

# Svalbard Odyssey





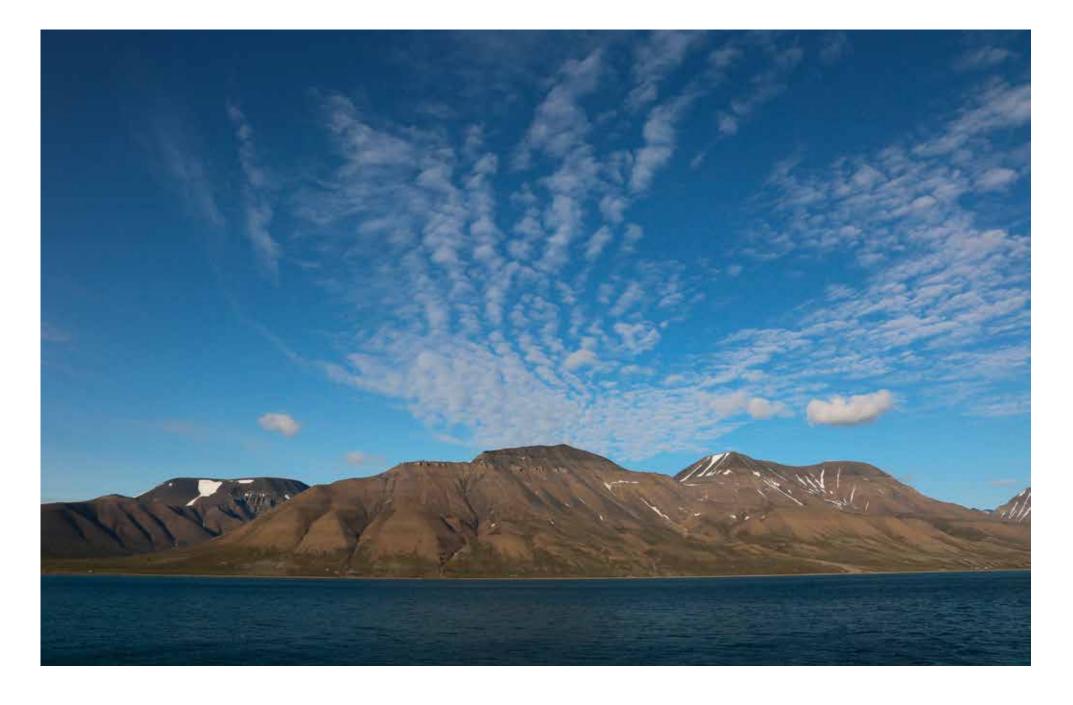
### **About Us**

Aurora Expeditions embodies the spirit of adventure, travelling to some of the most wild and remote places on our planet. With over 27 years' experience, our small group voyages allow for a truly intimate experience with nature.

Our expeditions push the boundaries with flexible and innovative itineraries, exciting wildlife experiences and fascinating lectures. You'll share your adventure with a group of like-minded souls in a relaxed, casual atmosphere while making the most of every opportunity for

adventure and discovery. Our highly experienced expedition team of naturalists, historians and destination specialists are passionate and knowledgeable – they are the secret to a fulfilling and successful voyage.

Whilst we are dedicated to providing a 'trip of a lifetime', we are also deeply committed to education and preservation of the environment. Our aim is to travel respectfully, creating lifelong ambassadors for the protection of our destinations.



#### Day 1 | Thursday, 25 July 2019

#### Longyearbyen

Position:22:50 hoursCourse:27°Wind:near calmAir Temp:10° CLatitude:78° 10′ NSpeed:3.6 knotsBarometer:1022.6hPa & steadySea Temp:7° C

Longitude: 13° 14′ E

Clear blue sky and a calm fjord greeted those of us who flew in to Longyearbyen today. The surround of mountains had lost all but remnants of snow, yet at 78° North latitude we had well and truly arrived in the high Arctic.

Those who arrived earlier, with a day up their sleeve, may have spotted Svalbard reindeer grazing on the slopes, or snow buntings fossicking among clusters of Arctic cottongrass, while the fjord bustled with kittiwakes and small flocks of little auks.

The afternoon offered time to gain impressions of this unique frontier town—residents with a rifle slung over a shoulder, the polar museum with its impressive displays, the sledging dogs, and other highlights of a town first established for its rich seams of coal, the infrastructure of which can be seen across the slopes surrounding town. Even back in the early 1900s European tourist vessels brought well-to-do tourists to this isolated coastline to experience adventure in the Arctic. Now, Longyearbyen houses a university and its main industry has transitioned from mining into ecotourism.

By 1700 we arrived at the busy pier, ready to begin our Arctic adventure. Here, Robyn, Gary and Justine ticked us off lists and snapped a photo of two, then up the gangway we clambered, where the friendly Aurora team guided us to our cabins—not that many needed it, seeing as a whopping 24 of our 54 passengers have travelled with Aurora Expeditions before.

Expedition Leader Gary brought us together in a crowded bar to talk about our voyage, our sturdy ship, to introduce the Aurora team, and to address all important fundamentals of safety at sea.

The sound of seven-short-one-long from the ship's horn was our cue to grab bulky orange lifejackets and gather at the muster stations. We soon discovered the ambience and intimacy of a polar class lifeboat.

Soon after 1900 we upped anchor and turned our nose out of Adventfjorden, passing Longyearbyen's renowned 'Doomsday' Seed Vault accessed via a 120 metre-long tunnel built into the mountain side where the temperature remains a constant -18°Celsius.

After a delicious first dinner together prepared by chefs Al and Bert, followed by a gumboot exchange, the weary travellers prepared to bed down for the night when the call came for whales, blue whales, the largest creature ever to have lived on earth. Before us was a mother and calf, the spray from their blows extending high into the sky and hanging there for many seconds. Squadrons of guillemots skimmed the oily calm surface while we on *Polar Pioneer* moved from one side of the ship to the other, scanning the surrounds, and trying to guess where the whales would surface next. At times they appeared just metres from our ship. What a sight! What a tremendous display of nature for our first evening.















Day 2 | Friday, 26 July 2019

#### 14 Julibukta, Lilliehöökbreen

Position:21:50 hoursCourse:339°Latitude:79° 17′ NSpeed:10.6 knots

Longitude: 10° 41′ E

After breakfast Expedition Leader Gary and Naturalist Roger conducted safety and environmental briefings, then it was down the gangway and into Zodiacs for our first outing at 14 July Bay.

