



# EXPEDITION LOG

## THE ANTARCTIC FINALE



### ABOARD M.V. POLAR STAR

28<sup>TH</sup> FEBRUARY – 18<sup>TH</sup> MARCH 2010

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# MV POLAR STAR

## THE ANTARCTIC FINALE

We sailed with....

<b>Captain:</b>	Jacek Majer
<b>Chief Officer:</b>	Piotr Zengota
<b>Chief Engineer:</b>	Zenon Berger
<b>Second Officer:</b>	Jerry Malapad
<b>Third Officer:</b>	Mark Paul Deposoy
<b>Bosun:</b>	Bernardo Gonzales
<b>Hotel Manager:</b>	Janet Aurelio
<b>Head Chef:</b>	Bob Ward
<b>Doctor:</b>	Judy Forbes

<b>Expedition Leader:</b>	Megan Tierney
<b>Expedition Staff:</b>	Gilles Bourque
	Kirsten Brauneder
	Sonja Heinrich
	Hannah Lawson
	John Sparks
	Ursula Tscherter
	Philip Wash

*It started out as a smooth transit of the Beagle Channel but soon became one of hurricane force winds and 50 foot waves. As the tiny ship known as Polar Star battled the elements, the 3<sup>rd</sup> officer Mark Deposoy once again wiped his own vomit from the radar screen, barely holding on to control of his ship. He had twice asked his chief engineer for more power. The answer came back on the intercom "Negative", the engine room crew were needed to man the pumps!! Helmsman Mackross had been lashed to the wheel in order to control the ship's massive rudder and steer the ship to calmer waters. He was weak with exhaustion from hours of exertion but there would be no one to relieve him for many more hours. Down in the dining room it was a scene of utter horror. Passengers sipped on goblets of Dom Perignon to ward off impending dehydration but continued to vomit their scrambled eggs over fellow passengers. The expedition staff were being kept busy passing out sea sickness bags and after dinner mints. But, all in all there was a festive mood about the ship as Canada had won the Olympic gold medal in hockey only hours before.*

**JUST KIDDING!**

## Sunday, 28<sup>th</sup> February 2010: Leaving Ushuaia

For those of us who chose to walk the length of the dock with our luggage, it was made a little easier by more than 25 knots (force 6) of wind pushing on our backs. At the end of the dock awaited our floating home for the next 19 days, the *MV Polar Star*. Formerly a Swedish icebreaker with a hull thickness in some places of 34 mm, she is great little ship fit for our up coming adventure and tough enough to get us to and through the ice.

The colorful mix of passports showed that the crew, staff team and fellow passengers hailed from all over the world: Argentina, Australia, Britain, Canada, Germany, Italy, New Zealand, Poland, Philippines South Africa, the Netherlands, the U.S., just to name a few. Upon arrival at the gangway, our luggage was loaded onto the vessel by crane and net while we clambered aboard and marched to reception. We were greeted by smiley Janet, the Hotel Manager, and Irene, the Receptionist, and handed over our passports to them for safekeeping. We then made our way through the maze of corridors to our cabin, where a comfy bunk awaited us with our new Polar Star shell to try on.



Shortly after 5 pm we were summoned to the Observation lounge to be welcomed by Captain Jacek Majer, the Expedition Leader Megan Tierney and her enthusiastic Expedition Staff. First Officer Piotr Zengota introduced us to the ship's safety procedures, and prepared us for the mandatory lifeboat drill which was soon to follow. All the while we could hear and feel the steady rumble from deep inside the ship where the engines were warming up. At 6:18 pm the last dock line was pulled on board and the Polar Star departed Ushuaia.

We headed almost due east to transit the Beagle channel while the winds howled and the sun set behind watery clouds. We still had 25 knots of wind at our stern as we heard the ship's whistle blast seven short and one long: the call to lifeboat stations. We dutifully donned some warm clothes, grabbed our life jackets and headed to our station on deck four. It felt nearly authentic as the rains and strong winds pounded our face while we waited to be checked off from the drill and return indoors for some warmth and dinner. Doctor Judy made her round with a selection of sea sickness medication for those who wanted them while while dined on choices such as prime rib, broccoli soup followed by a dessert of peaches, strawberries with a light flaky crust and whipped cream. The bridge had forecasted strong winds and a rough first day in the infamous Drake Passage, and for some of us this was the last relaxed meal for a while.

Several of us strolled up to the bridge to see how things were run. Polar Star's open bridge policy gives passengers access to the ship's command centre where we could spend as much time as we liked watching the officers navigate, and keeping an eye out for sea mammals and birds. A few frolicking sea lions, Magellanic penguins and king shags were spotted, as well as several black-browed albatross and petrels, messengers of the open sea awaiting us ahead. The last hours of the day were spent navigating the Beagle Channel; named after the ship which circumnavigated the world between 1831 and 1836 with a certain young man on board, learning his trade and leaving his indelible mark in history: Charles Darwin. The Ushuaia port authority had supplied an Argentine pilot to navigate us safely through the channel.

Around 9 pm we passed the most southerly town in the world, Puerto Williams, on our right or starboard side to use proper ship's jargon. Originally a naval base founded in 1952, the settlement now has a population of 2,000 people including two of the last fluent speakers of the language spoken by the Yámana Canoe Indians. This tribal group was encountered by Darwin during his time in the Beagle Channel.

As darkness descended, most of us headed off to our cozy bunks, while some explored the Polar Bar. Our floating home away from home also features a small library, and maybe one should get up close and personal with those torture machines in the gym. Forget it, I'm on vacation!

### USHUAIA

Ushuaia lays at the extreme tip of South America, on the island of Tierra del Fuego, the land of fire. Its name is derived from a Yaghan word (the language of the nomadic Yámana canoe Indians) meaning 'inner harbour to the westward.' In 1906 the Argentine state founded a penal institution in Ushuaia largely for hardened criminals. The prisoners were responsible for most of the pre-1940 construction of the town. The prison ceased operation and was incorporated into the Naval Base in 1940. Ushuaia now has a population of about 60,000 permanent residents. They are descendants of English missionaries who stayed on as farmers, of Yugoslavians and Romanian miners, of sailors from Spain and Italy, who signed off or jumped ship here, of Chileans who came looking for work, of a few Germans, and just a handful of people bearing some blood from the veins of the native Indian population.

This is the southernmost city in the world, and it boasts graceful frame houses, self-made cabins and modern concrete buildings, all with the same roofs. There are no tiles here, only metal sheeting that is bolted down. The slopes are now being developed with smart hotels and ski facilities.

A spectacular chain of mountains, the Cerro Martial, rises behind the town, to the north. The ruined forest behind the town was caused by a terrible fire in 1918. The fire began to the west and raged eastward, so intense that the townspeople thought they might have to take to the sea in boats. Doused by torrential rain, the fire, which had lasted three months, was so bad that everything, even the seeds, was destroyed and the ground was left open to erosion.

## Monday, 1<sup>st</sup> March 2010: At Sea, northern Drake Passage

**Time:** 12:00

**Latitude:** 56° 44' S

**Longitude:** 065° 46' W

**Wind:** Force 7 (near gale, 28-34 knots of wind) West South West

**Sea Conditions:** very rough, wave height 4-6 m

**Air Temperature:** 7° C

**Barometer:** 999 mb

**Speed:** 9.1 knots

**Distance sailed from Ushuaia:** 161 nautical miles (nm)

We awoke to the rock and roll of the Drake Passage, as the Polar Star steadily ploughed through a rough sea. Being designed as an icebreaker, our little red ship is as tough as they get, but lacks dynamic stabilizers which would smoothen out her rolling from side to side in rough seas.

Needless to say, the call to our first breakfast on board was not attended by everyone as *mal de mar* was affecting quite a few unhappy passengers. At least the barometer was rising along with our hope that better weather was not far off. We were surrounded by several black browed albatross and storm petrels gliding about the ship. At least the birds seemed to enjoy the stormy seas!



Although the morning lectures were postponed because of the conditions, the call to lunch brought forth most of the passengers who were starting to gain their sea legs. By mid afternoon John Sparks was able to kick off the onboard educational lecture program with an entertaining talk aptly entitled “Storm Birds”. John spoke about the sea birds of the Southern Ocean and provided valuable pointers how to identify the different petrel and albatross species. An hour later Sonja introduced the whales, dolphins and porpoise of the Southern Ocean in her lecture entitled “Whale of a Tale”. The talk was a fascinating romp through the lives of whales and dolphins, their ecology and behaviour, and was peppered with scientific stories and little videos.

Following in the wake of the whales, Ursula, our recap captain, showed a life size cut out of a very unique dolphin known as southern right whale dolphin during recap just before dinner. John followed with a short funny video of crash landing albatross. Then Megan spoke about the next day’s activities, our second day at sea. She promised us a vacuum and boot party! Keeping with IAATO (International Association of Antarctic Tourism Operators)

guidelines, we planned to be vacuuming our outer wear clothing and anything that might be holding seeds and foreign debris from other parts of the world. At the same time we would also be fitted with rubber boots to enable us to get to shore with dry feet during wet landings. Finally, Hanna gave a short talk on the famous *HMS Beagle* which undertook a lot of the early charting (mapping) of southern parts of Chile and Argentina over a four year period. The bingbong went and Janet announced that it was time for dinner - *Bon Appétit* to those whose stomachs were willing to accept the delicious food. We spotted quite a few new faces in the dining room as the winds had begun to calm down during the evening, and the sea started to ease, albeit slightly. Post-dinner were treated to a gorgeous sunset and a beautiful waning full moon. At 8:30pm it was time for our evening entertainment: a 1 hour documentary on the famous British yachtswoman Dame Ellen Macarthur who travelled to South Georgia in a quest to help save the mighty Albatross.

