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2007 (based on historical references made in his text)

Tom Arnbom in Chukotka, Russia



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Tom Arnbom, a Swedish biologist, reports directly from WWF's [Polar Bear Patrol project](#) in Vankarem, Chukotka, north-east Russia. Tom's blog and expedition is a joint project between [WWF-Sweden](#) and [Aftonbladet newspaper](#).

Tom's blog offers fascinating insights into life in an extremely remote region of the world.

22nd November

A long wait

I am in Anadyr, Russian Far East, and a time zone 12 hours ahead of GMT. We have been waiting for three days and are hoping that the weather will calm down. The reason is that we want to fly to Cape Schmidt, which is due south of Wrangel Island, but on the mainland of the Autonomous District of Chukotka, Russia. The reason for my visit is to follow the work of the Umky-patrol, i.e. the WWF Polar Bear Patrol. Every year this coastline is invaded by "hungry" polar bears. The final goal is to visit the small native village of Vankarem. Last year, about 200 polar bears gathered in the surroundings of this village with a population of about 200 persons. That is not a good combination. Together with me, Tom Arnbom conservation officer of WWF Sweden, are the project leaders for the patrol Viktor Nikiforov from WWF Russia and Andrei Bultunov, a Russian polar bear scientist.

Outside our hotel, a real arctic snowstorm is hauling, even the local school has forbidden the younger kids to have any lectures today. There is a great risk of being frost bitten by the icy wind, on their way to and from school.

It is getting at you that we have to wait, and wait, and again wait. The thought struck me, what will happen if the weather will not calm down and we get stuck here in Anadyr.



Location of Vankarem, Chukotka, north-east Russia.

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23rd November

Cape Schmidt

During the night, all the clouds cleared away, and the welcomed sun barely managed to climb above the hillside. The expectations increased, and suddenly the hotel speakers announced that the flight to Cape Schmidt would leave in about 30 minutes. We quickly put all our things together and rush over to the airport.

For two hours we are heading north over a harsh and desolated landscape. Not a single trace of human presence. It is white of snow and most rivers are frozen solid. Along the meandering riverbeds, belts of willows are seen as dark patches. After an hour, the helicopter increases the altitude to avoid the numerous mountains.

At Cape Schmidt a police asks me for my papers, Viktor and Andrei is still inside the helicopter, so I give him my papers and stare firmly into his eyes and I hear myself say Umky-patrol, which is the Chukotkan word for polar bear patrol. The police shine up and welcome me to high Arctic.

From the crowd, a Chukchi man with a big smile approaches, it is Vlad Kavry, who hugs us as a bear. He is in charge of the polar bear patrol and invites us to stay with him.

24th November

Finally out

It is clear sky and the temperature drops below minus 10 degrees. Today we will check three areas for polar bear feeding spots. Instead of seeds, these are full with dead walruses, which all have died of natural causes. In historical time there have not been any walruses along this part of the coast, but suddenly 40 000 fat saturated beasts turned up on the beach in the village of Ryrkaypiy. First everyone was happy, but after a while the local government realised they had a problem. The smell was daunting, the sound enormous and dead walruses were found here and there.

In the end of October, the walruses disappeared as suddenly as they had appeared. The stinking

dead animals had to be removed before the polar bears were lured to the village. It was here at Ryrkaypiu, that a 16-year-old girl was killed, about two years ago, on her way home by a polar bear. Somebody had left some garbage in a container and the bear could not resist the smell. When Masha Kymylkut passed the container she realised a polar bear just a few metres from her. She panicked, and started to run which triggered the bear's hunting instinct and within seconds she was killed.

Before the sun is up, we head out along the coast with the Umky-patrol. We are about to visit some of the feeding spots where the dead walruses from Ryrkaypiu had been transported. No sign of polar bears, but everywhere there are tracks of arctic fox. The bears will come any day, as soon as the bridge of winter ice is formed from Wrangel Island to the mainland coast of Chukotka. Normally, the bears should have been here some weeks ago, but the "bridge" is building up later and later due to the summer sea ice is melting away, more and more. This increases the stress for the stranded bears at Wrangel Island, which have to starve for a longer period without being able to hunt. We are hoping for, and expecting hundreds of bears to turn up within the next two weeks.



On patrol for polar bears in north-eastern Russia.
© Tom Arnbom

25th November

Raw cooking

It is blowing hard and the snow comes in horizontally. Today we are inside. Our host, Vlad Kavry is a Chukchi hunter therefore we have to adopt to the local kitchen, which is far from the menu served in Europe and North America. Vlad has no cooler or freezer, instead he has a plastic bag hanging outside the kitchen window. In winter the outside temperature is always below zero. You save a lot of energy by eating raw meat, and do not have to warm everything up. That is smart climate living.

During the last two days I have been served raw fish as arctic char. They are really deep-frozen and to be able to cut them you hammer on the back of the fish to split it. The raw fish bits are dipped in salt and a tasty strong sauce. It is really tasty. Reindeer is carved in thin slices and also eaten deep frozen without being cooked. At breakfast one day, a reindeer stew was put on the

table, with onions and potatoes.