We divided into two groups—the larger heading for a stroll along the shoreline toward the glacier, the smaller group enjoying a tundra walk, where they encountered reindeer grazing on the lush tundra, and a small enclave of hanging garden where mountain sorrell, chickweed and moss campion nestled among an array of wildflowers. Above in the higher reaches, rocky cliffs were crammed with kittiwake nests, while patrolling below, an opportunistic fox trotted across the slopes with a dearly departed kittiwake held in its jaws.

The glacier walkers also had wildlife encounters with barnacle geese cruising in the shallows, kittiwakes bathing in a beach pool, flybys by eider geese, and a pair of Arctic skuas giving us the stink eye. Ulyana, on the other hand, sparkled with enticing geology, where we learned that the schist that makes up the surrounding slopes are billions of years old, making them amongst earth's oldest rocks.

Our return to the ship was highlighted with a close encounter with a bearded seal, lounging on an ice floe. This gentlemanly looking bod' with his impressive set of whiskers is the largest species of northern phocid seals, with the males weighing in at around 250–300 kilograms, while the females, larger, are in excess of 400 kilograms. Polar bears are their main predators.

Back aboard, chefs Al and Bert had ready a hearty pasta and meatballs lunch, with a little down time afterward to launch into a power nap, or review our photos.

Wind:calmAir Temp:10° CBarometer:1023.9 hPa & steadySea Temp:8° C

It was back out into it for a still, sunny afternoon of glacier cruising at Lilliehöökbreen. The temperature was so mild that some were seen in short sleeves. We turned off our engines to the sounds of the fjord, hearing its continual snap, crackle and pop as millions of ancient air bubbles burst from millions of pieces of ancient ice. At the glacier we were treated to a several thunderous calvings. No one missed out, with one very large calving across the far side of the bay that resounded for tens of seconds and had driver Sasha and Ulyana's passengers on high alert as they encountered the ensuing waves.

Each new calving exposed the brilliant blue ice beneath. We could see striations showing the annual precipitation of snow which, over time, is slowly compressed by the weight of subsequent falls of snow, until it transforms into ice. Simply motoring through swathes of brash ice—the aftermath of a glacial calving—was an exciting boating experience.

Back onboard, Captain's Welcome Drinks offered an opportunity to meet our good Captain Alexandr "Sasha" Evgenov, and to enjoy Justine's delicious punch over a leisurely chat with shipmates.

























#### Ytre Norskøya, Hamiltonbukta, Moffen Island

Position:21:30 hoursCourse:81.5°Wind Speed:8 knotsBarometer:1034.6 hPa & rising

 Latitude:
 79°58′N
 Speed:
 12.2 knots
 Wind Direction:
 WNW
 Air Temp:
 12° C

 Longitude:
 13° 46′E
 Sea Temp:
 6° C

Ashore we went at Ytre Norskøya, a small island located on the north west corner of the Svalbard Archipelago. The island offers something for every interest. The vegetation is distinct with its covering of golden moss tundra, and delicate outcrops of purple saxifrage and tufted saxifrage. For the mountain goats, Gary and Uly led a walk to the high points, where puffins nest and where, they hoped, they would be treated to panoramic vistas. Roger and Chris led a hike along the island's interesting lower reaches, stopping to view flora and birds, and a very old grave exposed on the tundra. Robyn and Justine led a walk to a lookout to view the remains of the 16th century Dutch whaling station which thrived here when the population of bowhead whales was in abundance. Now the whaling station shows the remains of blubber stoves along the shoreline, and includes rocky mounds from 165 whalers' gravesites.

Alas, a sea fog rolled in, and what had been a balmy morning grew significantly chillier, with visibility reduced. Robyn, Justine and Ilya's groups ventured off in Zodiacs for a circumnavigation of the island, and while the fog prevented good views of the shoreline, they enjoyed dozens of puffins on the water. Onshore, the fog lifted enough for Gary and Uly's group to scale the mountainside and spot several puffins and flybys.

An hour after the fog rolled in, out it rolled again, returning us to perfect conditions. Back onboard, Gary gave us a little siesta time before our afternoon outing at Hamiltonbukta. The

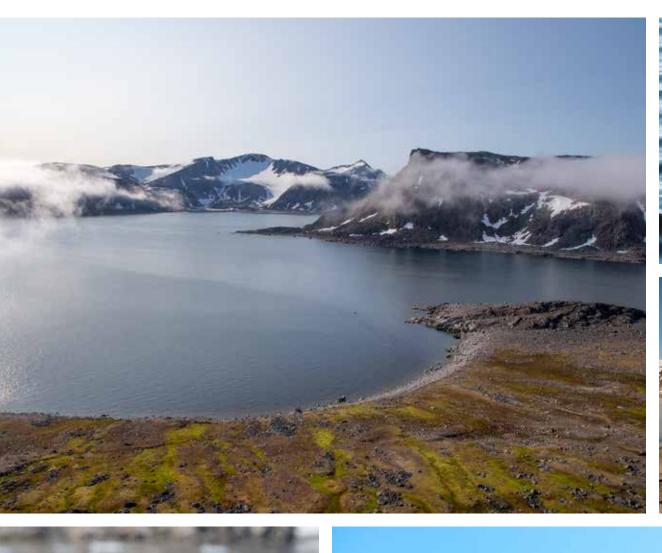
sun shone down from a piercing blue sky, the ocean was tranquil, and we spent the most glorious afternoon in Zodiacs. Thousands of squawking guillemots and kittiwakes nesting on cliffs were trumped by viewings of an Arctic fox. This industrious little fellow performed foraging duties, scampering across tundra, exploring rock crevices, trotting down to the waterline to investigate, and nimbly scaling an impossibly high ravine for hopes of a tasty find fallen from the bird cliffs. With its chocolate brown summer coat, this fox is a blue morph of the white variety. If we were here in winter we would see the blue sporting a lush silver coat with darker tinges.

Finally we dragged ourselves away and continued on to a delightful 'beach', or at least a sand spit, where we relaxed and watched several calvings from the nearby glacier. Our Zodiacs then explored the wider bay, enjoying close-up views of an ice slope, and an array of birdlife. Out at the skerries was a pair of Arctic skuas, families of eiders and a trio of purple sandpipers. What a diverse locale!

Al and Bert served us another fantastic dinner, after which our good ship approached Moffen Island at 80° North. Here at this special nature reserve we observed a haul-out of walrus along the beachfront. Our late evening encounter was the perfect way to square away a big, bold, glorious Arctic day!

















