, with native reindeer herders from Sovkhoz Tundra, a state farm on the Russian Kola Peninsula. Besides making interviews with administrators in Lovozero, the author was able to join Saami reindeer herders of the third brigade for a short time in their spring/autumn camp. Major topics touched upon here include: Saami cultural preservation and inter-ethnic relations, sovkhov organization, worker conditions, market aspects, and herd management. Although it has not been possible to provide anything like a thorough description of either Sovkhoz Tundra or the herding activities of its third brigade, given the dearth of contemporary material in the West of any sort from the Kola Saami, this information does fill many gaps. Moreover, this work was conducted during a critical time in the history of the Soviet Union, and of remarkable change in Socialist economy. Interviews were open-ended and therefore reflect also the herders' own interests. It should be noted, however, that while most of those interviewed were Saami, the sovkhov reindeer herding they describe pertains largely to their fellow sovkhov Nentsi and Komi herders as well. The state-owned sovkhov and its collectivized predecessor, the kolkhoz, have imposed their own frameworks controlling the most essential elements of herding form.

*Hugh Beach, Department of Cultural Anthropology, Uppsala University, S-751 20 Uppsala, Sweden.*

### Introduction

This paper will outline the results of my field interviews with native reindeer herders on the Kola Peninsula in late 1991. My previous attempt to visit the Saami of the Kola Peninsula and "talk reindeer" with the herders of Sovkhoz Tundra in 1984 as a guest of the Soviet Academy of Sciences, was thwarted due to the strategic importance of the Kola district for the Soviet military. The area was simply off limits to foreigners. Instead, I was given the opportunity to visit Sovkhoz Topolinski, another reindeer-herding sovkhov<sup>1</sup> in Yakutia in Siberia, accompanied by one of Russia's foremost scholars of the Saami, Dr. Tatjana Lukjanshenko of the Academy of Science's Moscow Department of Anthropology.<sup>2</sup> Seven years later, and once again in the company of my Russian colleague, I succeeded in

---

<sup>1</sup>A sovkhov is a state farm or factory in the Soviet Union in which the state owns the means of production and the workers are employees salaried by the state. It is often contrasted with its historical predecessor, the "kolkhoz" or collective farm in which the workers themselves own the means of production collectively and derive their incomes according to the success or failure of their enterprise.

<sup>2</sup>See Beach, 1986.

obtaining permission to visit Sovkhoz Tundra itself. The Bank of Sweden Tercentenary Foundation financed the expedition. I am also deeply indebted to the administration of Sovkhoz Tundra, and of course, the herders of the third brigade and their families at camp who showed us their work by day, and who, until late each night, indulged me with the "reindeer talk" upon which the following account is largely based.

The general purpose in visiting Sovkhoz Tundra was to complement my knowledge of the Saami and their herding forms, and in particular to document any impact of environmental deterioration on the herding lifestyle. As I am currently engaged in a long-term study of the social effects of nuclear pollution from the Chernobyl disaster on the Swedish Saami (whose reindeer were considerably contaminated due to the high cesium absorption of reindeer lichen), I was especially interested to know the impacts of, and reactions to nuclear contamination among herders in Russia.

Dr. Lukjanshencko and I arrived in Murmansk on Oct. 1, 1991, where we were joined by a young Russian-English interpreter, Sasha Sadokhov. After a five-hour bus ride we reached Lovozero, a community of 3,700 and the administrative base for Sovkhoz Tundra, near the geographical center of the Kola Peninsula. Had it not been for the efforts of Tatjana and Vasilij Petrovitch, a Saami official of the city, my journey would have ended here. During the past few years glasnost, perestroika, and the dissolution of the Soviet Union have brought a number of researchers this far, but few have succeeded in leaving the cities to join the reindeer herders at their actual work station. It is not solely for military or political reasons that Lovozero is the common end point of visits to Kola Saami herders. Permission to join the herders in the field is a matter for the Sovkhoz administration to decide. Furthermore, even when permission is granted, difficult practical problems remain.

The herders might not be congregated at any particular camp. Visitors might disrupt a critical work routine. Transportation to and from camp frequently requires a helicopter which consumes large amounts of fuel, an item in short supply. All things considered, sovkhos officials argue, not entirely without justification, that it should suffice for researchers simply to interview reindeer herders at home from the field during their break time in Lovozero. The anthropological cornerstone of participant observation is not immediately credited with scientific worth. Provided the authorities can be convinced of the validity of fieldwork, and provided luck with timing and transportation can position one at camp in the company of herders, a sojourn of any length also demands food and supplies, access to which can prove difficult. On Oct. 4, Tatjana, Sasha and I were flown out to Bapozero, spring/autumn camp of the third herding brigade, a half hour's flight north northwest of Lovozero. Our six-day stay with these herders was admittedly brief, but also intense.

Given the short duration of our stay in the Kola Peninsula, twelve days in all, it is not possible for me to present here anything like a thorough description of either Sovkhoz Tundra or the herding activities of its third brigade. Nonetheless, I felt it was important to present the following information despite its gaps. The dearth of contemporary material in the West of any sort from the Kola Saami herders inhibits comparative or

diachronic analysis, but it does call for the delivery of the following notes from the field. Having stated the limitations of this material, I wish also to stress its worth. Not only is information about the Saami and reindeer herding on the Kola Peninsula rare, this information was obtained during a critical time in the history of Russia, and of remarkable change in it's economy. In fact, just a few weeks after our trip to Bapozero, the Soviet Union officially ceased to exist. Changes toward an open market economy were beginning to be felt, but on the whole, the sovkhos model of the past 15 years was still intact.

Our interviews with the herders were open-ended and therefore reflect also their own interests. The material obtained covers many topics, albeit in an incomplete patchwork. It should be noted, however, that while most of those interviewed were Saami, the sovkhos reindeer herding they describe pertains largely to their fellow sovkhos Nentsi and Komi herders as well. The state owned sovkhos and its collectivized predecessor, the kolkhoz, have imposed their own frameworks controlling the most essential elements of herding form: reindeer ownership, meat marketing, land use and work organization. This means that many aspects of sovkhos herd management can obtain regardless of any of these native cultural traditions. On the other hand, without native traditional know-how, sovkhos reindeer herding could never succeed.

In any case, this paper is not so much about Kola Saami reindeer herding as it is about the kind of state-farm, multi-ethnic reindeer herding which some of the Kola Saami, along with members of other ethnic groups, are now engaged in. My primary efforts were not concerned with sleuthing age-old items of Saami culture, but rather with determining those features of their occupational practices that follow from their current situations. Reindeer herding on the Kola Peninsula such as practiced in Sovkhos Tundra, provides aspects fascinating for both Saami studies and comparative reindeer herding studies. The sovkhos form of reindeer herding has incorporated the traditional herding cultures of a number of different native peoples, merged them under one central authority and collectivized their reindeer assets under state ownership. This system has, to be sure, generated its own kind of difficulties. But on the whole, what we see here is a herding form and way of life with many of the same problems that affect herders in other countries. Moreover, the sovkhos herding form demonstrates unique strengths which have made Soviet reindeer herding an inspiration to other herding peoples around the world.

#### **Resources and Native Status**

Lovozero has been a site of extremely rapid growth and the focal point for policies of centralization that have relocated native peoples from their small traditional settlements. A great many of the town's inhabitants over the age of 30 have been born in isolated villages now completely abandoned, maybe revived briefly only during vacations or for temporary lodgings during hunting and fishing trips. Housing in Lovozero is in short supply. Construction of standardized two and three room apartments in monotonous gray concrete high-rise buildings is persistent but seemingly

always inadequate. In the older parts of town and mingling with the new concrete apartment buildings, are small private wooden houses of much earlier date. Lovozero houses a mixture of ethnic groups, prominently Russians, Saami, Komi and Nentsi. The following demographic statistics contain the most recent figures available from town hall:

**Table 1.** Statistics regarding tribal peoples from the census of January 1, 1991 for Lovozerski Raion.

|              | Saami | Nentsi | Komi | All peoples<br>(tribals &<br>Russian) |
|--------------|-------|--------|------|---------------------------------------|
| Lovozero     | 728   | 55     | 763  | 3721                                  |
| Krasnoščel'e | 88    | 58     | 347  | 725                                   |
| Kanevka      | 12    | 2      | 65   | 112                                   |
| Sosnovka     | 14    | 13     | 15   | 97                                    |
| Revda        | 72    | 52     | 100  | 14357                                 |
| Total        | 914   | 180    | 1290 | 19012                                 |

Being in short supply, housing has come to be a point of contention between ethnic groups. Our informants were primarily Saami, and our material is undoubtedly slanted by their perspective; however, even one side of the truth is not for that reason completely wrong. Lovozero was originally a Saami settlement. In the latter half of the 1800s, large numbers of Komi began spreading into the Kola Peninsula from the east. The Komi are also traditional reindeer herding peoples, and their grazing lands had become insufficient. Komi herding proved more efficient than that of the Saami, and the Komi soon surpassed the Saami in wealth and social advantages. After the Revolution, the new government authorities treated the uprooted Komi as especially needy people and provided them with housing at the expense of, for example, Saami families who had been waiting in line for apartments for years.

