

## Beaivváš

Beaivi or Beaivváš, the sun, is the most important spirit, god, or power. Of course it is so, because without Beaivváš there is no life. There are other nature spirits, as well as the stars; Bassi Aske, the moon; Bieggolmmái, the wind-man; and Diermmes, the thunder. Nearer to earth reside Sáráhká, Juksáhká, Uksáhká, Leibolmmái, Čáhceolmmái, and under the earth dwells Jápmeáhkka.

Beaivváš can be seen in drawings on Sámi drums. The sun can be drawn round, and some people think that the four-cornered world pole drum-picture is also the sun, with reigns of light drawn in four directions.

Older written accounts describe the sun as the mother of all life- the animals and plants. The warmth of the sun brings out colors in life, providing nourishment and health to reindeer, other animals, and humans.

The sun is always important to the Sámi. There are still people who give offerings to Beaivváš. In the Eanodat area a cake would be baked of meal and reindeer blood. At the end of winter, this cake would be placed outside, against the outer wall, as an offering to Beaivváš. This offering brings good fortune in reindeer herding. The Sámi ask the sun to shine, guiding the lost, and aiding those caught in bad weather. Beaivváš would provide light to wanderers in the mountains, to farers at sea, and to herders searching for lost reindeer.

The sun daughter's names, Sala-nieida, Akanidi, or Rana-nieida, indicate that in most Sámi areas the sun appeared most often as a female, or at least in female form.

The Eastern-Sámi tell a story about the mother and sisters of Beaivváš. The three daughters, Beaivváš' sisters, live in huts in the forest. They have large breasts, and are sparsely clad. One of Beaivváš' sisters is around seven years old, and wears no clothing on the left side of her body. The eldest sister lives in a beautiful home, made of gold and silver, with gold on the inside and silver everywhere outside.

The mother of the sun lives with Beaivváš in a golden home, and she is not beautiful, but is as hot as fire. Beaivváš' son, Peivalke competes eternally with Guovssahasat, the northern lights, for the love of Mánu-nieida, the moon's daughter.

As I write I must ask you- have you known the sun, thought of its beauty, recalled its love, and remembered its warmth and usefulness? Beaivváš bestows life to plants, sustains animals, and supplies food to humans. The sun's light gladdens and inspires the mind, while its shining rays soften the heart. Beaivváš' light is made of every color, even those that usually may not be seen. In one's life it is possible though to see the colors of the sun and to hear how many beautiful voices are sounding. My dear children! Do you still think of the sun at all?

Robert Crottet published a Swedish language book in Stockholm, Sweden, in 1954. In Crottet's book, there is a story about a woman named Mariska, and a Christian priest who tried to convert her to Christianity.

The priest says, "My poor child, you are the only pagan in this region."

And Mariska agrees, turning to send a kiss to the sun, saying, "When you are old, like me, you will like the warm gods."

"But what happens when the sun disappears in winter, behind the clouds?"

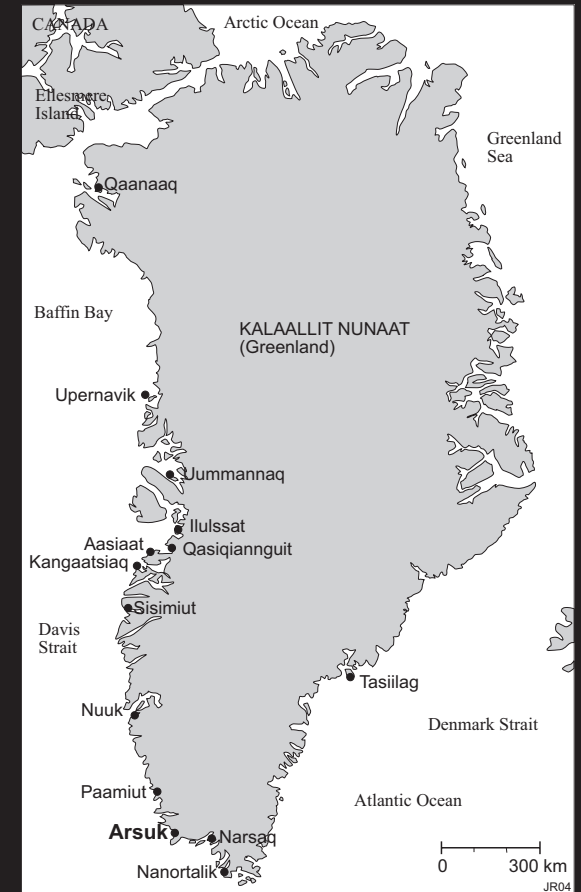
"One of Beaivváš' sons sits upon my wood oven. I give him firewood to eat..." replies Mariska.

"I thought that wood is also one of your gods. I have seen how you treat the bark. How can you put your god in the fire?" asks the priest.

"Only a god is worthy to be food for another god," answered Mariska. And then she explained that she prefers a god that can be cut down, like a tree, instead of a god she cannot see and touch...



[illegible]



# Greenland



# Arsuk Blues

by Kristian Olen aaju, Greenland

## My Birthplace - ARSUK

My birthplace is a place, where I have woken up from my unconsciousness and where I had the experiences of my life. To wake up as child to the real life is like to be formed in the long winter of unconsciousness followed by a short, but extremely violent and impressive summertime.

Arsuk was founded in 1805 in South of Greenland, South of Paamiut and North of Qaqortoq on 61 degrees northern latitude. It is a very beautiful place. The name 'Arsuk' means 'a lovely place'. It is placed at the foot of majestic, magnificent high mountains with an archipelago and bird fowling mountain. The area is rich with fish. It is not far away from *Ivittuut*, 'With lot of big grass' with the cryolith mine and *Grönnedal*, 'Green Valley', where the Danish government had placed their Naval Operations Centre. Habitants of the Centre are soldiers and sailors of the Royal Navy of Denmark.

Life in Arsuk in my childhood was connected actively to nature. Already at that time I got respect for natural dangers, because snow changes, strong sea storms and snowstorms, blizzards could be dangerous for hunters and fishermen of our settlement. It could cost human lives to live out in nature.

I understood how much the influence of four seasons had for peoples' lives. They wanted to be happy and to have a common, familiar way of life in the settlement. The social life was exciting. I was among hunters, fishermen, a living, developing community.

One Sunday in my birthplace I wrote that I should let nature teach me how small my worries were compared to a high, dangerous and silent mountain wall. I could not even look at the top of the mountain. The incredible scenery I had experienced is an unforgettable picture of the nature.

## Climate Conditions In Arsuk

The vast area of Greenland is a giant cape of ice. This cape of ice has influence the climate. Though the climate varies from North to South and from West to East. The average temperature does not go above 10 degrees Celsius not even during the warmest month of the year.

In the whole Greenland landscape you can see the influence of ice, which has given us a big archipelago.

The area around southern Greenland is in summertime very warm. Greenlanders have established themselves as farmers in their local places. These places are the same in which the Icelandic Vikings had their settlements and fields.

In Arsuk the temperatures can in the wintertime go down to -20 degrees and in summertime to +20 degrees Celsius. In summertime icebergs from Cape Farwel can cause problems for ships. Rest of the year sea is free of ice.

There are not so many people in Arsuk as it was in my childhood in 1940s. In 1970s to 1980s there were more than 340 inhabitants. At that time Arsuk was one of the richest settlements in the world according to the average salary per inhabitant. Most of them moved after the fish and salmon periods and cycles of nature. Today there are almost 170 people in Arsuk.

The inhabitants of Arsuk have always been hunters. There are good opportunities to hunt seals, whales and get fish. At the same time there are very good bird fowling mountains, where there are a lot of *appat*, white and black auks.





## Poems by aaju

### ***CAN YOU HEAR THE FALLING SNOWFLAKES?***

*I do not hear them*

*Can the pulsing heart  
cry?*

*Yes*

*Then you do not ask me more*

### ***FOOTSTEPS***

*While I am standing and looking  
at the tracks of footsteps on pure snow  
I am thinking about a human being  
who was climbing up over the mountain  
and disappeared on the backside  
of the dark house  
when I looked out of the window  
early morning  
while you were sleeping*

*The footsteps belong maybe to this human being*

*In the early morning  
there was an extreme silence  
Sila was sleeping  
No wind was moving*

---

*(Sila= Spirit of the Weather)*







Iceland



*“We’re Not The Enemies Of The Seal”*

# Seal Hunters of Broddanes, West Fjords, Iceland

*Tero Mustonen with Eysteinn Einarsson and Sigvaldi Thordarson and the members of the farm of Broddanes*

## Introduction

Seals have been hunted for a long time off the coasts of Iceland. Many names of the local places reflect on a tradition hundreds of years old in the Atlantic maritime communities of Iceland. Even though local people do no longer depend on seals, the community-based harvesting of seals remains an important element in the life of certain families and farms. In 2003 Snowchange conducted local interviews with the seal hunters of Broddanes in West Fjords, Iceland. The participants spoke of their traditions, hunting methods, observations of environmental change and cultural opinions.

Eysteinn Einarsson is a structural and earthquake engineer, living now in the capital of Iceland, Reykjavik. He grew up in Broddanes until about 1980 when he moved to Reykjavik to attend high school and the university. During these years he spent most of his summers in Broddanes and the community nearby. Eysteinn also lived in the United States for some 8 years but moved back to Iceland in 1997. His parents are sheep farmers and still live in Broddanes. He says:

“I try to go seal hunting in Broddanes every June. Today it is definitely not a professional activity nor something that the people or the farmers need. They do not depend by any

means on seal hunting or the money that they can get from it.

Even though they receive some money for the skin, it’s very little. So it’s more recreational, just to maintain the tradition I am very much interested in keeping, at least the hunting. For example, we treat the skin today somewhat differently than we used to 20 years ago, so some of that old knowledge might get lost forever pretty soon.

Hopefully I can continue this for as long as I live and maybe pass it on to my son and maybe to some other generations. It would be very sad if this hunting tradition would be lost completely and nobody would continue doing it. I hope that the seal hunting in the future will not only be done by some fishermen who just shoot the seals and leave it in the ocean, shoot them just to prevent them from eating the fish. That would be terrible.

Even though seal hunting has never been a big part of this nation’s history it still has through the ages been a part of it. And for those farmers who had the opportunity to hunt, the seal meat was a big complementary diet or supplement for food.”

Sigvaldi Thordarson is Eysteinn’s partner in hunting seals. He works at ÍSOR, Iceland GeoSurvey, but has been hunting seals at Hafnir on Skagi in Northern Iceland, before participating in the hunts at Broddanes. He started when he was



about fourteen to go regularly to seal hunting trips. He says:

“I’ve been doing this for over a quarter of a century. My father moved to this farm (Hafnir) when he was 21 and he lived there, although only in the summers for the last 30 years of his life, until he died at 81. That’s good 60 years. I learned about the seal hunting from him, and also from another man who worked for my dad on the hunting, but we used to call him ‘*kaftinninn*’ (the Captain). I think he took part in the hunting at Hafnir for about 40 years. My father came from a farm from the inland, nowhere near the sea, so he had no experience in seal hunting when he came there. Therefore, he had to learn everything when he moved to the farm. He learned from the people who had been working on the farm before him, workers who came there to hunt the seal and work on the skins. This way he learned, both how to hunt and how to utilize the seal products.

One of the early workers who worked for my father, was a farmer from a nearby farm, and his son (the Captain, I mentioned before) later started to work on the hunts with him. I guess this was often how the knowledge was carried down through generations.”

## Method of Seal Hunting

### Use of Nets

Eysteinn reflected on the methods of harvesting the seals:

“The seals are almost always caught in nets by the farmers or by somebody with their permission. No one else is allowed to go there to hunt the seals like we do it. The fishermen typically don’t make special trips to hunt seals but of course

sometimes they catch seals in their fishing nets. But that happens far away from the traditional hunting places.

The seal hunting in Broddanes is typically done around the 20th of June. If there’s a cold year, we might do it slightly later, if it’s a warm year, we might start slightly earlier.

June 17th is our national holiday, and sometimes if there’s a long weekend associated with the June 17th, we go to Broddanes for the hunt. It’s just convenient for us, because all of us, who do this hunt, live in the city some 250 km away, and therefore we try to come on weekends or on a three-day weekend. Typically we arrive on Thursday night and leave on Sunday night.”

Sigvaldi reflects on the time of the hunt:

“All activities are done when the seal mother is trying to get rid of the young seal, so it’s three or four weeks after they are born. Where I come from we always start on the same day, on the 24th of June. Then we put the nets out, perhaps check if we have caught anything on the way back, and after that we come and

check the nets every day if we can.

Everything has its time. This just happens to be a right time at this place for the pup to leave the mother. In other places it happens sooner, especially if you go further south, so it’s just depends on the way nature work.

In recent years we only visit nets maybe three or four times before we take them out of the sea again. Before they used to do this a lot longer because the prizes were higher for the skin and also the nets were not as good. It was more difficult for them to get the numbers and they also did hunt more seals.”

Eysteinn continues:

“Our season is typically three, maybe four days. We use special nets to hunt the seals - they’re stronger and the size of the





grid is a bit bigger, just to fit, and the tread in the nets is such that the skin does not get damaged. The nets are stored at the farm over winter. When we arrive at Broddanes, we bring the nets to the boat we use. Now we have a small plastic boat with a motor that can accommodate four or five people. We go to the same hunting places year after year, and place the nets in the ocean. Our experience, as well as the experience of our forefathers, tells us where the best chance to catch the seals is."

Sigvaldi discussed the nets in detail: "Traditionally the nets were prepared by the hunters before the hunting started. This could mean stitching up parts of the nets that had been torn, and putting floats (cork) on the top rope. When the nets were put in the sea, some small stones were tied to the bottom of the net to keep that end down and some big stones were tied to each end to prevent the seals from dragging the nets away from where they were placed. But the nets have been changing a lot in the last century. Nowadays we have nets that have led in the bottom rope and something that floats in the top rope, so that the net always keeps open. Today they are very easy to manipulate and much stronger. This also means that it is much easier to get the seals loose from the nets than before because we don't need the cork or stones to keep them open, but they could get tangled up in the net with the seal, making it very difficult to get them out."

Selection of sealing places is very important. Eysteinn discussed the selection of places: "We have tried to place the nets in new locations. Sometimes successfully, sometimes not. But typically we go to a sker [above water reef in the coastal bay] or to a rock, tie one end of the net into the sker or rock and then normally lay the net

directly out from it. Occasionally we lay the net parallel to a sker but that is an exception.

Sigvaldi agrees. He points out that "One year this island is very good, the next year some other island might be good. It shifts through the years."

Eysteinn continues: "Sometimes we place just one net and sometimes two in a row. It depends on how many locations we are going to place the nets in, and how many nets we have available.

Typically just one net, almost directly out from the land. We bring maybe 6 or 8 nets with us, and after we have placed all the nets, we check them and very often we have already caught some seals. So, during our first trip when we actually place the nets into the sea we bring back three to five seals.

We try to check the nets about 12 hours later and then again after 12 hours. After that we will go once a day to check the nets. The third or the fourth day we go and collect the nets. And that's the end of our season. Today we catch anywhere from 10 to 40 seals per year. Back in the old days the farmers used to continue this over a two weeks period at least and would of course catch more seals.

Roughly half of the seals we catch in the nets drown, while the other half is alive when we arrive. It depends whether it's a shallow water or deep. If it is in shallow water, the seal can go up to the surface and breathe, or sometimes if it's a low tide, they might still be alive when we arrive.

If the seals are alive we have to kill them. We have a club or a wooden stick and we just hit them hard on their head with the club. Immediately we cut the main blood vessel in the throat so they will bleed a bit. We only eat the meat from the seals that we club because that's simply much better meat.



## Weather Knowledge and Cultural Change

Sigvaldi illustrated the prevailing conditions in the following way:

“At Hafnir there is always some wind; there is almost never no wind. I remember maybe two or three days in my whole life when it was calm the whole day. If the wind drops, then very soon you get a breeze from the sea, so a minimum wind is normally around 5 m/s.

Eysteinn discussed further the impact of wind and weather on the hunt:

“There are places where it depends on the wind, whether it’s blowing from the south or from the north, how we actually place the nets. In most locations we try to place the nets regardless of the wind.

However, when we are putting out the net, the line might not be perfect because of the wind. The plastic boat we have now is much lighter than the wooden boat we used to have. So we have harder time controlling it, especially if the wind is blowing. There are few places where it is dependent on the wind, how we put the nets and where we put them.

It appears that the period from 1930 until 1965 was a warmer period than the period from 1965 to 1995. Now it seems, from 1995 up to now, it has warmed up again and according to my father the weather is somewhat similar the past few years as it was back in the previous warm periods. So we might be seeing a warmer period or a cycle, we don’t know for sure.

There are of course occasional exceptions to this, some years and some months maybe, but what I find most interesting is that the falls are a lot warmer now than they used to be, and typically it does not get cold until the beginning of No-

vember, and usually it does not start snowing until January. You can pretty much forget about skiing in Iceland, which some people might find strange, but that’s just the way it is.

At the farm, the lambs are typically born in May and when there’s enough vegetation out in the fields, we just simply let them go loose in the mountains where they essentially grow wild. In late September, early October we go up to the mountains and herd them, this is called “réttir”. I remember before this warmer period started, it was much easier to herd the sheep. This is because the sheep are more willing to come down when it is colder. In the past three or four years, the falls have been exceptionally warm and sometimes made it almost impossible to get the sheep down from the mountains.

So that’s a big change.

My feeling is that the tide is getting more extreme than it used to be. This area, Broddanes, is very interesting geologically. This is a part of rather small area where the crust of the earth is still rising since the end of last Ice Age. When the tide is very low, some sker and rocks appear which weren’t seen before. My mother tells me that when she was growing up in Broddanes, she never

saw those sker and rocks.

I have noticed this myself and it is obvious to me that during low tide you can see that the water level is significantly lower. It’s definitely got something to do with the rising of the land here. Maybe as well with the increased fluctuation on the tide, I am not sure.

Whether the tide is higher due to global warming and melting of the glaciers, and the ice cap in the North Pole, I don’t know, it’s hard to tell here, because the benchmark is moving. You can’t really tell.

Sigvaldi agrees:

“The sea seems to be changing its level a little bit in the north,



so it's a little bit lower. At least that's the feeling you get, because some of the sker are more prominent. Sker is a small, really small island that hardly gets out of the sea. They are more prominent now, it seems."

Eysteinn continued reflecting on weather changes: "The older generations have seen weather patterns like this before. My impression it is just a cycle, but I don't know for sure".

The old weather prediction and wave knowledge skills are disappearing. "I think it's been pretty much forgotten" says Eysteinn. "Because this is more recreational for us and we don't care all that much if we catch ten seals or forty, that's not really the most important issue. We would like to catch 40 but if that doesn't happen it's ok."

Sigvaldi continues:

"I'm not able to predict the weather, but this is something the old farmers in Iceland tried to do, because it was very important to them. I'm sure they could predict a little bit, by seeing if the clouds would be coming in.

Because of the way we hunt the seals, that doesn't have very much effect on the hunting, we only have to get out to the sea. Sometimes we don't. There has been years that the weather was so bad that we couldn't hunt any seal. Then that's just off. So as long as we can go out and put the nets out. The seals are more or less there.

### Use of Meat, Flippers and Blubber

Eysteinn reflects on the use of meat and blubber of the seals: "When we bring the seals back to the shore, we remove the

skin off the seals and put it into a very salted water to preserve it before we ship it off to the buyer. The meat we use for ourselves is always from a seal that was clubbed to death. If we catch many seals, we use only a part of the meat.

It's been a tradition to give away few seals to some of the neighbours and relatives. However, we always keep the skin even though we give away the seal. Some people may receive one or even two seals. It is however their responsibility to cut the meat and preserve it in any way they like to.

Some of the remaining seals we feed to the dog but when there is an abundance of meat, we simply bury the seals in the ground. Occasionally people want to get blubber and salt it, but that's extremely rare. We don't do that ourselves."

Sigvaldi continues:

"We also keep some of the back flippers, which are put in *"mya"* (whey or lactic acid) for preservation, and eaten in the winter months. This is a traditional way of preserving food in Iceland and called *"júrmatur"* (sour-food), but nowadays mostly eaten at special festivals called *"Þorablót"* in the month *"Þorri"* (starts in late January, extending until late February)."

### Traditional Ways and the Future

Eysteinn thought about the importance of passing the skills and traditions to younger generations:

"In general I think most younger people are not interested or they don't know much about seal hunting. I don't think they oppose the hunting like in some other countries, but they



don't really take much interest in it.

I think if the seal hunting would be introduced more to the public, some people might take interest in it. Today we're only telling it to our relatives or friends, but nothing more, so there it's an ever-decreasing number of people who know much about it or know the skill.

Just how to cut off the skin of the seal is a bit tricky. If you're selling it, you have to be careful not to cut a hole in the skin, it would then be ruined and worthless. This is something my father does really well. I learned it when I was younger, but I've never been good at it. I'm not even sure if I could pass it on to someone else.

I grew up with this and to me it is a normal thing to do. In a way I enjoy this very much. I'm not saying I enjoy killing an animal but I enjoy the hunt and I try to do it as mercifully and quickly as I can. I do get excited when I go out there catching seals. Just like when I go to hunt some ptarmigans or goose.

Last year only about 290 seals were caught in Iceland so it's a dying thing to do. We caught 40 seals last year, so I don't know what's going to happen to this tradition. We sell our skins to a person who makes fur coats. Maybe he will not buy from us in the near future. What do we do then? Maybe we just hunt the seals to get some meat and the flippers.

What happened some years ago, when I was a kid, we would get very good price for the skin. Then Brigitte Bardot and some environmentalists started acting against us and suddenly there was no market for the skin. For some five or six years, no seal hunting was here at Broddanes.

Around that time, the Icelandic Government started the promotion of the local fur industry, minks and foxes. The seal meat was considered pretty good when mixed with some other ingredients to make food for the foxes. A new market for the meat opened up and we started hunting seals again. This time we didn't even bother to take the skin off since there was no market for it. The seal was therefore sent directly to the







meat factory, where it was ground up.

Then around 1989, a small market for the skins opened up again and people started making seal skin clothing and furs. Even our foreign minister wears a seal fur coat on special occasions."

Sigvaldi commented:

"I think it's 5-6 thousand kronur for a skin. It's not much more than that, but I'm not sure. They might get a little bit from the fisheries, I'm not sure. But it's not enough really to keep this alive in the way it used to be, so it becomes a side project. And also not in all the places where they used to hunt."

The local knowledge of waves, ocean, currents and the ecosystem, "wave knowledge" if you will, was important, especially historically, for the hunt. Sigvaldi reflected:

"Knowing the sea currents can be important when you try to get between places, especially in the old days, when you had to row. Obviously you don't want to row against the current. Also the nets are going to be affected by the currents in a sort of fluctuating way. So I'm sure they tried to know the waves and the currents.

There is also one thing you should keep in mind. All the seal hunters are sort of farmers, they are not fishermen. This is because the seal hunting belongs to a certain farm. Where the young ones are born that's where you can hunt them and that's tied to a farm. So the hunters are not fishermen per se, even though many of them also go fishing, because obviously all the farms are by the sea and there are some where you can fish nearby.

I'm very much against the Norwegian-style, industrial seal hunting. I think seals should be utilized by the people who live with them and it should be a by-product and something they can use. Local people sort of understand the way the seal lives, and they don't want to destroy it. They just want to utilize it, make use of it in a way that is proper, and in harmony





with nature.

I certainly very much respect the seal, I think it's a wonderful animal and I would never want to make it extinct. I take great care not to do that. I think almost all the seal hunters here feel the same way. We're not the enemies of the seal."

Eysteinn continued:

"I don't know what will happen if we will not be able to sell the skins, even though we don't get much money for it now. We might then just go for a couple of days, just to get some meat and maintain the tradition. And maybe in ten years nobody will be interested in the seal hunting. Hopefully not."

### Story-telling

"The 'small people', elves, spirits and ghosts is quite common" says Eysteinn. "It is a big part of our history. Most people know the some stories and talk about them but of course not everybody believes in it."

Sigvaldi commented on dreaming, seal stories and stories of the hunters:

"There are not so many stories about the seal, but about the people who were involved in it and how it sort of proceed by the people. Because in the old days it was the first fresh meat you got at the spring. So, people came and they got some meat and they really waited for this. And everything was eaten sort of like in the first half of the 20th century.

Use of dreams is just a normal thing with Icelanders. Maybe not myself, but especially with the elders. They would dream about anything. That would sort of predict what they would going to hunt or what ever. They would interpret the dreams according to whatever they were doing. So certainly some of them used dreams or maybe not used them but they thought they were going to see what's going to happen. But that's just kind of an Icelandic thing, no more being specifi-

cally for the seal hunting.

It's difficult to say. Future depends on whether you are going to get the next generations interested in seal hunting. It's not to everybody's taste. And people are becoming more 'environmentally friendly', they kind of misunderstand this activity. They look at it as just being a cruel thing. They don't see it as preserving a way of life. Maybe they have a point, at least in Iceland it's not necessary for anyone, your life doesn't depend on it in anyway. So you can take it as more of a hobby. Even though my view would be different. It's difficult to explain, how you look at this.

I wish other seal hunters in the north keep up with the traditions and certainly don't try to industrialize it too much, I don't think it's a good thing. It should be kept as a tradition. I hope they do that."







*An example of the rich understanding of the Icelandic landscape is a story told by Eysteinn regarding three trolls and the local fjord:*

*"The story is about three trolls who decided to cut off the West Fjords from the other parts of the country. One troll was digging from the east, in the bay of Hunafloi, while the other two were digging in the west, in the bay of Breidafjörður. The two trolls in the west dug a very shallow but a wide canal and therefore the bay of Breidafjörður is very shallow with lots of small islands and rocks. The troll in the east was digging a rather deep canal and was not progressing as well as the two trolls in the west. When the trolls had almost completed the digging and there was only about ten or fifteen kilometres remaining in a direct line in between them, the trolls realized that the sun was coming up and if they couldn't get into their caves before sunrise, they would be turned into stones.*

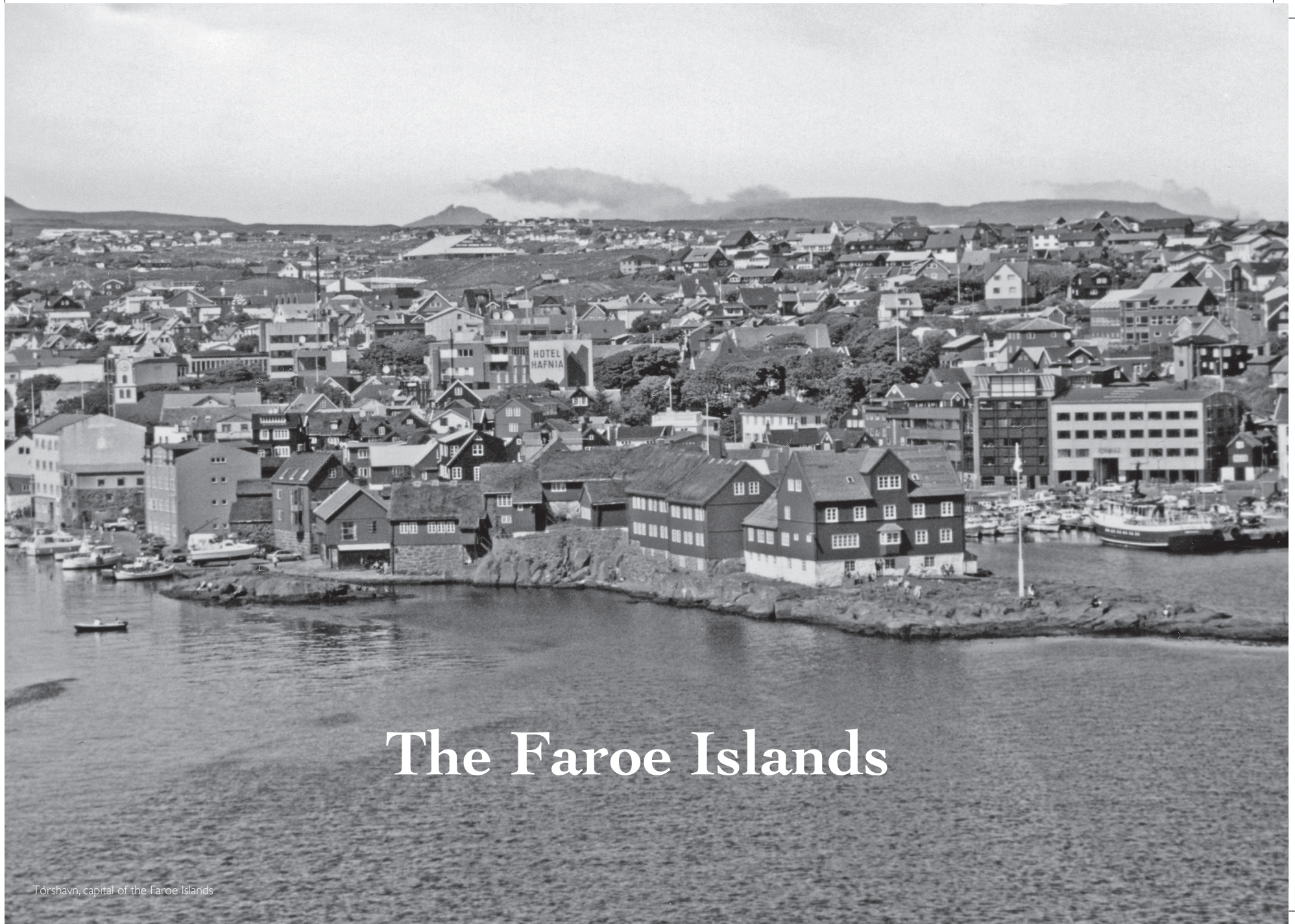
*When the trolls realized they were running a bit late, they started running. The troll on the east ran north to a place called Drangnes, where a small fishing village is now located. When arriving at Drangnes, the troll realized it was too late and couldn't get to its cave. The troll went up to the nearby mountain and kicked the top of it into the ocean and created the island of Grimsey just off the coast. The troll turned into a stone just inside the town of Drangnes. Today there is a small monument beside this rock with this story telling.*

*The other two trolls came from the west, running east across the mountain down into the fjord of Kollafjörður. When they had ran for some time, the sun came up and turned them into stones. They are standing there right now, two rocks known as the man and the woman."*

---

*The interviews were conducted in May 2005 by Tero Mustonen in the community of Broddanes and City of Reykjavik. Additional material was gathered in Northern Iceland in October 2005. Thank you local people in Broddanes Farm.*





# The Faroe Islands

Tórshavn, capital of the Faroe Islands



# Local Voices From The Faroe Islands

By Mika Nieminen, Jobanna Roto and Eija Syrjämäki

## 1. Introduction

Englishman Sydney Norgate described in 1943 The Faroe Islands as “the land of maybe”. This maybe, “*kan-uka*”, seems to be a crucial part of Faroese life and way of living: “*Maybe we go fishing, maybe we travel*” – everything is related to climate.

The Faroe Islands are located in the middle of North Atlantic Ocean, at 62°N and 7°W. The islands consist of 18 islands, which are separated from each other by fjords and sounds. Total area is 1396 km<sup>2</sup> - but there is always no more than 5 km to shore. The closest land is Shetland, which is located at a distance of 300 km to the southeast.

Just over 47000 people and 70 000 sheep live in the Faroe Islands, which capital is Tórshavn. The official languages spoken are Faroese and Danish. Religion has an important role in Faroese culture.

The Faroe Islands has been a self-governing territory under the sovereignty of the Kingdom of Denmark since 1948. Autonomy is ruled by local government, *Føroya Landsstýri*, and parliament, *Føroya Løgting*. The Faroes has chosen not to be a part of European Union.

During the summer 2003 we had the honour of visiting those islands and discuss with the local people and learn more about their culture, how they value life and how they respect

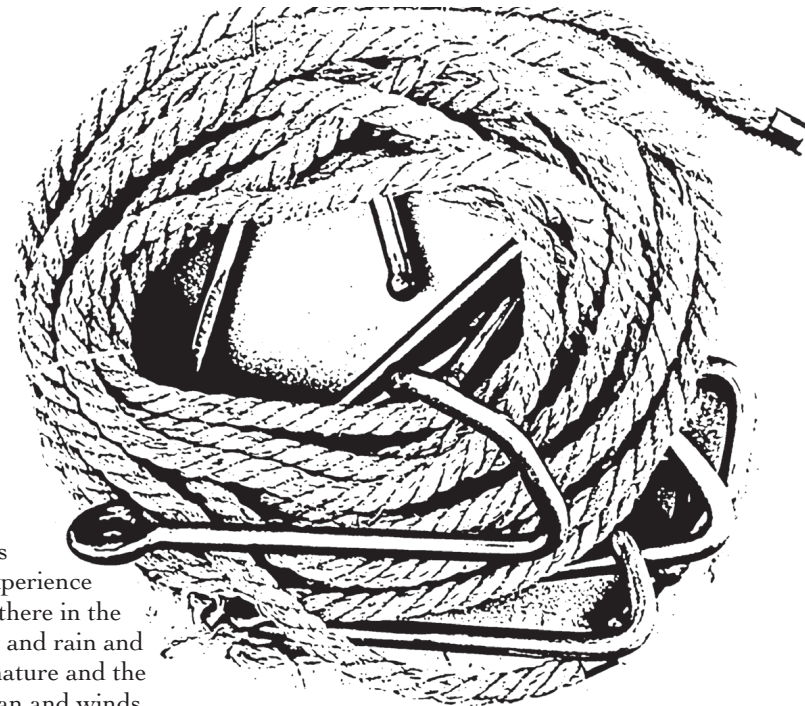
nature. It was rewarding experience to get to live there in the middle of fog and rain and see the true nature and the power of ocean and winds.

In this paper we will be discussing and passing on the thoughts the locals shared with us. All the discussions are used with the permission.

## 2. Whaling

Schools of **long-finned** pilot whales (*Globicephala melas*) have been caught in the Faroe Islands for hundreds of years. Therefore, the Faroese culture is strongly connected around whaling and activities related to the whale hunt. **In Faroese the pilot whales are known as *grindabvalur***

Whaling has had a great importance in the earlier days, because it brought needed addition to a subsistence diet of the people. Whaling has remained as well a way to get food and as a combining factor of people. Today the importance of pilot whaling can be divided to three different reasons – whaling has an importance as food, economically and it has a



social meaning.

The Faroese pilot whaling has been widely and heavily criticised in the International media. This happens often with false arguments, because lack of understanding the tradition.

Ólavur Sjurðarberg lives in Leirvík and works as a school teacher. He is the Chairman of Pilot Whalers Association, which main purpose is to spread information about pilot whaling and train the local people to conduct the whaling in a proper way.

“For the community, Faroes, they [whaling] brought a lot of food for free. That’s important for the community, for all, house holds and the community in Faroes, they got a lot of meat, for free, and also, of course, blubber and then the hunt is going on... when the hunt itself is over, it’s like a dealing process and preparing process to store the meat. It gets all the people in community in one way or another and there’s a lot of people out, so you can have a talk and meet people... it’s nice together.” [Ólavur Sjurðarberg]

According to Ólavur Sjurðarberg, whaling has been and still is an essential part in the people’s lives. Pilot whales bring food for people, and activities related to the hunt itself bring people together. No money is involved in hunting. After the hunt, meat is dealt for free among the participants and the habitants of the particular whaling district.

Ólavur Sjurðarberg also sums up the importance of pilot whaling and connects it into the cultural relevance. “[Pilot whaling] have cultural importance. (You’ve seen how social it’s,) it can assemble a lot of people from different villages, it is one. It’s also a supply for special food for the Faroese households. We [have practised] that all the time people have lived on these islands and hopefully we can continue.” [Ólavur Sjurðarberg]

Everyone living in the Faroe islands has an opinion about pilot whaling. And often it can be heard from them that it is

natural part of their life. They do not have much land to be cultivated and they will take what the nature can offer them. They have developed the whaling methods and they do not see that the methods could hinder them from continuing the whale hunt. Therefore Bjarni Mickkelsen, a biologist, compares hunting in Europe, and hunting in the Faroe Islands, and emphasises the way the pilot whale hunt is conducted.

“As a local I can’t see any difficulties in the pilot whaling. I can see that there have been some in earlier time the way that we traditionally hunted these animals with a spear for example. It was used to secure these animals. Also it was important that we got them. It was very important to get this meat, food source, so you put a lot of effort in to get them. But today we have cut out everything so we use only the most necessary equipment. So this is a way of hunt actually, it is quite different than what you experience in Europe in hunt of land animals but still this is a hunt and we kill these animals as quick as we can with traditional way, which we have found out to be the best way to do it.” [Bjarni Mickkelsen]

Bjarni Mickkelsen continues by telling about the sustainable level of the pilot whale hunt.

“... this is part of nature to harvest these marine mammals on a sustainable level. And in the Faroes we are, we have the very strong feeling about the sustainable level that we harvest and we do quite some calculations on numbers of whales and so on and so on. Still our traditional way of hunting these animals has been, has not threatened any stock of pilot whales in the North Atlantic.” [Bjarni Mickkelsen]

Everyone is free to participate into the *grindadráp*, the whale hunt. There are no professional whale hunters, but the knowledge about conducting the hunt is taught by experienced hunters. There are no special vessels for whaling either. Boats, which are used are normal shore fishing boats.

The *grindadráp* happens only when it is possible to drive the whales into shore. This means that the school of whales



has to be close enough to the shore, before the hunt can take place.

“As you can see, nobody in the Faroes are a professional whale hunter, all have other civil jobs and we never go out for seeking, we never go out by boat seeking where the pilot whales are, we only take them who come here randomly in between the islands. And if it’s possible so we drive them on the shore, it’s also sometimes, it’s not possible, we have tried, but they will not... then we have to let them go out again.” [Ólavur Sjurðarberg]

### 2.1 How the whale hunt happens?

The information presented next is compiled from interviews with Jústines Olsen, Ólavur Sjurðarberg, and Páll Mikkelsen.

The traditional hunt of pilot whales, *grindadráp* or just *grind* in Faroese, is a comprehensive process, which starts from spotting a school of pilot whales and ends when the meat has been dealt and killing area is cleaned.

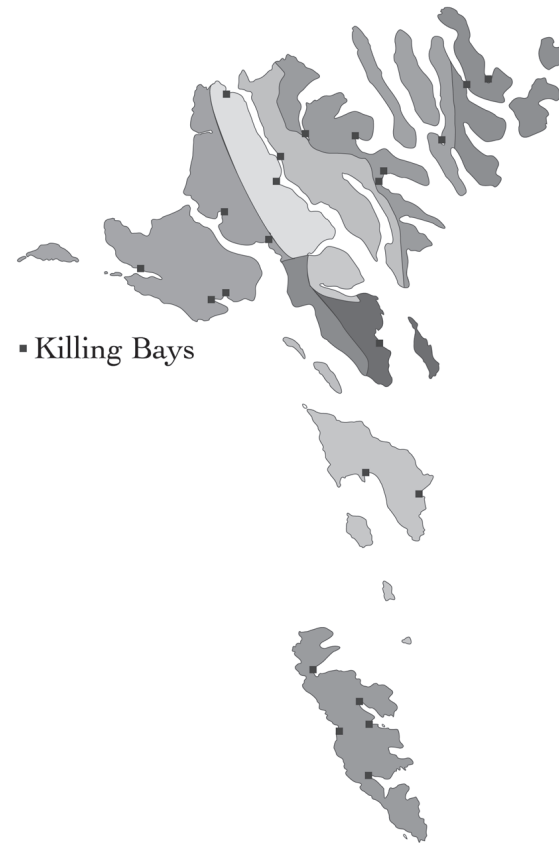
Three stages can be recognised in the pilot whale hunt that is traditionally conducted in the Faroe Islands. The stages are: 1) Driving the whales; 2) Killing the whales, and; 3) Dealing out the meat and blubber.

Driving the whales starts when a school of whales is spotted near the land - otherwise it is impossible or very difficult to drive them on the shore. The hunt can happen at any time of the year, but most frequently the hunts take place during the summer months. Spotting whales can happen from boat or on shore. A message about a school of whales, Grindabøð, is given immediately after spotting. Meaning of Grindabøð is to get enough people for catch. Nowadays this message is given normally via phones.

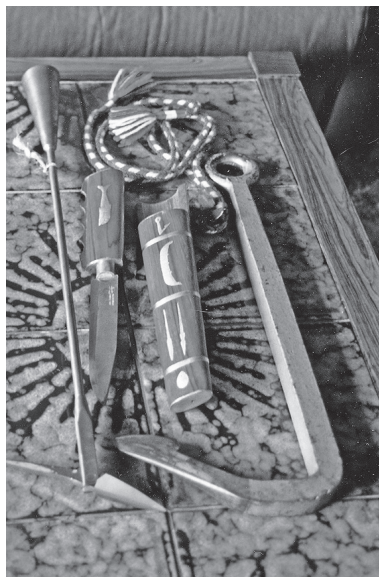
The whales are driven to the specific whaling bays. There are 22 official whaling bays in the Faroe. The legalization is based on the character of the bay – this means suitable sea to-

pography and sufficient land infrastructure. The boats participating into the hunt drive the whales in a wide semicircle. If some group of the whales cannot be beached like described, the group should then be driven out back to the sea.

The second phase, killing the whales, takes place when the first whales are stranded. People, usually men, are standing



© Mika Nieminen, 2003



Some of the traditional pilot whaling equipment: harpoon, knife and whaling hook. The use of the harpoon has been banned since 1986. The traditional whaling knife is decorated with figures related to the whale hunt.



Blubber has to be salted in order to make it last longer.

in the sea; with water about up to their waists. If the whales are in too deep water they should be hauled upper to the shore to ensure that the killing is as fast as possible and that the whale cannot escape back to the sea when it has already been injured.

Traditionally the hauling is done with the help of rope and special gaff, *sóknarongulín*, designed for it. After this, the whale is killed using a traditional whaling knife, *grindaknívur*, by cutting down to sever the spinal cord. This cuts down the blood supply to the brain, which causes the loss of consciousness and death happens in seconds. Usually people who are the most experienced in hunting do the killing.

After slaughtering of the whales the meat and blubber are shared among the participants of the hunt and the residents of the whaling bay. The catch is dealt out according to the rules of traditional community sharing, which ensures that everyone gets their share. If a whale hunt takes place in the same bay for several times, the catch will be shared outside the district.

A district sheriff, who is responsible that the sharing is done in a correct way, looks after the sharing process. Sharing is still done in a traditional way, which means that whales are measured in old Faroese measurement units, *skinn*, which corresponds to roughly 38 kg of meat and 34 kg of blubber.

After the sharing, the meat and blubber are put into storage and prepared. There are various ways to storage and prepare the meat and blubber: meat is normally dried or frozen, blubber is salted or frozen - preparing occurs most typically by boiling. Páll Mikkelsen showed us the traditional way of preserving the blubber in salt.

The methods of whaling have changed in the Faroe Islands. The ways to kill the whales and haul them into a beach are constantly improved. Jústines Olsen, who works as a veterinarian in the Faroe Islands, has developed and keeps developing new tools to make the killing time shorter.

Danjal Andreassen reflected the changes in pilot whaling, which have occurred during the years.

"If you look to the past, when I was young, then we often had this spear, harpoon, so it was not good. Today it's stopped, it's very nice. So, it's much better than it was twenty years ago. I think it is very important for Greenpeace and other people to come to Faroe Islands, and for us to see this thing that you have to change it how you kill the whale. I think it's important." *Danjal Andreassen*

The way the killing process is done has been changing during the years. For example, the use of the whaling hook, *sóknarongul*, has been criticised due to pain it causes for the whale, before the actual killing. Another traditional whaling equipment, harpoon, *skutil* in Faroese, has been banned since 1986.

The blowhole hook has been tested for several years in the Faroe Islands with the purpose that it would replace the

© Mika Nieminen, 2003



The blowhole hook, *blásturongul* in Faroese, has been developed to be used instead of the whaling hook. At the moment, the blowhole hook is tested in the Faroe Islands.





whaling hook. The idea of the blowhole hook is to secure the whale without unnecessary pain.

Other killing techniques are also currently tested, with the intention to make the killing process faster. A new design for the whaling knife can be seen on the right.

## 2.2. Taking Part In Whaling

During our visit to the Faroe Islands the pilot whaling happened twice. We were asked to join the hunt in Hvalvík, 3.8.2003. People who participated into the hunt were from very young to very old, men and women, but mostly men. About 200 boats and more than 1100 people, from which some 500 to 600 people were on land taking part to the hunt on that day. Roads along the bay were full of cars and people watching the hunt, everyone seemed to be there. To compare – no more than 200 (181 people in 31.12.2002) people live in Hvalvík.

When we got into Hvalvík, we asked people if we could join them and come with them into their boats. First we asked from an old man, who was sorry because his boat was very small and thus he could not take us with him, but he advised us to ask from a bigger boat, next to his. The bigger boat was also filled with people, but they made room for us. People on the boat hoped that the hunt would go well and fast.

Our first glimpse from the whales came and we were told that we can see only one tenth of the whole school of whales at time. Huge ring of boats was driving the whales towards the whaling bay, Hvalvík. All kinds of boats took part in the hunt and we were wondering, how it would have looked if the boats would have been those rowing boats that Faroese used in the past.

The most spectacular moment was when the first whales came into the beach and when the first kill took place. The peaceful men on the shore ran to the bay with knives and hooks to do what they had to do. 152 whales were killed and

the water in the bay become red in colour.

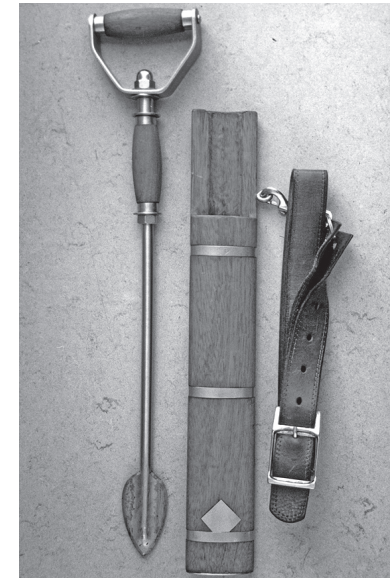
The killing was done fast and the hunt was over relatively fast. After this the slaughtered whales were hauled on the docks, where they were later cut into pieces and shared among the participants.

The time of the hunt was late evening and because of that the sharing was done not until the next morning. As suddenly as the village of Hvalvík had filled with cars and people, it emptied. Everyone went home to wait the next morning. Also we were offered a share from the hunt. Even though we are not Faroese we would have been entitled to a share because we took part by driving the whales to the shore. The whales were shared after killing parts, "*Drápa-partar*". Everyone got 0,7 skinn, which corresponds to some 24 kg of blubber and 27 kg of meat, for everyone taking part in the hunt or living in Hvalvík's whaling district.

© Justines Olsen. Used with permission.



Whale hunts are very spectacular and they might upset people who are not used to seeing them. This picture is not from the same hunt mentioned in the text above.



New design for the killing knife has been developed to make the killing process faster. This knife is currently tested by Justines Olsen.



© Johanna Roto, 2003



Puffins at Mykines, the most Western island of Faroes.

© Johanna Roto, 2003



Sheep herding is an important part of Faroese life.

### 3. Other Traditional Sources of Food

The traditional way of living mixed into the modern way of life can be seen in the every day errands of the Faroese people. The use of natural resources is important for both community and individuals. For example many people still participate in whaling and fowling, which are their ways to live off the land.

Very productive areas with abundant marine species surround the Faroe Islands. Fishing plays an important role in the every day life of people, by providing food and income. Fisheries products, which include farmed salmon, comprise more than 95% of total exports.

Many people get their food straight from the sea and in many cases the catch is divided up among relatives and neighbours. This also means that it is almost impossible to get a fresh fish from the local store.

#### 3.1 Fowling

The Faroe Islands are densely populated by various species of birds. Some of the species e.g. puffins and fulmars are hunted. There is plentiful bird cliffs in the Faroes, but most of the fowling cliffs are on the western or northern coasts of the islands. Fowling happens on the cliff ledges. Men use the net at the end of the pole to catch the bird. Fowling and egg collecting are traditional activities and sources of local food.

Seabird colonies living around the Faroe Islands are harvested based on traditional methods. Hans Jacob Hermansen, who works as driving school entrepreneur in the Faroes and is the former Chairman of Pilot Whalers Association, describes the situation of the bird hunting today.

"We take the fulmars, the young fulmars, we take that in the end of August on the twenty fifth, later again and... I suppose fifty to sixty per cent of the Faroe Islands are active in this thing, whereas in other countries a small percentage

would be active, rest would go to shops and buy it. So we live in a way we go to the shop to buy things, otherwise we are self-providing with things: fish, sheep, birds and so on. So that is the way, it's a combined existence of the life, where the old way of living and the modern way of living." [Hans Jacob Hermansen]

Rene Hansen, 29-year-old bird hunter from Nolsoy, a small island opposite to the capital Tórshavn, reflects that *"the first reason why I catch the puffins is to have something to eat."* In addition, he also expresses his concern about the future of fowling.

"Means a lot for me [fowling]. I am the youngest who is catching the birds now, so it seems like that. When I get old enough, it's stopped." [Rene Hansen]

#### 3.2 Sheep Herding

It is said that *"wool is Faroese gold"*. A sheep is an important animal on the Faroe Islands – and nearly everyone who is living on a village could be called a shepherd. Many people in the Faroe Islands have some sheep by themselves, even on town area. Sheep herding is partly communal – each man owns certain sheep, but pasture is often locally owned. Individual sheep can be recognized with sheep ear marks.

The owner usually does the wool gathering and slaughtering of his or her sheep. According to Ólavur Sjurðarberg, it is an essential thing that you know how to prepare your food from the beginning; the only way to learn your culture is by practising the traditional activities.

Besides sheep, there are some cattle in the Faroe Islands, mainly for milk production.

#### 3.3 Fishing

As a consequence of the location of the Faroe Islands near the strong sea currents the surrounding waters are abundant in fish. Fishing in such conditions requires great amount of





knowledge about the sea currents and navigation.

Faroese economy is strongly dependent on the fishing and aquaculture industries. Because of geographical location most of the exported fish is frozen or salted. But even these days there are a lot of fishermen who do the small catch on the side of fishing vessels. The species with biggest economical value are cod, haddock, seithe, salmon and halibut.

Due to the experience in fishing, the techniques to catch the fish and the other activities related to it have been shaped by the sea and weather conditions. Reðin Leonson, retired policeman from Mykines, tells about fishing in the Faroe Islands and criticises the fishing quota, which is used in many countries.

"Here in the Faroes it is very good with the fishing. Because we have no quota, it is crazy with the quota because if you have quota as one tons cod today and they just take the good cod and rest is handed outside again. They maybe catching ten ton, and take one ton, the rest out, dead fish. But we have fishing days, all you can fish that day you come home with. We have fishing days, instead of quota. And it is ok because here is plenty of fish. Very good regulator with the fishing day. Much better than quota." [Reðin Leonson]

Sofus Strøm, who lives in Suðuroy, in the southernmost island, and works as a teacher, assesses the factors affecting the amount and quality of fish.

"There are many things, which are affecting the growth of the fish stock; temperature, currents. So, we think that because there are so many things, which are affecting, you cannot just look, three, four years back that it is our fishing which is causing that." [Sofus Strøm]

On the other hand, Strøm sees that over fishing is affecting the fish stocks in a negative way.

"But I believe we are over fishing. Not with trawlers, it was ten years ago I thought it was trawlers, which caused it. But now I believe it is the long line fishing, where hooks with

baits are used. In one line fishing ship there can be 40 000 hooks, and if you think there is twenty ships out during one night, I now mean only the biggest ships. And if the weather is good, you also have the smaller ships, so I think we have each day about 10 -15 million hooks in the sea, every day, 110/150 days a year. So, it's very much." [Sofus Strøm]

#### 4. Culture

In the Faroe Islands the local culture and habits have been seen as the power of own identity. In this contexts history, language and traditional livelihoods has had the biggest importance.

Language is for Faroese more than a way of communication – It's an important role Faroese culture and identity. Faroese language is rooted in Old Norse, and is rather near Icelandic. Faroese language was an important element in the process of Faroese nation-building. All informants we interviewed emphasised the importance of their culture.

Like Faroese culture, also Faroese language has been enriched due to the harsh environment and climate. As Ólavur Sjurðarberg reflected to us:

"We have many names, answers for wind because we are so dependent on the weather. So we have, we have many different words for wind and for weather, and also for rough sea."

Faroese culture has its roots strongly in nature; it is dependent on the environment where it has evolved. In addition, natural resources, such as fisheries, are the main sources of income for the Faroese people. Mickelsen tells about how he sees nature and the people.

"I think nature means a lot for the Faroese. I think if you look at the islands you can say we have a lot of nature, still we do not have that lot of land that we can walk on but we have the nature very close to us and we live by nature." [Bjarni



Mickkelsen]

Still today, many people are fishing and participating in whaling and fowling, which are ways to live off the land. The use of natural resources is seen as an important thing for both community and individuals.

However, changes in the Faroese culture can be seen. Rene Hansen tells about the change from his point of view as a bird catcher.

“It’s [puffins] the same as the pilot whaling, now it doesn’t have so much meaning, but in the past it was very important. And that’s the same about pilot whaling, it is not so today... we can eat anything else, but it is just the culture [why] we kill. And some people like very much, old people, but younger generation... I think, 50 years and we not kill whales anymore, make the same with the puffins, we are not catching them anymore. We change, the culture [is] changing.” [Rene Hansen]

Access to exported food has got better and become more ensured, due to the faster and more reliable transportation. But still Ólavur Sjurðarberg discusses whale hunt as an event that brings people together and Sjurðarberg also wants to emphasize the cultural and social importance which cannot be enough stressed.

“For the community, Faroes, [whaling] brought a lot of food, for free. That’s important for the community, for all, house holds and community in Faroes, they got a lot of meat, for free, and also, of course, blubber it gets all the people in community in one way or another and there’s a lot of people out, so you can have a talk and meet people... it’s nice together.” [Ólavur Sjurðarberg]

Even though people are still getting together during a whale hunt, many of the traditions have been changing along the whaling methods. Ólavur Sjurðarberg gives an example by telling about the traditional Faroese dance, which was traditionally danced during and after the whale hunt.

“Earlier, I remember when, when there was a grindadance [pilot whale dance], every time when there has been a hunt. Grindadance was a dance that was going on from the point when the killing process was over, until the participant of the hunt was allowed to go to their way to the whales and cut their share. It was a social phenomenon in these waiting hours, but since our infrastructure has been as good as it is today, the grindadance is not a common way more. So we have lost, because of infrastructure this, I think so, the grinda dance. But it’s written much about that in books, now they only talk about it and do not practice it that much. But we still have the old Faroese ring dance. Grinda dance and the old Faroese ringdance is the same, but when it’s grinda day we do not dance.” [Ólavur Sjurðarberg]

The meaning of this particular *grindaansur*, grinda dance, has changed. According to some of our informants (Ólavur Sjurðarberg and Dorete Bloch), the grinda dance had a purpose, it was danced in order to keep warm and dry out the wet clothes after the slaughtering of the whales.

Earlier, connections between villages and islands were irregular and moving from place to place was done only when necessary. Today, when people have cars and other possibilities for easy moving from place to place, there is no need for the warming up and drying the wet clothes by dancing anymore.

This was seen clearly during our own attendance to the whale hunt in the Faroe Islands. Many people came to participate into the hunt, but after the hunt was over, everybody went back to home and the sharing of the meat was done next morning, when everybody came back to pick up their shares.

## 5. Future and Current Concerns

During the last couple of years the main topic of Faroese





Mykines

political agenda has been the question of independency. Generally strong Faroese identity and the fact that the Faroe Islands is a self-governing territory under the sovereignty of the Kingdom of Denmark, divides people's opinions whether the Faroe Islands should be totally independent from Denmark or not. Question is mostly economical and nationalistic. Leonson expresses his feelings about the independency.

"We can't be independent. We are independent in [our] world.

They should call us Faroe Islanders, we are Faroe Islanders, we can never be Danish.

We are Faroe Islanders. And we are very

proud to be Faroe Islanders. But I will never call Denmark our mother country, we are Faroe Islanders, and proud of that." [Reðin Leonson]

### 5.1. State of Environment

Many of the concerns of the Faroese people are connected to the changes in nature. Environmental pollutants are seen as a threat, which affects consumption of the whale meat. Link between the whale meat and Faroese culture is evident, as many of the traditional activities are done during the whale hunt. Although Faroese culture contains a lot of other things than the whale hunt.

Rene Hansen discusses relationship with nature now and before. Hansen sees changes in relationship with nature of people.

"We are so far away from nature now, they don't understand that [killing animal for food], but in the past when you lived so close to the nature... we lived like the animals, we had to so we could get them, we don't live that way anymore.

There is people who don't like that." [Rene Hansen]

Danjal Andreassen discusses about the importance of taking care of environment.

"The future... I hope we can take the whale, I also hope that the people outside look after us so we do it in human way, always, it's very important. What I also hope is the people outside Faroe Islands, they will understand that we need it, it's important for us. It's not only for whale it's for everything which is living in this world. You have to take care of everything. It's the same with fish. As we say in the Faroe Islands: everybody can't go out fishing. It will take five six years, no more fish. So, I think we have learned it. If we do not have fish we cannot live on these Island. I think we will take care of this. I am sure about it." *Danjal Andreassen*

### 5.2. Future of Traditions?

Sjurðarberg tells about problems of the modern world and sees them happening in the Faroe Islands as well.

"Young people are going to the center area, that's a world wide problem. We also feel it here and areas on the outskirts of the Faroes are, I must say, dying out. Some villages earlier, if you only go fifty year back in this there was big villages and now really small villages. Decreasing, getting smaller and smaller." [Ólavur Sjurðarberg]

Besides the fact that the young people are moving to the capital area, away from the small villages, Reðin Leonson expresses another threat, which is evidently changing people's habits.