#### Monaco Glacier, Texas Bar

Position: 20:45 hours Course: 30° Wind Speed: 4 knots Barometer: 1034.6 hPa & steady

Latitude:79°47′NSpeed:8.4 knotsWind Direction:NNEAir Temp:11° CLongitude:14° 07′ESea Temp:3° C

Just in case talk of yet more superb weather grows dull, we won't even mention the cloudless, sunny, warm, windless day. Paradise! And what better way to celebrate paradise than with a Zodiac cruise along a heavenly glacier: Monacobreen. The surface of the glacier comprises a field of jagged turrets and we learned from Uly that wind plays a part in eroding the ice into these dramatic shapes. Just as we were gaining views of the glacier, the call came from Justine that shipmate Karen had spotted a polar bear up on an ice floe. You bloody beauty! Six Zodiacs hot-tailed it across the fjord where we could see from a distance this magnificent creature stand, sit, then finally take to the water. Not long after, Third Mate Sasha informed us that he had seen a bear (probably a second bear) abeam of the ship, swimming in open water. Once more we gathered in the area and kept our distance so as not to perturb or stress the bear, who swam at a fast clip through loose pack ice. We got to see firsthand that a polar bear is a mighty powerful swimmer. Polar bears have been known to swim distances of several hundred kilometres.

Gary finally made the call to move on and we returned to our original plan of experiencing this marvelous glacier, named for the King of Monaco who, at the start of the 20th century, was a financial sponsor for a scientific expedition which undertook mapping of the region. Not to be outdone, the mapmaker on that expedition named the three smaller adjacent glaciers in honour of his siblings Emma, Erik and Hanna.

A young bearded seal introduced itself to the Zodiacs. The expedition team remarked on how exceptionally friendly and curious this seal was, as most bearded seals are quite wary of human interaction.

At the glacier front, thousands of kittiwakes took advantage of a river flowing out from beneath the ice, creating an upwelling of current that draws fish and small crustaceans close to the surface. The kittiwakes' fishing efforts were interrupted by an almighty calving which added to the excitement of the morning.

Our stellar chefs Al and Bert produced a delectable curry lunch, which fueled us for an afternoon outing at Texas Bar. At this quaint trapper's hut, built in the late 1920s and since renovated, we headed off in different directions. Roger, Robyn and Sophie led a walk to the top of the terminal moraine for speccy views of Hannabreen and Lompenfjord. Chris and Uly led a local hike with their group, while Gary and Co. kicked back to soak up million-dollar views from the hut.

Before dinner we gathered with Roger in the bar to reminisce over our last action-packed days. Then it was off to the dining rooms for more tasty fare. A bonzer day.

#### Svalbard weigh-ins:

Arctic fox:	3–4 kgs
Ringed seals:	65–95 kgs
Harp seals:	110-130 kgs
Bearded seals:	220-360 kgs

Polar bear

Females: 150–300 kgs Males: 350–700 kgs

Svalbard reindeer

Females: 53–70 kgs Males: 65–90 kgs

Walrus

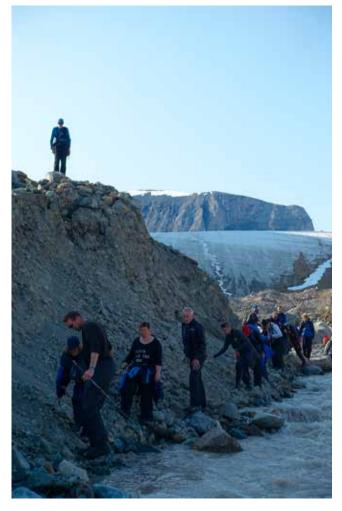
Females: 700 kgs
Males 2,000 kg

































Day 5 | Monday, 29 July 2019

#### Svalbard's pack ice near Sjuøyane

Position:21:30 hoursCourse:202°Wind:calmAir Temp:7°CLatitude:80°32′NSpeed:7.3 knotsBarometer:1027.9 hPa & fallingSea Temp:0°C

Longitude: 19° 30′ E

We woke to the crunch of ice against our hull. Overnight we had steamed nor'-nor'east to above 80° North latitude, and into the pack ice. Surrounding us awaited a crystalline wonderland.

We were on the lookout for bears and with at least a dozen scouts on the bridge and bow peering through binoculars, if there was a bear out there, we had a strong chance of finding it. We spotted several enticing tracks across the ice, and then the call came from Geoff and Chris of a bear in the distance! We changed course and headed over to the general vicinity but, try as we might to find it, that bear proved elusive.

We took the opportunity to listen to Uly's fascinating talk on rocks and ice, with some provocative questions thrown in on climate change.

Toward the finish of lunch the call came that another bear had been spotted, this time by Second Officer Gena. We were treated to wonderful views as the bear entered the water from one floe and swam a distance across to another. As it ambled across the ice it was apparent that the animal was sporting an injury, moving with a pronounced limp. The impact of such a disability for the Arctic's top predator is potentially catastrophic—we could only hope that it was a sprain that would heal with time.

Throughout the day our good ship was located off Sjuøyane, the Seven Islands, in the top northeast of the archipelago, north of the large island of Nordaustlandet. The seven islands were named by a British expedition in the late 1700s, names including Nelsonøya in honour of Viscount Horatio Nelson who served as midshipman on one of the expedition vessels.

We continued to motor through this otherworldly surround, a gorgeous vista of pack ice whichever way we looked, with ice mirages on the horizon, and the backdrop of the Seven Islands. Being so far north, it seemed too good an opportunity not to do something a little crazy, so after finding a patch of clear water, we lowered the gangway and nine of our expeditioners proceeded to throw themselves off a perfectly good ship into frigid water. Plunge or no plunge, it proved to be a fine spectator sport!

Naturalist Chris was next on the agenda with a comprehensive presentation on polar bears. We learned about the life cycle of these remarkable creatures who, other than to breed and raise their cubs, live solitary lives, roaming across the ice.

By early evening we had sightings of two new bears, along with a group of female walrus, comprising two adults, three juveniles each around three years old, and one small calf recently born, all hauled out together on the ice. The calves are born weighing about 85 kgs and usually dark brown in colour. The Svalbard population of walrus is thought to be 2,000–3,000, with numbers on the increase after being near decimated through hunting in earlier times.

We enjoyed relaxed views of our two new polar bears, one padding across the ice; the other, fatter and larger, busily snoozing, possibly having had a successful hunting spree.

By evening it was time to farewell this far-flung corner of Svalbard to make our way south toward new adventures. What a tremendous and memorable day exploring the pack ice.





























