

Expedition Log Around Spitsbergen (Svalbard), Norway 17 - 27 August, 2010

With Oceanwide Expeditions Aboard M/V Plancius



Captain Han Tiemes (The Netherlands) & his Dutch, Russian, German, Belgian, Romanian, Polish and Filipino Crew

Chief Mate François Kwekkeboom (The Netherlands) 2nd Mate Aleksey Nazarov (Russia) 3rd Mate Svenja Wilmes (Germany) Chief Engineer Leszek Rorat (Poland) Chef Ralf Barthel (Germany) Sous Chef Hazel Irvine (New Zealand) Hotel and Restaurant Manager Alan Hogan (England) Ass. Hotel & Restaurant Manager Francis De Buck (Belgium) Doctor Herman Noordman (The Netherlands)

And the MV Plancius Expedition Staff:

Expedition Leader Rinie van Meurs (The Netherlands) Assistant Expedition Leader Brent Houston (USA) Guide Gérard Bodineau (France) Guide Piero Bosco (Italy) Guide Michelle van Dijk (The Netherlands) Guide Florian Piper (Germany) Guide Andreas Umbreit (Germany) Guide Andrey Volkov (Russia) Kayak Guide Pete Gwatkin (Scotland)

And our mascot the Blue Whale!



17 August, 2010 Longyearbyen, Spitsbergen, Norway

GPS position at the pier : 78°13'N, 15°36'E

Weather: 6° C; Cloudy with many sunny intervals and a breeze from North-West.

Embarkation day.

All passengers were aboard by 5pm after many of us had seized the opportunity to explore colorful Longyearbyen, Spitsbergen's capital, including the downtown center, the local souvenir shops, and the excellent Svalbard Museum and Airship Museum.

Longyearbyen (population ± 2000) is situated in Adventfjord, which lies within Spitsbergen's largest fjord, Isfjord. Its location at 78° 13' N makes it one of the most northerly towns in the world. The mountains of Isfjord had a fresh cover of snow signaling the end of summer. Old machines and trams for coal transport reminding us of the extensive coal mines, once the town's main industry.



Our Hotel Manager, Alan and his assistant Francis were on-hand to meet all new arrivals to the ship. With the assistance of the friendly crew, we gradually found our way around the ship. Our introductory meeting was announced over the loudspeaker or P.A. (public address system). This was our invitation to gather in the Observation Lounge for a welcoming toast and a glass of champagne.

The Captain, Han Tiemes, welcomed us all and then Alan Hogan, the Hotel Manager explained all the need-to-know housekeeping details. Rinie van Meurs, our Expedition Leader (EL), then introduced his team of guides¹, naturalists and historians.

The Third Officer Svenja Wilmes led a mandatory safety briefing and lifeboat drill as required by SOLAS (Safety of Life at Sea) regulations.

Shortly after, *Plancius* lifted anchor and gently maneuvered out to sea. After dinner, a few hardy passengers ventured out on the observation decks to experience the cold Arctic air. Our airborne escorts the Northern Fulmars followed the ship as she sailed down Isfjord. For many of us this was our first experience in the "Land of the Midnight Sun" and our introduction to the magnetic scenery and timelessness of the Arctic.



¹ You will find complete biographies of the staff members in a separate file on the trip CD, personally created and produced on board the ship and specific to your trip's itineraries and landings.

18 August, 2010 Ny-Ålesund, 14th of July Glacier

Morning

GPS anchorage position: 78°56'N, 11°55.4'E Weather: 3° C; cloudy with some blue patches, wind direction variable force 1 Beaufort or less.

In the morning we arrived at Ny-Ålesund on a very calm sea. Before going ashore, however, we first had to attend a few mandatory meetings regarding safety and procedures during the Zodiac operations. We were also briefed on the guidelines issued by AECO (The Association of Arctic Expedition Cruise Operators) to minimize our impact and to protect the flora and fauna.



Following this we were shuttled to the jetty in the Ny-Ålesund harbor. Until 1963 it was a mining town. Whereas in the greater part of Spitsbergen mining is relatively safe because the permafrost prevents the formation of methane, the mineshafts at Ny-Ålesund ran under the sea where there is no permafrost. After a series of accidents mining was stopped. Then King's Bay Coal Company, the "owner" of the town, invented the concept of a research town. Research is carried out in subjects like marine biology, atmospheric research

and of course in all kinds of polar research. It has research stations from countries like Germany, the Netherlands, the United Kingdom, Norway, France, Japan, China and India.

People spread out over town, visiting the world's "northernmost" shop, the dog kennel and the small museum. Elsewhere in town we observed nesting Arctic Terns, two Red-throated Divers, Purple Sandpipers and several Barnacle Geese with some goslings. Near the dog kennel we saw how a Glaucous Gull was continually being attacked by Arctic Terns whenever it walked towards the Terns' chicks.

We met at the Amundsen's bust and set off towards the mast from where the dirigible expeditions to the North Pole took place in 1926 and 1928. The 1926 Amundsen-Nobile-Ellsworth expedition reached the North Pole and flew on to Alaska. The 1928 Nobile expedition ended in disaster when icing forced the dirigible to crash off Nordaustlandet. After many weeks of high drama and rescue attempts, some of the crew were rescued by a Russian icebreaker in one of the largest and most drawn-out rescues in polar history.