## **Tuesday, 2<sup>nd</sup> March 2010: At Sea, southern Drake Passage**

**Time: 12:00**

**Latitude: 60° 07' S**

**Longitude: 062° 14' W**

**Wind: Force 5 (fresh breeze, 17-21 knots of wind) North North West**

**Sea Conditions: moderate, wave height 1.25 - 2.5 m**

**Air Temperature: 6° C**

**Barometer: 999 mb**

**Speed: 9.1 knots**

**Distance sailed from Ushuaia: 401 nm**

The day started out with a clear comparatively calm morning, but before breakfast the Polar Star entered a bank of thick fog. This was quite typical as we were transiting through an area known as the Antarctic Convergence. The Antarctic Convergence (as Sonja explained at recap that night) is a zone bounded by the Subantarctic and Polar Front where the colder and denser north-flowing Antarctic surface waters sink beneath warmer subantarctic waters pushing south. The Antarctic Convergence is the physical boundary most widely accepted today for the Antarctic region. It is a dynamic zone of approximately 40 km wide encircling the earth along a fluctuating, zigzagging line between 48°S and 61°S. There is no visible line or marker post, but we can sometimes measure a marked drop in sea water and air temperature, from approximately +7 degrees C to a mere +3 degrees C. The fog is basically caused by the warmer moist air currents from the north meeting the colder water of the south.

During the morning Kirsten presented a lecture on Rocks vs. Ice in which she told us all about how glaciers are formed and how on their long flow from elevation towards the sea glaciers carve out valley and chisel the most sturdy rocks. Shortly after, Megan gave us a briefing on our planned voyage itinerary, the IAATO (International Association of Antarctic Tour Operators) Guidelines, and Zodiac safety. These were mandatory briefings so we had full attendance by all passengers and staff in the Observation Lounge.

Then it was time again for lunch. At 1300 hours (1 pm) the first official iceberg was spotted by the 2<sup>nd</sup> officer Gerry Malapad. We passed it on our starboard side several miles to the west.



Within an hour it was time for the great vacuum and boot fitting party. The expedition staff was on hand to help with cleaning any seeds or foreign objects from the clothing and bags that we might use when off the ship. This is an important measure to prevent any contamination of Antarctica and spread of invasive species from other parts of the globe. The staff also proved expert boot sales men (and women).

Later in the afternoon John Sparks gave an enlightening talk on “Penguins: Can’t fly! Run even worse!” which featured many great photographs and a comic look at the penguins of the world.

During recap Megan briefed us about our first intended landfall in Antarctica with visits planned at a chinstrap penguin colony at Halfmoon Island in the morning, and Deception Island in the afternoon. Ursula announced the winners of the Guess the Time of the First Iceberg Contest - Congratulations to John Law! Kirsten talked about volcanic eruptions of Deception Is (a place we will visit tomorrow) and Sonja explained the Antarctic Convergence zone. Hannah talked about some of the history of the places we will visit and those that discovered them. While this was going on two hourglass dolphins were spotted off the stern of Polar Star as well as a couple of Pintado Petrels which trailed the ship. The recap session ended with the usual call to supper, after which the evening movie was shown: ‘Ice Worlds’, an episode from the BBC documentary series ‘Planet Earth’.

## **Wednesday, 4<sup>th</sup> March 2010: Halfmoon Island, Edinburgh Hill and Deception Island**

**Time:** 12:00

**Latitude:** 62° 34.7' S

**Longitude:** 059° 51.8' W

**Wind:** : Force 5 (fresh breeze, 17-21 knots of wind) North West

**Sea Conditions:** smooth, wave height 0.1-0.5 m

**Air Temperature:** 4° C

**Barometer:** 990 mb

**Distance sailed from Ushuaia:** 585 nm

We awoke early to discover a new world. Polar Star had to make three anchor drops before the Captain was satisfied of a proper set. Off our bow was Half Moon Is., a small piece of mountainous ice and rock south west of Livingston Island, part of the South

Shetland Island chain. One half of a rainbow crossed the island reaching up towards the moon fading into the background. There was an icy feel to the wind and a sense of excitement on board. Today would be our first landing in Antarctica, and for some, the first excursion in a Zodiac.

Unfortunately by 8:15 am the wind was reaching 40 knots making a landfall at Halfmoon Island unsafe. By 8:30 am the anchor was up, and we were on our way again, to our next destination, Deception Island. Two Humpback whales surfaced in the distance and brought the ship to a stop for better views. Some light maneuvering allowed us to see them a few more times before they disappeared beneath the rippled sea. The Polar Star was back under way a short while later and a slight change of course brought us in close to get a good look at a large tabular iceberg off our port side.

Then the marvelous dark basalt cone of Edinburgh Hill came into view directly ahead of the ship. Kerstin explained that the perfectly regular basalt slabs presented columnar jointing at its finest. The weather gods started to smile at us, the wind died down, the seas subsided. Megan, the Captain and the expedition team conferred and quick decision was made for a spontaneous zodiac cruise amongst the ice in Moon Bay and around the base

of Edinburgh Hill. A short while later we were ready to experience our first zodiac ride. We clambered down the gangway and into one of eight zodiacs. The spectacular volcanic cliff face of Edinburgh Hill created a scene for some close up photographs as the zodiacs maneuvered close enough to almost touch the basalt columns. Several boats made short landings as there were fur seals, Weddell seals and a few small groups of moulting Gentoo and Chinstrap penguins dotting the shore line. After the hour and a half cruise everyone was back on board by noon.



Over lunch the anchor was hauled and we continued in blazing sunshine with Livingston Island to our right. The gentle blows of two sleepy humpback whales appeared off our starboard bow. Much to the whale lovers' excitement the Captain stopped the ship and the two whales approached the Polar Star. Over the 45 minutes or so we were treated to these two 12-16 meter giants playing around the ship. While most of us ran around the decks snapping pictures and taking videos they continued to swim the length of the ship, fore and aft and sometimes criss-crossed under our keel. On occasions, a whale would turn in a tight circle to face the ship and raise its head out of the water. It seemed almost

as though they wanted to get a look at us, these strange two-legged beings screaming with excitement above the water. One whale repeatedly touched the ship's hull with its wing-like flippers. For many of us this was a "once in a lifetime experience" - and even seasoned whale people like Hannah and Sonja were buzzing with delight. Finally the two humpbacks swam off slowly and we again got under way towards Deception Island, albeit slightly later than planned.



Within an hour we were entering the caldera of Deception Island through the narrow entrance known as "Neptune's Bellows". Many of us headed up to the bridge to watch as Captain Jacek took us through the narrow gap between the submerged Raven Rock, hidden from sight, and the towering Cathedral Crags, with precision; it was a privilege to watch him and his crew working together. Once inside we dropped anchor close to Whalers Bay. Soon after, we were being ferried by zodiac to the beach made primarily of volcanic sand and gravel. Kerstin and Sonja flagged a route along shore towards Neptun's window, the drop in the cliff face from which American sealer Nathaniel Palmer purportedly had first spotted the Antarctic Continent nearly 200 years ago. Several fur seals, gentoo penguins and cheeky skuas lined the path which after a short steep climb to the Window revealed lovely views out into the Bransfield Strait. Unfortunately it was too hazy to attempt spotting the Antarctic Continent in the distance. For those with less desire to stretch the legs, the ruins of the old whaling station and BAS base beckoned. Most of the buildings were destroyed in the violent volcanic eruptions and subsequent mudflows in 1969/70, but an old airplane hanger still stood as a witness from times gone by. The entire area is now a declared Heritage sites, and care had to be taken not to disturb any of the historic remains. For at least 14 people, the talk of pools of volcanically heated water and polar plunges were enough to get them to wear a swim suit under their outer wear. The brave (or shall we say crazy) 12 passengers were joined by

two equally crazy expedition staff for a short icy swim. Unfortunately the tide prevented the construction of the promised hot gravel wallow. It proved to be quite literally a breath-taking experience! Fluffy towels on land and hot showers back aboard awaited those avid polar plungers, along with the congratulations from the non-swimmers.

The dining room buzzed with excited voices that night over a slightly later dinner. The blueberry cheese cake was heaven. This evening's recap was a short one. As usual, Megan introduced us to the plans for tomorrow. John quickly explained the origin of gelatinous salps some of us had spotted on the beach. Hannah showed a short youtube video about Deception Island and also of today's wonderful experience with the humpback whales. And of course, Kirsten enlightened us about the snow and volcanic gravel layers several of us had marveled at in Whaler's Bay.

### THE GEOLOGY OF DECEPTION ISLAND

Deception Island is the sub-aerial remains of a previously much larger shield volcano that is 80% submerged. Port Foster (max. depth 190 m) is a breached caldera that formed when the centre of the volcano collapsed below sea level after a huge prehistoric explosive eruption ejected lava from the magma chamber below the surface. Smaller eruptions have continued at irregular intervals for at least several thousand years, the first historically recorded by Wilkes in 1842, who saw 'the entire south rim of the crater on fire;' the latest episodes occurring in 1967, 1969, and 1970. The 1967 eruption destroyed a Chilean scientific station at Pendulum Cove and a British station at Whalers Bay and required evacuation of the bases under emergency conditions. The five British scientists returned only to be evacuated again the following year when an eruption destroyed both the Chilean and British bases, and the whaling station. No permanent occupants live on the island, but both Argentina and Spain have summer stations there. The volcano is still active and steam can be seen from fumaroles around the caldera rim. The emergent flanks of the volcano exhibit examples of basaltic lava flows, ejected scoria and broken lava from cinder cones, and bedded ash-fall deposits.

### Thursday, 4<sup>th</sup> March 2010: Esperanza Base, Brown Bluff, and Antarctic Sound

**Time:** 12:00

**Latitude:** 63° 20.8' S

**Longitude:** 056° 57.6' W

**Wind:** light & variable (at noon, not in the morning)

**Sea Conditions:** calm, wave height 0 -0.1 m

**Air Temperature:** 1° C

**Barometer** 999 mb

**Distance sailed from Ushuaia:** 741 nm

For most of us, today started out normally. For our Assistant Expedition Leader Hannah, an early walk around the outside deck turned into a nasty fall with a fractured right upper arm. Doctor Judy was at hand to provide first care and some pain relief, but further medical treatment was urgently required. So all plans changed very quickly and the team went into action. With Sonja's translation help the Captain and doctor contacted the nearby Argentine Base "Esperanza" (Spanish for Hope) for use of their radiography facilities.