#### Wahlenburgfjorden, Alkefjellet

**Position:** 22:15 hours Location: at anchor Wind Speed: 8 knots Barometer: 1023.9 hPa & falling

Latitude: $79^{\circ}34'N$ Wind Direction:NNWAir Temp: $9^{\circ}$  CLongitude: $18^{\circ}39'E$ Sea Temp: $4^{\circ}$  C

Comfortably versed with the pattern of the day, we layered up and headed out at Wahlenburgfjorden on the west side of Nordaustlandet to experience the polar desert, an area sparse in vegetation compared to other Svalbard sites. We made our way by Zodiac into a lagoon where reindeer grazed on the rocky slopes. On what were they feeding? Along the shoreline, eider families shepherded young ducklings. Further along, small flocks of pink-footed geese took to the wing, or waddled ashore to keep their distance. Three species of goose nest in Svalbard—barnacle, brent, and pink footed being the largest. At the far end of the lagoon we counted around seven reindeer, including calfs, grazing upon an area of moss and vegetation fed by a meltwater stream. Reindeer use the Arctic's short summer season to fatten up, the males increasing in weight from ~65 kgs in Spring to ~90 kgs in Autumn, females from ~53 kgs to 70 kgs. Males develop heavy antlers during April–July and shed their velvet during Aug–Sept. Females usually retain smaller antlers for a whole year.

It seemed remarkable that this barren landscape could sustain so much life, but when we went ashore in the next bay, and turned our focus to the ground beneath our feet, there was no shortage of tundra. Two different saxifrage plants were in abundance—the distinctive spider plant, and tufted saxifrage, along with minuscule Svalbard poppies, mouse ear chickweed, mosses, grasses and varieties of lichen.

Our hikers headed up to the hill where huts, first built in the late 1920s for an Oxford University science expedition, have been rebuilt and are used today for research.

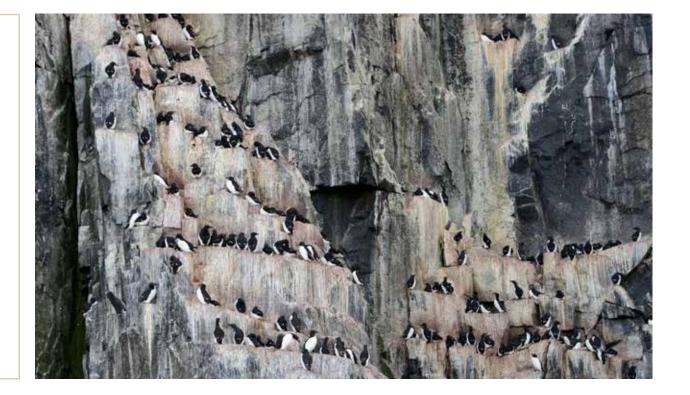
Back on board we sat down to a tasty lunch, then it was time for some retail therapy at Justine's ship shop. We took advantage of the three-hour-transit to our afternoon location by having Roger give us a lively presentation on Arctic birds, reindeer and fox. We learned about the aerodynamics of bird wings, and why birds such as puffins and guillemots with short, deep 'low aspect' wings need to flap to fly, while birds such as fulmar and albatross with longer, narrow 'high aspect' wings are gliders, gaining lift from their wings.

At Alkefjellet we took a sensational afternoon cruise along cliffs comprised of limestone with dolomite intrusions, the cliffs eroded into craggy turrets. Rock ledges house tens of thousands of Brunnich's guillemots. A resident fox seemed unperturbed by the throng from the birds. Large groups of guillemots rested on the water, while the air was a theatre of wings as birds headed out to forage. Guillemots catch fish and crustaceans often at a depth of 50 metres or more. By early June the female lays a single egg, pear shaped to prevent it from rolling off the ledge. Chicks are hatched in July and are generally ready to fledge three weeks later. They take to the water by leaping off their high ledge, followed by their father.

After soaking up this dynamic scene, we headed back to our cosy ship for warm showers, an adult beverage, and more delectable sustenance.

#### **Nest Predators**

Cliff-nesting birds in Svalbard choose their precarious nesting ledges partially to avoid a voracious terrestrial predator, the Arctic Fox. These foxes devour and cache eggs and chicks, often to feed over a dozen hungry pups. But, in a land free of hawks, eagles, and falcons, one avian predator still stalks these cliffs: the Glaucous Gull. These large, white and grey birds can gobble down an unattended nest or chick in seconds, and can easily catch a fledgling bird on land, water, or in the air.















DAY 7 | Wednesday, 31 July 2019

### Torellneset, Hinlopen Strait

Position:21:00 hoursCourse:339°Latitude:78°42′NSpeed:4.2 knots

Longitude: 10° 41′ E

Walrus! We could see a group of males hauled out on the end of the sand spit at Torellneset. Walrus are social animals and when onshore, they love to pile up beside and on top of one another. As Roger would tell us, they are thigmotactic creatures. In the water, walrus usually travel together in groups segregated into males or females. Walrus spend their year in the same region but in winter move to polynyas—areas of perpetually open water. Between foraging trips they may rest for up to eleven days.

Because walrus tend to be quite skittish on land, in contrast to their confidence in the water, our strategy was to bring the Zodiacs to shore 300 metres downwind from the group, and to slowly and quietly approach as a group along the undulating gravel beach. Everyone did a fantastic job of 'creeping up' on the haulout, and we were rewarded with clear views of these strange, mesmerizing creatures. As we saw for ourselves, a male walrus has massive shoulders and a thick neck; at 1500 kgs they are significantly heavier than females who weigh in at around 900 kgs. Adult walrus have extremely thick hides, virtually impenetrable to even the sharp canine teeth of a polar bear. Walrus leather is so tough that during the industrial era it was used as machinery belts, while the ivory from the tusks was a valuable commodity for hunters. Walrus have been protected since 1952. Fifty years on, in the early 2000s, the Svalbard population was estimated at around 2,000 animals. Since then their 'come back' from the hunting days continues to see a promising increase in numbers.

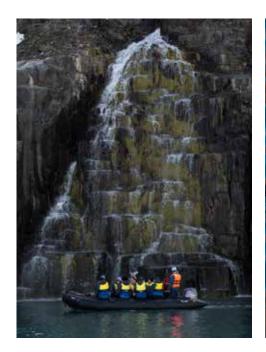
Our morning was accompanied by officials from the Sysselman's ship who came ashore to view our activities. The Governor of Svalbard—Sysselmannen—is the ultimate authority of the Svalbard archipelago, tasked to uphold Norwegian sovereignty, to ensure that the obligations of the original 1920s Treaty of Svalbard are upheld, along with monitoring more recent

Wind:calmAir Temp: $3^{\circ}$ CBarometer:1022.5hPa & steadySea Temp: $1^{\circ}$ C

regulations that focus on keeping visitors safe, and on environmental protection so as not to impair the natural wilderness and physical features of Svalbard, its flora, fauna or cultural remains.

