Nenets reindeer herders on the lower Yenisei River: traditional economy under current conditions and responses to economic change

Konstantin B. Klokov



The article is dedicated to the problems of survival and development among the aboriginal peoples of northern Russia in the context of current conditions. Data collected in the western part of the Taimyr Autonomous District allowed us to divide the non-sedentary population of this territory into three groups differentiated by overall way of life, land use and economic "calendar." These groups are: the nomadic reindeer herders of the tundra (about 250-300 people), the semi-nomadic fishermenherders of Yenisei delta (about 500), and the nomadic herders of the forest-tundra (300-350). The economy and ways of life of the three non-sedentary groups are described. Communities whose traditional subsistence base is reindeers have entered a crucial period. In response to the pressure of the dominant society, these peoples have three possible strategies: isolation, passive adaptation and active adaptation. Only the last strategy can preserve their culture, and create a "neoculture". Now, however, passive adaptation predominates. The mutual, bi-directional process of cultural integration needs to reinforce positive aspects of acculturation and promote active, rather than passive, adaptation. A necessary condition for this is the appearance among the Nenets of an intermediate social stratum which maintains close links to nomadic reindeer-husbandry and is simultaneously integrated into the dominant society.

K. B. Klokov, Geography Institute. University of St. Petersburg, 41/43 Sredni Prospect, 199004 St. Petersburg, Russia.

Reindeer husbandry in the Russian North is in crisis. In just the eight years between 1991 and 1999 the reindeer population has dropped by almost one-third, from 2260 600 to 1357 300 head. A number of peoples (the Ket, Nganasan and others) have, over the course of the 1980s and 1990s, given up reindeer herding altogether. The situation is particularly dramatic in Russia's northeastern regions: Chukotka, Kamchatka, Magadan Oblast and Yakutia. Throughout the 1980s half of all domestic reindeer in Russia (more than 1200 000 head) were concentrated in this area. By 1 January 1999 there were only 391 000. At that time there were only 3700 reindeer left in Evenkia - less than one-tenth of the average population for the region from the 1950s to the 1970s. In the taiga of southern Siberia, where reindeer have mainly been used for transport, reindeer breeding and herding is close to extinction.

One area stands out against this overall picture of catastrophic reductions in domestic reindeer population: the territory occupied by the Nenets people, where numbers have not shrunk, but grown. The reindeer population has increased particularly significantly in two tundra districts in the middle of that range: the Yamal District (where it went from 135 700 in 1981 to 197 100 in 1997) and the Taz District (from 76 300 in 1981 to 141 000 in 1997). On the margins of this zone the number of reindeer has either remained stable or dropped slightly.

Just why the traditional Nenets reindeer herding economy has survived in the midst of the overall economic crisis gripping Russia's northern regions is not entirely clear. Golovnev holds that "a capacity (and a willingness) to adjust to change is part of Nenets tradition" (1995: 576). It may indeed be that a certain flexibility – a capacity not only to withstand outside pressures, but also

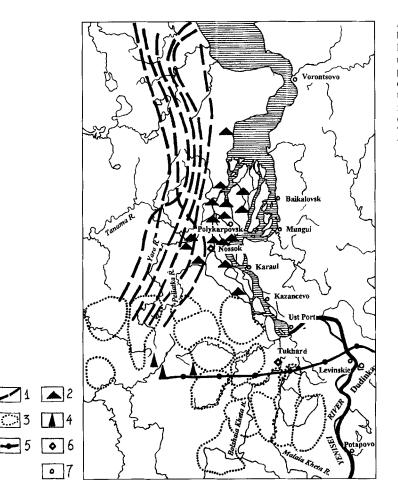


Fig. 1. Nenets reindeer husbandry on the lower Yenisei River, showing: 1) reindeer migration trails in the tundra; 2) primary fishermen/herder camps; 3) primary forest-tundra pastures; 4) natural gas fields; 5) natural gas pipeline; 6) villages (Zarya Taimyra and Tukhard *sovkhoz* centres); and 7) other centres of population.

actively to adapt to them – has become a fundamental part of Nenets character (Golovnev & Osherenko 1999). The particular features of that character are refracted through concrete social and economic conditions.

