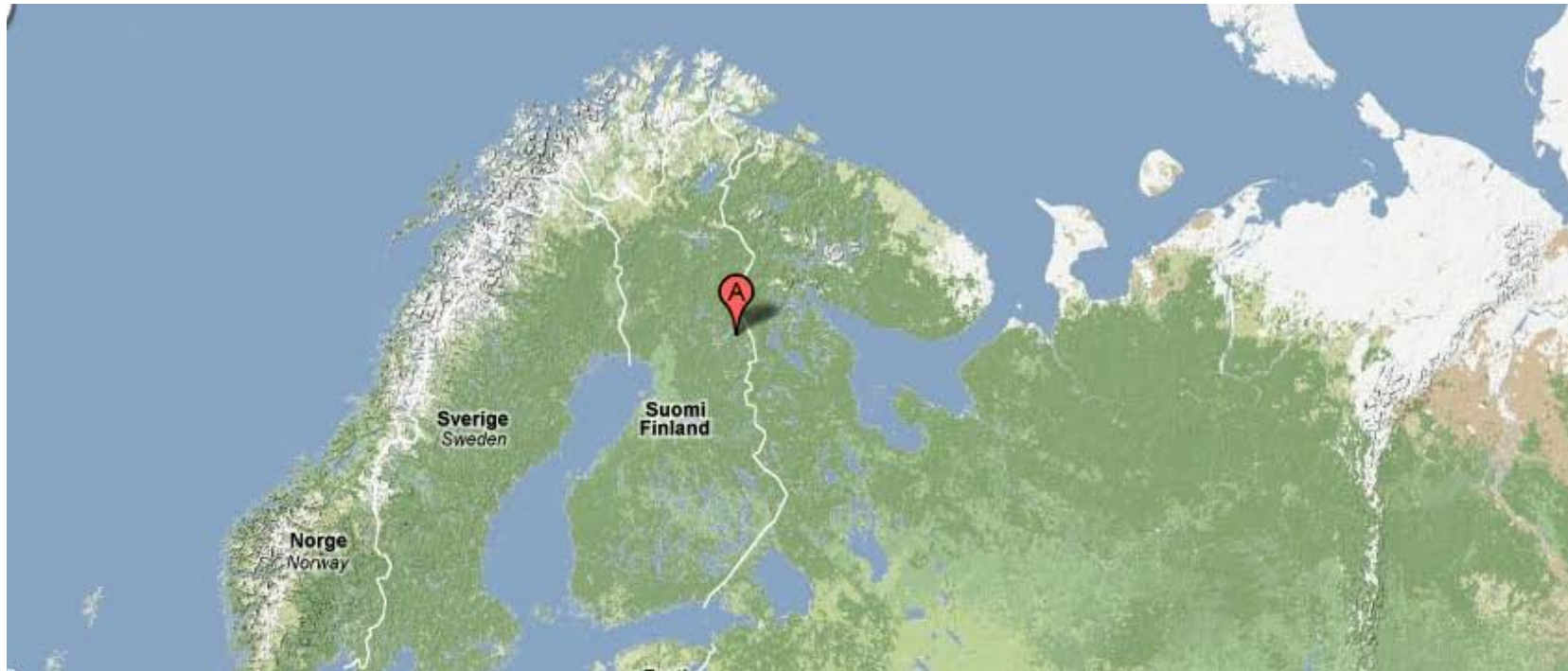


Expedition Log Book

Water Proof
EXPEDITIONS



**Arctic Circle, Russia, White Sea
February 27th – March 07th 2010**



Geographical maps state that the Big North starts at 66°33' North latitude (Polar Circle) and finishes at 90° of the North Pole. To face facts, the Big North and the lands around Polar Arctic Circle are locations without boundaries, reminding the sphere of imagination at legendary expeditions and at the hardest life conditions on Earth.

Exploring the Karelia region - this right-hand corner of Finland and top left-hand corner of Russia - means to face a natural environment of extraordinary beauty, with virgin forests, iced lakes and the huge tundra region. This frozen world demands adaptation to its extreme and full creativity in survival from all its inhabitants.