Another major point of contention between ethnic groups in Lovozero concerns hunting and fishing rights. Sovkhoz herders do not enjoy any special hunting or fishing rights comparable to those afforded reindeer herders in Sweden. There are some such rights, but one does not get them simply because one works on the sovkhoz. It depends on whether one is classed as "indigenous" or not: that is, as Saami, Komi or Nentsi. Indigenous status is not something determined solely by the historical record. Although the Komi and Nentsi peoples are not indigenous to the Kola Peninsula, they have been granted this status there. Peoples "indigenous" to a district are allowed to fish anywhere in that district and to use nets. Similarly, they can hunt anywhere in their district, but not closer than seven kilometers to settlements. There are some other factors, too, which play a role: e.g., how long one has been living in the north and how long one has been working there. In order to get these rights, one has to have worked there for at least fifteen years.

My question whether such resource rights permitted them to sell their

catches of fish or game met with a somewhat circuitous response. I was told that there is a limit to the size (and number?) of the nets one is allowed to use, so the amount of fish one can catch is not large. Few would want to sell. If one did, it would be illegal. Apparently this hunting and fishing privilege was at first only a privilege of Saami and Nentsi. Later (five years ago) it became the privilege of Komi as well; and still later the privilege also of Russians who live in the region. So is anyone excluded?, I queried. No one. This is a very recent law, enacted in August, 1991. At the same time, I was informed that a major debate had surfaced as to whether or not new Komi families moving into the Kola district should be classed as "indigenous", along with their Komi brethren who had come up to a hundred years ago, and who had already been granted indigenous status. If the new law gave equal resource access to all peoples, I saw no reason for the fuss. The explanation given was that practice does not necessarily follow law, and that for those empowered to control resource use, indigenous status was still the crucial issue.

While I did meet a number of Saami from Lovozero not connected to the sovkhos who opposed the granting of indigenous status to the "new Komi," all the sovkhos herders I met seemed in favor of it. They pointed out that it was a very strange situation when two people could be working together all year, but one could fish and not the other. They asserted that the new law, seen as a step toward the true equalization of resource access, is a good development, since in the past years there has been quite a lot of tension between ethnic groups over fishing rights. A common remark was that everyone had been fishing illegally before anyway, so this just made it legal.

Within the Soviet Union ethnic membership is documented. When they have attained sixteen years of age, children of mixed marriages are given a choice whether they want to be registered as belonging to the ethnic group of the mother or the father. With differential access to resources (in practice if not in principle) according to group membership, such a choice involves many considerations. As a recent example of the kinds of manipulative strategies registration of ethnic identity might involve, we were told that since Saami in the Kola Peninsula now have open contacts with other Saami outside the Soviet Union, some Russians have been claiming Saami ethnicity. Such a claim might facilitate their ability to obtain invitations from other Saami in Fennoscandia, or to travel to the West on the pretense of meeting with other Saami. There has even been speculation that in time visas will not be required of Saami who wish to travel to other "Saami countries" while still required for Russians.

Despite points of inter-ethnic conflict, it would be misleading to emphasize this when, on the whole inter-ethnic compatibility, intermarriage, and mutual influence are prevalent. For instance, the superb reindeer fur clothing used by sovkhos herders exhibits a mixture of Saami, Komi and Nentsi traditions. Most of the Saami reindeer-hide seamstresses we encountered were expert in fur patterning and cut, derivative of Komi and Nentsi traditional styles. Some of them, unaware of the external influence, claimed their work to be purely Saami in origin, it having by now been incorporated through a number of generations.

The older Saami whom I interviewed in Lovozero and who had spent

their youth in small, isolated, generally all-Saami villages explained that they knew Russian, because of all the Russians they came in contact with during their migrations. However, even today, few Saami speakers learn Komi, and few Komi speakers learn Saami. Of course there are those in Lovozero who speak Russian, Saami and Komi. According to our informants, Kildin is the main Saami dialect of the Kola Peninsula, but there are about ten other Saami dialects, some of them hardly intelligible to one another. The Kildin speaking Saami claim that the closer they come to the sea on the Kola Peninsula, the harder it is to understand another Saami dialect. All the children of the herders grow up speaking both Russian and Saami. The various herding brigades of Sovkhoz Tundra have different ethnic compositions, and therefore have correspondingly different blends of camp language. The children's ability to learn Saami, especially those elements related to reindeer herding, increases greatly at camp. Asked if his one-year-old son will grow up to speak Saami, one of the Bapozero herders answered simply, "How can he help but learn Saami?"

In Murmansk and Lovozero, however, among the non-herding Saami population, Saami language loss is a serious problem causing much concern. There are only a very few school texts for teaching Kildin Saami and these are the focus of heated debate. The one side claims that the only way to preserve the Kola Saami language is to join with the standardized Saami orthography based on the Latin alphabet used in Fennoscandia. In this way, the Kola Saami children will be able to utilize school texts from the West and to enjoy the far larger body of Saami publications. The other side maintains that the Kola Saami children should have their Saami school texts in the Cyrillic alphabet, an alphabet they already know through Russian. If they are required to learn an entirely new orthography to preserve their Saami language, it will disappear all the faster. They argue that once Saami has been mastered, there is time enough to learn the Latin alphabet and to link with the Western Saami literature if one so desires.

Lovozero and Karasjok, Norway, have become "friendship cities," and an experimental program has been devised for some Saami from Lovozero to study the Saami language in Karasjok. The dialect taught in Karasjok is northern Saami, the dialect of by far the majority of Saami speakers. Knowledge of this dialect and accompanying Latin based orthography will enable Kola Saami representatives to participate more fully in Nordic Saami political forums. However, by itself this is obviously not a solution to the long-term problem of Saami language loss on the Kola Peninsula.

### The Sovkhoz

The Kola district has two sovkhoses, one in Lovozero and another in Krasnoščel'e. On the Kola Peninsula as a whole, there are four herding sovkhoses. Sovkhoz Tundra, based in Lovozero, is the biggest sovkhos on the Kola Peninsula and deals mainly with reindeer. The Sovkhoz Tundra range covers about one fourth of the Kola Peninsula. Of the approximately 3,700 inhabitants of Lovozero, only about 400 work for the sovkhos. Approximately 10% percent of the Saami in Lovozero work with reindeer. As the former pure-Saami villages become increasingly mixed with

Russians, the Saami have become involved with other forms of livelihood and jobs. Nonetheless, it seems that herding roots are not far distant for most of the Saami living in Lovozero. Many of those we met commented upon the herding of the "old days."

An elderly Saami woman I spoke with in Lovozero related that she and her husband had owned their own small herd of private deer before relocation. She explained that they used to milk the reindeer a bit, but just for drinking; they did not make cheese. Most of the Saami had small herds; in fact, most of their deer were steers used for transport. In the old days they used to know all their deer personally, by name. It was traditional in those times to give a reindeer to a young child to commemorate its first tooth. They also used to give deer for birthdays and special occasions. It is the modern herding life to stay in one spot, she commented, but in her day they moved around a great deal with the deer.

When they hunted it was not for sale, only for subsistence. Asked about the importance of moose meat to the herder's diet, my informant said that she had never seen the animal in those parts. They are very rare: probably only a couple of hundred exist in the Kola region. In the old village where they used to live, the people were mainly Saami, although there were also some Russians (ten families), and Komi and Nentsi. When the kolkhoz was established in Lovozero, the Komi families moved to Lovozero. In Veronya, they never had any wild reindeer nearby. The Saami people there had used the high Nentsi deer sled with runners, as far back as she could remember.

Fifteen years ago Sovkhoz Tundra was a kolkhoz. Under the kolkhoz system, the pay a worker received depended upon how much the collective produced. Many of the kolkhozes that were devoted to herding were very poor economically. They had only small herds, and few goods to sell. Now that they have been reorganized into sovkhoses, the herds are big. With the kolkhoz system the deer were owned by its members, but with the sovkhos system they are owned by the state. I asked how this transition was accomplished. My question as to "how" was commonly answered as if I had asked "why." In the kolkhoz, I was told, some people were very rich and others very poor (depending upon greatly variable pay). This was against state policy, and so the state took over and evened out the living standards.