The Nenets reindeer herding zone in the Taimyr Autonomous Okrug ends at the left bank of the Yenisei River (Klokov 1997) (Fig. 1). The native population on the right bank has, over the last few decades, abandoned reindeer herding; it now makes its living by fishing and, to some degree, by hunting and trapping. Roughly 1500 of the 2600 Nenets living in the Taimyr Okrug are currently engaged in reindeer husbandry. Most of them fall into one of two village administrations: Nossok (based in the village of Nossok, on one of the tributaries of the Yenisei, 180 km north-west of the town of Dudinka, administrative center of the Taimyr Okrug); or Messoyakhinsky (based in the village of Tukhard, located on the Bolshaia Kheta River 70 km west of Dudinka). A smaller number (about 140 people) are governed by the Potapovo village administration, which is on the Yenisei in the southern part of Taimyr Okrug, and was not part of this study.

Nossok and Tukhard Nenets economic activity takes place over an enormous territory stretching almost 500 km south to north (to the shore of the Arctic Ocean) and 1500 km east to west (from the Yenisei to the border of the Krasnoyarsk Krai in Tyumen Oblast). A small number of Dolgan, Enets and other northern peoples are also engaged in reindeer herding throughout this territory (Table 1).

Field research into the traditional economy of Nenets reindeer herders was conducted by the author, S. Khrushchev and V. Moiseeva in 1995– 96 on the eastern edge of Nenets territory in the

Table 1. Northern peoples in the Yenisei Nenets ethno-economic range by number and percentage of total population.

Village administrations	Dolgan	Nganasan	Nenets	Evenk	Enets	Total	% Of total population
Vorontsovo	18	2	194	0	59	273	65.0
Baikalovsk	0	0	108	0	0	108	66.3
Nossok	9	0	1064	4	5	1082	76.6
Karaul	15	0	118	0	0	133	15.9
Ust Port	0	2	258	2	5	267	49.1
Tukhard	37	0	469	0	45	551	67.4
Levinskie Peski	170	25	11	0	0	206	64.8
Potapovo	19	7	140	59	11	236	52.2
Total	268	36	2362	65	125	2856	57.5

Taimyr Autonomous Okrug. We visited all the Nenets villages (Nossok, Baikalovsk, Mungui and Polykarpovsk) situated in Yenisei deltas, as well as the village of Tukhard on the Kheta River. The research team went to three fishing camps and eight reindeer herders' camps. The main method of collecting information was informal interviews with herders, fishermen and village residents. Quantitative data about village residents were obtained from the analysis of village administration economic records. Data on the domestic reindeer economy were received from the Statistic Committees of the Taimyr Autonomous Okrug, Ust' Yenisei and Dudinka districts.

Results allowed us to divide the non-sedentary population of this territory into three groups differentiated by overall way of life, land use, and economic "calendar." These groups are the nomadic reindeer herders of the Nossok tundra, the semi-nomadic fishermen-herders, and the nomadic herders of the Tukhard forest-tundra.

There are also roughly 300 non-nomadic Nenets living permanently in Nossok village and 140 in Tukhard village. The economy and the ways of life of the three non-sedentary groups are described below. Additional information about their ethnic and economic history may be found in the works of Popov (1944) and Vasiliev (1970).

Nomadic herders of the Nossok tundra (250–300 people)

This group is primarily engaged in large-scale tundra reindeer herding involving long-range seasonal treks (Fig. 1). It ranges over approximately 2.5 million ha of grazing land officially owned by a reindeer breeding *sovkhoz* (state farm) called *Zarya Taimyra* ("Taimyr Dawn"), based in Nossok village. Some of the herders are sovkhoz employees, others are pensioners, and the rest might be termed "independent herders" unattached to any official enterprise or business.