The only "normal" food is some kind of tortellini, which is sometimes eaten together with hot dogs. In addition, for every meal we do also have bread, biscuits and the. The most exotic dish so far was fermented walrus blubber. It is very rich in vitamins. The blubber has been fermenting for months to ripen. To be honest, it wasn't to my taste, but I did swallow it, I am glad that it is possible to buy frozen vegetables instead. The opposite can be said about the local salmon row, which has a very good taste. It is strange, but my belly is still working, despite all new courses.



Preparing whale blubber and other local delicacies.
© Tom Arnbom

26th November

Hit the polar bear on its head

The weather is still bad and it is a day to stay put. My host Vlad Kavry has grown up with polar bears outside the window, and every day a new story is told. Last fall when he was photographing a female bear, the local police arrived and started to scream at Vlad that he should immediately withdraw to the police car. One holy rule concerning polar bears is that you should not shout at them, they only get irritated, and that did happen. The female got closer to Vlad and he as usual brings out his stick to show the bear that he is not afraid of her.

The police now scream at his top of his lungs, and the bear got very irritated, at the same time

Vlad is trying to communicate to the shouting person to be quiet. The female attacks Vlad who hit the bear with his stick between her ears. The polar bear stops and confused she reluctantly backs off. Vlad then starts to walk back to the policeman.

The man starts again to shout loud and wants Vlad to hurry up who is now slowly walking towards the police vehicle. A sudden sound in the snow, and Vlad turns around and is literary standing front to front with the angry female bear. Once again, he taps the bear on top of its head. The startled polar bear now runs away to avoid this stubborn and brave Chukchi. When Vlad comes back to the paralysed policeman, he is only asked for his ID-papers - not a single word of polar bears or the incidence.

In other places in the Arctic, polar bears are usually shot if they get to close. When I discuss this with the WWF polar bear patrol, they wonder why - there is no need to shoot polar bears. It is important that you do not back off, try to look bigger than you are by holding something high above your head. The most efficient way according to Vlad is to point a two metre long stick towards the polar bear. I would not dare to try, but I am certain that Chukchi have a more natural way of handling polar bears, than many other places in the Arctic



A member of a Russian Polar Bear Patrol warns off a polar bear.
© Tom Arnbom

27th November

Arctic ghost town

The first, which struck you when you land at Cape Schmidt, are all empty buildings, enormous amount of metal scrap, and a few helicopter skeletons. Along the coastline, there are numerous ships and empty fuel drums. A bit inland, a wall of cotton wire surrounds an abundant military camp, where most buildings are falling apart. This is a remnant from a time when Soviet Union should conquer the Arctic.

The great modern exploitation and mapping of Siberia started after the Russian Revolution. Large resources were set aside to find minerals, oil and later on gas. The tundra was more or less invaded by geologists and engineers, and the goal was to find new areas to exploit. It started

about 1930th, and it was most intense during the decade before the fall of Soviet Union. Here at Cape Schmidt, a town was built which in the 1980th had almost 10 000 inhabitants. Most of them were military personnel who should defend Soviet, if America invaded them via Alaska. Then, there were direct flight from Moscow to Cape Schmidt, today there is a flight every other week from Anadyr, the main city of Chukotka.

A larger helicopter division was stationed here as well as numerous tanks. The military personnel are gone now, but the remains are still there. When I walk through Cape Schmidt, it is like passing through a ghost town dressed in white snow. Some buildings are still intact and are used for accommodation, offices or workshops. The new administration building really stands out. I wonder how it will look like in the summer? Probably very dirty and a lot of scrap will be uncovered when the snow thaws away. To take away and clean up this mess is too expensive and has for the moment low priority.

With the changing climate, I wonder which way the Russian Arctic will go? New areas will be exposed for exploration in the sea when the summer sea ice retreats more and more. It includes gas, oil, fishing and in the summer, shipping via the northern Arctic route to and from Europe. Here WWF can play a major roll in being part in developing security and management system to minimize the effect on nature and native people.



Cape Schmidt, Chukotka, Russia.

© Tom Arnbom



Cape Schmidt, Chukotka, Russia.

28th November

The school with polar bears

The sea ice is building up and soon can the polar bears at Wrangel Island head for the mainland, where I am standing. WWF's Polar Bear Patrol from the village of Vankarem will make a brief visit to Ryrkaypiy. Here, the king of the Arctic will most likely create problems for its inhabitants within the next 14 days. I am visiting the school where the 16 years old Masha Kymylkut was at when she was killed by a polar bear for almost two years ago. The school is situated at the western edge of the village with an incredible view over the ice-packed ocean, but also over the site where 40 000 walrus hauls out during the fall. The school has 200 students, of these 50 are living at the school while their parents are reindeer herding Chukchis who spend the winter far inland from the coast.

Today, the WWF team is giving a presentation for the older student about climate change and how it affects walrus and polar bears in the Arctic region. We do also explain why WWF thinks it is important to engage in the polar bears of Chukotka. After the presentation, some of the kids stay on and we have a chat about life in Ryrkaypiy. I had to question them how many of them have ever seen a polar bear? There are smiles everywhere, and a girl explains that last fall they could count to ten polar bears, at the same time around the school. Some of them were just outside the windows. All had different stories how they had encountered bears to and from school. I realized that for these kids, polar bears are part of their usual life. I get a question wondering how many polar bears there are in Sweden? None, I answer, and continue that I guess that in Sweden there are probably less than 10 children who ever have seen a wild polar bear, probably while travelling with their parents to the Arctic.

