

Komi reindeer herding: the effects of socialist and post-socialist change on mobility and land use

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Abstract

This paper contributes to the discussion concerning the way in which Soviet state policies have influenced the lives, social organization, economy and culture of a group of indigenous Komi reindeer herders of northern Russia: its main focus is to explain how these policies have changed the herders' patterns of migration and land use. Extensive anthropological fieldwork—to determine current and past herding practices—was carried out and archives were thoroughly investigated to document land use changes in relation to state reindeer herding policies. It was found that compared with those of several decades ago, the migration routes are now much shorter, as the herders have abandoned large areas of winter pastures located in the southernmost part of their herding territory. This “abandonment” phenomenon is endemic amongst reindeer herders generally, throughout the Komi Republic. Whereas the reasons for the abandonment of winter pastures are diverse, they can be attributed mostly to the state sedentarization policy, which has modified the family structures of herders, and the continuing decreases in state subsidies that have changed the balance between state and private ownership of reindeer. Both these factors have greatly contributed to the herders' dependence on visiting towns, where they now own flats, and on selling reindeer products, upon which they are increasingly reliant for financial security.

The effect of state policy upon the life, social organization and culture of aboriginal peoples has been one of the most important topics of research in Siberian anthropology (Fondahl 1989; Slezkine 1994), particularly since the break-up of the Soviet Union (Ventsel 2005: 24–25). Indeed, a vast body of literature exists describing how the socialist and post-socialist policies of the Soviet Union/Russian Federation have influenced the aboriginal peoples of the Russian North (for a review see Ventsel 2005). It has often been observed that at the state level both Soviet and, to a lesser degree, post-socialist Russian policies towards these peoples were highly centralized, uniform and inflexible, and paid little attention to the local circumstances and particularities of individual communities (e.g., Fondahl 1989; Shindler 1991; Slezkine 1994). For example, there were attempts to organize a post-Soviet clan-based administration for peoples without clans (Pavlov 2003). However, a number of studies undertaken during the last decade have demonstrated that the interpretation of these state policies

varied significantly in different parts of the Soviet/Russian North, and sometimes led to markedly different effects, even among different groups of the same people in the same region (e.g., Gray & Stammler 2002; Stammler & Ventsel 2003; Klovov 2004).

One example, which has received relatively little detailed attention, is the impact that Soviet/Russian state policy has had on the land use strategies and migration patterns of northern nomadic reindeer herding peoples. It has been documented that the central Soviet administration generally regarded nomadism as a backward way of life, which, although tolerated for economic reasons, was generally viewed as being inconsistent with modernity and destined to disappear (Fondahl 1989; Slezkine 1994; Vakhtin 1994; Golovnev & Oshirenko 1999; Konstantinov 2002). Therefore, up until the beginning of the 1980s, local authorities throughout the Russian North were urged to apply policies that would foster sedentary living. They achieved this by providing reindeer herders with free flats in villages, forcing the transition from

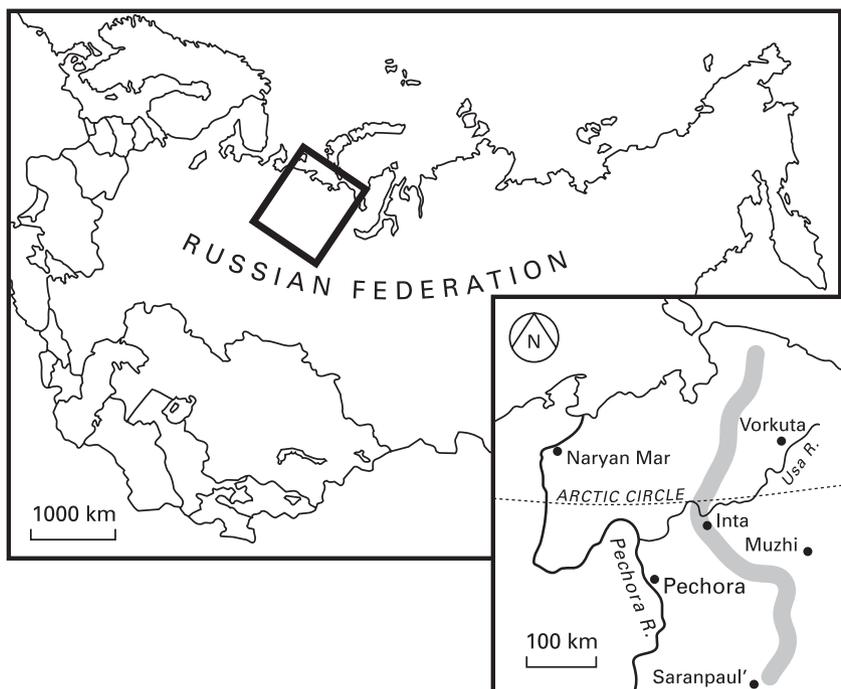


Fig. 1 Map showing the location of the study area in northern Russia.

“family nomadism” to “productive nomadism” (i.e., the system in which male and some female members of reindeer herding families move, while the majority of female members and children pursue a settled way of life in a town or village), as well as introducing “shifting pasturing” (Fondahl 1989; Krupnik 2000; Jernsletten & Klokov 2002). “Shifting pasturing” refers to the system in which several different groups of reindeer herders (mostly male) alternate between undertaking pasturing shifts in the tundra (lasting from one to three months), and periods of rest with their settled families in a village. Furthermore, the direct intervention of the state specialists in determining migration routes and schedules, which happened in many places, more often than not decreased the length of migrations, and bound them to a region around the sedentary bases of the enterprises (Syrovatskij 1975; Anderson 2000; Gray 2005; Ventsel 2005). It was only towards the middle of the 1980s that the transition from family to productive nomadism was officially recognized to be neither economically viable nor socially helpful in all regions (Zabrodin 1980). The degree and consistency with which these policies were carried out varied substantially from one region to another, and therefore affected reindeer herding groups in very different ways. For example, the Soviet policy implementation for the European and Yamal groups of Nenets reindeer herders resulted in a decrease in the length of their annual nomadic migrations, and an increase in the time spent in proximity to the “sedentary bases” (Golovnev &

Oshirenko 1999; Tuisku 2002; but see Stammer 2005 for an opposing view), whereas the migration patterns of the Yenisey group of Nenets apparently remained unchanged (Klokov & Šustrov 1999). Interestingly, post-socialist transformations—which included the lifting of the state “sedentarization” policy and the endorsement of nomadism in official discourses—also affected the Yamal and European Nenets in different ways. Whereas the Yamal Nenets’ migration routes remained similar to those of the late Soviet period (Golovnev & Oshirenko 1999) and, according to Stammer (2005), the pre-Soviet period, the migration routes of the European Nenets have significantly changed (Tuisku 2002). This shows that detailed regional studies are needed in order to understand better the effects that state policy may have on mobility and land use.

This paper focuses on documenting and explaining changes in the migration pattern of a community of Komi reindeer herders, who inhabit the eastern part of the Bol’shezemel’skaja tundra and the northern part of the Komi Republic (formerly known as the Komi Autonomous Soviet Socialist Republic [ASSR]), in the north-east of the European part of the Russian Federation (Fig. 1).

The primary aims of this paper are threefold: (1) to document the changes in the migration pattern of a group of Komi reindeer herders during the Soviet and post-Soviet periods (i.e., mainly from the 1960s period of amalgamation policy to the post-socialist present day); (2) to discuss these changes in relation to state policy

vis-à-vis northern reindeer herders; and (3) to propose hypotheses for the causal relations between state policy and the changes in the herders' migration patterns.

Background

The Komi began herding reindeer around three centuries ago, which, interestingly, corresponds with the age of "large-scale" reindeer herding per se (Krupnik 1976, 1989). As often stated in Russian literature, historically, the Komi adopted reindeer herding from the Nenets (Krupnik 1989, 2000; Žerebcov 1982; Konakov & Kotov 1991). However, this adoption most probably concerned transport reindeer herding, whereas the "large-scale" reindeer herding system was developed by the Komi independently from the Nenets, although not in isolation from them (Istomin 2004; see also Habeck 2005 for a discussion). Commencing in the Ižma region of the Bol'shezemel'skaja tundra, in the area that is now the Komi Republic and the Nenets Autonomous Okrug, the Komi increased the numbers and sizes of their herds over a short period of time (Islavin 1847; Kercelli 1911; Babuškin 1930), expanded into the Khanty-Mansi areas in the east, and even emigrated to the Kola Peninsula in the west (Konakov & Kotov 1991; Took 2003).

The communist revolution in Russia and the subsequent civil war caused economic stagnation, which paralysed Russia, including Komi reindeer herding (Istomin 2004). The history of Komi reindeer herding during the communist era can be divided into the following seven periods, which were essentially similar all over the Russian North (Fondahl 1989; Sergeev 1955; Muhačev 1990; Slezkine 1994; Vakhtin 1994): (1) the period of the civil war, from 1918 to the beginning of the 1920s; (2) the period of restoration, in the 1920s; (3) the collectivization epoch (from the Russian, *kollektivizacija*), in the first half of the 1930s; (4) the first period of stagnation, from the end of the 1930s to the middle of the 1950s; (5) the amalgamation epoch (from the Russian, *ukrupnenije*), from end of the 1950s to the middle of the 1970s; (6) the second period of stagnation, from the second half of the 1970s to end of the 1980s; and (7) the period of re-privatization and crisis, from the 1990s to the beginning of the 2000s.

