

Script: Life under the Arctic Sky 3D

Date 29-09-2015

- 00:00 In many ancient cultures in the World the Sun was seen as the father
and the Earth as mother ..

... And so it was in a land far to the North !

about 10,000 years ago the ice of the last ice age melted and herds of reindeer
started to roam to the ice free areas.

Hunters followed them Northward in search of food and clothing.

and so it was that a long time before any national borders existed, the Sami
people of Arctic Europe lived here: in an area they called Sapmi,

which stretches over the regions now known as the northern parts of Norway,
Sweden, Finland and Russia.

According to tradition the Sami count themselves as descendents of the Sun's
children.

the wild reindeer were a gift from the Sun's daughter. The Sun's son acquired his
bride in the land of the giants and together with her produced "Galla-bartnit" or
hunting sons.

1:13 "Galla-bartnit" were capable moose hunters who also invented skis,
something for which the Sami were so thankful they immortalized them in the
sky after their death, where today they make up the Belt in the constellation of
Orion.

They are still hunting and have Ursa Major as their bow. The Sami are
descendants of these Mythical people.

Let's find out more about life under the Arctic Sky!

01:52 The Sami are some of Europe's last indigenous people, reindeer herders
who for thousands of years have lived a nomadic life in the Arctic wilderness.

----- (NEXT SAMI INSERT IS NOT FOR NARRATOR)

02:04 (Spoken in Northern Sami and not translated): "We have our own history,
our own traditions, our own culture and our own language."

-----END SAMI INSERT -----

02:15 The Sami have their own voice, history, traditions and culture and their
own way to tell the World who they are.

02:21 Everything in their lives revolves around the reindeer. The utmost important thing to them are their animals. The food the children the stories, their lives depend on them.

2:33 Reindeer together with lichen are the most important energy medium between the Sun and the Sami.

02:40 Reindeer eat the lichen and moss and the Sami eat reindeer to keep themselves going. Much of the Sami culture comes forth from their nomadic and harsh lifestyles at the higher colder latitudes of our planet.

3:04 So why is it so cold in the Arctic ?

3:11 At the equator the same amount of the Sun's rays is received at a smaller area compared to a much larger area near the poles.

3:21 So the solar energy received in a particular place near the poles is less

3:26 This means: the closer to the poles the colder it gets.

03:34 But there are other factors which contribute to the poles getting even colder over the course of a year.

When the Earth orbits the Sun throughout the year it goes through Seasons.

03:55 The seasons are the result of the Earth's axis being tilted.

When the Northern hemisphere is oriented toward the Sun, it warms because of an increase in solar radiation. The sun's rays are striking that part of the Earth at a more direct angle. It's Summer.

4:10 Six Months later when the Northern hemisphere is oriented away from the Sun, the Sun's rays are less direct, It's winter in the Northern Hemisphere but Summer in the Southern Hemisphere.

4:30 Throughout the entire year the length of day at the equator does not vary much and always lasts nearly 12 hours followed by 12 hours of night.

4:48 Above the Arctic Circle the Sun never sets during the longest day of the year but in Winter during the shortest day the Sun never rises above the horizon, causing no solar radiation to reach the Arctic making it bitterly cold.

5:04 In many Sami areas the Sun was gone for two months during the winter, and always present for a period in the middle of the summer. Therefore the Sun had a special place in the Sami Worldview.

Although the Arctic Summer is bathed in light from the midnight Sun, its rays do not have as much power as those further South.

05:32 The Earth's Seasons have the ability to magically transform the Arctic wilderness and are the main reason for the nomadic lifestyle of the Sami

8:12 By tradition the Sami have always followed the reindeer from the summer feeding grounds at the coast to the winter grazing areas inland and back again.

The reindeer make one of the longest migrations of any land animal. By doing so the vast area of migration can spread across multiple modern day borders, but to the Sami this land is all one extensive track across which their reindeer must be free to move in order to find the sustenance of centuries.

9:16 The introduction of the snowmobile permanently altered the ways in which reindeer herding was practiced.

A small herd of reindeer could be collected and driven by a single man on a snowmobile, saving thousands of man-hours for the herders.