Saturday, February 27 2010. Ruka, Finland
8 p.m.: air temperature -15° C



Water Proof
EXPEDITIONS

We gathered in Ruka village, few kilometres from Kuusamo Airport, our gateway to the frozen land. A thick carpet of snow covered everything, muffled sounds and brightened even our tired thoughts and our souls.

A boring day spent among airports and airplanes, carrying heavy luggage, finally ended in the cosy and warm Rantasipi Rukahovi hotel, in the heart of the Ruka ski resort. We found ourselves sitting in the bar-lounge of the hotel for a short welcome meeting and the strictly necessary information about the activities of the following days.

We were six mates of five different nationalities, different life styles, different experiences, but we shared a common great wish : plunge in the dark and extremely cold water of the unique European Sea whose surface freezes during winter, the White Sea, mostly unknown to common people, a *terra incognita* for Western Europeans and Americans. But before this, why not to challenge the snow-covered slopes of Finland ? After a deserved refreshing sleep, the following day we enjoyed a full day trip among these noiseless and peaceful wildernesses.

Sunday, February 28 2010. Ruka, Finland
10 a.m.: air temperature -4° C, snowy

Water Proof
EXPEDITIONS



Our sledge-dogs safari started with the large smiling and friendly face of Lauri – our master musher - and ended up in something to be remembered for the rest of our life. We spent the whole day in the wild, relishing the essence of Finland and the majesty of the breath taking sceneries over arctic wilderness, crowned with trees thickly covered in snow. We were provided with all the necessary outer thermal dresses : suit, gloves, hat, etc. Then we headed to the husky farm where we were given a short lesson on how to handle the sledge and we made the teams. Three crews made by six dogs, one driver-mate and one passenger-mate, who was snugly seated in the wooden sledge. About the lesson, well, let's say that not everybody paid the necessary attention at the guide. During our rides we had some fun trying to avoid trees and to keep the sledges on the iced-tracks. Being with the dogs out in the elements in this remote location made us so enthusiasts. When we stopped for a break, the dogs tucked in their tails and let the snow drift over them, over their clear-blue glances. Time run very fast and we returned to the Rantasipi Rukahovi hotel at about 8 p.m. !

Monday, March 01 2010. Ruka (Finland) to Nilma Village (White Sea)
10 a.m.: air temperature -4°C - Let is snow, let is snow, let is snow !



The morning started with a lazy and abundant breakfast. Sat in the cosy restaurant of the hotel, we admired the snowploughs trying to clean as much roads as possible, in a fight lost before to begin. The snow was falling abundant and we were anxious about the route towards the White Sea.

Some of us went to a Subway shop to organize the lunch, some others went to a refurbished supermarket. At 10.30 a.m. everybody was ready to leave the hotel, the hall was plenty of heavy luggage. Pavel - our driver - and one of his friend, after having already driven several hours to join us, were waiting just in front of the hotel's entrance, ready to turn about and to get again onto the white-ways. We slowly set off, anxious to reach our destination on time, before the darkness of the night made more difficult our journey to the small village of Nilmaguba, at the mouth of Nilma river, in the Kandalaksha bay.

During the last few hundred years, technology has allowed us to become visitors of regions of Earth where we do not belong. In more recent years, after the Soviet Union crumbled, even the Russian Karelia region is slowly opening its doors at few foreign tourists.

Monday, March 01 2010. Ruka (Finland) to Nilma Village (White Sea)



Water Proof®
EXPEDITIONS

When roads are in good conditions, the transfer lasts about seven hours, included the necessary time to cross the borders, fill a couple of forms and wait during the detailed controls of the customs officers. Well, there are the Finland custom, a couple of roadblocks (where we has to show our passports), the Russian custom, another roadblock and – thanks God – we can go ahead in the Russian country. Unluckily our trip was conditioned by an unforeseen heavy snowfall and it took about nine hours to arrive to the village.

We were driven through a secondary road when a handful wooden cabins in the middle of nowhere appeared. Everything was covered by a white carpet of thick snow. Everything was dipped in the silence. With the help of the dive-guides and a snowmobile, we carried our luggage in the rooms and then we rushed in the cosy dining room for a refreshing and tasty dinner. We met all the staff of the diving centre and lodge and made the general plan of our activities. The following day, our first time would come : face the arctic salted and iced water of White Sea ; a check dive for safety reason for those already experienced and the first dive of the Ice-diving course for Bruno.