Statistics show that on 1 January 1996, Zarya Taimyra owned 5570 head of reindeer. The animals were pastured in six herds of 500 to 1500 head each. Privately owned reindeer registered by the Nossok village administration for the same date numbered 13 906. In fact there were more; it is virtually impossible to obtain an exact count, because roughly 5000 of the privately owned animals (mainly reindeer belonging to members of the sovkhoz herding teams) graze with sovkhoz herds, and the rest are pastured separately, in smaller ones. There are at least ten such smaller herds. At the beginning of summer five to ten herding families gather to form larger herds of up to 2000 head; in autumn they divide the herds and trek separately. The last official count conducted by the Nossok village administration was in 1995 (Table 2). Survey results put the largest herd at over 1000 head, with five or six of the other wealthy herders owning between 300 and 500 reindeer each.

Most of the trails followed by herds – sovkhoz and private alike – run parallel to one another, forming roughly one single route stretching over 300 km north to south. Only when moving from winter pastures to summer (or vice versa) do the trails of some of the herds intersect.

Herds winter over on the upper Pelyatka and Yara rivers and in the lands between the upper Yara and the Tanama. This is where reindeer moss is most abundant. This is also where wild reindeer come to winter – which makes the herders' work

Households with reindeer	Sovkhoz workers		Pensioners		Private herders		Total	
	# House- holds	# Reindeer						
0-15	i	12	2	22	0	0	3	24
16-30	8	193	9	208	2	21	19	422
31-50	19	779	8	264	5	203	32	1246
51-100	16	1007	15	767	5	410	36	2184
>100	28	4935	26	3599	8	1612	62	10 146
Total	72	6926	60	4860	20	2246	152	14 032

Table 2. Native households under the Nossok village administration, grouped by number of reindeer privately held as of 1/1/95 (Nossok village administration figures).

all the more difficult. In some years up to 2000 domestic reindeer have been lost to wild herds.

In spring the Zarya Taimyra herders head north. They stay for some time at the Tanama River before fording it, so the pastures in that area are heavily trampled. Calving takes place to the north of the Tanama. In recent years summer grazing has been concentrated on the upper Mongoche-Yakha and at roughly the same latitude on the shores of the gulf of the Yenisei, which cover a significant portion of the Yamal-Nenets Okrug. In the past, sovkhoz herds have gone even further north, towards the former Leskino village. Private herders may still graze their herds in that area. At the end of August the herds turn and head south again, following the same parallel set of trails.

Semi-nomadic fishermen-herders of the Nossok tundra (roughly 500 people)

These people also own reindeer, but during the warm season they leave their herds in the care of their nomadic-herder relatives; while they themselves fish the Yenisei and its many inland deltas. In wintertime they cut their own reindeer out of the herd to transport their ice-fishing catch, to check traps (they hunt Arctic fox in the same area, on the shores and islands of the Yenisei), or to visit the village. The official sovkhoz job description of this group is "fishermen" or "fishermen–trappers."

These fishermen-herders live in commercial fishing camps (*promyslovye tochki*) located beside the richest fishing grounds. Some camps have permanent housing, but others do not and people live in either *chums* (traditional tents) or makeshift

structures built with whatever is available. We have termed their way of life "semi-nomadic" since they do not always set up camp in the same place, although they do remain in the same general area from year to year. In some of these camps there are only one or two families, while others, such as Yara-Tanama or Deryabino, often have more than 100 residents. The chums and buildings may be set up a few hundred metres or even a few kilometres apart, and their relative locations may change. The number of families living in the camps is not constant from year to year (Table 3). They are highly mobile, as people move from one place to another while staying within the confines of their hunting-trapping-fishing range.

The three largest camps – Deryabino, Yara-Tanama, and Khinka – also have storehouses and shops. They function somewhat like the old tradings posts (*faktorii*) of the 1930s. Russians inspect and sell the fish, as a rule, and so there is usually at least one Russian family at each camp.

Fishermen-herders generally own fewer reindeer than do nomadic herders. Consequently their status in Nenets society – which depends on how many animals one owns – is lower. A family with several hundred head of reindeer has no need to fish; it can spend the entire year out in the tundra. And if necessary, it can always barter; the going rate is one reindeer for three sacks (approximately 100 kg) of fish. But as a rule there are more than enough fish in inland tundra waters to live on.