Afternoon

GPS anchorage position: 79°07,5' N, 11°47,3'E Weather: 7° C; clear sky with only a few small clouds. No wind.

During lunch we cruised toward the 14th of July Glacier in bright sunshine, calm seas and virtually no wind. The scenery was dazzling, as the sea sparkled like diamonds. Soon we arrived at our anchorage, out at the large mouth of a bay, surrounded by lateral glacial moraines with a terminal moraine jutting out into the middle of the bay on the right side. Soon the long hikers set off in the Zodiacs to a shallow beach around the corner from the bay. Their mission was to climb to the top

of an overlook where they could see the 14th of July Glacier from above, and what a sight they found. A three hour hike (total time) got them very high and to the edge of a steep drop-off where they could look down on the other two groups; the leisurely group of walkers and the kayakers.

A few Arctic Skuas were flying about overhead, always on the watch for an intruder into their territories, which now were occupied by one of their hungry chicks.



The 14th of July Glacier, named for Prince Albert the First of Monaco during a French expedition in 1906-07, was towering above the end of the fjord, with a mixture of blue-colored ice (newly exposed to the air) and white-colored ice (already exposed to the open air of summer). We could discern the most active areas of the glacier, where icebergs had been calving off as blocks of ice. Small icebergs and smaller pieces of brash ice, some compact and clear, indicated old ice, squeezed and compressed by the weight as snowfall is added. A glacier can only grow each year, over a long period of time, if there is more snowfall than there is snow melt,.

Brash ice (small pieces of broken up icebergs) filled most of the inner bay, but it was loose enough for us to weave through with the Zodiacs, to land on shore at the left side of the glacier. This leisurely group of hikers ambled along the beach and then up on the lateral moraine for a closer inspection of the glacier. A few Barnacle Geese were on shore grazing on the summer's bounty of vegetation, fattening up for their migration south, and to put on as much fat reserves as possible for the winter. Overhead and very high up on the side of the cliff was a colony of Kittiwakes, noisily calling to one another (and to their chicks) as they circled over the nesting sites and came from feeding out at sea.



A third group also explored the area, but in the kayaks! In warm, brilliant sunlight they paddled their way amongst the small bergy bits of ice. Their images were reflected in the flat, calm bay as they set off in a line of brightly-colored kayaks. A few times the glacier calved off new pieces of ice, but nothing big enough to cause any troublesome waves!

We all arrived back to *Plancius* in time for a wonderful dinner as we cruised to yet another glacier, the Lilliehöökbreen (breen = glacier).

All of us were out on the decks with our cameras or just to soak up the scenery as the low light of the western sky provided amazing colors on the glacial front. We could see a few medial moraines, areas where, as the glacier grew, it had scraped along the sides of mountains, creating dirty ice along the sides, and then coming together to form long, dark lines within the interior of the ice, called medial (or middle) moraines. This is how some icebergs calve off of a glacier as "dirty" pieces of ice. These peculiar looking pieces of ice are full of sediments and rocks, but are still able to float.



19 August, 2010 Mosselbukta, Mushamna and Monaco Glacier

Morning

GPS anchorage position: 79°54.2'N, 15°48.3'E Weather: 4° C; overcast, wind from North force 1 Beaufort.

Today Rinie woke us all up at 7 AM again and we made our way down to a sleepy breakfast. Soon however, the coffee and juices were coursing through or veins and we were wide awake and ready for the day.

Our destination was Mosselbukta (bukta = bay), but the fog was very thick and a landing was not possible. We dropped off the overland hikers, five intrepid passengers and two guides, Florian and Andreas. We would pick them up on the other side of the peninsula, in three days after they



traversed inland, camping for two nights, and then coming out into another bay.

Because the fog persisted, we took advantage of the time available for a few talks during the morning. Brent spoke in the Observation Lounge about "Ice As Habitat", an explanation of how sea ice acts as a substrate, or habitat, providing food for much of the ecosystem of the Arctic (and also in the Antarctic) by providing a place for phytoplankton and diatoms to grow, and thus invertebrates such as krill and copepods to feed, thereby providing the food for the upper trophic (feeding) levels. Everything from whales to seals and seabirds rely on this food source, and



ultimately the Walrus, Polar Bears and the Arctic Foxes need the ice for places to hunt (again habitat), for traveling and for places to rest, especially for the young animals who cannot yet swim as well as their parents.

Piero also spoke (in Italian) more about the Noble Expedition, expanding on the talk he did at the mast when we were all ashore in Ny-Ålesund

Today we also had a treat of seeing a few Fin Whales along the way to Mushamna. These are the second largest animals to ever live on Earth with very long, large, grey bodies and a very tall blow. They were feeding in relatively shallow waters and were quite active. All of us were out on the decks and some of us managed to capture a few photos of these gentle giants.

Just before lunch Andrey told us about the fascinating life of the Ivory Gull, and his studies on the life history of these high Arctic birds. Most of the Ivory Gulls in this area breed in very high latitudes, often on nunataks (inland mountains sticking out of the ice caps) where they stay with the pack ice nearly all the time, blending in with their snow-white plumage.