"I think in ten, fifteen years they [we] will not eat whale anymore. Because I will not give my grandchildren whale now because after all the talk about the quicksilver. I will not give them. If they want, ok, but I will not ask. When I was a child, it was, you have to eat so much blubber, because it is good for you. I would never do it for my children or grandchildren." [Reðin Leonson]



In other words, if young people are not practicing the traditional ways to live off the land and other traditional activities, the future of any culture is uncertain.

Traditional way of living is an important part of people's life in the Faroe Islands. For instance, Faroese traditional pilot whaling has often been misunderstood outside the islands. For last twenty years the Faroe Islands are most known and criticized because of their whaling practices. The pilot whaling became the object of attention since mid-1980s when antiwhaling groups became interested in it. According to Hermansen, the Faroese pilot whaling is not going to be affected by international pressure, but by another external threat.

"I think that we are not in a position today that international pressure would stop us from killing pilot whales, what I find the biggest problem is pollution, why we have to stop, because the pilot whales, like everything living in the ocean, is so polluted that we cannot use that for consumption and perhaps they are even threatened to extinction because of the pollution." [Hans Jacob Hermansen]

Hermansen is concerned about the pollutants in the pilot whale's meat. Because of these pollutants in the meat and blubber, health authorities have set recommendations for the consumption of the whale meat. According to the experiences we had during our trip to the Faroe Islands, local people are very well informed and educated about the current situation.

For example, Rene Hansen and Reðin Leonson emphasised in their interviews that no bird or whale will be killed just for fun; the killing is done only for getting food.

Hans Jacob Hermansen reflects the current situation from his point of view, and emphasises that the facts should always be checked before making any assumptions.

"The question, whether people are in favour or opposed to whaling that is a personal decision that everybody should be allowed to make. But, what we feel or what I feel is that it should be based on facts, and, I think, that is what happens

all around the world that we are drawing conclusions on information, but we are never checking whether it is right or wrong." [Hans Jacob Hermansen]

Ólavur Sjurðarberg also expresses his concern about the environmental pollutants, which are threat both to the people and the whales.

"Of course earlier the whale meat was a bigger part of the consumption, food here in the Faroes, because it seems we, every year got approx the same number of whales, approx thousand each year, so it was also earlier, but population only was a half of today, so earlier it was more to every household than today, still they got their share and ate it. But we got also a recommendation from health authorities, that we shall not eat whale meat more than every fourth day or so... it's because of pollution. (From the industrial nations here close to us.)" [Ólavur Sjurðarberg]

Justines Olsen brings up another threat, which is brought into the Faroese culture aside the environmental pollutants.

"There is one thing, which is worrying me for the moment, and it is that the recommendations that is coming out in the Faroe Islands at the moment is that they are recommending pregnant women and children: don't eat pilot whale. And from anthropological point of view that's a very tough recommendation. If the children cannot eat and the mother in the house preparing the food is not eating it when will they learn to eat it? I think if that message is coming through it will not take many years until there is no one except old, old man, eating it." [Justines Olsen]

Dorethe Bloch tells about her feelings and questions whether it is better to continue with the traditional diet or replace it by something other. Bloch compares the situation of the Faroe Islands to the situation in Greenland.

"I didn't eat it [whale meat] when I was waiting the babies but I also know from Greenland that it is more dangerous for human beings to leave the traditional food and instead eat,



what you call... if you see Greenland the alternative today to traditional food, birds and seals, whales, it is fast food, pizza and all that stuff. And it is more dangerous for the Greenlanders to eat that, the doctors in Greenland say to go on with the risk in the traditional food. So, I don't know." [Dorethe Bloch]

Another observation concerning people in the Faroe Islands, is the amount of birds. For instance, Rene Hansen has first hand knowledge about the birds, because he has been hunting them for many years.

"There's less birds than it used to be. I don't know what's the trouble. We think it's the food [of the birds]." [Rene Hansen]

Dorethe Bloch links the fluctuation in the bird populations and climate together.

"We think it [decrease of the birds] is about, it's climatic related. You know these oscillations in the climate and it influence on to production of the sea, and you can see it, if there is the pilot whales or not here, or bottlenose whales or not, it is climate related." [Dorethe Bloch]

Hermansen expresses his feelings about the way people are categorized to indigenous and non-indigenous.

"It's another thing that, very often, it depends on, it's the highest discrimination that I find is that the more indigenous you are the more cruel you are allowed to be, but we are not indigenous so we are not allowed to do such things, if we were a bit more dark or if we would have a span of dogs in front of our... in front of us. Then we would be allowed to do this." [Hans Jacob Hermansen]

The criticism is also pointed towards everyone who is presenting opinions and arguments based on feelings or untrue information. Or maybe the flow of information is not efficient enough in today's world even though we are living in the middle of information societies. Hermansen gathers the situation with following words:

"Also I think that the gap is so wide between people living here and the people getting the information about what we do while we are living here, because the image of Faroe Islanders far away, is quite different, I think, from those who have lived... who have been here, to see what actually goes on, I imagine that." [Hans Jacob Hermansen]

Thanks to all who contributed to carrying out this project by giving their time and full support!

We want to present biggest thanks to all from the Faroe Islands, just to mention:

Dánjal Andreassen, Dorethe Bloch, Krisfinn Christiansen, María Dam, Ove Fredriksen, Gutti Guttesen, Bogi Hansen, Rene Hansen, Hans Jacob Hermansen, Anna Jacobsen, Jákup á F. Jacobsen, Marius Jacobsen, Jens-Kjeld Jensen, Andras Joensen, Finnbogi Joensen, Sofus Debus Johannesen, Palli Lamhauge, Reðin Leonson and his family, Bjarni Mickkelsen, Páll Mickkelsen, Justines Olsen, Kate Sander-son, Ólavur Sjurðarberg, Sofus Strøm, Jógvan Vagsheyg and Zacharias Zachariasen.

And to you who made this possible in the first place:  
Tero Mustonen, Snowchange Project; and Tampere Poly-technic



# Ecological Monitoring and Observations of Cultural Hunting of Pilot Whales In the Faroe Islands – The Local Society Perspective

By Jobanna Roto

The Faroese have long been “*a place without interest*,” especially if we are talking about their culture. Internationally, the main topics about the Faroe Islands have recently been oil and whaling. In fact, the pilot whaling can be seen as a central part of the Faroese culture and way of living. The pilot whale itself can be seen as a symbol with both cultural and national meaning.

We can handle the social meaning of pilot whaling through actors and situations. Actors and situations are closely related to place and its special characteristics, both on the sides of physical and social environments.

The place has been a resource where the self-sufficient local culture has lived on in balance with nature. When we are talking about locality, our goal is to find cooperation between social processes and local conditions. The practice of hunting has long been a culturally meaningful practice for the Faroe Islanders as a tradition and a custom with historical roots.

The Faroese call the pilot whale “*grind*.” The traditional killing of the whales, *grindadráp*, has a huge social meaning. The whole village and even some others are taking part in it – there are no professional whalers in the Faroe Islands, neither special whaling vessels or boats.

However, there are plenty of specific rules, norms and habits about the catch. Also many Faroese words and practices are connected to the pilot whale and its hunting: special tools, activities, regulations, songs, foods, and so on.

Grindadráp is said to be bloody. The catch happens only

when a stock of pilot whales are observed near the shore. Then the whales are driven to a killing bay. Hunting the whales makes the killing place look like a blood bay for days. But it's most effective and humane to kill the whales by cutting the blood vessels in the whales' neck. It's the only method by which these whales can be killed successfully. Cutting happens with a special whaling knife, *grindaknívar*.

Pilot whaling is a non-commercial action - every participant of the hunting has rights to get a part of the catch for free. Participating in the hunt is not an obligation, and even the villagers who do not participate receive their shares of meat. After slaughtering the pilot whale the hunting traditions do not end. The grindadráp is a beginning for social communication between the villagers, relatives and friends. Whale division, carving and distribution (*grindabýti*) are also a crucial part of hunting. The pilot whale meat and blubber are a central part of traditional (ordinary) Faroese food.

Internationally, the Faroe Islands are most known and criticized because of their whaling practices, although there is often a huge lack of understanding of the economic, logistical, cultural and social dimensions of Faroese pilot whaling. Yearly the catch in the Faroes varies from a couple of hundred to thousand(s). Behind the criticism is the question about international networking and international contracts and relations. Centre – periphery relations have a central meaning.

The Faroe Islands as a northern autonomy are a small fac-



tor on the international arena, where the cooperation happens between micro and macro levels. We shouldn't see these levels as opposites, but concentrate on the interaction between the levels. It is important to make the actors with power to observe and pay attention also to local societies and their culture. We should see the local, national and international levels as a whole. It's important to give a chance to cultural

diversity, and respect others and their customs - There's not only one way to do and understand things. We are allowed to criticize the Faroese pilot whale hunting, but as long as it is a non-commercial cultural tradition with a great meaning to the local societies, we are not allowed to fight against it or forbid it. We should respect it.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Whaling												
Fowling												
Fulmar												
Puffin												
Gannet												
Guilliot												
Cormorant												
Agriculture												
Lambing time												
Harvest (hay)												
Potato harvest												
Fishing												
Angling from jetty (coalfish)												
Offshore angling												
Onshore angling (salmon and sea-trout)												

Traditional Calender of the Faroe Communities by Mika Nieminen







## Sieiddit

Sieidi are either natural stones or objects made of wood. An island, mountain, or mountaintop may also be a sieidi.

Sieidi are found by riverbanks, upon mountainsides, and along routes where people have migrated with their reindeer. They are in places where people hunt, trap birds, and fish. The sieidi near rivers and fishing places, and on the mountains where reindeer roam, have a clear function, and are clear witness to the existence of sieidi-worship. These sieidi tell clearly about why sieidi-worship takes place, and why it has taken place. One may also visit a sieidi because of problems in one's life, or for other reasons, such as honoring the powers in nature.

These days, some still visit the sieiddi. We cannot be sure why they visit, but they probably follow old traditions. Coins and other items will be seen, left by rocks and on mountaintops. But it is rare to find new or fresh reindeer antlers at the sieidi sites today. And some people think you must be cautious of the sieiddi places, because you can become enchanted and cursed there. The sieidi want to have offerings, and if you cannot provide them with what they demand, stay away.

Sieidi have been heavily discussed. There are many answers and explanations to questions regarding what sieidi are about. Sieidi are regarded as places where much power is concentrated or where nature spirits abide.

Sieidi may be gods, or the spirits of the dead, reborn within a sieidi.

Sieidi may be a symbol of Sámi collective thought, according to which sieidi manifests some common belief about gods, underground spirits, and other spirits. Or, sieidi may function, according to some people, as the marker of the local siida.

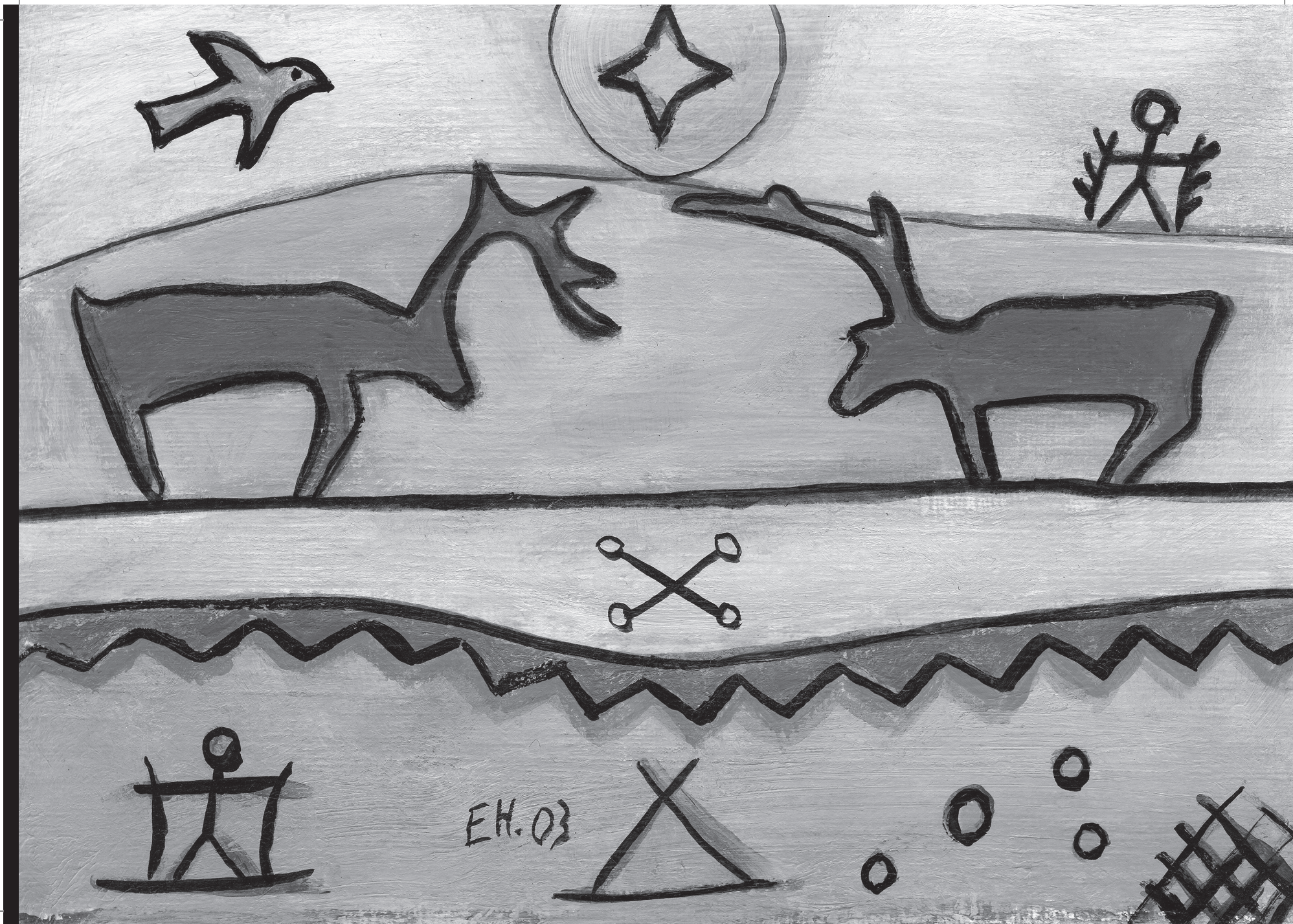
A sieidi is a sacred place, regardless. Whether it is a strangely shaped stone, a distinctive mountain, or a god-image, fashioned in wood. Sámi people are careful when approaching a sieiddi place, and may bring offerings such as reindeer meat or fat, food, money, silver items, and other things. The more powerful the rock, the more it demands.

One Sámi, a former reindeer herder in the Deatnu-river area, tells that before World War II, some reindeer herders in the region often gave offerings to sieidi stones. The herders would worship the stones, "promising themselves to the dark and making offerings to the spirits of the stones every autumn!"

A sieiddi may be used collectively, or by an individual. For example, Kátja-Nilláš had his personal sieiddi stone that he worshipped. Through sieiddi worship, people connect to spirits and gods.

One ancient sieidi stone from Ohcejot-river entered my dreams. The stone's spirit told me it resides inside the stone, sleeping during the day, awakening to work and travel by night.







# Snowchange Sápmi





# Swedish Part of Sápmi





# Concerns of Climate Change and Variability in Northern Fennoscandia

by Stefan Mikaelsson, Vice-president of Sámi Council delivered in SNOWCHANGE 2002 22.2 - 24.2 TAMPERE, FINLAND.

*"We, the Sámi, are one people, united in our own culture, language and history. Living in areas which, since time immemorial and up to historical times, we alone inhabited and utilized".*

**M**r. chairman, Ladies and gentlemen. This is one of the Sámi Council statements from 1986. My name is Stefan Mikaelsson and I am a vice president of the Sámi Council.

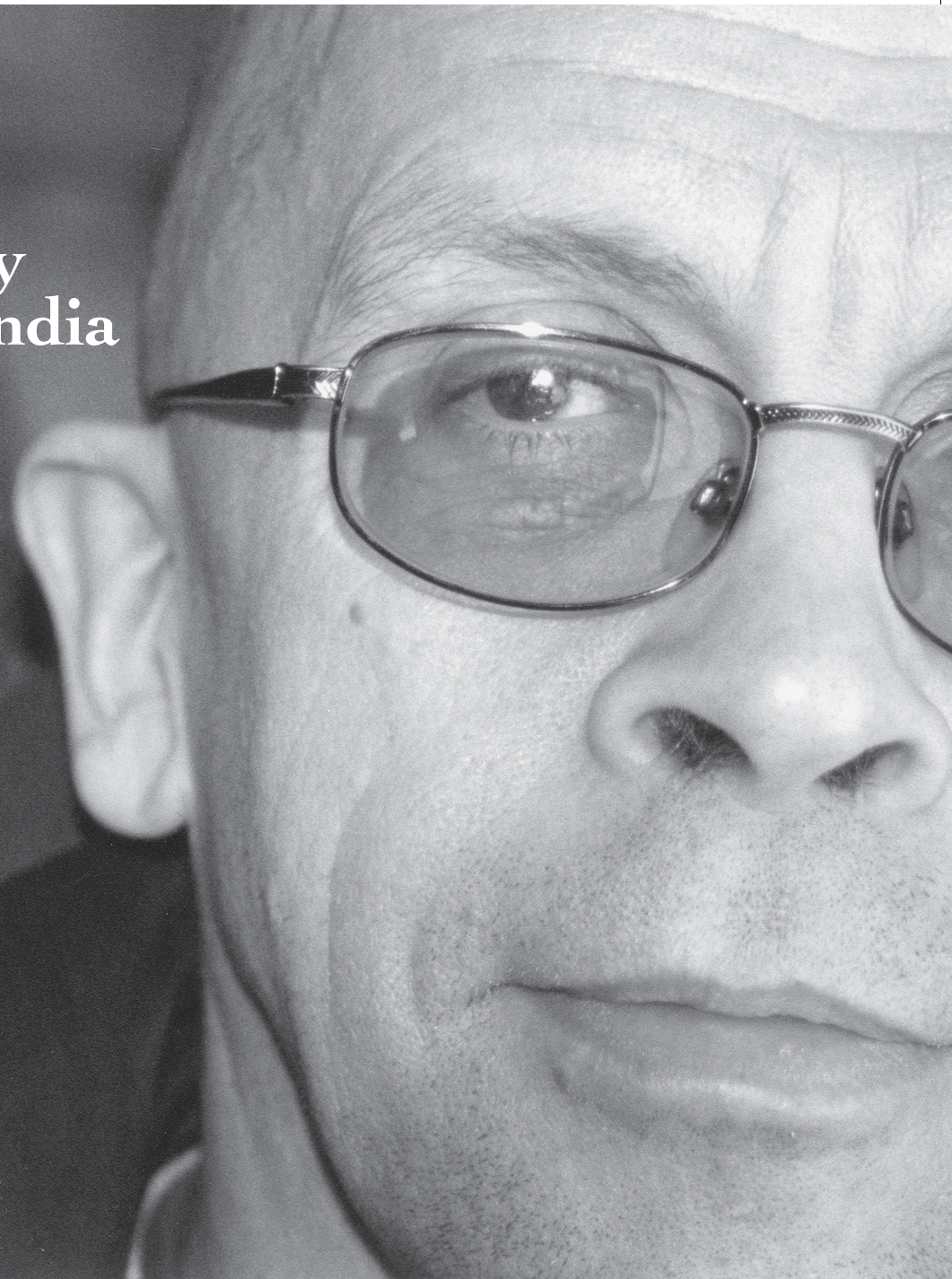
First, I would like to thank the organisers for the opportunity to participate at this important and interesting conference, Snowchange 2002.

The Sámi Council was established in 1956 and its general purpose is:

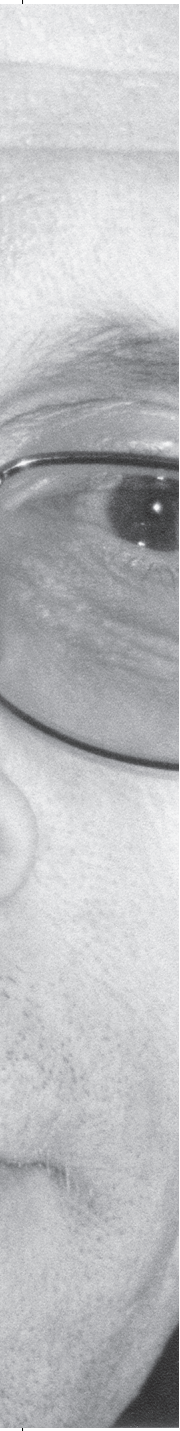
*To promote the interests of the Sámi as a nation, to consolidate the feeling of affinity among the Sámi people, to attain recognition for the Sámi as a nation and to maintain the economic, social and cultural rights of the Sámi in the legislation of the four states.*

The Sámi Council renders opinion and makes proposals on questions concerning Sámi peoples rights, language and culture and especially on issues concerning Sámi in different countries. These issues includes in example: draft decrees, environmental issues etc.

The Sámi Council is involved in International work. Participation in international processes is a necessity for Indig-







enous peoples and has brought substantial result:

The Sámi Council has attained NGO status at the UN ECOSOC and ILO. Also work with and through direct contacts with other indigenous organisations and other NGOs gives better chance to reach common goals.

Sámi Council has participated in the UN works since the 1980s and has contributed in for example to the revision of the ILO-Convention no. 169, the UN Working Group on Issues concerning Indigenous peoples and the work within the UN to establish a Permanent Forum. Sámi Council is also a permanent participant in the work of the Arctic Council.

Sámi Council has been involved in Arctic environmental co-operation from the very beginning of the Rovaniemi Process and the establishment of Arctic Environmental Protection Strategy (AEPS) in 1989-1990.

From my daily work as a reindeer herder in Sweden, I have seen that weather conditions change from one year to another. What is natural climate variability and what is climate change caused by anthropogenic discharges of different kind of gasses is difficult for me to know.

But it is not very difficult for me to know that the unlimited misuse of oil and oil-products are causing a great part of the problems. A long-term sustainable development foresees processes with low consumption of fossil fuels and raw materials.

According to scientific research, scientific research in mitochondrion DNA shows that the Sámi is a genetically unique people and lack relationship with any other known people in the world.

Because the dependence of renewable natural resources the Sámi Council is concerned for the effect of climate change and/or climate variability.

Will foreign trees and methods of growing them be introduced, and how will that affect the reindeers pasture? The risk of losing our possibilities to claim rights to land and wa-

ter are obvious if our ways to live are devastated by, for instance, a major change in climate.

Higher temperatures will probably also cause stress on both local flora and fauna. Changes in fauna will most probably not be in advantage of reindeer herding. Another stress could be diseases that are not found at higher latitudes today.

Will these kinds of diseases become more common in a warmer future? Scientists, as far as I understand, expect diseases that are common in southern latitudes to move northward.

What happens to reindeers, other animals, plants and trees when they are exposed to new bacteria, virus and parasites? I am not sure the scientists can tell us exactly what will happen.

Another result of higher temperatures is expected to be increased precipitation. In the coastal areas of Norway with high mountains will we have to expect more avalanches.

More snow will make it much more difficult for large animals to find pasture. A combination of snow and temperature fluctuations around melting point may make it impossible to get through the ice layers.

This is the reality that faces the indigenous peoples of the Arctic today and very soon the whole mankind. Allow me in this context to refer to the Third Assessment Report of Working Group I of the Intergovernmental Panel on Climate Change (IPCC). The report builds upon past assessments and incorporates new results from the past five years research on climate change. In the Summary for Policymakers (SPM) which was approved by IPPM member governments in Shanghai in January 2001 establish the fact that:

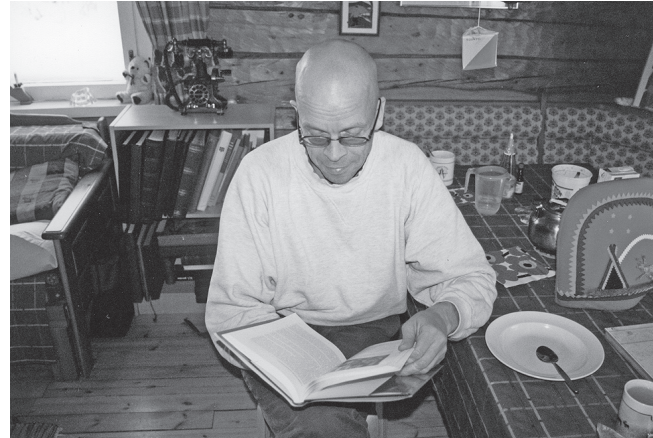
*The global average surface temperature has increased over the 20th Century by about 0.6 degrees Celsius, Globally, it is very likely that the 1990s was the warmest decade and the 1998 the warmest year in the instrumental record, since 1861, Global average sea level has*



*risen and the ocean content has increased, Snow cover and ice extent have decreased, Northern hemisphere snow cover and sea-ice extent are projected to decrease further, Glaciers and ice caps are projected to continue their widespread retreat during the 21st century, Concentrations of atmospheric greenhouse gases and their radiative forcing have continued to increase as a result of human activities.*

The Second Assessment Report of the IPPC concluded: *"The balance of evidence suggest a discernable human influence on the global climate".* Talking about the human influence, it is sad to notice that the Hague Conference on Climate Change 2001 failed, but we do of course hope and believe that the new administration in the United States together with other responsible governments takes the necessary steps to continue the Kyoto Process.

In closing we want again to thank the organisers to have given us the opportunity to address this conference in this important issue. Ladies and Gentlemen: *I wish You all good health and a long life. Thank You for Your attention!*



*'In My Childhood When We Would Watch The Northern Lights Start To Move This Meant That You Had To Stay Inside And You Couldn't Shout Or Run' –*

# Community Voices of Jokkmokk Region of Sápmi [Sweden]

*Ari Hiltunen and Niina Huovari together with the representatives of the Sámi Community in Jokkmokk region*

## The Community of Jokkmokk

Jokkmokk is located in the county of Norrbotten, Sweden's northernmost county, which takes up about a quarter (98911 km<sup>2</sup> [or 98249 km<sup>2</sup>; <http://www.bd.lst.se/bdfakta/enga.pdf>]) of Sweden's land area. Population of Norrbotten is 253254 (as of 1.6.2003).

The municipality of Jokkmokk (population 5782 as of 31.12.2002;) is located on the Arctic Circle and is Sweden's second largest municipality in terms of size. The total surface area is 19474 km<sup>2</sup> [or 17735 km<sup>2</sup>, <http://www.bd.lst.se/bdfakta/enga.pdf>] - an area that would take up to 2/3 of the size of the Netherlands. Half of this area consists of an extensive mountain range. There are national parks and a number of nature reserves. The UNESCO nominated the Laponia area (which includes Sarek, Padjelanta, Stora Sjöfallet and Mudus) as one of the earth's World Heritage sites in December 1996. Laponia was chosen as a combined nature and cultural heritage, which is unusual.

Jokkmokk is a Saami (Sámi) word meaning "a bend in the stream". Originally it was the name of a group of 'forest' Saami who had their winter settlement near the Lake Tal-

vatis. The town of Jokkmokk dates from the beginning of the 17th century when King Charles IX of Sweden decided to create churches and marketplaces in the north. His goal was to extend the kingdom to the north, and control the trade in Lapland and in this way impose taxes to help finance his wars. Until the late 19th century, the population of Jokkmokk consisted mainly of Saami, but with the coming of settlers and builders of hydroelectric power the situation changed. [<http://www.bd.lst.se/bdfakta/enga.pdf>, <http://www.turism.jokkmokk.se/eng.shtml>]

## Money Talks? Local Concerns

### Forestry

Stefan Mikaelsson is the chairman of the Swedish section of the Saami Council (Sámiráddi), which is a transboundary organisation over the whole Sápmi i.e. Saamiland. Sápmi covers the northernmost parts of Norway, Sweden and Finland plus most of the Kola Peninsula in northwest Russia.

Mr. Mikaelsson is a reindeer herder by trade and he lives





west of Harads – a small town by the River Luleälven. He belongs to the Udtja saame village (sameby), which is considered a saame village of the ‘forest Saami’ because its pasturelands lie in the forest area situated below a high mountain range.

Mikaelsson’s concerns arise over the well-being of reindeer husbandry – or rather the lack thereof. In his opinion, the forest industry and air pollution are to blame for the poor condition of the forests, thus leading to the harder circumstances for the reindeer husbandry. “Old forests are diminishing and the average age of trees has fallen from 120 to 90 years due to the new forest law that allows companies and private forest owners to clear-cut forests that are not fully grown. I have enjoyed being in the forest for many, many years since I started to follow my father when he went to see his herd, but now I have noticed changes. The trees are not as green as they used to be – the colours are different – and it feels to me like they are saying that they don’t feel so well. “

Different lichens, growing on the ground as well as the trees, are the most important winter nutrition for the reindeer (*Rangifer tarandus*). It takes time for lichen to grow and the early cuttings prevent the tree lichen from ending up as animal fodder. Furthermore, the need for transporting timber leads to building dirt roads that destroy also the ground lichen. This leads to extra work and expenses in the form of supplementary feeding of the reindeer, especially during winter.

New trees of foreign origin, for example, the beach (or shore) pine *Pinus contorta* have also been introduced in northern Sweden. “The forest industry has been supported by the authorities to import trees that grow very fast, but they didn’t look so much upon the quality of the timber - and definitely not on the possibility of having reindeer husbandry in the areas they operate”, Mikaelsson claims. He adds: “These plantations mean it is very hard to travel by snowmobile and



they make locating yourself difficult since they are grown in straight lines. Also the reindeer seem to avoid these areas.”

According to Mikaelsson, the quality of water has suffered as well in his neighbourhood. After cutting down a forest, it’s common practise to dig ditches in the soil, which results in faster flow of water – and residues of air pollution - from forest to rivers and lakes. Roach has been one of the fish suffering from these circumstances. “I’ve noticed that small rivers are looking like the rivers in India, they are more brown than blue. The one good thing about the actions taken by the forest industry has been that people show they are Saami in a much higher degree than ten or twenty years ago, and that is very positive.”

Interestingly enough, parts of Udtja’s pastures are located inside an active rocket testing area of the military. The area, which is now protected by law, has been cut off from forestry to a large extent and from tourism altogether, allowing much

Traditional style ‘Gammi’ Shelter That is a Church Today in Staaloluokta



of the old forests to survive. "This is, of course, very good, but I think we need to increase our efforts to rescue what is left and make sure that profits of today will not lead to great losses tomorrow", stresses Mikaelsson.

### Hydropower Issues

Stefan Mikaelsson isn't the only one concerned over the future of Saami homeland. Per Ola Utsi is a reindeer herder in Sirges sameby, the largest saame village in Sweden. He's also a handicraft's teacher with nearly twenty years' experience in Sámiij Áhpádušguovdásj (the Saami Educational Centre) in Jokkmokk. He lives in Porjus about 40km north of Jokkmokk. He has experienced firsthand the effects of the quest for a higher standard of living in 21<sup>st</sup> century Sweden. "They say that waterpower is environmentally friendly energy, but I say that stands for those that don't live there. For those of us that live next to a big reservoir it isn't environmentally friendly. It is inflicting damage. My way of living is damaged. My environment is damaged. My source of livelihood is damaged. You have to take another perspective. You cannot say that waterpower is green energy. It is a lie. It is green for some, but not for me. This point is easily forgotten."

Bertil Kielatis, the chairman of the Sirges sameby specifies the situation: "The whole River Luleälven is regulated all the way from the coast to up here. So, in this area we have thirteen (13) power stations built over our pasturelands, and that is a lot of land we have lost because of this water regulation. We had to change our migration paths, and it was a lot of arduous work. We had to move the habitats of those who lived closer to Lake Akkajávrrre [in Swedish Akkajaure]."

Kielatis goes on to say: "I feel we have been suffering so much because of the hydropower. On the other hand, the society demands it, but we've had to suffer too much for it, lost so much land. The lowlands that we have lost are the areas of

lowest snowfall and the most suitable for vegetation to grow. Those are gone."

Gun Aira, a Jokkmokk native, a reindeer herder who during winter works as a teacher in a Saame elementary school, has noticed the changes in the nature especially in the autumn and wintertime. She states that one of the biggest concerns for reindeer herders living in the area are the regulated rivers since the ice have become unstable. "It's hard to even think about moving with the reindeers along the river. Sometimes it is possible if you move earlier in the spring but then you must be very observant. "But even the unregulated rivers can be dangerous. "If there is not much snow the ice is stronger. Last year there was much snow, so the ice wasn't thick. It changes from year to year."

### Local Observations of Changes In Climate and Nature

Lars Anders Baer belongs to the *Luokta-Mavas* saame village (sameby). He is the *chairperson of the Saami Parliament (Sámediggi) in Sweden* and a reindeer herder. He was born in 1952 and has witnessed many changes in the environment during his lifetime. Many of these changes have made reindeer herding unstable especially in the wintertime.

"Snow is wetter than before and arrives later. Temperatures in the autumn have varied from cold to warm making the snow-covered pastures more unreliable for reindeer herding. But of course it depends quite a lot on the first snow. If the ground is warm when the snow comes, the resulting ice on the ground makes it difficult for the reindeer to feed themselves", comments Baer. "In my lifetime there has been less wind from the west in the mountains. From the reindeer herder's point of view that was a good wind. Reindeer always headed towards the wind, so more mountain areas were uti-







Rapids by Láddejákká Cabin





A Controversial Hydro-Dam Displaying  
Sámi Symbols Drawn by Lars Pirak



lized. But now there have been more winds from the east and the reindeer can end up in the forest. When I was a child, summers used to be very windy, but nowadays we rarely get strong winds from the west", he adds.

Rune Stokke, the chairman of the Udtja sameby tells about his observations: "Maybe over the last thirty years that I can remember, it seems that it has become a different weather, both with summer- and wintertime. And I'm not the first to think this way, because over the last few years, if there had been a high-pressure front, it may have remained for several weeks, and if it had started to rain, it would have rained for several weeks also. But in terms of temperature I don't know if there are big differences. But in any case, I think that when I started out as a reindeer herder there were more frequent and longer cold spells than what we have now. And with cold spells I mean temperatures lower than -30°C – temperatures between -30°C and -40°C. That was a lot more common thirty years ago. The decrease in the amount of reindeer since the 1990's is largely due to these strange winters. With this formation of ice, the reindeer have had difficulties to find food."

Bertil Kielatis states: "We noticed some fallout a couple years ago in these areas. Snow became dirty, but I guess it was mainly from Sulitjelma. They have this copper mine here across the border in Norway and maybe it came from there, we don't know. Or possibly it came from the continent – from Germany or... We have a lot of winds from the south-west here in the mountain area, so it's possible that the fallout came from there. This is what we have noticed."

Ellie-Karin Pavval from Tuorpon sameby lives in Tårnrajaure about 40 km from Jokkmokk. According to her summers have become warmer and winters milder: "Some summers, like this summer, have been so dry. You can even walk in the swamps without any rubber boots. Few summers back I saw three rainbows at the same time." However, she hasn't seen mountain lemmings (*Lemmus lemmus*) lately. "When I was

a child we saw them yearly. Willow grouse (*Lagopus lagopus*) has also diminished. But you can still see the weather from the reindeers; if it is windy the reindeer flits here and there. It predicts the weather", she says.

Rune Stokke continues: "These thunderstorms, in my opinion, have become a bit strange. I think they are so damned hard now. We have houses located between lakes here where we live, and in the last few years the thunderstorms have come and lightnings have struck the houses and broken the fuse boxes, and that never happened before - and the houses stand where they have always stood." Lars Anders Baer also reports a case of out-of-season thundering: "We have had thunder in winter in December. That's unusual."

Rune Stokke goes on to say: "Last year we had a lot of red foxes (*Vulpes vulpes*), but maybe it was because we had a warm summer and rodents and such had survived (the winter) – there were an incredibly large amount of foxes. And bear (*Ursus arctos*), for example, has increased a lot in these regions. I can tell about something that happened this week – on Monday this week – I saw a bear that lay on top of a reindeer eating, and last night I saw a cadaver of a grown-up reindeer and two calves that a bear had killed, so, in fact, there are plenty of bears. And it seems to be the case over the whole county of Norrbotten. A lot of female bears with cubs - two or three of them - they have increased a lot. In the Jokkmokk region and also in Arjeplog and towards Älvsbyn."

"I don't know about new species of animals, but, for example, beaver (*Castoridae*) has made an incredible increase (in its population) in the last 20 or 30 years. It was a really rare case if you even saw a beaver thirty years ago, but now they have several communities around Kåbdalis. And even all the way up near Naustajaure and Tjaveljåkkå. They were sighted up in the summerlands last year, they've never been seen there before. Also otter (*Lutra lutra*) has increased over



the last fifteen years, it is also quite common in this area. You see plenty of tracks, you can even see them in the streams.”

“But those, who have increased the most over this period of time, are the swans. When I was little, there were few swans. When you saw a swan...it wasn’t exactly a sensation, but when there was a nesting swan, it was news when you came home. But nowadays they are everywhere – yesterday morning we were flying over marshlands (in a helicopter) and I saw fifty of them. We counted them, they were in two lakes. Here they have large marshlands to dwell.”

“And those, who have actually diminished, are the small birds that chirp in springtime...I’m not that familiar with their names, but...A number of springs have been incredibly quiet – or maybe they have chirped, but they have been so few. It’s unknown where it results from, because in these parts there are lots of marshlands and thus lots of mosquitoes (*Aedes*) every year, so the birds should have food. It could be something that happens before they arrive here or that the nesting goes wrong or something.” On the other hand, there are sightings of new bird species every year.

Earlier, there were many lakes with water horsetail (*Equisetum fluviatile*), which is also good support fodder for the reindeer, growing in them. “I have noticed that water horsetail doesn’t grow in certain lakes the way it used to, and we don’t know the explanation for that, either. In certain lakes the water horsetail grew so robustly that it was practically impossible to row your boat through them during summer, but now, in the last 5-6 years I have noticed that there is no water horsetail growing in there – so, all of a sudden, you can just drive your boat in (the lake). And then there are lakes that seem to be filled with vegetation, but we found an explanation for that. We believe it is because the lakes were fished a lot with seine [nuotta] in the 1960s and to some extent in 1970s, but after that it was stopped. And it’s obvious that when you fish that way, the net moves along the bottom



Virihaure Lake in Jokkmokk Region



(but since the net fishing stopped), the plants had a chance to grow back.”

In 2002 there were surprisingly few mosquitoes in Udtja, “even there where I have my summerplace, although there are so many bogs, small ponds and puddles and everything there.” The latest tendency with the occurrence of insects has been that they appear earlier than usually. “Black fly (*Simuliidae*) and the smallest – I don’t know, if you have that insect - biting midge (*Culicoides*), a little devil that bites horribly. The black fly can appear before midsummer and that’s a bit unusual. The mosquitoes appear first – that’s the usual (occurrence) – and the biting midge last, in August or beginning of September.”

Gun Aira concurs with the statement: “Mosquitoes have always come after the frost and in August the black flies have turned up, but now they start to appear already in June.”

Baer: “There are some animals that change the colour of their fur in winter, for example the arctic hare changes its fur quite late. But sometimes it’s quite the opposite and you see white hares and willow grouses when the ground is still bare making them highly visible (thus vulnerable to predators).”

GA: “The arctic fox (*Alopex lagopus*) has disappeared. It has almost died out, possibly the red fox has gained a larger dominance. It really doesn’t belong up in the mountains. The same with the lynx (*Felix lynx*). It a forest animal and goes after the hare (*Lepus timidus*). But the forests are being ravaged more and that brings big changes. The numbers of the hare gets lower and thus the lynx follows after their food and this usually leads up to the mountains. When a lynx eats a reindeer, it only eats the meat. A lynx killed one of my calves and it had only eaten the rump and it felt bad to see that. Lynx has bad teeth and it needs soft meat. Lynx has gained more dominance up in the mountains and the same thing with the bears. Bears have always been found from the mountains but not as high as nowadays.”

BK: “The mountain lemmings are rare. We had them a couple years ago, but not the big mountain lemming invasions we had before. The arctic fox has decreased, you can tell. But on the other hand, predators have increased. All Four Great Beasts [bear, wolf, wolverine and lynx] have increased because of the fact that we live in a national park and these are protected areas – hunting of the Four Great Beasts is forbidden, but elk we are allowed to hunt here in Badjelánnda [Padjelanta in Swedish].”

### Traditional Knowledge

Elli-Karin Pavval tells: “In my childhood when we would watch the northern lights start to move, this meant that you had to stay inside and you couldn’t shout or run.

And in the olden days they used to say that when you saw a rainbow it meant that the biblical Flood wouldn’t come upon the earth - that the grace of God would always be upon us. And the weather was also seen from the stars and also from the moon, they said. And it was a common belief that if there was a woman expecting a child, when the moon was black she could go and ski and leave for any place she wanted and she wouldn’t give birth to that child during that time the moon was black. That’s what I heard when I was a young girl.”

She adds: “You could foresee what kind of flood there would be in the summer. People caught a big pike and took the liver out of the pike, and looked what the liver looked like. From the liver they saw if there’s going to be a lot of water, if there is a lot of heavy rain in the summer. That’s what the pike’s liver told.”

Gun Aira: “Before the snow comes you try to look at the nature for a sign of what the winter is going to be like. Those who have the skill look at the intestines of the fish and even the intestines of the reindeer during slaughtering.”

BK: “My parents taught me to use the nature, not to dis-



Elli-Karin Pavval and Niina Huovari in the middle of the community documentation in Tärnajaure June 2003



turb it, to try to be careful with it. It is the interest rate (of nature) we live on – leaving the capital untouched, so to speak, and living on the interest that nature gives. And that is how we hopefully can go on living.”

Per Ola Utsi continues: “We cannot put it into words, but we know how the weather works. We know when it pays off to gather the reindeer (for separation or calf-marking) and we know when it’s suitable not to. Without that knowledge there can’t be any reindeer herding or culture. That’s how it is. We are very skilful in binding our knowledge of nature and the weather together, because without it we are nothing.”

Isak Pålve from Tårnajaure (Tuorpon sameby) talks about the importance of understanding of place names in the local topography. Especially a certain rock called ‘Staalo Rock’ was mentioned: “I believe they [the old people] have seen staalos [a mythical Sámi creature] there. And it has been a place of sacrifice. In these parts we have a lot of old sacrificial places, sites of power. Staalo Rock is one of them – it is a very big rock with a hole in it. It is approximately seven–eight kilometres along the ‘Staalo route’. It used to have a ‘silver corner’ but this has vanished. Old people used to discuss place names while they skied. Today it is impossible to talk of place names when you drive a skidoo or if you are in a helicopter. This is why a lot of the old names for smaller places will disappear. Knowledge exists, we live it. But I do not think about that ever. It is just there. We still follow the old ways. Naturally. This is our way.”

## Human Development

Rune Stokke starts: “Those who are eighty years old have experienced an unbelievable change during their lifetime in this society, and even with the reindeer herding and in terms of weather, even though they had poor winters in the past as

well.”

“It is obvious that the rural areas must have a chance to live also. Personally, I feel that in my municipality the amount of communal support is quite lean – in certain cases, anyway. And it goes to show that the support is not enough, when the young move away from the countryside. In the village there are two enterprises – one is running a slalom-center and the other is a tourist business – that are seeking for employees, but there are no rental apartments for them. And this is just the way to reduce the countryside to poverty: the shops are closing, the schools are run-down and so on. Thus, strong efforts and money from the government are needed to keep the people and young here.”

“I’m saying this only from a reindeer herder’s perspective, but we need a better form of support to start a new herding business, so that the trade becomes attractive for the young people that, for instance, have left to study in high school, but would like to invest in the trade”, he adds. The drawbacks of the trade also include strenuous work and the lack of free-time. On the other hand, Stokke finds it positive that there are more and more of women in the business, bringing in whole new perspective in the field. “It would be a lot better, if there were little more women in the field, in general. Not everybody has to sit on a skidoo or run after the reindeer in the summer and take care of just the heaviest chores, because there is so much more that is related to the trade. So, more women would be welcome, without a doubt.”

In Stefan Mikaelsson’s view the Saami in the area put too much emphasis on meat production: “It’s not possible to have the reindeer to meet the demand of meat for the whole of Sweden.”

Adopting ‘green tourism’ might alleviate the pressure of raising herd sizes: “Tourists would come to see the livelihood, the nature or whatever thus bringing money in. So subsequently, the herder would need less reindeer to make ends



meet, hopefully meaning less work for the same profit. All this without necessarily having to build facilities for purposes of tourism.”

Bertil Kielatis adds another perspective: “A lot of bureaucracy has developed in the village; things have changed enormously between when I first started out as a young reindeer-herder and today. Progress has been rapid – technical progress has been terribly rapid. From skis via snowmobiles to helicopters, now we have telephones and such things. And it is easy with a snow mobile, but it’s also a possible future source of occupational injury, hearing and so on. There are not purely good things with technical progress – there are both benefits and disadvantages.”

Mikaelsson finds the hope for the future, education, a double-edged sword. On one hand, “school is taking more and more time and effort from children of today. Nowadays, it’s practically needed to have a high degree of education, even though it may not grant you a well-paying job or good work. On the other hand, it is beneficial for the Saami areas and reindeer husbandry to have just as high an education as the population in general.

The modern school might have a role to play in giving the children an understanding concerning why it is so important to learn and use the Saami language and also other Saami traditions – and not only in giving an understanding but also in showing Saami children that the culture is accepted by the majority of society, because children are very sensitive to the acceptance of others. If they find that they are not accepted, they don’t want to be a part of that culture.”

Mikaelsson goes on to say: “One good thing that is giving the Saami youth a lot of positive energy, are the confirmation camps that Sámi Nuorra (Saami Youth) arrange every year. The camps gather Saami youth from all parts of Sápmi, and they are very well appreciated. Maybe the number of confirmations is going down in general, but I think the appreciation

for these camps is increasing. Most of all, when meeting their Saami friends, the children can get their origins, traditions or what they have learned, acknowledged and feel strengthened by that – and that’s a very nice thing.”

Elli-Karin Pavval elaborates: “Nowadays the language has gained more popularity, young people read and study the language. For example, the living conditions of the reindeer must be expressed in the Saame language because you have to talk about mountains and such like the river names, and which kind of fur the reindeer have. When you have been walking about, you describe where you have been.

She goes on about the standing of the Saami women in Tuorpon sameby: “I have never felt that the Saami women would have had a poorer status than the men. It is the same as the men’s and it’s always been that way. Although women don’t have the same strength to ride (a snowmobile) and perform the tasks as the men, nevertheless the women ride the snowmobiles and go and gather herds and participate and everything. So that is why I don’t really understand those women who claim that they have a poor status. I have never felt that way.”

## Personal Responsibility

The municipality of Jokkmokk is renowned for the production of hydropower, but Stefan Mikaelsson is quick to give alternatives. Solar panels and wind mills tap into renewable energy sources and “it’s possible to set up small hydropower plants along natural flows of water without the need of constructing any large dams”, suggests Mikaelsson.

He emphasizes responsibility on a personal level. “It’s very easy to put demands on the society and other people but do nothing yourself, but you can only be counted credible when you practise what you preach. Maybe it’s not possible to stop other people from polluting our world, but it’s possible to





prevent our own pollution and that's where we have to start from. It's a question of having a responsibility to yourself – maybe not to the society, but to the environment because we are not living in a healthy way."

### Ownership of the Sápmi

Bertil Kielatis has a clear view on the topic: "This is the land of the Saami people. We were here first and moulded the region...The Saami nurtured this region and did such a good job of it – we've been maintaining its character and developing and moulding it, so it could become (the Laponia) World Heritage (Area of UNESCO)."

He continues: "The Saami take care of the cabins (in Badjelánnda) and it's working well – these are the things we want to take part in when making decisions. We are not against tourists, people that trek, but we want to guide the progress – maybe have the path outside somewhere else – these are the things we want to develop in this region on our own terms, so it's not the Swedes that develop it – this is what it's about."

Elli-Karin Pavval gets the final word on the ownership of the Sápmi: "They have made the laws so that you must follow them. But the thing we would have wanted was a shared Saami land without a single border. I don't know if it would will happen in the future – in my time it won't happen, but for the future generations (maybe)..."

### ACKNOWLEDGMENTS :

#### The interviewed:

*Gun Aira*  
*Lars Anders Baer*  
*Bertil Kielatis*  
*Stefan Mikaelsson*  
*Elli-Karin Pavval*

*Isak Påve*  
*Rune Stokke*  
*Per Ola Utsi*

#### Those interviewed, but left out of print:

*Nils Henrik Gunnare*  
*Edvin 'Sarek' Nilsson*  
*Jan Stuge*

#### Thanks to

*Ája Library*  
*Anna Westman and the personnel of reception at Ájtte Museum*  
*Gareth James for proof-reading*  
*Jokkmokks Styrkelyftsklubb*  
*Marko Marjomaa for Saami translations*  
*Lars Pirak*  
*Jane Axelsson and Håkan Landström from the Projekt Laponia (Laponia Project)*  
*Yngve Ryd and Isse Israelson*  
*Sámij Áhpáduiguovdaj (the Saami Educational Centre):*

- *Kent Isaksson*
- *Principle Henrik Micael Kubmunen*
- *Fritz-Åke Kuoljok*
- *Per-Jonas Parffa*  
*and Stefan Mikaelsson – as always*

### REFERENCES :

<http://www.bd.lst.se/bdfakta/enga.pdf>  
<http://www.saamicouncil.net>  
<http://www.tracetech.net/sanat/>  
<http://www.turism.jokkmokk.se/eng.shtml>



# Finnish Part of Sápmi



*A shortened version of the text has been published as well in the ACIA – Arctic Climate Impact Assessment by the Arctic Council.*

# Sámi Nation Environmental Concerns from the Community of Purnumukka and the Vuotso Region

by Tiina Salin, Mika Nieminen and Tero Mustonen

## Introduction

The documentation of ecological, climatic and other changes in the Vuotso region and more specifically the small Sámi Reindeer community of Purnumukka took place in two stages. The initial community contacts, networking and first interviews took place in September 2001. Following that, during March and April 2002, Mika Nieminen, a staff member of Snowchange project spent time in the region, living and practicing reindeer herding in Purnumukka with Pentti Nikodemus and Riitta Lehtonen. In the process he spoke with active reindeer herders, hunters, Elders and fishermen in the region. The community concerns of changes taking place are present. We chose to present a mix of Elders comments, as they carry the most extensive knowledge with additions from the younger generation of Sámi living in the region. This is what the local people had to say.

Sakari Keskitalo, a 72-year-old described himself as follows: “this is where I have lived since my youth, my village was flooded under the reservoir [construction of Lokka and Porttipahta reservoirs in the 1970’s] so I moved here in Vuotso 35 years ago. As a young man I used to be a horseman, for ten or so years I rode logs on the timber cuts. Then in the 60’s I began as a reindeer herder, bought a skidoo and spent 30 years doing that. Then I retired and started fishing, for there

was so much whitefish in the summers. Then that went under tax, the tax got so big that there was no point anymore. It’s been three years since I last fished. And I gave my reindeer to my son, he is continuing, a professional reindeer herder.” Iisakki Magga is another reindeer herder, aged “only 63” as he says. “Since a school boy I’ve been with the reindeer. It was hard work; moving the male reindeer used for pulling sledges, I had 30 of these to look after, reindeer of three houses. In the morning I had to move them; I had to start at seven so that I could make it to school at nine. And after school I took my school bag home and went out to move the reindeer again. That was hard work.”

These two men reflected the overall changes that have taken place in the region. By far the biggest ecological disaster that they have experienced has been the construction of the Lokka and Porttipahta reservoirs and the massive clear cuts preceding the construction. Best lichen areas were flooded and they had to transport 5 000 reindeer away from the grazing grounds because of the construction. The specific grazing grounds were excellent autumnal grazing areas for the reindeer. As well, in the local river Tankajoki the salmon used to migrate all the way to Tankapirtti area. This was before the reservoirs came. The Isohaara Powerplant connected to the reservoirs blocked the salmon from entering upstream. However, there is some talk of re-opening the access for salmon





in the future. Sakari and Iisakki both fondly remembered the times when even 17-kilogram salmon could be caught from the river Tankajoki.

The oldest reindeer herder in the community of Purnumukka is an 86-year-old Niila Nikodemus. He reflected the local weather by saying, “during summers it used to be warmer for longer. Now it is about three days and everything changes during summertime. Changes used not to be so rapid in the past. It used to be so warm in the summertime that when I could not sleep at night I would go sleeping on the concrete floor of the sauna at my cabin! But this was decades ago. Things have slowly changed here. They are putting some kind of ‘buzzers’ to the air. Nowadays no two days are alike.”

A reindeer herder for life, Heikki Hirvasvuopio is now retired with his son continuing the profession. He recalls starting the herding with his late father sometime before Heikki turned ten years. He reflected on the overall observations of changes and said that winds have grown stronger and they can be very fierce these days. “This is special when you consider things to the past. For example we never had this kind of storms and falling of trees then. The biggest changes in weather and nature started very sharply in the 1970’s. Then we really observed that for the first time. During springtime rains would come and sometimes red snow would fall. I wonder if it came from the Kola Peninsula or whatever place. We drove skidoos on the fells herding reindeer and when a new snow would fall it would be red! For example it seemed in the 1980’s and early 1990’s that horsehair lichen will disappear altogether. Now it has made a comeback. We can see them hanging from the trees again!”

### **Weather, Rain and Extreme Events**

Veikko Magga is a reindeer herder for over 50 years and





he is a member of the reindeer herders association of Lapin paliskunta. He stated that the Finns and the Sámi practice reindeer herding in the same fashion locally. Veikko put the blame for the changes he has seen on air pollution. Extreme weather events had been noticed but they were rare. Four years ago massive storms felled vast areas of forest in the region according to Veikko. He sees the changes in nature date back to some 20 years. "It has been about twenty years that the changes have been visible. We ran out of horsehair lichen and everything from trees then and even areas where reindeers did not go lost their lichen cover. Summers used to be much hotter before. In the forest we could sleep outside without any cover. This has changed. During autumn time a mild weather has been unusual. But this might be because of the presence of the two reservoirs, Lokka and Porttipahta."

Heikki Hirvasvuopio talked a lot about the seasonal changes, mostly of summer and fall. "The summers used to be like standard. It was dry weather and these lasted quite long in the early summer. We had then the marking of calves in the beginning of summer and we had all the reindeer up on those big fells because especially the start of summer was so hot. It was the hot weather that drove the reindeer on the fells, and

insects too of course. Now the summers have changed, it is very unstable nowadays. The reindeer cope here in the woods now. They don't move up on the fells anymore like they used to do. The falls have gotten longer now. Before it used to be well below zero temperatures and winter set in at once when it did. It wasn't like today that falls are mild for longer. The fall time has longed, there's sleet and rain and such. But it used to snow." Hans Kittu of Purnumukka claims that thunderstorms have decreased in the area. "Nowadays there are no real thunder rains anymore!"

Armas Sieppi from Purnumukka has been a reindeer herder all his life and that is now 70 years of experience. He talked about winter and reindeer herding. "Sure they [winters] have stayed on the same system that they have been always. Here the snow has come in early sometimes and a little later other time. Now it has been a couple of years so that there's been less snow in the autumn than what it used to be." Veli-Matti Mutenija is a local Sámi who works for the Kemijoki Powerplant and has had a tourist business of his own prior to that. He remembers how in Purnumukka it "snowed 30 centimeters of snow on the midsummer week [the last part of June] in 1977! Birch trees had leaves on but twigs snapped as snow covered them. This was extremely bizarre event in the local weather."

### Ice Rain

During the interviews many members of the community voiced one of the most important concern to be the icy rain that falls in the autumn time. Pentti Nikodemus who is a young reindeer herder in Purnumukka expressed his concerns vocally about the impacts the icy rains in fall 2001 had caused in the sense that the reindeer were unable to access the lichen through the frozen ground during that fall. Veikko Magga explained that for decades the area had good frost in



the fall time; it created proper bottom. Now this ice freezing on top of the ground causes more work for the reindeer herders. As the reindeer cannot get enough food, there are more and more reindeer deaths occurring. "Over the past few years we have lost thousands of reindeer," says Magga.

Niila Nikodemus remembered how the ground used to freeze. "Before there was good portion of a meter of rain in the fall and then it would be frost and the ground would freeze. The frost was really good; it dried the lichen before it snowed on top of everything. With snow on the lichen it preserved well there. Nowadays there is no proper ground freezing. The snow can melt on the ground. Now it rains and still when it is wet, there's frost and everything freezes and that is bad for the reindeer. It can't get to it. And the reindeer will ruin the lichen, trying to dig it out. It [the lichen] is stuck in the ice, and it will come all up. When the lichen is frozen it will detach with the ice. I have seen this when the melt takes place in the spring. There have been massive amounts of lichen clawed out. The lichen is loose; not in the ground and it will no longer grow but dry out."

### **Snowchange, Rivers, Ice**

The amount and consistency of snow has fluctuated in Purnumukka and the Vuotso region as well. Veikko Magga recalls that nowadays the snow sets in actually in spring. "Some falls in autumn but there is no proper freezing, only so that the lowermost snow freezes. The lichen freezes solid into this layer and the reindeer cannot get proper food because of this. For a couple of years in row there has been less snow in the autumn than previously. But I think sometimes it falls earlier, sometimes later. It has always been this way." Armas Sieppi thought that the snow and snow consistency is much harder these days. "Nowadays snow is much harder than before. And yes we have ice, at least in the reservoirs the ice is thick.

We've had these reservoirs for 30 years now."

Niila Nikodemus discussed the snow and ice covers based on his massive experience of lifelong local observations. "There is normal fluctuation in the amount of snow. However, snow falls later; it used to be permanent snow cover always in October. Now it can be November or middle of November. Ice has thinned, especially on the small rivers and ditches here. I wonder if the reservoirs affected this? It used to be that we could just easily drive our skidoos on the ice. There used to be a proper ice cover on the small rivers."

According to Heikki Hirvasvuopio, the thickness of snow has changed massively. There are no thick layers anymore. The year 2002 however seemed to be an exception. "Now we have enough snow; like we used to have before. Before the winter used to come all at once. The [ground] bottoms were in order and decent freezing took place. Nowadays it can be after Christmas before the winter really sets in. Weather today is very mild and it fluctuates much."