This year, there is even a greater risk for more polar bears than usual around the school at Ryrkaypiy. Only hundred metres from the school, is the beach where the 40 000 walrus hauls out, and some of them died of natural causes. The walrus disappeared during October, most likely to avoid being locked in by the sea ice, which is formed during the winter. With the help of WWF, the authorities managed to transport away most of the carcasses, but some walrus could not be moved and is still lying on the beach within sight of the school. Within a week or two, the polar bears will be here and they will feel the smell from the frozen and rotten walrus. They will most likely cause some problems.

During the last few days we have met the local authorities to discuss that who have the responsibility and how can you scare off the bears away from people and houses. One solution to decrease the conflict is the polar bear feeders, i.e. heaps of walrus that have been moved away from the beach at Ryrkaypiy. In one single site there are 50 of them. Hopefully, the polar bears will stop to eat so they are not hungry any more, and therefore have no reason to head into the villages to look for food. The inhabitants are also asked to clear away any carcasses in their neighbourhood, and not leave any garbage outside or through away leftovers. Many do hunt and fish, and the leftovers are thrown out to the dogs outside.



The school in Ryrkaypiy overlooks a haul out of 40,000 walrus.

© Tom Arnbom

1st December

Fishing and rain

It is still dark when we go eastward to search for polar bear tracks. After an hour, I notice the first daylight. The snow makes it hard to figure out where land ends and where the sky starts. We are travelling on the tundra and it is incredible flat. The highest plants, barely reach the same height as my shoes. Rumours tell, that a large polar bear male have been sighted in this area. After two hours, we haven't seen a single footprint of any animal. Not even a flying bird.

Viktor, who drives my skidoo, suddenly stops and says that this is a very good fishing area. I cannot detect a lake or river, just a flat white surface. There are no landmarks to orientate after. It does not take long before the first hole in the ice is made, and soon the first fish is hauled up on the ice. We catch arctic char and other fish species, which are adapted to this harsh climate.

When the wind shifts in Chukotka, from coming from west to east, then the air temperature goes up. It did happen for us, and from having a small thin layer of ice on my clothes, it started to rain, which thawed my survival suite. I had luckily had a suite which is made for rain, but the others on the team had warm clothes made for dry cold air, they looked more like drenched wet dogs, than tuff Arctic explorers in fluffy down jackets.

I ask Viktor and Vlad Kavry, who both are members of the WWF's polar bear patrol, if they have noticed any differences while it seems like Chukotka is getting warmer. Yes, they have observed many changes, if it is caused by climate change it is hard to know, but Vlad and Viktor think so. The numbers of both ptarmigan and lemmings are decreasing along the coast, probably due to the ice bark that is formed after winter rains. The wet ground then freezes and creates an ice shield that separates birds and rodents from getting access to the food on the ground. Last summer, several large flocks of swans turned up, they do rarely if ever come this far up to Chukotka. On the beach a large ray was washed up for the first time, and now do large numbers of walrus turn up on the beaches.

In addition, the polar bear migration along the coast is for the moment at least six weeks late, while the winter sea ice has not frozen yet. The invasion of walrus at Vankarem and Ryrkaypiu is most likely caused by the lack of summer sea ice, the walruses have no place to rest on between feeding dives. Therefore they have to swim all the way to the coast to haul out to rest.



Drilling a hole in the ice for ice fishing.

© Tom Ambom



Tom Arnbom and the catch of the day - arctic char. Chukotka, Russia.
© Viktor Nikiforov

2nd December

The polar bear legend

The Chukchi are traditionally sea mammal hunters and reindeer herders, and they are probably the ancestors to the American Indians. Their attitude and respect to the polar bear have always been totally different from their view of other animals. Walrus, grey whales, ringed seals and reindeer are important as game animals for the Chukchi, and in their Mythology these animals are treated more or less as a meat source. When I ask the Chukchi hunter Vlad Kamry, if they have any specific expressions for polar bears, like for example sly as a fox, strong as a bear, he looks at me and surprisingly says “we treat them as humans”. Then Vlad, starts telling me Chukchi legends and anecdotes, it is so I really understand the special relationship they have with the polar bear.

The first legend he tells me is as follows. It is a year of hardship, there is no food and many Chukchi are dying of starvation. In the end only two households exist. It is a father and his son, and the other is an older woman, her daughter and a foster son. They decide to move into one hut, and try to help each other to survive. Every day the father and his son go out for hunting, but

they always return empty handed, and finally there is only a small amount of meat left. They barely manage to go out hunting anymore due to exhaustion, but the old woman makes a soup by cooking some seal skin, so they get something to stop their hunger. Next morning the hunter and his son, slowly make their way out to hunt. Suddenly, a female polar bear and her two cubs turn up outside the hut. The foster son is also out, and they end up just in front of each other. Then the female bear starts talking to the scared boy that she is hungry and she needs some food for her two young which will otherwise die of starvation. The boy goes inside and collects the last bit of meat they have left and gives it to the polar bear that disappears.

