The Annual Cycle of the Settlements of the Circumpolar Peoples

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The purpose of the article is to describe the seasonality and means of livelihood of the native peoples of the circumpolar area in historic times. The research material consists of historical sources, and the study covers the period from the 16th century to the beginning of the 20th century.

The seasonal variations of climate, and flora and the fauna, were reflected in the living conditions and the choices of dwelling places of northern communities engaged in the hunting and reindeer husbandry. Societies living by hunting, fishing and gathering, or by herding reindeer, changed their dwelling places after the seasonal cycles of natural resources.

The author has divided the circumpolar area into four main zones: 1. The Interior Boreal Forest, 2. The Interior Boreal Forest - Tundra, 3. The Sea Coast, 4. The Sea Coast - Interior. The basis of the classification are the natural conditions and the natural resources which guide the annual cycles of the groups of people. The classification works as a basis for studying the annual cycle of the peoples of the circumpolar area.

Key words: circumpolar peoples, seasonality, settlement, subsistence economy, cultural ecology

1. Introduction

The purpose of this article is to describe the seasonality and means of livelihood of the native peoples of the circumpolar area in historic times. The research material based on published sources consists of travel accounts, reports of government officers and explorers sent by fur companies and ethnographic literature of the circumpolar area. The material goes back to the 16th century and the latest documents are from the beginning of the 20th century when some of the circumpolar peoples still existed on a subsistence economy. People in a subsistence economy utilise recurrent natural resources and produce goods mostly for their own needs. (Pennanen 1979, 5, 66).

The Circumpolar Area and the Circumpolar Peoples

The circumpolar area consists of the land and the sea surrounding the North Pole. The boundaries of the circumpolar north can be defined by climate, vegetation, fauna, permafrost, sparseness of human habitation and many other factors and therefore it is difficult to define precise boundaries for this vast area. For the purposes of this article the circumpolar area is defined as including in North America, Alaska, the northern parts of the Canadian provinces including all of the Labrador Peninsula and Newfoundland, the whole of Nunavut, Yukon Territory and Northwest Territories in Canada and Greenland. The Eurasian side of the

circumpolar area consists of Northern Fennoscandia, Northern Russia and the northern parts of Siberia including the Kamchatka Peninsula. (Armstrong - Rogers -Rowley 1978, 1-3)

The circumpolar area is divided into the Arctic and Subarctic. Arctic vegetation is scanty tundra while the Subarctic area consists of the boreal forest belt. The tree line, north of which grows no trees, is both an ecological and a cultural borderline dividing the Arctic and the Subarctic. (Graburn and Strong 1973, 1–2)

The circumpolar region is about 41 million square kilometres in area, which is about 8 percent of the global area (of land 15 % and of sea 5 %). Roughly 600 000-800 000 inhabitants of the aboriginal population and 70-80 ethnic nationalities live in this vast area. (Armstrong, Rogers and Rowley 1978, 2; Graburn and Strong 1973, 3-4)

The circumpolar peoples represent seven linguistic families. (Graburn and Strong 1973, 7-8; Krauss 1988, 145-150):

Eurasia:

1. Uralic

Finno-Ugric: Sámi; Zyrian; Khanti, Mansi Samoyedic: Nentsy, Nganasans,

Entsy, Sel'kups

2. Paleoasiatic

Chukchi, Koryaks, Itel'mens, Nivkhi,

3. Tungusic

Northern Tungusic: Evenks, Evens, Negidals

Southern Tungusic: Nanays, Ul'chi, Oroks, Orochi, Udegeys

4. Kets

Northern parts of North America and Greenland:

5. Eskimo-Aleut Aleut

Eskimo:

Inuit: Bering Strait, Kotzebue Sound, North Alaska Coast, Interior North Alaska, Mackenzie Delta, Copper, Netsilik, Iglulik, Caribou, Sallirmiut, Baffinland, Quebec,

Labrador Coast, Polar, West Greenland, East Greenland Yupik: Alutiiq, Central Alaskan Yupik, Siberian Yupik

6. Algonquian

Western Woods Cree, West Main Cree, East Cree, Montagnais, Naskapi, Attikamek, Northern Ojibwa, Lake Winnipeg Saulteaux

7. Athapaskan (Northern)

Holikachuk, Ingalik, Kolchan, Kovukon, Tanaina, Tanana, Ahtna, Kutchin, Han, Tutchone, Hare, Mountain Indians, Tagish, Inland Tlingit, Kaska, Tahltan, Tsetsaut, Sekani, Carrier, Chilcotin, Beaver, Slavey, Dogrib, Yellowknife, Chipewyan

The table above is a collection of the language groups, which exist in the circumpolar area. For example some of the Finno-Ugric languages or the Athapaskan languages exist also outside the circumpolar area. The table represents views of several philologists. (see Graburn and Strong 1973, 7–8 and Krauss 1988, 145-150)

The names of the seven main stocks are given by philologists to classify language families. Names under the main stocks are also used as the names of the ethnic groups. Some of the names are given by European scholars, some are used by the ethnic groups themselves and some are given by neighbouring ethnic groups.

People belonging to the same linguistic stock did not form a political or national entity but identified themselves with their local community. Neither are linguistic identity and cultural resemblance comparable to each other. People speaking the same language do not always form a culturally uniform group or culturally alike groups do not necessarily speak the same language. (Graburn and Strong 1973, 8).

The circumpolar peoples' first contacts with Europeans varied from region to region. Russian settlement began to spread to Siberia in the 17th century but Russians and Siberian peoples had had contacts long before that. The Indians of Northwest Canada had had dealings with European traders and fur hunters since the turn of the 18th century. The Inuit had their first continuous contacts with Europeans in the 18th century but in some Inuit territories they did not have dealings with Europeans until the 19th century. (Pääkkönen 1995, 60)

Northern peoples interacted with surrounding societies long before European contacts. For example the Siberian people had connections with Chinese and Middle Asian cultures long before the Russian Cossacks came to Siberia in the 17th century. (Dolgikh and Levin 1996, 302).

The Sámi history of contacts with Europeans differs from other indigenous peoples of the circumpolar area. The linguistic relationship and the ancient common cultural background with the Finnish people are characteristic to the history of the Sámi people. (Pääkkönen 1995, 58–59) Government interest towards the Sámi region in the Nordic countries started to grow in the 16th century and, for example, the aim of the 17th century Swedish government was to settle the Sámi region with a Swedish and Finnish population. (Virrankoski 1973, 78–79, 82–83).

2. The Annual Cycle in the Circumpolar Area According to Earlier Research

The seasonal variations of climate and flora and fauna were reflected in the living conditions and the choices of dwelling places of northern communities engaged in hunting and reindeer husbandry. One dwelling place was not sufficient to provide for the communities living a subsistence economy. Societies living by hunting, fishing and gathering or by herding reindeer changed their dwelling places according the seasonal cycles of natural resources.