I was also curious how the organization of the sovkhos differs from that of the old kolkhoz. I was told that the main difference is that in the kolkhoz the herders would decide among themselves if they (for example) would spend funds to build a fence. Now they are not so free in making such decisions. In the kolkhoz it was possible to work one day 24 hours and another day 2 hours, but in the sovkhos everyone has a very set working day schedule. When asked which organizational form they preferred, sovkhos herders who had also been herding under the kolkhoz form, expressed the opinion that as far as the work itself goes, there is not much difference. Now, however, the sovkhos form provides much stronger capital backing by the state, and so they gain more access to costly machines (snowmobiles, helicopters, etc.).

For the whole sovkhos the total number of deer is about 40,000 head, and should not exceed this number in order to preserve grazing. Currently the sovkhos has different brigade herds with about 4,000-6,000 head in each.



Years earlier there were only about 1,000 head in each. About 8 to 10 people care for a herd of about 4,000-6,000 head, forming a brigade. Sovkhoz Tundra has currently 10 herding brigades. They strive for no more than 6,000 head per brigade, otherwise grazing problems might result. The size of each brigade herd is about the same everywhere, that is, also in the other herding sovkhoses. Their winter herd size is considerably less, so there is no problem with overgrazing. Within each brigade, for practical purposes of herding work, the best number of deer in an individual herd is only about 2500 head.

All together, the sovkhos has only a little more than 100 employees. Each brigade has about 12 people. Usually there are 10 men, and also two women who deal with food and clothing, per brigade. Each brigade has its own veterinary team. The herders of each brigade elect one of their team to be chief of brigade. There are some brigades that are composed only of Saami, but most are a mixture of Saami and Komi. There are also some Nentsi.

Over the different brigade chiefs, there presides a council of the chiefs of the brigades. There is a chairman of this council, and it appears that this man is usually the same as the director of the sovkhos. While all the chiefs of the brigades have had practical experience with deer, those sovkhos workers who work only with financial matters or administration in the main office probably have no experience with deer. The sovkhos also runs a small "factory" in Lovozero where employees (often wives of herders) make shoes and clothes according to traditional fashions for use by the herders.

#### Worker Conditions

Much of the personal equipment used is traditional in character, sometimes with a history dating back centuries. When in the field herding reindeer, for example, the herders generally use shoe-grass of the same kind as that used by the Saami in Sweden. This material is useful for absorbing foot perspiration as well as for adding warmth. The grass is cut near wet places and prepared by beating, shredding and braiding-just as in Sweden. Shoes can be of any kind. A simple loop is used for a ski binding. The herders rarely use skies alone without being pulled behind a deer (see the section on "Herd Management" concerning transport deer, below). When the herders leave by sled to round up the herd for the main autumn slaughter, each will bring food, a tent, and a change of clothes. They do not use sleeping bags. Sometimes they might even adapt a plastic bag or sheet for a tent. The men have never had anything like a mobile cabin or tent put up on a sled. The closest approximation they ever had to such a mobile tent, was a makeshift structure experimentally erected on the women's sleds, but this was very unsatisfactory because one could not light a fire inside.

Many of the herders use lassos made out of long, braided strands of reindeer hide. Such a lasso, which the Kola Saami call a "lashkim," lasts almost a lifetime. Nowadays, few people know how to make the traditional reindeer hide lasso anymore; those that do know naturally make them for their friends and relatives as well. The lasso's eye piece, called a "chubar," is made out of reindeer antler, but is considerably smaller than that used by

the Saami in Sweden. Increasingly, imported plastic lines are becoming popular, but besides being stiff in the cold, these are difficult to obtain. The herder that wants a good lasso must still get a hand-made one of reindeer hide. The reindeer hide lasso can be used for big deer and small deer all the year round. The use of high technology tools is, of course, less widespread and less advanced than in the West. For example, the herders do not employ walkie-talkies to keep in touch when in the field. Instead, they carefully plan where and when they will reunite before they split up, and if a special need arises they resort to flares (red rockets that are shot off overhead).

Three snowmobiles were kept in a small shed near the main cabins in Bapozero. The herders explained that they rarely use the snowmobile to go to the herd. Almost all contact with the reindeer is by sled. If they do use a snowmobile, it is usually either in order to travel into Lovozero or to haul wood. The marked preference for sleds is because they are more economical (owing to high fuel costs) and better for the deer (on account of the disturbance caused by motor noise). Not only is gas in short supply, but herders cannot deduct the purchase of a snowmobile from their tax declarations (as they can in Sweden). Moreover, the herders claimed that while the snowmobiles may work fairly well for the first year or so, they soon begin breaking down. My informants had never heard of the "larven" type of snowmobile, designed for steering with one's own legs mounted on skis. Their snowmobiles consume about 30 liters of gas per each 100 kilometers. The snowmobiles at Bapozero are sovkhos (state) property, and the sovkhos prefers its herders to use sleds whenever possible in order to save money.

The use of helicopters is apparently increasing (as in Sweden), since the herds are so large. These vehicles will not only transport supplies; during certain times, as in the mushroom season, the reindeer are greatly spread out, and then the copters will be used to locate the animals. Unlike the situation common in Sweden, however, helicopters are not used to gather together or drive a herd. Some brigades that are far away from Lovozero make extensive use of the helicopter. However, the third brigade, being so close to town, uses it only a few times a year at the beginning of each season to freight out quantities of supplies. Hence, the helicopter but seldom comes to Bapozero.

A more usual form of transportation between the base camp and Lovozero, is by boat via the river when it is not frozen. After a ride of three or four hours out of Bapozero, one reaches the end of a dirt road about twelve kilometers from Lovozero. This simple road was completed sometime in the 1950s. While on the job, the herders use up almost one 150-liter propane tank per month. They use ten tanks per year, and when they leave camp in December with the help of a big all-terrain-vehicle, they will use it to haul the empty tanks with them to be refilled. By exercising a little foresight, the third brigade has never yet run out of propane the way some other brigades have. Much of the time they simply use a fire outside, especially when they cook food for the dogs.

All but one of the herders of the third brigade had housing in Lovozero, either their own small apartment or else quarters in the old house of their parents. Each herder has a total of about 4 months off the job.

This does not mean that they all get four-month vacations, but that there are periods during which, because of the rotating winter work schedule, they can be at home in Lovozero while other herders work at winter camp. Nor will a herder have to be separated from his family for a full eight months, since he can make occasional trips to Lovozero-which is not prohibitively far from Bapozero. Moreover, each herder gets a one month vacation in summer (July), and only two men are needed at any one time at the winter camp. The main periods that herders are away from Lovozero for extended times are autumn and spring. Should a herder have a child under seven years of age, this child and the mother can stay with him at the Bapozero autumn/spring camp. They will be provided their own small, single room living quarters with a wood stove and a propane stove. Any older children will be housed in Lovozero with relatives or given room at the boarding school free of charge. Once the small child becomes school age, the child and mother must return to Lovozero.

All three of the women at the Bapozero camp stated that they preferred living there to being in Lovozero. They claimed that their general health, and especially the health of their children, is better here in camp than in Lovozero. The food in Bapozero is better (fresh reindeer meat and fresh fish), and while in camp they are earning pay, in fact, a very good pay, since living in camp is considered a hardship condition. The difficult time for these young wives with their small children occurs when their husbands move from Bapozero in the autumn to start moving the herd north in October for the coming slaughter. They remain in Bapozero until sometime in December, with only radio contact to the sovkhos base station in Lovozero. However, the women will not be without contact with the herders during this entire period, for the latter will be coming by now and then from the winter range as the herding work requires or permits.

Herders of the third brigade are in a fortunate situation with respect to their proximity to Lovozero, for they can be joined by friends and family members for brief visits or school holidays without much difficulty. This helps the children keep up an interest in the herding livelihood. The herders in each brigade are frequently related to each other. To some extent, they are given the choice which brigade they want to work in. It is not uncommon that a herding family stays with a certain brigade through the generations.

In the past, primarily Laika dogs were used for herding, but now the majority are of mixed breeds. These are private dogs, trained and cared for by their individual owners. Each herder uses only his own dogs, which last for about ten years or more. Many herders own two dogs: one older and more experienced and a younger one in training. Alternatively, one may be best at short-distance work and the other at long-distance work. Seldom is found a universal dog - one that can both chase deer with maximum effect for a hundred meters and also control the herd's movements over distances of many kilometers.

The herders describe two ways of using dogs: (1) when the herd is settled in one place, and (2) when the herd is on the move to another territory. In the latter case the dogs just keep the herd together and moving. Sometimes, on the rare occasions when a herder is using a snowmobile to control the herd, he may put a dog with him on the seat so that the

combined motor noise and barking will have a double effect. Some dogs seem either to have a natural talent for herding, or to have acquired the skill spontaneously from their parents. In order to train them, the first step is for the herder to take a dog with him and see if it has any interest in herding. If the puppy shows such an interest, it is put on a leash and brought along with the trained dogs to learn. The herders command their dogs by voice, along with a few gestures. Most dogs have been with the herd so long, however, they know what to do and know just what their masters mean by the slightest murmur.