Sakari Keskitalo and Iisakki Magga remember the time before skidoos. They used skis and only after 1964 the herding was done with the help of skidoos. They both feel that the ice is thinner now. Autumn times are wetter today. In the olden times it used to be so that the ground dried properly before it snowed and the lichen was accessible for the reindeer. Now the wet rains "freezes the lichen so that is very difficult for the reindeer to access it". More reindeer have died because of this. They recall that "it used to snow on 17th September but now it can be December before snowfall". Sakari and Iisakki stressed that this early proper snowfall ended when the reservoirs were filled. Later snowfall became evident after the reservoirs were full.

The absence of proper long and cold winter these days made Veli-Matti Mutenija pleased. "Cold spells are a lot shorter but I can tell you I don't miss the minus-35-degree weather! In the autumn of 2000 there was extremely little





snow in the region according to Veli-Matti. He remembers the winter in 1998 to have been very snowy. During the 1950's is used to snow so much "that the road to Sompio was cut back for two weeks. We couldn't go anywhere by car. They used horses and reindeer at that time." Veli-Matti recalled the year 1985 as follows: "There was a very cold spell in the fall but no snow! Even on the ice the wind would blow off what little snow remained. Fishermen could use cars to travel on the ice for there was no snow. In 1998 or 1999 there was only sleet but no frost on the ground. We were bushwhacking and harvesting one of the birch groves and the ground was totally unfrozen and it snowed almost 40 centimeters. We could not go to the lake at all, as the ice was only able to carry the fallen snow, not more. Last year [2001] the snow came in February!"

## Animals

In addition to the reindeer herding, many people in the community also hunt and fish. There have been changes over the years in the regulations regarding these activities as well as changes in the values of the catch. The community members have also observed changes in occurrences of several non-profitable species that still are an important part of the surrounding nature. A part of the interviews were thus concentrated on the perceived changes in the local animal populations and their fluctuations.

## Birds

Veikko Magga stressed that small birds seem to have disappeared and have not been seen for "many summers now". Niila Nikodemus, an Elder, voiced his observations: "There used to be more birds, such as capercaillies, ptarmigan and others. We needed not go far to hunt them. We trapped ptarmigans

here on the riverbank. They used to come sit on the field and on the nearby birch trees. But I have not seen them like that for decades. Yeah, I don't know why this has happened. It is not because of hunting. It could be that as there are now more roads winding here, more hunters have arrived, massive amounts. As it was only locals hunting before; the numbers stayed. We used to hunt everything; pine martens, squirrels, ermines -everything!"

Heikki Hirvasvuopio talked about the disappearance of birds in Kakslauttanen. "Especially the ground birds, we could be talking about extermination almost when compared to the past amounts. I used to hunt quite much alongside reindeer herding back in those days so I have a good idea of the stocks. We can not even talk about the same amounts during the same day. This is true especially with ptarmigans, capercaillie and ground birds. With small singing birds the same trend is noticeable. Nowadays it is silent in the forest - they do not sing in the same way anymore. It used to be that your ears would get blocked, as the singing was so powerful before. They [singing birds] have disappeared completely as well."

In Vuotso Sakari Keskitalo and Iisakki Magga agree with Heikki Hirvasvuopio's words. Birds have disappeared almost completely particularly in the last 20 to 30 years of time. They remember that in the 1950's you just needed to select the bird to shoot while going outside. There was no need to wander even to the forest. Nowadays you have to walk many kilometers to see them. There used to be hundreds of birds in a flock during fall time. Sakari and Iisakki felt that especially grouse birds have diminished in numbers. Veli-Matti Mutenija sees the crash in bird stocks as a sum of various factors. "First of all it is affected by hunting itself and the efficiency of the hunting. For example capercaillie and wood grouse have been protected even for some time to get the stock on the rise again. Then there is all forest cutting adding up. Affecting are



also all issues related to small predators; all hawks are now under protective measures and foxes are allowed to hunt only with a legstring (footsnare jalkanaru); iron traps are forbidden. Guns used for hunting have improved and dogs have developed; they are better these days. And there are so much more people hunting now." According to Veli-Matti one thing has not been studied enough in relation to diminishing numbers of ground birds. "There are hundreds of kilometers of wire-netting fence spread out in the nature, also here in our area. How much are ground birds dying because of that? A bird can not see it too well; the loops are so big in the fence. It is known that even moose get caught in those fences. And reindeer have been seen stuck on them."

### **Wolverine, a Predator**

Large predators have an impact on the reindeer stocks as they harvest the herds occasionally. Wolf, fox and wolverine are common predator species to the region. Armas Sieppi said that there are different kind of predator animals present but mostly he talked about wolverine. "We have predators here in our herding area. They decrease the standard of living by quite a bit. Every year tens of per cents is cut off from the calves. Wolverines are among the predators. They are coming from the neighbour's side [Russia] now. Yeah, they kill. One can kill more than ten a day. The best figure I have heard is over 60. One wolverine, [catching] a little herd. When wolverine has had its pups it hunts so that it snaps [a reindeer] under skin and leaves it alive but marked. When a bad day comes, it will track and hunt the marked one. It's ready-made food for it. It hurts the reindeer so that it can not move too far. That's what it is like. [The amount of wolverines] depends always on the weather. In a good weather they can travel from far. It migrates long distances."

### **Squirrels**

Squirrels used to be hunted in the Vuotso region. The main reason was the fur and the price that was paid for it. Now the squirrels have grown less in number. Niila Nikodemus portrays the old times and the change: "We don't see squirrels anymore. Before we used to hunt them all fall. We got the permit in November when the fur had come clean. All the time we hunted and there were [squirrels] every fall. I wonder the reason now that we don't hunt them anymore but still their numbers don't increase. If it were like before, we hunted them continuously. The skin was good and we got a fair price on it too. Great fur."

### **Insects**

The past summers in the Vuotso region have been lived with a very small number of insects, which is a drastic change to the previous times. The insect time (räkkä in Finnish) lasts from the end of June through July. Then different stinging and biting insects, such as mosquitoes, gadflies, blackflies and the smallest; biting midges, appear all at the same time. Räkä causes the reindeer to gather in docks and move up on the fells where wind and air fluctuations make it easier for the reindeer. Local community members discussed the change in insect numbers in the interviews as well. "Last summer was such that there were no mosquitoes nor gadflies during the whole summer" stated Veikko Magga. Niila Nikodemus on the other hand pointed out that the number of insects is depended on a particular summer. "If it is a rainy spring time, they will be plenty but if it turns out to be a dry spring; hardly any will come." Heikki Hirvasvuopio had similar observations as Veikko Magga. According to Heikki both mosquitoes and gadflies have disappeared. "Especially this is true with gadflies, nowadays they are very few. Back then when



the vermin were aplenty, that was what made the reindeer move up on those big fells.”

### Traditional Calendar and Knowledge

The traditional knowledge of the Sámi people has shown a great adaptation capacity and this has been true with both ecological and social changes that have taken place and thus affected the people, society or the reindeer. In reindeer herding the traditional weather reading skills and knowledge of the weather are very important factors. During the community visits, the observed changes were linked to questions on traditional knowledge and how its use has changed.

According to Veikko Magga both reindeer herding and traditional knowledge have changed to the negative direction. “We have to feed the reindeer with hay and fodder quite much today. But I would not advocate that the traditional Sámi calendar would be mixed up yet. But traditional weather reading skills can not be trusted anymore. In the olden times one could see beforehand what sort of weather it would be. These signs and skills hold true no more. Old markers don’t hold true anymore; the world has changed too much now. We can say the nature is mixed up now.”

Hans Kittu agrees on the issue of traditional weather forecasting not withstanding anymore. “They [weather patterns] used to hold, my mother and her uncle, they used to follow the weather. And it was true then, but not anymore... since 1968 when they started building that reservoir. I remember that after the reservoir came, it [weather pattern] was mixed up.” Hans believes that changes in weather have caused confusion in using the traditional knowledge. Niila Nikodemus reflected on the traditional weather reading skills in the following way. “Winters used to be windier. Blizzards always followed cold spells in the past. Old markers do not hold anymore! Climate can change so suddenly now; there is no sta-

bility. It used to be good weather for a longer period but now the changes occur already after a day or two. Marked, special days vary too much now, they don’t hold steady anymore. However, the Sámi calendar has remained true. It is always dependent on the year, they are not the same.”

In Kakslauttanen, Heikki Hirvasvuopio discussed the traditional forecasts and argued that the weather periods are not a standard these days. “We had certain stable decisive periods of the year that formed the traditional norms. These are no longer at their places. Specific calendar days, like Kusta Vilkkuna [a Finnish folk historian of weather and culture] wrote, held really true. But it is no longer so. Today we can have almost 30 degrees of variation in temperatures in a very small time frame. In the olden days the Sámi would have considered this almost like an apocalypse if similar drastic changes had taken place so rapidly. Before I spent all of my winters in the forest and was at home for maximum of one week. Nowadays the traditional weather forecasting can not be done anymore as I could before. Too many significant and big changes have taken place. Certainly some predictions can be read from the way reindeer behaves and this is still a way to look ahead in weather-wise. But for the markers in the sky we look now at vain. Long term predictions can not be made anymore.”

Veli-Matti Mutenija remembers that during a full moon a circle around it meant blizzards. “I feel to some degree this is still true today.” Sakari Keskitalo and Iisakki Magga had the same rule of thumb. “When the moon had a big ring around it, yeah, for sure that meant a terrible blizzard within two days. It is still like that. A circle around the sun used to mean bad weather as well.” These men had fond memories of Anselmi Pokuri, a 100-year-old Sámi Elder, who used to observe the moon with great accuracy. “If the moon was sort of hanging on its sharp edges it meant snow to come, and if it was all straight up; there was no snow in that month. And





it was so. It still is, I've been watching it. And if the moon looked like a half a flat bread it meant there was only little snow in the month. They sure didn't have any books to look at, it all originated in experience."

### Reindeers and Reindeer Herding

The reindeer are the key species for the community of Purnumukka in many ways: cultural, social, economic and ecological. The issues of climatic and ecological changes in the region have impacts on the reindeer and their herding. Reindeer herding is faced with a lot of difficulties all the time with pressure coming from different political, social and economic fronts. The hardship is concrete as the way of living that was supporting everything in the past, is going through changes and causing an increasing unemployment.

Armas Sieppi expressed his opinion on reindeer herding by saying "Reindeer herding has got more difficult in every way. Clear cuts and forestry activity is the number one of the affecting factors. There is no more food for the reindeer in the forest, almost all must be taken into home feeding. And now so much snow in the springtime. Just today it has snowed 20 centimeters. And the later snowfall in the fall is having an impact too. Now the reindeer herding is changed into motorized job. We have always been waiting for the snow to come but now we can't use the skidoos. Motorbikes would go but that is not really working; the terrain is too difficult." Sakari Keskitalo and Iisakki Magga reflected the changes that the modern time has brought to reindeer herding. "In the past it was that who had reindeer, made a good income in a winter. There was so much less of expenses then. Skies don't cost that much. And the forests were pristine [with a

lot of food]. Being a reindeer herder back then; it was all you had to do. The expenses were so little and there was no tax. Now it is all sorts of money holes; you have to buy skidoos, all-terrain vehicles and cars. Gasoline costs and everything. So many things have changed now..."

Heikki Hirvasvuopio outlined the impacts of climate change on the reindeer herding. He said the weather fluctuates too much in the fall time with rain and mild temperatures. "This ruins the lichen access for the reindeer. In some years this has caused a massive loss of heads. It is very simple; when the bottom layer freezes reindeer can not access the lichen [that is frozen on the ground]. This is extremely different from the previous years. This is one the reasons why there is less lichen. The reindeer must claw the lichen out with force and the whole plant comes completely off, with roots. It takes, as you know, extremely long for lichen to regenerate when you remove the roots of it. This current debate of loss of grazing grounds is not therefore connected with the larger number of reindeer, no, this is not the case. In the past the herds were much larger. The main reason for the loss of grazing lichen areas is the bad weather conditions that contribute to the bigger impact on the area. I don't think many have observed this reason in their



thinking."

### Arrival of New Species

There are new species in the Vuotso region nowadays that were not common to the area in the past. Different sorts of plants, hay species and animals have migrated to areas where they were not seen before. Heikki Hirvasvuopio talked about the arrivals: "Well, yes we have new species in the area.



For example a kind of white boletus has appeared here. I haven't seen it before and now it is fairly common already. It has spread. And then there are many hay species. They have moved up here from the more southern latitudes. We have minks now too. They have come during my lifetime, in the past we didn't have them at least in the nature. Now it is pretty common here. The first wild mink that I saw was in the mid-1960; it was in the Eastern Kaira area. Apparently it had escaped from the Russian side. It is not longer than that; to have mink here."

Armas Sieppi has seen some new bird species in the area that were not common in the past. Sakari Keskitalo recalled seeing a roe deer as a proof of new arrival species. "Five years ago I saw two in Vassama. Last fall one was circling around right next to the border [to Russia]. It was going around the hill using the road; it was coming toward us. It is twice I have spotted a roe-deer."

### Erosion

There is some erosion visible in the Vuotso region and that is mainly caused by human activities. Heikki Hirvasvuopio noted that there is not much erosion in other areas but some normal wearing on the tourist areas. "There is wearing and tearing where there is people. The ground is eroded in places where human has impacted the ground; say, on fell sides. Then the water erosion comes in picture and it starts to hollow out the paths that people have been using. But that [erosion] is not weather-related; that is born of something else."

Veli-Matti Mutenija had similar thoughts on erosion. "I don't know if it really can be called erosion, but when you move around, forests are treated and such, that will leave tracks in the nature. Human leave marks. The more people, the more those leaving tracks and marks behind. Tourism does contribute to erosion but it is not only that; all sort and

every kind of human activity contributes to it. There are nowadays so many hunters, fishermen, backpackers and what not moving about in the forest. It has never been so many people here that what is today. The whole population in Finland and in the area of North-Finland has increased; it's never been like this. Sometime in the beginning of the century it wasn't half the people here compared to this day. That has for sure increased erosion."

### Other Concerns and Perspectives for the Future

Hans Kitti was born in 1938 in Purnumukka and he went to school in Vuotso. His words of his own life tell much of the overall change in living that has taken place in the area. "After school I took care of our reindeer with my brother, and I was sort of a caretaker at home. We had those reindeer that were used for pulling logs and timber from the forest. The hay was still made in the woods during my days. Well, that time came to an end and people made their own fields, and that was followed by the era of tractors. Our neighbours bought a tractor too and used that to pull logs. The reindeer were not used to pulling anything anymore. I didn't have any trade. At times I worked for the Metsähallitus, Department of Forestry and then I was unemployed again. In 1974 I got a job at finding ore. That's what I did ever since, until 1993 when I retired. 20 years passed there. At first the job was here in North Finland but that was slowly cut off. And then I had to travel around Finland doing my job." Armas Sieppi sighed and said that reindeer herding used be a profitable source of income. "It sure would be good that there'd always be work for everyone. But today the jobs are hard to find for sure -at least up on these latitudes."

There is a concluding note from Veikko Magga that he voiced in relation to a question on how people and animals have adopted to all the changes taking place in the nature and



normal life. He said: "Nowadays people are so hurried all the time. It never used to be this much hurry in the olden times. This has changed."

**Community Members whose voices have been used in the chapter for Finnish Sámi Documentation**

**Authors and Editors of the Chapters**

Tiina Salin  
Tero Mustonen  
Mika Nieminen  
Elina Helander  
Pentti Nikodemus  
Hanna Eklund

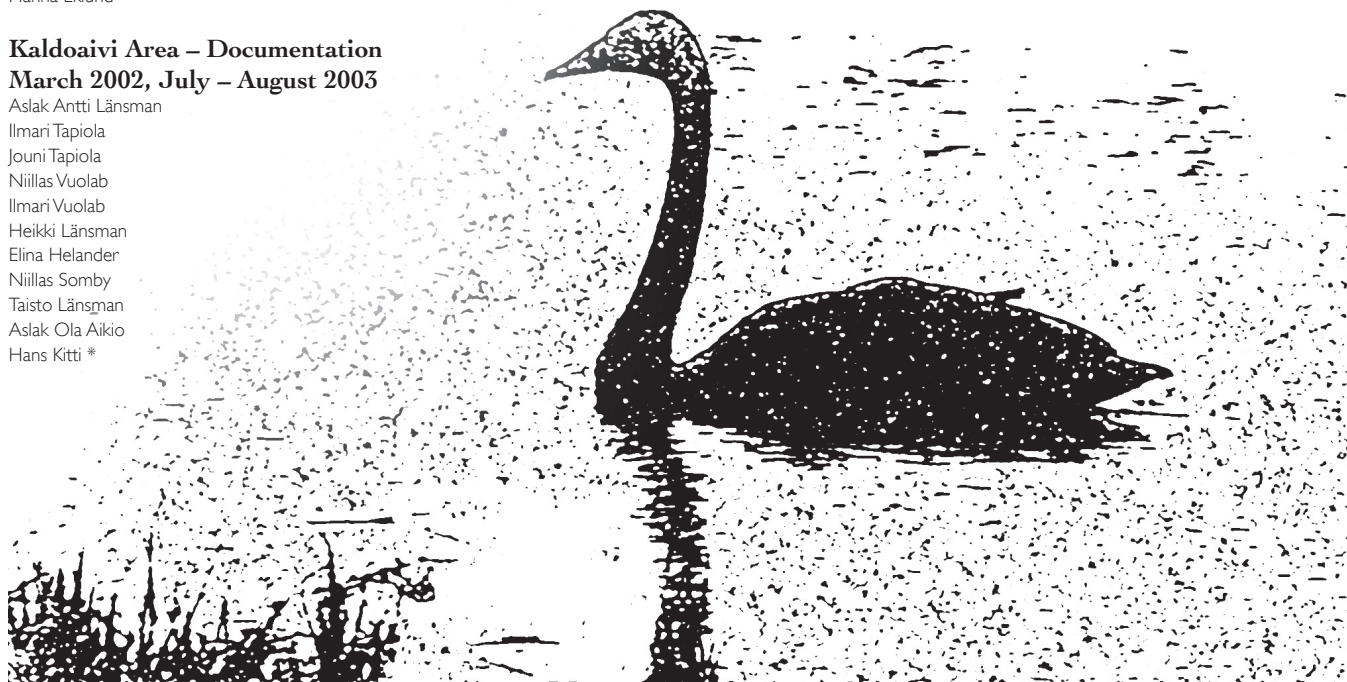
**Kaldoaivi Area – Documentation  
March 2002, July – August 2003**

Aslak Antti Länsman  
Ilmari Tapiola  
Jouni Tapiola  
Niillas Vuolab  
Ilmari Vuolab  
Heikki Länsman  
Elina Helander  
Niillas Somby  
Taisto Länsman  
Aslak Ola Aikio  
Hans Kittí \*

**Purnumukka Area, Documentation March – April 2002,  
September 2003**

Sakari Keskitalo  
Iisakki Magga  
Veikko Magga  
Armas Sieppi  
Niila Nikodemus  
Pentti Nikodemus  
Heikki Hirvasvuopio  
Hans Kittí \*

\* = Two different individuals





# Snows, Dreams, Thoughts, Yoiks, Feelings and Ideas – A Snow Diary of a Reindeer Herder

*Pentti Nikodemus with Tero Mustonen and Mika Nieminen. Translated by Tero Mustonen*

**P**entti Nikodemus comes from a Sámi reindeer herding community of Purnumukka in Sodankylä Region of Finland. In addition to being a herder he is an active outdoorsman and a person of many skills.

He lives in traditional style – takes water from the river nearby. His house is heated with wood chopped by himself and his family. He is a known *yoiker*, and has performed in Murmansk, Russia in addition to the Snowchange Conference in Tampere and in many, many other venues around the region. Life in Purnumukka revolves around the reindeer herding year starting in May.

Since 2001 the Snowchange Project had been involved in documenting local concerns of climate and ecological concerns in Purnumukka. This material and the main findings are presented elsewhere in this publication.

In Autumn 2002 in a partnership with the Snowchange project Pentti engaged on a highly experimental set of observations. We agreed that Pentti would produce a '*diary of snow and dreams in the Winter 2002 - 2005*', reflecting on all aspects, knowledge, experience and observations. In social sciences 'participant observation' method is a time consuming and radical form of field work.

There was a strong sense of freedom, non-linearity and sharing involved. It was as well an attempt to document '*Landscape, Mindscape, Dreamscape of a Sámi reindeer herder*' from



his own perspective. Pentti has kindly agreed to work with Snowchange so that we can present this 'pilot work'.

## **Diary of Snow, Dreams and Events Autumn and Winter 2002-2003 by Pentti Nikodemus of Purnumukka**

### **September 2002**

10<sup>th</sup> – 11<sup>th</sup> September 2002 *I dreamed of my new drum. I heard movements in the doorway. Spirits. I am very afraid.*

14<sup>th</sup> September 2002 *Much was shown to me in a dream. All bad feelings were taken away. Creator looks after me. Strong messages. What is of worth in a persons life? Is it surviving or being wise? I wonder what is important.*

24<sup>th</sup> September 2002 First snow fell to a warm ground here. No snow in Ivalo.

*Old Knowledge:*

*'What falls [snow] from the North, the South will melt.*

*What falls from the South will not be melted by North.'*

28th September 2002 Hardly any snow.

29th September 2002 No snow.

### **October 2002**

1<sup>st</sup> October 2002 Driving home from Rovaniemi – Snow up to 15 cm on some places

2<sup>nd</sup> October 2002 Another snow in Purnumukka

3<sup>rd</sup> – 4<sup>th</sup> October 2002 My Uncle Pietari passed away from this world last night. He used to live until 1980 here in Purnumukka. His daughters husband Olli and their son Markus with his cousin came to live in Pietari's old house during these days.

A Dream by Kyllikki, a family member and a Sámi woman at 4 am:

*She saw Lauri, a brother of Kyllikki's mother come indoors and say:*

*'Pietari is gone'. Niilo, a husband of Kyllikki's sister said have you put him to the casket yet. Answer was no.*

*In the morning the news came that Pietari had passed away.*

[4<sup>th</sup> October 2002] Snows on the ground. My old man, 86-years-old, says that this snow will not stay as the cover has not frozen properly because härjät, trained reindeer stay away from home still [they require feeding].

*A bird came to us. It had black feet. A strange new bird. It walked around the yard of Pietari and flew around. It was very tame and came to the kitchen window. It went to the river and swam but no waves came. It came to meet my father. It was Pietari saying his goodbyes to us. It stayed for 3 days here and it was never or before seen. Later we learned it was a long-tailed skua. It was even photographed. [Pentti shared this story as well in Snowchange 2003 – editors note]*

9<sup>th</sup> October 2002 Mild weather, it rains. Snow disappeared.

11<sup>th</sup> October 2002 Fantastic warm day. 10 Plus degrees in Sodankylä. We drove the new tractor home. Riitta [wife of Pentti] is taking part of skinning of 900 reindeers.

14<sup>th</sup> October 2002 Härjät are home.

15<sup>th</sup> October 2002 Landscape is white with snow. River [near the house] flows free. No ice cover.

16<sup>th</sup> October 2002 In evening temperatures at minus 16 Celsius. River covered with thin ice.

17<sup>th</sup> October 2002 Man, it is cold! 22 degrees already! Skies clear, river has a proper ice on it. Reindeers fenced in Saki-aselkä – we brought one of them home.

*Tomorrow is the Funeral for Pietari. Time for last goodbyes. We postponed the corraling because of the funeral.*

18<sup>th</sup> October 2002

I was told that I was driven by bad spirits at the funeral. Some bad people attacked me. Have to be strong. Olli felt a grip of an 'invisible' hand on his shoulder at funeral. A poem came to me today:

*You had been lowered to the cold ground*

*In a casket*



*When you decided to come and say hi to Olli  
 You said: 'Hi! You were always a good fellow!'  
 You left us  
 You left us like a migrating bird  
 Migrating bird  
 It is hard to believe  
 You came  
 You stayed  
 You were  
 Black footed  
 Black and White  
 You came to say Goodbye*

*Today the dream from 14th September proved to be very strong and  
 protected me.  
 Another poem of mine:  
 I am stronger now  
 Finding my own way  
 I reject that  
 I close the doors on you – evil!*

19<sup>th</sup> October 2002 A second corralling of reindeers. Strong  
 biting winds and cold weather. I was able to get water from  
 the river stream standing on the ice today.  
 20<sup>th</sup> October 2002 Snowfall in most bizarre places – South-  
 ern Sweden has received 20 centimetres!  
 21<sup>st</sup> October 2002 Powder snow coming in. A squirrel, four  
 Siberian Jays and Five Great Blue Tits in the yard.  
 25<sup>th</sup> October 2002 Mild weather, close to zero. It rains 'su-  
 per-cooled' water [just near zero].  
 26<sup>th</sup> October 2002 Sleet, Snow stays.  
 29<sup>th</sup> October 2002 Snowing since early morning. Did the first  
 snow shovelling today. 10 centimetres of snow.  
 30<sup>th</sup> October 2002 Clearing up. Rapid cooling from -12 de-  
 grees to -27 in the evening. This is a record for this Au-

tumn.

31<sup>st</sup> October 2002 – 22. Seven of härjät are home, eating feed.  
 Must be the cold spell!

## November 2002

3<sup>th</sup> November 2002 Another record, minus 28!  
 7<sup>th</sup> November 2002 Strange halo and light effects in the sky.  
 From minus 16 to -27.  
*Sun next to another Sun [Sun Dogs] marks winter conditions. This  
 happened 7th November 2002.*



8<sup>th</sup> November 2002 Another record, minus 30!

...  
 18<sup>th</sup> November 2002 Mild. – 8. Corralling of reindeers in  
 Vuomaselkä.  
 19<sup>th</sup> November 2002 – 8 to – 22 degrees. I wonder about the  
 traditional calendar! Where are '*Lüsan liukkaat, Kaisan ka-  
 ljamat*'!  
*Multi-colored circles around the Moon are a sign of a blizzard com-  
 ing in. This used to hold true. It has been changing. We had this 19th  
 November and 20th November 2002.*  
*If a Moon that has its tips pointing upward on descent is seen this*





means a blizzard.

*Lift a finger and point it to Moon. If a 'P' is formed, Moon is increasing and 'K' is a descending Moon. You can tell the phase of a Moon this way.*

20<sup>th</sup> November 2002 At 6 am. Rainbow-colored circles around the full Moon! Minus 27. Again in the evening many 'colored' circles around the Moon.

22<sup>nd</sup> November 2002 Winter conditions – 27. I froze my face while skidooring. River has very, very little water in it now.

25<sup>th</sup> November 2002 'Kaiwa' - A marker day on traditional calendar. No signs of thawing as it is said to be. Minus 9.

28<sup>th</sup> November 2002 Coldest day, minus 36! Winter record.

29<sup>th</sup> November 2002 Minus 32.

*November was winter-like, but not enough snow! Traditional days off-balance.*

## December 2002

1<sup>st</sup> December 2002 –25. Strong winds that freeze you! Reindeers fenced in. We almost froze with these conditions [caused by the winds]!

2<sup>nd</sup> December 2002 Corralling day, minus 19.

4<sup>th</sup> December 2002 Where is all the snow?!

10<sup>th</sup> December 2002 While cutting a moose hide I stuck a knife to my foot. Ouch! A doctor said at the hospital: 'This is what I call a proper wound!'

*'Se ei oo suvi se on natsu' = Natsu snow cracks under foot softly. We had 'natsu' snow on 11th December 2002.*

13<sup>th</sup> December 2002 Mild day, Northern Lights paint the sky with their colors!

17<sup>th</sup> December 2002 Winds increasing. So little snow! It is disrupting corralling of reindeers! Because of the lack of snow reindeers dispersed over large areas! How I wish for a proper snowfall!

18<sup>th</sup> December 2002 Full Moon in all of its glory. Storm

winds. – 13.

19<sup>th</sup> December 2002 From – 34 in the morning to – 21. So much variation!

21<sup>st</sup> December 2002 From – 16 in the morning down to – 32. Variations over so little time span continue.

23<sup>rd</sup> December 2002 – 28, a little snow must feed the cold.

24<sup>th</sup> December 2002 Christmas Eve. Traditional marker days begin between Christmas and New Year – these days can predict for the coming year and annual weather. Blazing Northern Lights with the Moon! – 36.

25<sup>th</sup> December 2002 Northern lights play in the Northern horizon. It means more cold spells coming in. – 33.

29<sup>th</sup> – 30th December 2002 – 38, 5 Degrees !

31<sup>st</sup> December 2002 Last Day of the Year – unbelievable lack of snow. So cold!

## January 2003

3<sup>rd</sup> January 2003 Great variation ! From – 14 to – 22

4<sup>th</sup> January 2003 Another variation From – 18 to – 28

6<sup>th</sup> January 2003 – 38,5. Cold spell is increasing.

12<sup>th</sup> January 2003 Finally it snowed!

14<sup>th</sup> January 2003 Another variation From – 17 to – 30 in a day.

20<sup>th</sup> January 2003 – 39! Cold and clear skies. Today the Sun returned!

22<sup>nd</sup> January 2003 A long cold spell down to – 30 has continued!

28<sup>th</sup> January 2003 – 30.

29<sup>th</sup> January 2003 – 34. Monotonous cold!

30<sup>th</sup> January 2003 – 36, 5. Sun visible for the first time in our house!

31<sup>st</sup> January 2003 Winter record low at –41. My father said that we will have plenty of sunny days in the summer as it has been so cold now [which came true – editors note]. River



ice is so thick that we have to hack through the ice for a long time. I wonder for how long we will have this clean water. I am very gratified we still have it.

### February 2003

1<sup>st</sup> February 2003 – 40 in the morning. Cold spell continues.  
14<sup>th</sup> February 2003 Snow fell from trees in Sodankylä. We still have it on trees.  
16<sup>th</sup> February 2003 Spring feelings, 0 degrees. Sun is warming us.  
18<sup>th</sup> February 2003 Extremely warm, +2, 5 Degrees! We are losing snow from trees.  
21<sup>st</sup> – 25<sup>th</sup> February 2003 Snowchange 2003 Conference Participation in Murmansk 2003. So many wonderful and new experiences in Murmansk. Last corralling of reindeers for this year.

### March 2003

Early March 2003 A lot of stable ice covering the ground as it has been so cold – but where is the snow?! The sheets of ice have appeared in places never before seen, and the ground is not properly frozen.  
7<sup>th</sup> March 2003 Strong winds, blizzards. – 4 degrees.  
9<sup>th</sup> March 2003 Extreme winds, *'ploughing of forest for lichen for reindeers'* as the old people would say. A storm. Zero degrees.  
10<sup>th</sup> March 2003 Strong winds. Close to zero.  
12<sup>th</sup> March 2003 Strong winds, minus 20 at night-time. I hung the meat [reindeer] to dry.  
13<sup>th</sup> March 2003 Strong winds continue. Excellent minus 20 cold to dry the meat properly.  
22<sup>nd</sup> March 2003 Sunny warm days, plus 12! Winds increasing.  
24<sup>th</sup> March 2003 'Snow droplets'! These will melt very

quickly.  
28<sup>th</sup> March 2003 Sunny. I skied 50 kilometres today.  
31<sup>st</sup> March 2003 – 30 at night time.

### April 2003

1<sup>st</sup> April 2003 – 5 degrees.  
2<sup>nd</sup> April 2003 Extreme winds continue!  
5<sup>th</sup> April 2003 Cold snaps at night time. Sunny.  
11<sup>th</sup> April 2003 Sunny and warm. Travelled to lake Vuontisjärvi for yoiking event. Excellent beard moss here on spruce trees. Our reindeers do not have it so nice in Purnumukka!  
13<sup>th</sup> April 2003 Back home. Snow grows less and less.  
14<sup>th</sup> April 2003 Warm. I was hospitalized. Appendixes. They will operate me in Rovaniemi!  
18<sup>th</sup> April 2003 Easter. I return from Rovaniemi. All snow gone pretty much.  
23<sup>rd</sup> April 2003 Excellent snow cover for skiing!  
24<sup>th</sup> April 2003 Magic night – you can predict the weather and snows for the rest of the spring based on tonight. Extreme cold, cover of snow hard. Night-time cold minus temperatures will continue as long as the snow is as big as a willow grouse.  
27<sup>th</sup> April 2003 Ever since 'Magic Night' good snow cover.

*End of Diary.*



*A shortened version of the text has been published as well in the ACIA – Arctic Climate Impact Assessment by the Arctic Council.*

# Sámi Nation Environmental Concerns from the Kaldoaivi Reindeer Herding Region [Communities of Ohcejohka (Utsjoki) and Nuorgam]

*by Tiina Salin, Elina Helander and Tero Mustonen*

## Introduction

The Kaldoaivi reindeer herding area in the northeastern corner of Finland borders both Norway and Russia. The Sámi communities of Nuorgam and Ohcejohka or Utsjoki are in the 'Sápmi proper'; this is the only part of Finland where the Sámi form the majority of the population. The Snowchange community visits were building on a long experience of the region; already in 1996 members of the documentation team had been hiking and socializing in the area. After the Snowchange 2002 conference held in Tampere, Finland, Elina Helander from Ohcejohka invited Snowchange team members to take part in the community visits. The team spoke with Elders, reindeer herders, fishermen and cultural activists of the changes that are taking place in the local area and communities. The interviews were conducted mainly in March 2002 with some additional interviews added in summer 2003. The interviews were located in the Skallovaara reindeer corral area, in the villages of Ohcejohka and Nuorgam, in the remote area of Lake Pulmankijärvi or Lake Polmak and in the village of Sirma, situated on the Norwegian side of the River Teno.

Ilmari Tapiola is a reindeer herder from Ohcejohka. In

addition he is an active Sámi politician in the Finnish Sámi Parliament. He is 46 years of age and has lived all his life in Utsjoki. "Who could leave his home", he noted. Ilmari is a member of the other reindeer herders' association that is situated in the Utsjoki area: Paistunturin paliskunta. Roughly said, the Paistunturi reindeer herding area is to the west of River Utsjoki and the Kaldoaivi reindeer herding area is to the east of the river. Now there is a fence separating the two areas and thus the reindeer don't mix up too easily. Jouni Tapiola is Ilmari's 78-year-old father, who lives in Kaava, next to Utsjoki. "Kaava means the bent side of a peninsula, that's where the name originates. I was born here in 1924, I think, and I have lived my life here and so has my father before me. He was of the Helander-family. There used to be too many of them and all names got mixed and so he changed the name and became Tapiola." Jouni Tapiola has been a fisherman for all his life.

Aslak Antti Länsman was interviewed at the corral area. He is a 55-year-old reindeer herder of the Kaldoaivi reindeer herding area. "Our own siida area, or herding area, is the Lake Polmak and its surroundings. The name of the siida is Lake Polmak Siida." Aslak Antti talked about the reindeer herding and ice rain in the fall time. "For some ten years it





was mild in the fall and that froze the ground affecting reindeer herding. Not in a good but a bad way. It was the frozen ground. Now it looks like it has got a little better again. We have good calving and the reindeer are in very good shape, already the second year in a row.” Heikki Länsman has also lived his whole life in Utsjoki and that is 67 years. He is a reindeer herder and a ptarmigan hunter. He recalls changes in winters by saying “There has been fluctuation, I think it was in the 1950’s it was the end of March the snow melted. There have been winters with low snow and mild temperatures before but now it has been three such winters in a row. It is quite little snow in December. It can all melt and be nearly black ground in Christmas.”

Niillas Vuolab was interviewed twice for his good memory of places and people in the area. “I was born in Angeli, in Inari. It was in 1917, I’m as old as Finland is. In the fall of 1919 I came here [to Utsjoki], moved downstream. I was such a young man then that I don’t really remember how it looked here back then, but the terrain is still the same. Of course there was more of pristine forest then. I began working with reindeer before I turned 14 years.” Niillas has spent all of his life with the reindeer and he has been actively involved in their reindeer herders’ association. He has served as the head of the association as well as the vice head and the other way round. Ilmari Vuolab was Niillas’ son who passed away a year after the interviews. Ilmari was a reindeer herder at the Kaldoaivi reindeer herding area. “I have lived basically always here in Utsjoki. And with the reindeer, yes, I grew to be with them since a little boy. I was born to a reindeer-Sámi family.”

Taisto Länsman is a reindeer herder from Lake Pulmanki

and he has extensive records of the ice breakups in the lake. “My family moved to Pulmanki sometime in the 1920’s. My Grandfather lived near the road to Karigasniemi, there is a state called Anttila. My Grandfather was named Antti and that is where the name of the state came. They had sheep and my as my father visited the place later, he remembered how their mother used to take the sheep to this island close by for summer time. My Grandfather moved out here later.” Hans Kitti lives in the village of Karigasniemi and he is currently retired after full working life. “In my life I have been a reindeer herder, I wasn’t even 15 when I went out for a full-day

job. It was 1949 the exact year. And already before that I had been with the reindeer with my father. Reindeer herding has changed a lot from where I started. This new technique changed everything; modern times had its affect on these areas as well. As people got more, they started using the land in different ways. And in 1967 I began as a taxi driver and there they were, taxi and reindeer herding side by side. As sources of income they supported each other well.”

Elina Helander is a special researcher at the Arctic Center of the University of Lapland. At the same time she is also a Sámi living in Utsjoki. She took part in the preparation of the interviews and the documentation work. In addition she participated the community visits and made several contacts possible. Niillas Somby from Sirma in Norway is a long-standing Sámi warrior and activist. He took part in the discussions related to traditional knowledge. “I’m not so very old, a bit over 50 years old. My father and family were reindeer herders. I remember very traditional people who used to have a good weatherman. Because we had reindeer we always used to go



Niillas Vuolab



to this old man and ask how the weather is going to be this spring. The springtime is always the very critical time for the reindeer to survive or not to survive. And this old man was always able to tell about the weather for the whole year.”

### **Climate Variation - Weather, Rain and Extreme Events**

On his reindeer farm in Lake Pulmanki Taisto Länsman talked about the changes he has witnessed in the weather. “As I remember, the winters used to be more stabile. Nowadays the fall-winter is such that there is much rain and temperatures above zero. The ground freezes. Before it was so that when the winter came, it stayed. It was seldom that we had such sleet and high temperatures. As part of the ground freezes and with the little lichen there is, it is hard [for the reindeer] to find food. There are only some good spots and they get used up during the winter. The winters have changed for sure. I think the change began somewhere in the turn of 1970’s. The greatest change then was that a massive amount of reindeer traveled here from several reindeer herding area -back then there were no fences dividing the herding areas. The reindeer came here to the fell area from the roadside and shores of Lake Inari. I don’t know if it [the Pulmanki region has changed to more southern climate] is true but winters show different. And during summers it might rain more. The rain is good though in reindeer herding for there are mushrooms growing but at the same time it is bad. Hay is difficult to get dry then. But today hay is packed in these plastic bales.”

Hans Kitti has seen change in weather when compared to the past. “In my youth winter used to set in early and there were long cold spells that lasted for months. Winters were hard then. Although then we were living outdoors and now in well-heated houses, it can be we experience cold differently

now. We used to live in lavvus [a Sámi shelter] in the forest as well, the cold was very much present then. The weather didn’t fluctuate as much in the past as it does nowadays. It must be a consequence from polluting this atmosphere. There is pollution in the air, there are chemicals lead to waters -I’m sure that can affect the climate and its change a lot. Today it is rare to have those good old summers! Now if it rains, it is pouring down and for days on end, flooding small creeks and rivers. When I used to live by the River Teno, it was two to three times it filled up in the best summers, it was big flooding. It never used happen like that in the past. Now the ground and soil is very thin and there are long dry periods; the ground can’t suck in the rainwater. First rains more or less fly to creeks and through them to rivers; that is why the water level rises so abruptly. The soil is so tight.”

Ilmari Vuolab has noticed summer time fluctuations as well. “There is a great variation. When the rains come, it rains constantly for weeks without an end. This past summer [2001] it was extremely dry at first. All rivers dried in the early summer. Areas that I know well; rivers Kevo and Utsjoki, the water level was so low, I have never seen them like that before.” Ilmari also recalled to winters he has lived. “The winter time is shorter now, it has been visible for some ten years now. In the 1970’s and 80’s there were very cold spells. I remember it used to be -35 on the Celsius even up here on the fell in Skallovaara when we had round ups. And the cold spells were definitely longer then. Now if there is frost, it is a day or two and it gets milder again.”

Jouni Tapiola believes the climate is changing. “Sure it has changed, you can tell it from the white frost or rime. In the olden times we never had this sort of white frost. Yesterday those birches out were all clean but then it was little cold temperature during nighttime and they [birch trees] are white frosted. It must be some sort of odd moisture in the air.”



## Snowchange

Taisto Länsman has kept extensive weather records of the local snow, ice and weather conditions in the Lake Pulmanki area. They have been written down since 1977. “Last winter [2000-2001] we had hardly any snow here up until February. Then it came. But before February we could not utilize our skidoos, as there was no snow. In December that winter we experienced extreme cold spells, it was down to -30 on the Celsius. Ground froze for sure. This winter [2001-2002] there has been very little snow as well. Reindeer were doing great in the sense that they did not have to dig too deep for food. In 1968 the autumnal moth appeared all of a sudden. Out of blue there were all these moths flying and the next year then the caterpillars, piles of them. For many years it ate leaves from birch trees and the trees died standing. The moth ruined vast areas of birch trees here. Now the wind blows freely. It packs the snow very tight. And when that freezes; it is nasty, so hard. Reindeer can not get through that.”

Similar issues were brought up by Aslak Antti Länsman but he had another point of view. “In the time period of 1966-69 we had this autumnal moth here. At the time it sure didn’t look good but it had some positive effect on reindeer economy as well. All the previous snow pack -areas where there used to be birch trees were gone as the trees decayed from the moth caterpillar attack. These areas were difficult for the reindeer to access the lichen because of much snow in the twigs. Now wind can blow freely and there is less snow. I think this is better than what it used to be. Though there used to be more lichen, as the reindeer couldn’t access it all. There are moth-affected areas in Lake Polmak and in upper parts of Utsjoki for example. And there will be other areas in the future but I’m not bewailing over that. The winter feeding situation is better now. Of course these areas are missing broad-leaved trees in the summer... but it might be less harmful than hav-

ing too much snow in the winter.” Aslak Antti also thought the weather was changing. He felt the spring came earlier now and that the fall time had grown longer.

Niillas Vuolab stated that the winters used to be much colder in the olden times. “We used to have periods of even -45 to -50 below zero and weeks of -30 to -40 below. But we managed somehow even then! We had to herd the reindeer constantly, we used the lavvu before and after the wartime. We didn’t have real protective clothes or sleeping bags or such. First we put twigs on the bottom [of lavvu] and then a reindeer pelt on top. There was fire in the stove. At bedtime we pulled on a thick-haired pelt as a cover and another one to cover the feet. A Norwegian blanket was fairly protective, as it was pure wool. But not every boy had that, it was an expensive one.”

According to Ilmari Tapiola from the Paistunturi reindeer herding area snow is setting in constantly later. “It used to snow in October - November but now it is hardly any snow at the end of December. We can barely move with our skidoos. It has delayed our herding somewhat. With no or little snow we can not round them up. This has been happening for the past ten years. We also used to have longer cold spells and it was colder in the winter. Now the springtime has grown longer. Snow melts later in spring and that causes another kind of harm to reindeer herding. There are no snow-free areas when the reindeer have their calves in the spring. They don’t have much food when they really need it as they start feeding the calves as well.”

## Rivers, Lakes and Ice Conditions

The Teno River, or Deathnu in Sámi, is the most important river in the area and it carries an excellent stock of wild Atlantic salmon. Aslak Antti Länsman told us that “some people have drowned in the river when the melting started too early.







People should be more careful while traveling the ice. The travel on the ice started during the World War II and after that. There has been summer flooding in the River Teno and that has affected fishing. As water level rises the salmon move upstream to the small tributaries. And the fishing methods don't work as the water turns clayish. The river is important, it gives life." Ilmari Tapiola talked about the river as well. "The river has remained frozen as we have had cold spells now. There is much sheet ice on the river if no snow. We see sheet ice in the valleys and on the fell sides. Sometimes even the fell valleys have sheet ice if there has not been a decent snow cover or cold spells. The Teno ice breakup has been delayed every year now. Usually it takes place at the end of May."

Jouni Tapiola, a salmon fisherman in Kaava, has lived all his life on the banks of Teno following the rhythms and flows of the river. He spoke at length of the river conditions and changes. "In shapewise Teno has stayed the same. Some local places, like the Outakoski rapids, may fluctuate 20 to 30 meters but this is because of the sandy river bottom. The water is at risk to pollute. It is like crystal clear water so even little pollution can be noted early on. The biggest pollutant is agriculture; cow sheds. Especially on the Norwegian side where agriculture is well subsidized. But there has been efforts to clean them [the cowsheds in Norway] to decrease emissions. It is said that the Teno water is no longer drinkable. And it can be so. I don't want to drink the water anymore. It has become somewhat eutrophic. The riverbanks used to be very barren; only rocks, as long as I remember there were no brushes growing there. Willow is an indicator if it starts growing. Some is now growing and it indicates some amount of pollution. There have been few changes in the ice breakup. Now we have something called 'a little breakup'. I remember for example during the war there used to be massive breakup! In 1942 the ice formed a great dam near here.





It made the water level rise so much that there was water in the house. It moved our yard buildings. That was the biggest breakup I recall. We don't have it that way any longer. Now the ice breakup is quiet, smooth. But the trick is that if it has been a very long winter and then it gets summery fast, there can be a quick breakup, then there is risk of real flooding."

Lake Pulmanki is the only lake in Europe that has a stock of fresh water flounder. Taisto Länsman recalls that there were more than enough of it in his childhood but that is has diminished in numbers now. Also salmon migrates to the lake and according to Taisto, summer 2001 was good salmon year in Lake Pulmanki as well. Taisto has been keeping a record of the freezing and break-ups of the lake since 1977. "The [freezing and melting] takes place in fairly standard way. My parents told me that it freezes at the end of November. No matter how severe cold spells, it will not freeze before that. It takes its time. It [the lake] is such a big pool of water... and deep too. Yeah, especially if it is windy, the lake won't freeze. And the break-up in the summer or spring has stayed pretty much the same. I measured the ice thickness for the Environmental Centre for some years. To me it seemed the thickness hadn't really changed."

## Birds

Ilmari Vuolab had noted that duck birds were increasing again after a time when all kinds of duck birds were disappearing from the region. "But then again, what we call sea birds, like long-tailed ducks, velvet scoters and common scoters -they are all gone. There used to be great flocks of them and now they are so few." Hans Kitti is frightened to notice the change in the volume of birds. "Bird singing has disappeared. In the spring if you go the mires, it is nothing compared to the old days. There used to be all kinds of birds... it is so empty nowadays. And I don't understand the protective

measures applied on species that eat all beneficial game. And beneficial are the fell area species like rabbit and ptarmigan. Now there are only ravens croaking."

Niillas Vuolab recalls the nature having lost a lot. "It is poorer now. Summer time migratory birds are so few these days. We can find almost all species, but the numbers are not like in the past. We used to have flocks of sea birds and ducks but not any more. And it is not that long ago, still after the war the spring migration was great. I don't know why this is so but I think they might be wiped out excessively where they spend the winters, in the south. Maybe that prevents them from returning here. Ptarmigans are less these days too, but we still have them."

## Ptarmigan Hunting

Heikki Länsman, a ptarmigan trapper in Utsjoki shared his views and experiences as a life time hunter. "This season has been very good, it hasn't been this good ptarmigan year since long. Summer and spring times determine the following ptarmigan season. If the spring conditions are favourable there will be plenty of offspring. There have been poor ptarmigan years as well but in the long run the hunting has been the same. The bird population has been balanced. Today the price of fuel is higher but then again, so is the price of ptarmigan. Approximately two ptarmigans make up a day's fuel spent. To cover all expenses I need to trap at least four in a day. It is not that much profit though. [If climate would warm and the snow melt] that would mean an end to ptarmigan trapping. It is an old traditional way of hunting for the Sámi so it would have an effect on the culture. Trapping can not be done during unfrozen ground. Those hunting with good dogs are the only ones able to hunt when there is no snow." When asked why Heikki chose this profession, he merely said that he had to do something. "I like to move around in the nature.



But it is at least ten years of trapping before you learn it and can make it profitable. I had to learn it all by myself, I had no teacher. There are not many professional ptarmigan trappers left. I think four or five here in the Utsjoki region."

Ilmari Vuolab said he hasn't had the time to trap ptarmigans in the recent years but he has been told the stocks are fairly good now. "I believe that now that the selling of ptarmigan hunting permits is more regulated, it shows immediately on the bird stocks. There are more of them now. In the earlier years the permits were given out recklessly in my opinion."

### **Arctic Fox, Wolves and Wolverines**

The predators of the Scandinavian North, especially the arctic fox, have almost disappeared from the Kaldoaivi region. They are much less in numbers than in the Kola Peninsula for example. Heikki Länsman spoke of the last observation of an arctic fox and said that it was some 10 to 15 years ago. "I haven't seen the arctic fox in a long time. It has disappeared for sure. They are here no more." Wolverines are more plenty as Heikki explained. "I saw three wolverines just a couple of weeks ago. They were traveling together. I see tracks of wolverines every day, I think they come from Norway."

Niillas Vuolab remembered times when there were a lot of wolves in the area. "After the war there were many wolves here, none really counted them though. But there were several packs plus some couples to add up with few lonely ones too. We had to herd the reindeer constantly because of these predators. If a pack of say, ten wolves would come hunting, with one single attack they could take ten reindeer. Another attack or another pack, and it would be another ten reindeer!"

### **Insects**

Niillas Vuolab described with a great accuracy the deadly impact of caribou nostril flies and gadflies on the reindeer. Sometimes the impacts had been fatal as the caribou nostril flies blocked the throat of the reindeer. This was affecting especially the calves. Gadflies were not as severe on their effects but in the hot summer air there used to be a yellow cloud following the reindeer as they moved. "Nowadays all insects are so few. I haven't seen too many gadflies during a summer now." Niillas' son Ilmari Vuolab was on the same track. "Gadflies and all insects have diminished a lot. I remember stories how there used to gather clouds of insects on people's yards. You could tell who had cattle, cows and sheep, by the amount of insects buzzing around the yard. But I think all insects are less today."

Heikki Länsman said that there was hardly any use for mosquito spray last summer [2001]. He sees that all insects have decreased in numbers when compared to times when there was more agriculture in the Utsjoki region. Ilmari Tapiola thought that the decrease in gadflies could be a result of vaccinating reindeer against them. "But it all depends on the summer. Cold or warm summers. Moist or dry summers, that all affects more on the insects, I think." Hans Kitti has observed disappearance of wasps and decrease of bees. "I miss wasps. In summers I go to places where there used to be wasps, but there are none anymore. I was afraid of wasp stings before but now I'm lucky if I can find one of them. I think butterflies have gone too. We used to have so many different kinds of butterflies, now they are very few."

### **Arctic Cloudberry and Moss**

Picking Arctic cloudberry is a part of the Sámi culture and adds to the variety of income sources. Ilmari Vuolab and Eliina Helander shared their concern for diminishing cloudberry





areas. Ilmari, though “a lazy berry picker” claimed that “there are less cloudberry when compared to the olden times. Last summer [2001] was a good year but there could have been four or five poor cloudberry years. One after another. It is more rare to have a good year.” Elina pointed out that generally there is less cloudberry in the areas where they used to grow. Hans Kitti expressed his worry over the disappearing moss. “It is worth noticing that moss is disappearing. Pollution must have something to do with this. There used to be a thick layer of moss, so thick it was difficult to walk over. Nowadays there are no mosses, it is hard to find any.”

### Arrival of New Species

Ilmari Vuolab spoke of observing new bird species that have spread from more southern latitudes. “I have hoopoes for example and other species that are not familiar here.” According to Ilmari, mink is the worst of all arrival species. “Minks have spread and become more and more common. I believe they come here both from south [of Finland] and from Norway. Minks are real pests; they eat fish from creeks and ptarmigans and whatever they can catch.” Taisto Länsman had similar observations. “I haven’t seen mink here before and they are common. Mostly I have seen them here on the banks of the river Pulmanki but I don’t know where they come from.”

### Erosion

Taisto Länsman has seen erosion on the Lake Pulmanki. A couple of years ago a stream bank at the northern end of the lake had collapsed and blocked the stream that runs to the River Teno. “We started to wonder why all of a sudden there was water rising on top of the ice, in spring time. It [the blockage] had to be opened with bulldozers and finally

the flowing water widened the stream again. I’m not sure of the reason, but the rainy summer might have left the clay soil damp.” Taisto also expressed his thoughts on all terrain vehicle use and marks left to the nature. “Yeah, they [all terrain vehicles, ATVs] leave a mark behind. You only need to drive a couple of times from the same spot and there will be marks. A year after you can still see that an ATV has gone there.” Aslak Antti Länsman felt there were interconnections with warming trends in weather and the river bank collapse that took place in the Lake Pulmanki.

Jouni Tapiola talked of erosion and a collapse of riverbank on the Norwegian side of the River Teno upstream from the village of Nuorgam. “There was a steep sandy bank. I don’t know if it had frozen from behind during the previous winter. When the ground warmed up, there was a crack that loosened and a quite a bit of earth fell to the Teno. In the Teno these kinds of natural phenomena don’t mean a thing, all sand flowed downstream, the river bottom was restored and the Finnish side remained as it was.” Jouni Tapiola continued with natural upheavals. “Still waters have remained as they are. Occasionally there can be a special event, such as what happened one spring few years back. Ice packed forming a dam some 500 meters from here. The ice formed a massive pit on the river bottom and there was one rock in the middle. It was called an Otter Rock for it was shaped as an otter’s head. It had been there forever I guess, and all Elders swore that there is a rock that will remain until the end of the world. But the ice made this large pit and the Otter Rock was buried in it. We can’t see it anywhere anymore!”

### Traditional Knowledge and Calendar

Taisto Länsman believes the climate is changing in some way and that the Sámi traditional calendar is confused as well as the traditional knowledge is off track. “After New Year the



winds here blow from south-westerly direction. In Sámi language we call February 'kuovamann' -it means a hard month. Winds are hard and the snow surface hardens. But I think the winds, especially in winters, have grown stronger. It has happened during the past 10 to 15 years. We were not used to the kind of storms we are having today."

Ilmari Vuolab thinks the ecosystem has changed. "The traditional markers in nature don't hold true anymore. It is a very good question as what has contributed to the change. It cannot all be because of cyclic weather patterns in different years. I believe the changes we have seen are long-term phenomena. The wise people say that there will be changes for the next 100 years even if we acted now to reduce emissions. I feel the Sámi have always been quite adaptive people and we adapt to the changes as well. After all, climate changes in small steps; not in a year."

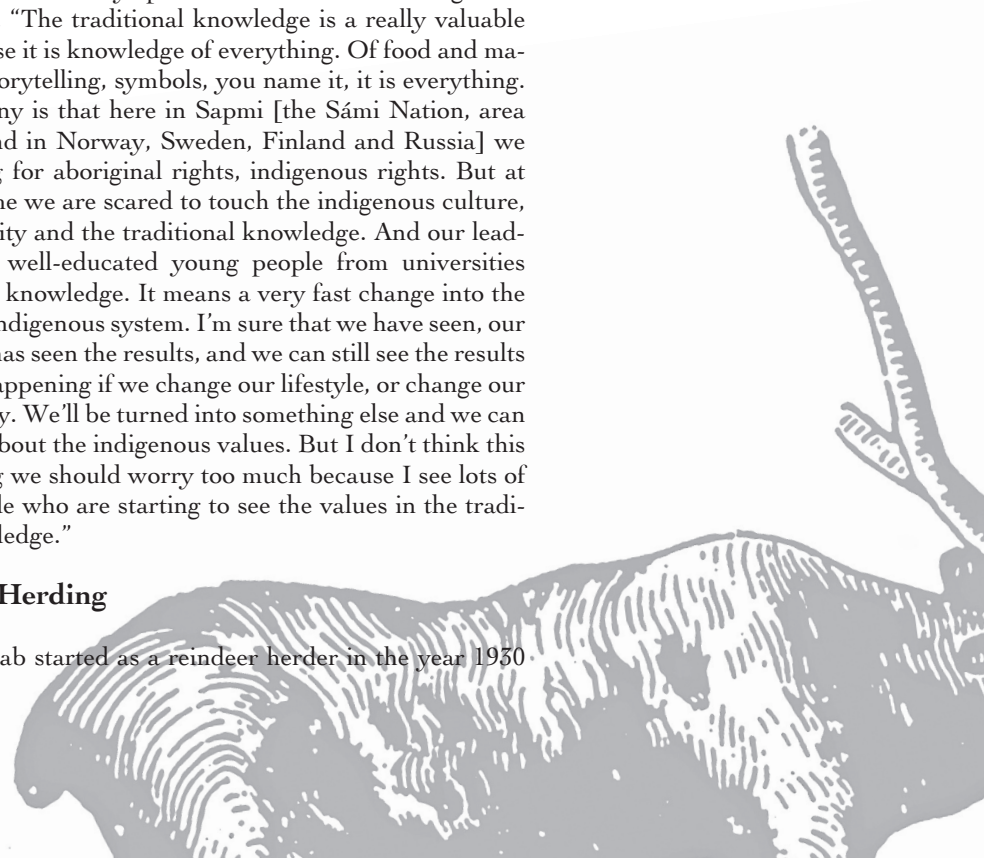
Niillas Vuolab talked at length of the traditional weather reading skills. "Back then it was so that migratory birds were making noise before it would rain. For example, when the red-throated diver flew high up in the sky and quacked loudly we knew it would rain soon. In the springtime a whimbrel's wailing meant rain as well. Sometimes the movement of Aurora borealis was used in weather reading. When they spread all around the sky we were to expect a deep depression. And if there were shooting stars at winterly sky we surely had some winds to come for longer time. And the moon... dense snowfall over a long period could be read from several rings around the moon. We had time to think and observe while herding and reindeer told [of weather changes] too, after a long cold spell the weather was going to get milder in a day when the reindeer breathing started steaming. I have heard these from many old weathermen and followed things myself. I used to spent most of my year outdoors!" Niillas also explained the importance of traditional knowledge in relation to place names. "In the olden times people were not so educated,

they didn't know how to read a map. The places and their names were learnt so that a younger person would follow a more experienced, someone who knew the places, while reindeer herding. It is sort of oral heritage that too. We had maps in our heads back then."