We asked one resident of Nossok village, a former reindeer herder, to estimate the average budget of a middle-income fishermen-herder family consisting of three adults and three or four children. Of their ca. 200 reindeer, at least 70 are males used for hauling, while another 30 are females used for short-distance travel (to check Table 3. Population dynamics of commercial fishing camps on the inland delta of the Yenisei (Nossok administration figures).

Our service to the first		Total popula	Northern neonlas? The of total		
Commercial fishing camps and villages	1993	1994	1995	1997	 Northern peoples' % of total population (1995)
		Camps	;		
Tolstaya Zemlya, Angino, Rybnoe	12	13	6	3	100
Pelyadka	28	27	27	25	100
Khara Protoka	4	8	8	18	100
Lama	23	18	23	23	100
More	24	20	19	18	100
Yara-Tanama	194	139	113	106	98.2
Puchevsk, Aleshkinskaya	20	17	12	14	100
Top Khasari	2	2	2	3	100
Khinki	60	70	56	60	96.4
Yanodo	30	55	60	47	100
Deryabino	99	157	154	123	98.0
Mongochi	0	22	17	21	100
		Village	s	<u> </u>	
Nossok	642	578	490	630	54.1
Polykarpovsk	49	45	47	35	27.7

Arctic fox traps, for example) but not for heavy loads. A herd this size produces about 30-40 calves yearly; it loses roughly 10-15 head over the same period. One reindeer yields 35-40 kg of meat and the family consumes about 20 reindeer a year. Here the wild herds who come to graze the right bank of the Yenisei in autumn are a help. But in the spring the wild reindeer graze elsewhere, and the family has to slaughter some of its own herd. Domestic reindeer (about ten head per year) are also slaughtered to provide clothing. If possible, the family eats meat every day, much preferring it to fish. In good times they eat six or seven times a day, in bad - perhaps twice. In spring and summer they also eat goose and duck; in winter, willow grouse and hare. In the fall they gather cloudberries, to eat fresh and to freeze for winter.

Despite the "natural abundance" all around, as much money goes to support a tundra family as a village family, since the former also has to pay for equipment, fuel, ammunition, etc. The sharp rise in equipment and fuel prices over the last few years has made it impossible for many families to have snowmobiles, and has significantly limited the use of outboard motors. A Buran snowmobile sells for what is now a fantastic sum for Yenisei Nenets. Prices are a matter of barter rather than inflation: a Buran costs two tonnes of whitefish or one tonne of sturgeon, a Vikhr outboard motor costs one tonne of whitefish. In theory, a fisherman on the lower Yenisei can catch two or three tonnes of fish a year. But a middle-income fishing-herding family still cannot afford a snowmobile, since their income has to cover gasoline, tackle and supplies, and staple items like tea, flour, salt, sugar and tobacco as well as rubber boots and a number of other essential goods. The reindeer also take time away from fishing. Trapping Arctic fox has become unprofitable in recent years because of the drop in pelt prices, and professional trappers have abandoned it altogether. The fishermen trap only when they are also ice-fishing. Hence, in practice, the only ones who can afford to buy equipment are the wealthy herders.

At the same time, much depends on price fluctuations in a relatively new market: reindeer antlers. A herd of 200 reindeer can, with no ill effect to the animals' health, provide about 100 kg of raw antlers yearly (antlers are sawn off every other year). Brokers will take anywhere from 200 to 500 kg of antlers in exchange for a Buran. Therefore only the wealthy owner of a 400- or 500-head herd can afford to buy a new snowmobile. Everyone else rides a used snowmobile until it wears out completely or trades it for driving animals.

Native residents told us that, as a rule, the wealthier herders do not work at the sovkhoz, but live deep in the tundra. Owners of smaller herds move closer to the shore because they cannot survive without additional income from fishing. This then establishes a vicious cycle: to sell the fish, they must travel to a village, and in the village they drink. Drinking has been the death of many of the young men, and in the most literal sense: drunk, they drown or die from exposure. Others commit crimes and land in prison.