Monday, March 02 2010. Nilma Village (White Sea), Cross Island
09.30 a.m.: air temperature -3° C



WaterProof
EXPEDITIONS

White Sea is a different and odd destination: *distant* from our society, from our customs and known sceneries, even from our imagination. With the onset of winter, the ice gradually covers the whole White Sea and until the spring, the scenery mixes up land and sea into a unique white iced expanse. In these conditions, the most efficient transport is by snow-mobile or ski-doo, with wooden sledges tied up as wagons. We quickly realised that the ski-doo's sledge would have been essential for everybody. We loaded the sledges with our gears and moved to the first diving-camp, about ten minutes ride from the lodge. The fresh snow fallen during the last hours - together with the rising of the temperature and the consequent melting of the upper part of the iced-tracks - made our ride more difficult. Sometimes we had to get off, but the skill of the drivers was laudable and they always drove safety. The diving-camp appeared with some wooden cabins built on skis (easy to move), with attractive wisps of smoke coming from their chimneys, unequivocal sign of heating. Our first day at the Arctic Circle diving centre started with a necessary theory session led by Katya – one of the instructors – on how to interpret the signals and handle the rope, hypothermia, safety measures, etc.

Monday, March 02 2010. Nilma Village (White Sea), Cross Island



Water Proof®
EXPEDITIONS

Until one hasn't tried, nobody believes how it is difficult to walk a few steps in an iced and water-melting camp, dressing the dry-suit and carrying the scuba-gear. Luckily only few steps are necessary to move from the cabin to the *mania*, the iced-hole.

At the beginning of the under-ice-diving season - which lasts from February to April - some well definite *mainas* had been cut into the iced-platform but, due to the low temperature, they must be dug again when every dive is performed. The marine water rises through the holes, forms puddles and quickly freezes. During the time of only one night, a thick layer of ice bars these passages and every day the guides must hack them by using a large handsaw. *Mainas* are fascinating: they are the portals between the white frozen land and the mysterious, dark marine environment. Divers must cross these thresholds to discover an underwater world where they cannot freely swim. For safety reasons, a rope connects each diver with his underwater buddy and both with a tender, who stays on land, at the mouth of the hole, withstanding adverse weather conditions and cold. We can peep in the mystery but always have an umbilical cord that connects us with our terrestrial, two-footed world.

Monday, March 02 2010. Nilma Village (White Sea), Cross Island

Water Proof
EXPEDITIONS



The organization of the Arctic Circle and the skill of the team revealed to be indispensable. At the first impact with the frozen waters, some parts of the equipment of everybody clearly showed that ice-diving was not our everyday sport. Dry-suit not really dry, regulators freezing, weight and trim systems not properly calculated, stress ... few annoying equipment failures that have been quickly solved with the experience of our guides. We made our first dive in the neighbourhood of Cross Island. The fairy green water of White Sea welcomed us with its absolutely astonishing beauty. The main skill we must have is the ability to remain calm underwater : diving in an overhead environment is not for the claustrophobic. Maintaining neutral buoyancy is already essential in normal dive conditions, but in this environment it is mandatory and could be any more challenging, especially when we want to shot some good images. The bed of the sea was flat, scarcely reaching 7–8m deep, with some kelp stretching up to the surface towards the ice. Nevertheless there were some subjects to be photographed and we all tried to handle our underwater housing and strobes in this extremely dark environment.

Monday, March 02 2010. Nilma Village (White Sea)
08.00 p.m.: air temperature -8° C



Water Proof
EXPEDITIONS

Here at Arctic Circle diving centre and lodge only few Russian people speak fluent English. Nevertheless everybody does everything possible to understand and to be understood. Non-verbal communication has a great value in this situation : we are more concentrated, we pay more attention and especially we can take our time to explain and to understand.

Day run fast among preparations, dives, relax in the wooden-cabin of the camp, chats with mates and the guides. Soon was time to return to the lodge and enjoy our first *banja*, a traditional Russian steam bath with a real wood-burning stove. Don't worry because of doing a sauna after the short and shallow water dives at White Sea : in healthy divers, this does not cause decompression diseases or cardiovascular illness.