When the hunters arrive back in the evening, they see the footprints of the bears. They ask the old lady to cook the last bit of meat so they get some strength to be able to hunt the polar bears next day. The women cannot find the meat, and all except the foster child, believes that it is the bears, which have stolen the meat. The foster son does not dare to tell that he has given away the meat. During the night, the foster child hears some strange sounds outside the hut, and he goes out. Once again, he is confronted with the female polar bear. She had heard from the spirits that he has given her their last piece of meat, and therefore she wants to help them. The female bear presents a fat large ringed seal, which she has just killed. The boy runs inside and tells the others what he had done and the gift they have got from the polar bear. Since that day, the Chukchi understand that they share the spirits with the polar bears, and therefore they should be treated as equals.

Vlad also explains that traditionally, the polar bear hunt was strictly regulated in Chukotka. No bear was allowed to be killed without the eldest permission. Before the hunt, many rituals were carried out, and when the polar bear had finally been killed, no other bears were allowed to be hunted for a long period by the members of the village. They continued to honour the killed bear for months after it died.

3rd December

Polar bear tracks and open sea

It stopped raining during the night, the temperature is still above freezing, but the wind is much harder than yesterday. It feels like the wind gets hold of the house and shakes it all night. Despite the “bad” weather, the polar bear patrol heads out to check some feeding points. A raven passes by between the buildings while we come out of the door. At the first feeding point, a white Arctic fox runs away. At the next place, nothing. Vlad Kavry then decides that we should go along the coast to the west; there is a chance that we see a polar bear.

The ocean is dark and totally open, just a few days ago it was covered with ice, all the way to the horizon. We drive 10-20 metres from the water edge, so we do not miss any bear. When ice covered the ocean, there was not a single bird present, but today bird species like glaucous gulls, ivory gulls and Ross gulls pass by. For many birders, it is a dream to see the last species, an Arctic and pinkish bird, and today I observed a minimum of 2 000 Ross gulls migrating towards the Bering Strait!

Along the beach there is a rusty container. Vlad Kavry, the chief commander of today's polar bear patrol, tells me that last year a poacher had put some bait in the container to lure polar bears which then were supposed to be shot illegally. Off course, the patrol took away all meat in the container. We continue our skidoo trip, suddenly Vlad stops and jumps off. He points at some very large footprints in the snow – umky he says, i.e. polar bear in native tongue. After ten days, we get at last see a sign that there are polar bears in the area. Only a few kilometres later, next polar bear track turns up. It is only a few days old. The footprints are twice the size of my winter boots – on some occasions you feel very small, and that is what I do just know. Sadly we had to turn around, while it is getting dark. We find a skidoo track which continues along the coast towards west, Vlad is worried that it is a poacher. The patrol does have a purpose.

The strong southeastern wind, is probably breaking up the newly formed sea ice on the southern side of Wrangel Island. This means that the bears on Wrangel Island cannot get ashore on the mainland where we are. There is most likely sea ice further out to the west, and it is a bit worrying if the bears head out on the ice and wander off to southwest. They will then end up close to two settlements, which are renown for poaching. If so, many bears might be killed.

The lack of sea ice along the coast of Chukotka, means that few, if any female polar bears will give birth on the mainland this year. Normally, somewhere around 20 females build winter dens along the coast. They should already be in their dens, while the cubs are born around New Year. There is no problem for the females stranded at Wrangel Island. But if there are any females out on the pack ice, and do not reach Wrangel on time, they do then have to give birth on the sea ice, and there it is pretty hard to dig a protective and insulated den for the newborn. When I see the ice chart over Svalbard, I am choked. The pack ice is far away from the landmass, and if the ocean does not freeze soon there will be a problem for the pregnant females. They have three choices. Either quickly wander off to the west and reach Greenland or Jan Mayen, or head east to islands in Russia. The third option is to give birth on the sea ice, which is possible, but the survival rate of the newborn probably drops dramatically.

4th December

Poolar Bear

Finally after ten days, we succeed. This might be my last day here at the northern coast of Chukotka. The flight is scheduled for tomorrow, but it all depends on what kind of weather we get within the next 20 hours. There were no plans to get out today, but it is fantastic outside. Clear sky, not a single breath of wind and about zero degrees Celsius with other words like a day in early May. At ten, Vlad Kavry cannot stand it anymore and say lets go out with the polar bear patrol. So with short notice we are out on the skidoo heading east along the coast. We have not even left Cape Schmidt when some very large footprints appear they go almost straight in among the houses. Where is the bear now? Around next corner or . nobody knows?

We decide to continue to the east. Kilometre after kilometre, we pass numerous carcasses of dead walrus. I realize, there must be more food than usual, which is served for the polar bears and the Arctic fox. Further on a flock of birds flies away when we approach. They were sitting

on a half-eaten walrus and there are many footprints around it from a relatively small polar bear. But no sign of a live wild polar bear. Along the coast, there are many ivory gulls and Ross gulls, which are heading towards the Bering Strait, and close to shore there are several ringed seals.