Fishermen-herders see the tundra and the village as polar opposites: the tundra is the positive pole, the village the negative. The village is deadly, for the most part because of the alcohol available there. Here are some typical comments from the survey conducted among fishermen: "A good fisherman goes to the village once or twice a month and only drinks for two or three days; a good-for-nothing one goes there nearly every day"; "The ones from Deryabino, they're fine, they come in, stock up on supplies – and head back out right away... but there are others that drink for seven days straight."

A herder who stays in the village longer than two or three days risks losing his team; unable to graze, the animals weaken and easily fall victim to village dogs. The fishermen-herders who live at the commercial fishing camps in the Yenesei deltas, told us about it like this: "The teams are tied up, the reindeer die, they starve. The dogs chew them up"; "The animals stand there half-dead, they're already gone, they're bleeding, and they [the owners] are still hanging around drinking. No big deal, they say, let the dogs have them". When we asked about such behavior in terms of traditional Nenets beliefs about good and evil, a Deryabino Isherman replied: "... there's no sin in it, these days probably you can just do what you want . . . The shamans are gone, there's no sin."

The village is harmful also because it leaves young people unaccustomed to life in the tundra. Young women who have grown up in the villages do not go to the tundra, while those who grow up in the tundra tend to stay. Roughly half of herding family children who graduate from the Nossok boarding school remain in the village, while the other half returns to the tundra. In recent years children have no longer been forced to attend boarding schools, so many remain in the tundra with their parents and learn to read and write on their own. Village "clubs" have closed and the Komsomol - communist youth organizations which once included almost all young people in the Soviet era - no longer exists. For the young, village life has become more boring, less attractive, than it once was. At the same time, the village is necessary to the herders' very existence; it is the essential link between them and the outside world.

Nomadic herders of the Tukhard forest-tundra (300–350 people)

This group includes several Dolgan families as well as Nenets. There are also families of mixed ethnic background.

At the Tukhard sovkhoz in the forest-tundra, the life of the herd and the herders alike is significantly different from that of their counterparts at Zarya Taimyra. Here, all the types of pasture reindeer need are to be found within a single area. Here, the space occupied by a single herd and a single family (or small group of families) engaged in traditional reindeer husbandry is not a narrow, elongated ribbon stretched over hundreds of kilometres, but a relatively compact area. At Zarya Taimyra, therefore, all the herding teams are in more or less the same position; at Tukhard, geography plays a more significant role in a family's economic situation. Some families' grazing land borders the village; others have to travel to reach their pastures.

A few decades ago, almost all the herders made long treks to the north, just as the Nossok tundra herders do today (Vasiliev 1970). However, when in 1970 local kolkhozes were transformed into *sovkhozes*, the size of each household (economic unit) was expanded, while land use was consolidated. This change affected not only herd management but the herders' way of life as well.

The Tukhard sovkhoz has traditionally had twelve herding teams consisting of six or seven native families each. (A land tenure legislative proposal involving a complicated system of long, intersecting treks was never enacted.) The herders stay within a single area throughout the year, following a closed, circular route. In the first place, this makes it possible to diversify, because they can both breed reindeer and hunt, trap and fish a single area. In the second place, this makes it possible to divide pastureland and hunting and fishing grounds among families or groups of families, and to shift from a collective to a socalled "independent farmer" economy. This is exactly what happened when privatization began. When the leadership changed, a conflict arose

between old and new directors. The enterprise split into two parts: the first, which retained the old sovkhoz name of "Tukhard" while receiving private enterprise status, was headed by the new director; the other, named "Numpan", a clan economic association, was administered by the old. Meanwhile, ownership of all the reindeer sovkhoz and association animals alike - was transferred into private hands. The sovkhoz retained the financial base, the buildings and the equipment. Herding families were formally divided between the two leaders, with some now being termed "independent farmers", and others remaining sovkhoz employees. They live and manage their herds in identical fashion. Many of them even keep their reindeer in common herds and trek from camp to camp together.