There was also no longer a need to use the reindeers as draft animals.

10:16 The reindeer and the Sami have sustained one another throughout the ages. The Sami lived in small groups, the size was mainly defined by the resources of the Area.

Today there are 80,000 – 100,000 Sami, but only 10 % are still actively involved in reindeer herding.

Each family may own a herd of a thousand or more animals.

10:46 Reindeer herding usually demands the efforts of the whole family. The reindeer are docile enough that even youngsters can handle them perfectly.

This is how the knowledge and skills are passed down through the generations.

All the Sami children have their own chores to do and responsibilities of increasing importance the older they get.

11:13 In the Sami myths there has always been a struggle, between the light and the dark, between the sunny side and the shady side, where the Sami have been called the children of the Sun or the Light. Hence the dark has always represented a threat to the Sami.

11:36 Here in the Arctic this is the last day the Sun can be seen above the horizon this year. It will not show itself anymore for the next two Months.

'The Sun slowly sinks, the wolf comes'

'Morning will come, will it not' ?

'The Sun is setting , the herd shrinks'

'Morning will come, will it not' ?

------(MYTH THIS TEXT IS NOT FOR NARRATOR) -----

15:15

Grandfather: “ {Name of the Boy} it is time to go to sleep” (not translated)

Boy: “Grandpa, Why are there lights in the sky at night ?”

Grandfather: “ Well, once upon a time there was a giant fox who lived in the forest “

“and sometimes the fox ran through the forest and swept its tail across the snow spraying it up and illuminating the sky”

16: 55 Boy asks: “will the giant fox come and eat us ?”

Grandfather: “ No no, don't worry the fox is just playing in the snow and is showing off the lights to us”

Boy: “So it is a nice fox ?”

Grandfather: “ The nicest fox you could possibly imagine !”

-----END OF MYTH -----

18:12 Modern Science had been trying to solve the mysteries of the Northern Lights for centuries. Four hundred years ago Galileo thought they were reflections of the sunlight, but even Galileo was wrong.

Many centuries later we now know the cause of these magical lights.

Galileo named these Northern lights the Aurora Borealis but there are also Southern lights: the Aurora Australis. There are even Auroras on other planets in our solar system. Just as long as these planets have an atmosphere and a magnetic field !

19:00 Throughout 4.6 billion years the Sun has dominated the sky as a gigantic nuclear reactor.

Most of the energy is released into space in the form of light. Huge quantities of charged particles named ions are also thrown out from the Sun.

Strong Solar winds blow these particles out into space. Some of the particles are blown towards the Earth.

19:35 A magnetic field around the Earth receives the dangerous rays, pulling and pushing them towards the polar regions, where the magnetic field forms an oval, centered around the magnetic North and South Poles.

Within these ovals the ionized particles from the Sun, collide with the hydrogen, oxygen and nitrogen gas particles of the Earth's upper atmosphere. These interactions occur at a gigantic speed causing millions of flashes of light in varying colours which move along the undulating magnetic lines about 100 km above the ground.

The colour depends on the type of gas.

The activity of the Sun increases and decreases with an eleven year Solar Cycle.

The activity of the Northern lights follows this cycle. This means the Aurora can be seen at its best every 11 years.

22:37 After two Months of darkness, the Sun finally rises above the horizon again, albeit briefly at first.

22:58 "The night is far spent, the day is at hand: let us therefore cast off the works of darkness, and let us put on the armour of light"

23:22 Every day the Sun rapidly climbs higher and higher in the sky: Spring has arrived.

23:31 The increasing power of the sun's rays begins to melt the snow and ice.

23:42 Far away from any city or nearby road, the Sami are gathering for their most epic annual event: the Spring Migration of the Reindeer.

This huge logistics project involves many Sami families who work together as a group to make it more manageable.

24:02 The last supper before the start of the spring migration is consumed in a shed near the inland Winter pasture of the herd.

24:10 The next morning the reindeer herders monitor the herd from afar and wait for snow conditions to be ideal.

24:18 The reindeer already have a natural tendency to start migrating by themselves, but one very important step has to take place.