According to J.H. Steward's cultural ecology, the relationship between culture and its environment is best recognised by investigating the technological and economic adaptations of the culture, and those cultural

forms most closely related with these pursuits. These economic features and the cultural patterns related with them form the Stewardian concept of cultural core. (Steward 1972, 37)

According to William Fitzhugh this primary level of culture is clearly portrayed in a culture's subsistence-settlement system. The core of this system consists of a set of techniques used to extract biological energy from the environment, combined with a settlement system adapted to maximize the harvest of this energy as it shifts seasonally or geographically within the environment. The primary factors in the formation of a distinctive seasonal pattern in an annual cycle of a community are technology, economy and resource potential. Other important determinants of settlement locations are weather, geography and the need for social interaction with a larger group. (Fitzhugh 1972, 7)

Settlement is defined as a form of human occupation of a particular geographical locale by one or more individuals for any length of time with the purpose of dwelling or ecological exploitation. The size of the population living in a settlement and the amount of time they use it depends on the various purposes of different settlements. These various settlements with different functional potentials form a network utilised by hunting and reindeer-herding groups during the course of the year. The network of different types of settlement forms a region, which a certain size of a local community needs to provide for its annual subsistence. This region contains the means of subsistence i.e. natural resources that the community utilises within the annual cycle. (Chang 1962, 29–30; Fitzhugh 1972, 7)

2.1. The Typology of Settlement and Community Patterns by Chang

Ethnoarchaeologist Kwang-Chih Chang created a typology of settlement and community patterns for circumpolar societies. The basis of Chang's typology is the permanence of settlements and dwelling places. The annual settlement patterns of the

circumpolar peoples can be categorized by how permanent or temporary the annual subsistence region and the settlements within this region are. The settlement pattern is first divided into permanent and seasonal settlements (see Table 1). The permanent settlement pattern means that the community occupies one locale all the year round. The seasonal settlement pattern, on the other hand, means a network of settlements occupied by a group of people in different seasons of the year within the annual subsistence region. Chang classifies the settlement pattern of the circumpolar peoples into the seasonal settlement category. The seasonal settlement pattern can be classified into two categories: A. Sedentary seasonal settlements: the annual subsistence region of a group of occupants remains permanently unchanged, and B. Temporary seasonal settlements: a group of people has to change its habitation from one annual subsistence region to another after one or several years' occupancy, for example, because of the exhaustion of natural resources in the region. Within the sedentary seasonal settlement the locales of the main settlements can be either permanent, which means that the occupants use the same locales during their annual cycle year after year or transient, which means that the locales of the various seasonal settlements keep changing every year. (Chang 1962, 29-30)

Table 1. Categorization of Settlement Patterns (Chang 1962, 30)

I. Permanent settlement

II. Seasonal settlement

A. Sedentary seasonal settlements

- 1. Permanent bases
- 2. Transient bases
- B. Temporary seasonal settlements

To support his typology Chang describes some regional cases from different parts of the circumpolar zone. According to Chang the Siberian hunter-fishers occupied the same annual subsistence region year after year so they appear to have a sedentary seasonal settlement pattern. Siberians seems to fall into three major types according to their ecological adaptations: 1. The interior river and lake fisher-hunters, including the Khanti, the Mansi, the interior Samoyeds, the Ket and the Yukaghirs. Their annual cycle was characterized by a winter settlement where they gathered to spend the midwinter and one or several summer settlements along the rivers or lakeshores where they scattered to fish. 2. The Arctic Samoyeds, who settled in for the winter in the forest zone and moved to the tundra in the summer. 3. The eastern coastal hunter-fishers, including the Nanay, the Nivkhi and the Itel'men, who lived in the Isle of Sahalin and in the delta of the River Amur, and the Maritime Koryak and the Maritime Chukchi from the northern east coast of Siberia. The annual range of the coastal people was smaller and their annual cycle of movements did not follow the same kind of winter gathering and summer scattering pattern as with the interior people. Their winter site was located on a riverbank and the summer site by the seashore or they merely had different dwelling houses for the summer and for the winter near each other by the seashore. (Chang 1962, 30–31)

The annual subsistence region of the Northern Athapaskans remained the same year after year but their seasonal settlements within it seemed to be temporary. The Athapaskan communities had one or two larger gathering settlements and a number of smaller scattered camps. Chang subdivides the Northern Athapaskan area into a Western and an Eastern Zone. In the Western Zone fishing was the main subsistence and people gathered on the seashores or by the riverbanks or lakeshores in concentrated settlements during the fishing seasons. During the intermittent seasons, small groups moved into the mountains to hunt wild game. People in the Eastern Zone followed the migratory routes of their game herds, caribou, so they lived in the forest borders during the winter and moved out onto the barren grounds for the summer. Their annual cycle resembled the annual cycle of the Arctic Samoyeds of Siberia. (Chang 1962, 31–32)

How sedentary or temporary the settlement patterns in circumpolar societies were was apparently related to the nature of food resources. A predominantly fishing subsistence enables generally more intensive sedentary settlements. On the other hand a predominantly hunting subsistence tends to coincide with a settlement pattern of a more temporary and transient type. (Chang 1962, 37)

2.2. The Subsistence-Settlement System by Fitzhugh

W. Fitzhugh used both archaeological and ethnographical data to survey the subsistence and settlement patterns of the Hamilton Inlet area in Labrador, Canada. He divided the subsistence-settlement system of the Hamilton Inlet into four basic types: Interior, Modified-Interior, Interior-Maritime and Modified-Maritime. (Fitzhugh 1972, 5, 158)

1. Interior System

Settlements were situated in the boreal forest. The mainstay of the winter economy was caribou and in the summer lake and river fishing. (Fitzhugh 1972, 158)

2. Modified-Interior System

The winter settlements were situated in the boreal forest and the spring and summer settlements by the seashore. The main subsistence was caribou hunting in the interior. Coastal fishing and sea mammal hunting were practiced in the summer. Hunting technology was more specialized in utilising the interior than the coastal resources. (Fitzhugh 1972, 159)

3. Interior-Maritime

Communities that mainly specialized in sea mammal hunting and fishing but hunted also caribou in the interior. The communities lived most of the year in large seashore villages. The winter hunting trips to the interior were made in small groups. (Fitzhugh 1972, 159–161.)