However, certain changes have taken place since the reorganization. First, new conflicts have arisen among the herders. Second, the "households" have now split into even smaller groups, and the number of separate herds has risen to sixteen. The smallest of these groups consists of two families with 500 reindeer each; the largest counts eight families with a total of 2000 head. Third, the overall area of grazed land has shrunk significantly, since all the groups have begun to stay closer to the central village. This is in part because the herders can no longer rely on stateprovided helicopters, and have to make their own efforts to keep in touch with the outside world. Only one "farmer" group, the one strongest in economic terms, has expanded into new territory an unoccupied zone of grazing land lying along the left bank of the Yenisei, not far from Dudinka. Thus this group can market its products independently, bypassing the central village of Tukhard.

Tukhard is both the sovkhoz administrative center and home to oil and gas workers, a base of operations for the Messoyakhinsky oil and gas fields. This has left its mark both on the life of the village and on the nomadic population that comes here. Strange as it might seem, current prices prevent the sovkhoz from selling any significant amount of either reindeer meat or fish to the oil and gas company. It is cheaper for the gas workers to bring in supplies from "the mainland". However, a certain amount of private exchange does take place. Helicopters fly into the village several times a day from Dudinka and Norilsk. Making regular flights over herder camps, pilots establish informal commercial ties with the nomads; they fly out both wild and domestic reindeer meat and other products. It is difficult to assess the volume or frequency of this sort of exchange, but it is clear that the Tukhard herders are not isolated from the outside world and can, when necessary, get the goods they need. Even so, since the reorganization of the sovkhoz and the cessation of state support, herders have suffered financial hardship, for the same reasons that Zarya Taimyra sovkhoz has.

The sovkhoz now procures reindeer meat by having each owner slaughter his own reindeer in his camp and then bring the meat into the village however he can. A sign is then posted announcing that whoever wants reindeer meet can come to the sovkhoz office to buy it. But in fact only the lazy do that, the ones who haven't managed to strike a bargain with herders directly. Four kg of meat costs roughly the price of a bottle of vodka.

A local Tukhard tundra woman's description of her family offers a picture of the life reindeer herders live today. She and her husband have ten children who spend the summer with their parents and the winter at a boarding school in Dudinka. She and her husband have many relatives in Dudinka and Krasnoyarsk. Here is how she describes the nomadic life of her family:

Our business is called "Ty" – that means "Reindeer". In summer we camp in one place for a week at the most. When the mosquitoes are bad we break camp every three days. In the winter we move every five days, two or three kilometres at a time.

We trek with other families. We have a common herd for all seven families, about 1000 head in all. We own 280 head ourselves. The other families have 100 to 150 each. Each family slaughters about 20 reindeer a year. To make clothing for a woman, you need to slaughter three; for a man, six. In August we kill the reindeer for women's clothing, and in October for men's. We can make clothing for only one person a year. The meat, of course, we eat. We also hunt wild reindeer.

She also told us that three years ago some reindeer herders from the Taz District of Tyumen Oblast began to come on the Yenesei pastures. With big herds of 3000 head each, these herders are wealthier than the Yenesei Nenets and use many imported things: Japanese chainsaws, foreignmade snowmobiles, mini-electric generators, etc.

Several things mentioned by our respondent characterize the new trends linked to the reforms. First of all, there is the appearance of wealthy herders, the "new Nenets" who have moved in from the Taz District with their foreign-made snowmobiles. We should also note that their appearance signifies a major violation of landuse borders, i.e. an overall weakening of local government control over what goes on in the tundra. The division into rich and poor families, which in former times was carefully concealed (for example, when village administration registered privately-owned reindeer belonging to a single owner under relatives' names), is now acknowledged as a normal fact of life. It is no longer unusual for herders to have family ties to towns, where the children and relatives of many herders live, or to have direct links to brokers.

The salary paid by the sovkhoz is no longer significant. Because of a lack of state financing, the situation with both veterinary care for the herds and provision of snowmobiles and other equipment for the herders has worsened considerably.