In the afternoon we motored south through Hinlopen Strait, encountering loose pack ice with groups of walrus hauled out, all of them snoozing. Just as Roger was preparing to give a lecture on seals and whales, a bear was spotted at a great distance on a thick band of pack ice. Captain Sasha motored *Polar Pioneer* toward it but as the ice grew thick and dense our ship fought to make headway. We opted to sit and wait for a while to see if the bear might approach us. Finally, though, he trotted off in the opposite direction and into a veil of mist.

With fog closing in and the cocktail hour approaching, Justine's bar proved to be a hot spot for a delectable refreshment or two before dinner.































#### DAY 8 | Thursday, 1 August 2019

### Kapp Waldburg, Kapp Lee

Position:20:30 hoursCourse:209°Wind Speed:9 knotsBarometer:1021.3 hPa & rising

Latitude: 77°41′N Speed: 12.1 knots Wind Direction: S Air Temp: 6° C

Longitude: 19° 52′E Sea Temp: 3° C

Fog waxed and waned. Would it clear in time for our morning outing at Kapp Waldburg? Gary held off after breakfast but we didn't have to wait long, for within thirty minutes the fog lifted and blue skies prevailed. Another stunning Arctic day.

Onshore we made our way to a ravine where kittiwakes nest on the cliff face in their thousands. If we looked closely we could make out small downy chicks in some of the nests. But even as we approached the cliffs a small tawny fox introduced itself and made its way up onto the adjacent slope. Totally unperturbed by our presence, it looked to have found a warm comfortable spot in the sun, settling down for a nap. But when two kittiwakes started to squabble down at ground level, the fox sprang to life, and within seconds had leapt past all of we human onlookers and had the tail of a kittiwake in its mouth. Somehow the kittiwake struggled free for a lucky escape. No doubt disappointed by the outcome, our fox resumed its position in the sunshine.

The long walkers took the steep climb to hike above the ravine and around the upper plateau, taking in great views of all that was going on.

A keen group joined Uly for some fossil hunting down along the shoreline and were duly rewarded with a fantastic collection—as Uly remarked, the examples they photographed were the kind of fossils you might expect to see in a museum.

Chris and Ilia took a delightful Zodiac cruise along the shoreline to gain views of reindeer grazing on the tundra—for this group it was magical to simply sit and soak up the serene silence of the surrounds. Several of us noticed the strange tidal current in Freemansundet, with drift ice on the far side of the fjord being swept east to west, then coalescing at the western end before being returned west to east up the near side of the fjord.

Robyn led a tundra walk and her group were thrilled to have close sightings of a group of reindeer, several males in the group sporting impressive antlers.

Our afternoon offered another fabulous outing at Kapp Lee. We spent time admiring the walrus hauled out on the beach, those in the shallows galumphing their massive hulks up the beach to join the mob. Robyn, Uly and Sophie led a longer walk across the tundra, while Roger, Chris and Gary led shorter walks. All in all we explored a good part of this location where the tundra is considered amongst the lushest on Svalbard. Reindeer were busy grazing, while along the shoreline purple sandpipers were busy doing their own spot of foraging.

Alas, when it came time to return to Zodiacs we found them high and dry on the beach. Teamwork to the rescue! It's astonishing what a group of energetic passengers and staff can do when we collectively put our shoulders to the wheel. One by one we heaved each Zodiac out into the shallows, and soon we were all aboard.

















Day 9 | Friday, 2 August 2019

### Hornsund: Samarinbreen, Gnalödden, Burgerbukta

Position:21:30 hoursLocation:at anchor, BurgerbuktaWind Speed:5 knotsBarometer:1021.3 hPa & steady

Latitude:77°04′NWind Direction:NAir Temp:7° CLongitude:15° 59′ESea Temp:3° C

We hadn't quite loaded the sixth Zodiac for a cruise along Samarinbreen, when Chris spied a polar bear on the beach far away on the opposite shore. Ripper! Off we all motored at a rate of knots, arriving at the said spot to find a sizable male bear guarding a beluga carcase, looked upon by many glaucous and ivory gulls. Before our arrival our bear likely devoured the bulk of the beluga but for the remaining intestines, skeleton, tail and flippers. Laden with a body weight of beluga meat and blubber, he was splayed out on the sand with barely enough energy to open his eyes at our arrival. Our bear was conspicuous for his less than pristine coat, his fur muddied with glacial sludge. A squadron of gulls was making the most of bear nap time to feast on the beluga remains, though two ivory gulls looked to have priority over the many glaucous gulls who stood back while these lighter, more agile birds took their fill.

We set off to make our way along the glacier front. Uly educated us on the surrounding mountains consisting of metamorphic base material, with a foreground of sedimentary layers including a layer of 'Old Red' Devonian sandstone, all pushed upward at an angle, near vertical in places, during an epoch when Greenland squashed against Svalbard, causing much uplift.

The bear had finally woken up so after an hour of cruising, all Zodiacs returned for a second look. We were astonished with the bear's sudden show of agility: irritated with glaucous gulls trespassing on the carcase, our bear sprang up in a second, to place a paw on one unfortunate gull, immediately crushing its wing. It was all over for the poor glaucous gull who, while surviving the actual attack, was rendered unable to fly. This was nature at its rawest: life and death before our eyes.

Back onboard we sat down to another tasty lunch while motoring to the northern side of Hornsund to Sofiebogen/Gnålodden. Here, the mountain Gnålfjellet translates to 'Nagging Mountain', named for the continual throng from kittiwakes which nest on its cliffs. At the base of those cliffs is a small trapper's hut, famed for Norway's Wanny Woldstad, Svalbard's first woman trapper who spent five winters in Hornsund in the 1930s. She and her working partner Anders Saeterdal had their main base at the mouth of Hornsund but regularly rowed the thirty kilometres or hiked across the larger glacier of Hansbreen to the satellite hut at Gnalödden, where they trapped fox and hunted bear. Those who ventured to lofty heights beneath the bird cliffs were treated to a fox roaming the hillside, on the lookout for the next meal. Others enjoyed quiet time wandering the beach front, and relaxing amongst the soft tundra with its carpet of wildflowers. The Zodiac ride back to the ship was accompanied by a delightful pair of puffins who flew close.