4. Modified-Maritime

Communities lived year-round by the sea and specialized in hunting sea mammals. They used winter ice-hunting techniques as well as openwater sealing. Caribou hunting was done only in the coastal environment. Fish, migratory birds, berries and small game were also important seasonally. Communities lived winters in large, relatively permanent villages and spent the summertime in smaller settlements by the nearby seashore. (Fitzhugh 1972, 158, 161)

2.3. The Economic-cultural Types by M. G. Levin and N. N. Cheboksarov

The concept of the economic-cultural type was created by Levin and Cheboksarov to classify northern economies that basically combined hunting, fishing and reindeer breeding. The features of the types are characteristic to the peoples living in the same kind of natural environments and on the same kind of socio-economic level. (Levin and Cheboksarov 1955, 4)

The core of the concept is the economy and the cultural elements related to it. The economy consists of settlement patterns, dwelling types, tools etc. and it is dependent on both the natural environment and historical development. (Eidlitz Kuoljok 1991, 14; Levin and Cheboksarov 1955, 4)

Groups belonging to the same economic-cultural type share the same kinds of cultural and social features but the concept is not bound by ethnicity. Communities belonging to the same ethnic groups can belong to different kinds of economic-cultural types. Likewise, ethnically divergent groups can belong to the same economic-cultural type. (Eidlitz Kuoljok 1991, 14–15; Levin and Cheboksarov 1955, 4)

The Economic-cultural Types in Siberia

- 1. Hunter-fishers of the taiga,
- 2. sea-mammal hunters on the Arctic coast,
- 3. fishermen in the basins of large rivers and lakes.
- 4. reindeer-breeding hunters and fishermen of the taiga,
- 5. nomadic reindeer-herders of the tundra.
- 1. The economy of taiga hunter-fishers was based on the hunting of reindeer and elk coupled with fishing in the forest rivers and lakes. For transportation these reindeerless hunters and fishermen used skis, hand sleds and boats. This type of economy was represented by the Evenks, the Orochi, the Yukaghirs, the Kets, the Sel´kups, the Khanti and the Mansi. (Levin and Cheboksarov 1955, 4–5; Levin 1964, 6–7)
- 2. The Arctic sea mammal hunters lived in turf huts by the Arctic seashore of Siberia. Their economy was based on hunting seals, walruses and other sea mammals and fishing. They used dog sleds, kayaks and boats for transportation. Kayaks and boats were made of sea mammal skin. Of the ethnic groups of Siberia the Yupik and some of the Chukchi and the Koryaks were settled on the Arctic coast of Siberia. (Levin & Cheboksarov 1955, 5; Levin 1964, 7)
- 3. The fishermen of the large rivers lived in the Amur and Ob basins. Fishing was their main means of subsistence. They lived in semidug turf huts and mostly lived a sedentary way of life. They used dogs for transportation. This type of economy was common among the Nivkhi, the Nanays, the Ul'chi, and the Itel'mens and also among some of the Khanti, Mansi and Sel'kups. (Levin & Cheboksarov 1955, 6; Levin 1964, 7)
- 4. The reindeer-breeding hunters and fishermen of the taiga represented the most widely distributed economic-cultural type. Reindeer were chiefly used saddled or packed for transportation. The herds of reindeer were small and they were not kept as a source of food. Their way of life was more nomadic compared to the sedentary fishermen or Arctic hunters and their hunting area was wider than that of the reindeerless hunters and fishermen

of the taiga. The reindeer-breeding hunters and fishermen lived mostly in Eastern Siberia from the River Yenisey to the Sea of Okhotsk. The ethnic groups living in those areas were the Evenks, the Evens and the Dolgans. This type of economy was also common among some of the Nentsy, the Sel'kups and the Kets living in the forests west of Yenisey. (Levin & Cheboksarov 1955, 6; Levin 1964, 7)

5. Reindeer breeding was the principal means of subsistence for the nomadic reindeer herders in the tundra and forest-tundra zone. Hunting, fishing or the pursuit of sea mammals were of subsidiary importance or were absent altogether. Reindeer were used as a draught animal for example on the annual migration between the tundra and the forest zone settlements. Except that reindeer meat was the staple diet, reindeer was also the source of material for clothing and dwellings. Reindeer herders were among the Nentsy, the Chukchi and the Koryaks. (Levin & Cheboksarov 1955, 6; Levin 1964, 7)

In addition to these economic-cultural types there are also tundra and forest-tundra reindeer-breeding hunters and tundra and forest-tundra hunters in Northern Siberia. These types are the predecessors of the tundra reindeer herders before the development of nomadic reindeer herding. The means of subsistence of the hunters of the tundra and forest-tundra was hunting of reindeer and fishing. They lived the summers in the tundra and wintered in the forest-tundra. They used reindeer hide as a material for clothing, dwellings, boats and sledges. (Eidlitz Kuoljok 1991, 17) The reindeer-breeding hunters of the tundra and forest-tundra used reindeer chiefly for transportation; reindeer meat was used as a source of food only exceptionally. (Eidlitz Kuoljok 1991, 16).

2.4. Types of Settlements

The network of functionally complementary settlements formed an annual subsistence region of the hunter-gatherers. The settlements can be classified by size and function into different types: gathering site,

base camp, hunting or fishing site, field camp, bivouac and cache.

The gathering site was a large settlement where a local or regional community gathered once or twice a year in a certain season. The duration of the gathering depended on the cause of the gathering and on the quantity and quality of the exploited resources on the site. (Fitzhugh 1972, 137)

A local community or several families lived for a longer period of the year in a base camp. The place was utilised as the central focus of activities in a resource area. From the base camp hunters or hunting groups made hunting trips to the neighbouring environment. Both social and topographical sizes of the base camp varied according to the seasons. (Binford 1983, 341–346; Fitzhugh 1972, 137)

Food and other raw materials were supplied and often processed on hunting and fishing sites. Joint hunting sites with hunting fences, which were built on the migration routes of reindeer in spring and autumn and major salmon weirs in springtime, are examples of large hunting and fishing sites. (Binford 1983, 346; Fitzhugh 1972, 137)

A field camp was a temporary settlement for a hunting or fishing group. It was a place where a hunting or fishing group slept, ate and otherwise maintained itself while away from the base camp. (Binford 1983, 346)

The products of hunting or fishing were stored in a cache to be consumed later. In winter the products were frozen and in summer they were dried. Later they were transported to the base camp to be consumed or alternatively the base camp was moved near a large cache. (Binford 1983, 345–347)

Bivouacs were transient camps occupied overnight or for few days around a hearth or in light dwellings (Fitzhugh 1972, 137).

There were also sites where communities provided firewood or raw materials for tools etc. and sacred sites to practice religion. (Fitzhugh 1972, 137).

Within each type of settlement there was variability according to seasonal and resource variations. The one and the same settlement could also have several different functions. (Binford 1983, 347)

3. Social Organization

The social organization of the circumpolar peoples reflected the variation of the seasons. The communities gathered and dispersed into different groups if necessary. One reason for the gathering and dispersion was the seasonal movements of game. For example reindeer hunters gathered in autumn and spring during the migration of reindeer to hunt the reindeer together. In springtime when salmon were running people gathered to build weirs in good fishing grounds. The annual gathering of the communities had a significant social meaning as it strengthened the group identity of the communities. During the gatherings the most important religious ceremonies of the year and also the marital ceremonies that ensured the continuity of the communities were performed (see for example Damas 1969, 122-123).

In their studies of the social organization of North American Arctic and Subarctic huntergatherers, American anthropologists have defined six different community levels according to their size and structure: household, household group, local band, regional band, area population and activity group. (Fitzhugh 1972, 138; Helm 1969, 214–217).