An hour later, Hannah was whisked to shore for an X-ray of her arm to confirm the diagnosis and assess the damage. While Hannah was being treated in the base's medical room, back at the ship John kept us entertained with his lecture about "Whaling". The remainder of the expedition team made arrangements for a spontaneous visit to Esperanza. The Argentineans proved gracious hosts and welcomed us to their Antarctic home away from home. Many of the base personnel have brought their families for their

year-long stay in Antarctica. This includes 14 children of all ages who go to school at the base and have broad-band internet connection to their schools and friends on mainland Argentina. We were guided around by friendly base personnel with the able translation help from several of our Spanish-speaking passengers. After visiting the makeshift hut where three men from Nordenskjöld's 1903 expedition had to overwinter, and a quick poke around the small but interesting Antarctic museum, all tours ended in the recreation hall (a building known as 'The Casino') where coffee, tea and biscuits were offered.

As the X-ray results for Hannah's broken arm proved inconclusive, a medivac plan had to be put into place. The only place where medivacs from this part of the Antarctic can be undertaken is the Chilean Base Presidente Frei on King George Island, in the South Shetlands. While arrangements were made for a plane to come from Punta Arenas, Chile, to pick up Hannah (now sporting a brand-new cast covering her right arm), we had the afternoon to enjoy the ice and sun in the scenic ice-filled Antarctic Sound. The Polar Star slowly made her way through brash ice and small ice bergs towards our afternoon's destination at Brown Bluff. The blues and greens of the sea met the browns, oranges and greys of the cliffs which in turn disappeared under the pure white of snow and ice that capped the peaks. Several groups of penguins were spotted both in the water and hopping on floes, along with Weddell, leopard and crabeater seals hauled out for a sunny snooze on the ice. Once the zodiacs were in the water, we were whisked to shore beneath the towering rock face of Brown Bluff. Some of us joined Kerstin and Ursula for a steep but rewarding climb up to a small snow-covered ridge affording spectacular views across the ice strewn Sound. Others followed Sonja and John along the gravel beach and plateau busy with moulting Gentoo and Adelle penguins, with several snoozy and occasionally growly male fur seals thrown in for added entertainment. Ever hungry Gentoo chicks chased their parent across the beach in pursuit of the next meal. The only escape for the harassed adult was to jump back into the water, while the chicks, still not fully moulted

out of their baby coat and reluctant to enter water, loitered like lost teenagers at the water's edge. It was easy just to sit and watch and absorb the Antarctic ambience with all senses. Time flew by, and before we knew it, last zodiac time was upon us, and we had to head back to the ship. One inventive passenger quickened the descend from the ridge with a toboggan run. (Yes, we saw you!)

As the evening sun bathed the ice into soft hues of orange and purple the Polar Star wound her way back west again en route to the South Shetlands. Rumor had it that our injured but relentless Hannah put in word with the Captain. It didn't take much convincing and soon our skilled Master turned the Polar Star towards some big ice floes on our starboard. She was being made do what she was built to do – BREAK ICE! THICK ICE! Most of us were out on deck and up on the bridge to watch our red ship crunch through ice over 2 meters thick. What a sight this was!

Finally as darkness was setting in, the ship maneuvered very closely between several massive tabular icebergs with her flood lights illuminating these white giants in an eerie blue-white light. The night sky above slowly unveiled the southern hemisphere's blanket of stars, with the Southern Cross gleaming next to a waning moon to cast shadows behind the icebergs. Despite Hannah's mishap, this turned out to be a marvelous day in true expedition spirit!



## **Friday, 5<sup>th</sup> March 2010: Ardley Island and Penguin Island**

**Time:** 12:00

**Latitude:** 62° 12.1' S

**Longitude:** 058° 55.5' W

**Wind:** Force 3 (gentle breeze, 7-10 knots) North West

**Sea Conditions:** smooth, wave height 0.1 -0.5 m

**Air Temperature:** 6° C

**Barometer:** 1005 mb

**Distance sailed from Ushuaia:** 851 nm

Perhaps for some, the overnight passage was a little tough for sleeping, as we did roll quite wee bit. But the dawn brought us into the sheltered waters of Ardley Cove, just off King George Island in the South Shetland Islands. On shore we made out the shapes of separate bases claimed by USSR, Chile, China and Argentina. Our morning's landing site

was a specially protected area, so only groups of up to 40 people were allowed at a time. With two sets of one and a half hour visits we were treated to a lovely hike along this seaweed covered shoreline where lots of inquisitive Gentoos and a few miserable looking Chinstraps were hanging out. Quite a few roosting or soaring giant petrels and several groups of skuas also added to this morning's wildlife list.

While all this was happening, our beloved, injured Hannah was taken to shore at Frei Base, and was beginning her long medivac trip home. Many of us watched as the four engined jet flew in on approach. As Doctor Judy and Sonja reported back from base, Hannah had an entire 150 seater plane at her disposal for her short 2-hour flight across the Drake Passage to Punta Arenas, where she was scheduled to undergo full medical treatment. Our thoughts and best wishes went with her.

At 12:30 pm up came the anchor and off we were for a short transit to Penguin Island for yet another landing. The sail past ice covered King George Island was very scenic, but a steady breeze blew in from the North-west. Soon the scout boat was in the water and headed for the shore in search of a suitable landing site. But it was not meant to be. With crashing surf at every stretch of shoreline and waves smashing in over the transom partially swamping the zodiac, Megan and some of her expedition staff made the decision to cancel this outing. All the while we were lined up at the deck 3 rails being entertained by two humpback whales feeding close to the vessel. Spectacular lenticular cloud formations provided a suitably dramatic backdrop.



Before disappointment about the cancelled landing could set in, our Expedition leader Megan informed us of yet another change of plans. We were now heading for famed Elephant Island with a potential view to attempt an early morning zodiac cruise near Point Wild. Quite a few cheers were heard from the ranks of the passengers (and the staff) when Megan revealed her new plan.

The evening's recap continued with a quick talk about the penguins we saw today and why we are seeing more Gentoos than other species. Ursula took the mic and explained the actions of this afternoon's whales. Sonja briefly talked about some of the current thoughts on how sea birds and mammals navigate. She also talked about the Chilean base where Hannah was flown out of and showed a few photos of the departing Hannah and plane. Sonja then went on to talk about penguin poo - all in the name of science. Need we say more? After supper John provided a lighthearted look at "how to take bad photographs" showing the dos and don'ts of modern picture taking.

## Saturday, 6<sup>th</sup> March 2010: Point Wild, Elephant Island

**Time:** 12:00

**Latitude:** 60° 56.9' S

**Longitude:** 054° 31.1' W

**Wind:** Force 4 (moderate breeze, 11-16 knots) West North West

**Sea Conditions:** moderate, wave height 1.25 -2.5 m

**Air Temperature:** 4° C

**Speed:** 11.5 knots

**Barometer:** 998 mb

**Distance sailed from Ushuaia:** 1035 nm

As the sky began to brighten the foreboding outline of Elephant Island was barely visible in the sea fog. We anchored right off Point Wild which remained hidden behind the white watery blanket, but the noisy Chinstrap penguins on shore and the occasional rumble from the glacier behind us gave away the presence of land. Point Wild was made famous when Sir Ernest Shackleton left here in a small boat with three crew to get help from South Georgia 800 miles away across the stormy Scotia Sea using only basic instruments for navigation. Shackleton and his brave men managed the unthinkable, reached South Georgia and raised help from South America. In the meantime the 22 men left behind at Point Wild survived the winter, gales, ice and starvation tucked under their makeshift lifeboat shelter on a tiny beach with a glacier behind and the roaring sea in front of them. Their salvation came in form of the Chilean relief ship Yelcho and its Captain Piloto Pardo whose bust and monument grace the rocky shore line looking out to sea in the direction from which the rescue hailed.

Well Megan hadn't been kidding last night. The wake up call came very early this morning. Breakfast was at 7 am and we were boarding the zodiacs shortly after 8 am. The fog lifted just enough to reveal the spectacular and awe-inspiring scenery. A massive glacier face bounded the bay to our right, while the remaining rocky outcrop of Point Wild was covered in moulting Chinstrap penguins. The zodiacs cruised around the rocks and brought us up close and personal with history and the current wildlife. Two leopard seals patrolled the shoreline and took an interest in our zodiacs, providing short glimpses of their sleek, almost reptilian body. They are amazing stealth hunters. Several lucky passengers watched one leopard seals take its breakfast in form of an unfortunate Chinstrap penguin. We even witnessed the leopard seal thrashing the penguin around to remove its skin and blubber layer for an easier meal. Soon the seal was on the underwater prowl again for its next snack. And penguins on shore were in abundance, covering the



beach, rocks and even the upper parts of the cliffs. One could be tempted to think they could fly! Skuas and kelp gulls swooped in to pick at the left over carcasses and a group of fur seals cautiously looked on.



As our two hour zodiac cruise was coming to an end, the glacial ice wall in the background calved. With a loud crack, huge chunks of thousand year old compacted snow, crashed into the sea. This created a large wave and a stern warning from Polar Star's Captain rang out over the driver's radios for us to take caution. We reluctantly steered through the brash ice and back to the ship. The ocean swell rocked Polar Star and created some interesting moments as we clambered up the gangway from the zodiacs. Perhaps this is a precursor to our upcoming landings.

Once again we retrieved our anchor and the Polar Star took course towards South Georgia for our two day crossing of the Scotia Sea. Unthinkable that Shackleton and his men made the same journey across the roaring seas in a semi-open lifeboat!

We soon felt the by now familiar rolling of the ship in the open ocean swell. Lunch was served as scheduled and there was time after for a short nap in the cabin or to curl up on one of those comfy couches in the Library as the ship once again cut through the waves. Mid afternoon brought our onboard geologist, Kirsten to the Observation lounge for her lecture on "When Fire meets Ice". This was an interesting technical treatise of the origin of volcanic activity in the Bransfield Strait, with a close look at the magnificent volcanic features seen at Elephant Island, Edinburgh Hill and Brown Bluff.

Recap had Ursula showing her life size cutouts of a female killer whale(or Orca for some of us) and calf. The evening movie was the documentary "In the wake of the Belgica". On the 110<sup>th</sup> anniversary (2008/9) an aluminum sailboat renamed Euronav Belgika with seven crew attempted to retrace the route and landings of Adrien de Gerlache and his sailing barque "Belgika.