Back onboard we gathered on the Zodiac deck for a BBQ. Chefs Al, Bert, and stewardesses Kat and Sasha provided delectable fare, while Justine whipped up a moreish brew of mulled wine. To the beat of retro music and dance moves, we wiled away a wonderful summer's evening in Hornsund.











































#### Day 10 | Saturday, 3 August 2019

## Recherche Glacier, Bamsebu (Kapp Toscana)

Position: Wind Speed: 2120 hours Course: 9 knots Barometer: 1021.3 hPa & steady

Latitude: 78°04′ N Speed: 12.9 knots Wind Direction: S **Air Temp:** 6° C Sea Temp: 4° €

Longitude: 13° 520′ E

#### By Chris Todd

We awoke to yet another perfect day, some of us worse for wear after the antics of the BBQ night. We launched Zodiacs and headed south towards Recherche Glacier, named after the successful French research expedition of 1838. We passed a large flock of kittiwakes plunge-diving for small fish in the shallows, then entered a strong tidal current flowing out from the lagoon at the glacier terminal, avoiding large chunks of glacial ice grounded in the shallows and passing flocks of kittiwakes using the ice as safe perches.

The terminal itself was 20-30 metres high, deeply incised and decaying into rounded chunks, like butter melting in a microwave. Once inside the lagoon Uly gave us a description of the geology (strongly deformed metamorphic rocks: Schist and phyllite) before our Zodiacs headed in different directions. Some cruised into the south-east corner where a silty brown river flowed into the lagoon. A group of bearded seals were hauled out on the gravel there, waiting for the incoming tide. Roger landed his Zodiac on a gravel spit to admire the gallery of ice sculptures, chunks of worn glacier ice, stranded there by the tide. Others parked next to a stable ice floe for those who wanted to take a walk on it. Others cruised across the face of the glacier to the western end, past kilometres of decaying ice. Once there they cut the motor and heard the now familiar sounds of kittiwake and little auk breeding colonies high on the colourful mountainsides.

We had planned for an afternoon landing at Vårsolbukta but as fog and bears don't mix, we headed back to fog-free Kapp Toscana on Van Keulenfjord for our last afternoon's activities.

We landed Zodiacs in a sheltered cove near a hut called Bamsebu, built by Beluga whale hunters in the 1930s. The Belugas soon ran out, piles of their bones mute testimony to the grisly trade, but the hut remains in good condition. Today it was surrounded by gear belonging to

a Norwegian, Hilde Fålun Strøm, being joined by Canadian, Sunniva Sorby. The two girls are preparing to spend 9 months there from September to undertake Citizen Science, measuring a range of climate change indicators and promoting action on climate change through broadcasts to schools via satellite link. Hilda has spent more than 25 years living in Svalbard, while Sunniva has 25 years' experience of working in Antarctica. They had both seen such profound changes in that time that they felt compelled to do something in response. We wished them well and took group photographs with them and their flag so we could follow their progress from home: website "Hearts in the Ice".

The 'short walkers' then headed over the tundra to a cairn and back along the coastal terraces, seeing reindeer and tundra plants, the dwarf willow leaves on the ridges already turning autumnal gold. Meanwhile the 'long walkers' headed towards Fleur de Lyshamna Bay, about 3 kms to the NW, little knowing what drama awaited them: almost simultaneously Gary from a Zodiac and the walkers on foot spotted a sleeping bear who soon became a walking polar bear. After a radio-directed detour to avoid the bear, our hikers scrambled down to the beach, high on adrenalin: Everything worked well and conflict was averted. Bear number 8.

After drinks and nibbles back on board, Gary thanked Captain Sasha and the crew, his staff and the passengers. There was also a nostalgic toast to the *Polar Pioneer* by those sailing on her for their last time.

Al and Bert created a magnificent dinner, followed up by a slide-show produce d by Ulyana, using photos from passengers and staff. It reinforced just what a magnificent voyage this has been, with perfect weather, wonderful close sightings of bears, foxes, reindeer and birds; beautiful walks in the tundra, experiencing the ship in sea-ice, great food, and all with a fantastic group of fellow-travellers.





































DAY 11 | Sunday, 4 August 2019

# Longyearbyen

**Position:** 08:00 hours Location: Dockside at Longyearbyen

**Latitude:** 78°13′N **Speed:** 0.0 knots **Longitude:** 15°36′E

With the town of Longyearbyen in our sights, our high Arctic journey draws to end. Throughout these eleven days we have had magical weather, calm seas, experienced other-worldly places and encountered incredible wildlife.

Our first day in Krossfjord introduced us to the tundra and its wildlife—our first Svalbard reindeers, our first Arctic fox. A magnificent glacier on that same day delivered heart-pattering calvings along with the experience of crunching through brash ice in Zodiacs.

The north-west corner of Spitsbergen set our imaginations alight with images of 16th century Dutch whaling, of hopeful young men working in cold, squalid conditions dreaming of profits from bowhead whales, some destined never to return home. For many of us this was a chance to see puffins, and who isn't all the more joyful for having a puffin in their day. We spent a dreamy afternoon beneath bird cliffs at Hamiltonbukta, entranced by the industry of an energetic blue fox. A place to soak up the feeling of the Arctic against a backdrop of glaciers.

A day in the pack ice in the far north east rewarded us with polar bears and walrus. As well as encountering these icons of the Arctic, just being amongst the pack ice offered a wondrous experience.

We explored remote Nordaustlandet with its ice dome shimmering between valleys of the mountains. This terrain was polar desert and yet it sustained reindeer and their young, along with many geese and an array of delicate wildflowers. On the western side of Hinlopen Strait we cruised the bird cliffs of Alkefjellet crammed with Brunnich's guillemots. A morning with

Wind Speed: 5 knots Barometer: 1014.6 hPa & falling

Wind Direction: S Air Temp:  $6^{\circ}$ C Sea Temp:  $4^{\circ}$ C

walrus followed, and an afternoon motoring amongst the pack ice on the south eastern side of Svalbard, spotting walrus lounging on ice floes, and a distant bear.

Along the way we were treated to inspiring education presentations on glaciology and geology, wildlife and Arctic ecology.

In the southeast we visited a kittiwake colony and found remarkable fossils. At Samarinbreen in the southwest we were treated to a close encounter with a male polar bear, fat and sluggish from gorging on beluga, while on the northern side of Hornsund at Gnålodden we again experienced a bustling kittiwake colony with a resident fox patrolling the base of the cliffs.

A final day of outings in Bellsund delivered a serene morning glacier cruise. We spent an afternoon at Bamsebu studying the sobering remains of a Beluga slaughteryard. More happily, we met with the residents of a log cabin who are staying over for winter in the name of science, and a little later our long walkers received an adrenalin rush when Gary spotted a polar bear in their vicinity.

We disembarked *Polar Pioneer*, our petite beloved vessel, having made new friends, and taking with us cherished memories of a remarkable time in a unique corner of our world.