The basic social group of Arctic and Subarctic hunter-gatherers was household that stayed together throughout the year. Usually a household was composed of several generations. It was often a group of two nuclear families that was composed, for example, of a father and son with their families, brothers with their families or brothers-in-law with their families. The size of a household was approximately 15 persons. (Fitzhugh 1972, 138; Hosley 1981, 540)

A household group was composed of two or more households gathering together for hunting or fishing activities that could not be efficiently conducted by a single household. This group was usually composed of related families. (Fitzhugh 1972, 138)

A local band composed of several households gathered together at some point during the yearly round. It was a community that controlled a certain subsistence and settlement region. The population of the local bands varied depending on natural conditions, resources etc. but it was composed of approximately ten households to which belonged about one hundred people altogether. (Fitzhugh 1972, 138; Hosley 1981, 540; Smith 1981, 275–276)

A larger social unit than the local band was the regional band. Its population varied from 100 to 1000. It gathered once a year for a short time and consisted of two or more local bands. Reasons for gathering were social, economical or religious. All the members of the regional band did not necessarily gather at the same time of the year but the families of the community were connected by marital or kinship ties. Members of a local band usually chose their spouse from their regional band and so a regional band comprised the gene pool for a local band. (Fitzhugh 1972, 138; Helm 1969, 214; Hosley 1981, 540–541; Smith 1981b, 275–276)

Area population is the largest population unit consisting of societies or bands living in the same culturally defined area. In ethnological literature groups of this size are usually called a tribe or a people. (Fitzhugh 1972, 138; Helm 1969, 217)

An activity or task group gathered for specific functional activities, for example reindeer hunting, whale catching or fishing. A task group consisted of hunting-aged men of two or more households and its size depended on the work they were supposed to do. (Fitzhugh 1972, 138; Helm 1969, 214) For example the Siberian east coast Chukchi, Koryaks and Yupik had boat groups consisting of about nine men who practiced sea hunting using a boat owned by one of them. The boat group consisted of relatives of the boat owner who were usually his sons, brothers or nephews. (Bogoras, 1975, 122–123; Antropova and Kuznetsova 1964, 808)

Households, local bands and activity groups are also found in Eurasia. A household of close relatives consisting of one or two nuclear families comprised the basic socioeconomic unit of the Eurasian hunting communities.

Local bands seemed to be the largest community with which people identified themselves in Eurasia. A local band could have a leader or a strong man who did not necessarily have power but who was respected and whose advice was listened to by the other band members. Local bands were named after their leader, leading family or a geographical site.

There was also a regional level interaction between communities in Eurasia. Local bands were united by marriage, trade and common religious feasts but on the grounds of this research material it is difficult to say how organized the activities between local bands were.

Local communities of the circumpolar area were usually very flexible: people could join them or leave them quite easily. Even though the social structure of the local communities remained the same year after year, individual families or persons could change to another community for economical, social or other reasons. According to Helm the Northern Athapaskans moved to a new community either by marriage or they moved to a community in which a close relative already lived. (Helm 1969, 216).

Local communities can be considered as social networks in which families and individuals moved. If necessary they could move to a neighbouring community in which they already had relatives or friends but it is supposed that there was a nuclear group that remained in the same geographical area for generations. According to Bogoras in the villages of the Sea Chukchi there were families that stayed in the same place even though the other occupants moved away to seek better hunting grounds or waters (Bogoras 1975, 387, 628). There was usually one dominating family also in the village communities of the Alaskan Athapaskans. (Hosley 1981, 540).

Circumpolar communities usually consisted of relatives but they gave membership to non-relatives. Earlier the communities might have been more closed and it is possible that they became more open as a result of depopulation caused by epidemics brought by Europeans.

One reason for the need to have larger communities than households might have been the earlier mentioned hunting group. The methods of reindeer hunting demanded the co-operation of several hunters. For example in Kemi Lapland there were reindeer hunting groups consisting of 8–12 men who came from families living nearby .(Tegengren 1952, 33–34).

Co-operation in reindeer hunting increased the interaction between families and it furthered the development of village organization. The same kind of reindeer hunting groups can be found all over the circumpolar area (for example Smith 1981b, 276). Also sea hunting was practiced in groups consisting of a few men. In the villages of the Sea Chukchi the families of the hunters belonging to the same boat group lived near each other (Bogoras 1975, 628–631). Also the Inuit of Northern Alaska practiced whaling in boat groups whose leaders were the owners of the boats. (Spencer 1984, 320–321, 330) The hunting groups of the Inuit of the northern coast of Canada consisted usually of close relatives but occasionally there were also nonrelatives in the groups. (Damas 1969, 129)

Summer or winter gatherings were important for the continuity and the social identity of the communities. On the Eurasian side of the circumpolar area the winter settlements were more permanent and this might have been one reason for the creation of the village organization. For example the Khanti and the Mansi gathered in their winter villages during the coldest months of the year and in the summer they dispersed into smaller groups along the rivers.

Also the Chukchi lived more permanently and nearer to each other in winter than in summer when the communities dispersed to their seaside dwellings.

On the North American side of the circumpolar area at least some of the Athapaskan communities also gathered together in wintertime. For example the Ingalik had quite a permanent place for their winter village while their summer settlements were dispersed along the riverbanks. On the other hand, the Algonquian communities living in

the eastern parts of Canada used to gather in large communities in the summer and lived winters in smaller groups (for example Leacock 1981, 190; Smith 1981, 259).

The reconstruction of the social organization of the precolonial time circumpolar peoples is problematic because the historical sources describe the time when Europeans had already influenced the social life of the circumpolar societies.

For example the Scandinavian and the Russian governments influenced the social organization of the Sámi villages in Swedish Lapland and the Kola Peninsula. (Eidlitz Kuoljok 1987, 74–76; Lundmark 1982, 70–71) The Russians also influenced the village organization of the Siberian and the Alaskan natives by nominating village elders to collect taxes for the Russian government. (Bogoras 1975, 543; Jochelson 1908, 431–432)

4. Ecological Zones and the Annual Cycle in the Circumpolar Area

On the basis of the previously mentioned sources and the research material I have studied, I have divided the circumpolar area and its annual cycle into four main ecological zones: 1. The Interior Boreal Forest, 2. The Interior Boreal Forest - Tundra, 3. The Sea Coast, 4. The Sea Coast - Interior. The basis of the classification is the natural conditions and the natural resources that guide the annual cycles of the groups of people. The systems of annual cycles of the societies living in similar natural conditions were parallel to each other. Inside the ecological zones there was naturally plenty of local variation but the classification works as a good basis for studying the annual cycle of the peoples of the circumpolar area.

4.1. The Interior Boreal Forest Zone

The interior boreal forest zone covers most of the circumpolar area. The most important game animals in the area were elk, reindeer, fowl and

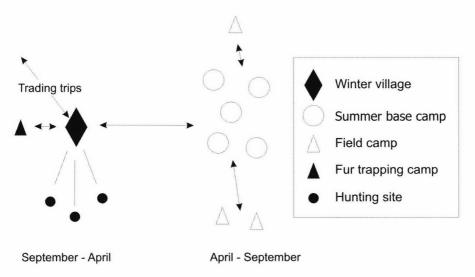


Fig. 1 The Annual Cycle of the Khants and Mansi of the River Ob

lake and river fish. In this vast area there lived economically different kinds of groups. The hunter-fishers of the interior rivers and lakes, the fishermen of the large rivers and the reindeer herder-hunter-fishers lived in Siberia. The hunter-fishers and the reindeer herder-hunters of the Sámi living in the forest belt of Northern Sweden, Northern Finland and the Kola Peninsula belonged to this group. The Athapaskans living in the Pacific drainage basin of North America lived in the same kind of natural conditions as the previous groups.