## **Sunday, 7<sup>th</sup> March 2010: Scotia Sea, sailing towards South Georgia**

**Time:** 12:00

**Latitude:** 58° 43.0' S

**Longitude:** 047° 17.4' W

**Wind:** Force 4 (moderate breeze, 11-16 knots) West

**Sea Conditions:** moderate, wave height 1.25- 2.5m

**Air Temperature:** 6° C

**Speed:** 11.2 knots

**Barometer:** 1002 mb

**Distance sailed from Ushuaia:** 1292 nm

After a reasonably comfortable night at sea we woke to a grey overcast morning. The ship was cruising at just over 11 knots towards South Georgia. This morning after breakfast we signed up for engine room tours. Each tour lasted for about twenty minutes.



We were guided through the main control room, two engine rooms and auxiliary engineering compartments. We saw, heard and felt one of the main diesel generators running. Over one engine a spare 900 mm piston hung ready for installation (if needed). Two important commodities took our particular interest: the boilers for heating our showers and the vacuum waste system. At the stern and low in the ship is the rudder control compartment and we were able to watch how direction of the ship is controlled.

Ursula kicked off the day's lecture program with a talk about "Incredible Hunters" in which she discussed the feeding techniques of whales and dolphins and showed us many amazing short videos. Shortly before Megan's lecture Sonja's excited voice echoed over the PA system. Fin whales! As for the humpback whales a few days earlier the Captain stopped the ship. For more than an hour we watched a dozen fin (finback for the North Americans) whales swimming and foraging closely around the ship. The whales displayed text book ID feature showing off their white right jaw and mouth line, their sickle shaped fins, dark back with lighter chevron and their very tall blows (up to 6-8m tall). Although they were not as closely interactive as the humpback whales had been this was also quite a unique encounter as it is unusual for fin whales to swim around a ship for such an extended period of time. While we were busy with the whales, a few of us were also paying attention to the few black browed and even a wandering albatross gliding about the ship. These magnificent birds travel thousands of miles and can have a wingspan of over 3 ½ meters. Not long after, fog began to hide most of the surrounding view from the ship. It was a good time to head for lunch.

Some of us headed for a snooze, back out on deck for more fresh air and whale/ dolphin spotting, while others leaned back in the Observation lounge and watched "Shackleton Part 1", the dramatization of the Endurance Expedition. In the afternoon Megan gave her postponed lecture on "Penguins, krill and fisheries". She explained what CCAMLR (Convention for the Conservation of Antarctic Marine Resources) is, how it works and detailed her experience with using Adelie penguins to help monitor and manage the krill fishery.

For recap Megan talked about tomorrow's plans including a full day at sea and another vacuum party in preparation for our arrival to South Georgia. She reminded us that the clocks would go forward by one hour that night too as South Georgia was in a different time zone. Ursula explained the physical difference between the minke and the finback

whales we had seen today. John showed the 1949 black and white film made and narrated by Charles Swithenback while on board a Norwegian factory whaling ship, and Doctor Judy gave an update on Hannah's condition. Hannah had undergone successful surgery in Punta Arenas, Chile and was preparing to fly back to her home in the U.K. Sonja stepped up to the mic and commented John's short video of a zodiac being swamped while attempting a landing at Bailey Head.

Supper was called and one of the choices was broccoli soup, a delicious slab of prime rib with a dollop of horse radish sided with green beans and mashed potatoes. Before the end of the evening Ursula narrated three short movies she made on Minke whales, her study species in the St. Lawrence Estuary in Canada.

## **Monday, 8<sup>th</sup> March 2010: Scotia Sea, sailing towards South Georgia**

**Time:** 12:00

**Latitude:** 56° 34.2' S

**Longitude:** 040° 45.8' W

**Wind:** Force 3 (gentle breeze, 7-10 knots) North

**Sea Conditions:** moderate, wave height 1.25 - 2.5 m

**Air Temperature:** 3° C

**Speed:** 11.2 knots

**Barometer:** 1004 mb

**Distance sailed from Ushuaia:** 1558 nm

Did you put your clock ahead before going to bed last night? This morning's "bing bong" came even a little later than planned but all made it to breakfast. The Polar Star was making good progress towards South Georgia and we spent another day at sea, watching for sea birds and whales (with little success in the foggy conditions), catching up on our diaries, reading a book, relaxing and attending lectures. John presented "A Southern Eden – Part I" at 8:30 SGMT (South Georgia MEGAN time). He gave a sometimes comical view of the wildlife of South Georgia - a place he describes as the "Banana Belt" for birds and talked about the habits of the King penguin.

Shortly before lunch, Megan introduced us to the wildlife and the visitor guidelines for South Georgia. She also showed a video put together by the S.G. Government that all visitors to the islands are required to watch.

After lunch we held the second infamous vacuum party and disinfected any previously soiled outer wear and boots. Some people seem to thoroughly enjoy these little cleaning frenzies..... Recap was at 6:15pm and Megan sparked every one's attention by announcing that tomorrow morning's wakeup call would be at 5:45 am South Georgia time! The plan is for the Polar Star to cruise the very scenic Drygalski Fjord before breakfast, with an after-breakfast landing at Cooper Bay.

After supper the second half of the movie 'Shackleton Part II' was shown to conclude the

dramatization of his epic journey.

## **Tuesday, 9<sup>th</sup> March 2010: Drygalski Fjord, Cooper Bay and Gold Harbour. South Georgia**

**Time:** 12:00

**Latitude:** 54° 51.0' S

**Longitude:** 035° 52.4' W

**Wind:** Force 2 (light breeze, 4-6 knots) East

**Sea Conditions:** slight, wave height 0.5 - 1.25 m

**Air Temperature:** 4° C

**Speed:** 11.2 knots

**Barometer:** 995 mb

**Distance sailed from Ushuaia:** 1757 nm

Our 5:45 am wake up call came as a bit of a shock but we should be well rested after our rather comfortable two and half day (716 nautical miles) transit from Elephant Island. We rounded the southern most point of South Georgia, Cape Disappointment, at first light. Famously named by Captain Cook at the end of his second voyage that failed to find the peninsula of the supposed *Terra Australis Incognita*, this southern extent of South Georgia proved that the land was nothing more than an island.

With the night's fog behind us, a reddish glow preluded the 6:05 am sunrise over our stern just as our ship entered Drygalski Fiord. Polar Star's decks soon came alive with passengers. The brash ice thickened as we entered the 6 mile long fiord. We passed a sleeping whale and woke up a leopard seal snoozing on an ice flow. The seal reluctantly slipped sideways into the sea. The Captain stopped the ship a mile short of the tidal glacier which overhangs the water, and spun the Polar Star around in a tight half circle. During this maneuver we also witnessed several small calvings. According to the navigation chart, we were surrounded by steep 3,000 foot cliffs and with the naked eye we saw jagged tops pointing skyward. As the breakfast dingdong went we were already sailing out of Drygalski Fjord.



By 9 am the Polar Star was anchored in Cooper Bay and we were soon in zodiacs and on our way to our first landing in South Georgia. Even before setting foot ashore we realized that the beach and adjacent rocks were teeming with wildlife. Inquisitive fur seal pups frolicked in the shallow water between rocky outcrops, and all along the beach. We even spotted two “blondies”, fur

seals with creamy fur colour (a condition known as leukism that occurs in one out of 800 pups). Two king penguins and several gentoos completed the welcome committee. However, the main aim of our landing was to see Macaroni penguins who were nesting and moulting in a small colony above the landing site. A short slippery scramble up a gully was rewarded with magnificent views across the bay. A further stumble over mud and dense tussock grass (while dodging sleeping fur seals) brought us to the edge of the Macaroni colony. There were hundreds of them huddled together in their annual moult where they renew their feathers and so are unable to enter the water during that time. This is a difficult time for the penguins, and some looked a little unhappy. Their beautiful yellow head feathers (which have given them the name) were drooping a little, but still provided for some pretty photo opportunity. Soon a persistent drizzle set in which gave the penguins an even more miserable look but did little to dampen our good spirits. After exploring on shore most of us enjoyed a half hour cruise along the coast where a large leopard seal followed the zodiacs. For our bird enthusiasts two South Georgia Pipits provided added bonus.

Back on board it was only a short repositioning cruise down the coast to Gold Harbour, our afternoon destination. This was a favorite spot for those of the staff who had been here before. We were greeted by a burping, farting, sneezing and grumbling wall of blubber in the form of a huge pile of elephant seals in a wallow close to where



the zodiacs landed. At this time of year large male elephant seals that were fierce opponents only a few months earlier during the breeding season had now gathered into groups to moult, itch and share their misery. Unlike other seals, elephant seals shed the entire outer layer of skin which causes them great itch and irritation. So they band together for warmth (renewing the skin requires heat and energy) and company while they are confined to land. Beyond the elephant seal wallow stretched the beach covered in king penguins. They soon drew all our attention. About 25,000 pairs breed in this beautiful setting surrounded by steep cliffs and hanging glaciers. The expedition staff got together and counted every one and came up with the number 25,221 pairs (plus minus a few where Phil lost count...). Given the asynchronous breeding cycle of the king penguin we witnessed adult birds sitting on eggs, brooding small chicks as well as several 'wooly' penguins (large brown fluffy chicks) standing around. We were able to spend more than four hours in this wildlife heaven, and got up close and personal with king penguins, as well as the many cute fur seal pups. At this time of year these pups form little gangs that

play-fight and practice their territory holding skills. Many of us had close encounters with these feisty little creatures who were all bluff and huff, and ran for cover as soon as they were spoken to sternly.

Most of us were back on the vessel by the time the sudden katabatic winds from the nearby ice fields hit the ship. The last two zodiacs however had to battle back to the ship in gale-force winds (force 10 with more than 45 knots, top wind speed recorded on the bridge 53 knots). This provided some heart-stopping moments for the gangway crew and staff involved. A zodiac ride not to be forgotten! All were back aboard safely for dinner followed by a short late-evening briefing about tomorrow's outings. Bring it on!!!