The morning fog finally began to clear as we made our way to Mushamna in Woodfjorden, where it was possible to make yet another landing.

Afternoon

GPS anchorage position: 79°39.9'N, 14°10.1'E Weather: 6° C; overcast, wind from North force 2 Beaufort.

Once ashore we split into two walks. One set off along the beach which was littered with drift wood. This wood, which is ubiquitous in Spitsbergen, actually comes via Arctic ocean



currents from the huge boreal forests in Russia, eventually making their way up and out of the mighty northerly flowing rivers.



We spotted many species and signs of wildlife here. We saw Brent Geese near the old cabin and a large Arctic Tern colony surrounding a freshwater lake, as well as a big flock of juvenile and nonbreeding Kittiwakes that were bathing in the fresh water. From our experienced team of Naturalists we learned about everything from the history of the old cabins, the rocks piled up around old fox traps, the structures and feather patterns of the bird wings, the polar adaptations of plants and how there is actually a mini-forest along the surface of the these layers of soil amongst the lichen and moss-covered rocks.

Evening

GPS position: 79°31.3'N, 12°24.5'E Weather: 5° C; dense fog, no wind.

After a lovely dinner (as usual!), we made our way into Liefdefjord through a thick fog. The Captain and Bridge officers had to carefully maneuver the ship into the bay at the end of the fjord, but we "could not see our hands in front of our faces" as the saying goes. The Monaco Glacier remained a ghost glacier shrouded in dense fog, and even though we knew there was a glacier just a few hundred meters away. There were thousands of bergy bits in the water and the glacier runoff mixed with the grayish-green color of the seawater. The fog never lifted, so we eventually turned around and headed out of the bay, back out the fjord towards our next adventure.



20 August, 2010 Faksevågen, Palanderbukta & Alkefjellet

Morning

GPS anchorage position: 79°33.0'N, 17°40.9'E Weather: 6° C; sky clear with only a few clouds, wind from North-East force 2 Beaufort.

It was a stellar day for a landing at Faksevågen; a clear, sunny and warm day, and in fact, one of the nicest days of the summer we were told! We divided into two groups; one group went on a longer and more arduous hike, high up on the ridges with Gerard, Michelle, Pete and Piero, offering

amazing views of the vistas of water below and the mountains and glaciers in the distance, and the other group went with Rinie, Andrey and Brent, up a steady slope alongside a small rocky canyon to an overlook of the inland glaciers and their moraines. Many of the summer's flowers were still in bloom and the geology and glaciology were textbook examples of formations of new valleys carved out by huge glacial action. After some Zodiac shuttling here and there at the various pick-up points along the shoreline, we were all back on board.



Afternoon

GPS anchorage position: 79°33.2'N, 20°58.8'E Weather: 4° C; blue sky, sun, wind North-West force 4 Beaufort.



Our afternoon was spent in Palanderbukta, a large bay, usually protected from strong winds and with three massive glaciers pouring down to the sea. We landed on a long gravel beach and set off across what looked like heaps of plowed gravel. We waved our way through the mounds of rocks and after a few hundred meters, arrived at the foot of a large glacial tongue. We soon found out that we could actually walk on the glacier! So off we went, up and up and up until we were out of sight of the landing. There were millions of tiny holes in the ice, caused by the action of the melting of ice where a small stone or piece of dust was embedded inside. There were also small streams of melt water winding their way down over the top of the ice, carving small chutes of water to head down hill to the sea. We could have gone on for miles and miles over hard-packed ice, but we eventually had to head back down for dinner.

The kayakers also had an interesting paddle inside the bay, trying their hardest to stay out of the increasing wind and waves, but everyone did just fine. The views of the tidewater glacier, the Northern Fulmars flying overhead and the Arctic Terns feeding amongst the bergy bits was truly memorable.

Evening

GPS anchorage position: 79°34.5'N, 18°33.9'E

Weather: 3° C; some clouds with many sunny intervals, wind from North force 3 Beaufort.





AND... our day was still not yet over, as after dinner, Rinie gathered us all into the Observation Lounge for one more briefing for the day! Because the sea conditions were so good, we launched all of the boats and most of us went for a "Midnight Cruise" of the towering bird cliffs of Alkefjellet – the famous huge dolerite bird cliffs, part of the Nordaust Svalbard Nature Reserve.

During the briefing for the landing, Rinie encouraged everyone to come, even the non-birders, for a Zodiac cruise right beneath the towering walls.

These stunning layered formations are just south of Cape Fanshawe, which was named after a mate of the *Hecla*, one of Parry's ships in 1827. Geologically the cliffs are 150 to 100 million years old, comprised of clearly demarcated cross sections through a central part of a dolerite intrusion on top of Permocarboniferous sediments, or limestone metamorphosed intrusions "cooked" into marble, which gives it the sharp contrasts of color on the cliffs.