Despite their obvious usefulness, the dogs themselves require watching lest they should kill an occasional calf. When I pointed out that in Sweden such a dog would be killed, the Bapozero herders replied that they could not afford that luxury. Long ago they might have done this too, but now they say it is so difficult to find decent dogs that they must put up with a few bad qualities if, as one herder put it "you don't want to be forced to gather your deer by throwing your hat or running and shouting yourself." A big problem comes up when a herder returns with his dogs to Lovozero, where the living space is so crowded with parents and siblings, etc., that there is no real place for the dogs. Herders therefore will often leave their dogs in camp with the brigade. In many brigades the dogs are not even tied up. At Bapozero, however, they are. The dogs are always kept outside, in the winter too. When it is really cold, sometimes all the dogs sleep together for warmth. They eat mainly fish, internal organs of reindeer, and anything left over from the herders' plates.

The pay that a herder gets from the sovkhos is variable, depending both on how long one has been working for the sovkhos, and on the possession of special skills. The standard salary is about 500-600 rubles a month, high wages for the Soviet Union. The pay scale used by Sovkhos Tundra is the same as that used by the other sovkhoses on the Kola Peninsula. However, elsewhere in the Soviet Union the scale is different. The reason why the pay scales are different for different herding sovkhoses in different geographical locations, is that the conditions and hardships are so different. Here in Kola, herders may migrate with the herd for 100 km before reaching a new camp, whereas among the Nentsi it might take 1,000 km on the average. Sovkhos employees (herders etc.) receive certain benefits as well as money. They are paid in money, rather than with a combination of money and goods, but they also get access to certain goods (like meat and fish) at a substantially reduced price. Or, they might simply get access to certain goods at the regular state price, but these are the kinds of goods (like washing machines) they would otherwise hardly be able to come by.

The state farm pays its herders only one time a year; in the meantime the herders get products from the state at prices subtracted from their coming salaries. This year, since there is such a high rate of inflation, the salaries will be increased somewhat; but the increase will not compensate adequately for inflation. The sovkhos herders do not take outside, part-time jobs during slumps in the reindeer work schedule as might herders in Sweden. They are employed by the sovkhos only, and are doing sovkhos work all the time except for vacations. Of course the work comes in waves, as they explained, but they rest at times, and if they needed to have other

jobs, they would never have the time to rest. Their salary is still secure, they pointed out.<sup>3</sup> Swedish herding Saami cannot rely on such a secure income. Besides a secure regular salary, herders have the possibility of gaining increased income according to performance. For example, should a brigade show more herd growth than agreed on in the plan, then the members of the brigade earn more.

As is so common today among most reindeer herding operations, a major problem is the securing of new herding recruits. When the current crop of sovkhos herders were young, this was not a problem, but nowadays youngsters no longer want to follow in their parents' footsteps. Herders report that in their youth, it was difficult to get a job with the reindeer, since it was very prestigious work; there were more applicants than jobs, and one had to be a very skilled herder and very reliable. Nowadays everything is upside down, and if one can find another job outside of the sovkhos, one generally takes it instead. The best recruitment possibilities are with children of herders who have been brought up in the herding life by their parents. Unfortunately, 60% of the herding men up to 40 years of age are unmarried, and the proportion of children among the herders is quite low. Now, for the first time, the sovkhos is going to introduce some new herders from outside, imported hands from the south of Russia who must be trained from the very beginning. The herders regret this development, of course. Such an inexperienced recruit might become a snowmobile driver, they say, but not a real herder, since this cannot be taught; one must grow up with it.

The problem of finding new herding recruits does not stem only from the herder's own insufficient supply of children. Even those children they do produce are very likely not to become herders. In the past whole families moved with the deer on the tundra, except maybe the very small children and very old people; now things are almost the reverse: only the very small children live with their parents at reindeer camp. School-age children are attending classes in Lovozero. Bapozero herders report that when they were children of about 15 years, they could tell the individual deer apart and work well with deer. Now, however, the boys get the usual education at the ordinary school, and only later do those interested in becoming herders receive some special herder training in the classroom: the result does not produce nearly as good herders.

One of the third brigade herders was a graduate of the first class of the technical training school for herders at Lovozero, but he says that he learned nothing of real worth there. The real learning came from doing the job itself. The school does not teach them how to lead the Saami life or how to do the real work with deer. This man was the son of herders and had worked with deer since childhood. I was curious, therefore, why he had enrolled in a herder-trainee course in Lovozero. It turned out that he had to prove that he had been trained in the school in order to get a job as a herder. He had to have his papers, even if he regarded them as worthless in reality. The Saami herders of the third brigade, like their counterparts in Sweden, express concern that the quality of younger herders does not compare

<sup>3</sup>Again let me remind the reader that the conditions described in these pages may have altered radically since I made my observations.

favorably to their standard. Finding recruits is one problem, but finding good recruits is another. They claim that due to the increasing dependency on modern transportation vehicles, it is difficult nowadays to find people who are skilled in working with deer. They have become lazy and used to living in town. Few people want to work with the deer, so they are forced to take the untrained and the untalented - almost anyone who expresses the least interest.

In previous years the herders never heard anything about radioactive contamination; now the radio reports every day on new tests made on different items in different places. The Saami mainly joke about this, since no one can really tell how important it is. They know, however, that people were beginning to be affected from the fallout from atmospheric bomb tests in the 1960s, and since then health problems have only gotten worse. The herders have also heard that people who have eaten a great deal of reindeer meat near where there has been fallout from bomb tests, show very high values of radioactive contamination. Now they believe such problems stem more from nuclear reactor plants than from bomb tests. They know some tests have been made for radioactivity in the deer, monitoring the animals' blood. Also, each year every sovkhos worker goes through a long radioactivity test. I asked if they knew any results about themselves, but they replied that they had no idea. Information about the use of nuclear explosives for mining purposes on the Kola Peninsula was revealed shortly after my return to Sweden. No one I had spoken with in Russia made mention of it, and I doubt they were aware of it. According to official reports, contamination from these underground explosions has been contained.

I brought a sample of reindeer moss from Bapozero back to Sweden for testing at Uppsala University's Department of Radiology, which has been concerned with much of the testing of Chernobyl effects. Lab results indicated that there was little contamination from Chernobyl, approximately the same level as that recorded for Swedish Norrbotten. Nor was the nuclear contamination in general higher than that of Norrbotten.

When asked if there had been purchasing resistance to reindeer meat, they replied that they had not noticed any. Tests of the reindeer meat are rarely made. Before Chernobyl reindeer meat testing was even less frequent. Now the herders know that radioactivity is somewhat high, but this is quite uniform. Accordingly, they regard it as superfluous to perform many repetitions of tests in different areas. In short, the herders consider themselves well informed without requiring frequent tests. They argue, moreover, that the majority of the end consumers rarely eat the reindeer meat in pure form anyway; usually they mix it up with something else and other meats to make sausages. However, no one I interviewed could give me concrete values about the meat test results. According to the herders, it is up to the buyers to do the testing. The public is still buying, and the meat continues to be exported to Sweden - so supposedly values are under the marketability limits set for reindeer meat in Sweden (1,500 Bq/kg). In general, the herders report that they have neither observed nor heard of any special effects due to Chernobyl. Maybe there has been some change, the herders add, but nothing they can notice.

### Market Aspects

Within the present economy where, as in the Sovkhoz, payments might be made in the form of goods or even access to goods, where a broad system of subsidies prevails, where bills are checked off against annual lump sum incomes in the face of galloping inflation, it becomes hardly sensible to think of determining the profitability of any operation. As one might expect, we received variable assessments of the strength of the sovkhos herding economy.

A Lovozero official indicated that herding reindeer was hardly a profitable enterprise. Only now, with the move into the market economy, does the herding income cover herding costs. Earlier, according to him, there was a net loss. The price for reindeer meat rose ten times last year. This is scarcely unusual nowadays, whereas under the old system costs were heavily subsidized by the state and prices artificially kept down. A major problem with herding, I was told, is that it now requires a great deal of expensive high-tech machinery and fuel. It is very difficult to pay for all this through the sale of the meat. If herding is not a profitable enterprise for the state, I wondered why the state maintained this massive sovkhos herding investment. The official made the case that much of state motivation for sustaining herding in isolated regions like the interior of the Kola Peninsula, was to support the native populations and help them maintain their cultural heritage. The Bapozero herders scoffed at this argument and stated flatly that the sovkhos herding certainly was economically attractive to the state.