For those newcomers, the time in the banja should not exceed five to ten minutes. After the heat phase, we should take an icy cold shower or an icy water bath ; many hardy banja's veterans leave the sauna and immerse themselves directly in a snow bank ! In the relaxing atmosphere of the sauna, the traditional banja involved an invigorating beating with birch leaves and branches. This provides a perfect massage. Try and see !

Monday, March 02 2010. Nilma Village (White Sea)
10.00 p.m.: air temperature -8° C



Water Proof
EXPEDITIONS

After a tasty and relaxing dinner, time came for our first session of the underwater photography workshop of Franco. This was organized in five encounters, during which Franco spoke about the problems of shooting good images in the difficult conditions of the White Sea and gave us some good tricks. Every lesson has been tailor made considering the diving-spots of the following day, so that we have been advised on time. Obviously the main problems were related to the lack of light and the cold. Because of the ice-layer and snow cover, there was not sufficient light to shoot with ambient light ; long shutter speeds, as well as high ISO, were mandatory even close to the surface. Moreover, the fairy-green water absorbed a large quantity of strobes' light-power and simultaneously the particles suspended in the water (or raising from the bottom because of a scarce buoyancy or a bad controlled movement) reflected the light as mirrors.

During the workshop's lessons we reviewed the images that Franco took during the expedition to White Sea he made last year. This helped us in choosing the lenses and the fittings, and gave us an idea on what to expect to see during our dives.

Monday, March 03 2010. Nilma Village (White Sea), Cross Island
09.30 a.m.: air temperature -4° C



Water Proof
EXPEDITIONS

Weather showed no signs of getting better. Air temperature was warmer than usual, snow kept on falling and a grey sky welcomed us again in the morning of Wednesday. After a wonderful breakfast, we moved into the sledges and headed to the camp of Cross Island. Our buddy team was scheduled as the first to dive, at 10.30 a.m., but we needed long time to get ready and jumped into the *maina* after 11:00. The patience and the help of our guides (Misha, Sergei and a couple of tenders) were laudable and essential. We felt again the difference between freshwater and seawater ice. At the surface of the hole, the melting ice had the consistence of a pudding. This made a contribution in absorbing the slight light that could not pass through. Then we slowly got used to the place, the darkness, the green water, and swam down along a gentle slope. Visibility was bad and we didn't find the diving-spot we supposed to explore. Nevertheless we found some interesting crevices among rocks, some well hidden and camouflaged critters, some kelp's branches hosting diaphanous stalked jellyfishes (*Haliclystus auricola*) and crustaceans. We surfaced late and this caused that all the scheduled dives were postponed.

Monday, March 03 2010. Nilma Village (White Sea), Cross Island
12:00 a.m.: air temperature -3° C