The first and second periods relate to the establishment of political control by the communist government over reindeer herders, and the building of official institutions for their administration. The period of collectivization was marked by strong intervention by the state into the life of reindeer herders. This intervention was directed mainly towards the system of property relations, whereby independent reindeer herding entities became local collective state farms (in Russian: *kolhoz*; plural *kolhozy*).

After the period of stagnation, when the issues of aboriginal peoples were mainly neglected by the state, the second reconstruction era (which coincided in time, but was not limited to the amalgamation policy) emerged. During this period a strong attempt was made to reform both the technology of reindeer herding and the herders' way of life: by creating new state farms (in Russian: *sovhoz*; plural *sovhozy*) in place of semi-independent *kolhozy*, closing/merging villages and encouraging sedentary life, etc. This period is the focus of this paper.

Study site and methodology

This paper focuses on the reindeer herding state farm (*sovhoz*) Bol'shaja Inta, which is one of three reindeer herding enterprises of the Komi Republic's reindeer herding region of Inta (in Russian: *Intinskij Rajon*). The other two enterprises of this region are Petrun'sky (Petrun' village) and Fion-A (Abez village). The Bol'shaja Inta *sovhoz*, which used to be the supply enterprise of the Intaugol coal-mining company during the Soviet period, emerged as a reindeer herding enterprise during the 1960s, by acquiring (during the period of amalgamation) seven smaller collective farms (*kolhozy*), which had been established during the 1930s (Smetanin & Savel'eva 2004: 336; Tables 1, 2). To differentiate between the *sovhoz* from the socialist era and the post-socialist *sovhoz*, the latter are hereafter referred to as "modern *sovhoz*".

During the period of this research, Bol'shaja Inta consisted of five brigades (in Russian: *brigada*; plural *brigady*), each of which was historically linked to a particular village and *kolhoz*: the first and fourth brigades were those from the village of Adzvavom, the fifth brigade was from its neighbouring village Adzva (formerly known as Lar-Van'-Ig), whereas the second and third brigades originated from the villages of Kočmes and Larko, and Nidz'el', respectively. The brigades from the three remaining *kolhozy*, which were also acquired by Bol'shaja Inta (i.e., those from the villages of Jag-El', Dresjanka and Kosjuvom) were most probably integrated with those of their closest neighbours, i.e., with the first, fourth and fifth brigades, and the second and third brigades, respectively. The second brigade ceased to exist towards the end of 2005, and although there has been talk of its re-establishment, this prospect remains unclear.

Anthropological fieldwork for this paper consisted of three expeditions with brigades of the Bol'shaja Inta *sovhoz*. The first expedition took place in 2001 (September–November), the second took place in 2002 (June–December) and the third took place in 2003 (January–February). During these expeditions, nine months were spent with the second and third brigade, one month was spent with the first and fourth brigade,

Table 1 *Kolhozy* (local collective state farms) in the Inta region prior to amalgamation. The names of the *kolhozy* were taken from archival data in the year 1945 (KNA 2576). The names of the villages, to which the *kolhozy* correspond, were provided by veteran reindeer herders.

Name of <i>kolhoz</i>	Corresponding village
Budenogo	Adzvavom
Kirova	Adzva (formerly known as Lar-Van'-lg)
It is likely that the Kirova <i>kolhoz</i> belonged to the Nenets Autonomous Okrug (NAO), as it was only after merging with Budenogo in 1958 that the new enlarged Kirova became registered and known as a Komi <i>kolhoz</i> (KNA 4859). Adzva was formerly known as Lar-Van'-lg, although it is not clear when the village was renamed (Roščevskij et al. 1999: 219).	
Timošenko	Jag-El'
In 1958 the Timošenko <i>kolhoz</i> was renamed Frunze (KNA 4859).	
Vinogradova	Nidz'el'
Čapajeva	Kosjuvom
Kosju	Dresjanka
Sotsolenevod	Kočmes & Larko
In 1945, Sotsolenevod was not registered as a <i>kolhoz</i> belonging to the Inta region (KNA 2576), as it belonged to the NAO (KNA 3794). It was not until 1953, when Sotsolenevod merged with Čapajeva to form the Molotova <i>kolhoz</i> , that it became registered as a Komi <i>kolhoz</i> (KNA 3794).	

Table 2 Amalgamation of the *kolhozy* (local collective state farms) in the Inta region.

1960	Stage 1
Molotova <i>Kolhoz</i> (Kosjuvom + Kočmes + Larko)	<i>Sovhoz</i> ^b amalgamation of Bol'saja Inta
Frunze <i>Kolhoz</i> (Jag-El')	
Kosju <i>Kolhoz</i> (Dresjanka)	
1961	Kirova <i>Kolhoz</i> acquired the Vinogradova <i>Kolhoz</i>
Kirova <i>Kolhoz</i> (Adzva + Adzvavom)	
Vinogradova <i>Kolhoz</i> (Nidz'el')	
1963	<i>Kolhoz</i> abolished in the Inta region. Both <i>kolhozy</i> were subordinated to the Pechora region.
Kirova <i>Kolhoz</i> (Adzva + Adzvavom)	
Lenina ^a (Petrun')	
1967	Stage 2
Kirova <i>Kolhoz</i> (Adzva + Adzvavom)	<i>Sovhoz</i> Bol'saja Inta acquired the Kirova <i>Kolhoz</i>

^aLenina *Kolhoz* (now the *sovhoz* of Petrun') was based in the village of Petrun' which is to the east of Inta.

^b*Sovhozy*, new state farms.

and one month was spent with the fifth brigade. During various intervals—from August 2001 to February 2003—a period of over a month was spent interviewing retired reindeer herders in small remote villages: Adzvavom (two weeks), Kosjuvom (one week), Petrun' (three weeks) and Rogovaja (three days). A number of days were also spent with state farm officials, collecting relevant maps and asking general herding questions.

The research included participant observation and interviews that were conducted in both the Komi and

Russian languages. The interviews were informal, and no specifically designed questionnaires were used. The interviewing process was repeated several times, with different individuals and groups of herders, in order to cross-reference the data. Participant-observation, used to study the technology of reindeer pasturing, essentially involved practical work among reindeer herders. December 2001 was spent perusing Russian state archives in both Inta and Syktyvkar. The majority of information was obtained from the Komi National Archive (KNA), as this is where most information is held, and obtaining access to the Inta files proved difficult. The reliability of Soviet reindeer herding statistics is often questioned. This especially concerns those relating to private reindeer (Tuisku 2002; Stammler & Ventsel 2003), collectivized reindeer of the 1930s–40s (Slezkine 1994; Habeck 2005) and the structure of reindeer losses (Konstantinov 2002; Konstantinov & Vladimirova 2006). However, in the context of this research, little else could be done other than to accept the statistics at face value.

The figures representing the winter pastures and migration routes of the Bol'saja Inta *sovhoz* brigades are based both on maps obtained from the *sovhoz* administration and the herders' knowledge. The *sovhoz* maps had neither coordinates nor scaling. However, the historical aspects of the migration routes and winter pastures (i.e., where the herders used to travel and pasture their reindeer prior to the relatively recent changes) were drawn by veteran herders, using accurate topographical maps. Although much care has been taken to reproduce, as accurately as possible, the *sovhoz* maps and combine them with the herders' knowledge of pastures and migration routes, they should be treated as approximate representations.