Most of the sovkhos reindeer meat is sold to the state "kombinat" in Murmansk. This kombinat is a state company which mainly makes sausage of the reindeer meat. The sovkhos saves a little of the meat for sale in Lovozero at local stores. Most of the hides and antlers are exported or used for making souvenirs. The antlers which are exported are cut into small pieces and sold to Japan and Germany. No one seems sure what they are used for. Nor do they know much about the eventual use of the hides, except that they are sold to factories in the middle of Russia. It seems that such matters are beyond the concern of the sovkhos. In fact, no one we interviewed could tell us where all the meat is finally consumed or in what form. Many expressed surprise that they so rarely see reindeer meat in the stores on the Kola Peninsula. A number had seen reindeer meat sausage, but even this is not common and is made from only the lowest grade meat.

When asked if the sovkhos can choose its own market for sale of meat, or if it must meet a state quota, the herders answered that the Sovkhos has a type of contract with the state to sell a certain quantity to the state "kombinat" in Murmansk. If they meet the quota and still have excess meat, they might make barter deals, not involving money. They might give meat to one factory and get fuel or TV sets in return. It is not that they are not permitted to sell for money, only that the price is so low for the meat, maybe only 15 rubles/kg, that they think it better to trade goods for it. Also, an incentive to sell to the state kombinat is that the state then helps them get access to goods from other state factories, which they would have a hard time getting otherwise.

The herders inform us that the price they got for reindeer meat in the

autumn of 1990 was 9 rubles per kilo-that is, for first class meat. (There are three meat classes.) The year before the price was only 2.8 rubles/kg. They did not notice any price fluctuations in reindeer meat due to the bankruptcy of the big Finnish reindeer meat slaughterhouse. After all, the price of meat in Russia has gone up, not down as in Sweden. Russian reindeer meat economy reacts not so much to international shifts in supply and demand, but to the far more radical changes in the internal economy.

The sovkhoses have a variety of lucrative markets where they can sell secondary products of reindeer husbandry. Not only the prime meat, but also other animal parts find ready buyers. There is, for example, a factory in Russia which makes an elixir called Pantacrin from reindeer antlers, preferably antlers cut from living deer.<sup>4</sup> Whereas Sweden and many other countries have outlawed the cutting of antlers from living animals on grounds of cruelty, the countries of the former Soviet Union have no such laws. Not surprisingly, then, the sovkhoses eagerly embrace the Pantacrin trade. There have also been some Asian buyers of antlers who have sought direct contacts with the sovkhoses. One company offered \$17 a kilo, even for hard antlers without blood.

Most of the antlers are cut systematically by the "kombinat" slaughter company during the autumn buck slaughter. (Note that only the antlers from uncastrated bucks are used for Pantacrin.) But in addition to the regular autumn antler harvest, some deer have their antlers cut as early as May or June during the spring corrals. In this case, the procedure calls for special measures, because it is important to stanch the flow of blood after cutting. The herders are fully aware that the deer might otherwise die prematurely. Therefore, they tie a piece of cord tightly around the antler stump. They also use some type of spray on the stump, presumably to keep the flies away and help fight infection. Significantly, however, none of my informants had any idea what Pantacrin is used for. For the slaughter of private deer, one need never have anything to do with a big company. It is best to slaughter one's own deer oneself in the field. Furthermore, there are always people in town ready and willing to do the slaughter work in return for a reindeer's heart or some minor cut of meat. In the old days they used to make sausage with reindeer blood, but no longer. Nor do they make use of reindeer livers any more.

A few of the herders remember that when they were children they used to grill soft antlers over an open fire and eat them. These Saami herders declare that they never drink the blood of reindeer, but that the Nentsi do sometimes - not necessarily from the antlers. They also eat marrow bones, fresh or cooked, and fried reindeer brains too, but they do not eat raw meat, unless it is frozen, and then very little, and infrequently-only if they are in a hurry. These herders do not observe the tradition, common among Swedish Saami, that if possible the cooking of meat is left to men. Both men and women will cook anything, but, as with the

<sup>4</sup>Pantacrin fetches a big price, especially in the Far East, where it is believed to increase vitality as well as stimulate sexual prowess. Although there is little scientific evidence to support this belief, the force of popular superstition ensures a continuing market for this substance.



Russians, it is chiefly the women who cook.

### Herd Management

The third brigade has a range that is far more circular in shape than is common for brigade ranges in Sovkhoz Tundra. Of the ten brigades, almost all of them have migratory routes bringing the deer to the north sea coast in summer. Only the third brigade and one other have no range adjoining the sea. All the herders of the third brigade are Saami. The chief of the third brigade, Ivan Lukin, has held this post for ten years, having been chosen for the position by his fellow brigade herders. His father had also been a chief of brigade. The chief of brigade is responsible for the brigade's herding and must organize the work. As noted previously, visits by foreigners to reindeer camp in the past used to be rare indeed. Now, however, constraints have been eased, and at the time of my visit I learned that another foreigner had been hosted for a few days at Bapozero in April. The popularity of the third brigade for foreign visitors stems from its short distance from Lovozero. Being closest, the third brigade is also the cheapest to get to!

Of their ten big herds, corresponding to the ten brigades, there are eight that migrate north to the coast in summer (to rid themselves of the mosquitoes) and south to the inland in summer. Two brigade herds stay in the inland year round, not too far from Lovozero. Each of the eight more migratory herds follows its own special route. The reason some herds move north in summer, but others stay inland, has to do with the habits of the deer. These two herds that stay inland are composed of animals that have a long tradition with such a pattern. Moreover, within the territories of these two herds, there are some hills onto which the deer can escape from mosquitoes. The herders stress that these habits have been largely set by the deer themselves. When they move the herds, they try to save grazing in some places for another time, so they do not always do it exactly the same way. They do not always move all their animals together in one group, but let them spread out a bit to save grazing land from being overly trampled and depleted. The deer keep to their customary territories. The herders have experimented with trying to move deer to new regions, but the animals always try to return.

With respect to the seasonal work schedule, herders say that the easiest period is the winter time from January to April. In autumn they have a lot to do: bring the herd together and start the slaughters. In February, they also choose deer for future slaughter. The main slaughter is at the end of October. In the spring they are busy moving the herds and then marking the calves. (It seems that summertime is not considered a real part of the main reindeer work schedule at all. July is also the period when most herders have vacation.) In November and December they keep the deer on the east side of the Kitsa River. January the herd spends on the big hill not far from Bapozero. The calving land is at the very beginning of the Kitsa River, about 15 km north of Bapozero. Instead of moving to the coast, the deer go up to the mountains to get away from mosquitoes. The herders do not need to make smoke to protect the deer from mosquitoes. They do, however, have a special kind of repellent which they spray on the deer - not on all of them,

but on their transport animals, whose service precludes them from getting relief in the mountains.

The herders mark the calves immediately after they are born in mid May. This is easier than waiting until late June or July as in Sweden, since one does not have to corral them or match them with their mothers again. Other than marking the newborn calves on the spot and watching for predators (usually wolves and bears), the herders trouble the deer as little as possible during this sensitive period. In discussions about the skill of old herders who might assist a cow during a difficult birth, the Bapozero herders indicate that some of them can still do this. Herders in this brigade can still perform an operation on a cow to cut out a stillborn fetus, but such measures are not always such a good idea with a big herd. While concentrating on helping a few animals, one may lose a larger number to predators and other dangers. It is necessary to watch over them constantly.

The Bapozero herders thought the timing of the Swedish Saami calf marking system extremely inefficient. They wondered how the owners can recognize which calves are theirs as late as July. Even if the calves run with their mothers, they wondered how maybe 50 private deer owners can mark the calves in a herd of a couple of thousand head all at once. Reflecting their own herding system, and assuming that one would be performing a collective reindeer count in conjunction with the marking, the Bapozero herders wondered how one could get a good count with 50 different herders working in the corral at once. (For more on marking in the sovkhos, see below.)

In the Swedish mountain Saami districts<sup>5</sup>, after the calving the deer are left largely on their own in the mountains, until the herders can return when the ice breaks up toward the end of June. The herders of the third brigade, in contrast, remain guarding the deer (and marking the calves as they are born) throughout this period. They remarked that the Swedish ranges must have far fewer predators (which is true). One reason they mark at birth, is that later if the calves become separated from their mothers, errors can be made, and in addition many might be missed entirely. Even so, the marking is often done in two steps: those they can get at birth in May, and then the ones they missed at birth are marked in early June. In the summer the reindeer are quite free, but after the gathering in the autumn, they are kept together. Castrations are performed mainly at the end of February and again in the beginning of May. Since the herd is kept together in the winter anyway, this requires no major effort.