On top of the cliffs were small colonies of Kittiwakes and

we could hear them yelling from all the way down in the Zodiacs Most of the birds on the sides of the cliffs though were Brünnich's Guillemots, which are packed inside by side along the narrow ledges, taking care of a single black and white chick. The estimated population of breeding pairs in this area is 65,000 pairs! This is one of the largest seabird colonies in Spitsbergen and definitely the most impressive. Hundreds of adult birds were on the water and flying through the sky. Mostly males were on the water below their nest sites, calling to their chicks, which were only a few weeks old. The pairs of birds do not build a nest, but rather the female lays a pear-shaped bluish, speckled egg, and both parents incubate the egg and shelter the chick on their feet! How they manage to do this is an amazing thought!

Luckily for us, this is the time of the year when the young birds are jumping off the cliffs down to their parent (usually the waiting male) calling out to them from the water below. The 21 day-old chicks cannot fly yet, but in a leap of faith, they jump and glide down and out from the cliff, and there were several chicks landing all around us. What a way to start your life as a guillemot ! But

the story is not over. After the chick jumps and finds its father by calling out to each other, the pair then set off swimming out to open water in what is called a "swimming migration".

The chick matures for a few more weeks under the care of the father while the mother is off on her own feeding (gaining her strength back) after laying the egg, incubating it some of the time, and taking part in the care of the chick. The father has also done some of the incubating and care, but he did not expend the energy of the egg, so he



takes over until the chick fledges, or sets off on its own. We saw many pairs of birds swimming out to sea and after a long look at these crazy cliffs of tightly packed birds, jumping Guillemot chicks, all the noise of the Kittiwakes calling out, Glaucous Gulls and Arctic Foxes feeding on unfortunate chicks, the low light of the nighttime sky, we headed back to the ship for a good night's sleep. I doubt any of us will ever forget this spectacle of sights and sounds and smells!

21 August, 2010 Murchisonfjorden & Sorgfjorden

Morning

GPS anchorage position: 80°01.7'N, 18°11.7'E Weather: 4° C; fog clearing while being ashore, wind from North-West force 2 Beaufort.

This morning we visited the island of Ringertzøya at the western edge of Murchisonfjorden looking for Walrus. After an early morning scouting party found a few on the beach, we were all soon whisked ashore to view them. We divided into two groups so we would not disturb them as they slumbered. There was a small pond just above the landing site with an Arctic Tern colony on the periphery, and we could even spot a few of the downy, fuzzy-feathered chicks running around begging for food as the nervous and ever-calling parents hovered overhead. With took great care to avoid the terns, staying down at the beach, where two purple sandpipers were dipping into the water and a family of grey phalaropes were furiously spinning around looking for tiny morsels of food.



However it was the big guys piled up on the beach were the main attraction. Walruses have to haul out to molt once a year, all lumped together and quietly settled down (if not asleep!), we could hear and smell them even from offshore. This lumped together behavior is known as being thigmotactic, or "touch loving", where the action of rubbing their bodies together and the warmth of the surrounding neighbors warms the animals and apparently speeds along this transformation and the replacement of their skin in preparation for the long, cold winter months. In total we had 10 walruses over the entire area, including three animals in the water. It must be quite a shock to go from the warmth of the group on shore to the coldness of the freezing sea! Some of these male Walruses were a little pink, a color that varies among the populations, and is also determined by the way the blood flows to the periphery of the animal.

On the other side of the bay we spotted a Polar Bear on shore, but after investigation by the Expedition Team, they determined that this young bear was very cautious and not cooperating with us, walking away from the beach and headed inland, so we did not launch the boats, nor could we go ashore there after lunch.

Afternoon

GPS anchorage position: 79°55,8'N, 16°42.9'E Weather: 7° C; some clouds with many sunny intervals, wind from North force 2 Beaufort.

Instead this afternoon we landed on a long, pebbly beach in Sorgfjord for another hike. The intrepid group (long hikers) headed off with Rinie and Brent at a fairly quick pace, across a gently sloping, raised gravelly beach, slowly gaining in elevation as we went along, only to stop at the edge of a canyon filled with snow and a small stream flowing beneath it. We then carried on along a cliff wall to a loose, rocky scree slope, where most of us scrambled up to the top and hiked over to an amazing overlook. The medium hikers (some us



at a quick pace as well) headed over to the first canyon viewpoint, and we all could not believe our eyes as this big, open expanse seemed unlikely amidst all of this relatively flat gravel.

Evening

Weather: 4° C; some fog banks, wind from North force 3 Beaufort.

Once back on board, we found out that the Hotel Department had prepared an extravagant BBQ which was the "surprise dinner" - a barbecue out on deck, complete with plenty of great food, drinking, some dancing and music. This was a fine way to end an amazing day.

Late Evening

GPS whales position: 80°07.3'N, 15°51.7'E Weather: 3° C; clear sky, very nice light of sunset, wind from North-East force 2 Beaufort.

A surprise wake up call came on during a sound sleep late in the night, as Rinie announced that we had a Blue Whale very close to the ship! Most of us rushed out on the decks to watch these massive leviathans feeding very close to the surface. Another "reminder" call from Rinie twenty minutes later definitely woke us all up to come on deck to watch the spectacle. At least 10 whales were in

the area - a few Blues, including a young calf of only 15 meters! Some Fin Whales and some Minke whales, all feeding on the small schools of fish and swarms of krill which we could even see on the surface. The seabirds – the Black-legged Kittiwakes, Arctic Terns, Glaucous Gulls, and Northern Fulmars were all in on the feeding frenzy as the whales kept circling their prey and lunging for the food, opening their huge mouths to extend the throat grooves, gulp up a mob of fish and krill, and then squeeze out the water, filtering the prey out by using their baleen – the long keratinized fringed plates that hang down from their upper jaws.