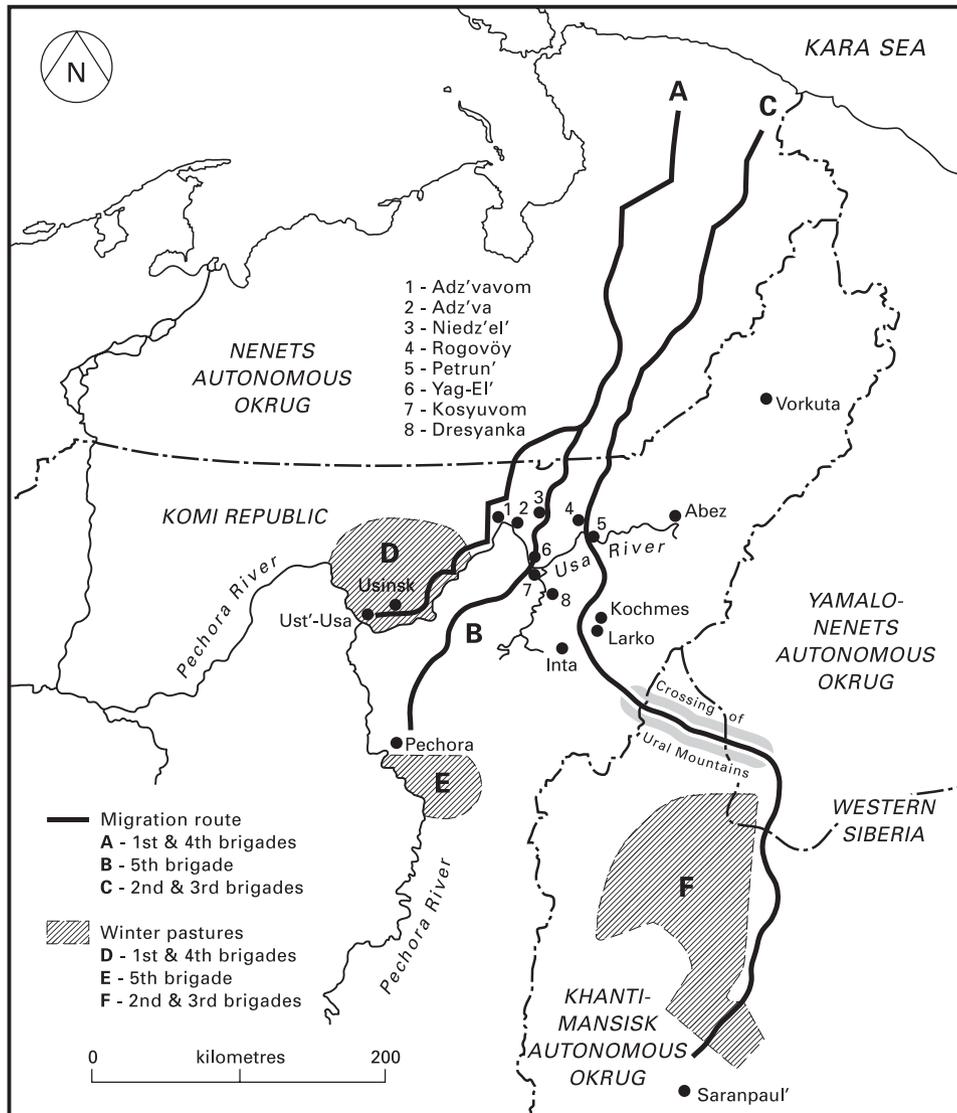


Fig. 2 The migration routes and arrangement of winter pastures in the early 1960s.

Changes in mobility and land use

The most notable changes in the reindeer herders' pattern of migration in Bol'shaja Inta occurred progressively, as a result of their abandonment of winter pastures. The reduced length of the herders' migrations means that they no longer travel as far as they did several decades ago, to pastures located in the southern range of their migration route. In the following sections these changes in mobility and land use will be outlined chronologically, ranging from the *sovhoz* period (early 1960s) to that of the present day. It was not possible to map individual migration routes before the 1960s because of the lack of archival and detailed anthropological data. However, veteran reindeer herders said

that the migration routes used prior to the 1960s were essentially the same as those used in the early *sovhoz* period (early 1960s).

Migration routes and winter pastures during the early 1960s

Figure 2 shows the migration routes and arrangement of winter pastures during the early 1960s, following the first stage of the *kolhoz* amalgamation (in Russian: *ukrupnenije*), and the establishment of the Bol'shaja Inta *sovhoz*. The migration routes A and B are those of the brigades belonging to the Kirova *kolhoz* that did not merge with the *sovhoz* during the first stage of Bol'shaja Inta's

amalgamation process. These brigades included the two from the village of Adzvavom (currently known as the first and fourth brigades) and that of the village of Adzva (currently known as the fifth brigade). All three brigades shared the same migration route, except the fifth brigade, which had its own section of migration route that branched off along the way. These three brigades, unlike the others of Bol'shaja Inta, had winter pastures that were located near the Pechora River, rather than in western Siberia.

According to the veteran herder Aleksej (first brigade), the first and fourth brigades had their winter pastures near the village of Ust'-Usa (close to the new "petroleum" town of Usinsk), whereas those of the fifth brigade were east of the town of Pechora. Aleksej explained that the migration routes followed the Usa River, which intersects with the Pechora River, and leads to the winter pastures. Similarly, the veteran herders Mihail and Aleksej (second brigade), and Ivan (third brigade), recalled their trans-Ural migrations with nostalgia, and drew the routes on the map with great precision.

The information provided by the herders with regard to the location of their migration routes and winter pastures is supported both by published maps (IGE 1964: 98) and by maps held by the *sovhoz* (MA 1982).

Migration routes and winter pastures during the late 1960s

Figure 3 shows a change in the migration routes and winter pastures of the first, fourth and fifth brigades, which occurred during the late 1960s. According to Aleksej (first brigade), the three brigades were no longer permitted to travel to the Pechora region, which they had always done in the past, once they merged with the Bol'shaja Inta *sovkhos*. Instead, they were given new winter pastures behind the Ural mountains, near Saranpaul' (further south from those of the second and third brigades), and had to create a new section of migration route (G) that joined up with that of the second and third brigades. This meant that the brigades from Adzvavom and Adzva were forced to abandon not only their Pechora winter pastures but also the sections of their migration routes that led to them. Aleksej reported that no reindeer herding brigade (from Bol'shaja Inta) ever travelled to the Pechora region after this period.

The reasons for relocating the winter pastures of the first, fourth and fifth brigades become clear if one takes into account the development of the oil and gas industries, which was initiated in the region during this period. In 1964, the decision was taken to establish a permanent settlement in proximity to the Usinskaja oil well in the middle of the first and fourth brigades' winter territory; in

1971, this new settlement was officially named Usinsk, and acquired city status in 1984. In 1964, a gas deposit was discovered in Pechora, near the mouth of the Vuktyl River (the upper part of Pechora), and by 1967 a major industrial plan to extract the gas had been developed (Smetanin & Savel'eva 2004). Around the same time, the Bol'shaja Inta *sovhoz* acquired the Kirova *kolhoz*, which included the brigades from the villages of Adzvavom and Adzva, as part of the second stage of the amalgamation process (described earlier), and changes were made to the location of winter pastures. It is highly likely, therefore, that these changes correspond with the plans of industrial development. No further mergers or acquisitions occurred from this point onwards, and the brigade structure remains the same today as it was in 1967.

Migration routes and winter pastures during the mid-1970s

Figure 4 shows the abandonment of the trans-Ural winter pastures (E) and the section of migration route that led to them. According to Aleksej (first brigade), the brigades from Adzvavom and Adzva were the first to cease pasturing their herds behind the Ural Mountains, in 1974 (some 31 years ago), which signifies that they travelled there for a period of only seven years (1967–1974). Similarly, Serafim, Aleksej and Mihail (second brigade) reported that the two remaining brigades (the second and third) continued pasturing their herds in western Siberia for a further two years, before abandoning the practice themselves in 1976. Instead, the herders reported that all of the brigades started to use winter pastures that were situated close to the Ural Mountains (i.e., not on the other side of them), near the village of Kožim and a place called Tundra Pjaseda (D); however, to a certain extent, they probably used some of the pastures located around the town of Inta in a similar way as they do today.

Interestingly, according to the map of 1964, the pastures located near Kožim, and Tundra Pjaseda, were marked as being "reindeer passages" rather than winter pastures (IGE 1964: 98). This meant that these pastures were not intended to be the final destination of the migration route, where reindeer would be pastured for about 4–6 weeks before starting the migration back towards the north. However, it is not exactly clear which winter pastures each brigade was meant to use during the mid-1970s, as no maps from this period could be found. Nevertheless, it is evident that the winter pastures located in western Siberia would almost certainly have been available, given that, to this day, they remain part of the official winter pastures of Bol'shaja Inta.