The herders make the reindeer count in October, at the same time and in the same corral as the selective slaughter. This is the most practical system, since the results of an earlier count would be inaccurate anyway after the slaughter. After the slaughter, the deer of the third brigade number about 2,300 head, and since this is not such a large herd, they are kept together. Other brigades with larger herds, as many as 3,000 or 4,000 head, would divide up the animals. They would separate a big herd into three parts: (1) the cows, (2) those (mostly bucks) destined for slaughter, and (3) all the rest. This means they must post guards for each herd. The third brigade

<sup>5</sup>The term Saami district (Swedish *sameby*) = Swedish Saami herding cooperative and territorial unit.

has it easier with only one herd.

A winter station, consisting of a single small cabin, is located about 20 km north of Bapozero. Besides its use throughout the winter by herders guarding the deer, the station also serves as a base near which the herd can be gathered for the October move north toward the slaughter corral. Once the herd is gathered, usually only two people stay at the winter station at once, on shifts. With good winter weather and relatively few predators in the vicinity, one does not have to check on the herd every day. In October, after the herd has been gathered in the vicinity of the winter station (about a ten day process), the push will begin toward the slaughter corral when the sovkhos leaders in Lovozero give the herders the signal via radio to start the move. All but the two herders working shift at the winter station, will at that time be based at the Bapezero camp, where there are greater facilities. Family members (wives and small children) are there also. When they get the go-ahead, the Bapozero group will return to the winter camp and, together with the two there on the working shift, move the herd to the slaughter corral.

It takes them only two days without hurrying to move the herd from the winter camp to the slaughter corral. They use tents when on the move as there are no more cabins between the winter camp and the slaughter corral. Once the slaughter is done, they will move the herd back to the Bapozero area - unless there is a great deal of snow, in which case they will keep them at the winter camp. As snows come, they move the herd again to winter camp, and the wives and children will return to Lovozero (usually in December). In May, when the sun is strong and the snow carries well, the reindeer move to the calving land, where there is plenty of good grazing.

The mixing of herds belonging to different sovkhos is not common, in part due to the use of fencing. Nonetheless, it can still happen. If there is a big mix, one sovkhos might gain from slaughtering unmarked deer belonging originally to another. To the west there is fencing, and in some areas on other sides, but the fences are about 20 years old and apparently not in very good shape. The fences would cost much to repair and some feel are really not very necessary. In fact, Sovkhos Tundra has declined the offer of another herding sovkhos to split the expense of a mutual fence, since the deer movement is usually to Sovkhos Tundra's benefit. Within Sovkhos Tundra itself, there is never any trouble with overlapping grazing areas with other brigades. The brigades always keep their distance from each other and know their own ranges. Each has a lot of range.

As in Sweden, marks are cut in the ears of the reindeer. However, while a limited number of reindeer may be owned privately by each herder, with correspondingly private marks, the vast majority of reindeer belong to the sovkhos and are marked according to brigade. Thus there are ten different brigade marks for Sovkhos Tundra. The private marks have usually been inherited from father to son.

Herders can keep a maximum of fifty private deer within the Sovkhos herd. It is even possible for non-herders to do so. Some years previously, everyone had to pay to keep private deer in the herd, but now the policy has changed: If one works or has worked for the sovkhos and then retired, one can still keep private head in the herd without paying a herding fee. If one has not worked in the Sovkhos, the cost for keeping each deer in the

Sovkhoz herd for one year is thirty rubles. These private owners are usually retired herders or other non-herding Sovkhoz personnel. In the third brigade, for example, there are a total of ten private marks, only some of these belonging to its herders. Nor do all the brigade's seven herders keep private head. Although a pensioned herder has the right to put his deer in any brigade of his choosing, usually he keeps them in the same brigade he was working in. That is where the animals were accustomed to being when he was active, so they are familiar with the people there.

Since almost all the reindeer and all of the rangelands are state owned, the herders' incomes are not dependent on the number of deer in their care. Hence, they need not live in constant anxiety about the vicissitudes of fortune or acts of nature. This is a significant advantage over the situations of herders in other countries, where a herder's entire estate may be wiped out overnight. Nevertheless, there are incentives for each brigade to try to maximize the number of calves bearing its collective mark. Each brigade keeps strict statistics about its herd growth, and it is good for one brigade to show a greater growth percentage compared to the others or to exceed its own projected growth. Such successes might bring the herders of the brigade a salary bonus. Therefore the brigades are rather competitive amongst themselves about which can show the best result.

The chances of a brigade's acquiring more than its rightful calves is rather slight, because the herders strive to mark the calves immediately at birth, when the deer are guarded on their home calving-land areas. Mixing thereafter will create no problems. However, mistakes and oversights occur more frequently today than in earlier times, when the herding was more intensive. Now that the herds are much larger and the herding more extensive, 100 percent marking has become more difficult. Thus, there are some unmarked calves. Since the third brigade does not, however, migrate to the coast as do most of the other brigades, contact with the others is minimized, and the third brigade seldom finds itself taking over unmarked calves from mixing with other brigades.

When a person owning private deer in the herd dies, his relatives acquire ownership of the animals. The mark might still remain for some time; there are thus some people with more than one mark, but efforts are being made to promote the possession of only one mark per person. As in Sweden, the Kola Saami prize old and simple marks. Marks are very personal, and families prefer to keep their old marks extant if possible. On the other hand, members of a deceased man's family might well prefer to phase out his mark (gradually slaughtering his deer) rather than give it up for use by someone else who is not a family member.

I brought up the problem of altering someone else's mark to resemble one's own, so as to take over possession of another person's deer (in a word, rustling), but was assured that if any herder wanted a mark pattern that was too similar to another herder's mark, it would not be permitted. All the marks of the sovkhos are kept in a special book, and only marks clearly distinguishable from all the others in the book will be allowed. If the mark of a deer is partially destroyed by frost, for example, the deer will be sold to the slaughter kombinat, and they will credit the owner. However, if so much of the mark is destroyed that no one knows who owns the deer, they will just let it go free until it becomes old. Sometimes the private owners

put additional special marks on their deer, like a tag on a rope around the neck, so that it will not be taken for slaughter by mistake.

A herder who has spent a lot of time training a particular deer, need not obtain formal ownership of it from the Sovkhoz in order to be able to use it. He simply tells the people at slaughter time that this deer is not to be slaughtered, and he can use it as he pleases. Transportation deer often belong formally to the Sovkhoz. The private deer are mainly used for meat, since it is much cheaper this way. While private owners with many head might well sell deer to the slaughter kombinat, most herders own only a handful of deer and prefer to keep them as a meat resource rather than a money resource.

Until recently, there was a considerable amount of illegal hunting of wild deer, one reason being that the sovkhoses, dealing in tame deer, wanted to increase their ranges by killing off the wild deer. They feared also that they were losing many tame deer to the wild herds. In earlier times, when herds were small and care intensive, wild deer were not a great problem. Now, however, with big herds under extensive care, the deer are only semi-domesticated and more prone to run off with the wild deer. While one can see the difference between tame and wild deer - the wild deer are lighter in color than the tame deer - it can be very difficult to separate them once they have mixed. Herders here described the same method I have heard from herders in Alaska: a mixed herd of wild and tame deer must be chased by snowmobile at great speed over a long distance. The tame deer will eventually fall to the rear and can be scooped back. There was a short period after W.W.II, when it was evident that the sovkhos would not be able to produce meat according to its planned quota. To make up for the deficit in meat, the sovkhos instituted for a time the systematic hunting of wild reindeer - even tracking and shooting them from helicopters. At the time, hunting the wild deer in this fashion was legal, and the numbers of wild reindeer dwindled rapidly. After several decades of hunting, there are currently only two very small known herds on the Kola Peninsula remaining. Killing them is now illegal.

Sovkhoz Tundra has no September buck slaughter even though the bucks have attained prime weight then. Neither the sovkhos nor the meat buyers have modern slaughter trucks with refrigeration compartments, so slaughters must wait for the temperature to fall below freezing. Since the young bucks are no longer subject to slaughter after mid September (due to weight loss and the likelihood of meat corruption from the high hormone concentrations), it is the castrated animals as well as old and weak deer that are slaughtered. The October slaughter is the only main slaughter of the year. Of the 2,500 head gathered by the third brigade in early October when we were in Bapozero, the herders estimate they will slaughter about 200 at the end of the month. It is the chief of the brigade who decides which deer are to be killed. Mostly the selection is made on the spot, at the slaughter site. Of course if they see a sick deer before then, they will note this and slaughter it later at the slaughter time, but they use no special slaughter tag system. Brucellosis occurs rarely, and when found, the deer is killed immediately without question.

I explained the Swedish slaughter system of marking the deer as individuals with number tags, and determining values on the basis of

weight and meat class for subsequent payment to the owners. By contrast, the sovkhos deer are not individually marked in conjunction with slaughter. The herders can just look at a deer and know approximately how much it weighs, and at the slaughter site there is always a man who can read all the marks. A deer is weighed and classed by the slaughter company, and when the owner wants his money, he simply goes to the office and says he has a certain mark and collects the money accrued to that mark. At the corral in October, there is a special slaughter team. The brigade members do not do the slaughtering themselves. The brigade members deliver the deer, select those for slaughter, and "work" the corral. For the actual slaughtering, the slaughter team does not use a bolt pistol. Instead the deer are clubbed on the head with a heavy stick and then stabbed in the heart.