22 August, 2010 High Northern Latitudes

Morning

GPS position at 8:00 : 80°32.1'N, 19°27'E Weather: 0° C; many fog banks, wind from West force 2 Beaufort.

This morning was an early one for us as Rinie was again on the P.A. system, this time to announce a Polar Bear that was feeding on a Seal! What great luck we were having, with the late night Whales and early morning Bear! This red-faced, bloodcovered male Polar Bear was on a piece of first year sea ice (thinner, flatter ice that formed during last winter), and had been eating away at the seal carcass for a while. He took little notice of another seal in the water, and only sniffed at our nearby ship, so we could all see him feeding quite clearly (even through the fog!). He was a nice and fat



Bear and he was so full of Seal meat and blubber that he looked like he was ready to burst. He looked around at the water and at the Glaucous Gulls and Ivory Gulls that had moved in for their share of the food, and then he very nimbly fell into the water nose first and showing us his back side and big padded feet. He swam onwards and we left him in peace Some of us went back to our beds, while many of us were too excited to go back to sleep and we stayed up reviewing our digital photos. What a way to start a day!

By 8AM we were above 80° North, and because the fog persisted, we had time this morning to take in some educational lectures. Peter our UN and WWF spokesperson gave a talk on the Atlantic Flyway, a critical migration route for many Arctic and other Northern Hemisphere birds, stressing the point that all wildlife, and especially Arctic Birds that migrate great distances are really global creatures, and are affected by pollution and other human-caused problems and barriers. He suggested ways to help by joining in on environmental causes to help protect these crucial flyways. Piero also spoke (in Italian) in the Dining Room more about the Italian influence on expeditions and history in this area, specifically on the mapping of the remotest area of Nordaustlandet during the rescue operations of the Nobile expeditions in 1928.

The fog continued to shroud the loose pack ice, however, as we headed north by northeast and we were soon into the thick of it. We were already at 80° North, only 600 nautical miles from the North Pole! A few Kittiwakes followed along as we nudged into ice floes, ever hopeful that we might turn over a chunk of pack ice and expose an Arctic Cod so they could swoop down and catch it. As always, Northern Fulmars accompanied us, flapping and gliding along using the gentle and subtle updraft of the ship to gain just a little lift in altitude so they could soar above the ice floes, and then, if they spotted some food, they could easily float down to seize it.

Arctic Terns were here too, calling away as usual, and we saw a few bearded seals on the ice floes, as well as a few bearded and ringed seals in the water, popping their heads out for a look at the mysterious ship approaching their icy realm. All hands were on deck as we weaved in and out of



narrow ribbons of ice, sometimes hitting one with a jolt surprised by the sound each time a bump or a crunching sound was heard. We went out on the forecastle (the bow) to see and hear this new sound, while others scanned the horizon for wildlife.

Just before lunch Gerard spotted two walrus on a nice ice floe. The sun was beaming through for some excellent photos, and all of us (including the ship's crew!) had very good views of these tusked beasts. We also saw a few bearded seals on ice floes, as well as some ringed seals in the water, and

even a small group of harp seals which is quite uncommon because they are such shy animals!

Afternoon

GPS position at 16:00 : 80°36.8'N, 21°47.6'E Weather: 2° C; fog banks with many sunny intervals, wind from West force 3 Beaufort.

After an amazing morning full of new adventures, we continued to scan and scan the pack ice. In between thick patches of eerie fog, colorful clouds reflecting night-lights, sunshine, cold, open water, and the enigmatic pack ice, we continued to search for the elusive ghost bear. Finally, late in the evening the Captain put the ship into the pack ice for the night, The engines were shut down, and our quiet and peaceful ship drifted along with the ice and the birds, the wind and the currents – a pelagic ship, free to roam among the icescape in the evening light. We drifted off to sleep dreaming of ice bears as sunbeams danced in our dreams.



23 August, 2010 Alpiniøya

Morning

GPS morning position: 80°21.8'N, 24°45'E Weather: 0° C; clear sky, wind from North-West force 2 Beaufort.

This morning we awoke to calm seas, sunny, calm conditions, and an icecap that stretched on for miles and miles over the horizon. We were just north of the southern (and larger) part of the Nordaust-Svalbard Nature Reserve. Ice was everywhere, and in some places it was still quite tightly packed together, although as the tide went slack and the currents slowed a little, it loosened up a bit.

So it was time for a Zodiac cruise in the ice! We launched all the boats (as usual) for a cruise around the small island of Alpiniøya. Once in the water, we could immediately see that the ice floes had recently been smashed into one another, creating lips and blocks of ice on the edges of each floe. Some floes even had other floes on top of them, an example of how ice can get very thick and complicated, melting and meshing together, to form a convoluted and varied icescape. Some sea ice was quite white and therefore not so old, and



some of it was thicker and more compact, reflecting a turquoise blue color under the water.