### **Wednesday, 10<sup>th</sup> March 2010: St Andrews Bay, Grytviken and King Edward Point**

**Time:** 12:00

**Latitude:** 54° 26.1' S

**Longitude:** 036° 10.0' W

**Wind:** Force 3 (7-10 knots) North East

**Sea Conditions:** smooth, wave height 0.1 - 0.5 m

**Air Temperature:** 10° C

**Barometer:** 1000 mb

**Distance sailed from Ushuaia:** 1811 nm

Arriving in St Andrews Bay to a spring like day of +10°C (52°F) and a dying 30-knot breeze was a nice way to start another day in this South Georgia Paradise. Soon after breakfast the expedition team headed for shore, and a little while later (after moving the landing site further south-west past a newly developed glacial river) it was the passenger's turn to make landfall. And then, there were penguins, penguins and more penguins. St Andrews Bay is the home of South Georgia's largest King Penguin colony, with at least a hundred thousand pairs nesting along the beach and up the glacial stream valleys. One lost looking chinstrap penguin was also spotted amongst the rows and rows of kings. With a backdrop of three different glaciers, snow capped mountain peaks and grass covered foothills, the two dozen reindeer grazing the flood plain behind the beach seemed to fit right in. This was truly a magical place where some of us just didn't want to leave. The king penguins seemed to think alike, followed us around and gathered in large groups at the landing site. It seemed that the penguins were trying to join us aboard, but they were refused boarding as they had not donned proper orange Polar Star life vests. We finally left under blue skies, blazing sun and to the trumpeting good byes of thousands of king penguins.

During lunch, the Polar Star continued further north towards Cumberland Bay and our afternoon's destination Grytviken and King Edward Point. En-route Megan briefed us about this afternoon's landing and tomorrow's "Shackleton Walk".

The entrance into Cumberland Bay was very scenic and many of us were out on deck watching the Polar Star approach Grytviken. To our amazement the Captain put the vessel alongside the very small government pier at King Edward Point around 3:30 pm. While custom's paperwork was being processed, a member of the South Georgia Museum came on board to tell us about the work they do in the newly refurbished museum and at the South Georgia Heritage Trust.

From there we were back in the zodiacs for a quick trip across the bay to pay a tribute visit to Sir Ernest Shackleton who was buried in the small graveyard overlooking the bay. When all had gathered around Sir Ernest's grave, our John Sparks toasted him with a short famous quote by Sir Raymond Priesley: "For speed and efficiency of travel, give me Amundsen, For scientific discovery, give me Scott; But when all hope is lost get down on your knees and pray for Shackleton". We raised the glasses (well, plastic cups actually) to "The Boss", threw back a sip of whiskey and gave the rest to Sir Ernest. Many had their picture taken by the grave marker and then went on exploring the remains of the old whaling factory. Although it seemed like we had lots of time on shore, the four hours were gone rather quickly with writing post cards or poking around the wonderful museum and gift shop.



Ursula, Sonja and one of the base's scientists went out looking for one of the satellite tags that Sonja's colleagues had glued to elephant seals late last year, and which by now had fallen off the moulting seal. The small party came back victoriously and smiling, having successfully located and retrieved one expensive tag filled with data.

Dinner took place in form of our voyage BBQ on deck 5 aft of the Observation Lounge. Our head chef Bob with his assistants and dining room staff put on a huge spread with an intricately carved water melon for decoration. We were joined for the BBQs by 14 of the Grytviken and King Edward Point staff. Some of the brave ate outside and our own toastmaster John was sporting his famous Union Jack shorts and matching socks, much to the 'enjoyment' of all onlookers. Some chatted and partied until the early hours in the morning, but no one missed the boat.

### **Thursday, 11<sup>th</sup> March 2010: Fortuna Bay, Stromness and Hercules Bay**

**Time:** 12:00

**Latitude:** 54° 09.5' S

**Longitude:** 036°41.0' W

**Wind:** Force 3-4 East North East

**Sea Conditions:** smooth, wave height 0.1 - 0.5 m

**Air Temperature:** 9° C

**Barometer:** 989 mb

**Distance sailed from Ushuaia:** 1864 nm

At 3 am this morning we left the dock at Grytviken and repositioned to Fortuna Bay. This was the beginning of a wonderful day. The weather was bright and gave fine views of the northern faces of Mount Spaaman, Larssen Peak and Marikoppa that form the backdrop from which the König Glacier flows into Fortuna Bay. Those who had planned to undertake the hike from Fortuna Bay to Stromness (affectionately referred to as the *Shackleton Hike*) were ferried across the bay by Zodiac at 8:45 am and dropped at the start point. The remainder of us stayed on ship to enjoy the scenic navigation around the headland and into Stromness Harbour.

Of the shore party, 57 avid walkers soon followed in Shackleton's footsteps (or at least in Ursula's who was leading the hike). The hike covered the last section of the epic 36 hour crossing of South Georgia undertaken by Tom Crean, Frank Worsley and Sir Ernest Shackleton, ending in Stromness on 20<sup>th</sup> May 1916.

The first part took us up a fairly steep incline through the tussock before leveling out at the 300 meter ridge line. The group was soon spread out as people clambered up the hill at different speeds. We looked over our shoulder and glimpsed the Polar Star slowly slipping out of Fortuna Bay and out of view. She was to await us in Stromness at the end of the hike. We took several group photos and continued onwards. The wind picked up as we neared the top of our climb. This was a welcome refreshment for some as the sunny weather with balmy temperatures and the unfamiliar exercise had caused a few sweat drops to be shed. We continued on mostly flat ground past two small crystal-clear lakes that looked almost inviting enough for a plunge (any such thoughts were quickly dispelled by dipping one's hand into the freezing cold water). As we reached the top of the final ridge we caught sight of the blue ocean again. There was no sign of the Polar Star but we knew she would arrive and anchor soon.

The incline down to the flood plain below was quite steep with loose stone and gravel making for slow progress. Soon some of us changed course and trekked over to the waterfall where Shackleton and his two companions had descended. This route was much too slippery and wet for us, but a few tasted the pure and delicious cold water that had wound its way down from a thousand feet above. The waterfall was surrounded by a beautiful carpet of green which stood in stark contrast to the rocky cliffs.

Then followed the long walk across a partially dried up river bed to the old whaling station at Stromness. The closer we got to the beach, the more fur seal pups and their over anxious mothers we came upon. Out of nowhere five or six large reindeer (caribou) rumbled across in front of us. A much larger herd was later spotted feeding in and around the old whaling station. A few of us even watched two males fight, apparently just for the fun of it. Up in the hill to our right were a bunch of moulting gentoo penguins. As we neared the shore an eerie scene from the past with the ruins of the Stromness whaling station rose to our right. Entrance to the station is forbidden due to the dangers from

asbestos fibers used in the construction of these old buildings. and the remains had to be viewed from a safe distance marked pedantically by many small signs.

In total, the Shackleton hikers covered 3.8 nautical miles, 4.4 statute miles or 7 km (according to GPS track). Some of us who had not done the hike took a brisk walk up to the water fall to also enjoy the stunning views. Others simply sat on the gravelly shore and watched the water ballet of dozens of young fur seals in the shallow water.



Back to the ship for a late lunch, we were treated to a short rest while the ship motored to Hercules Bay. We anchored in a small horseshoe shaped inlet carved out of the rock with some jagged caves eroded out of the cliffs. We once again got ready for a zodiac cruise as the welcome rays of the sun warmed us. A stone throw from the vessel and situated on an inhospitable looking craggy rock face was a small rookery of moulting macaroni penguins. The gentoo penguins had made a more appealing choice and were hanging out on the flat pretty pebble beach right in front of a picturesque waterfall. Elephant seals and the omnipresent fur seals occupied the shallow nearshore waters. South Georgia shags (also known as “flying penguins” by 3<sup>rd</sup> Officer Mark) and giant petrels were paddling around. The water inside Hercules Bay was much like other parts of South Georgia - an almost Caribbean shade of turquoise and blue. The zodiacs cruised along the impressive rock face, and most stuck their bows around the corner to explore the more exposed coastline. Reindeer were once again spotted on the hills, and dense kelp forests caused a bit of grieve for some zodiacs by catching in the propeller. Sonja’s boat spotted a hunting leopard seal which turned out to be rather inquisitive and provided the many fine views of its sleek body and big head before disappearing in the tangle of kelp. As the sun slowly fell behind the mountains, photographic opportunities became more difficult and the air

cooled quickly, so it was time to return to the ship for a short recap followed by dinner. John showed some old slides of Stromness in the late 1990's and talked briefly about the birds of South Georgia. Megan managed to brighten our evening with the announcement of Friday morning's 5:15 am wakeup call. Off to bed then!

## **Friday, 12<sup>th</sup> March 2010: Salisbury Plains, Prion Island, Elsehul**

**Time:** 12:00

**Latitude:** 54° 01.4' S

**Longitude:** 037° 14.6' W

**Wind:** Force 4 (moderate breeze, 11-16 knots) West South West

**Sea Conditions:** smooth, wave height 0.1 - 0.5 m

**Air Temperature:** 5° C

**Barometer:** 983 m

**Distance sailed from Ushuaia:** 1904 nm

Well, neither the weather nor the sunlight wanted to cooperate this morning, so the wakeup call was delayed until a slightly more civil 5:45 am. The scout boat was sent ashore and reported back that the swells were too large to make for a safe landing. So this morning's planned landing at Salisbury Plain turned into a 1 hour zodiac cruise instead. The snow continued to fall and made for a quite dramatic backdrop to the beach teeming with fur seals and king penguins. Five boatloads braved the elements and enjoyed close up encounters with particularly playful young fur seals around the zodiacs. At times it seemed as if they would jump right into the boat with us. While most of the 125,000 king penguins of this colony were hidden in the drifting snow, several thousand penguins hung out on the beach and squawked and looked on. A few were in swimming around gracefully, but the seals no doubt stole the show. We were back on board for our 7:30 am breakfast as the ship motored the short distance to Prion Island.

Prion Island is a Specially Protected Area and one of the few "rat free" albatross breeding areas open to visitors. A maximum of 50 people are allowed on shore at one time. So while the first groups of passengers headed straight for shore three zodiacs with Kerstin, Sonja and Phil at the helm went for a circumnavigation of Prion Island. Ever playful fur seal pups again provided entertainment, along with several elephant seals, and many close up sightings of the endemic South Georgia pipit. As the first groups returned from Prion Island, the zodiac cruisers went ashore. The hike from the beach up to the 250 foot hill top was made easy with a very sturdy boardwalk built only a few years ago. The seals



had certainly discovered it as easy access route and seemed to monopolize it as their own private highway!