I brought up calf-slaughter principles which have been advocated by herding authorities in Sweden (i.e. slaughtering a certain proportion of calves while they are at their fastest rate of growth, for cost-benefit purposes). They say they do not practice this, as they have plenty of room. In short, saving grazing does not seem to be such an important consideration, and therefore they have no need to maximize meat production per unit of grazing consumed - the main motivation for calf slaughter. The deer they slaughter are usually 12 or 13 years old. Such matters of slaughter policy (average age of slaughter animals) can vary between brigades. The price they get for the meat of young deer is somewhat better, but still they prefer to slaughter the older ones. The administration has specified some herd goals for each brigade, to reach and maintain a certain number of animals and to slaughter a certain weight of meat. The herders accordingly feel they can achieve this best by slaughtering the older deer (thus getting, as they say, "two rabbits with one shot").

Some years ago the third brigade experimented with transporting live deer to Murmansk for slaughter. However, they did not like it and have gone back to the old system of slaughtering the deer at the corral site near the road and transporting the meat. It is a great deal of trouble to transport living deer. At the slaughter corral the herders count the animals and also make injections against parasites. They have a corral system which enables them to tally the deer one at the time. There will be three men counting the deer at the corral: two will check for the sovkhos, one for the private deer. It takes two days to finish work with one herd. The slaughtering takes time, since a number of different brigades use the same corral. There may only be a few days' break before the next brigade brings in its herd, or the next one may come right away. The job for the third brigade is over in about two days. The bigger the herd, the longer one stays.

Usually they gather all the deer together in a central enclosure which has small sections off to the side. These fence sections are round in form; if square, the deer would bunch in corners and hurt each other. The animals are taken a few at a time from the central enclosure to the smaller enclosures where they can more easily be selected for slaughter. The herders count the deer in these smaller sections and then add for the total. The men catch the deer by hand, generally not with lasso (as the Swedish Saami do). A man stands at the gate to each enclosure and others help push the animals through. Apparently there is a difference about how the work is done depending upon the brigade. If almost all of the deer in the corral

belong to a single brigade, its members will simply grab and push the deer through the gate. If, however, other people from other brigades are present, they may choose to catch their few stray deer with lassos and pull them out.

I asked what percent of the herd they cut for antlers. They replied that it all depends upon the individual condition of each deer. But usually not many are selected for this purpose. There is really no routine for the antler cutting. The October corralling is mainly for slaughter. For the sovkhos as a whole, there are three places where they count the deer, and two places where they slaughter the deer. One such slaughter site is called Kilometer 69, since it is located along a road at the 69th km of road from Murmansk. Lovozero itself is the site of the biggest slaughters. Recently, the military occupied Tomani, one of the sites of the sovkhos's original slaughter operations, so now they must count and slaughter at separate places. They count them now in a field and bring them in to Lovozero for slaughter.

The herders point out that if a herd is too large it becomes hard to manage, and if too small it yields too little profit. Moreover, the third brigade could never reasonably maintain a very big herd, since their range is relatively small. Other brigades have larger ranges and therefore larger herds, but this gives them a great deal of management problems as well. Currently, the third brigade has the appropriate number of deer (2,500 head) for the size of its range. The herders do have specified age/sex proportions for the herds which they strive to attain. There are tables for herd composition. (For future research, it would be interesting to compare these tables to Swedish rational herd proportion tables and analyze their respective merits.)

The herders castrate the deer mainly in February. In former days they did it with knives, but now, as in Sweden, they use a special tong. Apparently there are a few people who might still use their teeth for partial castrations, but this is rare. On the whole there is no difference in the way one castrates for a slaughter deer or for a sled deer. It has happened that a brigade has failed to keep track of how many animals of different types it should strive for, with the result that it would castrate too many. If this occurs, there might not be enough males to impregnate all the females. To remedy this situation, it might be necessary to mix the herd with that of another brigade so as to benefit from its bucks.

The herders try to improve their breeding stock by sparing the deer with the best appearance and behavior from castration and slaughter. One of the herders was making a special survey of white deer in an effort to increase their numbers, both because they are beautiful and also because the white deer are very useful in the summer owing to their great visibility. In the old days the deer in this area were very light in color, but the deer that belonged to the Komi were much darker. Consequently, they now have a greyish mix. The largest animals are those belonging to the ninth brigade.

When I asked what criteria the herders employ to pick their sled deer, I was told that each herder simply chooses the deer he likes best and trains them personally for his own use. Primary considerations are an animal's build - i.e., whether it is too fat, or its legs are too short or too thin, etc. - as well as its beauty. When they choose a deer to tame, they choose him mainly to be a sled deer, but once tamed the same deer can also serve as a pack animal or whatever. Of course, one can also train deer for separate

duties, but this is generally unnecessary. Some deer can be trained very easily, while others are intractable and require much time. They are usually easier to handle after they have been kept tied near the cabin for a few days, and it is often enough to train a deer for as little as one month. The deer are used for sled work for only a month at a time, then switched. The herders break in new deer each year.

The number of reindeer to be attached to a sled varies depending on the season. In summer and early autumn when there is no snow cover, one uses five deer; in winter, three or four depending on the type of snow. Should the herders need to haul heavy supplies, however, they can hitch as many as seven or eight deer to a single sled in fan formation. Five deer can easily haul more than 500 kg on a sled. The herders almost never travel with more than five or six deer (even including reserve animals). A larger number is seldom necessary. However, during the calving period each herder may keep ten or fifteen sled deer on hand, since one may have to change quickly with little warning.

The use of sleds begins in September and continues through May. This is the most convenient mode of transport, because it can handle large quantities of supplies. Moreover, the deer are especially good over wet land. There are three main varieties of sleds: two types of driving sleds, and one standard supply sled. The winter driving sled is somewhat smaller than that used in the autumn. The supply sled is more robust and completely flat, lacking the raised back and sides of the driving sleds (see figure 1). The Bapozero herders know of the use of motorbikes in Fennoscandia, but for them it would be prohibitively expensive, since fuel is scarce. Moreover, the herders think such bikes would probably be useless on their terrain because it is so extremely wet there. They argue, in my opinion rightly, that even the three or four-wheeled vehicles with large tires would be of limited value: If they break down, one has a major problem, but a sled can generally be repaired or simply kept in service.

The middle of September is a very hard time - the hardest - for the herders. It is during this period that they must hike over vast distances to catch their sled deer, which have run free since June. Once each herder has caught the five or six sled deer he will use in the autumn, he keeps them tied up near camp. When we arrived in Bapozero there were a total of 35 sled deer tethered individually, each with a grazing radius of about four meters. Each herder kept his sled deer in a loose cluster, twice a day bringing them water (until snow cover made this unnecessary) and moving the logs to which they were tethered so as to provide each animal with a new grazing area.

The system of harnessing the deer to the sled is both simple and ingenious. The deer can be moved as a team from one sled to another in a matter of minutes without completely unharnessing them. From the driver's perspective, the animal farthest to the left is the lead deer. A leather line from the right side of its shoulder strap runs to the left side of the head gear of the next deer to the right, and so on to the right down the line. A thick leather pulling line ending in a metallic eye-piece extends back from each deer, and these are then all threaded onto a wide loop connected to the sled (see figure 2). Driving the team is performed with both a rein and a long stick called a *harreh*. One holds the *harreh* in the left hand, and by





Figure 1. The driving sled with raised back in the foreground and a flat supply sled behind. Foto: Hugh Beach, 1991.



**Figure 2.** A five-deer team harnessed for bare-ground autumn driving. Foto: Hugh Beach, 1991.

keeping it somewhat raised just behind the lead deer, lets it know to move on and not to make a turn. To stop the team one simply pulls the rein, and to signal the lead deer to remain still, one places the front tip of the *harreh* to the ground. To make the deer speed up, one taps them lightly on the hind quarters with the *harreh*. One does not do this to the lead animal, however. To make the leader speed up, one uses the driving rein. Should it be necessary to stop and disembark for some reason when on the tundra with no trees around, one simply ties the driving rein to the back of the sled (so the deer and sled in effect make a circle and cannot go anywhere). There is a hook-like attachment, called a *yendle cher* in Saami, which is located on the left side of the lead sled deer and serves to hold the driving rein. Long ago they had *yendle chers* made of bronze or copper as well as of antler. Many young people these days, not keeping up the old traditions, never use the *yendle cher*; without it they must always keep the driving rein in the hand. The *yendle cher* is properly used mainly when driving along winter roads with a long clear path ahead. Then one can simply hang the rein on the hook like an "automatic pilot." It keeps the rein out of the way and prevents it from getting tangled under the reindeer's feet.