We stop, to get a better view from a small hill. Vlad looks at me and smiles. There, far far away, a light yellow furry thing is eating. This is what we have been waiting for a wild polar bear. We try to get a bit closer, but the bear sees us and it dashes for the sea and swims away. Despite that the bears have been protected for more than 50 years in Russia, this bear is really afraid for us. Vlad Kavry, the local leader for the polar bear patrol, divides the bears into four categories; the skittish ones which take off for nothing, the curious which get closer to have a look, the aggressive ones and finally the bears which totally ignore humans. Sadly we met a scared one. We depart from the site so we do not disturb anymore. During the last two days we have been lucky to encounter footprints from five different polar bears around Cape Schmidt. I wonder how it is when all the several hundred bears found their way from Wrangel Island to the mainland, and starts to migrate towards east. When we discuss this Vlad turns to me and says this is the first time I really wonder if the winter will come. Yesterday, it rained and hundreds of polar bears are missing what is happening?

When we get back to Ryrkaypiu I take part in a local meeting about walrus. There are 9 natives and one Russian, and they have all voluntarily protected the 40 000 walrus which turned up last fall at Ryrkaypiu. They do now want help to establish an official state reserve, and they do also want help from the local administration to clean away all metal rubbish which is littering the haul-out. I am amazed with such strong belief and strength they want to protect the walrus this is when grass root power is at its best I have to comment that 8 of the 10 people are females. We men, ought to learn something from this engagement. WWF will help them with legal documentation and bring their wish to higher decision levels, but the idea of a reserve and protecting walrus in Chukotka is coming from the natives, and not from an office in Moscow.



Polar bear tracks. Chukotka, Russia.
© Tom Arnbom

5th December

Will the walrus save the polar bears?

It is still warm outside and when I pass a carcass of a walrus I really feel the smell – it is like a stinking wall. Now, I get some kind of feeling for how it was in Ryrkaypiu when they had 40 000 walrus hauled-out. In total, people in the village transported away 573 dead walrus, to polar bear feeding areas at a distance of some kilometres. It must have been a gigantic task to move so many dead large bodies, especially when some of them were pretty rotten – not a smell you want to have when you go out to meet some friends.

Thousands must have died in the area during last fall. During the last few days, I have seen tracks from five different polar bears, and several hundred dead walrus along the coastline. When the migrating “herd” of polar bears come, there is a “smorgasbord” served, and probably fewer bears will visit the Russian settlements than normal. Now when the Arctic pack ice is melting, and the hunting grounds for the polar bears is literally disappearing, perhaps the walrus will be the savour along the coast of Chukotka.

During this year, there was a massive shift in the distribution of the Pacific walrus. It is likely that about half the Pacific population were in Chukotka that has never happened before. When researcher from North America were told by the Russian scientist that 40 000 walrus had hauled-out at Ryrkaypiu, nobody first believed it. Suddenly, one of the world’s largest colonies of walrus was in Russia. The enormous amount of meat, which is available for the polar bears in Chukotka, must affect their migration. Perhaps, they will stay longer than usual. But so far, the polar bear migration seems to be at least 6 weeks late. The problem for the pregnant female bears do still exist, they want to get ashore to make a good den before giving birth around New Year. If, they cannot find land, they have to give birth out on the sea ice.



Walrus haulout. Ryrkaypiu, Chukotka, Russia.

© Tom Arnbom

6th December

A new nature reserve?

Snowstorm and definitely no weather for flying – the phone rings and yes, there is no helicopter today – maybe tomorrow, or some other day. The people who live here is pretty isolated. In winter, there is one flight every other week, and it takes a maximum of 20 passengers.

Today, we (the WWF-team) visit all kinds of different official authorities. While being stranded, we try to do some important paper work. We do manage to meet all the officials on the list; hunters association, local authorities in Ryrkaypiu and finally the highest administrator of the region around Cape Schmidt. We have already met different representatives from local NGOs and the native population. All, yes all of them, are in favour of creating a nature reserve for the walrus at Ryrkaypiu.

The paper work is done in express speed through all levels of Russian bureaucracy. Next step is to present the idea for the government of Chukotka in Anadyr. Viktor Nikiforov from WWF Russia and Andrei Boltunov, a polar bear scientist have during the last few days prepared all kinds of background document and maps which supports the creation of a state nature reserve for walrus at Ryrkaypiu. In addition, several supportive letters from local native NGOs, the hunting association and the authorities have been collected.

If, everything works out OK, then WWF together with the local government and the natives have succeeded in creating a very important nature reserve for the world's largest haul-out site of Pacific walrus, and that in a few days time. I realize that, by financing the polar bear patrol it is an incredible successful investment for the future of polar bears in Chukotka. The snowstorm gets denser, and the visibility is only tenths of metres.

7th December

A carcass

Breakfast is served – black coffee and raw fish in small bits. The bones are put on a common plate, simple and easy. It is calm outside and the helicopter should not have any problems to fly up to the Arctic coast. BUT, now it snows in Anadyr instead. The Weather Gods do not seem to be with us, and for the next few days there will most likely be drift snow and wind.