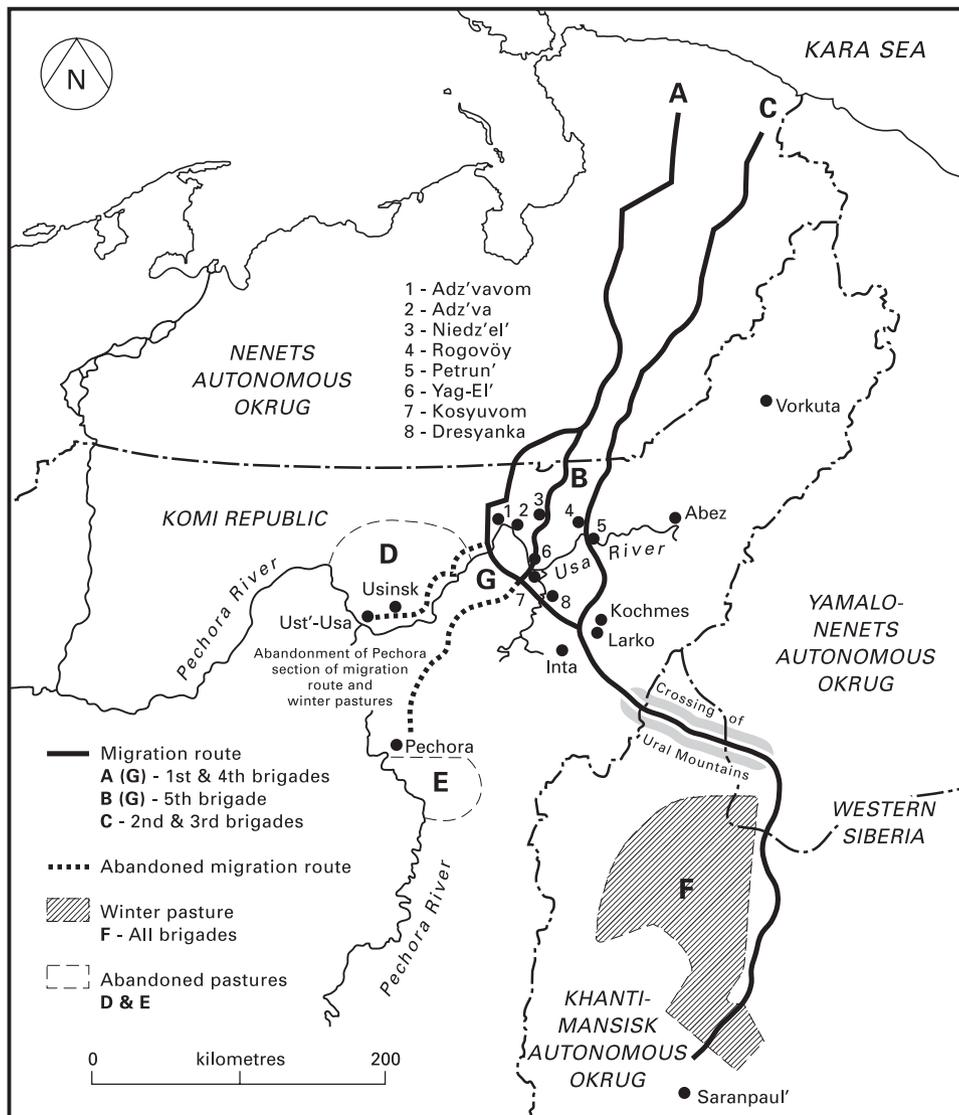


Fig. 3 The migration routes and arrangement of winter pastures in the late 1960s.

Migration routes and winter pastures from 1982 to the present day

Figure 5 shows the official arrangement of pastures from 1982 onwards, which correspond with those presented in the *sovhoz* map (MA 1982). Although the map was printed in 1982, there is no indication that any further official land use changes have since occurred, as the *sovhoz* has had no amendments made with regard to pastures, and continues to instruct the reindeer herders to make movements that correspond to these maps.

It was pointed out earlier that the pastures located near the Ural Mountains, currently marked as being winter pastures, were, in the past (i.e., during the early 1960s) considered to be "reindeer passages". Similarly, the

sovhoz map of 1982 shows that the winter pastures of all brigades are now located much further north than previously. In fact, the 1964 map shows the current winter pastures as being located in areas that were previously marked as either spring/autumn pastures or "reindeer passages" (IGE 1964: 98). The only exceptions are the winter pastures located behind the Ural Mountains (now kept as reserve pastures), which have not been exploited by a Bol'shaja Inta brigade since 1976.

According to Aleksej, Ivan and Petr (first brigade), the brigades from Adz'vavom and Adz'va (first, fourth and fifth brigades) stopped pasturing their herds near the Ural Mountains in 1982. This coincides with the date that the *sovhoz* map was issued (MA 1982), showing the winter pastures of these brigades to be located elsewhere (Fig. 2).

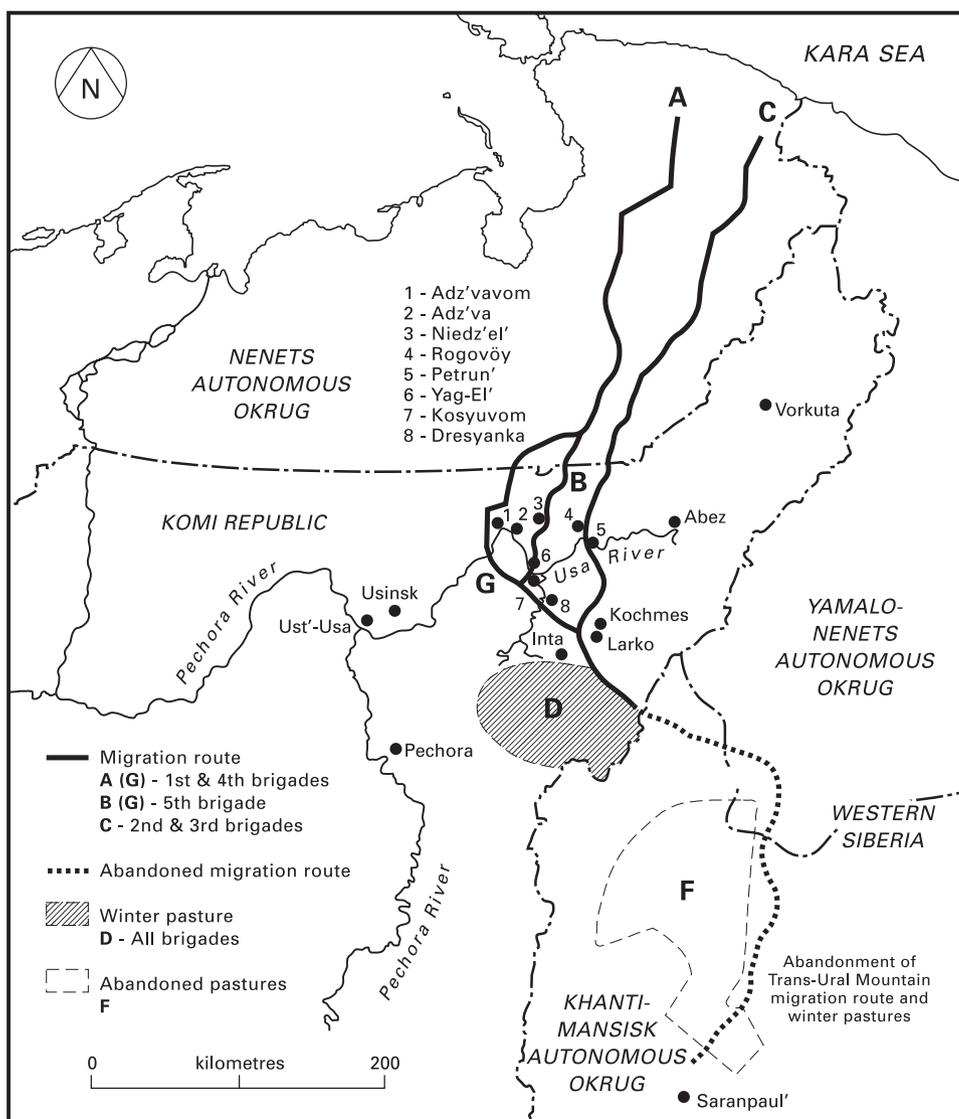


Fig. 4 The migration routes and arrangement of winter pastures in the mid-1970s.

However, according to Vasilij and Aleksej (second brigade), and Ivan and Prokopij (third brigade), in 1990 the second and third brigades also stopped winter pasturing near the Ural Mountains. Consequently, between 1982 and 1990, a further abandonment of winter pastures took place (of those near the Ural Mountains). Some abandonments resulted from a possible reorganization of pastures, whereas others resulted from the general trend of not travelling so far south.

It should be noted that more recently (from 2001 to the present day) the first and fourth brigades have been observed to use pastures belonging to the neighbouring Haruta reindeer herding enterprise: this resulted from the lack of prosperity of a number of the Haruta enterprise

brigades, who no longer used their winter pastures. These pastures are located to the north and north-west of Adz'vavom.

Summary of change in migration routes and winter pastures

Figure 6 shows the general “retreat” from the migration routes and trans-Ural winter pastures in the Bol’shaja Inta region from the early 1960s to the present day. Although some of the winter pastures are no longer available (i.e., those to the west), those near the Ural Mountains and in western Siberia remain accessible, despite having been abandoned. It is apparent that all of the brigades no longer