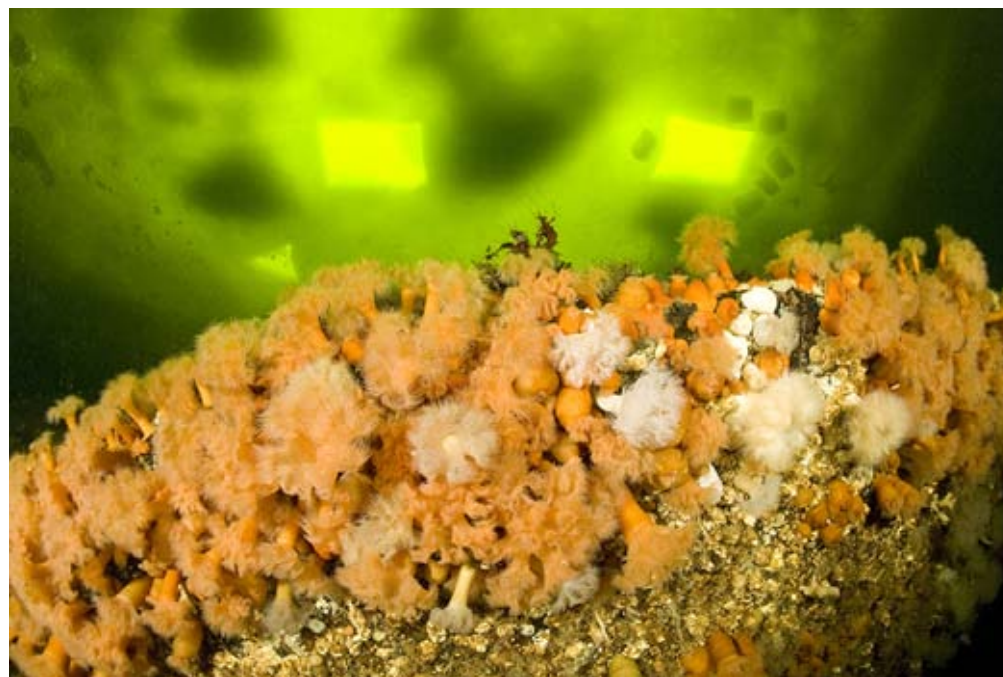


Water Proof
EXPEDITIONS

Buddy-team number two got into the maina at 12.30 p.m. and quickly disappeared at our sight. We stayed for a while at the mouth of the ice-hole, looking the exhausted bubbles coming from the regulators of our friends and stretching out towards the shaken-ice, then we hurried up inside the heated hut. Misha stayed at the maina as tender. The Russian guys seemed to be everywhere, in the right position at the right time, taking care of us as our mum would have done.

At 2 p.m. was again our turn to go beyond the border between our airy - two footed world and the liquid – two flippers element. From solid iced-water to thick liquid-water. Our dive site was the famous Anemone Rock, the main attraction of Cross Island, so we moved with the ski-doo to another hole, a short way off there. The second hole has been cut almost exactly on the vertical of the rock and we didn't fail the place. The bottom was at 15mt depth, but the rocks formation rises until about 5mt from the surface and hosts luxuriant colonies of colourful anemones and soft corals. With the right amount of light coming from the maina, this was a good spot for trying the tricks of Franco and to get some images against the natural light.

Monday, March 03 2010. Nilma Village (White Sea)
5:00 p.m.: air temperature -5° C



Water Proof
EXPEDITIONS

With this diving-condition, we were more awkward than usual and time ran faster than expected. Soon we had to swim backwards, following the rope that connected us to our tender, and to ascend back through the ice hole, into the natural light. Buddy-team number two was almost ready and eager to dive the Anemone Rock. At 5.30 p.m. we all loaded our photo-equipments, garments and personal goods onto the sledges and been driven back to the lodge. Snow was falling slowly in very small flakes and it was already getting dark. We had to stop a couple of time and get out of the sledge because of the bad condition of the track. We arrived on time to take a warm shower, download the images from the cards and have a quick look before to dine.

During the dinner the ambience was relaxed and intimate, and we all appreciated the savoury and abundant food. We spoke about our experiences and Franco entertained us with stories about his travels. Katya and the guides made the plan for the following day : weather permitting, we should have gone to Bio Filter Bay, at about 30 minutes by ski-doo from the lodge. Franco did his lesson according to this destination and spoke about shooting wide-angle images of the iced-formations.

Monday, March 04 2010. Nilma Village (White Sea)
8:00 a.m.: air temperature -9° C



Water Proof
EXPEDITIONS

That morning we got up with a dim sun hidden behind the haze. Luckily the weather seemed to change and temperatures to drop. This should allow us to go further without dangers and to dive the Bio Filter Bay. We met in the dining room; Katya confirmed the scheduled diving-spot and put us in a good humour. Bio Filter Bay is located in Velikaya Salma Strait, approximately 30 minutes skidoo ride across the sea to a rocky cliff face on the far side of the channel. We crossed the iced-sea without any problems and without thinking that we were travelling upon a column of water more than 50mt deep. A thick layer of solid ice floated upon the salted water and moved up and down, following tidal waves and underwater currents. At the beginning of March, the platform of ice was still about 1mt thick and was anything but static ! Thanks to the White Sea's tidal currents, the high and low water levels differ by up to 1,5 mt and the tidal cycle last 12 hours. So the ice at the shore continually cracks against the rock faces with which it comes into contact, refreezes and breaks again. The constant friction sculpted the underwater side of the iced-blocks into wonderful, mesmerising shapes : all around the cliff face, they took the shape of a cave.