If the flight continues to be cancelled, the positive side is the chances to see polar bears increases. So far, we have seen footprints from five different adult individuals in the area close to Ryrkaypiu and Cape Schmidt (see map at www.umkypatrol.ru). The Russians who are travelling with me are really worried about the polar bears living on the mainland of Chukotka. Normally, around 20 females give birth here, but this year when the winter ice still have not been formed, the pregnant females cannot go ashore to give birth. They must either give birth on the ice or on Wrangel Island. A third option is to take off and wander further west on the pack ice until they reach land.

In Cape Schmidt, a Christmas tree appeared. The colourful lights are flashing regularly against the concrete buildings, a great Merry Christmas feeling. When I approach the tree I realize it is made of plastic. It is at least 500 km to the tree line, and how should they be able to transport a real Christmas tree to Cape Schmidt, without any roads?

We started to walk back, when a green Niva bus stops. The driver with large walrus moustaches

asks us if we want a ride back. I am met by a fog bank of cigarette smoke while entering the bus; at the same time I see the sign, which says, “smoking is forbidden”. I jump in, and realize that I have accompanied with a rein deer. To fit, I have to sit on top of it. Luckily, the deer is dead, unlucky while the deer is skinned. But the luck is still with me while the dead rein deer is deep-frozen, i.e. I do not have to sit on a bloody carcass.



The Cape Schmidt Christmas tree.
© Tom Arnbom

8th December

Climate change hits hard in Chukotka

At the same time as the world’s leaders are gathering in Bali to discuss climate change, the arctic part of Chukotka in eastern Russia is hit by a large scale ecological change caused by the meltdown of the sea ice. During the two weeks I have been here, I have gathered several bits of hard facts, such as thousands of walrus died here during the fall and the polar bears cannot reach the mainland to give birth to their cubs.

During the last ten years the summer sea ice has decreased dramatically along the coast of Chukotka. The summer ice is completely gone now, and the winter ice is almost two month late. The absence of the sea ice in this part of the Arctic has caused a change which affects both animals and the Chukchi people. The walrus is an important food resource for the indigenous people living along the coast, but now the traditional ice hunt is impossible, maybe forever.

The walrus has always used the summer sea ice as a platform to rest (or haul-out) on between feeding dives in relatively shallow areas. Now, when the ice is gone, they have to swim to the coast to haul-out, and that can be more than 100 kilometers away from the feeding area. We are here to survey polar bears, and hundreds of them are missing from the area, but they can either still be at Wrangle Island or out on the pack ice far north. But what is frightening us are all the dead walrus which we encounter along the coast. Nobody has foreseen this.

Normally the winter sea ice is formed late September or early October. It is now December, and still the ocean has not frozen. There is no ice bridge for the pregnant polar bear females to reach the mainland of Chukotka, and few if any will have their dens along the coast this year. This is the first time this has happened. There is much evidence that climate change is going on in the Arctic, and not just impacting polar bears and walrus, we just heard on the radio that a layer of ice has formed on the tundra and the reindeer are having a hard time to find food in Chukotka's inland.

I am in Chukotka to observe the polar bear migration together with WWF's polar bear patrol, but instead I am encountering a situation which according to researchers should happen first in 50 years, the big melt of the sea ice. I was aware of the problems for polar bears, but I am shocked to see all the dead walrus carcasses. I can barely hold my tears anymore.

9th December

Lost in the snowstorm

I did not sleep much last night. The WWF polar bear patrol stationed in the village of Vankarem were supposed to visit us today. After 15 hours, they had still not arrived. So Vlad Kavry, the Chukchi and experienced hunter, went out to find them, one of them is his little brother Sergey. He borrows our satellite phone, after a few hours Vlad returns, and he wants warm dry clothes and some tea before heading out again. He had seen some skidoo headlights at distance on the other side of a river, which was not frozen.

Vlad is a bit worried, but at the same time he knows that the three persons who are lost are very experienced people. If needed, they will dig themselves deep into the snow and spend the night in the white fluffy insulating snow. At 3 am, he calls and tells us he had found them, they were really lost while the snow blizzard had made them lose orientation. At 05.17, four snowmen come in through the door. The patrol from Vankarem had then been driving for 22 hours.

The helicopter is now cancelled until Monday.

Despite the bad weather, I walk down to the ocean. Five dogs pass me, they had eaten on a dead walrus carcass. I am always watching my back, and check the snow for fresh polar bear footprints. I am not especially macho outside the village, anytime a white large shadow might turn up. I hear a motor sound behind me, it is Vlad, dressed in white. He has followed me on the skidoo to check so no polar bears are close to me. He asks if I want a ride home. I point out some

long-tailed ducks for him swimming in a lead in the ice. Vlad looks at me, and shows that they are very good to eat, and then a big great smile forms on his weathered face.

I hope we get out tomorrow. Now, the whole Polar Bear Patrol is here. They are Chukchis and do not care so much about the weather.

10th December

The polar bear had a bad smell

Today the Nobel Peace Prize will be given to Al Gore and the IPCC for their work with climate change. I am eating breakfast with four Chukchis, all with long experiences of hunting. Here in Chukotka, far away from long suit tails and champagne, we observe something which has to do with climate change; the Arctic sea is open – no pack ice along the coast of Chukotka. As Fedor tells me: "it is not as usual anymore, we have never before seen eider ducks, long-tailed duck, and gulls this time of the year. The sea should be covered by ice – when will sea ice come?"