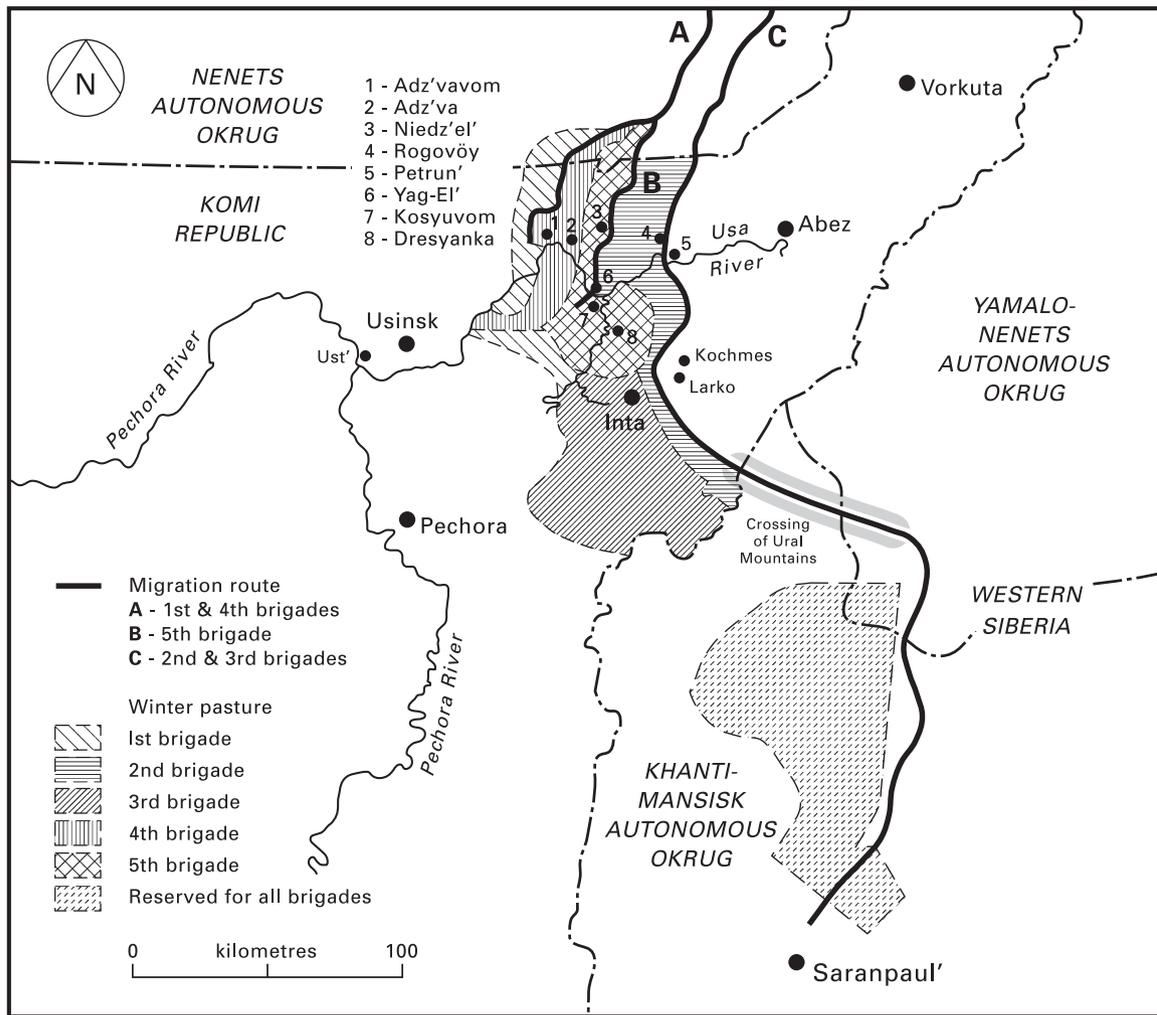


Fig. 5 The migration routes and arrangement of winter pastures from 1982 to the present day.

travel as far south as they once did, and the modifications to the official “pasture maps” over the years appear to reflect the reindeer herders’ changing pattern of land use, rather than change having been dictated by the state. The migration routes A (first and fourth brigades), B (fifth brigade) and C (second and third brigades) are approximately 29, 31 and 42% shorter, respectively: i.e., 34% shorter on average. For example, the length of the trans-Ural migration route (of the second and third brigades) has decreased from 720 km (one way) to 410 km. For the sake of simplicity, the migration routes were measured in a straight line: the actual lengths are considerably longer.

There were two separate reasons for the abandonment of some winter pastures, and the sections of migration routes that led to them. The winter pastures located near Pechora were essentially abandoned following a reorganization of reindeer herding territories during the *sovhoz* amalgamation period, by a direct order of the state,

whereas those located south of Inta (near the village of Kožim and on Tundra Pjaseda) and in western Siberia were abandoned because of a range of complicated social, cultural and political factors, but not by direct state order. These factors are analysed in a later section.

Changes to state policy

The situation after the 1960s amalgamation (*ukrupnenije*)

According to archival data, the Bol’shaja Inta herd comprised between 10 000 and 12 400 reindeer (excluding transport reindeer), before calving, from 1970 to 1983. Consequently, there should have been a minimum of 2000 and a maximum of 2480 reindeer (before calving) in each brigade, assuming that all five brigades had comparable herd sizes.

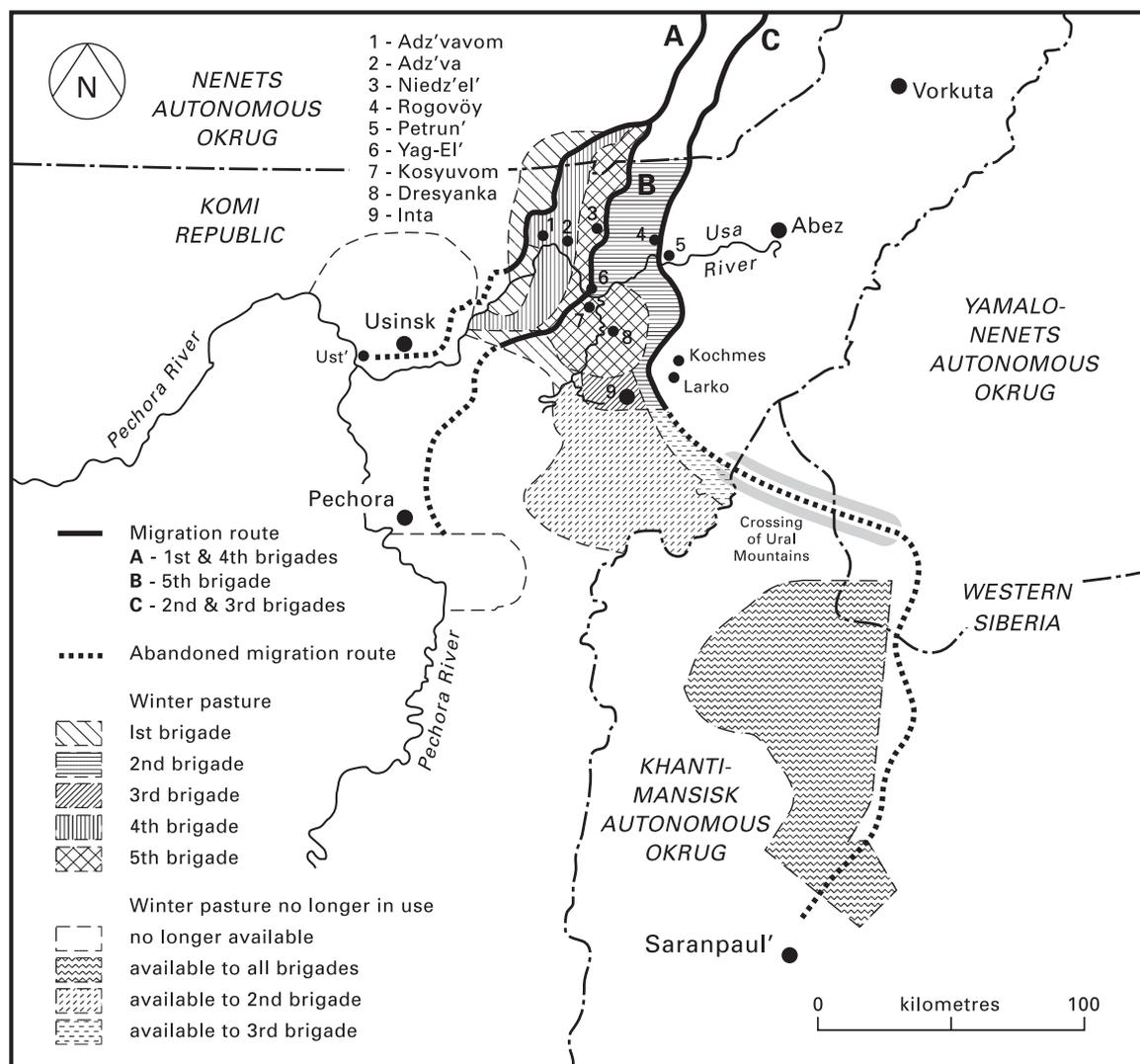


Fig. 6 The overall change in migration routes and winter pastures from the early 1960s to the present day.

Following amalgamation, the status of reindeer ownership changed. During the *kolhoz* period, the majority of reindeer were owned by the *kolhoz*, and were supposedly collective property, whereas during the *sovhoz* period they became state property. Apart from this, a limited number of private reindeer (officially named personal reindeer) were officially tolerated. The number of private reindeer authorized in the Komi ASSR and the Nenets Autonomous Okrug was 30 animals per herder (Smetanin & Savel'eva 2004: 504). (Tuisku [2002] analytically differentiates between private and personal property of reindeer: she prefers to use the term "personal property" to designate the right of *kolhoz/sovhoz* workers to a certain number of reindeer pastured in a brigade's herd, whereas "private reindeer" can be owned only by independent herders who do not work for collective/state enterprises.