Monday, March 04 2010. Nilma Village (White Sea), Bio Filter Bay
12:00 a.m.: air temperature -8° C



Water Proof
EXPEDITIONS

We arrived at the dive camp at 10:00 a.m.. The huts were already heated and we found our underwater gear ready to be dressed. Even if the maina has been dug only half an hour before, the surface of the hole was already hidden by the shaken-ice. In fact, when sea ice forms, it releases salt into surface waters. These waters become denser and sink to form the Arctic halocline - a layer of cold water that acts as barrier between sea ice and deeper warmer (-1,5°C !) water that could melt the ice. At 11:00 a.m. the buddy-team number one was already disappeared through the maina and started to shoot pictures at the underwater iced-sculptures located close to the entrance, so to profit of the natural light coming from the hole. After about one hour they surfaced and was our turn to slide in the darkness. First we swam towards the wall, where the biggest ice-formations had been created by the tidal movement of the platform. Unluckily, due to the layer of snow felt upon the ice-floe and the lacking of a strong sunlight, underwater there was few natural light. The snow absorbed and reflected the faint rays of sun. Descending towards the bottom we encountered a nice fucus seaweeds, stretching from the darkness up to the light.

Monday, March 04 2010. Nilma Village (White Sea), Bio Filter Bay
2:00 p.m.: air temperature -6° C



Water Proof
EXPEDITIONS

We swam back, near to the maina, to admire the underside of the iced platform and the fairy yellow light, which changed of shade and brightness on the basis of the iced-sculptures and underwater tunnels. Besides this we found also some brittle hollow ice stalactites that form on the inner surface of the ice ceiling from fresh water. These 'chandeliers' were about 15 cm long and 10 cm in diameter. We spent lot of time trying to photograph and have good results from our attempts, but once more we had to recognize that the art of photography is very hard in these conditions. The contrast between the darkness and the brightness was so high and the subjects so vanishing in the green-yellow water that we had to proceed by elimination, pushing at the limits the technics of our cameras and strobes and trying to apply the techniques showed us by Franco. At the end of our dive we were tired but satisfied and happy to have put to the test our abilities. A shining sun welcomed us at the exit of the hole. Everything was shining and the snow reflected the rays of the sun with iridescent gleams. The atmosphere was clean and rarefied, it seemed to be in a Christmas card. Close to Bio Filter Bay there is the Moscow State University Biological Station but visits have not been organized and there were no possibilities to go there with the ski-doo.

Monday, March 04 2010. Nilma Village (White Sea)
5:00 p.m.: air temperature -9° C



Water Proof
EXPEDITIONS

We all did our second dive without any problems. In these days, Bruno had successfully completed his ice-diving course and made his first underwater ice-dive as certified diver. For safety reasons, Katya kept on being his buddy and they enjoyed diving together.

During the evening, we made our plan for diving with the beluga whales the following day. In 2006, marine biologists from St. Petersburg's department of Utrishsky Dolphins' Aquarium decided to build a natural pool in White Sea, to keep few belugas. One of the main aims of the project was to make a "place of retired or vacation" for the white whales sold on purpose for performing in dolphinariums. This artificial enclosure (bounded with nets) is located close to Nilmaguba village. The belugas are regularly nourished with fresh fishes and Sasha takes care of them. Guests of the local Arctic Circle Dive Centre and Lodge can easily manage to go to the enclosure a couple of time each day, swim or dive (free-diving or scuba-diving) with the whales and the trainer.

We decided that buddy team number one would go to dive with beluga in the following morning and ice-diving in the afternoon, and buddy team number two would do the opposite.

Monday, March 05 2010. Nilma Village (White Sea)
08:00 a.m.: air temperature -12° C



Water Proof®
EXPEDITIONS

Being in the water with a marine mammal is different from any other experience. We knew the difference because we formerly have snorkelled with humpback whales or dolphins or the curious sea lions. When a marine mammal comes up to us and swims by, it looks us right in our eyes. Obviously we cannot know what the animals think, but they are sometimes very curious. They turn around to inspect us again and again, and I'm sure they're trying to figure out what we are and where we came from. We can perceive that they are thinking. Some tend to be too curious, but I've never been harmed by a marine mammal. Even large whales take care to avoid us, so they don't hurt.

Belugas are even more special. They use echo-location capabilities to search preys and to investigate the environment. And even to investigate us, when we jumped into the enclosure where they are. I felt a powerful flux of acoustic waves and I'm sure that the two belugas liked the answers of their analysis because they often returned to me for playing and be photographed. Belugas are quite social and are perhaps the most vocal of all whales.