Hans Kittu from Karigasniemi is worried over the loss of traditional knowledge, as young Sámi don't learn the skills anymore. "The learning and education must start while mother breast feeds her child. It is late when the child is growing and getting older. They are studying something [in schools and universities] but that is a lost generation already. Nowadays a teacher knows everything, that is the problem with schools." Niillas Somby spoke of traditional knowledge in a similar way. "The traditional knowledge is a really valuable thing because it is knowledge of everything. Of food and material and storytelling, symbols, you name it, it is everything. And the irony is that here in Sapmi [the Sámi Nation, area covering land in Norway, Sweden, Finland and Russia] we are claiming for aboriginal rights, indigenous rights. But at the same time we are scared to touch the indigenous culture, the spirituality and the traditional knowledge. And our leaders are the well-educated young people from universities without any knowledge. It means a very fast change into the other, non-indigenous system. I'm sure that we have seen, our generation has seen the results, and we can still see the results of what is happening if we change our lifestyle, or change our values totally. We'll be turned into something else and we can just forget about the indigenous values. But I don't think this is something we should worry too much because I see lots of young people who are starting to see the values in the traditional knowledge."

### Reindeer Herding

Niillas Vuolab started as a reindeer herder in the year 1950





before he turned 14. For 30 years he worked on skies and in 1963 got his first skidoo. He spoke of the time before the border between Norway and Finland was closed in 1852. Before that reindeer herders and reindeer used to travel to the Arctic Sea shore for summers and back to inland for winters. The whole family migrated with the reindeer but this changed as herders built fixed houses and took on cattle in addition to reindeer. Niillas remembers the time when land was cleared for fields and horses were brought to Utsjoki. He has seen the days of first agricultural tools in the area and claimed that nowadays it wouldn't be a problem to put up a field with all the machinery. Niillas told it was difficult to get enough hay to feed the animals but that his family's land has yielded enough and some more. According to Niillas the older reindeer herders moved on skies and they didn't use a common ski stick with a basket at all. They skied with one long stick so that they could feel through deep snow where were good lichen areas to bring the reindeer to feed on it. In the summer Niillas, like the other reindeer herders would walk with a heavy rucksack and winters went on skies. Because the reindeer wandered far, herders used draught reindeer to haul along a lavvu and supplies to last days. The change from skies to skidoos meant that even if the reindeer were tens of kilometers away, herders still could drive home for the night.

Niillas Vuolab explained how the reindeer responded to the change. "At first the reindeer did not understand what this new gadget was. Skidoos allowed us to get closer to the reindeer and they got timid and started running as they herd the noise but soon they got used to it. Then the animals started behaving recklessly but we could round them up quite soon with the skidoos. Skidoos overdid men on skis and also good dogs that were used before skidoos. Nowadays, when we winter feed our reindeer with skidoos, the reindeer come to check up a skidoo whenever they hear one approaching. There are other skidoos than those used in feeding moving

about but the reindeer want to make sure if [there is hay driven]."

Ilmari Vuolab saw a positive development in the reindeer economy. "Now we have an organized feeding system and we have returned to the old herd system. It seems to function that we handle the reindeer in smaller units in the wintertime. It is easier to see that all get food and such." Ilmari expressed his worry over the cut backs of the herd size applied by the government. He thinks there is no ground for the cut-off since all reindeer are in good shape and calves are big. The cut off are partly based on the disputable issue of decreasing grazing grounds. Ilmari Tapiola thinks the European Union has in some ways improved the reindeer economy but at the same time he sees that it is linked too much to agriculture. "But we don't get the subsidies that agriculture gets. We share the same duties but not the price support. There is only the national support for reindeer economy that is paid directly to the reindeer herder. That support is based on the number of reindeer one has."

### Fishing and the Significance of Salmon

Many of the community members voiced the importance of the River Teno and its salmon stocks. A common opinion was that there are fluctuations in the amount of salmon swimming upstream and that the couple of past years had been excellent salmon years. Jouni Tapiola from Kaava has been a fisherman for all his life and he spoke thoroughly of his experiences. "In my childhood there were no children's plays. It was fishing and it was nice to spend time on the river. Especially when it once in awhile jerked and we got a fish. In 1936, I was maybe ten years old, it was still allowed to practice active net fishing, *kulkutus* in the fall, it was forbidden in 1938 and is now allowed only in spring. In active net fishing there was a boat on both sides of the river and the net spread out





in between. In the middle there was one boat where the fish were collected. The whole pack moved downstream with the flow. Anyway, it was a matter of life so we fished all the time to get and store food. Other means of fishing back then were with dam, with rods and with seines. The wartime changed the fishing. The sea area was full of mines so no one dared to fish there. Here on Teno, all nets were made of hemp we couldn't get any hem thread so the nets rotted little by little. All this allowed more salmon to swim into the river and in 1945 I remember how there was so much fish in the Teno. But there were replacement nets and dams were built again so the salmon got less."

Jouni continued with the development of salmon tourism. "Few years after the war first sports fishermen arrived here. It was pioneering at first since they drove to Karigasniemi and were boated on the Teno from there on. When the road reached Utsjoki the number of tourists increased. But there was not enough accommodation or boats to rent here back then. The local people started to rustle up cabins and they were success, never empty. I think we were the first ones here in Kaava to offer tourist services. We still have the house, two rooms upstairs -they were our first tourist accommodation. Children slept in a storehouse! But they were satisfied with that. Today it's different. We cannot afford to prohibit the salmon fishing too much. Today the fishing tourism is the most profitable fishing we have. If no tourists, no rented cabin, no one to row on the river and no boats rented. Sure there has been quarrel over this. Those with no tourist business and cabins are against it [tourism], of course. But I feel this has become somewhat more peaceful nowadays."

There have been changes to the Teno salmon over the years and there are threats in the air that could affect its presence. Jouni Tapiola spoke of these issues. "There has been improvement on the salmon stock. It was in the 1970's that the Norwegians prohibited this trawl-like sea fishing. Al-

ready in the next year we had small salmon swimming upstream. Nowadays the sea is being fished out of shrimp that is leaving the salmon with only little shrimp to feed on. This has caused the colour of salmon to fade. It is not as red as Atlantic salmon from the Arctic Sea used to be. And the flesh or meat, that used to be much thicker in the past. Back then a salted salmon fillet was like a wood board. This is also due to over-catching shrimp. The farmed salmon is a threat to the wild species in many ways. It has pulled down the salmon price. Now the price for real salmon from Teno is half of what it used to be. Cod is now more expensive than salmon and after the war a kilo of cod was cheap. I don't know what they feed to the farmed salmon but somehow they've managed to colour it red. It is very oily or greasy fish." Jouni Tapiola ranked the salmon parasite, *Gyrodactylus salaris*, as the number one threat to the River Teno and its salmon stock. He hopes that the parasite could be prevented from entering the river and polluting the salmon. "It [the wild salmon] means so much [to the Sámi], in income ways. If there wasn't salmon swimming up this river, I don't think there would be any settlement either."

### Demarcation Effects and Transportation Policies

Periods of massive changes in Sapmi, Sámi homeland, and the Kaldoaivi region have taken place. Arrival of new people, construction of transport network, end of the Cold War and the joining of Finland to the European Union in 1995. All these affected the region. The River Teno has played a great role in the lives of the Sámi. In addition to the fishing, it has been an important way of transporting people, animals and goods, both across and along it. Because of this the Sámi in Finland and Norway used to have in intensive interaction. During the interviews comments on the social changes were brought up.



Niillas Vuolab recalled how it was common to walk either on the Norwegian or Finnish side of the Teno, which side ever was in better condition. “In the winters Norwegian reindeer herders could feed their reindeer on our side and rest while migrating the herd, and vice versa. I think it was in 1852 when the border was closed for reindeer. If I remember right, the agreement was that both sides got the reindeer that was there when the border closed. There were no fences on the Norwegian side and not long ago our reindeer from Kaldoaivi started wandering to Norway across the frozen river, they were looking for more food. We couldn’t get them back alive. Once there was 120 Finnish reindeer mixed in the Norwegian herds. Today it is easier, we can collect our reindeer alive from the other side and vice versa.”

Aslak Antti Länsman told about the Finnish-Norwegian border during the Cold War. “All of us had to carry a certificate of borderlands residence. We called it the frontier passport. Only locals could go across the borders, only on foot, not by skidoos. It made us Sámi grow apart. After the treaty of the European Economic Space this was discontinued. They [state authorities] never acknowledged that the border would cause any harms here, but it was a problem here. When the Cold War ended we burnt our frontier passports. I remember when a Sámi woman from Norway came across to Nuorgam and a young guy from the village, a frontier guard asked the woman for the frontier passport. The lady told the guy off by saying that she had never needed such a paper. The guard threatened to take her down to Ivalo for investigations and she replied having time to wait in the cell as well. The woman and the guy knew each other, but the bureaucracy demanded for this action. The days of Cold War were terrible! The times changed slowly and it was in 1957 that we could drive a car to Utsjoki for the first time. Before the road there were only few buyers for reindeer but now there were more. I think the road was a good thing! We were so in the woods before

that.”

## Sámi Culture

According to Niillas Somby the Sámi of today have not been educated properly thus causing loss in traditional weather forecasting and medicine skills as well as knowledge of spiritual ceremonies. Ceremonies were not officially accepted and because of that there are only few left. “I can tell you about the Sámi joihkis, the Sámi way of singing. They were an important part in the spiritual culture, out in the nature and in everyday Sámi life. They were forbidden during the Christian system, it was believed to be sin to sing the songs. But there were some drunken people who didn’t care about this and they kept these Sámi songs alive. Those good boys, good guys, they adopted the idea of Sámi songs being evil and sinful and kept quiet. The drunks kept the songs alive because they were protesting and didn’t really care.”

Elina Helander said the Sámi and other indigenous people have always taken good care of the nature. “When state officials and missionaries entered the Sámi land, they caused attack on the shamans since they were spiritual leaders. Sámi names were forbidden, our drums were taken away and people were punished for many things. They [state officials] said they owned the land now, without any documents to show this. These areas where we are living are the richest areas in Europe right now. Rich in natural sources. We thought we could get rid of them [state officials] since they’ve already taken away so much, like land and spirituality. But they are back again, this time for oil, gas and minerals.”

Aslak Antti Länsman is seeing a positive change in the Sámi culture and its acceptance. “Now we are using our language more and we are braver to acknowledge our Sámi heritage.”



## Climate Change and the Indigenous Nation of Sámi

Elina Helander, a Sámi from Utsjoki talked of changing climate and its effects on the indigenous Sámi people. “The Sámi have an ecological knowledge of their own, rooted in the traditional way of life. They have their own knowledge derived from experience, long-term observation, and the utilization of natural resources. This knowledge is best expressed and transmitted through the Sámi language. Sámi traditional ecological knowledge (TEK) goes beyond observation and documentation because it is a precondition for their survival. Particularly interesting is the fact that indigenous people like the Sámi have a long-term experience in adaptation.

People in the villages are worried as they face the global changes. The Sámi are used to combining different economic activities, such as berry picking, reindeer herding, fishing, hunting, trapping and handicraft. If the changes are sudden, accumulate rapidly and have impact on all or most of local resources, and if the resource base is scarce, then the problems start to show themselves immediately. Many claim that the weather has become warmer, and especially the fall and early winter are warm. During the recent years, the ground has not frozen properly in the fall, and there has been little rain in September. There are many salmon rivers and lakes in the Utsjoki area where I come from. When the ground does not freeze in the fall, and there is little snow during the winter, there is very little water in late May and early summer in the rivers and lakes. Then, of course, with little rain during June, the rivers are almost dry and the fish cannot go up. But during the recent years, it has happened that in July there are heavy rains. Consequently, the amount of water increases enormously and it becomes impossible to fish in small salmon rivers.

Many herders and subsistence hunters claim that there are

no winds anymore. Wind has some positive effects. For instance, wind gathers the snow to certain spots. In other spots there is little snow and it is then easy for the reindeer to dig through where the amount of snow is small. The wind can also make the snow soft, but on the other hand, the extremely strong wind, *guoldu* in Sámi, makes the snow hard. During the recent years, the weather has started to change rapidly, so that sudden shifts take place. There are no longer stable periods of a cold weather type. It has also become more difficult to predict the coming weather. People are more careful when moving across lakes and rivers. In our area the moose migrate in early November from north to south, but they can be hindered from doing this if there is no ice in the rivers and lakes. There must come about a radical change regarding the ecological awareness in humanity if we want to do something positive regarding the changes that occur and are predicted to come. When talking about the snowchange, we should not only monitor and accept the changes. We have to resist the global changes when resistance is imperative, i.e. when the changes made by man cause serious damage to nature, societies, and people.”

## Perspectives for the Future

Aslak Antti Länsman noted that the reindeer is an adaptive animal. He believes his sons will carry on the reindeer herding. Aslak Antti continued with his opinion on the European Union. “The EU has brought us more good than bad things. The reindeer economy has benefited from the union since now the meat prices are truer than what they used to be. We Sámi see the EU as a positive change in every way. It has even improved our human dignity. Of course I think that Sapmi without the present borders would be a good solution but I don’t really mind the way things are now. I believe we are headed for the better all the time. Finland is prospering little





by little after the depression years and that affects us too. The EU affects greatly on us. We can say that we have become prosperous after Finland joined the European Union.”

The idea of selfgovernance came up also in Ilmari Tapiola’s thoughts. “I don’t see Sapmi as an independent nation, but I think the three most northern municipalities in Finland: Utsjoki, Enontekiö, Inari and in addition to Vuotso region in the municipality of Sodankylä, should be given to the Sámi people to govern. We should be able to decide on our waters and lands in some way. I don’t believe that borders between nations [Finland and Russia] would ever open or be removed as such. To my mind there should be Sámi lands given to

Sámi people for governing within the national borders. I see that as the only choice.”

Hans Kitti voiced a need for change in order to redirect the poor state of the earth. “It is depending greatly on the world situation. Instead of lots of talking, the whole attitude in the world should change, totally. We can see the results of poisoning the nature in countries where forests have perished. I see that the forest is the lung that breathes and balances this interaction between the atmosphere and the earth. People don’t understand [what they are ruining]. It would be much richer to live in a nature that has not been burdened and exploited.”



# Global Change - Climate Change Observations Among The Sámi

By Dr. Elina Helander

*The Snowchange Conference. Tampere, Finland, February 22-24, 2002*

I would like to thank Mr. Tero Mustonen for the invitation to take part in this climate change conference. The time has come to take the snowchange issues seriously. First, I am going to talk about Sámi traditional ecological knowledge in relation to the overall climate change factors and monitoring. Second, I will tell you about the concrete climate and global change observations as they are experienced by the reindeer herders in the Sámi reindeer village of Kaldoaivi in Utsjoki in North Finland.

## 1. WHAT THE Sámi KNOW ABOUT THE ECOLOGICAL AND ENVIRONMENTAL CHANGES

### Traditional Ecological Knowledge And Climate Change

#### Traditional ecological knowledge

The Sámi have an ecological knowledge of their own, rooted in the traditional way of life. They have their own knowledge derived from experience, long-term observation, and the utilization of natural resources. This knowledge is best expressed and transmitted through the Sámi language. The Sámi people's knowledge system is similar to the traditional ecological knowledge (TEK) of other indigenous groups of the Arctic. It goes beyond observation and documentation



because it is a precondition for their survival. TEK is considered and reformed in relation to new information at each moment in relation to what happens in nature and people's plans and activities. Thus, traditionally, TEK is lived and activated in practice.

The Sámi people's knowledge has a connection to land and resource use, their livelihood activities, as well as weather and other natural phenomena. Also, the Sámi world view carries significance in relation to Sámi traditional ecological knowledge. One reindeer herder in my own village (Kaldoaivi) said that the only thing that keeps the Sámi people in their villages is the nature. On the other hand, nature and its resor-



ces are very much dependent on how humans relate to them. Traditionally, the Sámi people do not go to nature if they do not need to. Culturally, the nature is seen as having a spirit and, consequently, it is worthy of respect and worship. This view comes quite close to the “Gaia” principle as presented by Lovelock (see also Strathern 1992).

Knowledge about a human being’s, a single individual’s place in relation to his or her community and environment – and in fact, the entire universe – is embedded in traditional knowledge. These relations are expressed in old Sámi drum pictures, for instance. In order to understand the knowledge of the Sámi, one has to study it in the context of their activities, such as reindeer herding, trapping and fishing. Furthermore, it is important to consider their beliefs and relation to the nature. Such knowledge is traditionally expressed through stories, songs, memorized experiences and so on.

#### **Globalization brings forth localization**

Nature has never been in an absolute constancy. However, during the latest centuries or so the Sámi ecological knowledge has been connected to quite stable climate and nature factors, with some variability and smaller occasional changes in the weather systems. Moreover, Sámi TEK has been expressed and practiced in situations in which the Sámi people themselves managed their natural resources and controlled their lives, and in which the biodiversity in their areas was relatively abundant. This does not mean, however, that TEK cannot give answers when global changes occur.

Global change including climate variability brings great threats to indigenous life locally. Globalization brings forth localization. A closer look at the issue shows that it is a complex one. In the contemporary period, the environmental problems are not soluble at the national or local levels only. However, the monitoring of global, environmental and “snowchange” is necessary at the local levels, because the consequences of

such change can have a great variability in time and space and because the local levels are so vulnerable. In this connection, as already indicated, TEK has a role to play.

When we talk about global change and climate change we also have to keep in mind that at the same time we are talking about people and their reactions and solutions to changes. Particularly interesting is the fact that indigenous people like the Sámi have a long-term experience in adaptation. Their adaptational strategies are worth studying and considering. The traditional knowledge of the Sámi is very context-bound. The context is the activities of the everyday life within a community in its environment. TEK is also very relational in the sense that a person, in a specific situation in relation to some given factors of that moment, knows what kind of knowledge to activate.

#### **Research and TEK cannot easily specify the changes**

In many cases, it is difficult for ordinary people in their everyday lives to know if the changes they are now witnessing are connected to the concentration of greenhouse gases, or if they emerge from the overall natural climate variation, the Arctic oscillation, if the changes are man-made, if the cause emerges from airborne pollution, uncontrolled economic activity somewhere in the industrial areas, or if there are some local/regional causes or other causes such as cultural/economic behaviour of the Indigenous group itself. Scientists, too, meet the same challenges.

Some older Sámi say that for as long as they remember, there has been variation in relation to weather. For instance, sometimes the winters were extremely cold, sometimes mild. Sometimes the rivers were empty of fish, sometimes the fish appeared in abundance. But still, many witness changes and variability. Some of the changes are quite radical from the local point of view. From the Sámi vantage point it is important to focus on what is going on, because many Sámi still live







with nature and of nature and their living and identity are dependent on what happens to nature. Furthermore, at present, nature is very much dependent on people's reflexivity.

### **Worried**

When we talk about the climate change in the Arctic and its impact on the northern ecology and environment, including local societies, we have to take into consideration that there are also other factors having impact, such as global economic growth, pollution, contamination, etc. Indigenous peoples' societies and environment are very vulnerable. Therefore, from the indigenous point of view, all factors having impact on their environment and societies have to be taken seriously.

People in the villages are worried as they face the global changes. Perhaps not so much about every single factor as such, such as some elements regarding the natural climate variation. However, the combination and the consequences of certain negative factors are scary. The Sámi are used to combining different economic activities, such as berry picking, reindeer herding, fishing, hunting, trapping and handicraft. As long as there is plenty of everything in nature, and there are possibilities to combine different economic activities, the natural climate or resource variability that occurs is not experienced as specially harmful, under the condition that the changes cause different effects on different resources, such as reindeer calving, the berries and the fish. If the changes are sudden, accumulate rapidly and have impact on all or most of local resources, and if the resource base is scarce, then the problems start to show themselves immediately.

### **Sámi Concept Of Environment**

"There is no doubt in my mind that traditional knowledge has a major part to play in the efforts to resolve the ongoing global crisis as well in the further, sustainable development of modern economies. The Sámi traditional livelihoods have

always sought to live in harmony with the environment, to avoid upsetting the delicate balance of nature. In the Sámi society, in tradition, knowledge brings obligations.

The Sámi concept of the environment consists of different components, including

- the natural environment
- the cultural environment
- the social environment and
- the linguistic environment.

All these environmental elements, such as ice conditions, cultural ways, what takes place in the society, language behaviour, etc., respond to changes. These elements go together to make up a whole which must always be viewed as a single entity. If one of the elements changes, there will necessarily be changes in the other elements as well" (Helander 1993).

### **What Is Important?**

#### **Resistance**

There must come about a radical change regarding the ecological awareness in humanity if we want to do something positive regarding the changes that occur and are predicted to come.

When talking about the snowchange, we should not only monitor and accept the changes. We have to resist the global changes when it (resistance) is imperative, i.e. when the changes are "made in man" causing serious damage to nature, societies and people. The Brundtland Commission wrote about "our common future", saying that each of us has a responsibility. The reflexivity of the modernity means that we can reexamine our attitudes, motives and doings, and that we are able to monitor what is going on around us. Through modern information technology we also know what is taking place in distant places.

#### **Encouragement Of Local Observations**

I would like to claim that the Sámi people, especially those who live within traditions, have a method to make observations. They have learnt these methods during many centuries. Observations are made about the entire environment, namely the natural, cultural, social and linguistic environment and the linkages between these. Observations are also made about single factors and what happens to nature or to the human society if changes occur somewhere within the system of these factors.

#### **TEK Involvement**

The imbalanced and biased western knowledge regime has led to overall problems. There must be a balance of knowledge in relation to the ecological and environmental factors. Due to their constant stay in nature, the Sámi and other indigenous groups are able to make continuous observations that can be utilized in the overall monitoring of global change. One should encourage local observations of changes in relation to the environment and incorporate this and other TEK information into scientific databases. It is also important to consider TEK in political and administrative decision-making in relation to different programs with the aim to safeguard nature for future generations according to the sustainable principles. If we lose touch with TEK, we might also lose essential knowledge about our survival potential in the rapidly changing world.

Regarding the Sámi, it is now important to:

- initiate, conduct and support the research concerning the climate/global changes, especially when TEK and indigenous people are included, and register the observations and analyze the environmental sensitivity to weather changes and other global changes that take place in the Arctic
- study the different aspects of TEK
- collect material about indigenous adaptation strategies, and



-analyze the effects of climate/global change on indigenous societies and cultures.

Also, the Sámi should be given more control of their lands and the natural resources in their own areas.

(The issue of land ownership and self-determination is still unresolved between the Sámi and the surrounding states.)

## 2. OBSERVATIONS

Now I will tell you about some of the snowchange/global change observations from the north. These are observations as told by the reindeer herders in the Sámi reindeer village of Kaldoaivi in Utsjoki in the North Finland.

### Snow

Snow covers the ground in our area for six to seven months a year, at the least. The Sámi reindeer herders make observations about three main aspects in relation to snow:

-how to move and migrate (in Sámi, *jobtin/goastan*)

-how the grazing conditions are (in Sámi, *guobtun*) for the reindeer. When the reindeer herders meet and discuss with each other, one of the first things to discuss is *guobtun*, i.e., how the grazing conditions are, whether the reindeer have access to lichen.

-to track, (in Sámi, *vuohhtin*). (Cr. Eira 1994.)

I have comments on the first two of the mentioned snow factors:

### Regarding The Snow Amount And Quality

Some reindeer herders claim that these days there is not so much snow as there used to be. However, if there is snow, the snow with a hard layer, in the Sámi called *cuoñu*, is absent. In earlier years, there was always *cuoñu* during March and April, even in early May.

*Cuoñu* is beneficial if you want to migrate or move to some other location. Especially in old times, before the introduction of snowmobiles, the hard snow was very important.

*Cuoñu* is also beneficial for the reindeer if there is no diet available due to the large amount of snow or the fact that there is a very hard snow layer somewhere inside or under the snow. On the hard cover snow, the reindeer can easily move from tree to tree and take food from trees. In deep soft snow, the reindeer have difficulties to move and they become easily attacked by predators such as wolverines. On the hard snow, the reindeer can easily escape danger. Oftentimes when there is hard snow, the reindeer can move higher up to mountain tops, where they can observe the surroundings and see if wolverines, and in old times wolves, are nearby.

In the recent years the snow has often been loose and soft, in the Sámi language called *luotku*. Loose, soft snow, if it is not too thick or deep, is in some sense favorable for reindeer because they have easy access to diet. But too large an amount of snow makes reindeer tired and they need more energy and food. When there is little snow, and good *guobtun* (favorable food availability), the reindeer are in good health.

The fate of reindeer calves depends the amount of snow: when there is much snow, there are few reindeer calves. The female reindeer digs holes in the snow for her calf. If there is much snow, there is space for only one animal on a specific spot and the calf might not get access to the food.

### When Does The Snow Fall?

Earlier, the winter and snow came regularly. It started to snow in early October, at the latest. During the recent years, if and when it snows in the beginning of October, it starts raining after a while, the snow melts and it takes time before the real winter comes. In 2001, it started to snow in the middle of January in Utsjoki. Some amount of snow came before January but the mild weather type with rain and winds melt





the snow away.

### **Do We Need More Snow?**

Some people say that in favorable circumstances it is good that there is not much snow. But if you look at the whole story, the land, the water level in the rivers, vegetation, etc., it is favorable that there is enough snow, i.e., that there is a balance between different kinds of weather types. For instance, the snow covers and gives shelter to the vegetation. The animals, vegetation, etc., have adapted themselves to a certain variation in climate and nature. Human activities are also based on certain climatic “traditions”.

### **Weather**

#### **Ground Does Not Freeze**

Many claim that the weather has become warmer, and especially the fall and early winter are warm. During the recent years, the ground has not frozen properly in the fall, and there has been little rain in September.

There are many salmon rivers and lakes in the Utsjoki area where I come from. When the ground does not freeze in the fall, and there is little snow during the winter, there is very little water in late May and early summer in the rivers and lakes. Then, of course, with little rain during June, the rivers are almost dry and the fish cannot go up. But during the recent years, it has happened that in July there are heavy rains. Consequently, the amount of water increases enormously and it becomes impossible to fish in small salmon rivers.

#### **Changing Wind Conditions**

Many herders and subsistence hunters claim that there are no winds anymore. Wind has some positive effects. For instance, wind gathers the snow to certain spots. In other spots there is little snow and it is then easy for the reindeer to dig through

where the amount of snow is small. The wind can also make the snow soft, but on the other hand, the extremely strong wind, in Sámi *guolđu*, makes the snow hard.

In the spots where there is much snow, the reindeer do not have good access to the ground level, to lichen. In these snowy areas the lichen can thus be spared for later need, possibly for the following year.

These days, the direction of the wind can shift fast; during one and the same day the wind can blow from almost all directions.

#### **Is The Weather Still Cold During The Winter Season?**

Many claim that these days it is not cold during the winter season in the same way as it used to be. Earlier, for instance in the 1960s and still in the 1980s, there were winters with long cold periods. A period with very low temperatures persisted from November to the middle of February.

During the recent years, the weather has started to change rapidly, so that sudden shifts take place. There are no longer stable periods of a cold weather type. It has also become more difficult to predict the coming weather.

There are certain benefits to a milder weather. If it is extremely cold, the reindeer need more food and they have to work harder, and can become weaker due to the continuous working (digging snow, moving, etc.) and the hard winter conditions.

#### **What About The Rain?**

During the last 50 years or so, July has been a rather dry month. However, one observation about rains in my reindeer herding area Kaldoaivi is that during the recent years July has been rainy.

Another observation concerning rains is that it does not necessarily rain any more during September. The Sámi used to say that is good if there is some rain during September.



For instance, the amount of mice during the winter is small if there are heavy rains during the fall. If it rains too late, in October, for instance, and the weather suddenly becomes cold and snowy, this can create a hard icy cover on the ground, which is not good for the availability of food for the reindeer during the months to come.

During the recent years, the ground has not frozen in the fall, and there has been little rain in September. We have already mentioned the consequences of the heavy rains in July for the salmon fishing in salmon rivers. The salmon catch is small if the water level in the rivers is too high in the middle of the summer. It also becomes impossible or difficult to catch fish with the traditional fish traps or drift nets if the water level is too high or too low.

If there is little rain in the fall and little snow during the winter season, the water level in the rivers is low when the ice melts in May. It can have an impact on the traditional net fishing activities in the main salmon river Tana (in Sámi, *Deatnu*) of the area in early summer.

### 3. MORE OBSERVATIONS

#### **Dryness**

Some people claim that the air is drier and the effects of the sun are stronger than before. The light disturbs the eyes and the sun can burn the skin.

Many small lakes and ponds have dried up. The marsh areas have become drier.

#### **Some Biodiversity Changes**

##### **Berries And Trees**

Some berries, such as marsh whortleberries, have almost disappeared. Also, the amount of cloudberries, lingonberries and other berries is much smaller than in the 1970s, for instance.

In certain areas where there used to be berries, the berries do not exist anymore (for instance, in Rassejohka, Utsjoki). Local Sámi in Utsjoki also claim that vegetation, for instance, the birch tree, grows faster than before.

##### **Fish**

In many lakes, the fish populations have gone into decline, partly due to overharvesting, but also due to factors unknown to the local people. For instance, in Rievssatjavri, inside the Kaldoaivi reindeer village, the perch has disappeared. In the same lake, the pike seems to have survived.

##### **Birds And Insects**

The number of many birds is smaller than before and the number of crows, buzzards and some falcon species is almost nonexistent compared to how it used to be. The number of insects has decreased: the mosquito populations have declined among others.

In some areas some birds have disappeared, arctic tern, long-tailed duck and osprey among others.

##### **Airborne Pollution**

Many Sámi claim that airborne pollution has increased. The snow can be black, so that every winter there are black snowspots in the mountains. It is like powder or something on the snow and in the snow.

##### **Quality Of Ice**

The ice conditions in the rivers are different than they used to be. The quality of ice is not good anymore. The lakes and rivers are covered by ice later in the winter than before. People are more careful when moving across lakes and rivers. In our area the moose migrate in early November from north to south, but they can be hindered from doing this if there is no ice in the rivers and lakes.



### **Erosion**

People also register an overall increase of erosion. The river banks are eroded and the reindeer grazing lands as well.

### **LITERATURE:**

Eira Nils Isak. Bohccuid luhtte. DAT. Guovdageaidnu, 1994.

Freeman Milton M.R. Endangered Peoples of the Arctic. Struggles to survive and thrive. Greenwood Press. Westport, Connecticut and London, 2000.

Helander Elina. The role of Sámi traditions in sustainable development. In Jyrki Kakonen (ed.). Politics and Sustainable Development. Dartmouth, 1993.

Stern Paul C., Young Oran R. and Daniel Druckman (eds.). Global Environmental Change. Understanding the Human Dimensions. National Academy Press. Washington, D.C., 1992.

Strathern M. After Nature: English Kinship in the Late Twentieth Century. Cambridge: Cambridge University Press., 1992.

Voices from the Bay. Traditional Ecological Knowledge of Inuit and Cree in the Hudson Bay Bioregion. Canadian Arctic Resources Committee. Environmental Committee of Municipality of Sanikiluaq. 1997.







*In memory of Aslak Ola Aikio 1931 - 2004*

## A Hunter, Elder, Father, Friend, A Person of Knowledge

*by Tero Mustonen and Tiina Salin*

One of the last great Sámi hunters and Elders passed away in March 2004. This text compiles on several interviews he kindly gave to the Snowchange project during summer 2003 - This is Aslak Ola Aikio.

### Life

Born in 1931, Aslak Ola grew up in a Sámi community of Ohcejohka, or Utsjoki, in the Northernmost Finland in times when there were no real road connections but the mighty River Teno offered transportation and source of food -the Atlantic Salmon. In addition the Sámi were reindeer herders and hunters who lived by the yearly cycle in the nature. Aslak Ola Aikio learnt from a very young boy to work for home, tend to the reindeer, fish for salmon and hunt. He also learnt to speak Finnish as Sámi was his native language and he witnessed many changes around him through the years.

At home Aslak Ola Aikio spoke Sámi but he had learnt Finnish on his own: "I looked at the papers like ordinary people do, we had Lapin Kansa or Rovaniemi newspaper de-

livered. Well, I looked at the letters and text -everything. It wasn't just glancing over but I looked at it all. Every single one as if I was reading, and I was -in my thoughts I was reading it. Everything, the whole paper. It was of course a goal I had set for myself." At those times there were no fixed schools for the children but instead a circling school that came to a village every now and then. Long before Aslak Ola participated in the school, the teacher had sent him "a kilo of plums, a pencil and a small notebook" which was at the time considered a fortune. The teacher was a strict and God-obeying man who made the children write essays and learn the catechism by heart. "I read the catechism by heart, I set a goal to read 10 pages every day. The teacher said he had never seen such before. I had a tactics to learn the catechism. I went out to some building to cut off all disorientate noise and to hear. I read out loud once and only once the whole homework. In the morning I took one last look at it to make sure I hadn't forgotten any part. I have only good marks on my school report." Aslak Ola went to confirmation school as well but all the time he also had tasks at home such as collecting lichen and taking care of firewood. "There is plenty to do in a house. When living in subsistence economy there's never a rest but there's also enough of everything."

### Weather

During his life Aslak Ola observed the nature all the time since it was the way to get information on coming weather among other things. Out on the fells one had to keep track of everything in order to survive. Certain phenomena indicated changes and were useful to plan ahead. When Aslak Ola was 15 years old, he was herding a big herd of reindeer alone up

on the fells. He recalls seeing a strange light phenomenon. "The light came at night and there was open ground all the way to Kuktsavaara, about five kilometres. Everything became visible, I'm sure I could have seen a ptarmigan if there was one on the area. That bright it was! It lasted so long that I had time to think it was not a lightning. The light came from straight above and it seemed as if it was open. And I have heard of stories that the opening of space had been seen. This was closest I could think what it was but I don't know what that opening had been like. It is an ancient story, I had heard it from my grandmother, she was a bit of a seer, my grandmother. But this happened in late 1940's." When asked if Aslak Ola had seen a ring around the sun ever, he remembers



the winter 1939-1940 when the Winter War was fought in Finland. "It could be seen that there were three rods on both sides of the sun. So it is like a six-rod sun. And that is a sign that there will be a lot of wind. Minus 40 degree on the Celsius scale and wind blowing hard. Ptarmigans leaping on the fell plain as fast as possible, that was when I found out they do that. The birds won't hide in the bushes but will be galloping out on sight even if afraid of human. I guess it's for keeping warm. That winter the small lakes I lived by froze all the

way to the bottom. In February I tried to make a hole on the ice for water but after hours of work there was no water, just dry and frozen mud, the bottom. There was nothing living there, no fish for decades. Later the researchers have said that winter was not a cold one but I disagree. And the next winter, that was even colder. Still in February the forest was deeply frosted with no melt dripping. And in February the sun is already up."

Aslak Ola mentioned also of green storm that meant the heavy southern wind that started blowing after the long-lasting far



below-zero temperatures began to rise. The wind made the air extremely hard and the old reindeer herders used to say this storm made even rocks smooth. The green storm caused severe frostbite and often the men who had been out in the forest for long, had these frostbite still in summer. Aslak Ola has detected changes in the nature and turn of seasons when compared to the old times. The summers are hot and dry and water level in River Teno is low. The winters seem to end earlier and melting of snow and ice takes place as early as in April. "It is early spring and in the fall it takes long before there is frost on trees, and there is no snow. Snow is so little than one can hardly see tracks on it." Last spring Aslak Ola went skiing on River Äytsi, or Äimä, that is one of the tributaries for River Teno. "I listened to the sound of free water and saw that the river had frozen up for half a kilometre from where I was. There was more water on top of the ice and skiing there required having your rubber boots on. As I skied, water started adding on my track and I thought that now this will go then, it sure looked like that. The next evening I went there again and the river had freed itself and ran to Teno already. There is nothing holding the river when it flows on top of ice. Well, the River Äimä used to be a sort of magic river in the sense that no more than three days from its opening and River Teno will open too. Except for this year. It didn't happen. Teno was ice covered for at least another month. The River Äimä had changed. And I think it's because of the ice building all the way to the bottom."

### Getting Around

When moving around in the nature Aslak Ola didn't use stars to navigate and according to him, taking directions was based on something different. "I feel like it is some organ or something that I have right here, in the middle of my head -like an antenna that knows." He tested his antenna and its abil-

ity to make him go straight once by taking a target that was about five kilometres across a plain ground. He aimed at the target and started skiing but ended up few meters off the target. Aslak Ola was not satisfied so he skied back to the start and took his aim again. This time the result was again some distance off from where he intended. "It was all based on going straight, all the time. But if someone only assuming to go straight tries it, he would only end up making a loop. You must go straight. And there are bushes and birch tree areas where visibility is not far at all. There are ways to see where one is going, but it's not breaking branches for a mark, for then there would be crowds skiing there. So it was all based on making distance by going straightforward. And your track will turn if your antenna is not so sure. Today I don't feel it and even if I still have the theory of living in the woods and how to move there, I'm not as alert as I used to be and my body is now directed towards other things. But I never used or even carried a compass; I don't trust that at all. A map is something else, that is a picture of the terrain. I remember it when I look at it and I don't need to look at it again. It is enough to get through the next day with the information I have. Even if I had never been there before." A hunter has a way of knowing things, that may be called an instinct or something else. "I don't know what it is. At night I get this feeling that now I must go fast to this place and when I get there, there is an otter of course. But it is not that secretly, the feeling that one must be somewhere. A hunter surely knows the surroundings, knows where to move. He knows that very well. It is not obvious all the time why to do something, but when crossing a river I see these tracks, it is a big otter. That was the time when I had the feeling I must go." Aslak Ola described that a similar feeling can come also when fishing, to know where the fish is. This can happen especially at times when there is less salmon in the river. On the other hand he mentions the importance of knowledge based on experience





which is also needed in fishing.

According to the old hunter hunting is one way to use the nature and to hunt requires a good physical condition. He used to ski with his ski sticks under arm and carrying all equipment and supplies needed to cover several days. When younger, Aslak Ola had a goal to build his body to last tough trips. "After 10 hours of skiing and perhaps two foxes as result, yes it was fairly empty. There is no more fuel to burn. But if you keep that up day after day, catch or no catch, but if you have tried and waited, you will get something. And ten hours would fill every day. The goal is so hard, to learn to ski with a rucksack -it was difficult to cut the weight any less from 14 kilos, at first I couldn't fit anything in 18 kilos. But at the end I learnt. Finally my travel speed was a league per hour and then I thought that I'm in pretty good condition!" Hunters often seem to know where the animals are and Aslak Ola explained that it is all based on experience. "To have seen many nests. And they are replays of the terrain. There was this woman, or she was my godmother, and she was experienced. If she went to the woods and if there was anything nearby, she was sure to know that. But these things you don't talk out loud -there would be many coming to enjoy the set table. Of course tracks on snow tell an open story, like a book to read." When asked if he has heard of situations where one has sensed forthcoming events, such as visits, Aslak Ola agreed. He thinks hearing is just one element and that a person who spends long times in solitude, like hunters, may develop much more sensitive senses than others. "It is one kind of an experience. A hunter or a forest person moving alone in the open fell area might get this sensation of something that is behind his back. He just knows that there is something, not close but somewhere far at the back. And he decides to take a look when he reaches the top of next hill and so he does. And he gets a glance of a fox that just disappears from sight. I guess it is like having an extra eye. I don't think everyone has

this skill, it is an individual character. Some have it and some don't."

## Hunting

Game animals meant a source of income for Aslak Ola, as at those days there were direct catch rewards on wolves and wolverines for example.

Catching animals was easier said than done and a hunter had to develop his skills all the time. There was catch reward on fox as well and after noticing fox tracks a hunter was obliged to follow them. Foxes and ravens were not welcomed animals so they were hunted, foxes for the fur as well. At times the fox fur was regarded so

high that a hunter had secured his winter's income with one caught fox. At age 14 Aslak Ola went out to find his family's reindeer that wolves had chased away. He took his rifle and some ammunition with him and started his search from where the reindeer herd had been last night. There was joint pack of two wolf-families with puppies to feed but they hadn't succeeded in attacking the reindeer that had escaped their teeth. "I was passing the herd when I heard the leader wolf growl to round up the pack. I started running in that direction and noticed a wolf chasing one reindeer few hundred meters away. It didn't succeed and I tried to get closer which was a mistake. It was only later in the army I learnt to shoot from distance. I ran after the wolves the whole day, I could see the tracks on snow. The wolf had its alarm on, or it couldn't keep its mouth shut and then the massive jaws made a rattling noise. I fired



at it while it was chasing this reindeer and it turned and returned on its own tracks back. It didn't know I was there and I went after it. Suddenly the wolf appeared about 100 meters ahead of me and I took a shot at it but missed it. I fired again but it fell short. I thought I should have taken more ammunition with me. I finally wounded it and continued to follow it to get another shot. At some point this wolf joined two other, adult wolves and they sped off. I still followed and finally had a chance to aim again. But we didn't get the wolf. I fired several times but they only jumped off track if the bullet came close. Well, this caused me to carry four or five bullets with me for several years. And the next year I saw one more wolf and started following it but it was too fast on the easy terrain. Just one wolf. I knew already then I didn't need the bullets. It was my decision; there will be no more wolves at my sight. And none has come."

In late 1940's Aslak Ola and two other boys set out on a skiing trip to find a wolverine nest. That was more of a learning trip and they did not locate a nest. "There were wolverines, I found that out later, but we didn't understand what to do with them. To be in control of the situation we should've been quite experienced. But we only skid and imagined of finding a special spot where a wolverine had been gorging -and they do that, it is true. But we did not know of these sites. We didn't understand at that time how the terrain is the same, and directions and all are just replays of the nest. It must be Northeast where the animal faces first when exiting a nest. And of course, it can be a long distance from a nest to a spot with tracks. You can't follow it directly into the nest. But a human can learn to know where it is. It's not in jagged rocks; it is under a snowdrift. The jagged rocks are not right, except when it is escaping, then it will go there. And take its puppies there for safety." Later in life with more skills Aslak Ola followed wolverines sometimes with success and other times with no results.

There is a story of otter hunting that Aslak Ola talks about in somewhat confused tone of voice. "I always load my guns myself. One day it was snowing and I set out hunting. From a distance of 500 meters I saw otters running up the river and I decided to follow them. They had gone under the ice when I got to the shore so I stayed quiet. Soon one otter jumped on ice and I shot it. It fell there and the other was close by, still under the ice. It didn't show itself. The bullet had gone through of course and there was nice pack of snow where it had ended so I dug it out. It was still good looking and I loaded it in my rifle again. For two days I came back to hunt the other otter but it didn't show and wouldn't leave. It is a wise animal, I think otter is the wisest that there is! Well, I gave up chasing this one and went to check traps near Lake Kuktsa, a league away. And an otter has run up the River Kuktsa and I see the fresh tracks. A big otter. I follow the track and loose it but decide to stay close the river. I stayed there long time with my gun ready where I had loaded the same bullet. It was time to show if there's any magic. The otter heard me and suddenly splashed through the snow and I had no choice but to try shooting it in the head. The otter fell back through the hole. I went there, dug out the bullet from snow pack. It was still good. Then I noticed the otter had come through a melt spot in the ice so I opened the hole and peaked in to see how deep it was there. There was enough daylight for me to notice small movement in the hole. There was something with nose pointing toward the bottom and tail right on surface. I only had to grab the tail and pull it up. And it was a huge otter! It was the biggest otter I have ever caught. I had the magic bullet loaded again in my rifle but there was no more opportunity to use it. But then came a spring morning and I woke up with a feeling that I must ski quickly to the River Kuktsa. I decided to find out what this feeling was about, it is an otter of course. Halfway there I saw otter tracks and put up speed. Arriving on the spot I saw the otter with its nose above the



water and ice particles. I had one chance to shoot it before it would notice my presence. I fired and knew I had succeeded. I skied down and pulled the animal from the water. That was the end of the magic bullet, this time I didn't pull it out. It had proved itself already. I suspect that the subconscious mind had something to do with this. That is what I think but I can't say for sure."

Other animals that Aslak Ola has hunted for include squirrels. Their meat was not eaten but the fur was used as merchant. Squirrels carried fleas and the catch had to be wrapped in newspaper to prevent the fleas jumping to humans. At first Aslak Ola used a small Norwegian rifle that worked well with small animals like squirrels that were shot in the nose to save the fur. Later he got a Japanese big rifle that was loaded with shots and good for firing at larger animals like capercaillies as well. Ptarmigans are a common bird species for fell areas and Aslak Ola regarded them high. "Ptarmigan was the bird of life. It was hunted because it was a means of bartering. At those times there were many ptarmigan hunters in Rauduskaidi area. I think there were 4000 ptarmigans stored in the shed and the price of one ptarmigan was one syrup bread (or sweet bread). One bread with one bird. That bread was full of syrup and sugar, that sure is a treat. The time to hunt ptarmigans is fall and it lasts only until the end of March. We skied the traps continuously, we had to. For example an owl is a very bad thing. If it gets the taste of ptarmigan, it will stay close the traps and as soon as the hunter leaves, the owl will come and check if there are ptarmigans in the traps. And now, it eats right away! I was with my father when we used a half a day trying to shoot the owl but it wouldn't let us closer than 50 meters. I had my small rifle and sometimes the owl shook its feathers as the shots probably hurt a bit. I hit it for sure but the shots won't kill, not at all. Finally we went to see why this was. We dug the bullets that had gone through out from the snow and saw

that the bullets had a sort of a soft wool cover on them. That must have come off from the owl's feathers and softening the bullets so that they will not hit. We couldn't do it this way, so we put out the iron trap or same ruiddit."

The modern times have brought changes to hunters' lives and so Aslak Ola had began to hunt for moose too. The last hunting season prior to the interviews didn't bring any catch. "It is two months the hunting season, I skied last fall all the time, every day. I didn't see a moose that I would want to slaughter. It is often the question to think about, what is the moose like that I want to catch." Aslak Ola tells about two moose he had caught earlier. "There were these two moose, found them on the same spot. They were big, at first I didn't want them at all. The first I wounded in the chin bone and started following it for quite some time. I decided not to shoot it from far but to follow on skis until I come to a nice place where it is easy to slaughter and skin the moose. A few falls back I caught a big male but at first I thought it was a female. It had fallen the antlers but its colour, that it hadn't changed and was dark like a female. But no. And it was lying close to a big male that was kind of watching it. I shot from a distance of 250 meters and I tried to see what it was. It is important to know what you shooting. There was a lot to eat in this male; I still have pieces left. I like to chop the animal in portions and there are no bones left. I slaughter and skin in the traditional way, everything gets used. I piece moose the same way I work with reindeer. I don't break bones. Nowadays many take the whole moose with many hands or with machines and lift it up in some warehouse. That's a lot of work!"

## Fishing

In addition to hunting Aslak Ola has been involved in fishing





over the years. The Sámi people have a right to practice a sort of active net fishing, *kulkutus* on the River Teno and old land owning Sámi have a possession of a fixed dam fishing place on the river. The dam is a set of nets lined up in the river and attached to triangle-shaped stands made of wood or metal poles as a more modern solution. Aslak Ola sees the traditional skills and knowledge disappearing since some fishing methods are nowadays forbidden or heavily regulated. “We still practice active net fishing. The year before this was a good salmon year, the young people also got interested in that traditional fishing again. But you have to have the right to fish. And the time to do this is very short, three days per week in May and July. The fishing period has been cut shorter; the weekly protection time starts. On the 15th of June the active net fishing has to stop for that season. And of course there are the dams, but they are quite heavy-built systems. And that will not function if you don’t know about them, then it is no use and the price is high. So many different kind of nets. Yes, you have to learn it yourself. Everyone has his or her own way of doing the dam but the basic thing is that you can’t build it just anywhere. The most important point for me is the lower part of the dam; there should not be too much water underneath. And then you should be able to get your boat around it; there is much weight to carry. But now Teno is so low. I went out this spring to see the river and I thought that there would be no fish. No use of catching something that isn’t there. And that’s how it looks, there is no catch. There are not many good places to build a dam. And it changes too; the spring flooding changes the river-bottom easily a lot. You have to have enough of experience to know these things.”

“We used to fish with seines too. It was called lake-seine for its small mesh-size. It was maybe 35 or 40 millimetres. It was made of fisherman’s thread, or cotton thread. And of course it was dyed in some way. Because of the size of the mesh we caught small salmon, *tintti*, middle-sized salmon, *lo-*

*bijalka* and big salmon too. And lake fish such as whitefish, grayling, trout and char. We seined in Utsjoki and Kevo as well. 1944 was a good salmon year and the next year, people say it was even better, or more salmon. I was fishing in August and beginning of September, and there were salmon in those lakes. One morning I caught three large male salmon, but my hook was poor, it was only a big nail punched through a piece of wood. It was blunt. I caught one with that device, a 20-kilo. I had the two other with cotton seine. There they were. The net was around their jaw; that won’t last, just a little movement and they’re off. Well, that was not a good day. I sure had better catch every now and then. I used to salt the fillets and then take them on my bicycle to a store in Kaamanen. There they bought the salted salmon fillets. I had this wooden box that fit 36 kilos of margarine. I filled that with salmon. I rode my bike in the morning when it was cold to Kaamanen that is 60 kilometers from here and there was no road back then. Some path but mostly soft plains, and there were no bridges. When it’s cold, it hardens a bit and it can be easier to ride. I sold the salmon and always bought food supply with the money. That’s how I got money; that was true bartering. And I made several trips. As soon as I had fish, I went. And yes, I was the first one who bought a moped.”

Aslak Ola expressed his worry over the water quality in the River Teno. He claims the water level has dropped all the time and that there is much impurities on the river now. The water is surging where he has his boat, on a small calm piece of shoreline. The water of Teno has for long been undrinkable since it holds too much of colon bacillus. Aslak Ola has been asking the officials on what kind of observation there is done but he was not satisfied with the answers. He is worried and says “we are under an obligation by the law” to secure the state of the river.



## Teaching

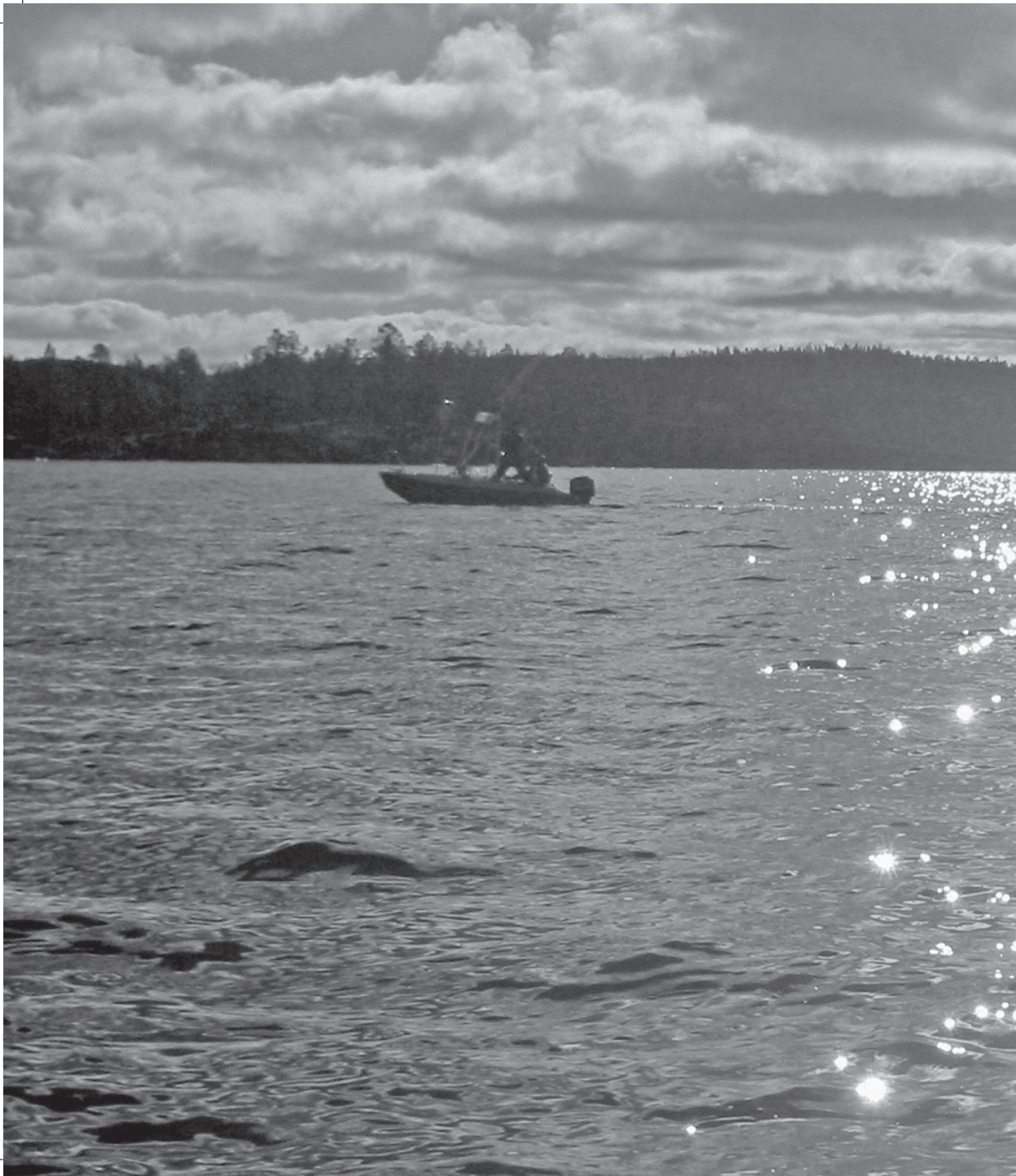
Looking back and comparing his life with those living today Aslak Ola sees the times of his youth more free. “It hasn’t changed naturally; it’s more like a revolution that we’ve faced. As an example the road was one of these events that converted the whole system. After the road came you had to have something to ride on it and that meant that they didn’t have any money. There are houses, surely, but no money. This subsistence economy is not.. Who lives in that must be very careful with the money so that there is still something left. The house is a community, and the sons in a house will earn from the nature with fishing and reindeer. Without reindeer you couldn’t cope, it was a transportation means. More money around here means much more cottages on the riverbank. I think this is what has happened and it is true.”

“I reproach people for they have become estranged from the nature, they don’t understand it! In the old times when living depended on having reserves in the nature, then it was well taken care of. Not too many fish were caught for example. With the modern civilization it seems that the most important thing is to get tourists here and they need to fish. With hunting it is the same. It is only for fun now; there is no other reason. I don’t understand if all the people did as they are speaking, I don’t know where that would take us. I think it would lead to catastrophe. Nature can not be exploited. The natural populations are of course tough, they will survive, there is always some reserve. If human being was so stupid to have eaten itself out of food in the last century, I’m sure there would not be one single person here anymore.”

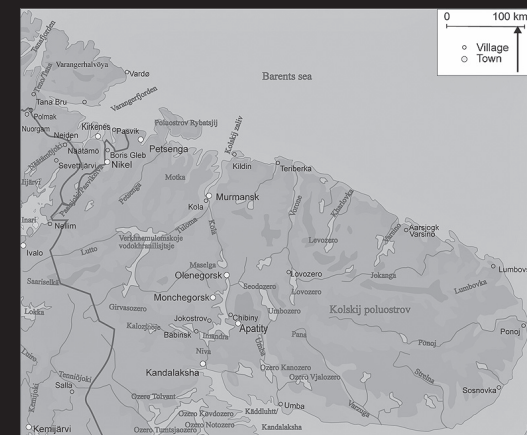
“There have been so many salmon rivers in Finland too, but we haven’t been able to keep them like that. And with the sea, we think that there is always catch in the sea. I don’t think so. Here the Arctic Sea was thought to be endless source and people were convinced the cod would never run out. My

father asked to voice his opinion in a meeting. I think they didn’t understand his irony when asked how they are sharing the catch of the Arctic Sea. Since it was done by figures, my father asked how could they put a figure on endless resource. At that time you could fish with no lure, with a bare hook. It wasn’t about luring the fish to take the bait but just waiting for one to come across the hook. But now there is no [fish], cod is much more expensive than salmon these days. It is that way around now. And yet the salmon farms are bankrupt. This is what I tell you, it is a lesson... for nature can not be exploited. If you do that, it is you who will suffer for it in the end.”





# Russian Part of Sápmi





*A shortened version of the text has been published as well in the ACIA – Arctic Climate Impact Assessment by the Arctic Council.*

*If There Are No Reindeers We Have Nothing To Do Here Either'*

# Kola Sámi Nation – Voices From the Community of Lovozero

*by Tero Mustonen with Sergey Zavalko, Ph. D, Murmansk State Technical University in cooperation with the participants from the community of Lovozero and Alexey Cherenkov, Murmansk Humanities Institute, Murmansk, Russia*

**I**n Lovozero there are 800 Sámi who live close to each other. We take care of and preserve the Sámi culture and advance it! Welcome to Lovozero!- *Larisa Pavlovna Avdejeva, 25rd September 2001, Director of the SamiCulture Center, Lovozero.*

## 1. Introduction - Post-Soviet Kola Peninsula

*Tero Mustonen, Tampere Polytechnic*

Murmansk Oblast is located in the Northwestern Russia, in the Kola Peninsula. It shares borders with neighbours, in the south the Republic of Karelia (Russia), in the west Lapland (Finland) and Finnmark (Norway). The area covers 144,900 square kilometres and the population has been estimated at 1,109,000. The capital of the Oblast is the city of Murmansk, which has about 400,000 inhabitants.