Although the authors agree with Tuisku and others [Fondahl 1989; Anderson 2000; Konstantinov 2002; Ventsel 2005; Konstantinov & Vladimirova 2006] that affiliation with a [post-]socialist enterprise brought about a number of important constraints on, and possibilities for, managing private property, we believe that this affiliation influenced the strategy of exercising property rights, rather than the rights themselves. We see no heuristic value in differentiating between "private" and "personal" property, and believe that such a differentiation in official Soviet-era documents has ideological rather than empirical relevance.)

Despite the strict limits on numbers, the percentage of privately owned reindeer throughout the Komi republic, and the Soviet Union in general, slowly grew during the entire *sovhoz* period. This tendency became apparent

during the 1950s, and especially during the 1960s, when the punishment for exceeding the permissible limit of “personal property” became less severe, whereby a guilty party was generally fined rather than given a prison sentence (Smetanin & Savel’eva 2004: 604). The growth of private herds was most significant in the Yamal, where, by the end of socialist period, more than 40% of the total herd was privately owned (Stammler & Ventsel 2003: 331; Klokov 2004: 60). The figure for the Komi ASSR—13% in 1987—is more modest, and closely resembles that of Yakutia, of about 10% (Stammler & Ventsel 2003). It should be noted, however, that the statistics on private herds may not be entirely correct, because of the attempts of the herders to hide the exact number of their private animals, and thus avoid fines. We believe, however, that the statistics still reflect general practices, and are useful when comparing different regions throughout Russia.

The size of the brigades increased after the transition from *kolhoz* to *sovhoz*. According to the herders, during the *kolhoz* period the brigades of Bol’šaja Inta generally had five or six herders each, as opposed to between eight and 10 during the *sovhoz* period. This change could be attributed to the increased number of reindeer managed by each brigade. Indeed, the herders recall that during the *kolhoz* period there were many more brigades than at present, and the size of their productive herds—at around 1000 reindeer per brigade (before calving and excluding draft transport reindeer)—was much smaller. The herders’ general statement that herd sizes in the Inta region were smaller during the *kolhoz* period, compared with those of the present day, is supported by archival material. For example, there were 1408–3331 productive reindeer (after calving) at the Budenogo *kolhoz* (Adzvavom) between 1945 (KNA 2576) and 1959 (KNA 4895). Considering that there were (and still are) two Adzvavom brigades, it is perfectly plausible that two productive herds of 1000 animals each (before calving) could have accounted for up to 3300 head of reindeer (after calving), given the productive capacity of 65% for a typical Komi herd (Dwyer 2006).

According to herding veterans, the number of herders living in a tent (in Komi, *čom*; in Russian, *čum*) was around five or six during the *kolhoz* period (as opposed to between eight and 10 during the *sovhoz* period), and generally consisted of two families, each of which occupied a separate side of the *čom*. In addition to the duty herders, there would have been at least two female tent workers and several children. This closely resembles the descriptions from the beginning of 20th century that among Komi a *čom* usually accommodated two families (Kercelli 1911), consisting of husbands, wives and their unmarried children. This pattern changed considerably after the amalgamation, mainly as a result of the gender

drift (see Vitebsky & Wolfe 2001). The decline in the number of female tent workers apparently accelerated during the *sovhoz* period (see Dwyer 2006). Furthermore, probably for the first time in Komi history, the herders living in the tent often belonged to more than two families. Although the implications of these social changes have not yet been researched, they would most likely have influenced the work organization of female tent workers, considering that the tent has only one stove, one set of common equipment and a finite amount of space (e.g., for making clothes).

The reasons for the gender drift are considered to be complex, and their detailed discussion lies outside the scope of this paper (see Vitebsky & Wolfe 2001). It is, however, worth mentioning that the outflow of women was strongly supported by the state as an important step in the transition from “family” to “productive” nomadism. In the Komi Republic, girls were encouraged to become sedentary by both the system of school education and public media, which represented the tundra as a male space, generally unsuitable for women.

Komi reindeer herding, unlike many other reindeer herding communities, did not develop on the basis of an “extractive economy” (e.g., hunting, fishing and gathering), but rather on that of a “productive economy”, which included cattle breeding and agriculture (Istomin 2000). As a result, present-day Komi reindeer herders have strong connections with family members who live a sedentary village way of life, and the herders return to these settlements during the winter—as their winter pastures are located close to the villages—to trade and exchange goods, as well as to visit family members. Reindeer herders, despite being nomadic during their working lives, usually retire to villages with their family, and sometimes build their own wooden houses. Since the development of towns such as Inta and Vorkuta, a Komi family may now consist of reindeer herders, coal miners, shop assistants, cattle breeders and agriculturalists. Household diversification is not unique to the Komi (see, e.g., King 2003).

The process of amalgamation meant that all villages saw their populations decline quite radically, and it is probable that some villages remain totally uninhabited. For example, the village of Adzva had a population of 242 in 1939, which decreased to 63 during the *sovhoz* period (in 1970), and to only 16 in 1995 (Roščevskij et al. 1999: 219). This depopulation was related to the state policy of closing down small villages, and centralizing the population in small towns and large villages, in order to facilitate logistics, improve the supply of goods and services, and decrease the population outflow from villages to cities (the so-called policy of unviable villages; Kovalev & Šapošnikov 1977: 36; APSH 1980: 44–53). The inhabit-

ants of the villages declared unviable were offered free flats in towns and larger villages, where the headquarters of their *sovhoz* were usually located (Kovalev & Šapošnikov 1977: 33). At the same time, the supply/support to these unviable villages was cut back, essentially forcing the local population to relocate.

The major effect that these policies had on reindeer herding families was that of segregation. Prior to the establishment of the *sovhoz*, the typical family type of the northern Komi, especially the reindeer herders, was the so-called large “undivided family” (Konakov & Žerebcov 1994; Solovyev, pers. comm. 2002). These comprised several related nuclear families, typically two or three, joined together to form one household. For example, such a unit could be made up of the families of two brothers and the family of one of their married sons. The unit held private property in common, for example, a house in a village (Konakov & Žerebcov 1994). Usually, an undivided family included nomadic reindeer herders as well as settled non-nomadic agriculturalists or farmers, and, whilst one of the related nuclear families travelled in the tundra, the remaining sedentary nuclear families stayed in the village, and worked both within the *kolhoz* system and independently (each *kolhoz* member had a right to a small plot of land and several animals). All the products derived from reindeer herding, agriculture and farming were considered to be the property of the undivided family, and were shared accordingly. Furthermore, when it was time for the herders to return to the village to either visit (during the winter) or permanently retire, they lived in the house of their undivided family, which they considered to be partly their own (Solovyev, pers. comm. 2002).

The state policy to provide accommodation meant that each nuclear family received its own flat, which, subsequently, changed the distinctive Komi family structure. Although today there is still a large degree of exchange of goods and services that takes place between nomadic reindeer herding nuclear families and other related families who remain sedentary in villages and towns, property is no longer considered to be a common commodity. Therefore, dealings between related nuclear families are now based on the principle of more or less balanced

reciprocity, whereby the help provided by one family is paid back in a similar manner. Consequently, whereas during the *kolhoz* period, and even prior to it, reindeer herders generally either retired to villages with family members or died whilst living and working in the tundra, during the *sovhoz* period they either applied for state flats (if they were entitled to them) or purchased real estate. This resulted in herders spending less time in the tundra, and more time visiting towns and villages, and occupying their newly acquired accommodation during the winter months, once they had reached their winter pastures.

The present situation (post-socialism)

Following the break-up of the Soviet Union in 1991, the former communist *sovhoz* of Bol'shaja Inta, like many others throughout the Komi Republic and Russia, became a quasi-independent enterprise, as a result of the privatization process. As Bol'shaja Inta was a “supply enterprise” to the Intaugol' State coal company, as noted earlier, both companies were privatized simultaneously in 1992 (Kolegov 2004: 14).

The Komi style of reindeer herding in the Inta area, and probably throughout the Komi Republic, was relatively unaffected by the *sovhoz* administrative period, at least in the sense that reindeer populations and control remained quite stable. However, following the privatization of Bol'shaja Inta, the ownership structure of the reindeer herds changed. Whereas formerly the herds were predominantly owned by the *sovhoz* (during socialism), reindeer herders steadily increased their ownership of reindeer (from 1991 to the present day), once the previous private reindeer ownership restrictions were lifted. This is corroborated by state statistics, which show that although the modern *sovhoz* continues to own the majority of the herds (close to 2000 reindeer per brigade), there has been an increase in the numbers of private reindeer owned by the herders (Table 3; also see Habeck 2005: 104). This recent trend is partly in response to the fall in state subsidies, and the resultant decline in both herders' salaries and the general availability of goods and services that are important to them, for example, helicopters bringing in a regular food supply and the materials

Table 3 Changes in reindeer ownership in the Komi Republic.

	1990	1998	1999	2000	2001	2002
Number of reindeer owned by enterprises and former <i>sovhozy</i> ^a	102.3	83.9	76.5	76.0	76.1	75.0
Number of reindeer owned by herders in thousands	21.3	26.8	23.8	29.0	24.7	25.8
Number of reindeer owned by herders unmanaged by the state ^b	N/A	2.2	2.0	5.1	5.1	5.1
Total in thousands	123.3	112.9	102.3	110.1	105.9	105.9

^a*Sovhozy*, new state farms.