Monday, March 05 2010. Nilma Village (White Sea)
11:00 a.m.: air temperature -10° C



Water Proof
EXPEDITIONS

They employ a diversified language of clicks, clangs, grunts and whistles; their repertoire of sounds is unparalleled so that they are sometimes called the Sea Canaries. The beluga's eerie songs once gave rise to fishermen's tales of sirens and nowadays this mysterious Arctic hunter continues to bewitch scientists.

And even to bewitch the visitors of the Arctic Circle Lodge, who literally loves the two white whales kept in captivity by the Utrishsky Dolphins' Aquarium. During our stay in the pool, Sasha performed some breath-held exercises with the belugas. They seemed to have fun and played with him with pleasure. Misha was with us underwater; his wife stayed on the edge of the enclosure, as a valid assistant of Sasha. The three Russian seemed to have a special feeling with the whales, a deep emotional involvement and we all appreciated their care of the animals.

After 40 minutes we went out of the pool, took off our scuba equipment and stayed some more time at the edge of the floe, admiring and photographing the belugas. Franco was playing with them, pulling faces and dashing water in their snouts. We all had a very good time.

Monday, March 05 2010. Nilma Village (White Sea)
8:00 p.m.: air temperature -18° C



Water Proof
EXPEDITIONS

We returned to the lodge and met all together for the lunch. At 2 p.m. we went to dive at Cross Island while buddy team number two went for the belugas' encounter. Little by little we started to feel sad because we were almost on the point of leaving. We had only one day and the two latest dives, then we would have to wash and to package our equipment and return to our daily life. This experience at White Sea took up all our energy and we were deeply involved in every instant of this adventure ; it seemed really incredible that was already time to leave.

Last evening at the lodge we get all annoyed because we were told we had to get up a 2 a.m. for the transfer to Finland. We complained with the organization because of this, but they explained that the roads were in very bad conditions due to the snow fell in the latest days and we had to make the best of things. We went to our rooms and try to sleep a couple of hours. When we got up, temperature was minus 25 °C and nature was lit by a strange light; we supposed it was due to our tiredness. Luckily the Russian guys helped us to carry our luggage to the minibus. ...but White Sea kept by a great surprise for us.

Monday, March 07 2010. Nilma Village (White Sea)
2:30 a.m.: air temperature -25° C



Water Proof®
EXPEDITIONS

Ela came very excited and called quietly, as if it would have been there a wild animal. We followed the girl and immediately our bad mood changed in a great excitement : a beautiful aurora borealis was performing in the sky dotted with stars, flashing with its greenish light the darkness of the Russian tundra. We were pervaded by the impulse of shooting this strange phenomenon. Everybody ran to catch his camera-body, set up lenses, manage ISO, f-stop, shutter-speed and try to find a steady support where to put the camera. Everybody held their breathes; it seemed a dream.

As all the beautiful dreams, it lasted few time because we all had to hurry up and catch the minibus in time for the departure. We said goodbye to our Russian's mates and slowly made for the white and dirty road. It took more than one hour to reach the main road, where we waited Pavel and his friend, who joined us in few minutes. Everything was carefully loaded in one van and we got into another minibus : it was 3.30 a.m. when we finally headed for the Finland border. We arrived after four hours and took less than one hour to cross and be in Finland. The Finnish SS82 (Siikaselka) road was much better then the Russian and we easily arrived to Kuusamo at 11.30 a.m.

Monday, March 07 2010. Nilma Village (White Sea)
2:30 a.m.: air temperature -25° C



WaterProof
EXPEDITIONS

As expected, there wasn't any serious problem during the airport's affairs. We all easily arrived in Helsinki and had lot of time to relax and chat together. We all didn't expect such a warm welcome in White Sea and we were positive touched of the skill, care, organization : we all found a seriously diving experience in a remote and beautiful corner of the world.

For these reasons, we all want to say a big and sincere "THANKS" to Lauri, Katya, Ivan, Misha, Sasha, Sergei, Dmitrii, Ela and her mother, and all the Russian guys that worked for us and made our experience unforgettable. A special thanks to Marlynda too, who organized such a special trip.

BYE - BYE