In our view, the most important changes have been a strengthening of the position of wealthy herders and an increase in the "number of degrees" of freedom in reindeer herders' economic possibilities.

Discussion

The material presented above gives us sufficient reason, we believe, to argue that a total shift to a sedentary life would be, in the current situation, fatal for the indigenous nomadic reindeer herders. More objective quantitative indicators supporting the notion that continuing to maintain a nomadic way of life is preferable in terms of ethnic survival were found in data from Nossok and Messoyakhinsky village administration records for 1991-95. These records showed that the birth rate among the native population living in villages was 1.5 times lower, and the death rate twice as high, as in nomadic herding families. Correspondingly, the was natural population growth rate was 3.5 times higher among the latter. Figures for the seminomadic population fell somewhere in between.

While Nenets accord nomadic herders the highest status, the dominant society has perceived (at the present time, perhaps unconsciously) Nenets traditional economy as something like a foreign body. It tries to force it into those economic forms it finds familiar, acceptable, efficient. Before reforms began, such efforts were directed at increasing its productivity as a supplier of unprocessed meat and fish. Now there is a new goal: to make the reindeer herding economy commodity-driven and open to commercial ties. In general, over the last several decades, the traditional economies of northern peoples have been rigidly controlled by the dominant society. In response, reindeer peoples have three possible strategies (Klokov 1998): 1) to isolate themselves from the dominant society (refusal to adapt); 2) to cooperate with the dominant society (passive adaptation); 3) to change somehow the way in which they interact with the dominant society (active adaptation).

Isolation is relatively rare. Perhaps the most outstanding example of it is a group of a dozen or so families that trek the eastern part of the Nenets Autonomous Okrug. Until the late 1980s this group remained unattached to any of the okrug's kolkhozes or sovkhozes, and was not registered with any of the village administrations. The children did not attend school, nor did the young men serve in the army. Among Yenisei Nenets there are a few wealthy herding families who live the same very isolated life. According to a survey (such information never finds its way into official statistics), the five or six wealthiest families own 300 to 500 reindeer each, while the largest private herd numbers over 1000 head.

Instances of active adaptation (the only strategy that will allow the nomadic herding population to survive) are even more rare. So far only individual elements of this strategy are in place among Yenesei Nenets, in the form of attempts by herders or their village relatives to establish independent commercial ties and sell their products on their own. The appearance of "independent farmers" in the tundra, as shown above, has been merely a passive response to the changes implemented by sovkhoz leadership (the second strategy). At the same time, according to native residents, the reindeer herders are the most unified group within the Nenets community, and are more willing to support one another than the fishermen, for example.

As our work has shown, passive adaptation has been the case for most of the northern indigenous inhabitants. Only the Nenets – especially in the Yamal and Taz districts – are the exception among the native reindeer herding peoples. A conservative strategy attempts to preserve the old life and economy as long as possible. When all possibilities are exhausted, the herder or fisherman moves into the village.

Conclusion

All of this leads to some rather sad prognoses for the survival of traditional nomadic reindeer husbandry. For it to be sustainable, there must be a strengthening of the positive aspects of acculturation – a mutual process of integration between the dominant culture and a traditional society.

The necessary conditions for this may come about if and when an intermediate social stratum appears among the Nenets, one that has an interest in preserving nomadic reindeer herding and is at the same time integrated into the dominant society. And since such interest is usually material, these must be people who profit materially from nomadic reindeer herding (i.e. those who are engaged in running it). On the other hand, for the herders these people must be "us" rather than "them" - that is, people whose values are much like those of the nomadic population. The cultural distance between them and the herders must be significantly less than that which separates the herders and the dominant society. Well-to-do relatives of herding families, for example, who own reindeer but do not graze them themselves, who are engaged in either managerial or commercial activity, might become such people. So might influential members of collectives, if reindeer herding collectives were to be successfully organized in Russia. We should note that the appearance of such a stratum would run counter to what seems to be an obvious principle, that "reindeer should belong to those who graze them" (analogous to "the land should belong to those who work it"). Unless it does, however, it is difficult to imagine how integration can take place without bringing with it the destruction of the traditional bases of native culture.