The economy of the hunting cultures of the interior boreal forest zone was based on reindeer (in North America caribou) and elk hunting and lake and river fishing. The difference in the natural conditions of the local environments was reflected in the annual cycle of the local communities.

There were local differences in the means of subsistence between the **Khanti and the Mansi** living on the River Ob and the lower reaches of its tributaries and the Khanti and the Mansi living in the upper reaches of the tributaries of the Ob. Hunting was the main means of subsistence in the upper reaches of the tributaries (Kazym, Sosva, Vakh, Yugan and Agan) of the Ob in the 19th century, while fishing was a subsidiary resource. In the Ob

and the lower reaches of its tributaries fishing was the main means of subsistence. (Prokofyeva, Chernetsov and Prytkova 1964, 517–518, 525) The next description depicts the annual cycle of the Khanti and the Mansi who mainly relied on fishing in their economy (see Fig. 1).

The winter villages of the Khanti and the Mansi were in forestry locations along the rivers but some distance from the riverside. The villages consisted of 1 to 10 houses and storehouses built on posts. The dwellings were half-dugouts built of turf and wood. (At the end of the 19th century there were also log houses.) One family or families of several brothers usually lived in one turf hut. At the end of the 19th century an average Khanti family consisted of seven persons, so the villages were inhabited by several tens of inhabitants. (Prokofyeva, Chernetsov and Prytkova 1964, 517–518, 525; Castrén 1967, 223, 225; Karjalainen 1983, 93, 98, 100, 103)

From the winter villages the Khanti and the Mansi made trade and tax paying trips to the market places, went on fur hunting trips and practiced ice fishing and reindeer and elk hunting near the village. (Prokofyeva, Chernetsov and Prytkova 1964, 517–520; Karjalainen 1983, 108) In the spring when the

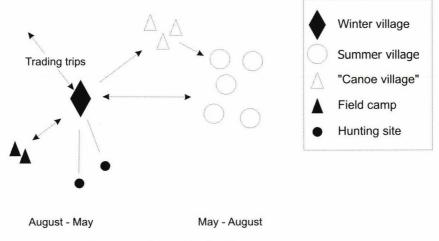


Fig. 2 The Annual Cycle of the Ingalik

rivers opened in middle and late April they moved to their summer settlements by rivers and lakes. In summer villagers lived dispersed as some of the village occupants had summer dwellings near the winter village at the riverside and some of them moved further along the river to the bank of a tributary or to a lake shore. From the tributaries of the Ob people often moved to the Ob to fish for the summer. (Karjalainen 1983, 93, 101; Prokofyeva, Chernetsov and Prytkova 1964, 517–518)

In summer fish was dried and fish oil was preserved for the winter. From time to time during the fishing season families made hunting and fishing trips from their summer settlements. During these trips families built camps of temporary tents covered with birch bark. Summer tents were alone or in groups of few tents along the riversides. (Castrén 1967, 225; Karjalainen 1983, 101–102; Prokofyeva, Chernetsov and Prytkova 1964, 526)

Besides fishing the Khanti and the Mansi gathered plants, berries and roots in the summer. They moved back to the winter village by the end of September just before the rivers froze over. (Karjalainen 1983, 63; Müller 1726, 30: Prokofyeva, Chernetsov and Prytkova 1964, 517–518, 523)

The **Ingalik** who belong to the Athapaskans had the same kind of annual cycle as the Khanti and the Mansi in Siberia (see Fig. 2). The Ingalik lived along the Rivers Kuskokwim and Yukon and their tributaries in Western Alaska. On the basis of the statistics made by Russian authorities Osgood estimated that the Ingalik population in the 1830's was about 1500. After the smallpox epidemic during the years 1838–39 the population diminished to 900. (Osgood 1940, 478–481)

The winter villages of the Ingalik were situated in the middle course of the River Yukon, in the upper courses of the tributaries of the Yukon and in the upper course of the River Kuskokwim and its tributaries. Villages were not built near the water but a little way up from the riverbanks (cf. the Khanti and the Mansi). At the beginning of the 19th century the winter village usually consisted of a kashim and a row of 10 to 12 winter dwellings in which lived 1 to 3 families, usually two families. A dwelling of two families consisted of approximately 12 people. In the villages lived usually 100 to 200 individuals. The winter dwelling was a semisubterranean hut built of wood and covered with sod and earth. The kashim was the ceremonial centre, the men's social centre and workshop. Behind the houses

were caches mounted on high posts and racks for sleds and canoes. (Osgood 1940, 302–308, 310–311; Osgood 1958, 25–31; 157–158)

The Ingalik lived in the winter village from the end of August (after the end of the summer rains) to May (until the snow melted). (Osgood 1958, 157.) In the autumn the Ingalik practiced communal caribou hunting by building guides and surroundings. Surroundings were built on the migration routes of the caribou. Fishing and hunting of moose, hare and forest fowl were also important in winter. (Osgood 1940, 251–252; Osgood 1958, 38-40, 243, 247, 280–281)

All families did not spend the whole of winter in the winter villages. At times two men might take their families to the mountains to hunt. They went off when the snow came and built a semipermanent winter camp apart from the village. (Osgood 1958, 169–170)

Other activities in the winter village were the religious ceremonies in the kashim. In winter the Ingalik also travelled to trade with the Inuit of Norton Sound. (Osgood 1958, 53, 61–63, 272)

In the spring a few weeks before the breaking up of the ice up to 10 families decided to move to fish at sites located on small lakes. These "canoe villages" were only a few kilometres from the winter village. People built shelters made of spruce poles and boughs on the lakeshores. After the breaking up of the ice in late spring they returned to the river and moved straight to the summer village. (Osgood 1958, 42–44)

The Ingalik moved to the summer village in May after the snow melted. The population of the winter village dispersed for the summer along the nearby river in groups of few families. Some of the villagers built their summerhouses near the winter village between the riverside and the winter village, others moved to either the upper or lower reaches of the river. The size of the summer villages varied from fishing camps of 1 to 2 families to villages of several families. The summer villages were smaller than the winter villages because the Ingalik wanted to take advantage of the best fishing sites. The summer villages had smoke houses and fish-

drying racks near the river and dwellings, which were not as solidly built, as the winter houses. (Osgood 1940, 316–317; Osgood 1958, 30, 158, 167–169)

The annual cycle of the Khanti, the Mansi and the Ingalik were typical of the forest zone occupants whose main means of subsistence was fishing. They lived a more sedentary life than groups that relied more on wild reindeer or caribou hunting. For example the three villages of the Ingalik, the winter village, the canoe camp and the summer village, were relatively close to each other within approximately a ten-kilometre radius. (Osgood 1958).