Vast natural resources exist in the area, as well as minerals, high technology and forestry. Barents Sea areas have large natural oil and gas fields. One of the most relevant of these

is the Stockmanovskaya Field. The City of Murmansk has a year-round open harbour because of the Gulf Stream. In late 2002 the 4 biggest regional energy companies decided to build a massive new harbour to the region in the near future. Fishing industry plays a crucial part in the local economy. Many air connections connect the region with other areas. Road connections provide the geopolitical non-Indigenous lines of communication to Finland and the EU, and to Norway as well. A historically important railway connects Murmansk to St. Petersburg and the Karelian Republic. The future plans include the extended and expanded development of the so-called North-East Passage to the Pacific and various other infrastructure developments.

The Oblast has a high military concentration of nuclear weapons, mostly in the form of submarines, a legacy from the Cold War.

The industry technology is rather old and inefficient, creating needs for updating. The environment and biosphere is badly polluted on a local level, even though many pristine wilderness areas remain. Lots of small industrial towns sprung up in the past for the non-Indigenous population. They are currently suffering from a flux of people moving to southern



areas. These villages include Apatity as well as Montsegorsk, which has serious local problems because of the presence of smelters. Civilian nuclear safety is a big issue, even in the high level political discourse.

Murmansk area has historically been of great traditional geopolitical and military importance. Events in the Second World War led to the recognition of the city as a Russian “hero city”.

It withstood many attempts by the German forces to breach the crucial defence lines (which were supporting the fronts and cities in the heartland of the country) from Murmansk harbour to the southern areas of Russia. Fishing has been a great resource and interest to the area. During the Cold War, the Kola Peninsula had the largest concentration of nuclear arsenal in the Soviet



Empire and this is still true, even though the Cold War era seems to have ended. On the other hand, when visiting the Kola Peninsula, it seems that the Cold War never ended. The demoralised and partly ruined Northern Fleet of the Russian Federation has nuclear submarines situated in the area. So many actors create a multiple actor dynamic to the security issues relating to the Kola Peninsula.

The assessments of climate change come from the Kola Sámi Nation village of Lovozero [in Sámi Luujavre]. In the course of Snowchange community visits we spoke with Elders, reindeerherders, cultural activists and local everyday people. Out of the participating informants, the editors have selected the comments which were felt the most relevant to the changes in the local ecological and climatic situation by

the local people.

## 2. Indigenous Voices from the Kola Peninsula

*The interviews have been recorded and edited by Jyrki Terva, Tero Mustonen, Sergey Zavalko and a numerous Indigenous and non-Indigenous students of ecology at the Murmansk Humanities Institute, Murmansk State Technical University and Tampere Polytechnic. The community visits functioned as story-telling and ecological teaching experiences especially to the participating young Indigenous students.*

Inter-connectness with the surrounding ecosystem remains a crucial, defining element in the life of Lovozero. Main economic and subsistence activities portraying this linkage are reindeer hunting, fishing, berry picking and hunting. This relationship with the land can be seen in an Elders words from Lovozero: “Tundra is like my dear mother to me! We herded the reindeers with the whole family. How else should we do it? We took care of the shelter. We knitted, we washed, we smoothed down clothes. What did we do? We baked break! When it is warm, it is warm. When it is not warm, it is cold. I spent my whole life on the tundra. Even after I retired, I spent a year in the tundra. Life was easy; the only thing we missed was the television. Before that all we did was to stay in the earth hut [chum, yurt, kota]. Summer or winter, always living in the shelter in the tundra.” - *Maria Zakharova, 9th June 2002, Elder, Lovozero*

Lovozero, as all of Kola Peninsula, shares a long history of multiculturalism dating back hundreds of years. The Indigenous Nation of Sámi has witnessed the arrival of Russian Pomors, Scandinavians and even other Russian Indigenous people to their homelands. People, such as Komi and Nenets have taken part in the life with the reindeers and for example Lovozero has a Komi population. Larisa Pavlovna Avdejeva stated that - “I would say the Sámi had conflicts before [with the Komi].” Connection to the traditional subsistence areas remains however, despite the experiences of the Soviet rule



and other massive processes which have affected the Kola Sámi in the decades past. "We know good places for cloud berries. We make the effort to visit the same places as our forefathers used." - *Larisa Pavlovna Avdejeva, 9th June 2002, Director of the SamiCulture Center, Lovozero:*

"If I tell you straight...during Soviet times, we were driven here. Our living places were destroyed. There was not a mention of private ownership. Houses owned by private people were destroyed and all other houses as well. Everybody was doing badly. Now the issues of the small northern Indigenous Nations are considered, and the federal government gives a legal guarantee of rights, that the regional administration has to respect. I know many Sámi departed, only few stayed. The situation of the country used to be such that the ones who could go, went. I think the values of life have stayed better with the ones that left than with those who stayed. Our grandmothers and grandfathers lost the most, because they suffered from persecution, forced relocations, collectivisation and many other things. Of course it was not right that a certain country should develop differently from the rest of the world. However, many things are not right." - *Olga Vjatšeslavovna Anofrieva, (born Zaharova) born in the community of Arđino [now abandoned], living since 1968 in Lovozero, 23rd September 2001, Elder*

### **Culture, Stories, Legends**

The Sámi story-telling has been traditionally a central method of passing stories, legends and knowledge among the peoples of the communities and reindeer herder families. In the current modern era of realities of living in Russia today, conflicts remain. Nina Afjaseva, then the current President of the Kola Sámi Association in Murmansk, spoke to us during the community visits in September 2001 of the stories and legends of the local people.

"We have a massive amount of stories and legends. World

is divided into three levels – air, world, earth. Humans live in the middle realm. After we die, our bodies go to earth. Our spirit soars to air, to the highest realm of being...[We have had here a conflict with an air transport company]..And now this company who does not know the rules of the Sámi life, breaks our laws. That is why they are in such a trouble now. Lena [a friend] told me today that in her childhood she used to be very afraid of the Northern Lights, Aurora Borealis. I was as well. For the Northern Lights mean, especially when the sky is very red, that the souls of the human beings are not living in harmony but are fighting, attacking with knives and blood is running everywhere. When the souls are peaceful, there is much green in the sky. When green flashes with blue in the night sky, this means peace. When we were young they said that the Northern Lights were alive and like a *urđalak*, a stalking vampiric bloodsucker of night time, could draw your blood. Northern Lights, it was told, were like alive, like dead people who had gone to the Toodeland, the Land of the Dead. So it seemed the Northern Lights could suck blood from people as well. To me this was an explanation for an unknown physical event. People used to explain this phenomenon with legends and stories. They instilled fear to us when we were young, so that we would not break the laws governing people and nature. For example, it is not enough to say "Do not whistle!". Rather to say: 'If you whistle, the Northern Lights will come down and suck your blood.' This will make the child to obey the rules and laws governing nature. The only entertainment for my generation was the storytelling at night time, when it was dark. Now we have lights. But before it used to be dark at night time, we were just burning some wood at the shelter. We lied down and somebody began to tell stories. The stories flowed slowly and beautifully. They caused sometimes horror and fright, sometimes happiness and joy. There were different kind of stories. Most stories affected the child's psyche in a such a way that





he or she would not break the laws of nature. One should not forbid, it will do no good. One has to give some examples to the child. These examples were our stories and legends." - as told by Nina Afjaseva, 24th September 2001, Kola Sámi Association, City of Murmansk, Murmansk Region

### 3. Kola Sámi Nation Environmental Concerns from the Community of Lovozero [Luujavre]

#### Observations of Change in Lovozero

Documentation of change in the Russian Indigenous communities today is a vital, much-needed process as the society in general has experienced such massive changes in the years after the collapse of the Soviet Union in 1991. Especially the Northern and Small Nations of Siberia, Far East and the North of Russia suffered from assimilation policies, state genocide and ecocide, continuing and extended occupation of the Indigenous homelands, colonisation of knowledge and living conditions. During the worst years of the Soviet terror, especially during the Stalin years, whole nations would be relocated and cultures collectivised. As the reclaiming of economic, ecological, social and cultural rights continues and struggles manifest, the situation has grown better during the post – Cold War years. However, in the remote northern regions of Russia local voices are often drowned or not heard, as the processes from Moscow or even from the regional centres silence the voices from the communities. Therefore there is a clear and coherent message – local people should be heard.

The documentation of change and the current interests, realities and comments cannot be separated from the more broad development of the Russian territories and the Indig-

enous nations living in the Russian Federation. The people interviewed stated that there are many other concerns in addition to climate change, such as the state of the Russian society, lack of resources and other information. But a definite impact to the traditional lifestyle had been seen because of the climate change. "Especially reindeer herders have observed change. They talk about the changes in the behaviour of reindeer. People have to travel with the reindeer and navigate differently. Bogs and marshes do not freeze immediately, rhythms change and we have to change our routes of movement and this means the whole system of living is under change. Everything has become more difficult. I have conversed with reindeerherders and they have told me of



these kind of observations. They have seen as well that in areas where it was possible to collect a lot of cloud berries before, now they berries are not ripe because of climatic warming and melting of glaciated areas. Changes are very visible." - Larisa Pavlovna Avdejeva, 25th September 2001, Director of the Sámi Culture Center, Lovozero

Climatic change in the local weather has become a priority issue for the reindeer herders and others in Lovozero. "Nowa-

days snows melt earlier in the spring time. Lakes, rives, bogs freeze much later in the Autumn. Reindeerherding becomes more difficult as the ice is weak and may give away. Rhythms of butchering and herding disrupts and the migration patterns of the reindeer change as well." - Larisa Pavlovna Avdejeva, 9th June 2002, Director of the Sámi Culture Center, Lovozero

More broad social and environmental awareness penetrated the layers of the Russian society from the middle 1980s onwards. Olga Vjatšeslavovna Anofrieva discussed how this has been seen in the industrial pollution locally: "The biggest benefit of perestroika was that the industries did no longer



pollute as much as before. Here locally the nature kind of rested. Now the arms race is being taken down, the amounts of military ships and military personel. One could say that we have now a positive era, quite difficult, but nevertheless so. We find ourselves now in a situation where soon decisive moves have to be made, we must develop our selves differently. I think changes in the weather are more to do with Gods influences." - *Olga Vjatčeslavovna Anofrieva, (born Zabarova) born in the community of Arđino [now abandoned], living since 1968 in Lovozero, 25rd September 2001, Elder*

#### **Climate Variation: Weather, Rain and Extreme Events**

The cycles of the seasons have defined the situated activities of the local people in Lovozero. Climatic variation has been witnessed and has caused alarm locally. "I would say the climate is warming globally, we have already observed this here. For example the reindeer herders coming of the tundra have said that last year the bogs and rives stayed open for a long time and it was hard to catch the reindeer. If this event was previously due in November, now we have it in December or January. Bogs stay unfrozen for a long time and it is very difficult to try to catch reindeer in such conditions. The herders say the climate has warmed and everything is a result of that."

- *Larisa Pavlovna Avdejeva, 25rd September 2001, Director of the SamiCulture Center, Lovozero*

"All sorts of unusual events have taken place. Nowadays the winters are much warmer than they used to be. Occasionally during winter time it rains. We never expected this, we could not be ready for this. It is very strange. Occasionally we would get snow during summers but this event has been absent for a long time. Of course we have blizzards, but I just want to say, winters have become warmer. Climate has become warmer. We are used to such a dry and long winter here." - *Larisa Pavlovna Avdejeva, 9th June 2002, Director of the*

*SamiCulture Center, Lovozero:*

"Oh, it is warmer. Before when going to the tundra we had to take a lot of warm clothes, otherwise we would freeze. But nowadays you can sleep with just one maalitsa, reindeerskin coat on during the whole night. It is alright with that one maalitsa. Previously we were using as well boots made out of reindeer skin. You never froze your feet in those. But now you do not need them any more." - *Vladimir Phillippov, 9th June 2002, Reindeer-Herder of Brigade number 2, Lovozero*

"Extreme events have been seen mostly in the spring time. This year we had thunder in May, and usually this occurs in July. Monthly mean temperatures have increased and spring has warmed up. During winter time there was little snow and that is why there was little water in rivers and lakes. The low water levels have affected negatively boating. Of course we understand all of these events are related. There is way too little rain, storms..there is sure thunder though. Lighting was rare here, as well as heavy rains. Now there is more of those." - *Larisa Pavlovna Avdejeva, 25rd September 2001, Director of the Sami Culture Center, Lovozero*

"The weather has changed to worse and to us it is a bad thing. It affects mobility at work. In the olden days the permanent ice cover came in October and even people as old as myself remember how 7th November we would go home to celebrate the anniversary of the Great Socialistic Revolution. These days you can venture to the ice only beginning in December. This is how things have changed. This year the ice came and froze a little early but for sure the weather has changed very much. All began about six years ago. Everything went haywire. Yes, six years ago! Now it can rain in January. Once three years ago I came back from the tundra, there was a full winter there. I was here in the community for some time, resting and lo and behold! On the tundra Spring had arrived because it had rained!"

*Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's*



*farm "Tundra", Brigade number 9, Lovozero*

"I have been living on the tundra all of my life. When I was working there were no satellites, nothing of that sort. And now they have holes in space, and the climate changes! Last December we went fishing with my friend. I guess it was the 27th or 28th December. Suddenly it started to rain. We thought no matter, we will have a good shower. I do not know where the rain came. It was not like that in our times. We drove reindeer. We had no ATVs or skidoos, we used reindeers." - *Vasily Alekseevich Galkin, 21st April 2002, Elder, Lovozero.*

"Thunder comes with the rain. Sometimes, but now very often. Especially there has been thunder in the past two, three years or so." - *Vasily Lukov, 21st April 2002, Reindeer breeder PTO-26, Lovozero*

### **Snowchange**

The predicted snowfall and the time of the arrival and melting of the snow has acted as a temporal and spatial guide for the subsistence and reindeer herding activities of the local people. Changes are now visible and this causes concern. "Our reindeerherders are saying that there is much less snow on the tundra as before. We have waited for a long time for the necessary snowcover to form. Reindeers have it tough as well, as the areas for reindeer lichen have changed and the previous experience of good grazing grounds and times no longer holds true. Snow is less and the ground freezes in many places. In our village there is less snow. Traditional calendar does not hold true anymore. This winter and the previous one were extremely warm here." - *Larisa Pavlovna Avdejeva, 25rd September 2001, Director of the Sami Culture Center, Lovozero*

"There has not been a snow cover before December in the recent years. We here do not have such transport routes for reindeer herding as in Scandinavia. We have vast areas and many water routes here. In order to travel on the river and

lake we need ice cover. It is bizarre. Last summers have been much warmer than before. I do not know what causes this. I believe weather changes not every year, but every decade. It must have its own rules. We are experiencing a warmer period now and it depends on the sun how many years it will be like this. I think after that it will become colder but I do not know how much humans can affect that. As I said before, the amounts of snow have decreased especially from October to December. Snowcover is thinner. Weather has warmed, water ways do not freeze. Before they told us it were the explosions that caused this, but now it is growing warmer. Nowadays there are less explosions and the weather warms. Bizarre. What does it all mean? We cannot blame the explosions like before." - *Olga Vjatšeslavovna Anofrieva, (born Zhabarova) born in the community of Arđino [now abandoned], living since 1968 in Lovozero, 25rd September 2001, Elder*

Reindeer herders told us of their observations of the season 2001 – 2002. They had witnessed disturbing variations:

"This year snow will melt later than usual, but last year, 2001, the snow melted extremely early. Last year we travelled to the tundra with the belief that there will be snow, even though here in Lovozero there is no snow. Snow melted because there was no crust. There should be though. This year the snow will stay because it has a crust." - *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

"In the past two, three years there has not been a permanent snow on the mountains. There used to be, but no more." - *Vasily Lukov, 21st April 2002, Reindeer breeder PTO-26, Lovozero*

"Yes, it is very interesting. First it snows, then it melts, like it would be summertime. And this all over again. First there is a big snowfall, then it warms up and then it freezes. During winter now it can rain, as happened last New Year. Before it never rained during winter time. Rain in the middle of winter? To the extent that snow disappears? Yes, it is true. Rain





and snow melts!" - Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero

### Rivers, Lakes and Ice Conditions

The herders have utilized the water ways, such as many rivers and lakes of the Kola Peninsula in their transportation routes. The current changes have caused uncertainty and worries that the routes cannot be travelled on safely. "Rivers do not freeze at all, they are only covered in snow. Ice arrives, but the surface of the water drops so that ice is like on top of empty space and then it is covered with snow. Of course the stream flows like it should. But the changes have taken place in the last six to seven years. Before we saw none of that. Well, for the past few years the weather has been different. No decent ice comes anymore. When the freeze-up occurs, they sometimes melt right away." - Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero

"The river Virma grows shallower every year. Now there is hardly any water left and it can freeze all the way to the bottom. There used to be a lot of fish, but now it is almost all gone. I think it is due to the drying of the bogs and marshes, improvements of the ground. Now the melt is slow. First the water gets on top of the ice and the river melts first from the middle. Steep riverbanks are still frozen but gradually they melt as well. Nowadays there is no actual ice melting event like before." - Vasily Lukov, 21st April 2002, Reindeer breeder PTO-26., Lovozero

[In the rivers there is] thin, much thinner ice than ever before." - Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero

### Looking to the Changing Tundra: Immigrants and Loss of Species

While living on the tundra ecosystem, as the local Sámi call

their surroundings, they witness in a very concrete way any changes that may take place. The community visits of 2001 and 2002 collected together some observations of the tundra – loss of species in some regards and in some aspects arrival of new species of plants and animals to the North.

### Plants, Birds

#### 2001

In September 2001 Larisa Avjedeva spoke to us about the changes in plant life: New species of plants have arrived. We never saw them before. This is what we have observed. New plants have arrived here and on tundra. Even there are arrival species in the river, previously known in middle parts of Russia. This past summer and the previous were very hot here. Rivers and lakes are filled with small-flowered a kind of duckweed, and the lake started to bloom. Life of the fish is more difficult and likewise peoples fishing opportunities as lakes grow closed up with the new plants. We have observed that the trees in our village grown much faster. New unknown plant species have arrived here in great numbers. New bird species have arrived here. As well, the birds stay in our village longer than before. Some new beautiful never-before seen birds have arrived." - Larisa Pavlovna Avdejeva, 25th September 2001, Director of the Sámi Culture Center, Lovozero

During the summer and spring of 2002 the Russian documentation team led by Dr. Sergey Zavalko returned to Lovozero and in this season, Larisa continued to share her concerns



in plant life: "For example we have now water lilies in our river Virma. None of that was before. As well we have seen plantains. Here in Lovozero we have many plantains now and none before. Especially on the river and lake shores you can see new species of plants on the tundra." - *Larisa Pavlovna Avdejeva, 9th June 2002, Director of the Sámi Culture Center, Lovozero*

Reindeer herders have witnessed the changes as well:



"The birds are about the same as they have always been but their numbers are decreasing all the time. Yes, there is very little birds nowadays. It used to be that there were ptarmigans on top of every brush. Nowadays it is not lie that anymore and

it feels bad. To give you an example, in earlier times I was sitting and watching the herd. I tapped my foot to the ground and a ptarmigan would fly to me. When I would say "Kop, kop" to it, it would come so close I could even hold it. Then I said again "Kop, kop" and it took off.

There is very little goose now. It used to be that they were all over. Before, when we were at the camp and we would see geese we would know the spring is coming. All people enjoy you know the arrival of Spring. Nowadays we see no geese. Occasionally one or two flocks fly over but this is a rare event. There are no birds of prey anymore. Very small number of those remain. Every one has disappeared somewhere. We used to see northern goshawks, they would fly high and scream. It was nice to follow them in the sky. All of them have disappeared and I do not know where." - *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

"It is very interesting that we used to have lots of swifts. They are no longer here. Have they disappeared? I think they have. We used to see them always on the beaches. But now they have disappeared somewhere. The same has happened with terns. Near the island of Vitsji they have almost disappeared." - *Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero*

#### Arctic Fox and Fox, Wolves and Wolverines

Large predators in addition to foxes, including arctic fox have been a essential part of the ecosystem in and near Lovozero. Kola Peninsula used to have a better number of Arctic Foxes than Scandinavia. For some reason, the top predators are changing as well. "In the olden times the arctic foxes could wander inside homes! Some years ago, during a time of rabies they jumped inside through the window! But now for example on a trip from the camp to the ocean shore there is no trace of them. But there are a lot of foxes." - *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

"Wolves were afraid of people. You could keep them away by waving your scarf, if you had a dog with you or you shot a round in the air. Wolves are very shy. But these "hairless wolves", humans they are afraid of nothing!" - *Maria Zakharova, 9th June 2002, Elder, Lovozero*

Arkady Khodzinsky raised an extremely interesting issue during an interview on 21st April 2002. He spoke of the arrival of "Scandinavian" wolves to the region. This proves to be a bizarre future challenge to the ecologists, as the numbers of wolves in Scandinavia remain so low that it is very difficult to envision a large migration to the Kola Peninsula. Therefore the presence of the new breed of wolves remains an enigma. "The number of wolves grows every year. They are cunning. They are not real wolves, northern wolves. I think they are some kind of Scandinavian species, not the



one from around here. Our wolf attacks a reindeer from the front and goes after the throat if it wants to kill the reindeer. But this new kind just kind of snaps from the rear and front. It is not a wolf, it is a huligan. It is not normal. I think it has arrived from someplace in Scandinavia, it is not from here. Northern wolf is such that it weighs at least 70 kilograms - that is for sure. I know because I have seen them. It is like a machine. But this is more like a dog, it has a brown tail and ears standing upwards. It is not a real wolf. People are saying this is a Scandinavian wolf but not an Arctic Circle wolf. Yes, they have arrived from somewhere else. The northern wolf is rare and very nice to come by." - *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

"During times of butchering of reindeers wolverines and foxes come to the village. But only at the time of the butchering when they smell the blood. Wolves - yes, we have started to see them in the forests between our grazing grounds and Krasnoshelje. Of course before times they were here, but they were solitary. Now they are in packs." - *Vasily Lukov, 21st April 2002, Reindeer breeder PTO-26., Lovozero*

"There used to be less wolverines. Now there is a massive number of them. They have increased in numbers and should be harvested. They kill a lot of reindeer. No difference to them, old and young alike are killed. Wolves tear and attack the reindeer as well. I think they are increasing as well. Before, when the price of the gasoline was lower, we used to shoot them from helicopters but no longer. Then we killed wolves from skidoos. That happens no longer either. I cannot say exactly how many, but the numbers were great. Mostly reindeers are killed by humans though. Human kills everything in front of him." - *Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero*

## Bears

Bear, the king of the northern tundra and taiga, is living as well on the Kola Peninsula. Arkady Khodzinsky spoke kindly of the predator. "If I tell you the truth, they are not trouble for us. They live their own lives. Sometimes they can be of nuisance, but they are animals who have a right to live as well! But if they wander too close, we shoot them." - *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

## Changing Insects Affect Everything

The Kola Peninsula is very famous of the biting insects and other northern insects. For the past two seasons there has been a change going on as well in the insectoid life. Larisa Avjedeva told us: "There is much less mosquitos, this is great! Mosquitos have grown less in number, but small flies have increased here. Insects have been changing, there is less now..." - *Larisa Pavlovna Avdejeva, 23rd September 2001, Director of the Sámi Culture Center, Lovozero*

"I cannot comprehend that there are no mosquitos. I think for two years now there have been no mosquitos. In recent times they have not troubled us at all. Here in Lovozero it will be soon like down south. Before there were insects and they would sting you, but we no longer need mosquito hats even. The biting midges come in August usually. This year there has not been biting midges nor mosquitos at all. Of course this is bad. I think they have disappeared from the northland altogether." - *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

"Well, last summer there were no mosquitoes at all." - *Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero*

## Changes in Fish and Fishing

Fishing in the local lakes, such as lake Popovo and Lovozero





is a crucial part of the local life. Changes have been witnessed as well there. "Fish does not live in dirty water. No way. Fish knows where it can thrive."- *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

"There is less fish. It comes up the river rarely, mostly in springtime when there is at least some water. Much wastewater has been poured to the river Seredivan. It flows from the village of Revda to our lake. There is a steel refinery and the waters around there look like milk occasionally. Here the water is now cleaner, almost like spring water. It used to be rusty."- *Vasily Lukov, 21st April 2002, Reindeer breeder PTO-26., Lovozero*

"Strangely enough the fish have diminished in size. There is hardly any fish left! There is whitefish. Here in lake Popovo for four years we could not catch any perch, but now we can get it again. There was a time that for four years you could not catch a single one." - *Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero*

"The changes in the animal species began about 10 years ago. New frogs and viviparous lizards turned up here."

- *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

### Traditional Calender and Knowledge

The legends, stories and generational traditional knowledge of living off the land has taught the Sámi to notice changes and adapt locally. At the core of the knowledge is the Sámi Calender, a system of local traditional knowledge of marker days, seasons and certain activities tied to the seasonal cycles. Now there is concern. Calender is off balance and this adds

to the burdens of observed changes locally. "When we ask the Elders and reindeerherders for example what kind of summer it will be, how much berries to expect or what kind of fish and how much to expect they answer us that they cannot predict anything because our Sámi calender of yearly cycle has collapsed completely because of the changes that have taken place in the nature. They cannot foresee accurately and with precision. Before we would ask the reindeer herders and the answers would be right to the mark but now the predicted times keep on moving and changing. Two days ago I had a conversation with my cousin who is a reindeer herder and had just returned from the tundra. I told him: 'Look how nice

the sky is, see those clouds, what a nice weather!'. He would tell me: 'Well you say the weather is good now when you are here in the village, but out on the tundra they do not know what is to come. You cannot say this, it is not allowed.' He told me a Sámi anecdote: 'Do not predict today something that an old lady can tell for sure tomorrow.' The Sámi weather calender is not accurate with the changes that we are witnessing. Yes, the reindeer herders see it and keep on discussing this at all times. We talk and

discuss the changes. It is difficult to make use of the Elders knowledge because the climate has changed. People have it hard. Yes, it is so."

- *Larisa Pavlovna Avdejeva, 25rd September 2001, Director of the Sámi Culture Center, Lovozero*

### Reindeers and Reindeer Herding

The most visible and urgent messages of changes relate back to the species of reindeer, which remains a key species of the community in cultural, social, economic and ecological sense. There is concern. Reindeers are acting differently, and



herders spend less time with the herds on the tundra. Mixing herds with the wild reindeers is another concern. The people spoke at length about the often very emotional relationships and concerns regarding the reindeers: "On the tundra the reindeers used to run towards people, but now they run away. The reindeers are our children. In the olden times when we used to have just the reindeers the air was clean. How should I explain? Now they drive around in skidoos and you can smell the gasoline, yuck! What did with herd with? The reindeer! Now they have started to herd with skidoos. Why on earth? They should rather train the reindeers like our fathers and forefathers did. Now everything is in ruins. There used to be many young reindeers. Yes, at the time the herds were bigger as well." - *Maria Zakharova, 9th June 2002, Elder, Lovozero*

"Before the 1970s we herded first on the tundra and then moved to the forested areas. Herding stopped in November. Reindeer roundup was in October or in November-December. First we would butcher only young reindeers for skins and other products. In November we butchered other reindeers. We stopped by 25th December, sometimes even before. We came back to Lovozero on the 25th. Reindeers had to be driven out of the summer pastures, we drove them further into the forest so that they could not enter the spring pastures." - *Vasily Alekseevich Galkin, 21st April 2002, Elder*

"I cannot say how much the reindeers and their behaviour has changed but some of their traits have changed because the climate has warmed and the reindeers have entered new areas." - *Larisa Pavlovna Avdejeva, 25rd September 2001, Director of the SamiCulture Center, Lovozero*

"The pastures could take up to 80, 000 reindeers which was the maximum amount. Now I think there is about 60, 000 reindeers. During perestroika we lost 20, 000 because people moved out to the big neighboring cities or they went to the military. Because of the poor economic condition of

the country poaching began. Reindeerherding became more difficult because of this. It is hard now as well. I must say though that the industry has grown to a certain level now and there is not as much poaching taking place from for example the neighbouring industrial plant. It operates now in a proper way and they pay a decent salary so people are satisfied now as far as I know. But the decrease in the number of reindeers remains a fact." - *Olga Vjatšeslavovna Anofrieva, (born Zakharova) born in the community of Arđino [now abandoned], living since 1968 in Lovozero, 25rd September 2001, Elder*

"Let me tell you. Before we herded the reindeers during winters, spring and summertime. During summertime the reindeers would go to summer pastures but now it is completely different. We have grown lazy and the reindeers flee from us. Believe me, this is true. We only try to herd and collect the reindeer during Autumn time. During springtime they are on their own. The worst thing is that we lose the calves in the process. Half of them perish when we let them loose on the tundra. Predators like bear and wolverine take a part of the calves and a part can sink in the bogs and marshes. Before when people took better care of the reindeers a greater percentage of calves survived but for about 10 years now things have been different. In our brigade there is only 3, 000 reindeer left anymore. The most important thing for now is to maintain the reindeer numbers and to stay alongside with them. We should not drive so close to them and wreck damage. We should protect the whole herd and get their numbers to increase. That is all we need! The most important thing is that we should leave them alone, both animals and people. We should not go near them. They have grown completely wild by now. We should not involve ourselves in that anymore. If we want to change the whole system and situation then we should alter the whole herd - we should slaughter them all." - *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*



"During summertime the reindeers are on the coast of the Barents Sea. During wintertime the herders try to collect the herd together and count the calves. It is difficult to herd reindeers today because there are a lot of "Buran", skidoos and military bases. Everybody shoots to eat them." - *Vasily Lukov, 21st April 2002, Reindeer breeder PTO-26., Lovozero*

"[The number of reindeers] has decreased, greatly decreased. Well, it is mostly humans who kill them." - *Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero*

### Wild Reindeer

"Reindeers are wild or almost wild. If I tell you straight, they are completely wild by now. But the most important thing is not to get involved! During the time of giving birth they should not be disturbed at all. The most important goal is to maintain the reindeers by keeping wolverines and bears out." - *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

"The wild reindeer mix with our herds. And they ruin everything. 10 or 20 years ago they were shooting the wild reindeers. It used to be more peaceful at the time because of that. But now they wander here and mix up in our herds. And you cannot control the herd anymore in the proper way. Yes, the whole race is ruined. Our mission is to collect the reindeer together and herd them. They go to the coast by themselves. In the olden times we used to go there as well. We gathered the herd together on route and travelled by the coast. But now the reindeers go by themselves and always try to run away to the forest. We have fences and corrals but they do not care about the fences, they just go straight through. Wild reindeers come and these go with them." - *Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero*

### Industry Impacts, Military, Transportation Policies and Demarcation Effects

#### Construction of Reindeer Fences on Kola Peninsula

During the Soviet period, at the time of the command economy and centralised systems of structural economies, decisions regarding use of land and construction work did little to reflect the local needs, wants and priorities. One of the local examples has been the construction of a reindeer fence as instructed from "above" on the Kola Peninsula reindeer herding area. The herders spoke of this process to us: "I can tell you. Before there used to be this kind of system that they told us to construct a fence like everybody had. Well, we built it. We cut of the migratory pattern and route of the reindeers but at the time we did not understand that. We constructed the fence across all of the territory. The reindeer have their own habits. When they started from the coast towards inland, suddenly they faced a fence. All the way to the fence they trampled everything into black earth on their way but on the other side of the fence it was green like it should be. There are no reindeers on that side anymore. If the reindeers used to travel across the area length-wise, now they go crossways because they have found a passable route. If humans have not discovered the route, reindeer have because they have brains too. They travel across the earth. Life moves them as well. They must live likewise. The order to build the fence came from above. It was given by somebody who does not understand, who has not lived with these reindeers, from somebody who does not know anything about the real life here locally! The fence was constructed and has been in place already for 15 years. It is still up there. And people are still maintaining the fence, but in that they are making a mistake. Think about that yourself. If I was walking this street to home and suddenly there was a fence in my way blocking the route and I would not be able to go under or on top of it. I would go





around it! This is what the reindeer does as well. We should not block the movements of the reindeers. We have to let them to travel freely on their own land. And then people are doing well and everybody is doing well. We should not construct fences across. But if you really must construct a fence, you should build it so that it is in the same direction as the migration routes of the reindeers so that they can travel freely. This is the most important thing!"

- Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero

"Maybe we are guilty as well because we constructed that fence. We used not to have a fence. The reindeers wandered to a certain boundary and came back to the seaside pastures. Now we have constructed this fence. The reindeers wander but the come across this fence, they would like to go to the ocean side, but they cannot pass it and they go back to the forest. Maybe that is the reason..."

- Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero

#### **Overall Concerns: Changes in People and the Land - Military Presence, Land Ownership, Social Change**

Kola Peninsula is one of the most important geopolitical and strategic military locations in the Russian Federation. A massive amount of nuclear and non-nuclear military forces are stationed in the region. It has, like stated before, a massive industrial presence, a legacy of the military-industrial complex of a superpower. In the uncertain times of the post-September 11th 2001 - Russia the centralisation trend of governance is visible. However, the Indigenous nations of the Russian North are stronger than ever before and reclaiming their traditional territories as well. New legislation has been introduced in 2000 and 2001 to deal with the land ownership issues. Situations vary locally. In Lovozero, people are aware of the processes and realities: "I did a little inquiry of my own

on the reindeer pastures who in the olden times used to belong and now again belong to the Sámi. They have greatly diminished when industries and military installations have been built. A massive amount of new roads has been constructed to cut across reindeer migration routes. I was discussing this topic with elders who are reindeer herders and they said that in those locations where there used to be reindeers there is none now because of expansion of industrial activities to those areas. We do not like that at all because the laws of the Indigenous habitants, the Sámi, do not coincide with the industry needs. We do not like it at all and we resist in any way we can. We are trying to make the point that human beings should be able to live in peace in their own surroundings. I think it is a wonderful idea. Our nation has suffered greatly from the expansion of the industries. The number of reindeers has decreased and good berry-picking and clean areas are less in number now. Even in *lake Seid*, in the holy lake of the Sámi Nation, they have made explosions and drilled core samples from the mountains. It is not in our favor for sure." - Larisa Pavlovna Avdejeva, 9th June 2002, Director of the Sámi Culture Center, Lovozero

"How should I put this...the reindeers are running away, to the forest. Especially the land areas near the ocean where wasted already 10 years ago, all of our pastures have been trampled. The pasture areas have decreased much especially around the seashore, there is not enough lichen there. Reindeers are trampling that." - Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero

"The trouble is the people. Animals only take what is rightfully theirs. They have always done that and will always do so. Animals are animals. Humans on the other hand damage everything, even themselves. This is the truth. Yes, humans cause this. And let it be this way. It is perhaps rightly so. If human does not look after his reindeers, some animal causes



trouble to them. If a reindeer herder wants to increase the number of reindeers, he should be with them. Animals live like they do, there is no point to try to forbid them from doing so. Let them live! Fifteen years ago winter was winter. I do not understand either what is happening to our tundra. To our land! I do not understand." - *Arkady Khodzinsky, 21st April 2002, Reindeer-Herder, Reindeer's farm "Tundra", Brigade number 9, Lovozero*

In 2001 Larisa Avjedeva stressed the main points felt by many, as she spoke on their behalf. "The cycle of the yearly calendar has been disturbed greatly and this affects the reindeer herding negatively for sure. We should start working differently in a new way. We still have not thought this and we still have not pondered this - we try to start from the needs of the people and be flexible. We Sámi have a anecdote, no, rather it is a legend, which has the law of the Sámi life in it. People tell this onwards always. The Sámi say: 'We are not reapers, we are not field-plowers, we are reindeerherders. The reindeers are our bread. Everybody should cherish their land. The green land with its flowers and lichens was given to us so that we should pass it on to our children.' We try to follow this Sámi law because there are laws that the Sámi follow. And the Sámi guide other people to follow those laws in our land. It is true. This is the truth." In 2002 as the documentation teams returned to the community, she continued that "We feel some unexpected changes are taking place in the tundra. But in the recent years it has been wonderful to follow what our youth have been doing. They have understood that they are needed here. We need well-trained and strong-spirited youth here. Nowadays the young people are very different from 20 to 30 years ago. They are more self confident, stronger in character and very proud of their Nation. When I was 18, we could not even imagine that." She looks to the future with a positive sense. She concluded the interview session in June by saying that "Yes, respect is coming back. And

the consideration for reindeerherding is increasing as well."

Olga Vjatšeslavovna Anofrieva has a massive experience of the local life, and dealing with the administration. She spoke of her perspectives of social change: "I think people will always consider an administration that passes new laws as an administration. But now, as long as power is distributed and there are problems for example in land ownership we are stuck in the current situation. I think it is characteristic of a totalitarian regime that used to govern and was considered a norm. But I think we should consider power to be something that answers peoples needs, follows and develops laws. But I think nowadays, especially the young generation, has a very high consciousness of such things. At least the setting of small business up in this neighbourhood is a lot easier now because the conditions are better for that. The current business and legal machineries do not function yet properly in our country. I think that we can solve the ecological problems together with the Swedish, Norwegians and the Finns. As to the clean-up of Nikel, I think together with a financial support from the west and a change of attitudes from here we can solve these problems. With the help of the Norwegians our water in the lake and at home became cleaner. As well in health care, especially in the dental care changes have taken place. None of us carry our own teeth anymore. Many of the children are now studying, they have a different perspective on life, we were never like that. They can write better, have conversations in foreign languages and become trained in traditional handicrafts. Much of this is thanks to the Scandinavians. Here many generations have gone through vocal training. Ancient arts, skills help us to familiarize and remember our own traditional ways of life and master the crafts: cutting and carving of the reindeer antlers, braiding and embroidery. Many of them have learned to master many Scandinavian languages."



## Concluding Notes

### Climate Change and the Indigenous Nations in Russia

Climate change work is only beginning in Russia, as the Indigenous societies, as well as the mainstream society, has many other, oftentimes more urgent social, economic and political issues to deal with. As well, the massive difference in the eco-systems and localities across the Northern Russia advocates, that we need local assessments of climatic changes to see the real effects of the changes. The respect and recognition of traditional knowledge in the assessment work remain on top of the priority lists in these assessments.

Vladimir Phillippov, in Lovozero summed up the feelings of the locals when he spoke to us in the early June. "Poaching should stop. We should hunt some wolverines and wild reindeers. An establishment of a Kola Peninsula- wide national park should be done before the whole region is polluted. For example in Olenegorsk everything has been polluted. Even the lakes! I went last night to the lake Voronje to herd my reindeers. I noticed all of Olenegorsk is fishing in our lake Voronje." The key to the survival and continuation of the life in Lovozero is dependent of the reindeers. As Vladimir put it: "Our income diminishes because of climate change. Of course and in a very drastic way. Even my wife has said that it would be a time forget the reindeers. But I tell her always: 'Tamara, we depend on these reindeers. If there are no reindeers, we have nothing to do here either'." - Vladimir Phillippov, 9th June 2002, The state farm "Tundra", Reindeer-Herder of Brigade number 2, Lovozero

### Notes

*The authors would like to thank humbly the community of Luujavre and the participants for giving their time, knowledge and wisdom to the project. Alexey Cherenkov was of utmost help as usual. Anna*

*Prakhova at the regional administration was of tremendous help. The Slavonic Languages Department of University of Tampere, especially Professor Hannu Tammola contributed the transliterations and translations of 2001 and 2002 materials into Finnish. During the field documentation of September 2001 Ville Kurki, Janne Ketola and Juha Jämsä documented the interviews professionally and with rigorous skills and stamina. Thanks belongs to them as well. Marjukka Dyer of the Environmental Engineering Degree Program at the Tampere Polytechnic supported everything like usual, none of this would be possible without her. Marko Kulmala designed the web sites and contributed to the visual documentation of the community of Lovozero, Luujavre. Thanks as well to Henry Huntington for editing, comments and suggestions.*

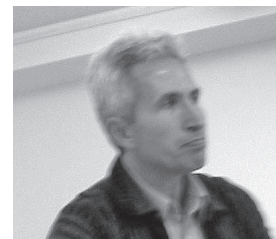






## Sergey Zavalko

The disastrous effect of global climate warming on tundra ecosystems appears in Kola Saami stories quite clearly. This influence takes its toll on reindeer as well which is considered as basis of Saami life and culture. The climate has become unpredictable.



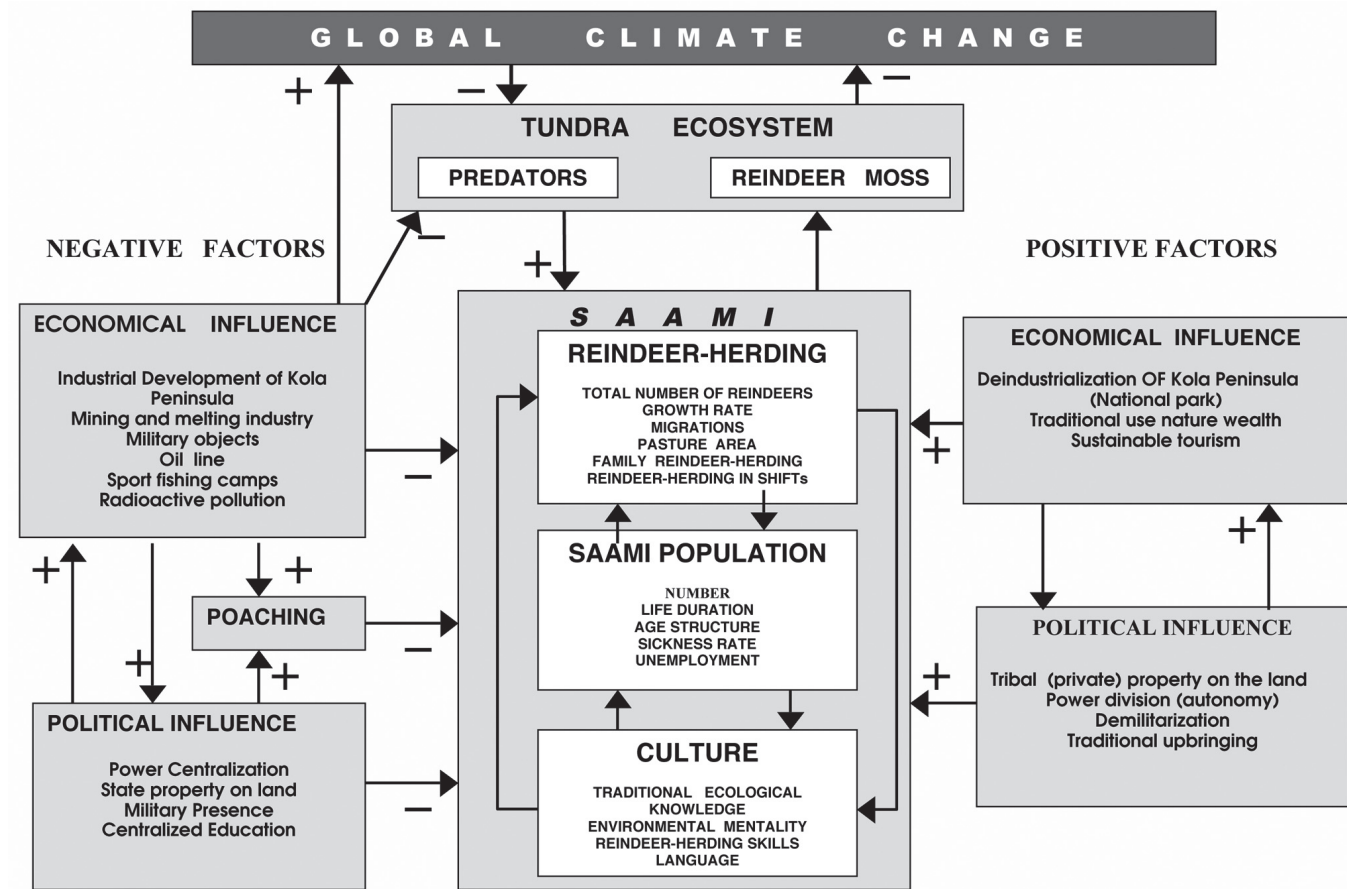
Common climate warming is going on against background of the all predicted parameter fluctuation increase. Saami observations like any Northern Indigenous peoples' are very interesting and valuable because they register not only climate change but also results of its influence.

Northern ecosystems balance breaks and this disturbs the normal life of the Indigenous peoples inside this ecosystem. It's clear the Saami culture will be damaged as a result of these changes.

A situation that is common for any Indigenous peoples of Russian North appears in the Kola Saami stories. It's an ordinary destiny of any Indigenous peoples in Russia during Soviet and post-Soviet period.

Forced and violent involvement of Saami in Soviet industrial society which had other, alien, destructive standards of "civilized" and "only-possible-way" style of life deprives this small ethnic group of any perspectives on the traditional activities. It means this ethnic group is actually cut from its native cultural roots and has in all probability fear of disappearance. Serious investigation of this influence of the "*internal expansion*" will make up our next work theme for project with the Kola Saami.





# "Tusovka of Piras"

Interview Session with "PIRAS" Tribal  
Community Representatives in Lovozero,  
March 2003

*From "PIRAS": Vladimir Galkin, Andrey Judin, Pavel Borisovich*

*Interview by Sergey and Kyrrill Zavalko, Professor, Murmansk State Technical University*

*Edited by Tero Mustonen*

*This chapter is dedicated to the hard work of Juri Chevtsuk of Group DDT and Mikko Keinonen, movie maker among many other things, who try to make the world a better place. - Editor*

Tusovka can be defined in the following way:  
"Good people and good people bring with them good spirits, tusovka. [It is impossible to translate the full meaning of this Russian term derived from slang of St. Petersburg]. When people come together – in a concert, restaurant, festival or only to have fun with a vodka bottle in a kitchen – tusovka is born. People have good times. Movie Director Sasha Bashirov has defined tusovka to mean – *Creative interaction and associations among free people.*" [*– this definition is a translation taken from <http://www.tusovka.fi/tusovka/esittely>*]

## Tusovka Of Piras

*Sergey Zavalko:* Introduce yourself please.

*Andrey:* I am the head of the "PIRAS" community, Judin Andrey.

*Sergey Zavalko:* The topic of our conversation is global climate changes and how do these changes influence on tundra, reindeer, Saami people, their state, economy, traditional activities, reindeer herding. However this is only the superficial question. As a matter of fact I would like to ask

you more concrete and as it can be said thorough questions. First of all I would like to ask you about climate changes. As you mentioned earlier, you spend most of your time in tundra, don't you?

*Andrey:* Yes it's true.

*Sergey Zavalko:* How much time do you spend in tundra during the year and how much time have you spent in tundra during your life?

*Andrey:* I regularly stay in Lovozero during the summer and sometimes leave this village in winter.

*Sergey Zavalko:* When was the first time you saw tundra?

*Andrey:* I was born in tundra and brought to Lovozero at the age of 18.

*Sergey Zavalko:* When were you born?

*Andrey:* I was born in 1965.

*Sergey Zavalko:* What are your general impressions concerning tundra for the past 5-6 years?

*Andrey:* It is not clear now. For instance, winter became



warmer and there is not so much snow as it used to be. There was a lot of snow during the winter earlier. The weather was cool and so forth. But you cannot even define whether it is winter or autumn now. There are either droughts or rains during the summer. The spring has also changed. The lake was open by the 25th May earlier. Now it is open only in June. Earlier there was a three-day difference between these two terms. It can be up to 3 weeks now.

*Sergey Zavalko:* When does the river cover with ice?

*Andrey:* You cannot predict it. Earlier people used to forecast weather.

*Sergey Zavalko:* Is it hard to predict weather now?

*Andrey:* It is impossible now. For example, it rains one day and it frosts the following day.

*Sergey Zavalko:* Are there any useful traditional omens or ways of weather forecasting now?

*Andrey:* People used to forecast weather earlier and now it is impossible.

*Sergey Zavalko:* What are your general impressions concerning climate changes in tundra? Is it getting warmer, colder or the climate is very changeable?

*Andrey:* It seems to me that it is getting warmer because the winter is not as cold as it used to be.

*Sergey Zavalko:* Do you think that the winter became warmer and the summer became cooler?

*Andrey:* Yes, it's true. If we take the whole year into account

then it is getting a little bit warmer.

*Sergey Zavalko:* What about thickness of an ice cover on rivers? Has it changed or stayed the same?

*Andrey:* It is impossible for us to define the thickness of an ice cover on rivers. However one can easily do it on a lake. The thickness of an ice cover on lakes has increased. Cooling isn't the main reason of it but warming is. The water is squeezed out on the ice and this water covers ice.

*Sergey Zavalko:* You mean additional ice cover appears?

*Andrey:* Yes, and after 2 or 3 days this water freezes and the thickness of an ice cover increases.

*Sergey Zavalko:* Is it safe to cross rivers in winter?

*Andrey:* It is dangerous in spring since the river washes away the inner part of an ice cover. In winter everything is OK. The main danger in winter are the springs.

*Sergey Zavalko:* Can you tell me about the situation with winds in Lovozero? Someone told me that there were no strong winds in Lovozero earlier.

*Andrey:* Yes, it's true.

*Sergey Zavalko:* What about the present situation?

*Andrey:* Let me see, I remember one strong wind in Lovozero. It blew in 1980. And now these winds blow almost every year.

*Sergey Zavalko:* Are they more common in winter or in summer?





*Andrey:* They are more common in winter.

*Sergey Zavalko:* Does it rain during the winter?

*Andrey:* Yes, it rains at the end of November.

*Sergey Zavalko:* Did it happen 10 or 15 years ago?

*Andrey:* We had one omen. It was called “*Kisloe Proskovje*”. It rained at the beginning of November every year. However it didn’t rain this year.

*Sergey Zavalko:* Are there any thunderstorms with lightning now?

*Andrey:* There were a lot of thunderstorms in my childhood. There was even a hail in summer.

*Sergey Zavalko:* Are there any thunderstorms during the winter now?

*Andrey:* No, there are no thunderstorms during the winter.

*Sergey Zavalko:* What about boring midge and mosquitoes?

*Andrey:* There were no mosquitoes this year.

*Sergey Zavalko:* No mosquitoes at all?

*Andrey:* Yes, according our concept there were no mosquitoes.

*Sergey Zavalko:* Did them all disappear?

*Andrey:* Yes, in addition to it there was a year of bad harvest.

*Sergey Zavalko:* Was the summer [2002] dry?

*Andrey:* No, it wasn’t. There were no mushrooms, no cloudberries, nothing at all.

*Sergey Zavalko:* Does the midge normally appear in August?

*Andrey:* Yes, and mosquitoes appear in July.

*Sergey Zavalko:* So there were no midges at all?

*Andrey:* Yes, you’re right. Some strange hornets appeared.

*Sergey Zavalko:* Do these hornets look like average wasps?

*Andrey:* Yes they do. Moreover they are rather big. It’s like a nightmare.

*Sergey Zavalko:* Were there any hornets earlier?

*Andrey:* Well, I don’t know exactly. I have a house in tundra. I saw strange huge ants there. We are afraid of them (laughs).

*Sergey Zavalko:* What about such animals as lizards, frogs, snakes?

*Andrey:* There are lizards in tundra. We’ve seen them near “*Afanajka*”. We’ve also seen grasshoppers there.

*Sergey Zavalko:* Were there any frogs and snakes in tundra earlier?

*Andrey:* Yes, they were.



*Sergey Zavalko:* Do you think it is a normal situation?

*Andrey:* Yes, I think so. There used to be a lemming crossing each 8 years. It happened periodically. Now there has not been a lemming crossing during last years.

*Sergey Zavalko:* Do you think that this crossing happens with a periodical cycle?

*Andrey:* Yes, from my point of view, it happens every 8 years.

New interviewed person appears.

*Sergey Zavalko:* Introduce yourself please.

*Pavel:* My name is *Pavel Borisovich*, born in 1955, brought up in Lovozero.

*Sergey Zavalko:* Where do you work now?

*Pavel:* I work in reindeer herding.

*Sergey Zavalko:* How long have you been working with reindeer?

*Pavel:* I've been working with reindeer since 1971 until now.

*Sergey Zavalko:* Do you constantly stay in tundra with reindeer?

*Pavel:* It happens. Sometimes I stay in Lovozero. However, I spend most of my time in tundra.

*Sergey Zavalko:* I would like to know your general impres-

sions concerning changes in tundra for the past 5-6 years. Is the climate getting warmer or colder? How would you describe the situation?

*Pavel:* Well, you cannot order climate to become warmer or cooler. It is impossible.

*Sergey Zavalko:* Is it getting warmer or colder in comparison with the past years?

*Pavel:* Well, Life is changing. Everything can change.

*Sergey Zavalko:* Do you take special warm uniform with you when you go to tundra in winter?

*Pavel:* It is impossible to go without clothes. We always take them.

*Sergey Zavalko:* Do you take special sleeping bags, so-called "Rousbky"?

*Pavel:* Yes, of course, they are always with us.

*Sergey Zavalko:* How long does the snow stay in tundra?

*Pavel:* It depends on a given Spring and what month it is.

*Sergey Zavalko:* When did it begin to snow in the tundra 10 years ago?

*Pavel:* Well, it is hard to remember.

*Sergey Zavalko:* Did it begin in November or December?

*Pavel:* If I'm not mistaken, in October everything was cov-



ered with snow. People used to begin slaughter before November holidays. There used to be November holidays. And now they begin the slaughter in January and finish it in April. However, a common slaughter term is from November and until the end of December. This current “improving” of reindeer herding can be called bankruptcy.

*Sergey Zavalko:* When do rivers cover with ice now? Do they cover earlier or later?

*Pavel:* It depends on temperature. After everything is frozen, it begins to melt and you cannot define whether it is autumn or spring.

*Sergey Zavalko:* Do people collapse into rivers during winter?

*Pavel:* I’ve never collapsed.

*Sergey Zavalko:* do you think that ice cover remains safe?

*Pavel:* Yes, but this will last only 2 weeks. Everything will be over by the end of May.

*Sergey Zavalko:* Does an ice cover remain safe in December, January?

*Pavel:* It depends, everywhere it is different.

*Sergey Zavalko:* Does it rain during the winter in tundra?

*Pavel:* Yes, it rained not so long time ago, before the “New Year”.

*Sergey Zavalko:* Did it happen earlier?

*Pavel:* Yes, it happened before and after “New Year” and later at a definite period.

*Sergey Zavalko:* Did it happen 10 years ago?

*Pavel:* Yes, it did.

*Andrey:* It rained on ‘*Kisloje Proskovje*’. There are only clouds but it doesn’t rain in summer and as a result it rains in winter (laughs).

*Sergey Zavalko:* Does the water level in rivers change or remain the same?

*Pavel:* I don’t know.

*Sergey Zavalko:* Do rivers become shallower?

*Pavel:* I didn’t take measurements but water level changes if it rains.

*Andrey:* It is very hard to define the water level due to our hydroelectric power station. It happens that the station lets water out or stops it at any given time. The water level depends to a large extent on hydroelectric power station. The water level depends on winds also. The water level will rise if a southern wind blows and will fall if a northern wind blows.

*Sergey Zavalko:* What about midge and mosquitoes in tundra?

*Pavel:* If there are a lot of midge and mosquitoes - it is like a nightmare. However, it’s better when there are no midge and mosquitoes at all.



*Sergey Zavalko:* Were there any mosquitoes this summer?

*Pavel:* They'll appear at a definite period. When the time comes, they'll appear. It is impossible to "get rid of" them.

*Vladimir:* Judging by the last year, there are almost no mosquitoes left in Lovozero. It can be a real evidence that the climate is changing. Even some species of southern bugs and spiders appeared in tundra.

*Sergey Zavalko:* Were there any bugs or spiders earlier?

*Vladimir:* Of course, there weren't.

*Sergey Zavalko:* As *Andrey* said, hornets have appeared in tundra now, is it true?

*Vladimir:* Yes, it is true.

*Andrey:* They appear at a definite period, exactly 3 weeks, and then the suddenly disappear. Grasshoppers are also very big. Where did they come from I wonder?

*Sergey Zavalko:* Are there a lot of huge anthills?

*Andrey:* No, we see only huge ants.

*Sergey Zavalko:* Did any new species of birds appeared in tundra?

*Andrey:* No, even birds that earlier lived in tundra have almost disappeared.

*Sergey Zavalko:* What about owls, hawks, ptarmigans? Do they still exist?

*Pavel:* Yes, we often see them.

*Andrey:* Hunters don't kill hawks and owls.

*Vladimir:* There are a lot of hazel hens (*Tetrastes bonasia*) in tundra now. There are a lot of hazel-hens around Seid Lake [a famous sacred place of the Sámi on Kola Peninsula] and even more in Krasnoshelje region since it is a southern territory. However, people stopped shooting hazel-hens. That's why there are plenty of them in tundra now.

*Sergey Zavalko:* What about geese? Has the abundance of polar geese decreased or stayed the same?

*Vladimir:* Their abundance has decreased.

*Sergey Zavalko:* Does arrival times, terms of the polar geese change?

*Vladimir:* These terms depend on spring. As a hunter I know the terms of returning. Earlier they used to return to tundra at the 5th or 4th May. Comparing past years with present day I should say that I haven't seen polar geese at all. Perhaps they're shot off on their way back to tundra.

*Andrey:* Polar geese don't spend much time in Lovozero.

*Vladimir:* I am against the idea that polar geese don't spend much time in Lovozero. I've seen a TV program where I've heard that all polar geese are shot off near the bay. Our director of hunting inspection says that all polar geese are shot off near Lovozero. These geese cannot reach Lovozero, as a hunter I know it. I buy a license for geese hunting every year and I haven't seen them here for 2 years. How can they be shot off near Lovozero?





*Sergey Zavalko:* What about bears, wolves, foxes, and glut-tons [wolverine, *lat. Gulo gulo*]? Has their abundance de-creased?

*Vladimir:* Yes, their abundance has totally decreased, espe-cially elk abundance.

*Sergey Zavalko:* Do you think that the main reason of it is total hunting?

*Vladimir:* Yes, It can be called barbarous hunting.

*Sergey Zavalko:* You mean people constantly go hunting?

*Andrey:* Yes, and they do it in a legal way.