### Spitsbergen Odyssey

25 July – 4 August 2019 | Distance Travelled: 1,153 nautical miles (2,133 kilometres)

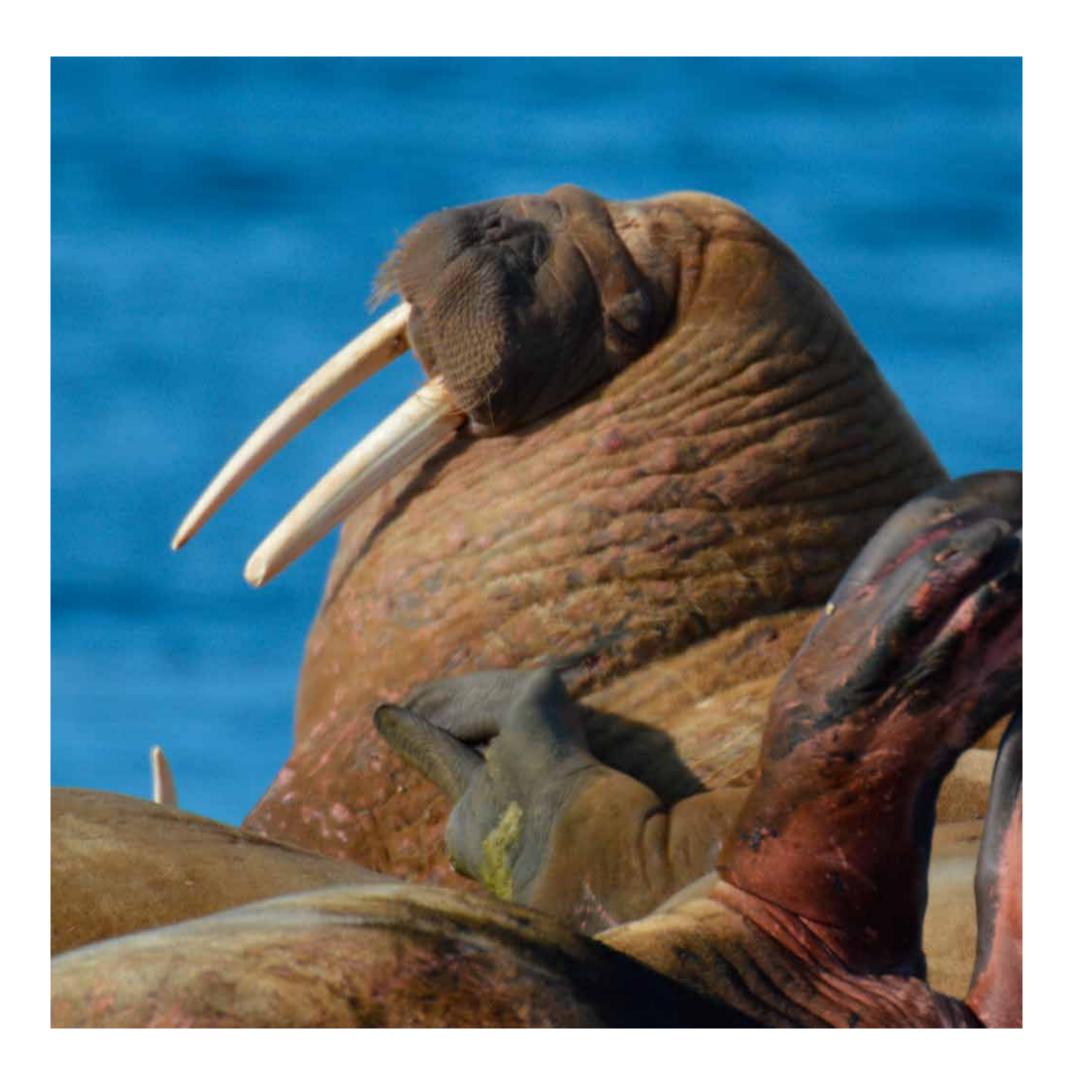


#### **Destinations**

- 01 Longyearbyen
- 02 14 July Glacier
- 03 Lilliehöökbreen
- 04 Ytre Norskøya
- 05 Hamiltonbukta

- 06 Moffen Island
- 07 Svalbard pack-ice
- 08 Wahlenbergfjord
- 09 Alkefjellet
- 10 Torellneset

- 11 Bjornsundet
- 12 Kapp Waldburg
- 13 Kapp Lee
- 14 Samarinbreen (Hornsund)
- 15 Gnålodden (Hornsund)
- 16 Burgerbukta (Hornsund)
- 17 Recherchefjord (Bellsund)
- 18 Bamsebu (Bellsund)



# Bird species log

Common Guillemot         X	BIRD SPECIES	BIRD SPECIES JULY - AUGUST										
Brunich's Guillemot		25	26	27	28	29	30	31	1	2	3	4
Brunich's Guillemot	Northern Fulmar	Χ	Χ	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ
Black Guillemot	Common Guillemot											
Razorbill (lib)  Little Auk	Brunich's Guillemot	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
Little Auk	Black Guillemot	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
Atlantic Puffin	Razorbill (ib)											
Arctic Tern	Little Auk	Χ	Χ	Χ		Χ				Χ	Χ	
Signate   Signature   Signat	Atlantic Puffin	Χ		Χ		Χ				Χ		
Kittiwake	Arctic Tern	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ
Nory Gull	Glaucous Gull	Χ	Χ	Х	Х	Х	Χ	Χ	Χ	Χ	Х	Х
Norry Gull	Kittiwake	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х
Great Black-backed Gull Ross's Gull (ib) Sabine's Gull Arctic Skua X X X X X X X X X X X X X X X X X X X	Herring Gull											
Ross's Gull (ib) Sabine's Gull Arctic Skua	Ivory Gull				Χ					Χ		
Sabine's Gull       X       <	Great Black-backed Gull											
Arctic Skua X X X X X X X X X X X X X X X X X X X	Ross's Gull (ib)											
Great Skua (ib)  Pomarine Skua (ib)  Pink-footed Goose X X X X X X X X X X X X X X X X X X X	Sabine's Gull											
Long-tailed Skua (ib)  Pomarine Skua (ib)  Pink-footed Goose	Arctic Skua	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ	Х	
Pomarine Skua (ib)  Pink-footed Goose	Great Skua			Х	Χ	Χ		Χ		Χ		
Pink-footed Goose X X X X X X X X X X X X X X X X X X X	Long-tailed Skua (ib)											
Barnacle Goose  K X X X X X X X X X X X X X X X X X X	Pomarine Skua (ib)											
Brent Goose  Common Eider X X X X X X X X X X X X X X X X X X X	Pink-footed Goose						Χ	Χ	Χ			
Common Eider X X X X X X X X X X X X X X X X X X X	Barnacle Goose		Χ	Х						Х	Х	
King Eider X  Long-tailed Duck X  Snow Bunting X X X X X X X X X X X X X X X X X X X	Brent Goose											
Long-tailed Duck X  Snow Bunting X X X X X X X X X X X X X X X X X X X	Common Eider		Χ	Х	Χ		Χ	Χ		Χ	Χ	Х
Snow Bunting X X X X X X X X X X X X X X X X X X X	King Eider			Χ								
Rock Ptarmigan  Purple Sandpiper X X X X X  Ringed Plover X  Sanderling  Dunlin  Turnstone X  Dotterel (ib)  Grey Phalarope	Long-tailed Duck				Х							
Purple Sandpiper X X X X X  Ringed Plover X  Sanderling  Dunlin  Turnstone X  Dotterel (ib)  Grey Phalarope	Snow Bunting		Χ	Χ			Χ		Χ		Χ	Χ
Ringed Plover X Sanderling Dunlin Turnstone X Dotterel (ib) Grey Phalarope	Rock Ptarmigan											
Sanderling  Dunlin  Turnstone X  Dotterel (ib)  Grey Phalarope	Purple Sandpiper			Χ	Χ				Χ		Χ	
Dunlin Turnstone X  Dotterel (ib) Grey Phalarope	Ringed Plover										Х	
Turnstone X  Dotterel (ib)  Grey Phalarope	Sanderling											
Dotterel (ib)  Grey Phalarope	Dunlin											
Grey Phalarope	Turnstone						Χ					
	Dotterel (ib)											
Red-throated Diver X X	Grey Phalarope											
	Red-throated Diver							Χ			Χ	