Neighbours of the Ingalik living in the upper reaches of the rivers, whose economy was based more on caribou hunting than fishing, had a different spatial structure for their villages. Their way of life was more mobile and they had more seasonal settlement sites than the Ingalik. Their population density was also smaller than that of the Ingalik. (Hosley 1981, 542)

4.2. The Interior Boreal Forest - Tundra Zone

The economy of the hunting cultures of the interior boreal forest - tundra zone was based on reindeer (in North America caribou) hunting. The communities lived in the boreal forest belt during the winter and moved to the tundra for the summer where they caught fish and hunted waterfowl as well as reindeer.

In Siberia the forest - tundra zone hunters were among the Nganasans (Popov 1966), the Nentsy (Prokofyeva 1964), the Entsy (Dolgikh 1964) and the Yukaghirs (Kreynovich 1979) and among the Eastern or the Arctic Drainage Athapaskans in North America. (Chang 1962, 31–32)

The next description concerns the annual cycle and economy of the Alaju family belonging to the **Yukaghirs** of Northern Siberia. Their main means of subsistence was wild reindeer hunting, lake and river fishing, waterfowl and reindeer herding. The herds of reindeer were small and the reindeer were

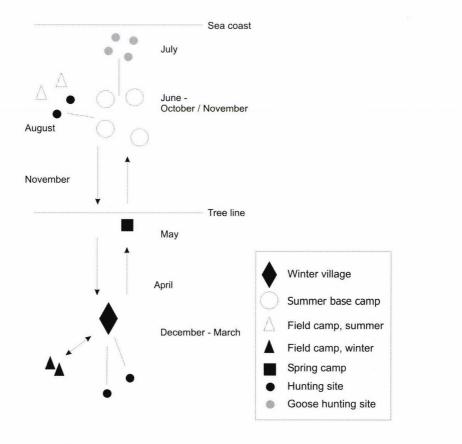


Fig. 3 The Annual Cycle of the Yukagirs of the Northern Siberia

chiefly used for transportation and as a decoy in hunting. (Kreynovich 1979, 187, 194; Stepanova, Gurvich and Khramova 1964, 791)

The borders of the hunting and living territory of the Alaju family which were agreed on with the neighbouring communities were the Arctic Ocean and the river mouths, lakes and mountains. (Kreynovich 1979, 194–196) The family consisted of seven households in which there were 55 people altogether. Besides parents and children the households usually consisted of grandparents and married young couples who had not yet established a household of their own. The size of a household varied from three to sixteen people. (Kreynovich 1979, 191–192)

The winter base camp of the Alaju family was in the forest belt between the Rivers Kolyma and Chukochey. In the winter settlement the band put up two conical tents

covered with reindeer skins. In both tents lived three or four households; about 20–30 people per tent. (Kreynovich 1979, 196, 198–199)

In midwinter the men hunted wild reindeer near the base camp but when the days became longer they moved to hunt further from the village spending the nights in small tents. In March the hunters went to the islands of the River Kolyma to hunt elk (see Fig. 3). (Kreynovich 1979, 199–202)

At the end of March the Yukaghirs packed up the reindeer sleds and started their journey up to the northern tundra. After a month's journey the band arrived at the border of the forest belt where they spent few weeks while the reindeer calved. The rest of the spring was spent hunting elk, building the wooden structure for the summer tents and collecting firewood for the summer. (Kreynovich 1979, 202–203)

At the end of May when the band continued their journey towards the summer settlements it split up into groups of one or two nuclear families. In June the Alaju family group arrived at their summer settlements. They lived in four summer base camps, one of them consisting of one or two households which consisted of about 10–20 people. Each household put up its own summer tent, which was smaller and lighter than the winter tent. (Kreynovich 1979, 203–204)

The old people, women and children spent the whole summer in the summer base camps while the hunting men gathered to hunt geese in July and to hunt wild reindeer at the end of summer. The reindeer-hunting group consisted of seven men and the leader. The collective hunts of reindeer in the tundra lakes ended at the end of August. Later in the autumn they carried on hunting reindeer, elk and fur animals. (Kreynovich 1979, 191–192, 204–206, 208)

In November when the snow covered the tundra and waters froze the Alaju family started the long journey back to their winter village arriving in December. (Kreynovich 1979, 196, 213–214)

According to Kreynovich's informant the distance from the southern border of the Alaju family's territory to the Arctic Sea was approximately 600 kilometres. By comparing the official maps and the map of the informant I judged the distance from the winter village to the seacoast to be approximately 300 kilometres. This is only an estimation because there is no scale in the map of the informant. In any case the distance between the summer and the winter settlements was several hundreds of kilometres.

The **Chipewyan** who belonged to the Athapaskans of North America lived in similar conditions as the Yukaghirs in Siberia. They chiefly hunted caribou while fishing and fur hunting was of secondary importance to their economy. The number of fur animals was relatively small in the territory of the Chipewyan, so the influence of English fur traders on the socio-cultural life of the Chipewyan stayed rather limited until the end of the 19th century. (Smith 1981b, 275)

The economy and the annual cycle of the Chipewyan were based on caribou hunting (see Fig. 4). The caribou gathered in autumn in large herds and moved from the tundra to the forest belt in November where they grazed in small herds during the winter. In the spring at the end of April the caribou moved back to the tundra. (Smith 1981b, 275)

The Chipewyan spent the winter in the forest belt following the caribou herds. In the winter the Chipewyan lived in local bands consisting of 25 to 100 individuals. (Smith 1981b, 276) In the winter of 1771 Samuel Hearne from the Hudson Bay Company met a community consisting of five tents that had spent most of the winter living in the same place hunting caribou. Earlier in the same winter he had met another community that had moved its settlement a couple of times during the winter. (Hearne 1958, 50–51, 54)

A crucial part of the social structure of the Chipewyan local band was the caribou hunting groups. The local band consisted of several hunting groups. The hunting group consisted of male members of related families and was established by a skilled hunter of sufficient authority. (Smith 1981b, 276)

In the spring the Chipewyan gathered in large regional bands on the migration routes of the caribou. The regional bands consisted of about 200 to 400 or sometimes more persons. People joined the regional band by kinship or marriage but the band membership was fluid. People could change the band and usually they moved to a band in which they already had relatives or friends. (Smith 1981b, 276)

The Chipewyan dispersed for the summer into local bands and moved to the tundra to hunt caribou and to fish for lake and river fish. (Hearne 1958, 181, 206–207, 210–211; Smith 1981b, 277)

In November they gathered again on the migration routes for the great kill and moved afterwards to the forest belt for the winter. The Chipewyan travelled on foot and by canoes. The canoes were mainly used to cross the rivers and lakes so the main part of the trip was made on foot. Belongings were carried on backs, pulled in sleds or packed on dogs. (Hearne 1958, 62, 132, 207–208; Smith 1981b,

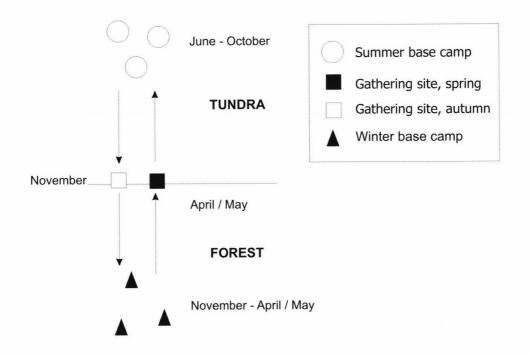


Fig. 4 The Annual Cycle of the Chipewyan

276)

The common denominator of the interior boreal forest - tundra zone hunting groups was the wild reindeer or the caribou. Especially in North America the way of life of the communities was based on the annual migration of the caribou. The communities gathered together when the caribou herds gathered, and dispersed into smaller groups when the caribou herds dispersed to the foraging ranges in the forest. (Smith 1981b, 275)

Besides hunting the hunters of Northern Siberia tended small reindeer herds. Reindeer made long journeys possible and the reindeer herds thrived in the cool tundra in the summer that partly explains the seasonal movements in spring and autumn.