Acknowledgements. - Researchers S. Khrushchev (University of St. Petersburg) and V. Moiseeva (Geography Institute, Russian Academy of Sciences) also took part in the author's 1995-96 expedition, which was organized by Academician Ye. Ye. Syroechkovsky (Institute for Problems of Ecology and Evolution, Russian Academy of Sciences). The author would like to take this opportunity to thank all the study participants, the Taimyr Okrug administration, and also the local residents who provided a great deal of help in this research effort.

References

- Golovnev, A. B. 1995: Govoryashchie kultury. Traditsii samodiitsev i ugrov. (Talking cultures. Samoyed and Ugrian traditions.) Yekaterinburg: Ural Centre of Russian Academy of Sciences.
- Golovnev, A. B. & Osherenko, G. 1999: Siberian survival: the Nenets and their story. Ithaca, NY: Cornell University Press.
- Klokov, K. 1997: Northern reindeer of Taymyr Okrug as the focus of economic activity: contemporary problems of reindeer husbandry and the wild reindeer hunt. *Pol. Geogr.* 21(4), 233–271.
- Klokov, K. B. 1998: Traditsionnoe prirodopolzovanie korennykh malochislennykh narodov Severa. geograficheskie i sotsialno-ekologicheskie problemy. (Traditional natural resource use among native small-numbered peoples of the North. Geographic and socio-environmental problems.) Postdoctoral dissertation abstract (extended). Moscow: Institute of Geography, Russian Academy of Sciences.
- Popov, A. A. 1944: Yeniseiskie nentsy (yuraki). (The Yenisei Nenets [Yuraks].) Izvestiya Rossiiskogo geograficheskogo obshchestva (Russian Geographic Society News) 76(2/3), 76– 95.
- Vasiliev, V. V. 1970: Nentsy i entsy Taimyrskogo natsionalnogo okruga. Ocherk khozyaistva, byta i etnicheskikh protsessov, protekayushchikh na Yeniseiskom Severe. (The Nenets and Enets of the Taimyr National Okrug economy. Daily life, and ethnic processes on the northern Yenisei.) In Preobrazovaniya v khozyaistve i kulture i etnicheskie protsessy u narodov Severa. (Economic and cultural change and ethnic processes among peoples of the North.) Pp. 106– 164. Moscow: Nauka Publ.



Nenets women rounding up reindeer on summer pasture near Kharasavey, Yamal Peninsula, August 1991. Animals are either lassoed on the run or herded into temporary corrals so they may be hitched to sledges for transport. Herders must move camp every 24–48 hours at this point in the migration to avoid having animals break through the thin cover of vegetation, which is already dominated by grasses and sedges due to long-term heavy grazing. Photo: B. Forbes.



Nenets herders' cemetery, Ob River delta, July 1996. Burials are above-ground due to continuous permafrost. The cross on the grave and the herder's overturned sledges reflect a mixture of Orthodox Christian and pagan beliefs. Photo: B. Forbes.



Winter Nenets camp near Nadym, Yamal region, March 1999. Note reindeer skins as covering for the tent (*chum*). In contrast to Finland, there is no "supplemental feeding" and animals must dig for lichens and other forage through snow that may be more than 1 m deep. Photo: B. Forbes.



Ritual suffocation prior to reindeer slaughter at winter camp in forest-tundra near Nadym, Yamal region, March 1997. The practice of pagan rituals pertaining to animal slaughter appears more prevalent among people living mostly or entirely on the tundra compared to those in collectives and towns. Photo: B. Forbes.



Nenets women rounding up reindeer in forest-tundra near Nadym, Yamal region, March 1997. Women and dogs do most of the work getting animals running and corralled, whereas men are responsible for lassoing and hitching animals to sledges. Photo: B. Forbes.



Skinning and butchering a reindeer at a collective farm near Naryan Mar, Nenets Autonomous Okrug, June 1996. Photo: B. Forbes.