# Mammal species log

#### MAMMAL SPECIES JULY - AUGUST

	25	26	27	28	29	30	31	1	2	3	4
Arctic Fox		Χ	Χ			Χ		Χ	Χ		
Reindeer		Χ				Χ	Χ	Χ		Χ	
Polar Bear				Χ	Χ	Χ	Χ		Χ	Χ	
Ringed Seal		Χ			Χ						
Bearded Seal		Χ	Χ	Χ	Χ	Χ	Χ				
Harp Seal					Χ						
Harbour Seal											
Hooded Seal											
Walrus			Χ		Χ		Х				
UNID Seal			Χ		Χ					Χ	
Minke Whale						Χ					
Humpback Whales											
Beluga											
White Beaked Dolphin									Χ		
Orca											
Fin Whale											
Blue Whale	Χ										











## **Expeditioners**

Cheryl Aldrich
Peter Armitage
Ross Avenell
Sue Bartlett
Galvin Bartlett
Peter Bergen Henegouwen
Janelle Bond
Keith Bond

Lucie Borst
Kate Bowenkamp-Jones
Fang Chen
Angela Collins
Peter Collins
Stephen Cox
Wendy Cox
Lindsay Doig

Kate Happ Happy Happ Carina Harding Janice Hinlopen Chia-Lin 'Charlie' Ho Karen Hollands Susan Humphrey

Freda Ferne

Ev Innes
Geoff Innes
Steven Jones
Lile Judickas
Martin Knuist
Ric Lawson
Sandy Lawson
Sharon Littlejohns

Shirley Lord
Gail Masters
Les Mitchell
Liz Mitchell
Richard Mohr
Jen Parker
Sandra Perucich
Tracey Rodgers

Anne Royters
Tony Royters
Peter Russell
Frances Samson
Tom Samson
Wendy Smith
Tony Summers
Robert Switzer

Kirsti Van Der Steen Mike Van Der Steen Heather Wheat Sue Whittle Peter Whittle Roy Winstanley



# **Expedition Team** Polar Pioneer Crew

**Expedition Leader** Deputy Expedition Leader Senior Naturalist Naturalist Geologist/Glaciologist Doctor Chef Second Chef Hotel Manager Aurora staff (Canada) Aurora staff (UK)

Gary Miller Robyn Mundy Roger Kirkwood Chris Todd Ulyana Horodyskyj Sophie Plowman Allan Estoque Bert Cruz Justine Bornholdt Ross Avenell Karen Hollands

Master Chief Mate Second Mate Third Mate Radio Operator Chief Engineer Second Engineer Third Engineer Fourth Engineer Electrical Engineer Boatswain Able Seaman Able Seaman Able Seaman

Aleksandr 'Sasha' Evgenov Vladimir Zimin Evgenii Aleksandrov Aleksandr Kiselev Ilia Liamzin Evgeny Petukhov Pavel Voronov Aleksei Moiseev Yurii Horobets Valentin Lomachenko Aleksandr Agafonov Rashit Ganiev Igor Popp Vasilii Berlizev

**Head Stewardess** Svetlana Fedorova Stewardess Aleksandra 'Sasha' Belusova Stewardess Uliana Koval Stewardess Ekaterina Rumiantseva Stewardess Natalia Trofimova Stewardess Elena Liukshina Russian Crew Chef Denis Zhenchevski

Vladimir Zhukov

Motorman

Ross Avenell Gary Miller Sue Bartlett Les Mitchell Liz Mitchell Galvin Bartlett

Kate Bowenkamp-Jones Stephen Cox Wendy Cox Lindsay Doig Chia-Lin Ho Karen Hollands Ev Innes Steven Jones Lile Judickas Roger Kirkwood Sharon Littlejohns

Robyn Mundy Sophie Plowman Tracey Rodgers Peter Russell Tom Samson **Tony Summers** Chris Todd Kirsti Van Der Steen Mike Van Der Steen Peter Whittle Roy Winstanley



#### Explore our unique itineraries to these amazing destinations...



Adventure With Us Intimate, educational, small group voyages to some of the world's wildest and most remote destinations, aboard quality expedition vessels.



The Arctic
Polar bears roam pack ice
for seals, walrus and whales.
Deep fjords and towering
icebergs meet colourful
tundra and fossil-rich plains.



Scotland
Abandoned castles, exquisite abbeys, stone age villages and haunting Neolithic relics.
Breeding seals and Europe's largest seabird colonies.



Patagonia & Chile
Wild and isolated, Patagonia's
wind-swept plains and
glaciated peaks are the
ultimate playground for
intrepid travellers.



Costa Rica & Panama
Filled with remote national
parks and biological reserves
brimming with colourful
wildlife. Traverse the Panama
Canal on a guaranteed
daylight crossing.

Our other destinations include: Iceland, Canada, Himalayas, Sweden and Norway