The hunting groups were part of the social organization on both continents. Also the Yukaghirs hunted communally in late summer when the wild reindeer herds were concentrated.

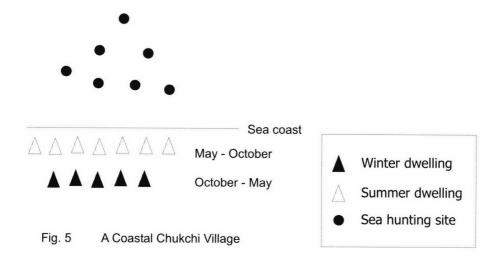
4.3. The Sea Coast Zone

The Arctic seacoast covers quite a narrow strip of the circumpolar zone. It consists of the south, west and north coasts of Alaska, the north coast of Canada with its islands, the coast of Greenland, the north coast of Fennoscandia, the north coast of Russia and the north and east coasts of Siberia.

The ethnic groups living in this area are the Inuit and the Yupik of North America and Greenland, the Aleut of the Aleutian Islands, the Sámi of the coasts of Norway and the Kola Peninsula, and the Chukchi, the Koryak and the Yupik of the coast of Siberia.

The people of the seacoast lived mainly a sedentary life in the arctic coast and their economy was chiefly based on the hunting of sea mammals.

The villages of the **Chukchi** on the coast of the Chukchi Peninsula were situated on narrow islands or on the shores of sandy capes. (Bogoras 1975, 28; Nordenskiöld 1882, 33, 49) At the end of the 19th century the size of the



villages varied from 1 to 25 dwellings consisting of 8 to 140 people (Bogoras 1975, 28–32). Until the beginning of the 19th century the dwellings of the coastal Chukchi were semidugouts built of jaws and ribs from a whale covered with sod and earth. In this "jaw house" lived two families consisting of 10 to 15 people throughout the year. (Bogoras 1975, 180–182; Nordenskiöld 1882, 38)

The village of the coastal Chukchi was a base camp in which they lived the year round making hunting trips to the neighbouring environment. (See Fig. 5)

The economic basis of the coastal Chukchi was the hunting of seal, walrus and whale. The hunting methods varied according to the seasons and the living habits of the hunted animals. Seal were usually hunted individually in winter, spring and summer. Walrus were hunted in boat crews of nine men in spring and autumn when they were migrating from south to north and back. The whale hunts required several boat crews. (Bogoras 1975, 115–124; Antropova and Kuznetsova 1964, 806–808)

The socio-economic units of the coastal Chukchi were family, village and boat crew. A Chukchi family consisted of a husband and one or several wives and children. In a "jaw house" lived two families whose men probably worked in the same boat crew. A

boat crew was a task group of nine men. The crew were often relatives of the boat owner who hunted together and divided the catch according to set rules. The boat crew was assembled from 4 to 5 families who lived near each other and who also co-operated in other ways. (Bogoras 1975, 544, 628–631)

The villages of the coastal Chukchi, the local band, were more regional than family communities at the end of the 19th century. At that time there were still villages consisting entirely of relatives. In the villages there usually lived a leading family whose members knew best the hunting resources of the region, because they had lived longest in the region and had not moved away even during the bad hunting years. The head of the family enjoyed the esteem of the villagers without being a proper chief of the village. In a village there was also often a physically strong man who was also known to be a good hunter whom others respected and obeyed. (Bogoras 1975, 387, 544, 628, 641; Antropova and Kuznetsova 1964, 819)

Characteristic of the economy of the Eskimo of North America was sea mammal hunting even though many of the Eskimo groups also hunted caribou and other inland game. Of the Eskimo groups the Alutiiq and the Inuit of the Bering Strait, the North Alaska Coast and the Mackenzie Delta were the most specialized in maritime resources.

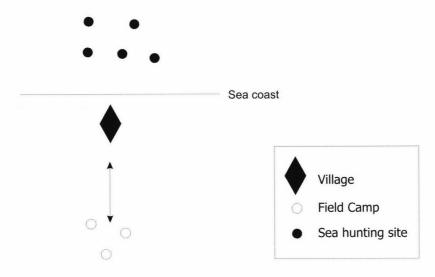


Fig. 6 The Village and the Seasonal Sites of the Alutiiq

The Alutiiq living in the southern coast of Alaska are divided into two groups: the Koniag and the Chugach. The Koniag lived on Kodiak Island and on the Alaska Peninsula. The Chugach occupied the Kenai Peninsula and the coast of Prince William Sound. The next description is from the Russian fur traders who came to the area of the Alutiiq at the end of the 18th century. (Clark 1984, 185)

The villages of the Alutiiq were located on the fringes of the coast behind a headland, in the lee of a small island or in a small embayment. Temporary camps for salmon fishing or summer settlements were located around the mouth of a river a few kilometres inland. (See Fig. 6) (Clark 1984, 185, 191; Davydov 1977, 155, 190)

The semisubterranean dwellings of the Alutiiq were made of wood, grass, turf and earth. The dwelling had two parts: in the middle was the common kitchen surrounded by two or three private side chambers each of them accommodating one to three families. In one dwelling could live up to 20 persons and thus a settlement aggregated 100 to 200 persons. (Clark 1984, 191; Davydov 1977, 154)

In the village there was also a men's hall or *kashim* where feasts, public gatherings and ceremonies were held. People were invited from neighbouring villages to the most important ceremony, which was held in December and lasted one month. (Davydov 1977, 173, 183).

At the beginning of the marriage a young couple lived with the wife's parents so a household often consisted of families of several sisters, unmarried siblings and their parents and an assortment of peripheral persons such as poor relatives or orphans. (Clark 1984, 192–193; Davydov 1977, 190)

The most important means of subsistence of the Alutiiq was the hunting of whale, seal and sea otter along with salmon and saltwater fishing. According to the Julian calendar Kodiak Islanders hunted fur seal from February until April. From late spring until June the hunters worked in the outlying islands catching sea otter. June and July were the best times to hunt sea lion and whale and additionally harbor seal and porpoise were hunted from April through to October. An important catch in summer was salmon, which the Kodiak Islanders were catching from May until September along the streams and at their mouths. Dried salmon was prepared for the winter during July. In late summer women picked berries and dug edible roots. (Clark 1984, 190–191; Davydov 1977.)