*Vladimir:* I don't agree. For example, hunting season in Lovozero and all Murmansk region is closed by the 28th February. And then in April some serious guys from St. Pe-tersburg arrive. They have licenses for elk hunting in April. You know that elk mothers will have calves in May. These elk mothers are shot off before calves are born. That's why elk's abundance is totally decreasing now. Our Severomorsk huntsmen and regional hunting inspection shoot elk near "Kitza" during autumn. There are no trees on this territory and that's why it is easy to catch groups of elk, shoot them and take their meat to meat packing and processing factory where they receive money.

They don't care about the future. They live only in present day. They've shot almost all elk on their territory and begin to use our territory. They begin their "raids" in January and continue it up to the period until ice melts. If this continues for about 5 years, nothing will last here, nei-ther bears nor elk. However, these people don't shoot glut-tons, as it can be said, the game is not worth the candle. So

it'll survive.

*Sergey Zavalko:* What about wolves?

*Vladimir:* There are plenty of wolves in tundra now.

*Sergey Zavalko:* Is it a real polar wolf or it looks more like a dog?

*Pavel:* It is even hard to define its color. Sometimes it looks like red, but sometimes it looks like grey.

*Sergey Zavalko:* Is it of huge, middle or small size?

*Pavel:* The middle one. I've seen one while hunting.

*Vladimir:* Our polar wolf weights over 150 kg and its length is approximately 2.5 meters. You cannot compare this wolf with the steppe wolf.

*Sergey Zavalko:* Do you want to say that polar wolves are rare now?

*Vladimir:* Yes.

*Sergey Zavalko:* Are there a lot of wolves as you said of small-er size?

*Vladimir:* It is not easy to say. Even reindeer herders cannot differ hybrids of a wolf and a dog from steppe wolf since they both have the same habits.

*Sergey Zavalko:* The main difference between these species of wolves is that a polar wolf immediately kills a reindeer whereas a steppe wolf firstly bites and than kills.



*Vladimir:* The polar wolf is like a reindeer herder. It only pastures reindeer and kills the sick animals whereas a steppe wolf kills reindeer in order to satisfy its hunger. This steppe wolf looks more like a wild dog.

*Andrey:* There were a lot of wild dogs but they all were shot off later. So only hybrids lasted.

*Sergey Zavalko:* What about weasels [*mustela nivalis*]? Haven't you noticed them in tundra?

*Vladimir:* Yes, I've seen weasels. There were a lot of squirrels in 1991 - 1995 but now they all are gone. Perhaps they migrated to another territory.

*Sergey Zavalko:* Has the fish abundance increased or decreased?

*Andrey:* It has decreased.

*Sergey Zavalko:* What can you tell me about size of a fish? Has it changed?

*Andrey:* It is not easy for fish to grow in such conditions. For instance, in winter it is fishing with winter rods that is done in Lovozero. Over 2000 fishermen come to one place where each can catch more than 100 small fishes in spring. It would be better to catch fish of large size with a net and take some legal actions in order to stop spring fishing.

*Sergey Zavalko:* Have any new species of fish appeared?

*Andrey:* I've heard that someone had caught ides.

*Vladimir:* We've seen ides near Tumanka and we see it here

from time to time. I used to catch it last year.

*Sergey Zavalko:* What about perch [*Perca fluviatilis*]?

*Vladimir:* Regardless of the fact that its abundance has decreased, we often see it in Lovozero. People didn't take perch into consideration earlier. Burbot [*Lota lota*] is a water 'janitor', cleaner, as you know. Now it's caught every day in large amounts. In addition to it, there is no pike [*Esox lucius*] in Lovozero now.

*Sergey Zavalko:* What about sea fish such as salmon?

*Andrey:* We haven't noticed it.

*Sergey Zavalko:* What about brown trout?

*Andrey:* We have it, but it is local fish but not sea fish.

*Vladimir:* It seems to me that the main reason why there is no sea fish in Lovozero is the hydroelectric power station. There are a lot of sea fish in "Par" and "Kolm" lakes. Sea fish manages to reach these lakes despite high rapids. People caught almost all salmon in «Karas» lake.

*Sergey Zavalko:* Has the fish returning times changed?

*Pavel:* No, fish knows its terms and it won't change it.

*Vladimir:* I'd like to add one interesting fact. There are a lot of sick fish in tundra lakes now. The main reason of it is that it is forbidden to catch fish there now. Our Ancestors cleaned the bottom of a river while catching fish and the fish used to eat normal forage.

That's why plenty of fish gathered at definite places and



everything was in balance. The fish used to be large and now its abundance has totally decreased. However, there is no connection between decrease in fish abundance and prohibiting fish catching.

The main reason of it is nature. This situation can be compared with the following: for example I've built a wooden house and went to live to another place. I haven't been to my house for 3 months. When I returned I found it totally destroyed. However, if I lived in this house for all the time I wouldn't have such problem.

*Sergey Zavalko:* do you have prohibition of fish catching?

*Vladimir:* Of course we have. I'd like to tell you about one interesting situation. I have right to take not more than 5 kg of fish after fishing. What should I do if I caught a pike for instance that weights 10 kgs? Should I cut a half of fish and leave it? I have to cross 60 km of tundra in order to reach place where I fish.

*Andrey:* I have a firm belief that it is important not to forbid catching fish using a net since while fishing with a net one can catch only large fish and clean the bottom of a river by mixing the bottom's soil.

That's why there used to be a lot of fish where people were fishing with a net. We always fish in these places. Not a long time ago people tried to catch something in "Staraja Tonja". The result was deplorable. They've caught only some ruffs [*Acerina cernua*].

*Sergey Zavalko:* Does it mean that you didn't catch fish with a net for a long time?

*Andrey:* Yes, we used to catch more that 500 kg of every day and today if someone catches 2 or 3 kg of fish, he can be

called lucky.

*Sergey Zavalko:* Can you tell me about the situation with reindeer moss in tundra now. Do the areas of reindeer moss decrease?

*Andrey:* These areas increase since the reindeer abundance is decreasing now. If we compare past years with present there are not so many fires now.

*Sergey Zavalko:* Do you think that the main reason of reindeer moss areas increasing is reindeer abundance decreasing?

*Andrey:* Yes it is true.

*Sergey Zavalko:* What about mushrooms? They can be called tundra state indicators. Is their quantity increasing or decreasing?

*Andrey:* It is a kind of an unpredictable object (laughs).

*Vladimir:* When I was a child (in 1972) I could pick a full rucksack of mushrooms in 20 minutes.

*Sergey Zavalko:* Is it possible to pick the same number of mushrooms now?

*Vladimir:* I've spent 2 hours while picking mushrooms but it wasn't even enough for roasting.

*Andrey:* Some mushrooms grow near mines. That's why they are bigger than average mushrooms. So even in a year of bad harvest there are a lot of mushrooms in such places.

*Sergey Zavalko:* I have a set of questions concerning rein-



deer herding. First of all, I'd like to ask you about the total number of reindeer. Has it changed in Lovozero?

*Andrey:* In what regions?

*Sergey Zavalko:* In Lovozero, for instance.

*Andrey:* There are 2 state farms in Lovozero

*Pavel:* The total number of reindeer in one state farm is totally decreasing since they are slaughtered from January till April. If this happens for 2 or 3 years nothing will last in Lovozero.

*Sergey Zavalko:* Do you think that the slaughter is very large now?

*Pavel:* Yes, if we take "Varzuga" there people slaughter reindeer before calves are born. Thus the kill 2 reindeer at once: reindeer mother and a calf. There used to be calving for several years.

*Sergey Zavalko:* Do the reindeer go to sea area without reindeer herders now?

*Pavel:* They also return from this area independently. We don't even know where they are.

*Sergey Zavalko:* Do you know the death rate percent of young reindeer? Has it increased?

*Andrey:* There's extreme shortage of young reindeer now. Reindeer herders on snow tractors together with reindeer mothers and calves must cross over 50 km of tundra without any stops in order not to be late from the slaughter. It re-

sults in dead calves.

*Vladimir:* The Norwegian came here in 1998 in order to help us with reindeer crossing. When they saw how do we care about reindeer they said that if the same thing had happened in Norway they would have been arrested immediately. They said it was cruel to go without stops for more than 100 km. Reindeers lungs are just burned down and the fall to the ground.

*Sergey Zavalko:* Do you think that all reindeer are completely worn out and they die before they reach place?

*Vladimir:* Yes, their lungs are burned down after such crossing.

*Pavel:* Earlier people used the following scheme: 1 day for crossing and 1 day for a stop. So their trip lasted for a week and everything was in order.

*Sergey Zavalko:* Why do reindeer herders cross such distances with reindeer?

*Vladimir:* It seems to me that the main reason of it is reindeer meat and perhaps payment of debts.

The reindeer meat, which comes to Lovozero is not fresh. It is burned and of blue colour. It is impossible to eat it. This meat lied somewhere in Murmansk for 3 years and then people brought it back to Lovozero for selling in order to save some money. Perhaps I'd be killed after such words (laughs).

*Sergey Zavalko:* What about pasture areas? Have they changed or stayed the same?





*Andrey:* They haven't changed.

*Sergey Zavalko:* Do all pasture areas are in use today?

*Andrey:* To my mind, no.

*Vladimir:* There's a threefold decrease in total number of reindeers. How can people use all pasture areas?

*Andrey:* These pasture areas are for 36 000 reindeers. There are only 15 000 reindeers left on this area. Generally speaking, the total number of reindeer has totally decreased. (~3000 reindeer).

*Vladimir:* Only 7 reindeer herding brigades are left – 3 brigades from the right wing and 4 from the left.

*Andrey:* It's very hard to define how many reindeer we have.

*Pavel:* To my mind people who work in an office and use PCs can count the total number but what do they calculate?  
*Sergey Zavalko:* Is it enough pasture areas for reindeer from your point of view?

*Andrey:* Of course it is. Pastures are good now. If we don't have any reindeer, Lovozero'll disappear.

*Vladimir:* When reindeers return from the coastal territories, they follow special mushroom ways. Reindeer herders know these ways and the only thing they should do is time of returning. That's why they only meet them at a definite place, gather them and begin slaughter.

*Sergey Zavalko:* Do the reindeer follow people now?

*Pavel:* Earlier slaughter began in November and finished at the end of December. Over 10 000 reindeer were slaughtered each year. That's why it was easy to define reindeers' total number earlier. And now reindeer herders can't even gather such number of reindeer during the whole winter.

*Vladimir:* People used to slaughter only young reindeer in



order to get fresh and tasty meat. Now they slaughter each reindeer and it is not enough.

*Sergey Zavalko:* Can you tell me about the reindeer herders present working cycle?



*Andrey:* In summer reindeer herders do not work. In autumn they gather reindeer for harnesses. All reindeer were gathered by November and were ready for the slaughter. Reindeer herders knew where the reindeer were and there was no need for using snow tractors. There was another way of life earlier. People lived together in families.

*Sergey Zavalko:* Did the reindeer herders family stay where reindeer grazed during “Pre-Soviet Period”?

*Andrey:* They did it even in “Soviet” period. They went to tundra together with their families.

*Vladimir:* There were no Land-rovers earlier.

*Sergey Zavalko:* Do you think that this family activity was continued was up to the 1970s?

*Vladimir:* I can give you one example. Earlier children from the boarding school were transported to brigades by helicopter. There used to be more children in brigades than in classes. There were approximately 10-15 children and the same number of reindeer herders in each brigade. There were 9 brigades.

When these children returned home, there was not enough space for all of them in the helicopter. Helicopter pilots tried to explain children that the carrying capacity of a helicopter is limited. But it was very difficult for children to understand that it was impossible to return immediately. So they all jumped into the helicopter and fled away on the 4th attempt.

*Sergey Zavalko:* Do reindeer herders take children with them to tundra now?

*Andrey:* Of course, they do. When summer comes they together go to tundra. There are 2 or 3 children in an average family. Now children don't want to stay in tundra and become reindeer herders. Earlier over 70% of children became reindeer herders and now only 9 children from 9 brigades want to become reindeer breeders.

*Vladimir:* It was another policy earlier.

*Andrey:* There was no need to teach a reindeer herder earlier. He was already trained by his relatives.

*Vladimir:* There was one policy earlier: *to learn, to learn an to learn (Lenin's words)*. We were separated from tundra in order to learn how the Russians live.

*Sergey Zavalko:* Did it happen during your life?

*Andrey:* It all began when I came to school. Firstly it was forbidden to learn Saami and then they started to teach us. It was very strange.

*Vladimir:* It is my firm belief that children haven't understood the situation with Russian and Saami languages. 4 years ago it was forbidden to learn Saami but then after 3 years we were taught Saami.

*Sergey Zavalko:* What language do you use in tundra?

*Pavel:* If a person who is with me is Saami I wouldn't speak to him in Russian. If he is Russian I'll use Russian language.

*Sergey Zavalko:* Are there people of various nationalities in brigades now?



*Andrey:* Yes, we have 2 wings. The majority of reindeer herders in the right wing are Russian and Komi whereas 50% of all reindeer herders from the left wing are Saami.

*Sergey Zavalko:* Do the youth stay in Lovozero after finishing school or the majority goes to town? Are there any new reindeer herders in Lovozero now?

*Pavel:* there's no need in new reindeer herders now, from my point of view.

*Sergey Zavalko:* The reason why I'm asking these questions is rather simple. I'd like to create a model of sustainable development that can be used among administration. What should we do with reindeer herding, fishing and sea fishing? We could develop either oil industry or reindeer herding. I mean we must take into consideration the whole problem of Indigenous people if we want to solve the problem with Saami people.

*Vladimir:* I understand. If I understood correctly, firstly you collect information from other reindeer herders. Secondly you combine received materials and present them to public.

*Sergey Zavalko:* If we want concrete economical assessment we should receive concrete facts. I ask detailed questions in order to assess the situation correctly. I'm inclined to believe, that the first thing people should do is to save the reindeer since Lovozero will disappear without reindeer herding. Earlier people could live without reindeer since they hunted and went fishing. They've also picked berries. But now it is not enough.

*Vladimir:* People claim, that our regional administration is planning to create one "Monchegorsk" region, haven't you

heard about it?

*Sergey Zavalko:* No, I haven't but I can get some information concerning this case. However I know a lot about oil mining companies such as "Lukoil" and "Sevdanko". These companies are planning to build an oil pipeline through Lovozero territories. It seems to me that it will cut all migration ways. What do you think about it?

*Andrey:* It will definitely cut all migration ways.

*Vladimir:* In addition to it some pastures could be destroyed.

*Sergey Zavalko:* What should we do then?

*Andrey:* To my mind, people won't help. "Lukoil" is a very powerful company. This project costs a great deal of money. Nothing can prevent Lukoil from building an oil pipeline there.

*Sergey Zavalko:* Were there any other traditional activities such as fishing and hunting besides reindeer herding until the Komi with huge herds came?

*Andrey:* Yes, there were no such large-scale reindeer herding earlier. People used to live in graveyards. Reindeer herding families used to have over 1000 reindeers. They also used to fish. There used to be enough fish for all of them. They used to sell and buy food with its help. It is not possible today.

I have one idea. We can create a community. So if "Lukoil" is planning to build an oil pipeline on our territories, we'll receive some money for using our rented land from this company. One more advantage of forming a community is that all pastures will survive. As a matter of fact this oil



pipeline won't disturb us.

*Sergey Zavalko:* What can you tell me about the private reindeer? Has their abundance increased or decreased?

*Andrey:* Contrary to SPHA's belief the reindeer's total number is decreasing. Only 70% of private reindeer are allowed to breed. People lose 30 calves each year.

*Sergey Zavalko:* Who causes more damage to reindeer? Is it poaching, predators or different illnesses?

*Pavel:* I have a firm belief that it is poaching.

*Sergey Zavalko:* Are all poachers military men?

*Pavel:* Yes, they are with machine-guns.

*Andrey:* The poacher can easily shoot reindeer since the only punishment he'll get is a fine. But if we create a community all reindeer will become private and the punishment for shooting reindeer will be stronger. It can be up to 5 or 8 years in a prison.

*Sergey Zavalko:* Do wild reindeer cause any problems now? Do they go away with domestic reindeer?

*Vladimir:* You cannot even define whether the reindeer belong to a state farm or it is wild since a half of state farms reindeer is almost wild.

*Sergey Zavalko:* Has the abundance of wild reindeer increased?

*Vladimir:* It is decreasing since they are shot off now.

*Sergey Zavalko:* Can you tell me about the purpose of the fence in tundra?

*Pavel:* It used to help earlier.

*Sergey Zavalko:* Does it cut some migration ways?

*Pavel:* Yes, it does.

*Sergey Zavalko:* Do you think that the purpose of this fence is to prevent reindeer from crossing large pasture areas?

*Andrey:* It is like a border between Krasnoshelje and Lovozero. However we should build more a modern fence as Norwegian did.

*Sergey Zavalko:* Do reindeer breeders use skis or snow tractors now?

*Pavel:* When I was a child there were no snow tractors at all. Reindeer herders used reindeer in harnesses. Now almost all reindeer have snow tractors.

*Sergey Zavalko:* What kind of transport is better?

*Andrey:* Reindeer is the best variant from my point of view. One can use it even in summer. I used to ride a reindeer with my father when I was young.

*Sergey Zavalko:* Do you wear traditional Saami clothes in tundra now?

*Andrey:* Nothing left from Saami clothes. The only thing that lasted is *Maritza*. However it is not Saami but Komi's tradi-





tional piece of clothes. The majority believes that *Maritza* is traditional piece of Saami clothes.

*Sergey Zavalko*: Do you use dogs in tundra?

*Andrey*: Of course we do, it is our main helper.

*Sergey Zavalko*: What food do you take with you to tundra?

*Andrey*: Fish and meat are common among reindeer herders. However they don't have enough money to buy these products every day. That's why they often go fishing.

*Sergey Zavalko*: Do you know the reindeer breeders' wages?

*Pavel*: Approximately 1000 Rubles per month. However it is 9500 per month but we receive it in parts.

*Sergey Zavalko*: Is the financial situation in a state farm hard?

*Andrey*: It is very hard.

*Sergey Zavalko*: Are there a lot of sick people in Lovozero?

*Andrey*: Yes, mainly because of low living wage. The most common illnesses among reindeer herders are chill and flu. Moreover, almost all reindeer herders have problems with legs since they all sleep on the ground.

*Sergey Zavalko*: At what age do reindeer herders die?

*Andrey*: They live 2 years after being retired. A lot of people died at the age of 35-40 during the past years. The reason is rather simple: it can be various illnesses or people become veritable drunkards from hopelessness.

*Sergey Zavalko*: Do you think that there is danger to lose all

reindeer herdering?

*Andrey*: Yes if it continues no reindeer herders will last in tundra.

*Sergey Zavalko*: What can you tell me about meat packing and processing factory in Lovozero? Who are the owners? Are the Swedish or from the State farm?

*Andrey*: It is not easy to say. Swedes cannot buy the whole factory. They can only rent it for a definite period of time.

*Sergey Zavalko*: Do they take all meat from reindeer herders?

*Vladimir*: There's no reindeer meat in Lovozero. If you go to the nearest shop you'll find no reindeer meat there.

*Sergey Zavalko*: Are there any fishing privileges for Saami people?

*Vladimir*: Yes, there are. For example, the price for nets is reduced for 50%. There were also free licenses for elk hunting but now you have to pay 600 Rubles as Russians do in order to get licenses.

*Sergey Zavalko*: Do sport-fishing camps cause any damage to Saami people?

*Vladimir*: Of course they do, when people from such camps shoot an elk, they take only horns from it and leave meat on the ground. What can we say?

*Sergey Zavalko*: Are all territories that are occupied by these camps closed for Saami people?

*Andrey*: Of course they are. All fishing and hunting places



are closed when a new camp is built. The most interesting thing about these camps is it is incredibly expensive to spend a few days in such camp. But where do the money go?

*Sergey Zavalko:* Are there any privileges for Saami people from these camps?

*Andrey:* No there are no privileges. This money settles somewhere else.

*Sergey Zavalko:* What does tundra mean to you? Is it a place of work or you cannot live without it? What would you choose if you are being offered normal highly paid (~500\$) job somewhere in an office and work as a reindeer herder?

*Pavel:* I have no idea what am I going to do in an office. Tundra is my native home.

*Sergey Zavalko:* What would you do if you're being offered luxury flat and high wages?

*Vladimir:* I cannot imagine the life in an office. I was born and brought up in tundra and my soul will always remain there.

*Sergey Zavalko:* Are there a lot of people who cannot change their present life to town life in Lovozero now?

*Andrey:* The majority thinks the same. As it can be said tundra have a magic influence on people.

*Sergey Zavalko:* What would be more effective for Kola Peninsula from your point of view: mineral resource development and non-prevalent reindeer herdering or prevalent

reindeer herdering combined with hunting fishing and tourism?

*Andrey:* From my point of view the second variant is better. Everything depends on the command. We have a village, Revda, near Lovozero. There is a mine there. There people get 1/3 of their wages. So if we build another mine somewhere on Kola Peninsula nothing will change.

*Sergey Zavalko:* Do you think that if the command is honest and hardworking it'll be easy to develop the second variant?

*Andrey:* I cannot agree more.

*Sergey Zavalko:* Thank you very much for such an interesting conversation.



*Jelena Jakovleva, Kola Sámi, Murmansk, Russia*

# A Speech in Snowchange 2003 Conference

*Translations: University of Tampere Slavonic Studies Department and Tero Mustonen  
Edited by: Hannu Tammola and Tero Mustonen*

A law dealing with reindeer herding was passed not until recently here in Murmansk Region. It provides for a legal right to continue reindeer herding without forgetting nature conservation either. Our traditional livelihoods here have been reindeer herding, fishing, hunting, collection of herbs and handicrafts. Nowadays Kola Sámi have three registered organisations and in near future we will found some more.

Today Sámi have many problems because in our lives we had a long period of complete change in our forms of living. During Soviet times we had no possibilities for traditional reindeer herding. Women could not join their men on tundra and children went to school and grew up separated from their families.

As a result we lost a lot of knowledge and ways to do things. These things have disappeared. Of course we want to use and we do use modern technologies as well.

Each organisation has their own development plans. As well in my organisation we have a step-by-step plan for years to come. Our first priority is to reclaim land rights. Additionally we are providing training. In our fight for land we have

come across many problems. Where the airport and the city of Murmansk are located today my father and mother and our Ancestors herded reindeer. As a compensation for lost pastures we are demanding new territories from the state.

We contacted an organisation involved in monitoring quality of terrestrial land ecosystems here in Murmansk region. They advised us to take control of a territory in Petšinsk County. They told us that within this area there had been the cemetery of Somgelsk. In accordance with the laws of Russian Federation we issued an application to claim this area without compensation.

The reply we received was an unfortunate one in a sense that the County of Petšinsk is not part of a traditional territory of Indigenous people. Therefore it was felt that we do not have the

legal right to exploit the territories without compensation. After this we decided that we will have a rental agreement along with other stakeholders.

Three weeks ago I participated in a seminar in Estonia dealing with Indigenous rights. After long conversations with experts they advised against renting this territory. They sug-



A detail from Lovozero Cultural Centre.



gested that we will issue a demand of return of new territories without compensation. We are currently engaged in this process of writing this document.

Numerous times I have been in a dialogue with the local regional administration regarding legal rights of land but the reply is always the same – Sámi people have not lived traditionally in the County of Petšinsk. We will not give up however. We will continue to prove that the state of Russia has taken traditional Sámi territories from us and constructed industrial factories on them. These factories have polluted our lands. These lands cannot be used anymore because of pollution. Therefore Sámi have a right to receive new territories to continue practising traditional livelihoods.

I have mentioned today that our organisation provides education as well. We have a project in which we receive funding from Denmark. Primary organisers of the project include Estonian Fund for Nature, Danish Nature Conservation Organisation and Sámi community. We organise seminars and create plans for organisations and as well a macro plan of action. This 'macro plan' will be presented to the regional administration when it is completed.

We are organising a seminar as well that deals with media and a way for Sámi communities to communicate their own issues in media. Next seminar is focusing on project planning and seeking funding. Upcoming seminars will include reindeer herding, traditional handicrafts and tourism. We have a small project competition among Kola Sámi and plans to develop Internet pages of these organisations. Trips to Kola Peninsula and Estonia are being planned.

Aim of the project is to create unity among Sámi communities. It is very important target as no community can reach its target alone. All aims are global nowadays. We all are aware of the rich natural resources of Kola Peninsula. This is the primary reason of difficulties in land claims and ownership of land.

On a Federal level there is a programme for reviving Indigenous cultures, but funding for this is very difficult to receive if every community works on their own.

This was all that I wanted to share of our project. I want to return to the main theme of the Conference which is climate change. Kola Sámi have observed that climate change is causing problems for reindeer herding and traditional ways of living for Sámi. Vegetation of this area is changing and this is causing difficulties for reindeer. I wish to express that participants of this conference should observe and research climate change especially here in Kola Peninsula. This is a way for you to help Kola Sámi to adapt to changing conditions and advice us how to conduct reindeer herding in the future as well! Thanks for inviting me to this conference! I wish all of you all the best!



A detail from Lovozero Cultural Centre.





*Larisa Avdejeva, Kola Sámi, Murmansk, Russia*

# A Speech in Snowchange 2003 Conference

*Translations: University of Tampere Slavonic Studies Department and Tero Mustonen  
Edited by: Hannu Tammola and Tero Mustonen*

## Honoured Guests!

**M**y name is Larisa Avdejeva. I come from the village of Lovozero, home of many of the Russian Sámi. Eight years ago a cultural centre was founded there and I am the director of that centre. This centre was established based on the wishes of the local Sámi. Its purpose is to regenerate and develop Sámi culture and ensure connections between generations.



Our work schedule is tied to the ways of the local people. We mark the time when reindeer herders return to the village. We monitor and observe what takes place in the tundra. Seasons of fishing and berry picking are of utmost importance as well.

Five reindeer herders from Lovozero were due to appear in this Conference. Suddenly the weather changed last week and all plans had to be changed. Usually herders remain close to the village in February. Now weather got really warm [plus degrees] and this triggered reindeer to wander around tundra dispersing. This meant that herders, even the ones on holiday, had to go after the reindeers to get them together again.

A project was carried out in 1990s which documented Sámi traditional knowledge in the villages of Jona and Lovozero. A book and a map were produced. Canadian partners provided us with methods of data collection. Lovozero district covers 37% of Kola Peninsula and it is the largest reindeer pasture territory in Murmansk Region. We marked on the project map moose and reindeer routes, lakes filled with good fish, herbs, historically significant locations, cemetery and old village areas of Sámi and our sacred places.

Another map was produced to identify reindeer pastures at different seasons. Information was based on 10 years ago interviews. Today this map does not hold true because of climate changes. Additionally industries have destroyed territories that were formerly under Sámi control. Military bases on Kola Peninsula have affected the reindeer and poaching is common.

This map came handy already in 1989 when a Swedish-Russian Company had a plan to start gold mining in our territories. Sámi opposed this and told researchers and officials that the consequences of gold mining here could have potentially disastrous for reindeer herding. Protests were so vocal that the company retreated from their plans. We were glad of our victory but after 5 years we found out that a pipeline will be constructed across our territories. At the moment our activists are engaged in conversations with residents and regional leaders to find solutions. If this pipeline will be built the existence of Sámi Nation can end. Reindeer herding is



our life and if pastures are destroyed it is not possible to continue herding. I hope this map will prove to be useful. The experiences from interviews with hunters and fishermen are now stored safely.

This conference deals with climate change and human responses to it. We cannot predict anymore what kind of weather will be tomorrow. I have had conversations with Sámi Elders and said to them that because today is a good weather maybe it will be tomorrow as well. They respond and say that you should not say so because nothing is for sure. I hope our work continues in the future and my peoples opinions and voices will be heard by others. According to an old anecdote we have no time to sleep. Time does not wait, it rushes forwards.

Many thanks.



*Stefan Mikaelsson, Vice-president of Sámi Council  
SnowChange 2003 in Murmansk, 23rd  
of February 2003.*

## Sisters and Brothers, World Citizens, Ladies and Gentlemen

**M**y name is Stefan Mikaelsson and I am Vice-president of the Sámi Council. First, allow me to thank the organisers of Snow Change 2003, for the good judgement and initiative to invite Sámi Council to Snow Change 2003. The first meetings of the Sámi Council were held in Jokkmokk on Swedish side of Sapmi, Samiland 50 years ago.

You are hereby proudly invited to our 50th anniversary later this year. But it wasn't until the Sámi organisations on Russian side of Sapmi decided to join our co-operation, that we together could transform the Nordic Sámi Council into what it is today: the International Non-Governmental Organisation Sámi Council.

Our commitments have brought significant results. Today the Sámi Council has attained observatory status inside the United Nations, the Arctic Council, the Barents Council as well as good network with contacts in, for instance, the European Union as well as in the European Commission.

And, it was also the Sámi Council who took the decision about the Sámi flag, now an symbol for all of the Sámi people. That would not have been possible without the co-operation



of Sámi organisations from the Sámi civilian society in Russian Federation, Finland, Sweden and Norway. United we stand, divided we fall.

Under those auspices does the Sámi Council work with Indigenous organisations world-wide, but here in the conference hall I can notice two of our best friends, which I have had personally experience of. Namely Inuit Circumpolar Conference (ICC) and Russian Association of Indigenous Peoples of the North, Siberia and Far East, and I do Thank You for Your good work and support. I am also really pleased to be able to attend this climate change conference here in Murmansk. I have travelled almost 1000 km from where I live, but I am still in Sapmi.

What makes the Indigenous peoples different from any ordinary minority is that the Indigenous peoples have a closer link to the nature and a spiritual contact with nature. The traditional way of living is crucial and once that is lost, the risk for assimilation into the majority society is almost certain



to occur.

When I travel to other parts of Sapmi, I can feel at home, even though I have more than 1000 km to my house. But this is much better described by the Sámi poet and Artist Nils-Aslak Valkeapää, and I will quote him, in order to give You the feeling I have, but in words so much better described by him:

*"I see our mountains  
the places we live  
and hear my heart beat  
all this is my home  
and I carry it  
within me  
in my heart"*

These words are especially valid here. Here is my home; Sapmi is here. With these words I do wish You all, us together, good prospects with SnowChange.

Climate change is the increasing topic in various conferences around the world. And of course, the changes in weather around the globe and in the Arctic can be noticed easily.

But the disbelievers demand more and accurate scientific research before they can accept what we are here to discuss: namely climate changes as an existing reality. In my part of Sapmi, on Swedish side, the industrial forestry, as well as building of hydro-plants and dams, has caused an rapid change of the environment in a very short limit of time.

The forestry has transformed almost all of the natural forests into industrial forests. The average age for this industrial forests is 40 – 50 years, with the lowest permitted age for clear cutting, by law is put to 90 years of age.

That means that every individual tree is not as well-developed, or not grown up, and don't have any chance to get there either. After clear cutting the forest producing areas

often need to be dried out (with ditches) in order to avoid too much water in the soil. This water is believed to be harmful for the new plants.

That is of course one vicious circle: the average age of forest is decreasing, the water flow is increasing and the average temperature during the coldest part of the winter is also getting lower. Destroying the boreal forests by forestry shows more obvious the negative aspects and impact what that activity has on our daily life.

Added to that like cream on a cake is the use or misuse of cheap fossil products. Therefore is it essential that the prices of gasoline, oil and oil products have to go up. There is no other solution and the best way for each single individual to show their consciousness and interests for environmental issues.

The two basic principles *"nothing will vanish"* and *"everything will spread"* is applicable here also. That is why it is so important for all to take their part of responsibility as an individual as well as citizen of a global world.

The most vulnerable peoples are the Indigenous Peoples when climate changes is mentioned. Therefore it was very stimulating and enjoying when the Stockholm POPs convention (Persistent Organic Pollutants) did single out the Circumpolar Arctic and Indigenous Peoples. It was the first global convention to do so.

This happened in May 2000, and is an major victory and demonstrates the influence of Indigenous Peoples in addressing global problems. Many of the global problems could be solved, if proper respect was given to the legal claims and the rights of Indigenous Peoples.

Therefore I urge to responsible countries to immediately ratify ILO-convention no. 169 as well as the Kyoto Protocol and other relevant international agreements. On the web page of Snowchange there are several interviews that have been performed on the Kola Peninsula and in Finland. These





interviews are shown in an excellent way. We need to get the interests from politicians and scientists.

Sámi Council will co-operate with Snowchange so further interviews can be made, this time around Jokkmokk, Sweden.

The collecting of facts and opinions from the individual Sámi living around Jokkmokk in northern Sweden will take place in April this year. The result will be published on the website [www.snowchange.org](http://www.snowchange.org)

This will provide a good platform for the future: *so that we don't adopt the change, but instead try to improve our conditions for future. Keep trying!*

In conclusion I would like to thank 2 persons for making Snowchange possible, namely Alexey Cherenkov from Murmansk Humanites Institute and Tero Mustonen from Tampere Polytechnic.

The most vulnerable group inside Indigenous Peoples are girls and young women. They do need good models and examples. Therefore it is very important to always think about the gender balance and show proper respect in the same way we want to receive it. *"In respect and participation."* No man should speak on behalf of women.

Today here with us we do have 2 women who are both good models as well as skilful politicians and shows the female aspect in politics of Indigenous Peoples.

Zinaida Strogalechikova, member of UN Organ 'Permanent Forum' and Anna Prakhova, chair of Barents Peoples Indigenous Working Group are skilful and competent women showing good work, not only for girls and young women, but for all of us.

With these words I do thank the 4 mentioned persons, and I do also thank the audience for Your attention. *Bolshye Spasibo [Big Thanks]!*



## Offerings and Worship

Sámi will eagerly give offerings to spirits. Those who earlier gave offerings often had many reasons for holding sacred ceremonies. Some wanted to have answers to some questions. An offering can also be made in thanksgiving. Rites may be performed to secure luck in reindeer herding, or in hopes for fare weather. An offering can ensure success in fishing and better health as well. This functioned, and still functions so.

When a person is sick, the noaidi journeys to the realm of the dead in order to find out the proper offering needed to return the stolen soul of the sick person, or to cure other sicknesses. If a person suddenly has unexplainable mental afflictions, it may, for example, be a result of hot weather. An offering has to be made to Beaivváš, the sun.

Sámi offer everyday food and drink to female gods. In past times, it was important to remember and thank the sun with a sacrifice of white reindeer. In some Sámi areas, a sacred sun porridge was eaten at Midsummer in June, in honor of the sun.

The reindeer offered to Beaivváš is normally white, or adorned with white ribbons, tied through the ears. For Diermmes, the thunder, the reindeer is gray. The chosen reindeer are in good shape, and the choicest meat is given in praise.

In some places, people would construct an altar, and place reindeer meat, antlers, and other gifts upon it. A special

pole, the Vearromuorra, could be erected in honor of the sun. The Vearromuorra, symbol of the world tree, would be smeared with libations of blood and fat. There are other practices as well. A ring may be fashioned of twigs and birch saplings. Pieces of meat are placed in the ring, and this is also an offering to Beaivváš.

For Diermmes, the Thunder, there would be an altar near the goahti, made beautiful with twigs and leaves. Wooden statues expressing the Thunder would be carved. These carved statues and reindeer antlers were placed on the altar and smeared with reindeer blood. The amount of wooden statues was equal in number to the sacrifice of male reindeer. The Sámi made other sacrificial statues of wood as well. Some symbolized world poles, helping to keep the world upright.

People used to gladly make offerings of reindeer. For example, the offerings to Rádien in September were given to obtain luck in reindeer herding, and to hinder the coming of the world's end. Sacrifices were also made to Varalden-olmmái and to Rádien's son with the same aims and methods. For Leibolmmái, spirit of the hunt, bows and arrows were produced and given.

In our time, you may see, sometimes, and in certain places, that people have brought offerings to sieidi sites, near to home and further away. What do you think about offerings and sacred ceremonies? Have they completely disappeared from Sápmi? Yes or no?





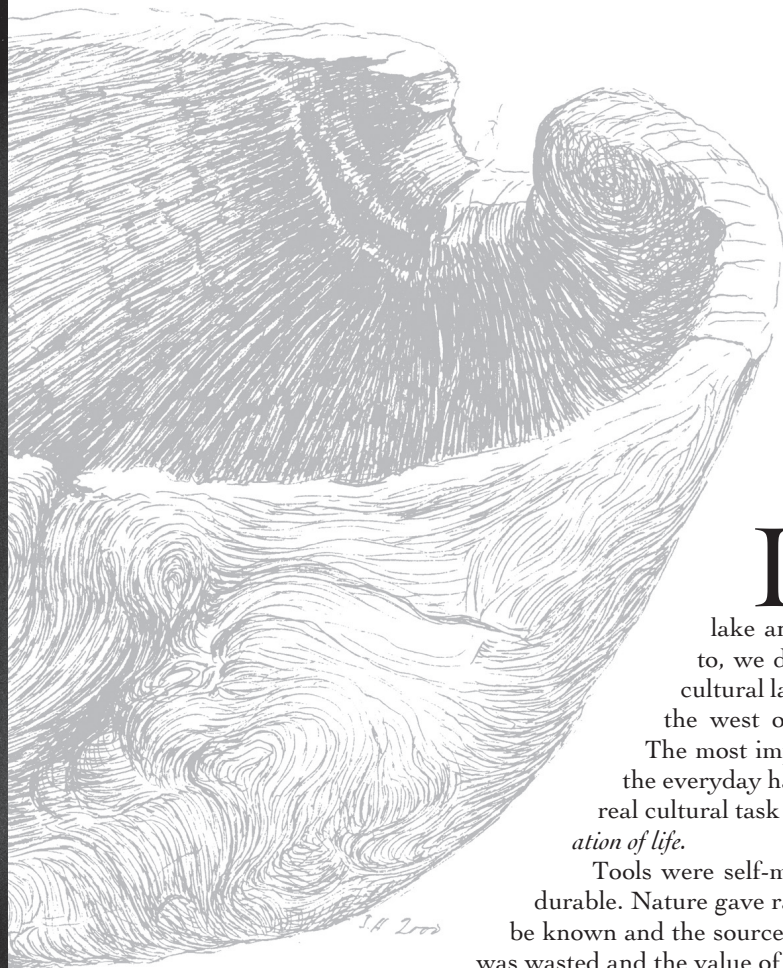
# Snowchange Finland











This article is based on books:  
Pekka Kautovaara, *Käden taidot*,  
1984, Kunnallispaino, Vantaa  
*Kättentöitä*, 2003, Otava, Keuruu.

# ‘Hands at Work’ – Traditional Finnish Skills and Forgotten Arts

Author and photographer Pekka Kautovaara

Translation by Michael Hicks, Antti Kautovaara and Tero Mustonen

Drawings by Sirkka Helminen.

## Introduction

It is in the forests that our heritage lays! We had to live on the gifts of the forest, lake and later on the field – we had to, we depended on it. Although new cultural layers arrived from the east and the west old traditions were cherished. The most important of these after all were the everyday handicraft skills. With these the real cultural task was accomplished: *the continuation of life*.

Tools were self-made, harsh, but practical and durable. Nature gave raw materials, but they were to be known and the source was to be respected. Nothing was wasted and the value of one's own work was known.

From these fragments of poems reflecting community life grew Kalevala – the national epic of Finland. These fragments of poems are also in working hands, echoes of a different thousands of years old way of life.

It was around 1978 that I first started taking pictures of hands at work, and the pictures set me thinking. Then one

day as I was looking at a number of pictures at the same time it occurred to me that these pieces could be fitted together to provide living evidence of a culture, which many people suppose to be completely dead.

These hands began to speak. At first just the hands, from the wrists to the tips of fingers. These skills were needed by every individual in daily life. Further away from towns and villages one lived the more one had to be able to do for one self. The services of professional craftsmen did not extend to the backwoods. Quality of tools that were made for one's own use did not have to be such a ‘*shining*’ quality.

Craftsmen, fishermen, hunters, shopkeepers, officials and factory workers will naturally have had quite a different rhythm of work than the majority of city people, for those living off the products of their fields, forests and lakes or rivers were obliged to adapt to rising and setting of the sun, the harvest times, hunting and fishing seasons and other events in nature.

## Culture of Hands

*A man, a woman* - these are the beginnings of a family and a house. Both bring with them the treasures of an age-old tra-



dition, the skills of using hands. In the case of Finland they absorbed this handwork tradition from both East and West, although they forgot long ago from whom. The main thing is, though, that they learned to work with their hands in order to live their lives in harmony with nature.

Skills that have proved valuable have been stored up in people's memories from one generation to another and handed on in the movements of their hands, the men and women separately specializing in their own forms of work.

Each person had his own inventory of tricks for nimble fingers. A person living in the forests of the interior of Finland could not carry much around with him in his knapsack at one time: some salt perhaps, and the seed to start a new farm. Everything else had to be created with one's own hands, the man and the woman dividing the work between them. They were aware of the value of their own work, and nothing was wasted.

The children learned the down-to-earth skills of making a living by following everything they did. They learned to speak by listening carefully with their ears, and they learned the language of handwork by watching closely with their eyes.

But in the end everything had to be tried and proved with own hands. Practicality determined the form of everything they made, just as the intended use of each article determined its durability. What else did one need? A measure of beauty perhaps?

Does this unbroken tradition of handicrafts still carry messages from the past for use, reflections of the unbroken chain of the generations? Can it still lead us into the world of our grandfathers and grandmothers? Do we have understanding to give due credit to hands made stiff by hard work? Do we realize that without them we would not be here at all? It is these hands over the centuries that have performed the most important cultural task of all: *the gathering together and preserv-*

*ing of what is most essential for us - enabling life to go on.*

## The Annual Cycles of Working Year

The working year in the countryside - from one All Saints' Day to the next - was dominated by an ever-varied series of practical skills and weather signs. The weather lore, based on the passage of the seasons and the periodic events occurring in nature, was used to predict the coming harvest, fish cycles and other community activities. These omens were particularly important when preparing for the new season's work, but it was the actual weather that determined how the work was eventually carried out.

The essential thing was to have each stage completed before the next was due to begin, which was quite possible when people spoke of jobs to be done, such as winnowing the grain or retting the flax, rather than working hours.

Work went on at a gentle pace, but the working days were long. Strength was needed, and perseverance, and these qualities could only be maintained through numerous breaks for meals and rest. But brute force was not good enough: *one had to keep one's tools in good repair.*

The skilled craftsman had done his work while the unskilled man was still thinking about his. On the other hand, one had to remember that *"It's better to think for a day than make mistakes for a week", as the old saying goes.*

Land owners and those without their own lands, such as farm labourers and serving girls, all had to be skilled in certain crafts. One had to be able to manage alone on a journey far away into the uninhabited forests, and one had to be able to work together with others in the fields and forest clearings. There was also much demanding independent work to be done indoors in the winter, work that occupied both the men and the women once the harvest had been gathered in the autumn and outdoor work was ceased. The men folk be-



came 'slaves' to their axes, saws and planes, and the women folk to their spinning wheels and looms.

The implements used in the home and on the farm had to be repaired and replaced, and these skills had to be taught to the young people as well. With flares, and later oil lamps, to lengthen the working day, the men would retire to their own corners in the house to work.

## Annual Rhythms of Outdoor Work

*The general scheme set out in the diagram describes the annual rhythm of work as it still took place recently on a farm in Eastern Finland, which supplemented agriculture with hunting and fishing in the traditional way.*

### SPRING

- Calving
- Fence repairs
- Hunting of wildfowl
- Spreading of fertilizer
- Forest clearance
- Sowing
- Cutting of stirring sticks and whisks
- Spawning-season fishing

### SUMMER

- Outdoors pasturing of cattle
- Dairying
- Cutting of winter fodder
- Cutting of birch sauna whisks
- Fishing with nets, cages, rods and seine-nets

### AUTUMN

- Harvesting
- Ploughing
- Drying and winnowing
- Hunting of wildfowl and water fowl
- Broom making
- Seine-net fishing [Nuottaus]

### WINTER

- Indoors season for cattle; no milking
- Feeding season for cattle
- Transport of compost to fields
- Indoors work
- Chopping of firewood
- Cutting of timber for building
- Squirrel trapping
- Burbot fishing

### From Hands of the People Would Come:

- mugs, bowls and churns as tableware and dairy equipment
- water buckets, tubs and butts for use in sauna and cowshed and for fetching drinking water by sleigh
- casks, tuns and vats for preserving food, including meat
- vessels for feeding animals
- spoons, ladles, lids, rolling pins, rods, pitchforks, rakes and spades
- sleighs, sledges and skis.

In addition to this a wide range of wooden articles men folk would produce many items in birch-bark or pine strips They would spend some time mending their fishing nets and making entirely new ones.

At the same time women would prepare food, clean house, look after smaller children and animals, spin and weave. All clothing they needed could be made at home, out of wool, linen or hemp. The loom would clank away in one corner, producing woven cloth and mats. The need for mats and wall hangings increased greatly as the early smoke cottages gave way to lighter, more open houses with chimneys.

Although the people on the farm could cope with all the work for the majority of the time, outside assistance was needed occasionally, from blacksmiths, tailors, cobblers, saddlers, glaziers or decorators. These tradesmen would not be available in more remote areas, however. There everything depended on the skills and ingenuity of the people themselves.

Once the outdoor work was finished in Autumn and the first porridge had been made with the new grain, the servants and labourers on the farm were given a few weeks' holiday before the indoor work began.

This period around All Saints Day, the only holiday in the year, gave them an opportunity to meet others in a similar position, and also marked the time for chancing employers or re-engaging with the same employer.

It was important to receive a good testimonial from one's





employer at the end of the year in service.

Liisa, daughter of Laari, received the following testimonial to her skills and behaviour in 1860:

*'Liisa, daughter of Laari, a servant-girl, who has served in my house for one year period. Who will be released from my service this All Saints' Day. Manners and behaviour: can weave cloth, can spin, can cake, can cook, can tend cattle. Serious, diligent, meek, not stubborn. Can read the Book [Bible]. Which is certified by this paper in Laukaa, The 29 Day of the Month of August 1860  
Henrik Pöyhönen, Man of the Church'*

Much of the harder or more laborious work was done collectively among the farms of the village. This gave each person a chance to show the others the speed with which he worked. It was also common to judge a possible husband or wife by his or her way of working:

*"Rose cheeks and broad shoulders, these are the serving-maid's best spokesman."*

Once a particularly hard-working farmer decided to go to nearby town on a Saturday morning, and summoned his farmhand on Friday evening to give him his instructions for the following day. It seemed to the farmhand that he was being given enough work for a month at least, and so he asked sarcastically:

*"And what should I do then?"*

*"Then you could finish off the fire fence and spread out the spoil from the ditch."*

*"And then?"*

*"In the evening you could take the horse and make the drills for the potatoes."*

*"All right, then. And after that?"*

*"Oh, well, do whatever you like after that."*

## Raw Materials In the 'Wood Age'

The raw materials needed for the men's handicrafts were charcoal and iron for the blacksmith, heel-ball, linen and leather for the cobbler, bone for the pipe maker, leather and wood. It was wood that was needed for the vast majority of the tools, domestic articles, vehicles and furniture of the handwork era, not to mention the buildings themselves.

Iron, bronze and stone being more difficult to obtain and work with, the term 'Wood Age' might best describe the many centuries of development of our civilization in the coniferous forests of the north. Wood may now give way to plastics, but our cultural heritage remains firmly rooted in the forests. Our people have been called 'People of the Pines'.

From their earliest years children were taught by their parents and other people of experience. They would walk through the forest to recognize the uses to which different parts of the trees could be put. Any gnarls, twisted branches, knots, stumps with roots or distorted growths were carefully noted. It was always easiest to take advantage of nature's own shaping of the wood, and the finished article was likely to be stronger if the craftsman had merely continued the work of nature.

But this meant that one had to have the shape of the object in mind all the time and be able to perceive that shape in a tree. *All twisted growths were workable growths*, as the saying went, and the usual thing was to cut them off as one went by, since no one would go into the forest without an axe and knife.

In the same way the wood needed for building a boat would be collected in the yard for many years before the boat could finally be launched, and pieces of wood for other purposes were put aside in corners or under benches until the time was right to finish them off.

The wooden utensils, which had gained in convenience



and ease of handling over the generations and indeed the whole range of wooden tools and household accessories always retained their simplicity and economy of design. No innovations were necessary.

These were timeless articles. But for the craftsmen engaged in making them they required a good knowledge of the materials they were made of, an unerring sense of form and true skill with the hands.

## Hardwood

### Birch (*Betula*)

- Sap used as a drink
- Gnarl as a ladle
- Bark for utensils and decorations
- Medicine, glue or fire starters
- Branches for sauna whisks, kitchen whisks, besoms, bands, buckets or withes
- Wood for skis, axe handles, rake blades, sleigh and sledge runners, shafts, spades, firewood, yokes

### Rowan (*Sorbus aucuparia*)

- Sacred tree
- Yokes
- Rake teeth
- Strips for binding sauna whisks
- Berries as food

### Bird Cherry (*Prunus padus*)

- Yokes
- Withes
- Leaves for medical use



### **Willow (*Salix*)**

- Bark for tanning
- Leaves for fodder
- Yokes
- Pipes, whistles and sticks
- Sides of carts and sledges
- Strips for binding

### **Alder (*Alnus glutinosa*)**

- Bark for dyeing
- Leaves for fodder
- Sap for treating wounds

### **Aspen (*Populus tremula*)**

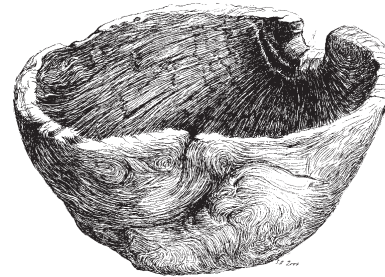
- Fences
- Oars and paddles
- Spades
- Rake handles

## **Softwood**

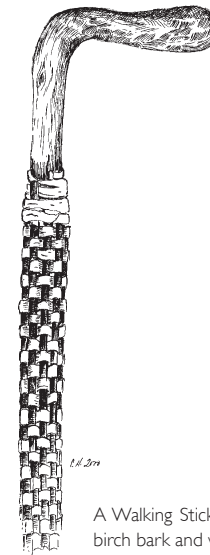
### **Pine (*Pinus*)**

- Planks, boards, building logs
- Boats, skis, coffins
- Branched stirring sticks
- Tar, flares, shingles
- Cones used in games
- Bark carved into toy boats
- Bark used as floats for nets,
- Bark bread
- Vessels, tubs
- Resin for chewing

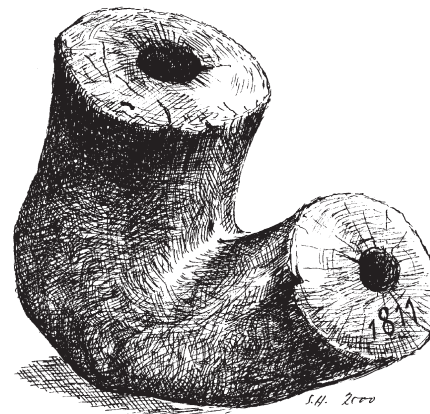
The use of the own shape of a tree was like a Forest ABC since childhood for many community people.



Gnarl burl basin was used to store food. Other uses included a common dish for meals or just a use as a aesthetical piece of work by nature and one's own hands



A Walking Stick decorated with twined birch bark and willow.



'Basket' of a pipe from 1811.



### **Spruce (*Picea*)**

- *Firewood, fencing*
- *facing boards for buildings*
- *Twigs as mats*
- *Young trees as withes*
- *Looms, spinning wheels*
- *Sides of sleighs, table legs*
- *Resin*
- *Keels of boats*

### **Juniper (*Juniperus*)**

- Branches used in washing, cleaning
- Air purifying
- Berries for medicinal purposes or as an additive in malting
- Vessels, churns
- Binding hoops round barrels or vessels
- Sacrificial smoke
- *Carved ornaments*
- *Hairpins*

### **Birch Bark**

Bark stripped from birch trees or logs had a multitude of uses on a farm which tried to be self-sufficient. It made a good insulating material, it was easy to work with and it was cheap, light and durable. Birch-bark preserved well and was useful in preserving. Its variations in colour also made it an acceptable material for decorative items. There were no special craftsmen who worked with birch bark. Everyone simply made what he wanted from it - women according to their own needs and men according to theirs. Birch bark in its time served purposes for which we now use wood, leather, metal, plastics and various surfacing materials.

Bark could be stripped from the trees at any time of the year, but it was most easily obtained at "*bark-shedding time*",

around midsummer, just as the rye was flowering. At this point in its growth, before the phloem between the bark and the wood had hardened, it would slip off in one's hand, so to speak.

Bark taken in the spring was the most beautiful and the most flexible, while autumn bark tended to be dark in colour and tough, and was used mostly for purposes in which strength was required. Spring bark could be kept fresh by immersing it in running water with a stone on top as a weight. In this way it would retain its colour and soft texture best.

The favoured day for changing the birch-bark lining on roofs was St. Peter's Day, 29<sup>th</sup> June. The bark was removed from the tree using one's fingers, a knife and a spatula-shaped tool of wood, bone or iron which fitted comfortably into the hand and ensured that the bark came off in a continuous slab or strip.

One began stripping the bark as high up the trunk of the live tree as possible, removing it in a spiral of the desired width, usually about 3-4 cm, at the same time gathering it into loops or rolling it into a loose ball with its surface outwards, as it had been on the tree.

The quality of the tree bark depended greatly on the place where the tree was growing. A birch growing in a heath forest would yield dry bark and one growing on mire rough bark with a pitted surface. The best of all was bark from a tree growing in a fresh, damp forest. Silver birch was avoided where possible and brown birch preferred, on account of its smoother bark.

Slabs of birch bark were used for roofing, for lining parts of buildings likely to rot, for insulating against damp, for making boxes, dishes and plant pots, and for putting on one's head as a protection against rain or as an eye-shade against the glare from a torch. Round birch-bark vessels could also be made from a length of tree trunk by gouging out the wood





from inside.

Narrower strips or bands of bark were used to make various objects and utensils by a square or diagonal weaving technique. Since the diagonal pattern was both stronger and more decorative, this was the more commonly used. Objects made in this way included birch-bark knapsacks, together with their straps footwear, dishes for sowing seed or sifting flour, pots to contain salt or berries, belts, horns, sheathes and handles for knives, straps for bells, jackets for bottles, ropes, floats, etc.

The tar from birch bark was used to oil leather boots. It did have the effect of turning them black, admittedly, but you could stand in water for a whole day and never get your feet wet. Glue could be extracted by scraping the surface of a piece of bark as it was burning, whereupon the substance was thrust into cold water to cool it down. This glue was unusual in that it had to be softened in the mouth before use, and again it turned the glued surfaces black, but it held firm.

### The Birch-Bark Knapsack

*"It's to be enough rye to fill the knapsack, then",* the priest declared to the village basket maker after he had ordered a birch-bark knapsack and bargained over the price. When at last the knapsack was ready, of course, it wouldn't even go through the priest's front door, for the cunning craftsman had turned the situation to his own advantage. The priest had to admit that as there had been no mentioning of the actual size of the knapsack the man should have his giant creation filled with rye after all, but he was also sent away with precise instructions as to how big the next one was to be.

The article in question is a container with a lid, entirely made of birch-bark and strapped on the back of the person carrying it with narrow bands or strips of bark attached to wooden battens fitted inside it. These straps ensure that the knapsack remains in an upright position, whereupon it as-



The double weave of the knapsack leaves it a beautiful golden brown colour inside and out. The same set of birch-bark strips can only be used for one knapsack. Each one is slightly different.

sumes a shape rather like that of squatting frog.

The excellence of the birch-bark knapsack for carrying fish, berries or one's own provision on a journey remains unchallenged. It is light, food can be kept cool and fresh in it, and the birch-bark never affects the taste of the food contained in it, which is why it can also be used for butter dishes, for instance.

Knapsacks can vary in size according to the purpose for which they are made, that used by a fisherman going to empty his nets usually being very much larger than one used for carrying a lunch packet.

The knapsack is constructed from the base upwards, starting from an interwoven square of seven lengthwise and seven crosswise strips, each 3-4 metres long. These are then bent



upwards at the edges and the weaving continued until the sides are completed, the last corner to be woven being the one which forms the lid.

When this first layer of weaving is finished, the knapsack is brown on the inside and white on the outside, but a second layer is then added throughout, so that both surfaces end up a golden brown in colour.

A group of workmen once tired of the incessant comments made by a talkative colleague from Savo, and so they put a kitten in his knapsack in the morning and then innocently remarked in the evening on his strange habit of carrying his cat around on his back for days on end. *"Oh, I always keep it there"*, their companion replied, *"so that the mice won't eat my lunch."*

### The Stirring Hook

The stirring hook was an essential in every household and peasant cottage. The smaller ones, about 25 cm long, were used for stirring soup in saucepans, while the larger dough hooks had to be much more solidly made to stand the strain of mixing water, yeast and flour by dint of sheer strength. The first to succumb, however, was the porridge stirrer, which was gradually softened by daily use.

The cook was even able to use the stirrer to test whether



Many superstitions were attached to the number of prongs on a hook mostly concerned with the coming harvest: "Four prongs bring famine, five prongs bring grain, six prongs dry and seven prongs mix."

she had put enough flour in the mixture, judging her porridge to be of the right consistency if the stirrer would stand upright in it. The most unusual variation on this utensil was the hook held in the left hand when lifting potatoes.

These stirring hooks were normally made in winter, as the resin in the wood in summer made the work unpleasant and left the finished article with a powerful smell. The top part of



a strong pine sapling about a metre and a half high growing in an open place was cut off. It was essential for this to have 4-6 branches growing from the same point at the top.

The stem was barked immediately, the branches trimmed level and the shaft cut to a suitable length. It was then placed close to the stove for a few days to dry, after which scraping with a knife cleaned it. Then it was ready for use. The prongs could be bent inwards further by binding the branches to the stem before drying and trimming them off afterwards.

The making of these hooks was men's work, and perhaps for that reason the boys were always anxious to do their bit, if only to show that they could handle a knife as well as a man. The sad thing for us boys was that dough hooks and stirrers seemed to be so seldom needed.

Many people believed that the wildfowl would escape from their traps if one cleaned a dough hook by licking or washing it. Even today most of the dough is removed by rubbing the hook in flour.