^bThis category consists mainly of reindeer owned by households of free Nenets reindeer herders (*jamb-to*), who operate in the Komi Republic. Source of data: KSSC (2005).

necessary for herding practices. Consequently, the ownership of private reindeer is of paramount importance to herders, given that the sale of reindeer products derived from their private herds generally account for over half of their annual income. Access to the village or town (especially Inta) in winter has also become increasingly important, as the reindeer herders spend more of their time trading to generate sufficient income to purchase food and materials for the following year in the tundra, as well as to supply their family with meat and furs. They also take the opportunity when in a village or town to try to find wives, or to spend time with their partners who either do not work in the tundra or have taken time out, for example, for child-bearing or health reasons.

Discussion

Although some of the changes detected in the pattern of Bol'shaja Inta's land use—namely, the abandonment of winter pastures near Usinsk and Pechora in the middle of the 1960s—can be attributed purely and simply to industrial development, this explanation does not apply to the abandonment of pastures near the Ural Mountains. We argue that it was predominantly the closure of small villages, and the resettlement of their inhabitants to larger villages and towns, as well as the gender drift and recent redistribution of reindeer from state to private property, that spurred the reindeer herders to abandon these pastures. Indeed, the beginning of this abandonment corresponds quite remarkably with the period during which most reindeer herders received their state flats. It appears to us that the resettlement campaign and the issuing of flats triggered the break-up of the typical Komi undivided family structure into European nuclear families, with the result that the ties, which included common ownership of property, that linked nuclear families into the larger grouping were no longer as strong as they had once been. This resulted in nomadic families desiring or needing to visit the village or town (where their flats were located) more regularly, and for longer periods of time. These visits could only be made during the winter months, when the herders reached the southern range of their pastures. This meant that if they wanted to stay in their flats, they were no longer able to travel hundreds of kilometres further south (beyond the village or town) to their distant winter pastures. As a result, the herders' migration routes receded, and the pastures they began to use during the winter months were those previously regarded as either spring/autumn pastures, or "reindeer passages" (IGE 1964: 98). It is probably for this reason that when the new *sovhoz* maps were produced in 1982 (MA 1982), following the Murmansk prospecting expedition, the winter pastures were drawn up, to some

extent, on the basis of where the brigades were actually pasturing their herds, rather than where they were meant to have been pasturing them.

There is, of course, a whole host of other reasons why reindeer herders spent increasing periods of time in the village or town. Firstly, the difficulty the herders experienced in finding partners (caused by the gender drift) was a major concern, and more frequent visits to town increased their chances of meeting a potential partner. Secondly, as the town and villages developed, so did living standards, and there is no doubt that these became increasingly attractive to the herders who spent most of their time travelling in the tundra under quite difficult conditions, and with only the bare essentials for living. Thirdly, during the *sovhoz* period, a reindeer herding family was permitted 30 private reindeer (Smetanin & Savel'eva 2004: 504); however, since the lifting of ownership quotas (following the end of socialism), there has been a steady trend towards the increase of private ownership, and the decrease of state/enterprise ownership (i.e., the modern post-socialist *sovhoz*). This trend is predominantly the herders' response to the low wages and decreasing supplies they receive from the modern *sovhoz*, and there is every indication that this situation is likely to continue. In fact, reindeer herders have already become more reliant upon private income that is derived from their private herds than on the payments made by the modern *sovhoz*. This means that during the winter months much time and effort has to be spent in the town preparing and selling reindeer products.

To broaden this discussion, it is interesting to note that Habeck, who studied reindeer herding in the Komi Republic, is also of the opinion that the reasons for the abandonment of winter pastures are mostly of a social and economic nature, notably the herders' preference for pasturing their animals close to villages (Habeck 2003: 83–84). Nevertheless, although the abandonment of winter pastures has taken place throughout the Komi Republic, there is one exception to this generalization. Of the four eastern Komi enterprises (Bol'shaja Inta, Petrun', Abez' and Vorkuta) that officially have winter pastures in western Siberia, only the herders from Vorkuta still use them. Vorkuta is situated more than two and a half times closer to the Kara Sea compared with Inta (Fig. 2), and has fewer pastures between the town and the coast, and hence the herders probably have little choice other than to continue using their trans-Ural pastures. This is supported by the director of the Vorkuta "Olenevod" *sovhoz*, who stated that "his brigades must continue (or resume) their migrations to the remote winter pastures [otherwise] he anticipates large-scale pasture degradation in the whole region around Vorkuta" (Habeck 2003: 84).

Another reason for the Vorkuta herders not abandoning their trans-Ural pastures could be that the town of Salehard (Salekhard), situated along this route, has an important marketplace, where they can trade the products of their private reindeer. It should be noted, however, that this is hardly the main reason, as the demand for reindeer products is significantly higher in Vorkuta compared with Salehard (Salekhard). Hence, purely from an economic point of view, trading in Vorkuta would be more profitable for the herders.

Consequently, the abandonment of winter pastures, despite being linked to the herders' need/desire to visit the village or town, is seemingly also dependent upon their location. For example, if Inta were to have been built 100 km further south, then perhaps the Bol'shaja Inta's trans-Ural winter pastures would not have been abandoned, as their location would have been much closer to the town.

Conclusion

The evidence presented in this paper shows that in the Bol'shaja Inta region the reindeer herders' migration routes became shortened by an average of 34% from the early 1960s to the present day. This was a consequence of the gradual abandonment of winter pastures, notably those situated near Pechora and the Ural Mountains, as well as those located behind the Ural Mountains in western Siberia.

The decrease in nomadic mobility during the socialist period was described in a number of regions of the Russian North (e.g., Anderson [2000] for Taimyr, Stammer & Ventsel [2003] and Ventsel [2005] for Yakutia, Gray [2005] and Nuvano [2006] for Chukotka). However, this decrease usually resulted from the direct influence of the state, which allocated specific pastures and migration routes for collectivized reindeer herders, and considered the long migrations, in which these people were traditionally engaged, economically unviable. What makes the case of Komi reindeer herding interesting, however, is that quite a significant part of the grazing territory has been abandoned by the herders, against (rather than following) the will of the state. On the other hand, as clearly indicated in this paper, this abandonment was still a result, albeit a rather unexpected one, of state policy.

It was found that changes to the herders' movements and of land use, which occurred over a period of several decades, probably arose as a result of the closure of small "unviable" villages, and the subsequent relocation and centralization of the local population and administration to larger villages and towns. During this process, most families received new state-financed flats, and the

numerous individual village *kolhozy* were amalgamated to form a single state enterprise (*sovhoz*), located in the town of Inta. These events led to a myriad of social, economic and political changes that, as time progressed, increased the herders' need and desire to visit the town during the winter months, which was achieved by gradually reducing the length of their migration route, and hence the range of their winter pastures. It would appear that the location of the town or village is an important factor determining whether or not reindeer herders abandon trans-Ural winter pastures. In the case of Vorkuta, the fact that the town is located so far north, and that there are few pastures located between the town and the coast, means that the herders have little choice other than to travel further south, beyond the town, to their more distant winter pastures.

Finally, the other major reason for the abandonment of pastures was plainly and simply a result of land encroachment by the oil and gas industry. Winter pastures situated near Pechora (formerly used by Ust'-Usinskiy and Kirova) are now home to the oil town of Usinsk.

