

"The Traditional Markers Don't Hold True Anymore" - Community Voices from the Kaldoaivi Reindeer Herding Region, Finland

Poster by Kaisu Mustonen, Snowchange Cooperative

'Snowchange Work in Kaldoaivi'

Snowchange staff and members had been visiting in the Kaldoaivi region since 1996. The community interviews began in September 2001. Full visits to reindeer separation areas in Skallovarri as well as surrounding villages of Nuorgam, Polmak, Sirma and Utsjoki were conducted in March 2002. The community documentation continued at length in Summer 2003 when the Elder Aslak Uula Aikio was interviewed. The community interviews continued in September 2003 as well as April 2004. Kaldoaivi materials were included in the Arctic Climate Impact Assessment. Since that the community monitoring has been conducted in 2005, 2006, 2007 and in 2008 with field trips to Paistunturi reindeer areas and surrounding villages. The Snowchange work in Kaldoaivi region continues as a long-term monitoring effort.

Kaldoaivi Sámi Voices - Observations of Weather and Snow Conditions



Lake Polmak, April 2006. Photo by Tero Mustonen, Snowchange Cooperative. Used with permission.

On his reindeer farm in Lake Pulmanki reindeer herder **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."

Hans Kitt from the village of Karigasniemi has seen changes 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 Sami 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."

Late reindeer herder **Ilmari Vuolab** also recalled 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."



Late Sámi Elder Aslak Uula Aikio with a friend and wolverine cubs in 1950s. Mr. Aikio was much-respected for his knowledge of the land and animals. Photo by family Aikio, Snowchange Cooperative. Used with permission.

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 rein-

January 2007 in Kaldoaivi wilderness area, Ohcejohka (Utsjoki). Photo by Tero Mustonen, Snowchange Cooperative. Used with permission.



deer 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."

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 cannot 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."

Observations of Birds and Insects

Hans Kitt 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."

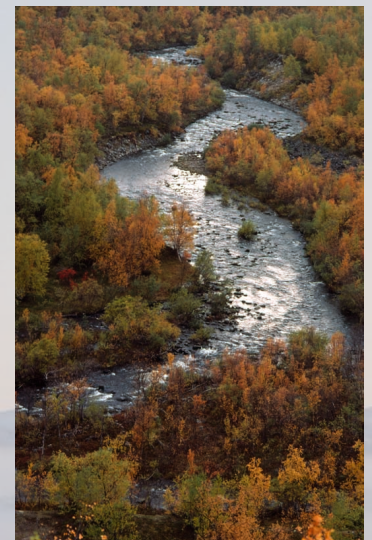
Niillas Vuolab recalls the nature having lost a lot. "It is poorer now. Summer time migratory birds are so few these days. We can find almost all species, but the numbers are not like in the past. We used to have flocks of sea birds and ducks but not any more. And it is not that long ago, still after 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 hunter **Heikki Länsman** predicts that [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 Sami so it would have an effect on the culture. Trapping cannot be done during unfrozen ground. Those hunting with good dogs are the only ones able to hunt when there is no snow."

Ilmari Vuolab talks about the changes in the amount of insects: "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."

Hans Kitt has noticed a difference in the amount of wasps: "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."



Kaldosriver. Photo by Eero Murtomäki, Snowchange Cooperative. Used with permission.

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 Sami 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."

Hans Kitt 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."