### An Axe Shaft

A farmer once thought he had found a clever test of his farmhand's skills by promising him that if he could make a perfectly straight shaft for an axe without once measuring whether it was straight or not he could have one of the daughters of the house as his wife.

Well, the farmhand took up the challenge, and when he got into difficulties he pointed to one of the daughters, who was just crossing the yard, and shouted out, "*To that the daughter you would give me?*" This gave him the chance to look down the shaft at the same time and divert the farmer's gaze elsewhere. The farmhand got his wife.

The local blacksmith would make the blade of an axe, but the shaft was the work of user himself. Curve of a pig's back will serve for the blade of a scythe, but an axe shaft has to be

shaped like a pike's belly, otherwise it will dig into the palm of the hand as you use it.

A good solid piece of birch was chosen for the shaft, which a skilful man could fashion within a couple of hours. It then had to be wedged in position in the eye of the blade. The wedge was held firmly in the hand and driven into place with the back of another axe. The shaft of the axe would accept the wedge if it was standing free. Pine was a better wood for the wedge than birch as it slipped into the shaft more easily.

Like the knife, the axe was a real all-purpose tool. It was used for splitting, cutting, shaping, hollowing and forging, as well as a measure of both length and weight. And in the autumn it was customary for some of the livestock to be "*given the axe*", i.e. *slaughtered*.

If someone did not show the proper respect for the village blacksmith, he could easily find after his next visit to the smithy that his axe or scythe stuck or didn't cut cleanly. There was some truth in the saying that it was better to be in the bad books of the parson than of the blacksmith.

### Boat Building In Savo Style

It is both simple and difficult to make a boat in the Savo [a province of Eastern Finland] style. The easiest part, of course, is looking for suitable trees in the forest.

The building of a boat commences two years before launching, when the builder goes out into the forest in January or February, when plant life is at a standstill, in search of trees with long branchless trunks growing in or close to a moist, lush copse. The best-favoured are slightly bent pines which will take up tar well. A naturally contorted spruce is also useful for the keel, as it will be stronger and save some of the shaping work.

The pines needed should be felled in the winter, sawn into planks that same summer and seasoned out of doors until



the following spring. The best results, good, straight planks, are obtained by drying them in the spring sunshine on top of a paling fence. The boat is similarly best built during dry weather in spring, which will help to leave it watertight.

Two men using a heavy plane, leaving the outer surface slightly convex and the inner surface concave smooth the dried planks. No splits or cracks can be permitted. The core of the wood has to be cut away from the planks forming the bottom of the boat, which also have to be shaped with the surface wood on the outside.

The ribs for the boat are made from the upper parts of the branch of a large spruce. Branches from small trees are no good, as they tend to break rather than bend. The best wood of all for this is juniper, however. The bung should be of deciduous wood, either birch or alder, although a temporary bung can also be made from a bundle of grass from the shore.

The best wood for the oars is obtained from young, slowly growing spruces, which will remain straight, whereas aspen is liable to warp. If one wants to try to keep an aspen oar straight, it should be soaked well in brine. Doubling the width of the boat at the rowlocks and adding the breadth of a hand calculate the length of the oars.

Now that we have all the materials ready, all we have to do is to magic them into a good solid, spacious boat of the kind which the people of Savo prefer.

The boat-builder in these pictures, Uuno Häyrynen, claims to have stolen the skills, which he needed, by spending his youth watching older men at work building boats. It is also said that there is yet another way of becoming a master boat-builder in Savo. Take your planks under your arm and carry them to the nearest roadside. The passers-by will soon tell you how to make a boat from them...

This boat took a week to build on his own. He began on Monday morning and was able to row his new boat out onto

the lake to set his nets on Saturday evening.

There was one man, though, who won a boat-building competition by finishing his boat within a day. When people set out to test this miracle boat there were many who mumbled that of course it would never hold water.

At this the builder retorted: *"Well, a boat's not supposed to hold water, but to let it out."* And if you order a boat to be made, make sure you look after the builder well. Otherwise the work might go like the building of one church boat, when the builder came back from his meal and announced: *"Let's shift the rib a bit, boys. The porridge was upside down in the bowl!"*

The people in the kitchen had forgotten to give him a knob of butter on his porridge, and by moving the rib he could make the boat beautiful to look at but hard work to row.

## The Collar Bow

The bow is the curved piece of wood in the harness, which enables the horse's collar to be attached to the shafts in a flexible manner by means of the traces. Use of a collar bow greatly increases the power exerted by the horse.

The ancient deceive forms part of the Eastern workhorse culture which spread through the forested regions of Eurasia and was absorbed by the Finnish peoples and their neighbours, the Great Russians. Other peoples do not seem to have discovered this very useful appendage to the harness.

The collar bow has to be made of tough deciduous wood without knots, and there should certainly be no dead branches attached at least, Akseli, a local person maintains. If we make this next one of a piece of bird cherry wood it will be bound to survive even the hardest of work. Sallow is no good for this purpose, but grey willow is, as its bark is darker and smoother. Wood for bows should not be cut when the sap is rising.

If the wood is not heated first it will not bend, in spite of





the fact that men are said to have bent living bird cherries into shape in the olden days. The strongest bow of all comes from wood that has grown out of shape under the ground, but barring this the most reliable method is to soak the wood.

The wood should be heated in an oven to the point at which water begins to drip from one end. *"Willow with bare hands, bird cherry with mittens"*, the saying goes, meaning that willow does not need to be heated very much but bird cherry does. Even better than heating it quickly in an oven would be the slow heat of a dung heap, but it would make the bending process very dirty work.

Cold water is poured over the wood just before bending, to make the bend more even and to prevent cracking or creasing. As the wood is bent into a half-circle over a wooden form, pegs are driven into holes in the adjacent wall and wedges placed between these and the wood. This forces the wood into an arc. A good bow will bend like a strip of leather.

Akseli usually leaves the bow in position for a couple of days to cool down and then, before he releases it, ties the two ends with wires so that they won't spring open in the face. In the olden days withes of willow were used for this. The actual drying process lasts for several weeks, as the bow has to stay in tension of its own accord. If it is dried too quickly it will split, and so it is usually just left under a bench at first and then moved to a drier place as it begins to wither.

The ends of the bow can also be dipped in pots of lamp oil so that they will absorb the oil and become tougher. One can also remove the bark before drying, but only with the fingernails, as a knife could easily start a crack.

The maker of a collar bow has to return to his work about forty times in all before it is finished, the last stages, its decoration and painting, taking place indoors of an autumn evening when the family have come in from the fields and can settle down with their handwork. *"The arms of the bow must be both*



Akseli or "Post-Aksu" and Hilma or "Hili" Manninen bent a number of new collar bows every autumn.

*the same thickness, otherwise the horse will be limping in a few days"*, Akseli warns us. He has little good to say of iron bows. They are very heavy and wear away the ends of the shafts.

What tricks did Tuomas the Bow-maker have up his sleeve for bending the bows? No one ever found out. No one was allowed to watch when he and his family were bending them, but they were the best of all. It is said that he had a special pool beside the stream in which he kept his saplings, and part of the secret evidently lay in the incantation, which he would recite during the bending process. The whole village at least knew that:

*"Tough and strong like a mare's hide, tough and strong like a mare's hide."*

And he would chase the small boys off with violent curses when they dared to parody his chants:

*"Tough and strong like a mare's hide, weak and flimsy as an aspen."*

A boy could get himself looked on as a grown-up if he



could make himself a pair of skis. But only a real ski-maker was aware of all the secrets of the trade.

It is understandable, of course, that skis should be such highly prized articles, for they held the key to movement across deep snow. Some legacies even mention a good pair of skis as being equal in value to a dairy cow.

All that is expected of a pair of skis is that they should be light, of hard wood, smooth and straight running, springy, able to carry the user's weight, slanting slightly inwards, hollowed out a little underneath, and well balanced or slightly heavier at the back. The task of meeting so many requirements naturally led to the use of conflicting techniques by different makers. Or was it that they used to guard their trade secrets by misleading those people who were inquisitive enough to ask.

Skis were usually made of birch. One could use old birch trees growing in mires, but these made the skis rather heavy, and one tended to look for lighter, more durable wood in a birch growing next to an anthill. Skis suitable for the hard crust, which forms on the snow in spring, could also be made from an old pine. To be used for skis, the trunk has to be absolutely straight and without branches for at least three metres. Very tall birches were not suitable, however, as there wood was known to crack easily.

Eino Nykänen, a ski-maker, walks slowly round his chosen tree, stroking its flank gently, as if wondering whether there would be a pair of skis to be had from it. Obviously there would, for in a few minutes the tree has been felled and its trunk measured against an old pair of skis.

Now comes the search for the core of the wood. One has to find this in order to split the trunk exactly in half. And one can't make skis from wood cut on the slant. The direction for splitting the wood can be found in any birch, a paper-thin crack a few centimetres long running down the centre. That is where the blow with the axe and the wedges has to go so

that the trunk will split into two equal halves, each of which may suffice for a pair of skis.

The split logs are left out to dry, partly barked, in the spring sunshine, and then split again when they are brought back to the farm. This gives triangular pieces about three metres long, each of which will produce one ski.

The ski is then roughly shaped with an axe until it is about 3-4 cm thick and 10 cm wide, taking care from the beginning that the core of the wood forms the top surface of the ski and the outer wood the underneath, as the latter is harder and is better for hollowing out. It is also important to note whether the wood is on the north or south side of the tree in the forest, though opinions differ as to which gives the more durable skis.

The wood for skis should be dried slowly, and it is important when taking it inside to dry that there should be no bark left on it, as this can cause warping, as can sudden drying. Sometimes the dry wood is taken outside again to 'unwind' and settle in its eventual attitude, so that it cannot warp any longer even if left in the blazing sun. Only when thoroughly dry should the skis be planed to shape.

Real craftsmen are said to possess as many as 30 planes or more, although six would seem to be enough when making skis at home. Each plane, long, short, rounded or grooved, has its own limited but highly specialized task.

The tips of the skis are softened in boiling water and bent on home-forged forms of iron, to which they are fixed with clamps. Only after they are dry are they shaped and planed to a point. Some makers even used to put a point at both ends of the ski. I suppose this meant that one didn't have to struggle to turn round in soft snow but could just change direction on one's skis and set off at once for home.

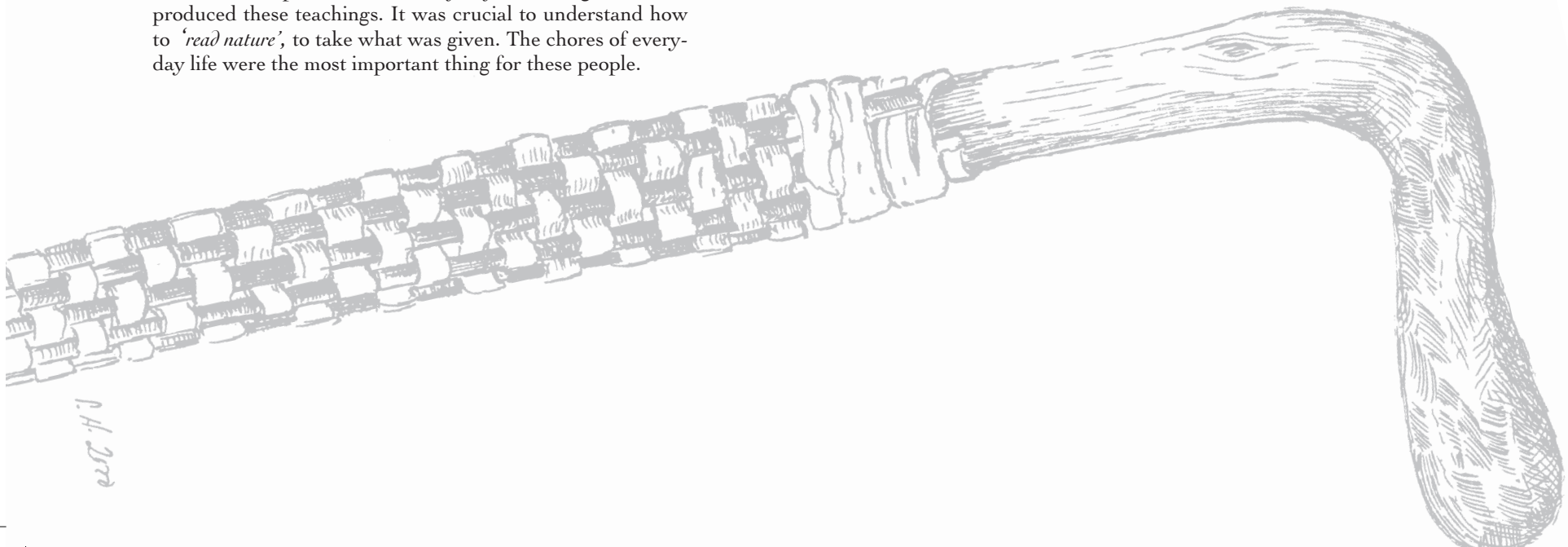


## Concluding Thoughts On Cultural Change

The industrialization process changed the needs of the people. Handicrafts were no longer needed in the same way as before. In Finland the Second World War [1939 – 1945] slowed this loss of traditional skills. It brought back old traditions that Elders are passing to their children today.

It is hard to interpret a culture of hands to a modern person and modern language. A modern person buys everything from the store all the time. Before all was made on nature's own terms. No two items were alike. Work was everywhere. Even pleasure of work! But it was not a idyllic time – all waking hours were for work, of course!

Essential components of work skills of the common people were practicality tested through the ages and economic simplicity. If items were durable and fit well it was enough. Reduction of unnecessary qualities from items was honoured and it proved to be very practical to have simple and well-made tools. Experience from every day life through centuries produced these teachings. It was crucial to understand how to '*read nature*', to take what was given. The chores of everyday life were the most important thing for these people.







# Observations Of Ecological Changes by the Pirkanmaa Region Professional Fishermen

*Tero Mustonen and Mika Nieminen with Pentti Linkola, Kalevi Vierikka and Simo Alhgren*

Last remains of Finnish traditional knowledge can be found among the professional fishermen of our country. Other groups that carry this knowledge are people like seal hunters, small-scale forestry professionals, hunters, people of handi-crafts and others. Not many are left. These communities and individuals have survived 100 years of nation-state building, formal schooling and many wars. They are still with us today.

In Snowchange we felt that documentation of observations from our own Elders, fishermen and hunters would be much-needed as these people will be with all probability be lost in 10-15 years. So in Autumn 2002 students of Tampere Polytechnic engaged in an exciting multi-year adventure of interviewing oral histories, observations and stories from all of the professional fishermen of Pirkanmaa, the local area, that were willing to speak. In total app. 25 people were met.

Many times staff and students would not stick to just interviewing but actually going fishing with these people of knowledge. Spending days on the ice, cleaning fish, checking nets and listening to stories and observations provided for an eventful project cycle and a wealth of information on place-names, star lore, weather and climate change, fish, birds,

predators, ice and snow reading skills, respect of nature and so forth. Our lives were transformed. The first results of climate change observations of our fishermen were presented in Murmansk Conference 'Snowchange 2003'.

Overall synthesis told of increased winds, lack of proper ice cover and snowfall since late 1980s [with the exception of the 1986-1987 season and 1995 – 1996, 2002 - 2003 season], falling respect of domestic (fish) food [local fish diets are being replaced with cheap salmon farmed in Norway] and fears of discontinuation of this traditional way of life. These findings and observations will be presented in a sister publication of this book that will be released in May - June 2004.

**Kalevi Vierikka** is from Haapasaari community in Sahalahti, 50 kilometres from Tampere, a City of 200, 000. He comes from a family which has been fishing at the same spot for over 500 years, or as long as records indicate. Being a semi-professional fisherman has complemented his life and provided livelihood at times of rapid personal, social and cultural change. Today he is 78 years old and still an active fisherman. Kalevi's summers are tied in to the spawning cycles of bram, pike perch and pike. He is of the generation that can forecast weather from nature. He is known in the Haapasaari community as



©National Board of Antiquities, used with permission.







©National Board of Antiquities, used with permission.



a person who can tell the weather accurately for months ahead.

*"Animals and signs in nature, such as the first ring of ice around shore reed and cycles of moon are my guides. Karmutuuli, a strong rare wind can be used to tell when the ice disappears from lakes. Movements of a hare three days after a snowfall are a good guide to weather",* reflects Kalevi. He has expressed a number of times the worry of changing climate and the loss of this type knowledge as well.

**Pentti Linkola** is nationally known environmental activist and a vocal supporter of a greener society. He is over 70 and still continues fishing for livelihood in his community of Ritvala. He is nationally known for his records and observations of birds and bird habitats.

He has written many books on the ecological standpoints, including a best seller *'Unelma paremmasta maailmasta'* [Dreaming of a Better World]. On numerous visits by Snowchange to his hut, he has commented on his observations of changing climate and winter conditions:

*"Storms and winter winds have increased. Winters are wetter. One can hardly stand up on the ice while checking nets as the winds blow so hard. There is rain in the middle of the coldest time of the year, in mid-winter. 1987 was a farewell – farewell to winters, and to the century. Only in 1995 – 1996 we have had a proper winter since. Nowadays it is very mild."*

**Simo Alhgren**, an 80-year-old fisherman, author and outspoken story-teller comes from a family of *nuotta* fishermen around lake Näsijärvi. *Nuotta* is an active form of net fishing that was continued until 1950s in larger scale. Today this tradition hundreds of years old is discontinued save for tourist shows or some pockets of fishermen communities. Alhgren eloquently spoke of the way the 'old people' of his childhood in the 1930s handled the *nuotta*:

*"When they took that nuotta from talas, the net cabin and prepared to go to the boats – there was no single hand movement that was in vain.*

*Everything had its purpose. ..Watching the sun come up and seeing the first fish and birds – this was a time of joy."*

In a lot of ways the documentation work among our fishermen has been the most rewarding process of Snowchange work because it has been a part of our own culture.

We, young people, have been able to re-learn many old words, ways of life, stories and ways to see the world that are hidden by the constant clamour and noise of Nokia cell phones and the Western way of life in our communities.

This work has given us tools to better appreciate the voices from the Inuit, Haida, Sami and other communities - despite our differences the challenges we face are almost the same.

In the summer of 2004 the participants of Snowchange documentation team among others will engage in a pilot-style attempt to bring back the *nuotta* fishing into the lakes where we fish. The oldest archaeological net finding in the world comes from our culture, from *Antrea* region [today in Russian Federation part of Karelia in former Eastern Finland]. *Nuotta* style fishing is at the heart of our culture, traditions and worldview. *Nuotta* is present in our oral history of how the salmon, white fish and pike perch brought fire to the world [Suomen Kansan Vanhat Runot Part I]. *We feel that it is time to bring nuotta back - to reclaim this knowledge and all that it represents.*



©National Board of Antiquities, used with permission.









# The Long Seal Hunting Journeys On the Ice

*- Seal Hunter Evald Geust, Replot, Ostrobothnia, Finland*

*Aija Mäkinen, Bachelor of Engineering, Tampere Polytechnic, Finland*

The seal hunting tradition in Finland has been fading away. Only some men, for whom seal hunting has been a part of their yearly activities, are alive today, to share the traditions and tell the stories of seal hunting journeys. The Snowchange project collaborated with seal hunters in two Finnish communities, Merikarvia and Kotka. As well, in the Swedish-speaking West Coast documentation was carried out.

In Finland, seals have been hunted in the Gulf of Finland and in the Gulf of Bothnia. Mainly two species have been hunted, the **Ringed Seal** (*lat. Phoca hispida*) and the **Grey Seal** (*lat. Halichoerus grypus*). The hunting techniques have differed from place to place and over time. Some use a dog, others prefer a special kind of ski. As well historically the netting of seals was carried out. Another special form of hunting

was conducted in the following way; A pup of a Ringed Seal would be located and caught alive from the ice hole. Hunters would attach hooks on the back of the pup and re-release the pup through the ice hole to the sea. Mother of this pup would locate the young one, start to swim on top of it and become hooked. After this a long cable was used to pull both pup and mother back to the hunters to be killed. This ingenious way of hunting was discontinued after the World War II. Finnish-speaking seal hunters involved in the documentation were Martti and Heikki Välimaa in Merikarvia and Harri Piispa in Kotka. Piispa would recall the use of hook method and hearing stories of it from 1930s through his father, another seal hunter.

Timing of hunting has varied depending on which species was hunted, on the ice circumstances etc. The time of the year also determines what kind of way of transport is used (boat, sledge, skis etc.).

Evald Geust is a seal hunter from the island Replot, in the coast of Ostrobothnia, in Finland. Evald was born the 1<sup>st</sup> of June 1931. He lived with only his father and his brother, because his mother passed away when he was very young. Evald's father was a fisherman and a seal hunter. Seal hunting was done in the winter time and fishing in the summer time.

Already from an early age Evald's life circled around his fathers profession, and that is where Evald learned all the skills needed for fishing and seal hunting. When he grew up, he naturally became a fisherman and a seal hunter himself as well. He hunted seal from the age of sixteen.

The long seal hunting journeys on the ice are typical for the area where Evald lived, and still lives. Evald would go out hunting with a small group of men, his father, his brother and some neighbours and friends. Because Evald at some point built his own hunting journey boat, he would be the one to gather the group. The group consisted of about three to five





persons.

The journeys were conducted when there was ice, i.e. in the winter, so the weather conditions could be very harsh. A second trip could be made later in the spring, even as late as May-June. Then the journey would head northward in the Gulf of Bothnia, because that was where the ice was.

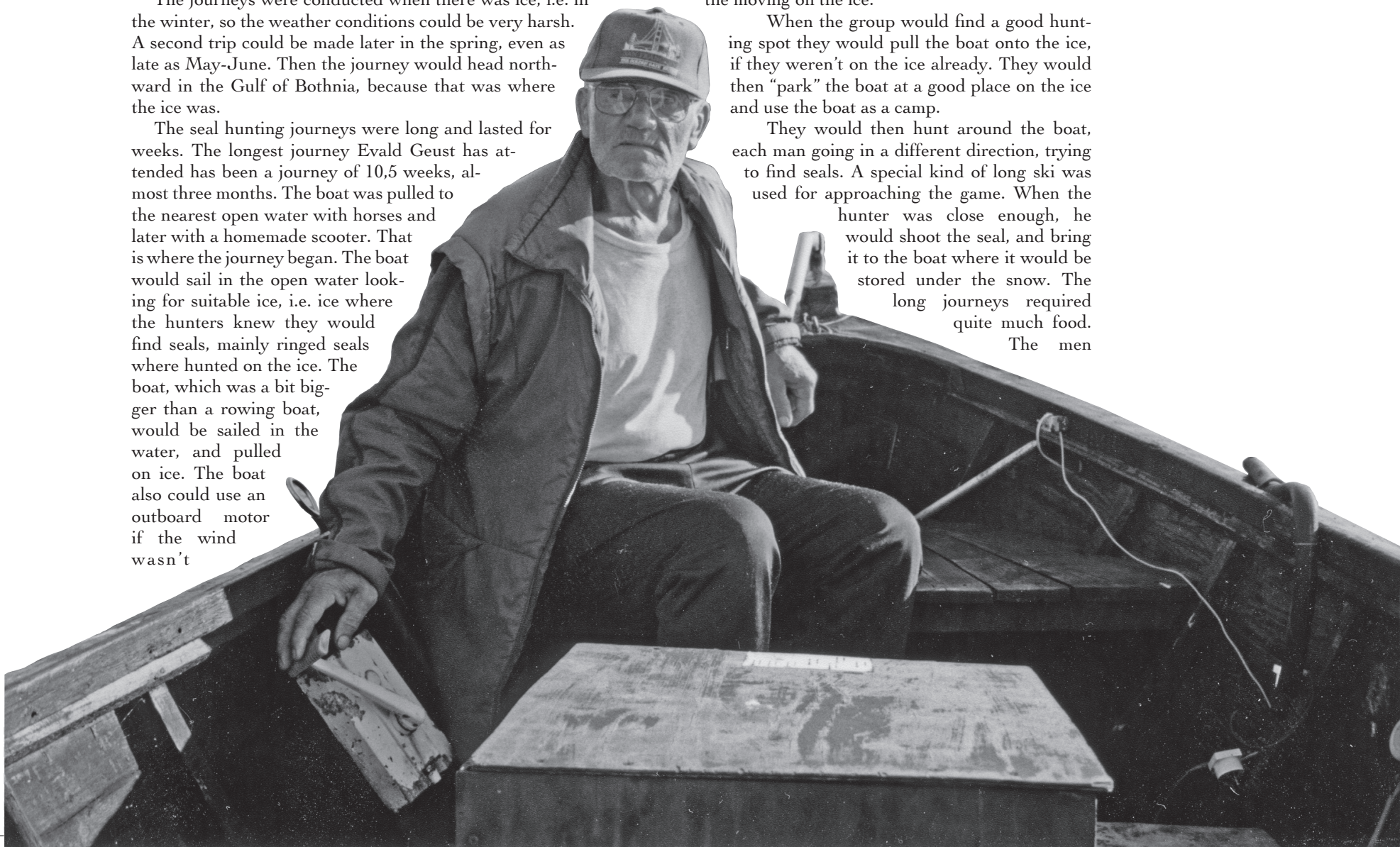
The seal hunting journeys were long and lasted for weeks. The longest journey Evald Geust has attended has been a journey of 10,5 weeks, almost three months. The boat was pulled to the nearest open water with horses and later with a homemade scooter. That is where the journey began. The boat would sail in the open water looking for suitable ice, i.e. ice where the hunters knew they would find seals, mainly ringed seals where hunted on the ice. The boat, which was a bit bigger than a rowing boat, would be sailed in the water, and pulled on ice. The boat also could use an outboard motor if the wind wasn't

good enough, and the boat had sled runners under it to help the moving on the ice.

When the group would find a good hunting spot they would pull the boat onto the ice, if they weren't on the ice already. They would then "park" the boat at a good place on the ice and use the boat as a camp.

They would then hunt around the boat, each man going in a different direction, trying to find seals. A special kind of long ski was used for approaching the game. When the hunter was close enough, he would shoot the seal, and bring it to the boat where it would be stored under the snow. The long journeys required quite much food.

The men





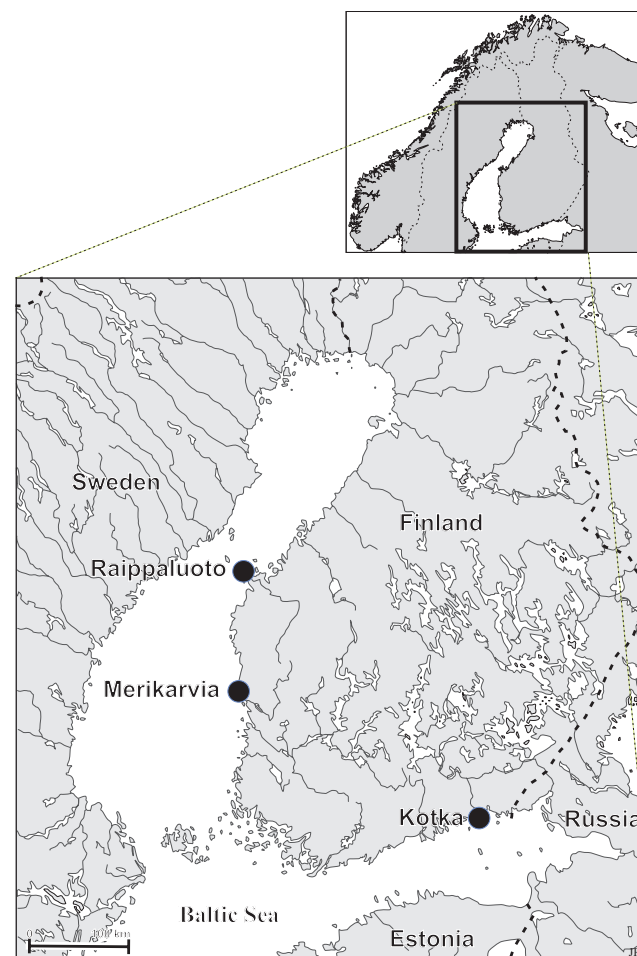
would have some basic ingredients with them, but a big part of the food they would eat on the trip was cooked seal.

Evald Geust and his fellows would hunt equally much on the Finnish coast as on the Swedish coast, and the journeys covered vast areas of the whole upper part of the Gulf of Bothnia. When the group of men thought they had hunted enough they would pack the boat with the seals and head for home. The amount of seals hunted could be hundreds of seals. Homeward bound if the men would see a seal they could a few random 'complementary' seals on the way.

At the time when Evald was hunting seals, people lived of the sea. The seal hunting journeys weren't only providing food and resources of living like blubber and skin, and the payments the hunter would get, but the hunting journeys were also kind of adventures which the hunters liked, according to Evald. The main thing in the journeys was however to provide food and money for the families.

Today Evald is still fishing quite a lot. Although the world has changed a lot since his youth, he is still clearly a man living from the nature, and he also understands the nature. Evald and the other seal hunters developed a good knowledge of the ice, the weather and other conditions affecting the hunt, and this knowledge is now collected to enable the future generations to share the knowledge and the stories.

As I am writing this, Evald is on a hunting journey again. He, now 73 years old, and his two friends, of the same age, have all gotten one license each. The men are allowed to hunt seals again, although they aren't allowed to hunt ringed seals, but grey seals. This time the journey will only last for a couple of days, and the time of the journey is later than before. But this trip shows the enthusiasm of these old men in the journeys, it is a part of their lives.





## Wolf

Gumpe, the wolf, and humans both hunt and use the same prey, each in their own way. The wolf is a wild animal, and does not bend to human will, in the same way that humans are not meant to control nature. A healthy wolf will not attack a human, so there is no reason to fear wolves under normal circumstances. The Sámi used to be afraid of the wolf because of the damage wolves brought to reindeer herds. It is now apparent that the wolf has a reason to fear humans, and there are not so many wolves in the Sámi areas.

In earlier times, Sámi used to herd reindeer throughout winter. When with the herd, the reindeer herder sings juoigan, especially when driving the herd. The wolves tgat had just entered an area were afraid of joiks. But the wolf became accustomed to humans and their singing, and began to circle closer, and were afraid no more. All things are sung, joiked, while skiing around the herd, mountains, lands, people, and boys and girls.

When the person has almost slain the wolf, he should then curse the wolf, swearing and saying: 'You have eaten my reindeer bulls and does, and now try to do that again, oh cursed seed. And still you bare your fangs, but you will no longer, evil seed, feast on my herd! Last night you ravaged my best sled ox, oh devil, demon, hell-spawn, long fangs, blood fangs!

And now you no longer are lessening my herd, oh hateful seed! If you, yourself, have not slain my entire herd, it was

then your cursed kin!' Then strike the wolf again, fiercely like a thunderbolt, and simultaneously run it through.

But the hunter who has faced many a wolf and also killed some wolves, he does not quarrel with or curse the beast. This hunter knows the wolf acts as a wolf must, and kills no more than fate permits. This is the natural limit, as with the height of waves in the oceans."

There has been much hatred against the wolf, and some reindeer and shepherders have tried to eradicate the animal.

But in older days, the wolf was honored as another sacred animal, until Christian thought and the ideas of private ownership came to Sápmi.

For the Eastern-Sámi, the wolf is a human's closest relative. The wolf is known as and called brother, sister, and other kinship names.

In an old Sámi song, the wolf is Suologievra, meaning the Powerful and Strong of the Island. This is because the earth was once regarded as an island. The wolf is a spirit animal, a Night wanderer. A wolf is the helping spirit and companion of many noaidi. The wolf is also a teacher for some people.

According to legend, a wolf can run through nine valleys in one night. The nine valleys represent the spirit dimensions

of the Sámi universe, divided into three worlds- lower, middle, and upper-earth. Each world is subdivided into three levels. This world picture can be seen in drums and rock carvings.

When missionaries attacked Sámi belief systems, they started with the animals, the Fárriš-spirits. To Christian thought, some wild animals, especially wolves, were agents of the devil. Missionaries regarded the closest friend of humans as the devil's hound, and the killing of wolves was thus justified. Many are still lost on this path.

Oral traditions portray many stories of Sámi traveling in the form of wolves and bears. Noaidi would enchant people, making them run as wolves. But some people changed themselves into wolves. Search for a curved tree, and pass under it against the direction of the sun. That kind of tree still exists. One is to be found on the Norwegian side of the Deatnu-river, some miles up river from Ohcejohka. The tree there was used by Stuorra-Jovnna.

Stuorra-Jovnna formerly lived in Nuvvus, but stayed mostly in Rástegáisá. Sometimes, Stuorra-Jovnna wanted to be a wolf. He would go to the forest, pass under his tree, and then run as a wolf. He would chase the reindeer herds, feast on reindeer meat, and be hunted by herders. He was shot at, but never wounded. And thus he wandered, many times near death's threshold.

Stuorra-Jovnna could run with the wolves for two weeks at a time. After two weeks he started to long for human life. If he did not change back in time, he would never be human again. One day, Stuorra-Jovnna realized that his time had come. Two weeks' end was that night past, and nine valleys lay before him.

That afternoon, he ran through the nine valleys, back to the tree where he had circled and circled, turning into a wolf. By the tree, Stuorra-Jovnna left behind his wolf's shape and habits and became a man again.

It is told that the youth of the Eastern-Sámi enjoy running as wolves because they like to compete with the reindeer. And the old people become bears, sleeping to winter's end.





# Snowchange Russia



# Climate Change Issues in the Russian Arctic Identified On the Basis of Indigenous Peoples Observations and Traditional Knowledge - Methodology and Methods of Interviewing

*Tatiana K. Vlassova and Pavel V. Sulyandziga of the Russian Association of Indigenous Peoples of the North, Siberia and Far East*

The main goal of the Russian Association of Indigenous Peoples of the North (RAIPON) activity in climate change issues is the involvement of the Indigenous peoples of the North through their observations and traditional knowledge not only in climate change registration, but the assessment of climate change impacts, the human vulnerability to them for the elaboration of local programs of sustainable development.

According to our methodology of climate change observations, it seems that it is best to use two methods of interviewing: *the structured interviewing followed (or accompanied) by unstructured*.

The structured interviewing is a low-cost method based on the elaboration of a set of questions (asked in a prescribed order and recorded by interviewers in a standardised form). It enables to collect substantial number of interviews and to cover large-scale areas in a shorter time. These advantages are however, bought at the price of a loss of validity and dimensions of everyday life.

First results of such structured interviewing including several climate change issues that could be considered as a field of concern to Indigenous peoples are available now due to the UNEP/GRID-Arendal project *"Local Health and Environmental Reporting by Indigenous Peoples in the Russian Arctic"*.

They are integrated into the data base *"Environmental and Living Conditions of the Indigenous peoples of the Russian North"* to be created in the RAIPON with the help of the NorthSets Project under the Institute of Geography, Russian Academy of Sciences.

These results are based on a questionnaire distributed among 10 indigenous settlements. To date we received filled-in questionnaires from 6 settlements from about 350 respondents (approximately 50 from each settlement).

Among these settlements there are *Lovozero (Murmansk region)*, *Ugut (Khanty-Mansi Autonomous Okrug)*, *Kuyumba (Evenkia Autonomous Okrug)*, *Krasny Yar (Primorsky Krai)*, *Mongol (Khabarovsk Krai)*, *Kovran (Koryaksky Autonomous Okrug)*.

The idea of this questionnaire suits well to our task of climate change observations documentation oriented not only to climate changes registrations but to the assessment of so-





cial vulnerability to climate change and the elaboration of the local adaptation strategy and environmental policy.

While making this questionnaire we intended to study the perception of indigenous peoples on their health and environmental (including climate change) problems, as well as to get the vision of their desired living conditions (desirable way of life).

Based on Indigenous peoples beliefs and values, where they want to live (in contemporary houses or in traditional homes), where do they want to work (in traditional economy or to be employed in modern branches of economy or services) this survey makes a very important assessment for the development of the pro-active adaptation strategy to environmental changes, including climatic ones.

Now the results of this structured interviewing is under the process of analysis, interpretation and assessment. Today we can speak only about some of its general outputs:

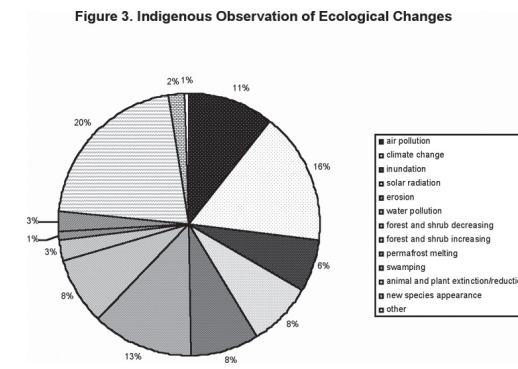
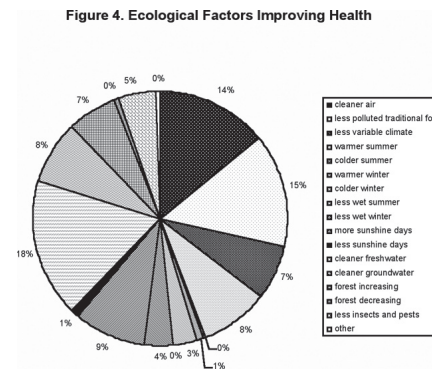
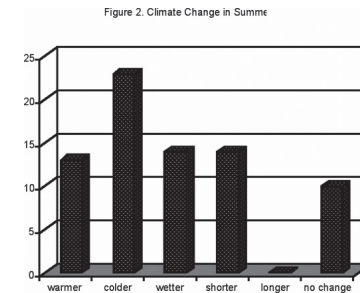
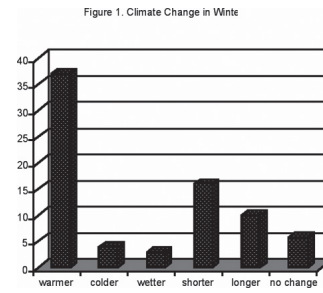
*Climate Changes Registration of indigenous peoples were gathered, including the following data:*

*Winter (summer) becoming warmer or colder, wetter or shorter, longer, or no changes during last years occurred (Fig. 1-2).*

*Climatic (weather) changes were documented during the life of the respondent. Years with abnormal conditions have been indicated in different settlements.*

*Changes in natural environment and natural disasters occurrence which could be interpreted in relation to climate (weather) change (snow and rain, drought, invasions of new species of flora, fauna and the disappearance of those which used to inhabit these regions, permafrost thawing, swamping, inundation, desiccation of water reservoirs, fires, forests areas expansion or retreat, insects and pests activity). (Fig. 5).*

*Climate changes reflected in the weather uncertainties and shifts in the seasons and phenology, as they are observed by the Indigenous*



peoples, were registered.

They confirmed our assumptions that real climate change impacts on traditional lifestyle, as they are witnessed by Indigenous peoples, are those that are connected with the effects of shifts in seasons and unpredictable extremities.

Climate Change Impact Assessments by Indigenous people were received concerning impacts on their health and status of well-being. It is interesting to note that the Indigenous peoples are more concerned about climate change impacts on health than about their welfare.(Fig. 4.)

They are in particular aware of climate impacts concerning



mostly climate (seasonal) variability, not only winter warming and higher humidity.

*Main Stakeholders / Institutions Responsible For Local and Regional Environmental Changes*, as they are perceived by the Indigenous peoples, are identified.

This information is important for the development of proactive adaptation and mitigation strategy to climate changes at the local (community/settlement) and regional levels.

*The Delineation of the Most Ecologically and Socially Vulnerable Communities/Settlements* and elements of vulnerability is possible on the basis of this structured interviewing.

It is extremely important for the elaboration of local programs of Sustainable Development. Ecological and social vulnerability can be seriously aggravated and accelerated by climate change impacts.

Unstructured interviewing in contrast to structured one, enables us to make correlations with the climate change processes and their direct impacts on traditional branches of economy, health, infrastructure, socio-cultural dimensions of Indigenous life.

During such interviews there can be obtained more evidence on how the documented climate and environmental changes affect the reindeer herding, fishing, hunting and gathering, all social, economic and cultural aspects of the traditional lifestyle. It is important that the structured interviews make it possible for aboriginal people to express their own ideas based on their traditional knowledge of the local situation.

Our aim is to obtain vivid accounts from Indigenous peoples based on their own perception and experience. It may also be possible to ask why these changes have happened. In unstructured interviews there is no set schedule of questions but a check-list of topics to be covered.

The preparation of a check list of topics for each community/settlement is necessary taking into account the local

specific features, especially elements of ecological and social vulnerability, which have become obvious during the structured interviewing discussed above.

The check list of topics is broadly divided into several overall subjects of Sustainable Development for each settlement. This argument is based on the fact that climate change issue could be addressed only through overall problems/targets of sustainable development. Climate change issue, taken alone, is not a priority issue for Indigenous peoples in Russia.

Within these ranges, specific local problems of Sustainable Development of each settlement will be identified in the process of the unstructured interviewing in personal communication and these problems will be interrelated with climate change issues.

In such a way the real involvement of Indigenous peoples into climate change discussion, and further participation in the development of the adaptation strategy will be provided.

The discussed methodology and methods used will be disseminated through the Indigenous Climate Change Network and a web-site presentation to the other Indigenous communities in the Russian Arctic.

Now we can speak only about some preliminary results of these structured interviews, to be analysed in the future with obtaining additional scientific information and statistics. The most important task is to discuss concrete results of this structured interviews with Indigenous peoples themselves and to follow it by unstructured interviewing.

Presentation at the Second AMAP International Symposium will discuss results of the structured interviewing carried out in 6 settlements, some of which for the settlement Lovozero (Murmansk region) are presented in figures 1-4.

## References:

Vlassova T.K., Sulyandziga P.V. 2002. *Socio-economic Aspects of*



*Climate Change On the Arctic: Integration of Science and Traditional Knowledge*. In: Proceedings of the Joint EU-Russia-Canada-US Workshop "A Common Approach to Collaborative Technological Research for Arctic Development". pp.291-298.

### **Acknowledgements:**

This presentation has been prepared through the commitment, generosity and support of many Indigenous persons who have shared their local knowledge and experience with us.

We would like to express our great thanks to Dr. Nikita Kaplin, vice-president of RAIPON, Co-ordinator of the UNEP/GRID-Arendal project "*Local Health and Environmental Reporting by Indigenous peoples in the Russian Arctic*" who managed to collect large amounts of structured interviews in a very tight time frame, Ms. Tamara Semenova who made critical contribution to this venture, to Mr. Alexander Voropaev, assistant of the NorthSet project, Institute of Geography, RAS, who helped to prepare figures, to Mr. Dmitry Forstman, Ph.D. student who helped in preparation of the data base.



# Russian Indigenous Peoples of the North, Siberia and the Far East Perspectives on Climate Changes Observation

*Summary paper prepared on the basis of the Report at Snowchange 2002 Conference, Tampere, supported by Tampere Polytechnic with assistance from Prof. Henry Huntington (the leading author of the ACIA monograph).*

*T.K.Vlasova, Ph.D, RAIPON expert, Leader of the NorthSets Project, Russian Academy of Sciences, Institute of Geography.*

The Russian Association of the Indigenous Peoples of the North, Siberia and the Far East (RAIPON) since 2000 has become widely engaged in the issues of climate change through the Arctic Climate Impact Assessment Initiative (Washington 2000, Sankt-Petersburg, 2001), Canadian Summit on Climate Change (2001, Whitehorse), European Commission Joint Research Centre “*EU-Russia-Canada-US Arctic Workshop*” (2001), several seminars, organised by Russian NGOs devoted to the discussion of the Kyoto Protocol etc.

It is a pity, but not so many representatives from Indigenous peoples communities can come and participate in all these events. Now we are here at the Snowchange Workshop in Tampere.

No special, precise investigation on the impacts of climate change on traditional lifestyle of Indigenous communities has been done in Russia and the awareness of the most Indigenous peoples (especially those migrated and previously resettled to larger settlements and being not engaged in traditional livelihood, where all changes happening in Nature are extremely important) about possible consequences of climate change in the Arctic is very low.

Scientists, decision-makers for many years didn't want to hear the teachings of Indigenous elders, who have been warning us about the long-term dangers, problems and consequences of aggressive abuses against Nature and “non-regulated” changes happening within it.

RAIPON is now among one of the first in trying to bring broad attention to the problems of climate change as they effect the indigenous peoples of the Russian North engaged in traditional lifestyle. And we are doing it just in time as the concern about climate change will be rising and expanding among many Indigenous nations mainly due to the increase in the climate variability, the uncertainty of the seasons.

I'll point that we can't speak of a climate change problem from Indigenous peoples perspective only just as climate warming (this is not so in many cases at the regional level), as many journalists and politicians do, taking into account the average annual global rises of temperatures.

But real climate change impacts on traditional lifestyle of the indigenous peoples are those, that are connected to the effect of unpredictable seasonal changes and extreme events (frosts, snowfalls, drought, floods, etc.).

In this short paper I will not speak about specific cases of such events happening now in the Russian Arctic as we are now only going to start their documentation and observation





all over the regions of Indigenous peoples settlements.

The necessity of the Indigenous people's observations of climate change is due not only to the fact that many meteorological stations in the Russian North, Siberia and the Far East are in bad shape as the result of economic crises in Russia, not only to the scientific and practical significance of registration climate changes in the Arctic, but also to the importance of the use of traditional knowledge in the development of the adaptation strategy to climate changes and the environmental policy elaboration.

RAIPON activity in climate change issues is the involvement of the Indigenous peoples of the North not only in climate change registration, but the assessment of climate change impacts, the human vulnerability to them for the development of adaptation strategy.

We consider that Indigenous observations of Climate Change are important for the Sustainable Development of their traditional lifestyle. The main principle of Sustainable Development of the traditional lifestyle is the involvement and participation of the Indigenous peoples in new types of neo-traditional activities. One of these activities may be the observation of climate changes on the basis of traditional ecological knowledge.

The methods and instruments of gathering Indigenous observations and attitudes to climate change issue which we are going to use, can be called *unstructured interviews*. They don't include set of questions of which are asked in a prescribed order and recorded in a standardized form.

We are not going to develop comprehensive questionnaires defining the situation in advance and providing little scope for the researcher to follow up interesting ideas of Indigenous peoples based on their traditional knowledge of local situation.

Our aim is to obtain vivid accounts from Indigenous peoples based on their own experience and in their own lan-

guage. In unstructured interviews there is not a set schedule of questions but a check-list of topics to be covered.

The check-list of topics should be prepared for each regional case study documentation, taking into account specific ethnic and local peculiarities of the socio-economic and environmental situation of each region.

But there are many common features for all Indigenous peoples. That is why the general check list of topics is broadly divided into 5 interrelated overall goals of Sustainable Development of the traditional lifestyle of the Indigenous peoples which we have identified, which were discussed at the 4<sup>th</sup> Congress of the Indigenous Peoples in Moscow in 2001, and at the Arctic Council meeting in Rovaniemi in Autumn 2001.

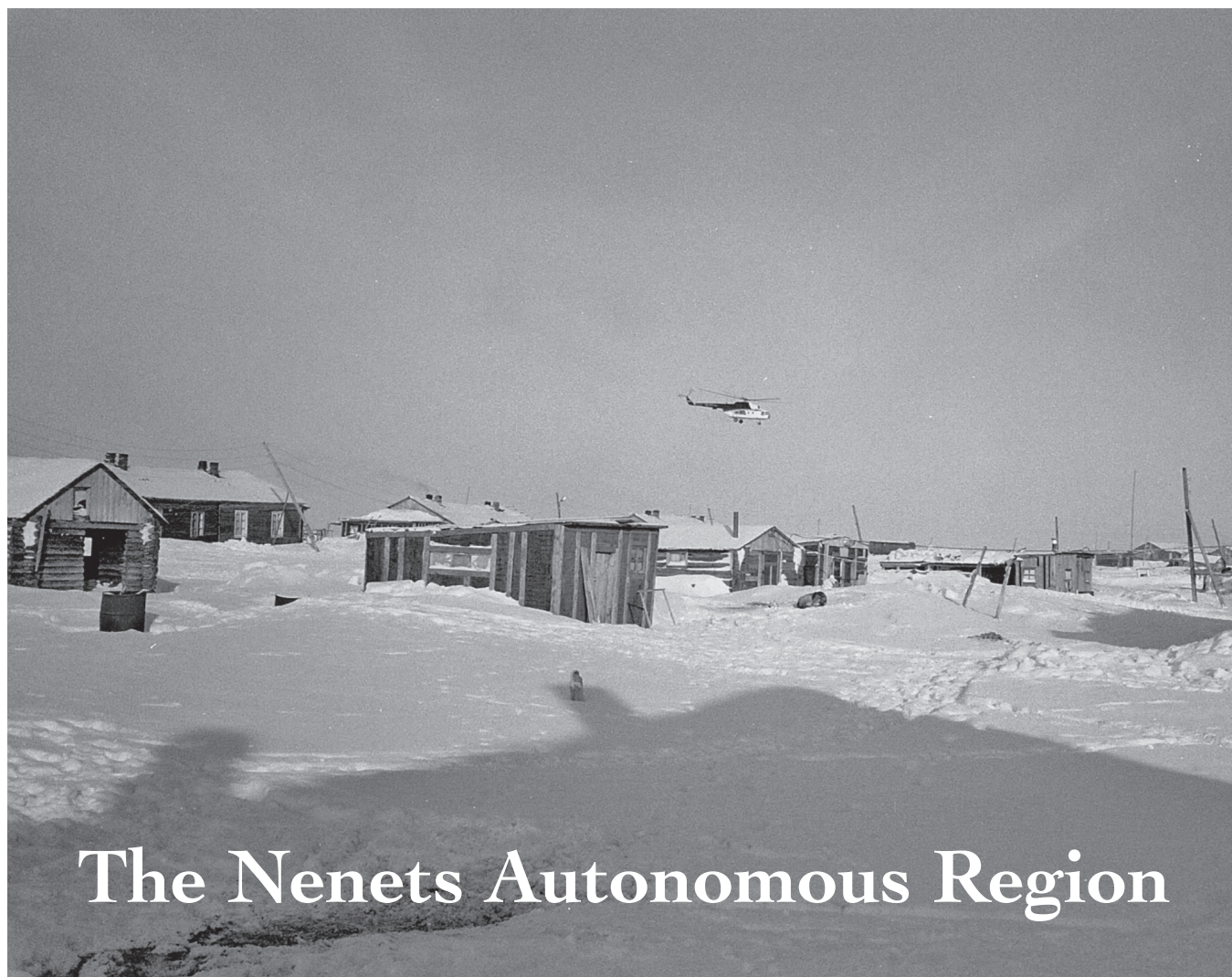
This argument is based on the fact that the climate change issue, taken isolated is not the priority issue for Indigenous peoples in Russia and climate change issue could be addressed only through goals of sustainable development.

Specific topics of interest to Indigenous peoples, parameters to be observed and documented to our approach should be grouped according to *Goals of Sustainable Development* which Indigenous peoples perceive and what is rooted in their traditional culture, values and beliefs.

From the indigenous perspective the Sustainable Development of Traditional Lifestyles (SDTL) is viewed as the main value. SDTL foresees the implementation of inter-related goals of the Sustainable Development combined in five spheres of human activity. Within these five overall goals of sustainable development during face-to-face talk, specific local problems of Sustainable Development will be identified and these problems will be interrelated with climate change issues.

*In such a way the real involvement of Indigenous peoples in climate change discussion and observations, further participation in the development of the adaptation strategy will be provided.*





## The Nenets Autonomous Region



*Vladimir Kotkin, Yasavey Organisation, Nenets Autonomous Region, Russia*

# A Speech of 23.2.2003 in Snowchange 2003 Conference

*Translations: University of Tampere Slavonic Studies Department and Tero Mustonen. Edited by: Hannu Tammola and Tero Mustonen*

## Good Morning Ladies and Gentlemen!

My name is Vladimir Kotkin. I am here as a representative of a Nenets civil society organisation, Yasavey. This organisation is operating in the Nenets Autonomous Region of Northern Russia. The administrative centre of Nenets Autonomous Region is the city of Naryan Mar. Natural resources of the region such as oil and natural gas started to be exploited already in the 1960s. Today crude oil enterprises and industries expand but these companies do not always adhere to Indigenous rights and they break laws.

At first we decided to monitor the situation from sidelines but constant quarrels broke out between the reindeer herders and oil producers. Regional administration took no action. We declared that start March 2001 we will have open and frank dialogue with the companies.

This practise is still in place. As an example I can mention organising joint meetings. These forums which are held



once a year have participants from reindeer herders, regional administration and the oil companies. These meetings are very important and much needed. It is possible to solve many problems before they are born and modifications can be made already in planning stages. The most important factor is that these conversations are held in public and open way. Yasavey would like to guarantee local people possibilities of being informed of these forums. Additionally information should be had on how much profit these companies are making and what share of this profit stays in the local region and benefits the local people. Very often people have absolutely no idea of the real situation and we are trying to assist them to get a clearer picture.

2000 to 2002 two forums were held. Next forum is planned for May 2003. These conferences are becoming annual traditions. After the first forum it was decided that a joint working group will be formed. This forum comprises of representatives from Yasavey, reindeer herders, regional administration and oil production company representatives. At the moment the most important function of this working group is to draft a law that governs the relationship between Indigenous people and oil production. I should emphasize that our organisation has the power to initiate laws.

Some of you might wonder why are we doing these things. The answer is quite simple: We have always lived here and we will live here in the future. Our mission is to



support small Indigenous nations of Nenets Region. That is why we want to be sure that we have a right to know how the State of Russia plans to exploit natural resources in this area.

Oil production affects the lives of reindeer herding Komi and Nenets peoples. Herding is the single most impacted livelihood because of oil production. Crude oil production leads to pollution of terrain and to forced purchase of pasture lands because they are ruined. Problems and conflicts will ensue between different stakeholders. Mostly this has an impact on reindeer herders, fishermen and hunters. Inhabitants in villages are impacted less but some way or the other they as well feel these processes in their lives.

According to official statistics only less than 1% of pasture lands have been removed from use. However the actual oil production will start in full force in two years and this is only beginning. We should keep in mind that when a pipeline is constructed it demarcates territories and people cannot go across these pipelines without a special route or a bridge. In future the land is no longer owned by the people who have always lived there, migrated and herded reindeer.

Production of oil will not disappear from these territories and we cannot stop or deny it because it is a part of state policy. The only thing we can do is to bring our suggestions and opinions forward to the public. A result from dialogues between the oil production company workers and us was that bridges will be constructed across oil pipelines.

Our organisation is very vocal and takes a stand on the state of environment all the time. Oil production means negative impacts to the environment always, especially in the Northern regions. After being polluted nature takes a long time to heal. Damage is long-lasting. For example an ATV [all terrain vehicle] can damage tundra for 50 or even 90 years.

I will tell you another example of our activities. A few companies broke the environmental regulations in a blunt way and leaked oil straight to nature. Everybody was powerless, including even the Attorney General's Office. We initiated a petition to President of the Russian Federation Vladimir Putin, Bureau of General Prosecutor and to Duma, Lower House of the Russian Parliament. Representatives of Presidential Administration responded that the issue is now being dealt with at the Bureau of General Prosecutor. They responded later from Bureau that this matter is a jurisdiction of local prosecutors. These local officials fined the involved companies with so little amounts that it replaced nowhere near the damage that had been caused to nature.

As our organisation has the power to initiate laws, we sent a proposal to local lawmaking bodies to fine the companies. We can defend our rights and our people in a fight against the oil companies but we cannot stop climate change. It is no secret that a new form of ice formation has developed in the tundra. This is called '*continuous ice sheet*' [a sheet of ice that prevents access to lichen and is formed by improper freezing of ground in Autumn time caused by rains that freeze before proper snowfall].

We have witnessed this sheet of ice before but nowadays it stays permanently and this disrupts the reindeer herding causing great difficulties. In the Nenets Autonomous Region there are app. 6 500 Nenets people and 90% are engaged in reindeer herding in some way or the other. Total number of reindeers fluctuates from 120 000 to 150 000.

Lastly I want to express our concern for the deteriorating health situation among Indigenous nations. We had a project, titled '*Revival of Red Chum Shelter*', *Vozroždenie kraanogo kšuma* health inspections were carried out among reindeer herders. The results were disturbing.

Thank You.





# Between the Tundra and the Mainland – People of Bugrino of Kolguyev Island On the Coast of Barents Sea

By Karina Suominen, Researcher, University of Helsinki, Department of Folklore Studies with edits by Tero Mustonen

Together with his friend Hyland, an Englishman Aubyn Trevor-Battye, a biologist by trade, spent four months on the field in Eastern Barents Sea region on the island of Kolguyev in summer of 1894. When he embarked on the journey he had little idea whether the island would be inhabited or would it be even possible to make a landing at the end of June. Indeed after two weeks of searching Trevor-Battye met some Nenets people. He spent the following three months with these people before his departure back to England via Pechora. (Trevor-Battye 1895)

I have visited the Kolguyev Island on three occasions, in 2000 and in 2003 as well as Spring 2004. It is almost too tempting to compare my own experiences and visits to the ones made by Hyland and Trevor-Battye over one hundred years ago. By comparing my notes with experiences of Trevor-Battye I could single-mindedly just wonder about the massive social changes or loss of the traditional ways. On the other hand I could try to observe those aspects of modern life of Kolguyev people that bear similarities to the past ways and deny the existence of change.