We made our way around the island, each Zodiac choosing it's own path, and we all eventually ended up along the coast, where a young female Polar Bear (she was quite fat and looked a little like a male in a few respects, but she was definitely a female) was feeding on a small seal, most likely a ringed seal. We guessed that the seal was killed on the sea ice and dragged ashore.

The sunlight was magnificent; low and strong, providing brilliant photographs, especially of the bloody face of the usually clean Polar Bear. On the rocks to the south, a mother Polar Bear and her cub were patiently waiting to come and feed on the leftovers of the seal. But alas, the first female ate everything she could, and she was almost too full to go on. After she took a little rest, she was

back at it, eating all the blubber, and then began working on the internal organs. It was quite gruesome to watch, but a perfectly natural thing in the predator-prey relationships of life.

Meanwhile the Black Feathers group led by Piero made a landing on Alpiniøya, a small island discovered by the Italians in 1928, bringing members of the group back there for the first time since the islands discovery.





Most of also saw a few Walruses in the water and on the ice floes. There were about 50-60 individuals in the entire area. We could all hear the booming sounds they were making – many of them using the bay and rocks as an amphitheater.

After watching the Walrus some of us went back to see the mother and cub Polar Bear. Once again they were sneaking up to the kill site, slinking along the rocky coast with their heads down, but their noses and eyes wide open. Once the

mother caught wind of the other bear, she retreated very quickly. Her cub mimicked every move of the mother, and was always fun to watch. It was wonderful to watch such behavior, especially of a young bear in its second summer, as it becomes a little more independent with each passing day

Afternoon

GPS position: 80°21.8'N, 24°45'E Weather: 3° C; fog coming quickly, wind from North-West force 2 Beaufort.

After a quick lunch (that was delayed not once, but twice!), we were back out in the Zodiacs and off to see the Bears and Walruses again. But not for long. Seemingly out of nowhere, the fog came rolling in, enveloping the ship and the Zodiacs. But here is where the element of an expedition kicks in! Not only was visibility reduced by the fog, but the increasing wind continued to drive the ice floes closer and closer together. Now the ice was so tightly packed in the bay that it was virtually impassible, so we all had to come back on board.

We took advantage of our time on board to hear Rinie's Polar Bear presentation (Part 1). Rinie gave an animated introduction to these animals and their polar habits. Rinie has written several books on Arctic animals, but his true passion is the magnificent Polar Bear. His photographs were stunning, and their behaviors he described were captivating. Thank you Rinie!

In the late evening the fog was still coming and going as we all had lively conversations at dinner and at the bar. Our adventures today were unforgettable, awe-inspiring and we continued on into the night, forever scanning for more wildlife as we headed off around the eastern side of Nordaustlandet.

24 August, 2010 Isispynten

Morning

GPS morning position: 80°13.6'N, 28°28'E Weather: -2° C; overcast, wind from North force 3 to 5 Beaufort.

It was our coldest morning yet, with freezing temperatures (-2°C), a little fog now and again, and even some snow squalls! Pieces of flat pack ice (seasonal ice floes) were still around, and a steady, fresh breeze kept it moving around quite a lot, re-arranging the patterns and changing the icescape every minute. A few of our old friends, the Northern Fulmars, were flapping about, and an occasional iceberg was spotted. A bright, glowing white light was off in the distance, a sure sign that there was a huge body of ice nearby. The wind kept getting a little stronger during the morning, building the swell and causing the ship to move around a little, but because *Plancius* handles the seas so well it was hardly noticeable.

Given the windy weather conditions we had time for a few more presentations. We heard about the amazingly adaptive polar plants from Michelle who showed us some fabulous representative photos of the majority of the plant and flower species in the region. Michelle is a polar plant expert and a true Svalbard local. She and Andreas live and work part of the year here in Spitsbergen, running the campsite just outside of Lonyearbyen. Rinie also spoke, following up with Part 2 of his Polar Bear talk where he spoke more about the denning behavior, parenthood and the trials of raising cubs. A female Polar Bear's life is hard because once sexually mature, she is almost always pregnant or with cubs.

Afternoon

GPS position: 79°41.5'N, 26°43.6'E Weather: 4° C; fog disappearing, wind from North-East force 3 Beaufort.

We sailed along in windy seas with some fog and low clouds eventually finding some calmer waters off the coast of Austfonna near a place called Isispynten. A former spit of low land (Isispynten) should probably now be called Isispyntøya (remember that the "øya" means "island" in Norwegian). Again we launched all ten Zodiacs, setting off for an undulating ride over a beautiful, turquoise-colored sea. Much of the island was gravel, ground up and deposited in heaps of rocks. The island is technically a terminal moraine, plowed and pushed down and over the scoured parent rocks (conglomerate gneiss intruded by quartz). In places where this happens just under the ice, land is exposed then left behind as the glacier retreats, interestingly causing the land masses to rebound, a process described as 'isostatic rebounding'. Land can rise up after being relieved of the weight of the ice, but then as more and more ice melts all over the world, the sea levels will rise, so it is all in constant change.

There were many shallow sandy bays here, teeming with algae, ctenophores (small medusas of jelly), salps and comb jellies, plus our old friends the small black winged pterapods – the same species we new from yesterday. These invertebrates live and feed here in the shallows.