We head out to the west before the first morning light. There is only a small hint of orange at the horizon in the southeast. Last time we went along this coastal area, I saw 2,000 Ross gulls; today I see only one ivory gull.

After two hours, the skidoo breaks down which is attached to the sledge I am sitting on. Within seconds the WWF Polar Bear Patrol is pulling the skidoo apart. They know what to do. The skidoo which was ahead of us returns and Vlad tells me to jump on. We leave the men to fix the broken skidoo. After 400 metres we stop. I am ordered to go behind the other four. The reason being that I am dressed in an overall which is bright red; the others are dressed in white, from top to toe. There is a polar bear 200 metres from us.

We leave the skidoo behind. They walk like a living white wall in front of me when we approach the bear. Vlad has a spade as the main defense weapon, Boris carries a rifle as a back up if anything goes wrong. At 50 metres distance we all sit down, I am still hiding behind the others. It is a large male polar bear, and he is stretched out along the ground. The bear suddenly stands up, and take a few steps towards us. I realise how big he is, much larger than the brown bears I have observed in Finland.

The bear can now smell us. Suddenly it explodes; the bear is running full speed to the beach. On his way he breaks through a snow wall and finally he throws himself into the water and starts swimming away from us. I walk up to the place he was stretched out – the snow is a mixture of red and brown. It smells horrible – I had no idea that polar bears smell. What a memory – a live wild polar bear.



The Polar Bear Patrol watch a large male polar bear about 200 metres away.
© Tom Arnbom

11th December

Frustrated

We are about to get on the flight to Anadyr. For a week, day after day, we have received the bad news that the flight has been cancelled. At 10am, we are told that the flight is cancelled one hour, then the doomsday message came – it is cancelled today.

How shall I tell it to my family at home? Logistically, it is getting a bit too much for my wife; planning of next week's funeral, final test for the diploma, homework reading with three children, board meetings and now today the car also has to taken to the workshop to be fixed. No swearwords are enough to explain, my frustration. But this is normal here at northern coast of Chukotka – flights are often cancelled due to bad weather.

Together with Viktor and Andrei, we head out to count dead walrus along the beach due west of Ryrkaypiu. It is great to stretch my legs and we walk about 5 kilometres along the coast, and then we walk back over the barren white tundra. All the time, we are checking for any strange white colouration, there might be a polar bear out here. However, no bear turns up, but we observe a young snowy owl, which is looking for lemmings.

I think it is time or me to get home now.



Dead walrus along the beach, west of Ryrkaypiu, Chukotka, Russia.
© Tom Arnbom

12th December

False alarm

The telephone rings, it is the police in Cape Schmidt, they have heard that there is a polar bear close to the met-station at the airport. It is the first alarm call we get on the new telephone line, which we fixed when we got here. We went from almost 0 to 100% action in 2 seconds. The clothes, which are packed for the eventual departure today, are quickly unpacked and within minutes we are ready to head off.

Vlad Kavry brings out the shotgun with the rubber bullets. Soon, two skidoos with sledges are on their way in full speed through the settlements towards the airport at Cape Schmidt. The adrenaline is running.

At the airport, we scan the horizon for a polar bear. No bear. We drive in a long wide circle, but not even a footprint in the snow. It must have been a false alarm. The positive thing is that it was the police who called and we managed to carry out an emergency call.

On our way back we stop at the local administration and discuss the upcoming problem with the spring thaw, and all the 570 dead walrus carcasses. Even if the polar bear migration gets going this year, not even 200 polar bears can manage to eat all the carcasses around the village. It will be a nice smelly spring and the authorities must be prepared for it.

No helicopter today, and most likely none tomorrow either. Thereafter, there might be a flight.

13th December

Right on

I am looking at the different ice charts over the Arctic. The pack ice has now reached Svalbard

and the female polar bears have no problems in reaching the denning areas on land.

In Chukotka, the ocean is still open, although there is a belt of drift ice along the coast here in Ryrkaypiu. The ice bridge between Wrangel Island and the mainland has not been formed yet, which means that this year's polar bear migration is delayed several months. A large area of the Chukchi Sea is free from ice; normally it should have been frozen solid.

Is it climate change or natural variation? You may believe what you want, but there seems to be enormous changes going on here in the arctic habitat of Chukotka.

Is blowing a hard western wind and my luggage is still in the sleeping room – its owner wants to go back home.

The picture shows how the native Vlad Kavry interpret the situation just now. I got his drawing five minutes ago. To the right it is the WWF-panda which have served a fantastic walrus stew, while the native man wonders where the polar bears (umka) are. I think he is right on it.

WWF have helped to move almost 800 dead walruses (died of natural causes at haul-outs) to strategic sites around the villages to lure the polar bears away from the settlements. But so far, no polar bears have come, several hundreds are missing. Where are they? Probably, stranded on Wrangel Island or out on the pack ice, and not able to get ashore on the mainland of Chukotka.



Vlad's interpretation of the current situation with the walrus and polar bears along the northern coast of Chukotka, Russia. Click here for large version.