Both of these approaches however deny and distort past and present. Both positions are familiar to academic descriptions of the Nenets: Emphasis on change and break of traditions is very common in Soviet ethnography. For example Homich (1966) writes:

*Triumph of the Soviet power fundamentally changed the life of Northern Indigenous people, including the Nenets. Their society changed overnight from patriarchal to socialistic and the Nenets started to participate actively in construction of the new society [...] It was the Soviet power that brought this nation to light and awareness, gave them books and steering stick of an airplane, gave them courage to face the brave, broad world. In tundra villages sprung up with electric lights illuminating these places. Today airplanes and helicopters fly into these communities helping people to overcome the empty spaces and vast distances of the tundra. (However it is worth noting here that these and other like-minded descriptions are missing from a book by Homich on Nenets that was published in 1995- - Authors note.)*

Flinckerberg-Gluschkoff and Garin, two Finns who visited the Northern regions of Russia after the fall of Soviet power write that:

*Time stood still. World disappeared, nothing moved, silence was absolute. This group of chums, shelters was not from our time – it could not be! It could be as well from pre-historic times as from 100 years ago. How could it belong to the age of nuclear power and space shuttles? (Flinckenberg-Gluschkoff & Garin 1992:45.)*

This passage emphasizes the continuation of traditional ways of living juxtaposed with the changes in surrounding society. It lets the reader to believe that traditional and modern are





incompatible, it is not possible to merge these two. However it is possible to merge 1894 and 2003. Traditional way of living and livelihoods are a part of this space shuttle or rather oil industry age. The 'traditional' has changed as well. This social change did not take place in such leaps, "overnight" as the Soviet state led people to believe. Everyday life is different now as in late 19<sup>th</sup> Century and the most important and significant changes have taken place in this realm of ordinary, everyday life in small leaps, almost unnoticed.

## 1894

At the time of visit by Trevor-Battye all Nenets on Kolguyev lived on the land, tundra in chums, shelters. These chums were relocated whenever the reindeers had eaten the particular lichen pasture and it was time to move on. The island was demarcated into use and occupancy territories based on family affiliation in a good understanding. These divisions of territory were respected well (Trevor-Battye 1895: 382). As the visit by the British took place in summer they were able to witness Nenets subsistence hunting of geese and other birds.

According to Trevor-Battye each of the 59 Nenets individuals living on Kolguyev Island at the time was very familiar with relations that he or she might have with the continental Nenets. It became evident that marriages and family relations extended to the Western Nenets of the continent. For example Uano claimed to be from tundra of Timan and Marrk from tundra of Kanin. Trevor-Battye writes:

*The Samoyeds are prisoners on their island. They have no boats which could venture across that fifty miles open sea. In the old days, when there was traffic with Mezen and Indiga, they may have passed more frequently, Now it is only occasionally that one is taken across. (ibid. 384)*

Trevor-Battye paid a visit as well to a *tsasouna*, a Russian Orthodox Christian prayer house. It was located between River

Bugrjanka and the current location of village Bugrino. This *tsasouna* was built on Kolguyev in late 19<sup>th</sup> century following a process in which all Nenets of the island were baptized Orthodox (Homich 1979). On the continent the missionary work was actively resisted which may have to do with destruction of sacred places that took place at the same time.

The Kolguyev Nenets embraced Christianity more easily. Certain individuals are still fondly remembered who kept their faith even through the Soviet period. Despite prayers made in *tsasouna* and its significant new presence on the island most of the Nenets still carried their own idols of worship and respected the holy places of the island (Trevor-Battye 1895: 383).

## Migratory Geese and People

*In olden times people used to say that island of Kolguyev was formed out of goose eggs. A long time ago a flock of geese was late in spring migration and they found no space on the continent. They decided to lay their eggs to the sea. An island grew out of the eggs. Ever since the geese have returned to lay eggs here. (Tolkachev 1982:42).*

This is a charming story. It reminds us of a common Northern Indigenous creation myth that is shared by many cultures of the Arctic including the Nenets. In this myth world is created from a egg of a common loon. As well this particular story tells of the island itself. This island on Eastern Barents Sea has the highest density of nesting geese and every spring they have returned here since the beginning of time.

When the geese arrive many people leave the village of Bugrino to go goose hunting and bird fowling, collecting eggs. When Trevor-Battye visited the island geese were harvested by thousands as their meat was the primary source of nutrition in the summertime. Today geese form an important component of Nenets summer diet but catches are well below the levels of the 19<sup>th</sup> Century.



In Summer people are on tundra, during Autumn and Winter people stay in the village. The app. 400 Nenets living today on Kolguyev occupy the southern village that was founded in the 1920s and 1930s. At first a hospital and boarding school were erected on the beach – village Soviet used to have their meetings where Bugrino is located today. But it was only in the 1930s when residential houses and a store were constructed. Before that time the president of the village Soviet traded meat and furs for other food items and items of commerce.

The village has been changed and modified slowly, over time. It was formerly only occupied by children, teachers and members of administration. Women started to arrive later and eventually everybody moved there. People have been reluctant to move to the village according to accounts of the locals. The last people on the tundra were people who did not want to move to Bugrino until life on the tundra became too difficult for them. For these people the village represents a place with nothing to do, where a man becomes flabby, lazy and Russian. To some Nenets the village is a social space reserved only for Russians. The Nenets way of life cannot survive there.

In the village children learn mostly Russian ways and skills. The school has meant well and it has had good intentions for the local people. It has been of use. Unfortunately it has destroyed the fundamental skills of Nenets children to life on the tundra. More and more the children stay away from the land in the village more and more the traditional tundra skills are eroded. It becomes easier to stay in the village. School has provided them with skills and knowledge for modern society. It has never taught skills required for nomadic life.

The children of Kolguyev have had to go to the continent for schooling since early times. Boarding school is always a particular environment in which the children are raised by

outsiders. The moment when children are sent to the boarding school in Naryan-Mar has been and remains a crushing and a very difficult moment in the lives of many parents on Kolguyev. Parents of today recall how hard it was to grow adult at 10 or 11 years of age. It was difficult because they longed for home and their parents. As well punishment followed if you spoke your Native language. It was totally forbidden.

People return from boarding schools for the summer – at the same time as the geese return. People go and have holidays on the tundra. Many families have cabins on the tundra located at former family territories. Geese are harvested before mating season and eggs are collected as quickly as possible after mating is over. Another goose hunting season takes place in early Autumn. Later in the summer time people eat plenty of fish and cloud berries are picked. Reindeer makes a return as a main dish long since the geese have left during late Autumn and winter.

### Reindeer herding On Tundra and In Bugrino

Russians have always conceptualized the village to be ‘clean’ as opposed to filth of the chum life of the Nenets on the tundra. Especially in the 1930s and 1940s women had training on how to be tidy and clean. However life on the tundra has been fairly clean. Saunas have been had. The chum was always constructed on top of a stony oven that was used to make bread. This oven was used to heat water for cleaning. Today there are no more chums. People live in their cabins on the tundra, and these cabins have no saunas whatsoever. The Nenets associate filth, cold and emptiness with these cabins, not with their homes. This marks another important change in the Kolguyev tundra – as cabins have replaced chums children and women no longer come to the tundra.

It is not a long time since chums were still in use. In Sum-





mer 2003 people said that it was only 15 years ago when some people still lived in chums. As it has been stated before older people preferred to live in chums during the Soviet period. They are now retired. In such cases the women lived with their husbands on the tundra continuing domestic chores as the men were herding reindeers. In Soviet period the work that these women did was classified 'non-profitable' and they were gradually transported from the tundra to villages. After elementary school many women continued their studies to receive some professions. Men returned to the tundra. Gradually people moved from chums to constructed small cabins. These cabins would be built out of materials of various qualities and they would be located in random locations around the island. This shift was not so enormous on Kolguyev as distances are smaller than on the continent. At least it has been easier to conduct this social change on the island. (More on the adaptation and change of reindeer herding in Tuisku 1999.)

In former times people returned from school to the tundra. Today children no longer wish to continue as herders of reindeer. A significant change has happened therefore in people's attitudes – at the time of the visit of Trevor-Battye reindeer herding and living on the tundra was a way of life and was taken for granted. Today reindeer herding is also a professional occupation that is chosen. However herding has larger dimensions than just the professional aspects. It is not just limited to the tundra ecosystem where it is practiced.

Symbolically the change from chums to cabins is significant. This change carries within itself a larger structural shift of social realities [men are separated from children and women] including demographic changes [decrease in birth rates, decrease in new marriages and marriages between ethnic groups] and pressures from surrounding society to modernize. On the other hand simultaneously the interaction between the tundra and the village is increasing because of new

technologies. In Kolguyev a rotational herding system is in place today – this means that some of the herders are on the tundra and some remain in the village. Shifts change every three to four weeks.

Reindeer herding is of utmost importance both in material and symbolic terms to the Nenets society. Changes in herding affect the larger fabric of this society as a whole. Therefore we can determine that these changes in herding affect as well the village life in Bugrino where the herders have their holidays. Spending time in Bugrino one could almost think that reindeer herding is invisible and non-existent in the streets of the village. One could easily think that herding takes place far away in the Northern tundra of Kolguyev and is not connected to the lives of the people in the village.

### Bugrino

Village has become the place where some aspects of the reindeer herding happen. Reindeers are butchered near the village in a slaughter house once a year. Women take care of the skins, knit and fix reindeer-skin clothes in the village. Therefore we can determine that reindeer herding takes place both in the village and on the tundra today.

Reindeers and reindeer herding is of immense importance in practical everyday life of the Nenets. However the symbolic meaning of reindeer is without parallel in the continuation of Nenets life and culture. Many people remind you in Bugrino that without the reindeers life on the island would become impossible – both on the tundra and in the village. This is reflected in the current programme title of the Nenets Cultural Organisation Yasavey: *"Reindeer – Our Life and Our Future"*, (*Olen' - nasha zhizn i budushcee*).

Even though tundra and village are drastic opposites in peoples' speech they are indeed intertwined in reindeer herding. Even though most of the people live in the village, a 'real





Nenets' is considered to be a person who lives on the tundra. In addition to a strong 'Nenets' identity the tundra is conceptualized to mean holidays, peace, independence, freedom and continuity. The village represents on the other hand often disorder, problems, alcoholism, dependency, Russian culture and breakdown of life.

Even though reindeer herding is intertwined with village life the disruption of family life is visible in the life of Bugrino. People with pensions have found it difficult to adapt to the village life. However it is the herders that have it the worst – they are without things to do during their free shift. Some of them are able to adapt better by tinkering some small things and relaxing but others feel that they have no worth in the village and start to drink to feel better. Liquor and related social ills are associated to the village in Nenets mind – booze is not part of the life on the tundra. It does not belong there.

Bugrino connects Kolguyev to the continent. At the close of the 19<sup>th</sup> Century a Russian merchant would visit the island once a year. In the 1920s a ship would visit twice a year. Today no regular ships come to the island save for rare few irregular visits. Transportation to and from the island is organised with helicopters with a semi-regular service every two to three weeks. The importance of the helicopter is emphasized by the number of people who are waiting for the arrival on the ground. In addition to mail and supplies the copter brings people who had visited Naryan-Mar or who had travelled elsewhere, family members, guests and news.

Very often you hear that the Kolguyev Nenets are away from the main lines of communication and society. Many inhabitants of Nenets Autonomous Region do not even know of the island. People think that Nenets culture and way of life have been preserved better on the island because it is in the periphery. However this image is completely wrong. Even though the geographical location of the island is peripheric connections to the continent are so strong that it is not mar-

ginalized any more than other national villages of the Nenets Autonomous Region.

## Religion

On a clear afternoon during the Arctic Night one can see the distant fires of oil drilling towers in Northeast horizon. These are the oil fields of Lake Peschano which are visible from the edge of Bugrino. Oil workers that are living in a nearby village had a tsasouna constructed for them in late 2003. According to Trevor-Battye Lake Peschano is a sacred place for the Nenets (Trevor-Battye 1895: 327). The Englishman was able to witness the folk religion of Nenets in every day life. Today this is the most hidden aspect of the Nenets culture. It is very hard to observe the continuation of this aspect of the traditional culture because people tend to dismiss this topic by saying: *"Religion is dead."*

On the other hand Russian Orthodox Christianity is not visible either in daily life. The old tsasouna was a bakery during Soviet times before burning down.

Religion is still alive in peoples' minds, in old stories and in folk poetry. To observe and understand these things takes a lot of careful work and time because many subtle references of religions nature can be missed if one is not able to put them into the context of spirituality of the people. As well the folk religion is tied into language of the Nenets and is only alive in the traditional products of made in Nenets language.

Landscape is alive with spirituality. It is part of the topography and a network of place-names. This manifests in old graveyard sites, burial grounds of shamans, living habitats of *sirtja*, [According to Nenets people these are a supernatural underground group of beings or humans that may come to the surface, steal children, leave things of value to the surface] and prayer / sacrificial places. One could say that wisdom sits in places.





Spiritual and religious thinking and behaviour has gradually diminished. According to stories of Kolguyev the local people never had to witness the purges of Stalin and shamans were never hunted. Information regarding the massive persecutions that took place on the continent came to Kolguyev. Spirituality went underground. Propaganda against any religion has been effective. People tend to view any spiritual or religious aspects of life with negativity. It is said that shamans gave up their positions "because they were not needed anymore". In my personal field studies I have tried to pursue the investigation of spiritual aspects of Nenets life. Many people feel uncomfortable and respond: "Everybody believes in something." The role of spirituality and religion is secure and it is securely underground in the mindscape of the Nenets on Kolguyev island.

### Space Shuttle Era or Not?

Framework of a 19<sup>th</sup> Century Kolguyev and a 21<sup>st</sup> Century Kolguyev are very different: At the close of the 1800s the administration was not sure if people live on Kolguyev even though the lone salesman from Oksino visited the island for trading every year. The Nenets of the island lived far away from Czar and the Governors but they were very aware of the things that are happening. In the 21<sup>st</sup> Century all of the Nenets live in Bugrino, the flag of Russian Federation flies daily in front of the regional administration building and religion is underground. Many things remain the same however – reindeer herding, geese and connections to the mainland are there like always. Unfortunately the western dialect of Tundra Nenets language is on the brink on extinction. Tundra is in peoples' minds even though they do not live there anymore on a regular basis.

Similarities and differences are easy to find. Change is never sudden and whole-hearted. Traditional life of the tun-

dra is over but it would be impossible to imagine Bugrino without all of the island with it. So strong is the connection to the tundra even today. Connection to the mainland of days past has remained and grown stronger – villagers of Bugrino would not like to live without the daily products of the village store and other items that the helicopters carry to the village. Village lives of the tundra and of the continent.

Life on Kolguyev Island is unique. The Kolguyev Nenets that live there form a very special group of people with their own language and material culture. These things are valuable even though they do not fit the 'traditionalism' format.

### References

- Flinckenberg-Gluschkoff, Marianne & Nikolai Garin 1992, *From the Lands of the Ugrian People: Tracing the Footsteps of the Finnish Explorers from River Ob to Urals / Ugrien mailla: suomalaisten tutkimusmatkailijoiden jalanjäljillä Ob-virralla Uralille*. Helsinki: Otava.
- Homich, L.V. 1966, *Nency. Istoriko-ètnograficheskie ocherki*. Leningrad: Nauka.
- Homich, L.V. 1979, *Vlijanie hristianizacii na religioznye predstavlenija i kul'ty nencev. - Hristianstvo i lamaizm u korenogo naselenija Sibiri*. Red. Vdovin, I.S. Leningrad: Nauka. 12-28.
- Homich, L.V. 1995, *Nency. Ocherki tradicionnoj kul'tury*. Sankt-Peterburg: Russkij dvor.
- Tolkachev, A.F. 1982, *Zveni, tin'gan! Reportazhi i ocherki. Arhangel'sk: Severo-Zapadnoe knizhnoe izdatel'stvo*.
- Trevor-Battye, Aubyn 1985, *Ice-bound on Kolguev*. London: Archibald Constable and Company.
- Tuisku, Tuula 1999, *Nenetsien anakarat elämisen ehdot tundralla ja kylässä*. Acta Universitatis Lapponiensis 23. Diss. Rovaniemi: Lapin yliopisto.



# Yamalo-Nenets



*Dimitri Ottovitš Horolje, President of the Russian Association of Reindeerherders Yamalo-Nenets Region, Russia*

# Art of Maintaining Traditional Livelihoods Under Pressure From Rapidly Expanding Industries

*Translations: Tetyana Kolinets, Pentti Savolainen, Tero Mustonen. Edited by Hannu Tammola and Tero Mustonen*

I am always glad when good things are mentioned in relation to reindeer. I would compare this to pleasant conversations regarding women.

Reindeer herding is an old livelihood in the Northern parts of the Earth. Within Russian Federation 19 small Northern Indigenous nations are involved in this activity from Kola Peninsula to Chukotka in Far East. Reindeer has maintained its important role as a foundation of Indigenous life over centuries.

Reindeer herding faces similar challenges across the planet. One of these problems is expansion of industries to the lands used by reindeer. In some parts of the world permanent irreversible damage has been caused to the reindeer herders by this activity. Lost territories cannot be reclaimed.

Today journalists come to me and ask whether it is true that there is a massive industry of oil and nature gas in Yamal Peninsula. I answer that it is true. The Yamal Region produces heat to Russia and for some European countries. 90% of Russian natural gas is derived from Yamal but our region is famous as well for another kind of riches – we have 50% of all reindeers in Russia.

A question comes immediately to mind – how has it been possible to preserve reindeer herding in Yamal? Answer is easy: Reindeer herders of Yamal have been always very abiding to

law. Everybody remembers that it was not possible to own anything privately in Soviet Union. Officially the herders of Yamal accepted all laws of the Soviet Union. However they always grew their own reindeers among herds owned by the state. In a way they hid their own reindeers among the state-owned. This was a survival strategy for private herding through the Soviet times. Now Yamal Region is developed intensively by the industries.

However it is we, ourselves that have to respond and try to influence the reforms and changes caused by development. Northern Indigenous nations possess a vast experience and traditional knowledge. Therefore they have a key role to play in decision-making regarding natural resources.

Now natural gas and reindeer are competing against each other in the tundra. To guarantee the future of reindeer herding the herders have to consider the protection of nature seriously. Non-renewable resources will run out someday. Oil and natural gas has to be found always from some new place, but a reindeer herder stays in the same place, home place of dwelling.

In different parts of the world nation states have an interest towards the Northern regions. Mostly this interest comes from mineral resources that these states wish to exploit. History has shown us that the collaboration between industry





and traditional livelihoods is not based on an equal relationship. This has been the situation in all parts of the North and always the industries have prevailed.

There are two important factors in the relationship between the two sides: How the industry reacts to a) the land and b) to the local people and their cultures. Typically the local people have few chances of resisting the invasion of the new arriving civilisation. Exploitation of natural resources has destroyed natural habitats of Indigenous people. In the process the world these Indigenous societies have known has been destroyed as well. Traditional livelihoods have suffered from consequences of industrial development of Northern regions everywhere. For example in Scandinavia reindeer herders have had to move away from hydro-electric dam developments and mining areas. In North America huge reservoirs have filled former hunting territories of Indigenous nations.

Indigenous people have started to fight for their land and for prevention of destruction of habitats – they wish to reclaim territories that governments have taken from them. After years of work Indigenous communities in Canada and United States of America have successfully received monetary compensations and land claims for their losses. For example in the Territory of Nunavut the Inuit people have received billions of Canadian dollars, a land claim and certain Indigenous rights to subsurface minerals. However the fight over control of land continues both in Canada and in the United States.

The last decades 1960 to 1990 of Soviet Union differ from the Scandinavian and other Northern European developments. Natural resource exploitation was conducted by destroying the land and taking of lands away from local control. Indigenous people and local inhabitants had no means of opposing this process. The only thing to do was to avoid contact and silently observe the fantastic violence to nature. As well

ecologists remained silent and observed; everything that happened was for the good of the state. Search and exploitation of natural gas and oil fields took place without any consent or consultation from the local people.

As a result of this trend millions of hectares of ancient reindeer herding pastures was polluted and ruined. This was a form of criminal exploitation of energy resources. In many territories reindeer herding was discontinued because there were no more pastures left. In addition to this reindeers were poached.

Perestroika, the time of the economic reforms in Russia in the late 1980s to early 1990s changed the relationship to nature. Demands were made for better more environmentally friendly methods of harvesting natural resources. Representatives of the administration and oil companies have to consider local peoples wishes and demands in order to improve development of reindeer herding in Yamal.

Today reindeer herding is not economically viable when compared to other sectors of economy. However there is much remaining potential in herding as products derived from it will increase their market value in future. The business is being developed by focusing on production and marketing. Construction of modern slaughter houses and other production facilities is important as well. These are the most important view points on assessment of how Northern reindeer herding communities can improve their living conditions. Reindeer herding has development potential all across North.

Open question remains – how will the relationship between reindeer herders and oil & natural gas businesses develop? Norwegian reindeer herder Anders Baer travelled to Alaska app. 100 years ago and took active part in developing reindeer herding there. He travelled with 3000 reindeer from Alaska to Canada. It took him 5 years to make this trip. He ended his travel journals by writing:



*"Reindeer is an eternal gift to humans. Minerals and gold will run empty someday but reindeers live forever."*

That is what I have been saying always while meeting with oil and gas companies:

*"Oil and gas comes and goes, but reindeer stays forever."*

Certainly there are a lot of problems remaining. One can find many polluted, uncleaned sites of oil drilling on tundra. Behaviour and opinions towards Indigenous people and towards reindeer herding have changed considerably since Soviet times. Reindeer herders in Yamalo-Nenets Region have fond memories of trade with oil workers. As well these people flew together in helicopters between reindeer resting spots.

Examples of undisturbed life of traditional livelihoods of Indigenous people alongside oil industries in Yamalo-Nenets Autonomous Region are being followed with great interest in other parts of Northern Russia and Arctic. There are examples of good cooperation between Indigenous traditional livelihoods and oil drillers on Yamal Peninsula.

I would like to mention the following oil and natural gas companies that have been conducting their business well alongside with their chair persons:

*Urengoi-gazprom* (Rim S. Suleimanov)

*Jamburg-gazdobytša* (Oleg P. Andrejev)

*SP Geolbeit* (N. N. Pjatin)

*Sibneft-Nojabrskneftgaz* (Mihail J. Stavski)

*Nojabrsk-gazdobytša* (Mihail I. Galkovitš).

Much positive development has been achieved in industrial centres in which cultural organisations have tried to reach out and build constructive relationships to Northern Indigenous communities and peoples. For example in the city of Nadym, lead by Mayor Vladimir Kovaltšuk, workers of oil industry have participated in a traditional reindeer herding festival. Mayor of City of Novyi Urengoi Viktor Kazarin has participated in a festival of Northern Peoples.

Reindeer herding is today an important part of Arctic sus-

tainable development. Future of reindeer herding depends on many factors. A significant event is that World Reindeer herders Association and Union of Russian Reindeer herders have received a permanent membership in the Arctic Council. Arctic Council allows for a possibility to tackle the problems and raise attention towards reindeer herding in intergovernmental level. Council advances the interests of reindeer herders as well in European Union because Finland and Sweden are speaking for reindeer herding there. In addition to this Arctic Council has the possibility to influence commercial regulations of reindeer herding.

Consumer trust in reindeer products is fairly good at the moment but it can disappear overnight in the food sector. Therefore the protection of fragile Arctic nature is very important for reindeer herding.

We have to try to influence especially the people in power as well as oil and natural gas companies so that their awareness of harmful threats caused by too much exploitation of natural resources, such as carbon, will be increased.

Positive relationship can be created for example by increasing the knowledge of reindeer herding among oil and gas workers. When they realize the way of life of herders the property is left untouched and shooting of reindeers will cease.

Herders know that further exploration of oil fields continues in the future despite their negative opinions and opposition to it. This is way they would like to see at least a compensation for lost lands of pasture.

Today many oil and gas companies help out people who are living in the herding areas in various ways including offering social assistance and buying computers to boarding schools.

In the current tough economic situation such help is very important but it is only a temporary solution. All companies that I am aware of have good relations towards herders and



this is what the local people say as well. Negotiations focus mostly on how to secure safe and unhindered passage of reindeers across oil and gas pipelines and roads.

**Exploitation of natural gas and oil causes the following impacts to reindeer herding:**

- *Herders lose their pastures*
- *Pastures will be polluted*
- *Reindeers are poached*
- *From place to place it is impossible to herd reindeers*
- *Herders are forced to relocate to villages with no employment opportunities*

As a result of all of the above people find themselves without hope and lose their faith in future. In villages the situation is very tense indeed. People survive as long as oil and gas produce some income. Then situation becomes worse.

Current reindeer herders and coming generations should be able to live in surroundings favourable to reindeer herding without a fear that the profession of Ancestors will be lost. In order to guarantee this, the following steps are necessary:

- Advancement of new modern reindeer herding legislation in Russia
- Convert the shelves of Rivers Taz and Ob into a interior water areas so that habitat for local people would be guaranteed.
- In addition on Federal level of Russia the following has to be implemented:
  - a) Compensations are due to be paid when industries rent territories of land where previously traditional livelihoods have been conducted.
  - b) Methods of compensation on damages caused on traditional use and occupancy territories and compensation of losses of income to practitioners of traditional livelihoods caused by these damages [of industries]

Many burning issues could be settled before Federal decisions are made. These issues include cooperation of oil companies

with reindeer herders, fishermen and hunters and compensations to these groups of people.

**Solutions would be sped up by the following actions:**

- a) A special organisation ought to be established to promote economic development of Northern Indigenous communities. This will be helped by significant economic potential of the region, capacity of the state and regional administration to solve problems dealing with Indigenous communities and growing activities of Indigenous people in the economic and business sectors.
- b) Establishment of special support funds for future generations. This has been implemented in Canada, Alaska and other parts of the Arctic.
- c) Creation of joint enterprises that would guarantee shares of profit from mining activities to the Indigenous communities.

Dear friends! It is possible to preserve natural habitats and traditional ways of reindeer herding by initiating partnership between reindeer herders, fishermen, hunters and the oil industry workers.

I mentioned earlier that reindeer and herders are like children of nature that will disappear completely in a face of natural catastrophe. I want to emphasize that Yamal is a good example of reindeer herding surviving in very tough conditions. I am very concerned for the future of herding. I was born in *chum*, traditional [teepee style] shelter, my brother and 84-year old father are still continuing herding. I have been herding myself for a long time and acted as a director of a Sovhoz myself. We were able to maintain herding even during the times of crisis when Soviet Union disbanded.

I could talk a lot of reindeer and herding but I will stop here.

Thank You!



# The Khabarovsk Region



*Galina Volkova, Khabarovsk Region, Russia*

# A Speech of 22.2.2003 in Snowchange 2003 Conference

*Translations: University of Tampere Slavonic Studies Department and Tero Mustonen. Edited by: Hannu Tammola and Tero Mustonen*

Today in Russia we celebrate the Day of Defenders of Fatherland. Therefore it is my privilege to congratulate all men both from foreign countries and our own on this special day. I wish you health, luck and wisdom. I wish that men would always protect their women even from global warming.

I am grateful to the organisers, especially to Alexey Cherenkov for inviting me to this famous forum. A couple of days ago I was asked:

“You there in the South must have it really warm?! You are so close to the Chinese border!”

As strange and bizarre it may seem, it is only minus 8 degrees Celsius here and we had minus 28 Celsius on my departure!

But onwards to the actual topic at hand. There are 23 272 representatives of minority Indigenous representatives in the Khabarovsk Region. These belong to the Far East Indigenous populations of Russia. Eight minority groups have been awarded a status of Indigenous permanent residents, these include Nanai and Evenki people. Of course we have similar problems as in other regions. In difficult economic conditions small peoples must receive legal protection and rights. These people form such a small part of total Russian population.

All across the world Indigenous people are considered nature conservationists. Their traditional knowledge, social

and national features are derived from nature. Exploitation of natural resources is of great significance in the economic development. When these Indigenous people have adapted to the surrounding ecosystems they have developed ways of living that are in balanced interaction with nature.

A researcher of Russian Far East *Juri Samin* says that in a wise folk culture one can always find ecological ways of living, high morality and respect for nature. According to him in this harmony a way of life has developed in which humans protect their habitats and the habitats provide for existence of humans. This is the ideal towards which all things living on this Earth aim for.

Use of and the right to use natural resources, such as hunting, reindeer herding and fishing is today tied to important legal processes. In Soviet times Indigenous children studied and lived away from home in residential boarding schools. This has resulted in a broken link in the intergenerational passing of knowledge and traditions. A new generation has emerged which does not know the ways of living of their parents or ancestors. Therefore today there are few young people who wish to continue reindeer herding among my people.

Fishing is one of the most important forms of exploitation of natural resources. To Indigenous habitants of a region fish is not only an economic resource but as well a cultural one. Fish is an integral part of culture. Fish skins are used to make



clothes, fish bones are used to make domestic things and art. If the fish stocks disappear, a part of culture is destroyed as well. Air gets hotter, summers are drier and drier, forest fires more common. Every year a larger portion of forest burns down. Winters are milder and there is less snow than before. As a result the water levels in rivers and lakes is lower.

These observed changes are fatal to fish and animal stocks as well as to traditional use of natural resources. So far observations have been collected. It would be extremely interesting if scientific research would be carried out as well in the Russian Far East to do with these changes.

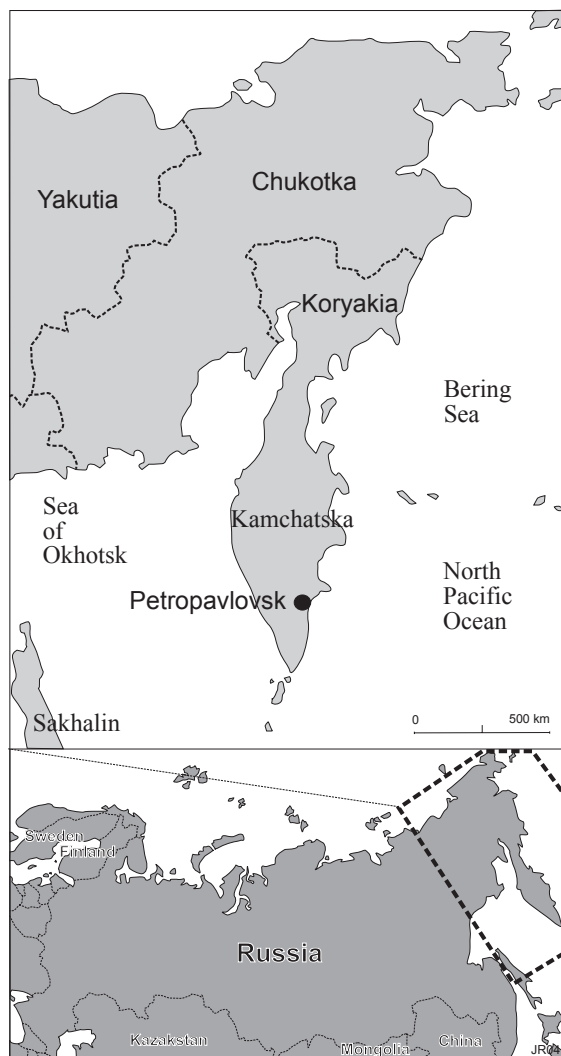
Climate warming is an acute issue and a relevant one. In the end I wish to say that I wish relationships between people would not grow bad but they would get warmer year after year like the climate has done in the past years. I wish as well that the main aim of this conference will be fulfilled – this means that our message will be passed to different people:

*“Nature is the greatest richness we have.”*

Thank you.



## Kamtšatka Region and Koryak Autonomous Region



# Experiences of Development Of Indigenous Co-Management in the Kamtšatka Region and Koryak Autonomous Region

*Viktoria Šarabmatova, Postgraduate Student, Kamtšatka State Technical University*

*Kamtšatka Regional Organisation of the Russian Association of the Indigenous Peoples of the North, Siberia and Far East, City of Petropavlovsk-Kamtšatski*

*Translations: University of Tampere Slavonic Studies Department and Tero Mustonen. Edited by Hannu Tammola and Tero Mustonen*

Kamtšatka reaps economic benefits from attracting foreign sport fishermen to harvest the rich natural salmon resources of the region. Kamtšatka is a good example of the similar problems that are being experienced in the rich salmon rivers of Eastern coast of Russia and for example in Kola Peninsula. Sport fishing was unregulated in 1991 when the Kamtšatka waters opened for access to foreign fishermen after the collapse of the Soviet Union.

Despite the lack of rules and regulations the Indigenous Council of Kamtšatka Itelmen '*Tšsanom*' [means 'dawn'] has initiated in partnership with independent environmental organisations a project relating to the topic. This project is situated in the Northwest Coast of Kamtšatka Peninsula. The purpose and aim of this project is to protect the culture and environment of this vast territory.

Fish stocks in Kamtšatka have been researched since 1965. In 1993 international Wild Salmon Center (WSC) was founded. WSC in partnership with the Moscow State

University and the Committee of Nature Conservation of Koryak Autonomous Region conducts research and conservation measures regarding Kamtšatka steel head (*Parasalmo mykiss*), a species that migrates to the ocean and back.

Funding for the project comes from charity donors and organisations. Scientific fieldwork is conducted both by Russian and American Scientists. Even ordinary fly fishermen contribute to the work. They catch fish for a quick sampling after which the sampled fish are freed. At the moment the project partners include Russian, American and Canadian universities, institutes of fish and limnological research and dedicated individuals. Dozens of scientific articles have been published as a result of the project.

In addition to this in 14 rivers of the Kamtšatka Peninsula project staff has documented ecological changes. Several positive developments have been accomplished in protection of salmon and their natural habitats from over-fishing [1].

American Peter Soverel from Wild Salmon Center has ini-





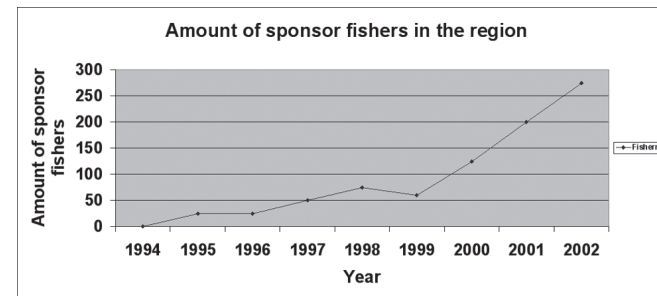
tiated a totally new kind of joint project in cooperation with Russian and other American scientists and state research organisations. The Wild Salmon Center supports the scientific research on Kamtšatka salmon until year 2015 with the hopes of improving the local economy. Most of the funding comes from American sport fishermen who under the guidance of the researchers catch fish and help to collect samples in the process. Fishing for the endangered Kamtšatka steelhead was officially discontinued in 1983. Today only fishing that is done is for scientific purposes. Fish are released after being measured, sampled and tagged. Special equipment has been developed for quick sampling and research.

According to Wild Salmon Center it is possible to develop and expand the sport fishing of steelhead to larger proportions in Kamtšatka Peninsula without forgetting nature conservation. The Center buys services from the local tourist operators. These operators organise the fishing trips. Operators hire local workforce and Indigenous representatives as guides and experts to the local areas. Wild Salmon Center cooperated with the local administration in a way that makes sure that the individual fishermen are responsible for their actions. Development is slowed down by a number of factors including low infrastructure of the region, short fishing season and increased sport fishing of Salmon in Alaska.

Wild Salmon Center works in partnership for example with such tourist operators as Ijanin-Kuth, Purga and Urgui. Other partners include Ecological Center of Koryakia and Ecological Fund "Wild Fish and Biodiversity of Nature". This fund has been in operation in west coast and interior of Kamtšatka Peninsula since 1994. The main target species of fly fishing are king salmon (*Oncorhynchus tshawytscha*), Kamtšatka Peninsula steelhead (*Parasalmo mykiss*), silver salmon (*Oncorhynchus kisutch*), dog salmon (*Oncorhynchus keta*) and Arctic Char (*Salvelinus alpinus*). Vast majority of catch is released back to freedom. Customers can however keep

two big ones as reward. American guides are instructing local work force. Locals work gladly in nature tourist programmes and research projects.

Visiting fishermen that come through Wild Salmon Center to Kamtšatka Peninsula is increasing all the time. From 1994 to 1996 the region was visited by app. 5 – 10 people per year for research project sponsor or nature tourist purposes. In 2000 – 2002 this amount had increased to 200-300 visitors per year. According to the Marketing Department of the Wild Salmon Center in 2002 they had 268 visitors.



On spawning grounds such as headwaters or on tributaries fishing is not allowed. However the implementation of this law cannot be supervised effectively in all parts of the territory. Reasons for this include vast distances of Kamtšatka Peninsula and the long routes that the inspectors have to travel across areas where no humans live. Some rivers are accessible by land but more expensive trips are made using helicopters. Fishermen are flown inland.

In 1994 one of the pilot projects of Wild Salmon Center was initiated in River Kvatšina in Koryak Autonomous Region. In 2000 – 2002 fishing trips were made to the region under four research projects and three nature eco-tourism endeavours. Prices for these trips were between 3000 and 7500 American dollars. Variations were caused by the length



of the trip and services provided.

Due to the active operations of Wild Salmon Center and Moscow State University several assistance programmes have been carried out in the Koryak Autonomous Region. Computers have been purchased to schools and books collected to local libraries. In the village of Tigili in cooperation with Indigenous *obschinas*, family units regular fishing competitions and nature-themed summer schools have been organised. Traditional feasts, such as the “*Day of the First Fish*” have been supported economically on several occasions.

In 2002 a joint project “Reasons of Illegal Fishing in Coastal Areas and Rivers of Kamtšatka Peninsula” was initiated. Project partners included Wild Salmon Center, Latš, an ethno-ecological science centre of City of Petropavlovsk-Kamtšatski and the association of Independent Experts of Kamtšatka Peninsula. Project attracts help and participation as well from local populations and Indigenous people. These people are worried about the situation of the river and coastal fishing and fish ecosystems of Kamtšatka Peninsula.

Sport fishing and development of eco- and adventure tourism creates jobs and raises the level of income and welfare of the region. At the moment salaries are paid late, people are dependent on pensions and random work contracts. People tend their small-scale farms or hunt for subsistence. This is hard because usually a form of transportation is needed to go to the forest. Access is difficult. Both Indigenous communities and other inhabitants participate in similar economic activities. It means a great deal to the local people to be able to continue traditional forms of economic activity, fishing and hunting. It is very important to get fish for food. Therefore fish eggs are harvested as well. This is an extreme form of wasteful behaviour because in the process thousands of unborn fish are lost.

Sport fishing is a young form of economic activity. It is not easy to compete against industrial or illegal fishing. It

has been evident for a long time that joint management and supervision of fishing areas by the local populations has to be achieved. Especially Indigenous communities share this feeling as the use of natural resources is a must for them. In addition they will reap economic benefits from such a model. This process would produce a new beginning, a platform for traditional lifestyles and development of sport fishing.

Primary target for the Indigenous communities is to protect the surrounding habitats and secure a privileged right for traditional use of natural resources. An ethno-ecological zone, a *refuge* has been thought about in the Koryak Autonomous Region for Indigenous people. The target is to guarantee Indigenous rights to traditional use, control and protection of natural resources and traditional livelihoods in the target region. This special zone, refuge is being designed by Olga Muraško. She is a member of independent international IWGIA (International Work Group on Indigenous Affairs) organisation. IWGIA aims to support and defend Indigenous rights globally.

Aim of the refuge is to guarantee the preservation of the habitats, livelihoods and territories of the Northern Indigenous peoples in the modern times. These Indigenous groups have been living on these territories since time immemorial. The Constitution of Russian Federation, article 72 as well guarantees these rights. In order to implement this plan a consensus understanding has to be reached between the Federal level, regional administration and local populations. In addition to this funds have to be secured to develop the region to meet international economic and social standards [2].

In December 1998 *Tbsanom* was founded. *Tbsanom* is a region dedicated to the traditional usage of natural resources in Koryak Autonomous Region.

Valentina Bronevitš who was the Governor at the time implemented a Presidential Decree of 22.4.1992 [Yeltsin Ad-



ministration] on immediate measures of protection of Indigenous habitats and livelihoods of the Northern Russia. This decree is related to a law on protection areas of traditional usage of natural resources in Koryak Autonomous Region. In addition to this the process took into account negotiations between Elders from the villages of Kovran, Ust-Hajrjuzovo and Hajrjuzovo and the representatives of the Council of Indigenous societies of the region.

This ethno-ecological territory located in the Koryak Autonomous Region is a living proof of a process of protection in modern Russia. The process shows that it is possible to combine different stakeholder interests and resources to conserve both fish and other traditional natural resources and guarantee local population rights in Russia today.

Articles leading to the founding of *Thsanom* are in accordance with the laws that were passed in 1999 and 2000 dealing with the securing of Indigenous rights of the Russian North, Far East and Siberia and Indigenous associations, *obschinas*. These laws guarantee Indigenous nations a right to participate in the planning of development of their home territories. The legal framework allows as well for the Indigenous societies to monitor the enforcement of nature conservation legislation and it allows the Indigenous groups to strengthen their self-determination.

Governor of Koryak Autonomous Region Vladimir Loginov issued a Decree Number 317 on 14<sup>th</sup> March 2001 that modified a Decree of 2<sup>nd</sup> December 1998 dealing with the territory of Thsanom in the Province of Tigilsk, Koryak Autonomous Region. This amendment takes away the legal rights of Indigenous communities to continue their efforts of nature conservation and practicing of traditional livelihoods. Indigenous people lost their trust in Governor to uphold the constitutional and other legal frameworks which are supposed to protect Indigenous rights.

11<sup>th</sup> May 2001 Federal Law was passed on protection ar-

eas of traditional use of natural resources by the Northern Indigenous peoples of North, Siberia and Far East. This law has triggered a lot of questions and even suspicion from state authorities, Indigenous representatives and industrial enterprises. Purpose of this law is to guarantee traditional territories and way of life of Russian Indigenous societies. RAIPON, Russian Association of the Indigenous Peoples of North, Siberia and Far East actually supported this bill and the process leading up to it. Biggest obstacles to implementation derive from the new legal reality. Situation is fresh and completely new. Scientific evidence of social and economic situations in territories is lacking. Economic and juridical tools to implement this law do not exist.

Council of Indigenous Societies of the Koryak Region has to aim for a form of selfgovernance that allows it to successfully participate and make decisions regarding natural resources in Thsanom in cooperation with the regional administration. It is only by coming together and working together that Indigenous people of the region can push for initiatives in the regional administration and make sure that the regional administration will enforce laws and decrees that have been passed. It is possible to find donors and sponsors for projects but the initiatives have to come from the Indigenous representatives themselves [4].

In Southern Kamtšatka Council of Indigenous Societies of the Jelizovski Region is trying to formulate its own solutions to traditional use of natural resources and problems related to establishment of protection areas. This process has become a life and death issue for the local Elders council and other Indigenous representatives. Establishment of a protected territory would guarantee constitutional Indigenous rights for inhabitants of Jelizovski to protect and nurture their traditional livelihoods.

President of Council Ljudmila Ignatenko feels that protection of home habitats has been traditionally in place in the



Indigenous communities of the region and the responsibility to take care of natural resources is not a new idea for these inhabitants [3].

Based on the experiences and modulations of the Thsanom process the Council formulated its own decree to deal with Avatša territory in Jelizovski Region. Avatša has national significance. Small Indigenous communities are using natural resources in traditional ways there. To establish a protected territory both time and money are needed. It is a hard process. Different stakeholders are trying to solve these problems in cooperation with the regional administration.

16th July 2002 Members of the Regional Duma of Kamtšatka forming the Committee of Ecology and Natural Resources made the following decisions to do with the territory:

- It was decided that regional laws to do with establishment of protected territories should be explored by the various Committees of The Duma of Kamtšatka Regional Administration. It was as well suggested to the committees that the traditional use of natural resources and livelihoods by small Indigenous communities should be a priority in this work.
- It was decided to suggest to the Governor of Kamtšatka Region that the following should be defined:
  - (a) Which members of the Indigenous communities have privileges regarding the harvest of animals
  - (b) Restrictions on fishing of anadromic species of fish [fish species that migrate from salt water ecosystems to fresh water to spawn] to the extent that they meet and correspond with local Indigenous management systems and habits.
- It was decided that a suggestion will be put forward to representatives of regional administration and experts in counties to adhere to wishes and concerns of Indigenous communities to establish traditional use of natural resources

protection areas. Attention should be paid as well to assess which territories are suitable for protection. As well juridical questions pertaining to the establishment process should be solved. While these suggestions should be made it should be kept in mind that to create a protected territory takes time and efforts.

Conflicts related to use of natural resources are unavoidable. Joint management is not the answer to all of these problems. However, co-management or joint decision-making may initiate processes which will lead to better context of solving conflicts. Co-management should approach conflicts in a fashion that will increase trust and cooperation between different stakeholders. This aim can be reached by developing sensible interactions both on particular and general levels. If this process is founded on principles of continuous cooperation all stakeholders interested in fish stocks can take part in problem solving and compromises can be made.

In 27<sup>th</sup> September to 4<sup>th</sup> October 2002 a conference was held in the city of Petropavlosk-Kamtšatski. This conference was called *“Traditional Use of Natural Resources by Small Indigenous Nations of Region of Kamtšatka and Surrounding Territories: Problems and Solutions”*.

This conference was attended by representatives of RAIPON and societies and associations of small Indigenous nations of the territory. In addition representatives of Indigenous family obschinas, Association of Independent Experts of Kamtšatka Peninsula and national companies such as law firm *“Rodnik”* took part. International participants came from the American Embassy in Moscow, Aleut International Association and a Danish environmental organisation. Aim of the conference was to create a network of Indigenous organisations capable of solving ethno-ecological conflicts in an effective way in Kamtšatka Region. Participants to the conference felt that there is a need to establish this network As well the





scope, aims and mission of the network to be created were discussed. The main aim of the network was defined to be to guarantee survival of the spiritual heritage, nature and cultures of the region. Final declaration of the Conference and the increased cooperation between regional administration and Indigenous people was seen to be a success.

There are two (2) Federal preserves of nature protection, seventeen (17) special Federal or Regional protected / conserved territories, four (4) Regional nature parks and one local level nature park in the Kamtšatka Region. In addition to this there are eightythree (83) other unique or important areas of importance in the region. These zones of special nature protection compromise 27,4 % of the territory of Kamtšatka. They have been selected because of their special ecological worth, uniqueness and/or rich biodiversity.

In 1996 it was decided to combine National Preserves of Kronotsk and Južno-Kamtšatski with Nature Parks Nalytševo and Bystrinski to create a UNESCO World Heritage Site *"Volcanoes of Kamtšatka"*.

It has become obvious in the past 20 years that it is not possible to maintain special territories of nature protection without solving the social and economic problems of the local populations first. Local people should feel as well willing to take part in the conservation policies and decision-making regarding nature protection.

Village of Esso in Bystrinsk Nature Park is the regional capital. Village of Anavgai is the national centre of Even people. The Nature Park is visited by app. 6000 people annually. 100 – 150 are foreign visitors and almost 1000 Indigenous people [including Even, Koryak, Itelmen, Chucki Nations]. Foreigners come most often with hunting groups and most of the tourists travel to Esso.

Income for the local people in the territory of Nature Park and in the near by regions comes from subsistence activities such as hunting, fishing, reindeer herding and picking of

mushrooms and berries.

Bystrinsk Nature Park is therefore as well an area utilized traditionally by the Indigenous people. Tourism will be developed. Therefore it is of utmost importance that while this is happening nature conservation is combined with guaranteeing continuation of Indigenous way of life while the biodiversity of the region is protected and wise use of natural resources is conducted.

New ways of getting Indigenous and local people interested in nature conservation and maintaining of biodiversity regionally are needed without a doubt. As well ways to limit burdens on protected areas should be developed. Therefore alternate sources of income that are available to the local populations are needed. These sources should be conserving nature. Sustainable forestry and enhancement of traditional livelihoods such as reindeer herding could be parts of the solution. It is equally important to develop regional tourism as an alternative livelihood. This means the local populations have to be activated to become part of the tourism. For example tourists could be accommodated in local families and local people could be guides for visitors. In addition small support funds should be created for small and medium sized businesses so that people can locate alternate sources of income. Like said before the local people should as well be included in the decisionmaking processes relating to the protected territories.

One of the guiding principles of co-management is to combine expertise from different fields to enhance regional development. For example traditional knowledge of the local people could be combined with the latest scientific achievements. Olga Tšernjagina has conducted Euro-Russian ethno botanical research among the Itelmen people of West Coast of Kamtšatka. Using local resources much work has been done to preserve Itelmen language and traditions [5].

We can determine that differences of opinion exists in



Kamtšatka on administering fish economy and natural resources. Some people wish to deregulate the use of natural resources and others are against such prospects.

Traditional use of natural resources by small Northern Indigenous nations means striking balance between limited use of resources, nature conservation, guaranteeing of cultural and historical heritage and ecological monitoring. This balance is as well an international criteria on establishment of protected conservation areas.

On Kamtšatka Peninsula traditional use protection territories could be one of the starting points of nature conservation. Within these territories traditional livelihoods, such as fishing, hunting and reindeer herding is combined with nature conservation and occasionally with some forms of tourism.

Indigenous families, Indigenous councils and economic associations have now a chance to take part in the creation of these protection areas.

### Concluding Notes

In Northern Russia land has not been privatized yet. Therefore some territories could be transferred under joint control, even to the extent of creating Federal level ethno-ecological preserves such as the territory of Thsanom on the West Coast of Kamtšatka Peninsula. Within the conservation areas and territories that allow for traditional subsistence use of natural resources local people could with some assistance from fishing organisations take part in conservation and modulation of fishing laws and regulations. Co-management agreements should be implemented according to the Canadian experience in which legal land ownership rights are tied to the process.

In Alaska, USA the right to fish is based on ethnicity and certain self governance rights of tribes. This definition is based on an understanding that regional resource rights, such as with fishing are divided and guaranteed primarily following

traditional ways, geographical locations and alternate sources of subsistence food for individual people. To think that such arrangement that would be implemented Kamtšatka is not very popular politically.

It is important to encourage Indigenous and local people to have deeper cooperation with the state authorities so that all stakeholders would be heard equally. This would create mutual respect and equal hearing for all parties. After this the Federal authorities and regional administration could delegate power and responsibilities in an orchestrated manner to local people that are engaged in traditional use of resources in the region.

Similar development is potentially possible in any part of the Russian Federation that has associations and organisations with a large Indigenous ethnic population base.

Representatives of Indigenous and self-governance territories have more and more weight in negotiations with regional administration and Federal representatives. Regional self-governance bodies and Indigenous people are in key positions when a more visible role for local populations is being negotiated in the decision-making processes affecting co-management of natural resources.

Long term aims and results may be depending on how the privatization process of land rights proceeds in Russia. In the past 10 years there has been a clear international sympathy regarding Indigenous rights in land, natural resources and self-governance questions. Only future will show whether the issues will proceed towards this direction in the Russian Federation and its administrative bodies.

Economic benefits from exploitation of natural resources should be shared locally to avoid conflicts and to develop cooperation. As well the control of natural resources should be clarified and understanding reached in partnership with local organisations and Indigenous groups.

It is time to openly talk of conflicts so that justice and com-



mon understanding will prevail. This guarantees as well the protection of cultural and natural diversity of a given region.

In Canada certain local administrative councils have been created which consist of both Indigenous and official representatives. Such a system guarantees successfully cooperation in regards to use of natural resources and their users. Unlike in Alaska, local expert councils have successfully consulted Federal representatives on important issues in Canada.

Establishment of co-management regime aims to create a new type of system to control and use natural resources. This system accounts for not only biological factors but cultural, social, economic and administrative factors as well. Even though this new system has not spread far yet it is only a matter of time when people realize that it is necessary to change the prevailing understanding of how the control of natural resources should be handled. The control of these assets and local nature ecosystem are after all connected to people.[6].

## References:<sup>1</sup>

<sup>1</sup> Гидо Рар III. Ошибки Америки собирается повторить Камчатка. // Северная Пацифика — Петропавловск-Камчатский: региональный информационный дайджест, 1999 г. №1(7), стр. 105–113.

<sup>2</sup> Запороцкий О. Н., Мурашко О. А. Как можно реализовать конституционное право на защиту традиционного образа жизни и исконной среды обитания (опыт организации особо охраняемой территории традиционного природопользования на Камчатке). // Северные народы России на пути в новое тысячелетие: К десятилетию Ассоциации коренных народов Севера, Сибири и Дальнего Востока Российской Федерации. – М.: АК МНС, 2000. С. 158–177.

<sup>3</sup> Игнатенко Л. Г. Территория традиционного природопользования — объект сохранения и защиты биологического разнообразия на юге Камчатской области // Проблемы охраны и рационального использования биоресурсов Камчатки: Тезисы докладов областной научно-практической конференции. Петропавловск-Камчатский, 1999 . – 136 с.

<sup>4</sup> Мурашко О. А. Опыт развития со-управления: особо охраняемая территория традиционного природопользования «Тхсаном» // Мир коренных народов — Живая Арктика. М: АКМНС, 2001 г. №7.

<sup>5</sup> Erich Kasten. Indigenous Culture and Sustainable Resource Management on Kamchatka // International Conference “Constructing Cultures then and now: A Centenary Celebration of Franz Boas and Jesup North Pacific Expedition, 1897–1997”, New York, 13.11.1997 – 17.11.1997.

<sup>6</sup> От патернализма к партнерству (строительство новых отношений народов Себвера и государства) / Отв. ред. А. Н. Пилясов. Магадан: СВКНИИ ДВО РАН, 1998 г. 198 с. (стр. 192).

## Sources Translitterated [Finnish – Russian]:<sup>1</sup>

<sup>1</sup> Gido Rar III. Ošibki Ameriki sobiraetsja povtorit' Kamčatka. // Severnaja Pacifika - Petropavlovsk-Kamčatskij: regional'nyj informacionnyj dajdžest, 1999 g. no1(7), s. 105–113.

<sup>2</sup> Zaporockij O. N. & Muraško O. A. Kak možno realizovat' konstitucionnoe pravo na zaščitu tradicionnogo obraza žizni i iskonnoj sredy obitanija (opyt organizacii osobo oxranjaemoj territorii tradicionnogo prirodopol'zovanija



na Kamčatke) // Severnye narody Rossii na puti v novoe tysjačelie: K desjatiletiju Asociacii korennyx narodov Severa, Sibiri i Dal'nego Vostoka Rossijskoj Federacii. M.: AK MNS, 2000, s. 158–177.

<sup>3</sup> Ignatenko L. G. Territorija tradicionnogo prirodopol'zovanija — ob"ekt soxranenija i zaščity biologičeskogo raznoobrazija na juge Kamčatskoj oblasti // Problemy ohrany i racional'nogo ispol'zovanija bioresursov Kamčatki: Tezisy dokladov oblastnoj naučno-praktičeskoj konferencii. Petropavlovsk-Kamčatskij, 1999, 136 s.

<sup>4</sup> Muraško O. A. Opyt razvitija so-upravlenija: osobo oxranjaemaja territorija tradicionnogo prirodopol'zovanija «Txsanom» // Mir korennyx narodov — Živaja Arktika. M.: AKMNS, 2001. no7.

<sup>5</sup> Erich Kasten. Indigenous Culture and Sustainable Resource Management on Kamchatka // International Conference "Constructing Cultures then and now: A Centenary Celebration of Franz Boas and Jesup North Pacific Expedition, 1897-1997", New York, 13.11.1997 - 17.11.1997.

<sup>6</sup> Ot paternalizma k partnerstvu (stroitel'stvo novyx otnošenij narodov Severa i gosudarstva) / Vast. toim. A. N. Piljasov. Magadan: SVKNII DVO RAN, 1998, 198 s. (s. 192.).





## The Gáhpa-áhkku Stone

Aslak Somby in Sirmá told me this exciting story:

“North of Levsse, northeast from Báisvárri, on the other side of the Gáhpa-ávži stream, sits an old sieidi stone, named Gáhpa. In the past, the stone was a powerful sieidi. Bie-htár-Pávvel, who has passed from this world, used to herd reindeer there. Pávvel was once resting with his herd, not far from the stone. And at midnight, an old woman came, chasing him away. Pávvel was so frightened that he ran home, hardly looking back, never returning to that place again. Gáhpa-áhkku said to him that she forbids reindeer herding there, because the animals trample lichen into the earth, littering her earthen home. The old spirit woman keeps milk there, deep under ground.”

Let's see what happened then:

“Years passed. Then I, Aslak Somby, was herding reindeer near the old sieidi stone. Then, a person appears. Strange-my dog did not bark, and the reindeer did not stir. A woman moves through the herd. Suddenly, when she came near, she shouted, ‘Listen boy! Take your herd away!’

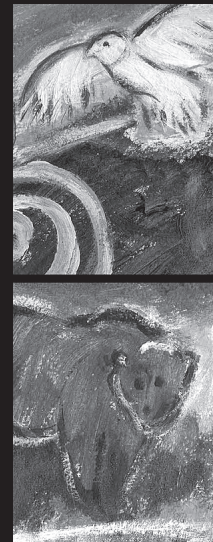
The woman was old and clad in reindeer furs and worn-out garments, and her hair was worn and partly fallen away. The old crone claims the reindeer tread the soil, spoiling her milk, stored there, underground. But oh, I had no plans to leave that place! ‘You shall see, boy, what comes of this!’ said old Gáhpa-áhkku. So she spoke, turning, leaving. I was curious if she left any tracks behind.

Oh damn! How the herd exploded then, running in every direction. I thought. There are wolves near, molesting my herd! It was March, many years before the war. Gáhpa-

geađgi was a sieidi place no more.

I decided to ski around in overlapping circles, searching for tracks, but I did not find any. And further on, still I found nothing. Not even a fox's print.”

Luohtu, protector and guardian spirit of the wild, often appears in reindeer-form. She is to be seen, clothed in furs, long hair hanging freely, a crown of antlers on her head. Was it Luohtu the herders saw by the Gáhpa-áhkku stone? Near Ohcejohka, there are sacred mountains, called Áiligas.



Luohtu- The Wild

Can you hear far away  
endless trees  
do you hear  
Luohtu- The Wild...  
far away in the woods  
far off hiding  
Luohtu- The Wild...  
Her fur is glistening  
her eyes sparkling  
can you see her  
great antlers against the sky  
Luohtu- The Wild...  
at the root of the world  
far away in the endlessness  
the trees are smiling  
the beasts are resting  
the spring is bright  
the ravens talking  
secrets  
it's whispering  
in the moss  
a gentle breath of wind  
breezes

Listen  
Luohtu- The Wild  
is joiking  
her children back again...  
Can you hear her?

(From Luohtu- The Wild, by Biret Máret Kallio. Áldá,  
Norway. 2001)