During our excursion we couldn't get too close to the edge of Austfonna (the massive ice cliff), for obvious reasons, but there was plenty to look at. There were a few "dirty" yet colorful icebergs around; some of them were grounded in the shallow waters while others joined in line with the shifting currents. We could easily discern the various layers within the icebergs. Some chunks had recently rolled over because the horizontal striations turned in all sorts of directions. Each piece of

ice no matter how big or small is under the same forces of nature. They are always changing shapes and in summer are usually melting, creating a menagerie of shapes, sizes, colours and angles.

All icebergs eventually melt, although some can roam the oceans for years. Some drift towards warmer waters via ocean currents often subject to the force of the wind. Others face a more icy environment drifting northwards, often re-freezing (in the winter) as the temperatures plummet



and entomb the bergs in the fast ice. Fast ice is a term used for ice "held fast" to the land and it is usually reserved for ice left in the bays of islands, or anchored to the great expanses of the high polar pack. We could also see where giant icebergs had collided with smaller ones, dumping their ice and rocks or mud on each other, it was a fantastic site to witness. Each iceberg has a story to tell, just as we all do. Ancient volcanic eruptions, dust storms, snowstorms and melt-water ponds are frozen in time and compressed into history. Herein lies a recording of the environmental conditions of the time.

Here too were many birds. There was a flock of Kittiwakes patiently waiting for a fish to be stirred up by waves, perhaps by us or perhaps by the calving of the icebergs by the omnipresent and looming glacier. Arctic Terns, some of them already in their non-breeding plumage, flew above our heads and over the island, along with some juvenile (young) terns which were probably looking at future prospects for nesting sites. Eider Duck families, including a late clutch of three ducklings were floating and flying about, most of the other young chicks nearly fledged. Eider Ducks, as with all species in the Arctic need to molt their feathers, shedding the older and worn out ones for new stronger feathers, ready to migrate south for the winter.



However, the best show of all was the Walrus experience of a lifetime. There was a mother and very small calf in one of the calm, protected bays. The calf was so curious that it kept approaching the Zodiacs, spending time at each one, investigating the engines and propellers (they were in neutral of course). The calf simply could not stop playing with the water spout flowing out of the engines, and it looked like it was having a fine time taking a shower! The mother was ever

watchful but she let the calf play with all of us. The mother and calf were kissing at times as well, a mutual display of bonding. The photographs were incredible!

During the evening, Plancius sailed along Austfonna as the evening light began to descend over the ice dome. Some of us were lucky enough to see pieces of ice fall. The sounds were impressively loud as new icebergs were just born, set free to roam the sea. Not to be out done, the dark bluish-grey clouds cast a kaleidoscope of colors; a back-drop for an oily-looking sea (although there is no



oil at all here!).

A menagerie of striated patterns merged into a stunning scene of brightly-colored ice bergs, contrasting the clouds and sea in such a way as to look like an impressionistic painting. We all got some very nice photographs with this banded bright blue ice against a steel-grey sky and the ice dome as our backdrop. A setting sun over a gigantic glacier is not an every day occurrence! We saw the last sunset of this summer as we were sailing southward, the autumn will come soon to

We saw the last sunset of this summer as we were sailing southward, the autumn will come soon to the Arctic.



25 August, 2010 Freemannsundet / Edgeøya

Morning

GPS morning position: 78°13.8'N, 21°22.6'E Weather: +2°C; overcast, wind direction variable force 2 Beaufort or less.

This morning was another fine day of shifting clouds and multicolored landscapes. We are no longer in the reaches of the ice, but now in the realm of patterned sedimentary rocks and leftover glaciers. We approached our anchorage at Sundneset (our Plan A landing) however, there was a Polar Bear coming toward the landing beach. It is ironic that we want to see bears on our terms (according to our programme) but they do sometimes occur on land where we had intended to go ashore and of course can be quite dangerous. So this quickly changed our plans for hiking at this landing spot. Then, as we waited to see what this bear might do, the Expedition Team and drivers scouted for another landing site. Once again plan A quickly turned into plan B, but such is the nature of expedition cruising...



Rinie then made the decision to drop off a group of 30 for a long, long hike. The plan was for them to go 19 kilometers over to Kapp Lee, so they set off in the Zodiacs for a nice smooth trip ashore near Skarpryttaren on Barentsøya. Two kayakers also went for a paddle assisted by the strong current and with Pete as their guide they cut through the water and along the shores of scenic slopes and steep canyons. They reported seeing a few flocks of Pink-footed and Barnacle Geese flying by up over the mountains. These beautiful birds are still here fattening up for the flight south and to make it through the winter.

Late morning

GPS position: 78°05.6'N, 20°45.7'E Weather: +4° C; clear sky with a few clouds, wind from North force 5 Beaufort.

The weather deteriorated (the wind came up suddenly), unfortunately only a few of us got to the beach at Kapp Lee to see a few of the Walruses. Even from the ship we had magnificent views of



some dramatic peaks, the highest being 355 meters high. The landing was tricky as the waves were building up and rolling in on the shallow, sandy beach. The old whale remains and walrus bones were scattered on the shore, providing nutrients to a host of plants, but they were a grim reminder of the slaughters of the past.