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References

- Anderson D. 2000. *Identity and ecology in Arctic Siberia: the Number One Reindeer Brigade*. Oxford: Oxford University Press.
- APSH 1980. *Aktual'nye problemy sel'skogo hozjajstva*. (Current agricultural problems.) Moscow: Selskoye Khozajstvo.
- Babuškin [Babushkin] A.I. 1930. *Bol'shezemel'skaja tundra*. (Bol'shezemel'skaja tundra.) Syktyvkar: Izdatelstvo Komi Obstatotdela.
- Dwyer M.J. 2006. *Komi reindeer herding: mobility and land use in a changing natural and social environment*. PhD thesis, University of Cambridge.
- Fondahl G.A. 1989. *Native economy and Northern development: reindeer husbandry in Transbaikalia*. PhD thesis, University of California, Berkeley.
- Golovnev A.V. & Oshirenko G. 1999. *Siberian survival: the Nenets and their story*. London: Cornell University Press.
- Gray P.A. 2005. *The predicament of Chukotka's indigenous movement. Post-Soviet activism in the Russian Far North*. Cambridge: Cambridge University Press.
- Gray P. & Stammler F. 2002. *Sibirien zwischen Kollaps und Kontinuität*. (Siberia between collapse and continuity.) *Max Planck Forschung 2*, 54–61.
- Habeck J.O. 2003. *What it means to be a herdsman: the practice and image of reindeer husbandry among the Komi of northern Russia*. PhD thesis, University of Cambridge.
- Habeck J.O. 2005. *What it means to be a herdsman: the practice and image of reindeer husbandry among the Komi of northern Russia*. Münster: LIT Verlag.
- IGE (Institute of Geography and Economy [Ždanov Leningrad State University] & Soviet Union Academy of Sciences) 1964. *Atlas Komi ASSR*. (Atlas of the Komi Autonomous Soviet Socialist Republic.) Moscow: Glavnoje Upravlenije Geodezii i Kartografii.
- Islavin V. 1847. *Samoedy v domašnem i obščestvennom bytu*. (Samoyeds in their private and public life.) St. Petersburg: Izdatelstvo Ministerstva Gosudarstvennykh Imuŝestv.
- Istomin K.V. 2000. Living in chum. Social relations and personal behavioural strategies among Komi reindeer herders. *Pro Ethnologia 10*, 50–76.
- Istomin K. 2004. *Ėtnoekologičeskije aspekty komi-ižemskogo olenevodstva*. (Ethno-ecological aspects of Izhma-Komi reindeer herding.) PhD thesis, Komi Science Centre, Syktyvkar.
- Jernsletten J.-L. & Klovov K. 2002. *Sustainable reindeer husbandry*. Tromsø, Norway: Centre for Saami Studies, University of Tromsø.
- Kercelli [Kertselli] S.V. 1911. *Po Bol'shezemel'skoj Tundre s kočevnikami*. (A trip with nomads across the Bol'shezemel'skaja tundra.) Archangelsk: Gubernskaya Tipografiya.
- King A. 2003. Social security in Kamchatka: rural and urban comparisons. In C. Hann (ed.): *The postsocialist agrarian question*. Pp. 391–418. Münster: LIT Verlag.
- Klovov K. (ed.) 2004. *Semejnyye osnovy olenevodčesko-promyslovoĝo hozajstva*. (The family foundations of the reindeer herding and hunting economies.) Tromsø, Norway: Saami Research Centre, University of Tromsø.
- Klovov K.B. & Šustrov D.N. 1999. *Tradicionnoje olenevodčesko-promyslovoje hozajstvo Taimyra*. (Traditional reindeer herding and hunting economy of Taimyr.) Moscow: Izdatel'stvo SpbU.
- KNA (Komi National Archive). *Various years*. Folder 4: files 2576, 3794, 4859 and 4895. Sovetskaya Ulitsa 26, Syktyvkar, Komi Republic, Russia.
- Kolegov M.A. 2004. *Resource and production opportunities of reindeer husbandry in the Komi Republic*. Syktyvkar: Information Centre for Nature Resources and Environment Protection of the Komi Republic.
- Konakov N.D. & Kotov O.V. 1991. *Ėtnoareal'nye gruppy komi. Formirovanie i sovremennoe sostojanie*. (Komi dispersion. Their origin and current state.) Moscow: Nauka.
- Konakov N.D. & Žerebcov I.L. 1994. *Tradicionnaja kul'tura Komi*. (The traditional culture of the Komi.) Syktyvkar: Komi Knizhnoje Izdatelstvo.
- Konstantinov Y. 2002. Soviet and post-Soviet reindeer-herding collectives: transitional Slogans in Murmansk region. In E. Kasten (ed.): *People and the land. Pathways to reform in post-Soviet Siberia*. Pp. 171–188. Berlin: Dietrich Reimer Verlag.
- Konstantinov Y. & Vladimirova V. 2006. The performative machine: transfer of ownership in a northwest Russian reindeer herding community (Kola Peninsula). *Nomadic Peoples 10*, 166–186.
- Kovalev S.A. & Šapošnikov S.V. (eds.) 1977. *Dinamika sistem rasselenija: sbornik statei*. (Dynamics of the settlement system: a collection of articles.) Moscow: Economica.
- Krupnik I.I. 1976. Stanovlenie krupnotabunnogo olenevodstva u tundrovykh nencev. (The rise of large-herd reindeer herding among the tundra Nenets.) *Sovetskaja Ėtnografija 2*, 57–69.
- Krupnik I.I. 1989. *Arktičeskaja ėtnoekologija*. (Arctic ethno-ecology.) Moscow: Nauka.
- Krupnik I. 2000. Reindeer pastoralism in modern Siberia: research and survival in the time of crash. *Polar Research 19*, 49–56.
- KSSC (Komi State Statistical Committee) 2005. *Sostojanie životnovodčeskoj otrasli sel'skogo hozajstva v Respublike Komi v 1990–2003 godah*. *Analitičeskaja zapiska KGSK*. (The situation in the animal breeding sector of agriculture in the Komi Republic 1990–2003. Analytical note of the Komi State Statistical Committee.) Syktyvkar: Komi State Statistical Committee.
- MA (Ministry of Agriculture) 1982. *Komi ASSR reindeer herding map of Bol'shaja Inta*. Document no. 7178. Syktyvkar: Ministry of Agriculture.
- Muhačev [Muhachev] A.D. 1990. *Olenevodstvo*. (Reindeer herding.) Moscow: Agropromizdat.
- Nuvano V.N. 2006. Traditional routes of herd's movements in east and central Chukotka. In K. Ikeya (ed.): *Chukotka*

- studies 4. The Chukchi culture*. Pp. 109–122. Osaka: Chukotka Studies Committee.
- Pavlov P.N. 2003. Kommentarij k federal'nomu zakonu "O territorijah tradicionnogo prirodopol'zovanija korenyh maločislennyh narodov Severa, Sibiri i Dal'nego Vostoka Rossijskoj Federacii". (Comments on the federal law "On the territories of traditional land-use by the aboriginal small peoples of the North, Siberia and Far East of the Russian Federation"). In G.V. Gruza & V. M. Makeev (ed.) *Vse o Severe. (Everything about the North.) Vol. 2*. Pp. 199–217. St. Petersburg: Nord-Ost-Norma.
- Roščevskij [Roshchevsky] M.P., Vaneev A.E. & Timonin N.I. (eds.) 1999. *Respublika Komi: ènciklopedija. (Encyclopaedia of the Komi Republic.) Vol. 1*. Syktyvkar: Komi Nauchnyy Tsent, Uralskoje otdelenije Rossijskoj Akademii Nauk.
- Sergeev M.A. 1955. *Nekapitalističeskij put' razvitija malyh narodov severa. (The non-capitalist way of development for the small peoples of the North.)* Moscow: Nauka.
- Shindler D.L. 1991. Theory, policy and the "Narody Severa" (Northern People). *Anthropological Quarterly* 64(2), 68–79.
- Slezkine Y. 1994. *Arctic mirrors: Russia and the small people of the North*. New York: Cornell University Press.
- Smetanin A.F. & Saveleva E.A. (eds.) 2004. *Istorija Komi. (The history of Komi.) Vol. 2*. Syktyvkar: Komi Knizhnoye Izdatelstvo.
- Stammler F. 2005. *Reindeer nomads meet the market: culture, property and globalisation at the "end of the land"*. Münster: LIT Verlag.
- Stammler F. & Ventsel A. 2003. Between neo-liberalism and dirigisme: approaches to reindeer herding in Yamal and Sakha. In C. Hann and the Property Relations Group (eds.): *The postsocialist agrarian question. Property relations and the rural condition*. Pp. 321–362. Münster: LIT Verlag.
- Syrovatskij [Syrovatsky] D.I. 1975. Sostavlenie maršrutov—osnova organizacii olen'ih pastbišč. (Route drawing is the foundation for reindeer pastures' use.) *Bjulljuten' naučno-tehničeskoi informacii NII sel'skogo hozajstva krajnego severa* 9, 16–17.
- Took R. 2003. *Running with reindeer: encounters in Russian Lapland*. Boulder, CO: Westview Press.
- Tuisku T. 2002. Transition period in the Nenets Autonomous Okrug: changing and unchanging life of Nenets people. In E. Kasten (ed.): *People and the land. Pathways to reform in post-Soviet Siberia*. Pp. 189–206. Berlin: Dietrich Reimer Verlag.
- Vakhtin N. 1994. Native peoples of the Russian North. In Minority Rights Group (ed.): *Polar peoples: self-determination and development*. Pp. 29–80. London: Minority Rights Publications.
- Ventsel A. 2005. *Reindeer, rodina and reciprocity. Kinship and property relations in a Siberian village*. Berlin: LIT Verlag.
- Vitebsky P. & Wolfe S. 2001. The separation of the sexes among Siberian reindeer herders. In S. Tremayne & A. Low (eds.): *Women as "sacred custodians" of the Earth*. Pp. 81–94. Oxford: Berg.
- Zabrodin V.A. 1980. Soveršenstvovanie tehnologii vedenija olenevodstva. (Improvement of the reindeer herding technology.) In A.D. Muhačev [Mukhachev] (ed.): *Puti intensivnogo razvitija olenevodstva na krajnem severe. (The ways of intensive development of reindeer herding in the Far North.)* Pp. 3–9. Novosibirsk: Sibirskoye knizhnoye izdatelstvo.
- Žerebcov [Zherebcov] L.N. 1982. *Istoriko-kul'turnye vzajmootnošenija komi s sosednimi narodami. (Historical and cultural inter-relations between Komi and neighbouring peoples.)* Moscow: Nauka.