The Bapozero herders claimed that it is an easy matter to learn to drive the deer sleds, even easier in the winter than in the autumn. They themselves had acquired the skill from their fathers at about the age of seven, and they could do it alone by the age of nine. After a few lessons, however, I can attest that it is no easy thing to control the reins, wield the *harreh*, steer through difficult country and keep from falling off - all at the same time. It was remarkable to see the smoothness and speed with which these skilled herders could move with their sleds even across rough, snowless terrain in undulating harmony. A common form of travel during snow cover is for a single person on skis to hitch himself behind a deer. The herder steers to some degree with the rein that pulls him, but he also carries a *harreh*. Of course, since the pulling rein and the driving rein are one and the same in this case, pulling on the rein only brings one closer to the deer and cannot constitute a signal to stop. Instead, one places the tip of the *harreh* in front of the deer's head as a signal to stop. I asked if it was not unnecessarily cumbersome to carry the big *harreh* stick when skiing behind reindeer. The herders said no, it is not too heavy, and it is much better to carry it because, as with a circus performer on a tightrope, the stick is excellent for keeping one's balance as well as for steering.

A tame transport deer might also be used as a pack animal when snow cover is lacking. I was shown the characteristicly interlocking pack saddle made from two small forked trees, which they had apparently been using only a week before our arrival, while they were out on foot looking for their sled deer. I asked about the use of *chovos* deer (i.e. those that will follow a herder alone with a bell, without a lead deer). I was told that they do indeed use these deer, but only in the deep winter snow when it is otherwise hard to get the herd to move, even with snowmobiles and dogs. My informants added that the most valuable animals are not the *chovos* deer themselves, but those other deer in the central herd that induce the rest of the herd to follow the *chovos* deer. These "herd-prodder" deer they never kill. This form of movement (combining the use of *chovos* deer and herd-prodders) is the method by which they take the herd to slaughter. They do not usually

put bells on the herd-prodder deer. All the herders know them very well anyway. The herders often put bells on the sled deer and other special deer so that they may be more easily found. However, they commented that it can be a little dangerous to put a bell on a deer in their range now, since there are so many armed soldiers around with nothing to do. They might well shoot a deer just for practice and to get the bell as a souvenir.

The third brigade has relatively few problems with predators. The wolves are not over-abundant in the area, nor are there significant numbers of eagles, since the latter prefer high cliffs which are lacking in the third brigade's range. Close guarding in spring and winter keeps the annual losses to predators quite low. While the sovkhos as a whole may lose as many as 3,000 head per annum, the third brigade's share of the loss ranges between approximately ten to twenty animals. I explained the Swedish state's predator compensation policy to reindeer owners and inquired whether the Kola herders have anything similar. They informed me that although they do not get compensation for losses of private deer, if a sovkhos deer is killed a state insurance company pays the sovkhos. The herders keep a very precise deer count, so there is no guesswork involved in determining exactly how many animals, whether sovkhos-owned or private, are missing. Third brigade herders are free to track and chase predators in defense of their reindeer, but their effectiveness is limited by the tight state controls on firearms. It is very complicated to get a rifle legally in Russia (though one can sometimes trade for guns illegally with military personnel). The herders carry guns with them mainly in the spring, when it is calving time, in order to protect the calves from predators.

The most dangerous predators are humans, who kill reindeer for a variety of reasons: (1) There is a considerable amount of illegal poaching, mainly in the summertime. Soldiers also sometimes hunt the animals purely for sport. (2) Even when not deliberately killing deer, soldiers frighten the deer with their all-terrain vehicles, sometimes causing them to panic fatally. (3) Moreover, Sovkhos Tundra is plagued by heavy losses from car and train collisions with deer. This is mainly a concern for the fifth brigade, whose deer migrate twice a year across a main road during their move to and from the coast. (This problem will be exacerbated if plans ever materialize to build a road all around the coast of the Kola Peninsula.)

The reindeer can always find grazing on the hills. Hence, herders of the third brigade do not find it necessary to give their herd artificial fodder, even when grazing conditions are bad. Nor do the herders ever collect natural moss in big bags (as in Sweden) to help see the herd through winter. Long ago they might have done this, but if so, then just for the sled deer. Even today, the only animals to receive artificial fodder would be the sled deer. The herders had had some bad experiences with the artificial fodder when first using it, but have since found that these problems occur only if the deer are given too much fodder. I asked whether those deer that get the artificial fodder are also given medicine to revive their stomach bacteria. The answer was no. While there is beard moss on the trees here too, just as in Sweden, the herders never break branches with sticks to help the deer get the moss. If the deer want it, they take what they can reach themselves. Since they do not use artificial fodder, I inquired if they were ever forced to release the herd completely during a bad winter, so that the deer can scatter

in the search for food. Apparently neither herd release nor use of fodder is required. The herders simply drive the animals to nearby hills where there is always sufficient grazing. In short, they have enough flexibility in their range to find adequate natural pasturage even when the winters are difficult.

### Conclusions

I asked the herders if they thought there would be any major changes in the herding system of their sovkhov, now that there have been so many political and economic transformations nationwide. They pointed out that while it might now be open to anyone to start his own herding business, to do so requires a big collective effort involving many employees and a great deal of expensive equipment. This is not something many private people are able to do or are prepared to take the risks for. Since the state has subsidized herding so much in the past, surely, I argued, major changes are inevitable if there is a switch to a more market-oriented economy. An administrator in Lovozero responded that herding would never be a very lucrative industry; hence, the state would always need to support the herding industry in some way or other. This man had been to Norway and brought up the fact that Norway subsidizes herding a good deal, and that this is also regarded as a form of support of cultural traditions. He assured me that the Russian state will also continue support of small peoples in order to help maintain their traditional livelihoods. If left on their own without such support, they would be quickly assimilated. Would this support be enough, I wondered, since, as I had learned, it is now necessary to introduce workers from the south without any prior experience in the herding business. The sovkhovs do not generate enough of their own recruits. The official replied that 80% of all those working with deer in Lovozero are Saami.

I also discussed these issues at length with the chief of the third brigade. He maintained that, despite the many problems with finding recruits, as well as the repercussions of the economic and political revolution in the former Soviet Union, there would still be a future for the herding here. There would probably be a state farm, as today, but herding as currently practiced would not last. It would not be done properly in the future. Industrialization and demographic changes would also continue to exert a significant influence. For the present, the brigade chief did not think that the quality and amount of reindeer moss (lichen) would deteriorate noticeably, but he did see a problem in that more and more people were tramping around in the area to hunt and fish. When I asked him what were the biggest changes in general that he had experienced in the herding life, he replied: the introduction of propane, electricity and snowmobiles.

Sovkhov herding, as exemplified by the third brigade, bears with it many of the practical problems which have plagued the socialist economy in general. Yet, in my judgment, it is simplistic to view all problems of implementation as stemming from the flaws of the socialist system alone. While I do not wish to defend all socialist principles across the board, neither do I wish to throw the baby out with the bathwater and to imagine

that herding problems will all be resolved with the so-called "death of socialism" in the former Soviet Union. In fact, I maintain that, in principle at least, the sovkhos herding form has many positive aspects for the ecologically and culturally sustainable pursuit of this unique livelihood. Without defending the forcible collectivization of the herders' private reindeer property under the socialist system, I think the resulting ownership structure does offer some concrete herding advantages. First of all, collective or state ownership of the deer provides the means to avoid a serious problem often plaguing other herding systems: the so-called "commons dilemma," whereby the private strategies of herd maximization used by many different reindeer owners leads to the depletion of the grazing lands and the destruction of the entire system.

The sovkhos organizational structure provides herders with a basic income security independent of their personal "reindeer luck." Moreover, the Kola herders do have opportunities to raise their incomes through extra effort and initiative. In private herding systems, there is often a mismatch between the optimal labor force requirement for a herding task and the number of deer owners participating in the task for social and structural reasons. In a private herding system, for example, if a herd has fifty partial owners, all fifty herders might have to participate in a work effort actually requiring only eight people. Under the sovkhos system (though by no means only under this system), the labor force can match real labor requirements. Finally, I believe the herding of the third brigade exemplifies a praiseworthy blend of modern "high-tech" and traditional "low-tech" herding methods and equipment. Not only is such a blend helpful in the maintenance of cultural traditions, it is also beneficial to the animals, promoting intimate knowledge and good care of the deer by their herders.

REFERENCES

Beach, H. 1986. "Visit to a Siberian Sovkhoz." *Antropologiska Studier*, no. 38-39, ed. T. Gerholm, Department of Social Anthropology, Stockholm.