The geology at Kapp Lee is quite unique, and there is a nice example of raised sedimentary rock compacted into a thicker, dense layer. There is clearly a point of weakness in this layer, and there is a place where magma from deep below the surface was injected up through this weak spot and lava settled in above the sedimentary rocks, which is now a layer of basalt (an old lava flow).



Sunshine provided good light for the photographers still on board the ship, as we waited for the long hikers to show up. We then received a call from the hikers that they were ahead of us, along the shoreline and ready to be picked up. They told us they were ready for a hot meal and wanted to warm up a bit and naturally Alan and the entire Hotel Department kept some hot lunch available for them once they returned. We heard tales of their travels. They had hiked in and out of the clouds, with spectacular views and interesting geology as they hiked and hiked. Toward the end they had to follow the beach for several kilometers to avoid all of the hills and valleys and even then, they took a long time to get back. Eventually we brought them all back to the ship safe and sound.

Once we had all the hikers and the kayakers and the staff and the Zodiacs back on board, we headed southwest around the south cap (Sørkapp) of Spitsbergen for our next destination. Nice evening light filtered through the clouds all night long. A few Fin Whales were spotted on the surface of an increasingly calm sea. Low patterns of land lay beneath the clouds, creating what looked like mirages, but we knew they were really land! The sun actually went below the horizon for the first time this voyage. Summer is over and we are nearly finished with our journey, but we have one more full day tomorrow!

26 August, 2010 Hornsund

Morning

GPS anchorage position: 77°02.6'N, 16°00.5'E Weather: +5°C; a bit of clouds evaporating, becoming completely sunny, wind direction variable force 1 Beaufort or less.

Early in the morning we were off the southwest coast of Spitsbergen headed for the large bay of water known as Hornsund, home to the third highest peak of Spitsbergen (Hornsundtinden at 1431 meters). This area is part of the South Spitsbergen National Park and we could see why with all the beauty around us! The name Hornsund comes from one of two stories. It is either named for the tall pointed peaks of the bay, or for a Reindeer antler which was mistakenly called a 'horn' when a man named Jonas Poole (a sailor) brought it aboard a ship way back in 1610. You can choose whichever story you like, but one thing we can all agree on is that it is a stunning place with amazing scenery.



Sunny weather broke through the clouds and occasional fog, a nice welcoming to this beautiful land and icecap. We dropped all Zodiacs once again and toured around the bays and fjords in search of wildlife. Eight large glaciers pour into Hornsund and have retreated a huge distance in recent years so there are a lot of blank spaces on the nautical charts where soundings do not exist. One of the benefits of a lot of tidewater glaciers, is that there are lots of icebergs around, many of them grounded, and some of them quite blue. They came in all shapes and sizes, some recently turned over and some very muddy from when they were part of lateral glacial moraines.

We all split up to better our chances of spotting wildlife, so there were Zodiacs buzzing all around. We had perfect weather with filtered light and some bright sunshine as we cruised around the bays

and glaciers. Some of the names (remember that "breen" means "glacier") : Storbreen, Hornbreen, Svalisbreen, Mendeléjevbreen, Chomjakovbreen, Samarinbreen, Paierlbreen, Kvalfangarbreen and Mühlbacherbreen. Each of these bays was simply stunning, and each one had jagged, towering peaks along the glaciated sides.

Ten kayakers had also taken to the icy waters with the ships Doctor joining the group for his 1st ever journey in a sea kayak, what a fabulous day he chose. An



incredible journey through the brash ice to the front of the glacier and some photographs of a lifetime. At the end of our fourth and final kayak journey of the expedition Five hardy folk took to the icy Polar waters in swimsuits for a final act of connection with this most wonderful and pristine environment.



For wildlife, the bays were alive with birds. Without the wind to provide loft, the Northern Fulmars were paddling along the mirrored surface, Pink-footed Geese and Black Guillemots were in smaller numbers. Arctic Terns were feeding and the Glaucous Gulls (young of the year) were on nearly every spire of ice. They were calling out for their parents, but the summer is over and they must go out and fend for themselves. There were a few Ringed Seals and Bearded Seals in the water, some curious and some quite shy.

But the scenery really stole the show as we made our way back to the ship, weaving through the icebergs and the brash ice. *Plancius* was waiting for us in the bright sunshine, and we came aboard for lunch turning our cards from red to green for one last time. Words cannot begin to describe the beauty we had today, and I think it is fitting to end on that note. We had an indescribable journey, but I hope I have conveyed some of its essence to you through this log. Thank you for coming on our sojourn, and thank you for reading along.



27 August, 2010 Longyearbyen, Spitsbergen

GPS position at the pier: 78°13'N, 15°36'E

Arrival at Longyearbyen during the night

Text: Brent. Photos: Michelle, Gérard.

The whole *Plancius* crew will thank you for sharing this journey with us, and we hope one day to travel with you again.



The *Plancius* Expedition Team.

Trip statistics:

Total distance traveled : 1,273.8 nautical miles (2359 km) Total fuel consumption : 39.8 tons Total water consuption : 190 cubic meters Total landings plus Zodiac cruises: 12 Total number of photographs taken : a rough estimate is probably the same as the number of Brünnich's Guillemots at Alkefjellet