The herd needs to be separated in several smaller herds as different families will migrate their own reindeer to different Summer feeding grounds towards the coast.

The herders wait till midday till the top layer of the snow melts and the hoofs of the reindeer sink deeper into the snow. This will slow them down quite a bit.

Right now this is the preferred snow condition as it is easier to round up the herd and lead them into a fenced off area nearby.

25:08 and then the Spring migration has officially started !

25:22 One of the reindeer is placed ahead of the herd to lure and guide the rest.

25:38 The rear and sides of the herd are guarded by the modern reindeer herders on their snowmobiles.

26:15 the reindeer are slowly running into a trap as the terrain features guide them into the large fenced area.

26:30 For now there is a momentary calm before the storm for the Sami herders, however their toughest workday of the year is yet to start.

27:22 The reindeer are separated into smaller groups and then again into smaller groups and taken to the main herding pen where the sorting starts.

28:08 The energy of the reindeer is incredible.

The Sami can recognize their own families reindeer by unique earmarks and they guide them into separate sections.

A process that is repeated with new groups of reindeer coming into the pen over and over again. It takes the entire rest of the day.

29:10 The different Sami families will now guide their own reindeer in separate groups all the way to their designated Summer feeding grounds.

Patience is a virtue during the Spring migration. The separated herds should stay separated and the Sami give ample time to allow for head starts to the other herds.

29:25 A thousands year old tradition is still honoured during the migration, the lavvu is constructed to spend the night close to the herd.

29:46 Some of the youngsters get a free sledge ride during the migration as well as do some of the younger and weaker reindeer ;)

30:14 Later in the day the snow has a harder crust and this condition is now preferred to allow the reindeer to more easily traverse a longer distance, therefore the migration continues in the evening.

The herd is migrating towards the West and towards the Sun, evening after evening.

32:06 Finally after many days when the herd arrives at the first road they are again led into a herding pen.

This year it is decided that a part of the migration is done by road in trucks due to bad snow conditions further down the track.

32:51 The final obstacle of the crawling Spring Migration is a huge fjord.

A five hour boat ride awaits the tired animals. This is the last stage of the Migration.

33:29 On board there is a sense of tranquility among the reindeer as they are aware that their long journey is almost over.

33:56 At last they arrive at their Summer feeding grounds near the coast. Nature has had a headstart here as much snow has already melted and an abundance of nutritious food awaits them.

The new calves will be born soon. The cows of the herd have carried them all winter long.

The herd will settle down to rest and feed here. The annual circle of migration is completed.

35:13 But there are more well adapted animals under the Arctic Sky.

Equally historic is the use of dog power.

The human-dog relationship amounts to a very long lasting symbiosis.

Dog power has been used for hunting and travelling since the 10th century.

Today this is the best non motorized way to explore the Arctic wilderness, and gain access to the most remote places to experience the sounds of silence.

36:51 To the Sami not dogs but reindeer were the most important means of transport up until the 1960s.

After that reindeer herding eventually became more mechanized, but to celebrate the tradition of reindeer as a means of transportation annual reindeer races are still organized.

This race is the Nordic championship Reindeer racing.

37:45 Permanent settlements in the Arctic have replaced the old lifestyle of Nomadism, and attracts a whole new [type](#) of visitor.

Tourist from all over the World gather in Arctic cities to see the [Magic](#) Northern Lights for themselves.

To have the best chance to see the Northern lights you'll need to travel in winter to a high latitude on Earth, even further North than the Arctic circle.

You would also need to go away from the city to avoid its light pollution and into the country side to the darkest spot you can find.

There is really no such thing as hunting for the Northern Lights . The lights are often there. It is more about hunting for clear weather conditions , or finding a hole in the clouds to see the Northern Lights above.

As after all this is the Arctic , patience is a virtue , but the rewards can be absolutely worth it and a life changing experience.

The Sami remain some of the most colourful people in the World. They still like to be in the wild and live their lives in nature, that is perhaps why still today choose to be reindeer herders.

We all have but one World.

That World would be poorer if we only had one culture.