It continued to snow lightly which provided for authentic Antarctic effects we had not

experienced much in the last few weeks. As the skies cleared through the morning and the wind freshened up, several mighty wandering albatrosses took to the air. Sometimes there were a dozen albatross soaring over the island at the same time while more were sitting on nests tucked away in the tussock. Young, non-breeding birds strutted up and down the slopes stretching their wings and looking for future mates. There was a sense of awe among the human onlookers, best captured by Robert Cushman Murphy's classic quote: "I now belong to the higher cult of mortals, for I have seen the Albatross."

In sunshine but with a strong breeze we returned to the Polar Star. Soon the able crew had retrieved the anchor one more time and we began our 750 mile trek to the Falkland Islands. But our good Captain made a slight detour and we paid a drive-by visit to Elsehul at the north-eastern end of South Georgia. Here as we nosed slowly up to the cliff face and the helmsman gently spun the Polar Star, we were able to see many grey-headed and black-browed albatross in flight. With good binoculars we could also make out the fluffy grey chicks on their lofty nests in the tussock high along the slopes. Anchored in closer to the islands was a privately owned 47 foot motor cruiser by the name of "Polar Bound". This vessel had spent winters frozen in the ice in the Antarctic and also in the North. Only few of us, however, seemed inspired enough to trade the comforts of our big red ship to the no doubt spartanic living conditions on this bathtub motor cruiser.

Sailing out and away from South Georgia we saw Bird and Willis Island and did some iceberg watching. A few of us spotted the distant fluke of a Southern right whale, and many more blows of humpback and fin(back) whales were seen as we headed into the open sea.

Recap saw the usual introduction to tomorrow's activities by Megan followed by Kirsten who finally got a chance to explain the shape of the rock structure we saw on our hike over to Stromness and later that day in Hercules Bay. She also talked about the creation of South Georgia's four different rock formations resulting from the interplay of plate tectonics, erosion and sediments. John ended recap with his famous pocket rope trick where he had knots tied at various lengths which represented the wing spans of selected birds of the sub-Antarctic. After supper we were treated to a video on life on Macquarie Island starring our own "Megan" and other researchers and the wildlife studies taking place there.

## **Saturday, 13<sup>th</sup> March 2010: Scotia Sea, sailing towards the Falkland Islands**

**Time:** 12:00

**Latitude:** 53° 57.6' S

**Longitude:** 043° 51.4' W

**Wind:** Force 4 (moderate breeze, 11 - 16 knots) South South East

**Sea Conditions:** rough, wave height 2.5 - 4 m

**Air Temperature:** 4° C

**Speed:** 11.0 knots

**Barometer:** 987 mb

**Distance sailed from Ushuaia:** 2145 nm

Today was a bit more of a day for relaxing as we rocked and rolled across the Scotia Sea. We all got a lie-in with breakfast being served at 8 am. Ursula was up with the first lecture of the day entitled 'Who is Who Among the Minke Whales'. She talked about how individual minke whales (and other species) can be tracked using photo identification and how this has helped her own research over the past 15 years. Before lunch Sonja gave an enthusiastic talk about "Seals for Science" and some of the cool gadgets used to gather information on the underwater lives of marine mammals, and the ocean environment.

Lunch proved a little trickier today as the movement of the ship was rather unpredictable. Those keen (and able) enough to keep an eye out spotted many black browed and wandering albatrosses flying about the ship, and various fin whale blows were also spotted in the distance. The film "South" was shown in the afternoon presenting unique original footage taken by Frank Hurley during Earnest Shackleton's 1914-16 attempt to cross Antarctica. Later in the afternoon Megan took the stage and talked about her time at the Australian base of Mawson in the Antarctic where she worked for one winter and several summers as a penguin and seal biologist.

During recap Megan reminded everyone to turn their clocks back again tonight as the Falkland Islands are in a different time zone, and so we regained the hour lost en route to South Georgia. Sonja spoke about records in the marine mammal world such as the biggest beasty, the fastest swimmers and deepest divers. John added some altitude records for bird flight.

After supper we enjoyed half of the BBC special on the habits of penguins of the Antarctic which unfortunately quit playing before it was halfway through. Our AV specialist, Kerstin, was unable to make it continue to play.



## **Sunday, 14<sup>th</sup> March 2010: Scotia Sea, sailing towards the Falkland Islands**

**Time:** 12:00

**Latitude:** 53° 35.4' S

**Longitude:** 052° 04.2' W

**Wind:** 42 knots SE

**Sea Conditions:** moderate

**Air Temperature:** 4° C

**Speed:** 11.4 knots

**Barometer:** 978 mb



## **Distance sailed from Ushuaia: 2438 nm**

We gained our lost hour back over night. Most were early to rise and a large crowd was ready for breakfast at 8 am. The weather had deteriorated somewhat in the dark hours and the seas were a little rougher. It was a grey morning with wet snow and a request was passed on from the bridge that we refrain from venturing out on to the outside decks. Throughout the day, the wind and waves continued to grow, however because we had a following sea, the motion of the ship remained relatively stable so that we could enjoy the days' ship-board activities.

The first lecture for the day was with Sonja. She introduced us to some of the nifty scientific equipment and techniques used to study the charismatic marine mega fauna, such as whale, seals and seabirds, and in particular the amazing southern elephant seal. Devices attached to these animals have recorded them diving for as long as 2-hours, to depths of over 1800-m! Sonja had an example of one of these tags on hand, which found on the beach at South Georgia after it had been moulted off by the animal that had been carrying it – a lucky find, for at £3000 each, they are expensive pieces of equipment! Her colleagues will be very pleased they see it. Before lunch, Megan explained the new research project she is developing (*The Penguin Feeding Project*; [www.penguinfeedingproject.org](http://www.penguinfeedingproject.org)), aimed at using the diet of penguins to assist in the conservation and management of Southern Ocean resources. After lunch we watched “*End of the Line*”, an eye-opening new documentary on the effects of over fishing of the world's oceans. To round off the day, John brought us up to speed with a talk and beautiful photographs of the type of wildlife we can expect to see in the Falkland Islands over the next couple of days.

For recap Phil gave a short lesson on the internal workings of Polar Star and a slide show showing the ship in her early days as a working icebreaker. Following this, Pat Lucock, the outgoing South Georgia Government Officer, who was getting lift back to Stanley with us, gave us insightful overview of the fisheries that operate around South Georgia. He explained the tightly regulated controls they have on the fishery, which has made it one of the most successfully managed fisheries in the world.

After supper Ursula showed two parts of a National Geographic documentary, “*The Mystery of Minke Whales*”. The film covered some of the research that has been done on the dwarf minke whales which live off the Great Barrier Reef in Australia. Afterwards, a handful of people retired to the Polar Bar before being rocked to sleep on the rolling waves which were beginning to feel the pull and tug of land.

## **Monday, 15<sup>th</sup> March 2010: Stanley, East Falkland**

**Time:** 12:00

**Latitude:** 51° 41.2' S



**Longitude:** 057° 51.1' W

**Wind:** Force 8 (fresh gale, 34-40 knots) South South West

**Sea Conditions:** slight, wave height: 0.5 - 1.25 m

**Air Temperature:** 7° C

**Barometer:** 994 mb

**Distance sailed from Ushuaia:** 2683 nm

Although it was expected that conditions would ease over night, the wind was still howling this morning - 40 -50 knots (65-85 kmph) and the seas were up to 20 ft (6.5 m). But at least some sun was shining through the clouds off our starboard quarter. In addition to this, the Falkland Islands were on the horizon and a day on land was anticipated.

Many of us were on the bridge as we entered Port William and then as we steamed into Stanley Harbour. It was still very windy but once in the shelter of the harbour, the seas died down and the ship stopped rolling at last. We dropped anchor right off the township of Stanley but before going ashore we had to clear customs. Customs officials and the Port Authority officers were brought on board. They checked our paperwork and passports, and then gave us the all clear to go ashore. Before long the zodiacs began to ferry us ashore, some taking a bagged lunch to munch while they explored the township, others opting to try the local pubs and cafes. And really, how could you pass up beer-battered fish and chips with mushy peas! Stanley is a quaint township, reminiscent of a small English village, full of history, and land-rovers! Many of us took time to explore the Visitors Centre and Museum, which was a pleasant walk along the waterfront. If we didn't feel like walking the whole way, we could take the complimentary museum shuttle bus, which was welcomed when the weather changed. However frequent changes in weather seem to be part and parcel of life in the Falklands, as we must have had just about every form of it within our 6-hour visit, including quarter-inch hail!

For those who were all shopped out, or had had enough coffee, zodiacs were available to shuttle us back to the ship. However most chose to go on the excursion organized for us out to a place called Gypsy Cove which lies just on the outskirts of Stanley. Along the way we stopped for a photo opportunity in front of the rusted wreck of the Lady Elizabeth. Upon reaching Gypsy Cove we spread out to explore this little point of land over-looking Surf Beach. Right next to the pass we found a group of moulting Magellanic penguins. These are of the 'banded' penguins, and would, we imagine look quite splendid with their hoop-shaped band of black feathers curving over the chest – however, today they were looking a little shabby with tufts of feathers being lost in the wind. However we were lucky to see two dozen or more come ashore and start striding up the beach towards their burrows.

Some of us chose to walk the whole loop which wound around Gypsy Cove, while others were content to stop at the Ordinance Point and take in the view across to Stanley. As well as the penguins, we rock shags and upland geese with a flock of fully grown fledglings. The Falklands are thin on the ground in terms of trees, but shrubs and low grasses abound, including dwarf shrub heath like diddle dee, which grew all over the

cove. Just as it was time to return, the rain and wind started again, so we were all pleased to get into the relative warmth and shelter of the buses which were waiting to run us back to town.

Arriving back into Stanley, it was almost 17:00 and time for the last zodiac – so we piled in and zoomed back off across the harbour to our little floating home. Soon we had weighed anchor and were slowly making our way back out of Port Stanley and navigating our way up the east coast of East Falkland Island, pleased for the moment that the ship wasn't rolling quite so much as it had been.