© Vlad Kavry

14th December

Even walruses in alaska are hit

Andrei has now updated the website for the WWF Polar Bear Patrol (www.umkypatrol.ru) with the latest news concerning the dead walruses along the coast.

I realize that something similar seems to have happened on the US side of the Bering Strait. When the summer drift ice melted, more and more walruses hauled out on land. US scientists are now warning that young walruses are at risk of being trampled to death in the cramped haul-out sites.

I visit the local post office to send a letter to Sweden. A middle age lady with red hair looks up, and explains that she has a lot to do and she is very busy just now. I look around, and see one girl sitting at the Internet, it seems like she is writing to a boyfriend far away. There is photography of the man on the computer, perhaps a Russian version of Facebook. When I give my letter to the postal lady, she wonders shall it really go to Sweden? Nothing is as important now as a letter to Sweden; I must find the best stamps for it”.

It feels unreal, as if I am from the outer space – a Swedish Cosmonaut who has landed in the village of Ryrkaypiu. I thank her for all the great stamps and wonders if I should put the letter in the mailbox outside the post office. “Nyet. We never use the mail box”.

I continue to one of the small local shops. It is Ira who is behind the desk. We buy some necessary things like toilet paper and yogurt. The last date for the yogurt was a month ago, but it is good enough for me. Ira’s shop sells everything from groceries, underwear, a pink princess dress to a toy replica of a machine gun. It feels like stepping back in time. It is just like an old shop out in the countryside somewhere in Sweden for 50 years ago.

No comments about the helicopter, which was cancelled, again.



General store in Ryrkaypiu, Chukotka, Russia.

© Tom Arnbom

15th December

A strange world

I visit a small school show, where they are performing a traditional dance from Chukotka. When I talk to the school pupils, they are very proud to Chukchis, but almost none of them speak their native tongue anymore.

Nowadays, it is exclusively Russian. Grandmas and grandpas, and the reindeer herders on the tundra do still keep it alive, but along the coast is disappearing rapidly. This is part of their culture, which will soon be gone.

The wind calms and the first stars are seen after midnight. However, in the morning the wind has once again picked up. Despite that we are informed that the helicopter will most likely come today. Fifteen minutes later, the hope is gone due to thick fog in Anadyr.

The police in Cape Schmidt have a new special case to solve, and I am the main object. My special boarder visa expires today. They are now working on it. The joke of day is that I have to spend the weekend in jail, but I will be given some extra bread.

They are calling at me from the kitchen, there is some news from Sweden on TV. I dash over and I learn that Liza Minnelli has been drunk on stage in Göteborg. Sometimes, I wonder what kind of world we are living in. I get really upset over a non-showing helicopter, and the top news of the world is about a falling star. No comments...



Chief of police in Cape Schmidt, Chukotka, Russia.
© Tom Arnbom

16th December

If the sea won't freeze...

It is now almost for two weeks that we have not been able to fly out from Cape Schmidt, which is situated on the arctic coast of Chukotka.

It is blowing a hard storm and most of the inhabitants are staying inside. I wonder if it is normal to have such bad weather for such a long period? The answer I get is that it is normal to have awful weather until the sea ice freezes in October, but lately the storms have been continuing even in November.

Usually the weather calms down as soon as the pack ice is formed in the ocean north of Chukotka. But this year things are not normal. The ocean is open and it seems like the storms never will end, and for ten days ago it rained.

This is what the climate change researcher have been saying should happen to the Arctic in the

future. Large weather variations, winter rains and more snowstorms. All that I know by heart, but it is not until now when I realize the width of the coming climate changes in the Arctic. It is one thing to sit in Sweden, but to be on site and experience all what is supposed to happen in the future, it is an insight that I hoped I never would have to experience.

Here in Chukotka it is dramatic; walrus are dying, hundreds of polar bears are missing, never ending snowstorms, winter rain, and now there is also a risk that the reindeers on the tundra will starve to death. What kind of world are we living in?

The Russian media is very upset with the behaviour of the US at the UN climate change meeting at Bali where many of the world's leaders are discussing the future.

My own problems are nothing compared to the ones on the global stage. But I am stranded in a village in Chukotka, and I want to get home to my family. It is likely that the climate changes are behind this. It does not matter if there were several helicopters waiting to take off from Anadyr to collect us, it is the weather which decide and as long the ocean does not freeze...

17th December

Empty promises

A fantastic morning. Not a breath of wind. I can see the stars in the sky, and at southwest I observe colour of orange which reminds me of the sun. It cannot be better weather for flying. Finally.

When we call the airport, is it closed for the weekend! We phone again, and we get the same message on the answering machine. We call all possible people to find out when the helicopter it due to arrive, but no answer anywhere. At last, we get help from a person who calls the airport at Anadyr. Yes it is beautiful weather here, BUT THE HELICOPTER PILOTS ARE HAVING A FREE DAY OFF, IT IS SUNDAY.

I have a hard time not to burst out in tears. It is the first good flying weather in 14 days, and the regular flight does not fly. All promises of flying during the weekend, is gone with the wind. It means that I will miss the funeral and cannot give support to my family. The earliest I get home is during the next weekend.



Tom's temporary home (the window with the light on) in Chukotka.

© Viktor Nikiforov



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