The Chugach caught whale, sea otter and

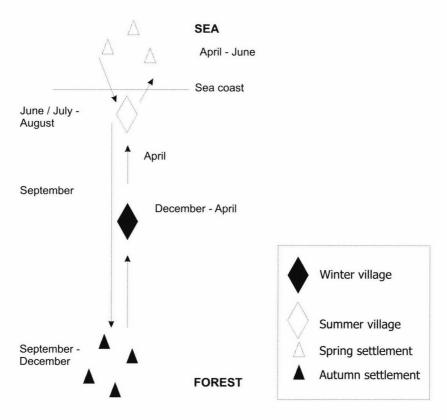


Fig. 7 The Annual Cycle of the Näätämö and Paatsjoki Sámi

halibut all year round. In the summer they fished for salmon, herring, halibut, cod and eulachon. Sea lion was mainly hunted in autumn and harbor seal in winter. The Chugach also hunted some land mammals, such as mountain goat in the autumn and winter and bear in the winter. (Clark 1984, 190)

In the summer the Alutiiq lived a few kilometres from the villages at fishing and hunting sites and returned to the main settlements in the autumn before the winter festivities (Fig. 6). At the end of the 18th century Alutiiq families spent some time in the summer on relatively inaccessible defensive positions when all the able men were hunting, fishing or on war expeditions. (Clark 1984, 191; Davydov 1977, 173)

Characteristic for the inhabitants of the seacoast were the almost year-round sedentary settlements. The settlement on the seacoast was a base camp from which people made hunting or trading trips. Near the

hunting and fishing sites were temporary field camps, which the hunters, sometimes with their families, occupied during the hunt.

On both continents the interaction between the occupants of the coast and the inland was active. From the inland of North Alaska people went to the coast to whale and some of them settled down to live there. Also at times people moved from the coast to live inland. (Spencer 1984, 323) The interaction between the coastal and the inland Chukchi was also active. (Antropova and Kuznetsova 1964) The relations of the coast and inland people are further discussed in the next chapter.

4.4. The Sea Coast - Interior Zone

People from the seacoast - interior zone lived in two ecological belts utilising natural resources from both the forest and the sea. There are differences between local

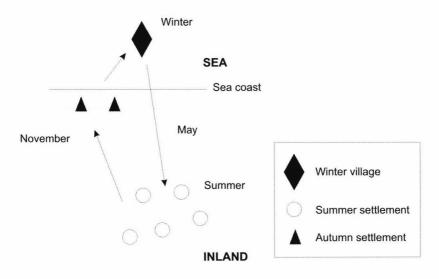


Fig. 8 The Annual Cycle of the Copper and Netsilik Inuit

communities living in these kinds of conditions. Some of the groups hunted game coming from the forest to spend summer in the tundra. Extremes of this group are the almost sedentary communities that from time to time went inland to fish or to hunt wild reindeer and communities living most of the time inland and going for a short time of the year to the seacoast to catch sea mammals or to fish.

At the end of 19th century one of the groups living between two ecological zones was the Sámi sida (village) of Näätämö and Paatsjoki at the modern borders of Finland, Norway and Russia. The winter settlements of the villages were situated on the banks of the rivers flowing into the fiords of the Arctic Sea. In April the occupants of the winter village moved as households via the summer village situated at the bottom of the fiord to the spring settlements (Fig. 7). Women and children stayed on the shores of the fiord to catch salmon while men went to the mouth of the fiord and to the open sea to catch cod and coalfish. (Tanner 1929, 103-124; Vorren 1980, 247)

At the end of June people of Näätämö and Paatsjoki gathered at the summer villages, which were situated at the mouths of the rivers flowing into the fiords. In the summer village they fished for salmon migrating to the river. The salmon fishing lasted until the end of August. At the beginning of September the local band separated into households that moved to the interior to fish and to hunt wild reindeer. (Tanner 1929, 127–138; Vorren 1980, 247–249)

In December the households moved back to the winter villages where they lived until April (Tanner 1929, 138; Vorren 1980, 249).

The main means of subsistence of the **Copper** and the **Netsilik Inuit** living in the central parts of the north coast of Canada were sea mammal hunting, fishing and caribou hunting. For the winter the Inuit gathered as a local band at the sea ice to catch seal. The local bands consisted of about 100 people. At the end of May local bands dispersed and the Inuit moved to the mainland. (Fig. 8.) (Damas 1984, 398–400; Balikci 1984, 417–424)

In the summer the Copper and the Netsilik Inuit hunted and fished in nuclear families or in groups of 15 to 20 people in the interior. On the good fishing sites groups of 50 people could gather. In late autumn, beginning some time in November, the Copper Inuit gathered in groups of 45 to 50 people. This gathering was called the sewing group because the subsistence came mainly from cached food and the women sewed the winter clothing

during this period of two weeks to a month. In mid-winter, at the end of December, the Inuit of North Canada gathered again to seal by the breathing-holes until May. (Damas 1984, 398–400; Balikci 1984, 417–424)

The resources of the land and the sea were also utilised by assigning tasks inside the community. The economy of the Iglulik Inuit living in the northern parts of Baffin Island and the Melville Peninsula in the north coast of Hudson Bay was based on - besides sea mammal hunting -hunting of polar bears and caribou. Young hunters with their wives hunted caribou in the inland during summer and autumn while older men hunted sea mammals by the seacoast. In the autumn both groups gathered at the seaside villages from which they moved to the ice for the winter. In the winter they sealed by the breathing-holes and at the floe edge. (Mary-Rousseliere 1984, 431-433)

Some of the Koryaks and the Chukchi of the east coast of Siberia previously practiced a combination of two means of subsistence during the 18th and the 19th centuries. The Chukchi who lived on the coast and had small herds of reindeer (about 50 to 150 head) hunted sea mammals at the seaside during summer. The Chukchi community consisted of about 10 to 15 related families that lived near each other in forest-tundra or tundra zones during the winter. For the summer the community gathered at one settlement by the seacoast. The young men of the community took care of the reindeer during the summer while the others spent the summer fishing and sealing. (Antropova and Kuznetsova 1964, 806; Bogoras 1975, 542)

The internal division of labour in the community made possible a diverse utilisation of resources. Groups specialized to exploit only interior or maritime resources traded with each other to get products they could not get from their own environments.

5. Closing Words

Seasonal movements of circumpolar people reveal human adaptation to the conditions of

the northern zone. The mobile way of life enabled the varied range of utilisation of natural resources. Apart from food and tools to provide it, the materials needed for clothing, transportation and living were supplied from nature.

Hunting or reindeer-herding villages consisted of settlements and hunting sites within a given geographical area and the social community living in it. Subsistence in the harsh conditions required co-operation and knowledge of the local environment. Local bands formed by co-operation needed quite a large area for subsistence. The annual movements inside the subsistence area were not haphazard but they were based on knowledge transferred as a cultural heritage from one generation to another.

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