The evenings recap had Megan talking about tomorrow's visits to West Point and Carcass Islands, which lie off the coast of West Falkland. She then showed a short video of the south American sea-lion that had jumped into her zodiac during one of her shuttles earlier in the day! He seemed extremely content sitting on the zodiac pontoon. After this, John read an amusing poem, "*Ode to an OOsik*", much to the horror of his wife Sally, (as it is all about the penis bone of a walrus!), but much to the enjoyment of all those in the Observation Lounge. He then topped this off with a BBC video first shown on April fools day of "flying penguins". We wound down the day with the movie "*Happy Feet*", a wonderful animation about a young tap dancing emperor penguin trying to discover why there are fewer and fewer fish to eat.

## **Tuesday, 16<sup>th</sup> March 2010: West Point Island, West Falkland**

**Time:** 12:00

**Latitude:** 51° 20.8' S

**Longitude:** 060° 40.2' W

**Wind:** Force 5 (fresh breeze, 17-21 knots) West North West

**Sea Conditions:** slight, wave height: 0.5 - 1.25 m

**Air Temperature:** 11° C

**Barometer:** 992 mb

**Distance sailed from Ushuaia:** nm

We dropped anchor this morning just outside a small cove in front of the homestead owned by the Napier family on West Point Island. West Point Island is home to wide variety of wildlife, including several colonies of black-browed albatross and rockhopper penguins. The Napiers have owned this island since 1879. Helping to look after the property is Michael and Jeanette who met us at the slipway below the house. The Napiers are very accommodating and are happy for groups such as ours to come and visit their island and, in particular the albatross and penguins. The nearest colony lies at Devil's Nose, a good 2-km walk up and over the sheep grazing grounds. Most of us were keen for a good leg stretch and were soon on our way. For those not so keen on a long hike, Michael and Jeanette kindly offered to take us up in their land-rovers.

The wind met us like a knife on the way over, but what a sight was to be seen when we reached the Nose. Lying below was the colony of black-brows and rockhoppers. Weaving our way through the muddy tussock grass we were soon right beside these magnificent birds. It is not until you see them this close that you appreciate their size and their beauty. Dotted all over the colony were nests built of mud



and tussock grass cemented together. On top sat some very large albatross chicks, patiently waiting the return of their parents to feed them – although by the size of them, it won't be long until they leave the nest and start fishing for themselves. Many adults were seen wheeling over head in the wind. Some landed – usually without much grace – their wings are meant for gliding, not fine maneuvering (!) and invariably cries went up from the chicks, seeing if it was their parent come back to feed them. Regurgitating an oily mix of fish and squid into the mouths of the chicks soon satisfied them.

In between the albatross nests we saw that feisty little character – the rockhopper penguin. These are the smallest of the crested penguins, but also probably the toughest. How they climbed all the way up the rocky cliffs and to the colony defies the imagination. Their tenacity must be astounding. All their chicks had fledged already, so it was only the adults present, doing what penguins do at this time of year – moult! Looking like raggedy pillows, they patiently sat in pairs or groups, waiting for their new set of feathers to grow so that they could then head back out into the water.

Although it was hard to leave, we were soon marching back over the paddocks, or bouncing along in the landrovers down to the Napiers house where we had been invited for a cup of proper English tea and a large selection of homemade sweets. The spread was quite unbelievable!

Along the track and out in the garden, we had some interesting encounters with the striated caracaras, or “Johnny Rooks”. These birds of prey are cheeky things, with little fear of man and an insatiable sense of curiosity. They are quick to investigate any bag or shoes left lying around, and would trot along behind us before taking off and soaring low over our heads.

The ever changing weather took a turn for the better, with the wind dying down and the showers easing. So after our fill of tea and cakes, the ride back in the zodiacs was relatively uneventful – although there were rumours that one staff member came back wetter than others. Phil, was that you who took an unplanned swim off the jetty?!

During lunch the ship covered the short distance across to the Carcass Island, which was named after an 18<sup>th</sup> century ship that sailed in these waters. Another family owned island

(Rob and Lorraine McGill), this one had a beautiful white sandy beach, turquoise water and a clump of cabbage palm trees all bathed in glorious sunshine. Taking the zodiacs ashore we weaved amongst the kelp beds and arrived at the small jetty. From there we took the muddy track down to the settlement. Some of us spent time exploring the beach and rock pools, spotting a number of different shore birds, including the



blackish oyster catcher, dozens of Falkland steamer ducks, and various pairs of upland geese. Others headed up and along the track running above the shoreline. Strolling along in the sunshine we kept a sharp eye out for a whole range of different birds. Flitting about on the wing we saw the beautifully red-breasted meadowlark and the endemic Cobb's wren. A few were also treated to a chance sighting of a Magellanic snipe.

However it was soon time to head back. On the way we called in on Rob and Lorraine who had prepared afternoon tea for us. Another very fine spread – the Aussies were particularly impressed to see lamingtons! When we couldn't fit another thing in we walked back to the landing site, where some of us were treated to a view of a small group of Magellanic penguins making their way down amongst the rocks and into the sea. Despite the sunshine, the wind had started to build, and our last ride back on the zodiacs was a wet one for most!

Soon after departing we sailed between West Point Island and the mainland of West Falkland – a stunning little channel providing a fantastic view of the intricate rock layering. At least five different groups of fin whales were spotted, and a small group of black and white Commerson's dolphins briefly rode the ship's bow and stern waves. Most of us took the opportunity to enjoy the last of the afternoon sun, standing out on the bridge wings or up on the bow. Above us a multitude of birds wheeled on the wind. Out beyond the shelter of the islands we could see the white caps building, a warning of the seas to come the following day.

Recap was brief this evening. Megan gave us a pre-departure briefing – something which seemed so far away, but now was imminently close; and then Ursula spoke about her research project with minke whales and how we could get more information about the work from her website [www.ores.org](http://www.ores.org). For a moment we thought we had got through recap before the dinner bell, but John came forward to expound on some of the magnificent birds that we had seen today.

After dinner had been had, if not necessarily needed after all the cakes and biscuits we had eaten during the day, the evening's movie was put on. Tonight it was "*Around Cape Horn*". This, a black and white movie was made in 1929 by Irving Johnson. It documents a 3 month voyage from Hamburg to Chile via Cape Horn on the square rigger "Peking", and includes footage taken by Johnson when he was strapped to the top of the mast during a F12 storm!

## **Wednesday, 17<sup>th</sup> March 2010: South Atlantic, sailing towards Ushuaia**

**Time:** 12:00

**Latitude:** 53° 49.5' S

**Longitude:** 064° 03.2' W

**Wind:** Force 8 (fresh gale, 34- 40 knots) West

**Sea Conditions:** high, wave height: 6-9 m

**Air Temperature:** +7° C

**Barometer:** 992 mb

**Distance sailed from Ushuaia:** 3037nm

The warning the Captain sent down from the Bridge the night before about strong winds and high seas, rang true. During the night, most of us were tossed from one end to the other in our bunks as the winds and waves grew. By the morning wake up call they were at F8/9 (gale force, 40+ knots) and 6-8 metres, respectively. And there they stayed for most of the day.

Breakfast was interesting affair, with the staff on hand to catch flying plates of porridge and scrambled egg. Due to the rough conditions, the lectures scheduled for the morning were cancelled and most of stayed put in our cabins or seated firmly in the Observation Lounge. From there we could see the waves spilling and crashing all about the ship, however in the sunlight the sea still seemed to sparkle which helped to take our minds off the heaving sea and the heavily rolling ship! The wind seemed not to phase those masters of the air – the albatross and giant petrels who spent the day dancing amongst the waves and spray! For those who ventured to the Bridge, spectacular photos could be taken of the waves crashing over the bow.

To entertain those who were up and about, the original '*Moby Dick*' starring Gregory Peck was screened before lunch. Lunch today was served by those amazing girls. They swish around the dining room balancing three or four plates on one arm and hardly seem to notice the ship is moving, while the rest of us struggle to keep ourselves upright!

Late in the afternoon conditions eased a very little bit, and Johnny Sparkles showed what mettle he is made of to present our final lecture of the voyage, so aptly titled 'The Dreaded Drake'. He gave a fine explanation of how and where wind is formed, how we utilize it and why the winds of the Southern Ocean are so particularly ferocious. We settled our bills and some of us even tried to pack, an operation that was not helped by the

movement of the ship. Many of us took a last trip up to the bridge, taking the opportunity to spend some time watching the ocean pass by, and the chance to reflect on the adventures of the last three weeks.

Then it was time for the Captain's Farewell Party. Originally it was planned for 18:30, but postponed until 19:00 in the hope that conditions would be more benign and we could all enjoy the show. Here we had the opportunity to see all of the ships' crew together – there are 35 of them, and the work they put in behind the scenes to keep the ship going and operating smoothly is phenomenal. We then had our final dinner, with more of us feeling like eating now than had been at lunch. Which is good as otherwise we would have missed 'swans in a chocolate lake' for dessert. Together we toasted our own farewells to new friends and of course the special places we had been.

After dinner we gathered for one last time in the Observation Lounge for our voyage slideshow which had been painstakingly put together by Kerstin and Ursula with picture contributions from all staff. This visual recap of the expedition was emotional as we were reminded of the incredible places we had been and the amazing things we had discovered.

After this all that remained to do was to pack those final bags. All that remained was to eat our last dinner on board, pick up our pilot and sail back along the Beagle Channel to our berth on the dock in Ushuaia - journey's end!

Many of us have waited years for this voyage of discovery whilst some of us have had only a very short time to prepare for it. Whatever the case, it is an adventure that we will never forget and one that we will carry with us wherever we go in the future.

**Our total distance travelled was 3,136 nautical miles or 5,760 km.**

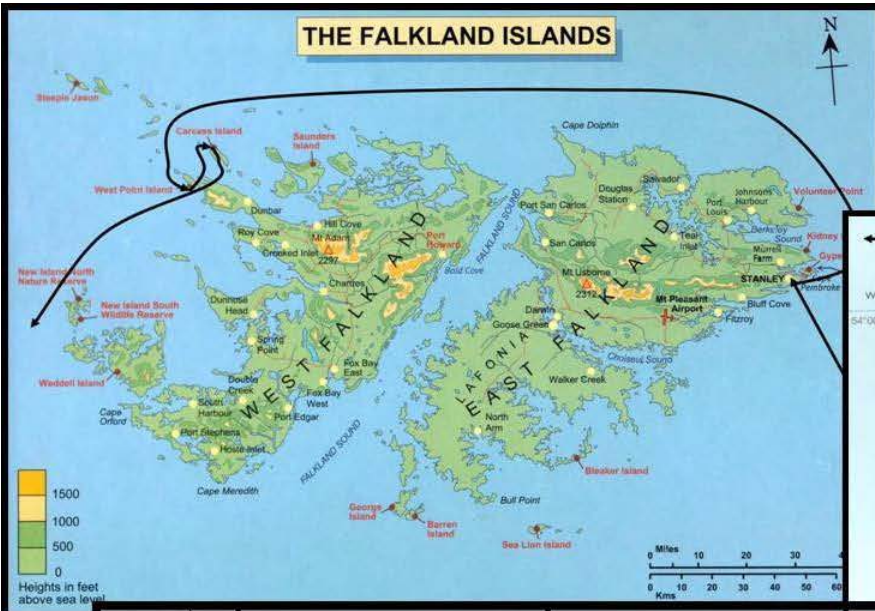




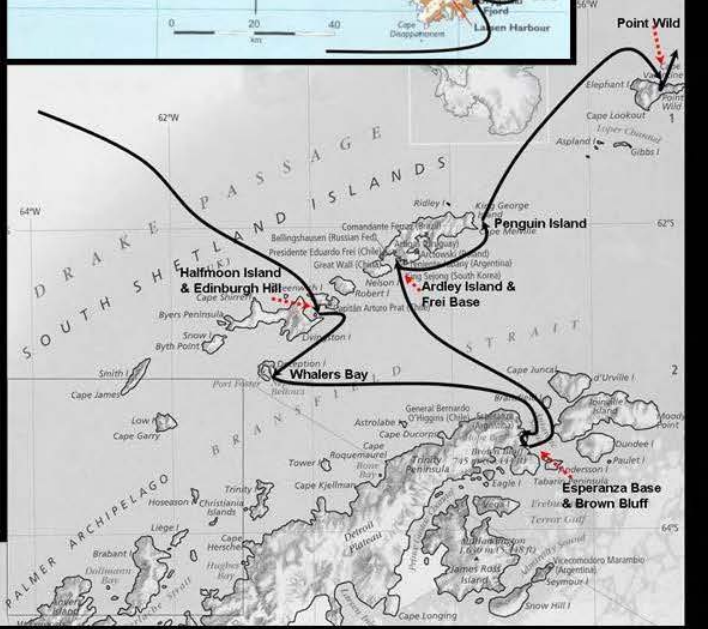
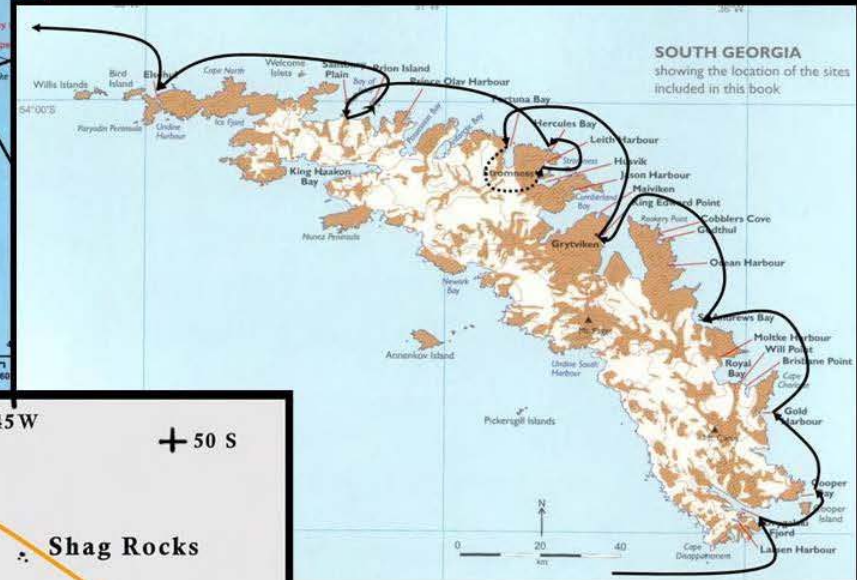


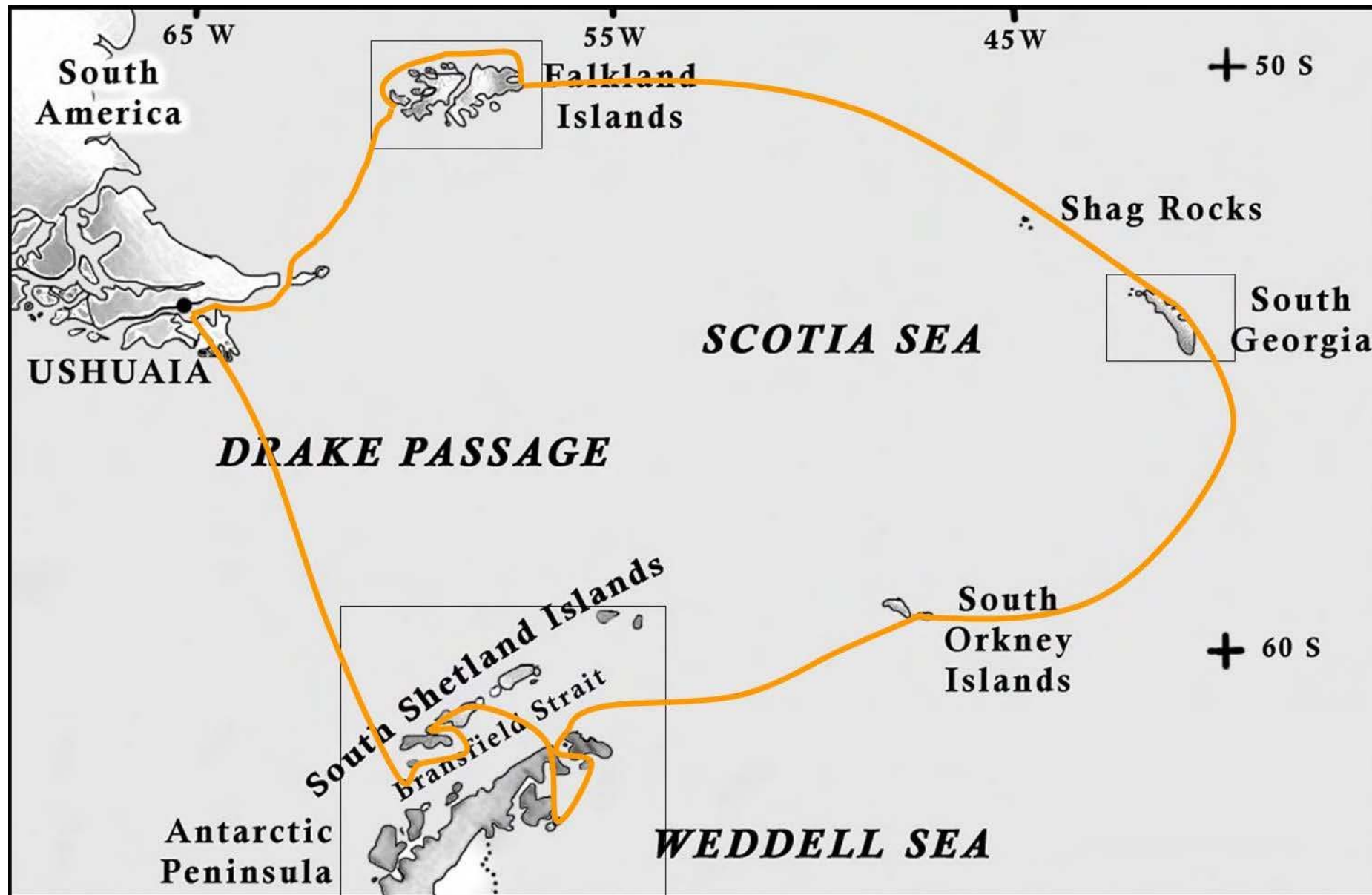
<b>MARINE MAMMALS</b>	<b>28-Feb</b>	<b>1-Mar</b>	<b>2-Mar</b>	<b>3-Mar</b>	<b>4-Mar</b>	<b>5-Mar</b>	<b>6-Mar</b>	<b>7-Mar</b>	<b>8-Mar</b>	<b>9-Mar</b>	<b>10-Mar</b>	<b>11-Mar</b>	<b>12-Mar</b>	<b>13-Mar</b>	<b>14-Mar</b>	<b>15-Mar</b>	<b>16-Mar</b>	<b>17-Mar</b>
Antarctic Fur Seal, <i>Actocephalus gazella</i>				x	x	x	x		x	x	x	x	x	x				
South American Sea Lion, <i>Otaria flavescens</i>	x															x	x	
Southern Elephant Seal, <i>Mirounga leonina</i>										x	x	x	x					
Weddell Seal, <i>Leptonychotes weddellii</i>					x													
Crabeater Seal, <i>Lobodon carcinophaga</i>					x													
Leopard Seal, <i>Hydrurga leptonyx</i>					x		x			x			x					
Southern Right Whale, <i>Eubalaena australis</i>													x					
Humpback Whale, <i>Megaptera novaeangliae</i>				x	x	x						x	x	x				
Antarctic Minke Whale, <i>Balaenoptera bonaerensis</i>					x	x												
Dwarf Minke Whale, <i>Balaenoptera species</i>								x	x					x				
Sei Whale, <i>Balaenoptera borealis</i>																		
Fin Whale, <i>Balaenoptera physalus</i>								x	x				x	x		x	x	
Blue Whale, <i>Balaenoptera musculus</i>																		
Sperm Whale, <i>Physeter macrocephalus</i>																		
Long-finned Pilot Whale, <i>Globicephala melas</i>																		
Killer Whale, <i>Orcinus orca</i>																		
Peale's Dolphin, <i>Lagenorhynchus australis</i>																x	x	
Hourglass Dolphin, <i>Lagenorhynchus cruciger</i>								x	x					x				

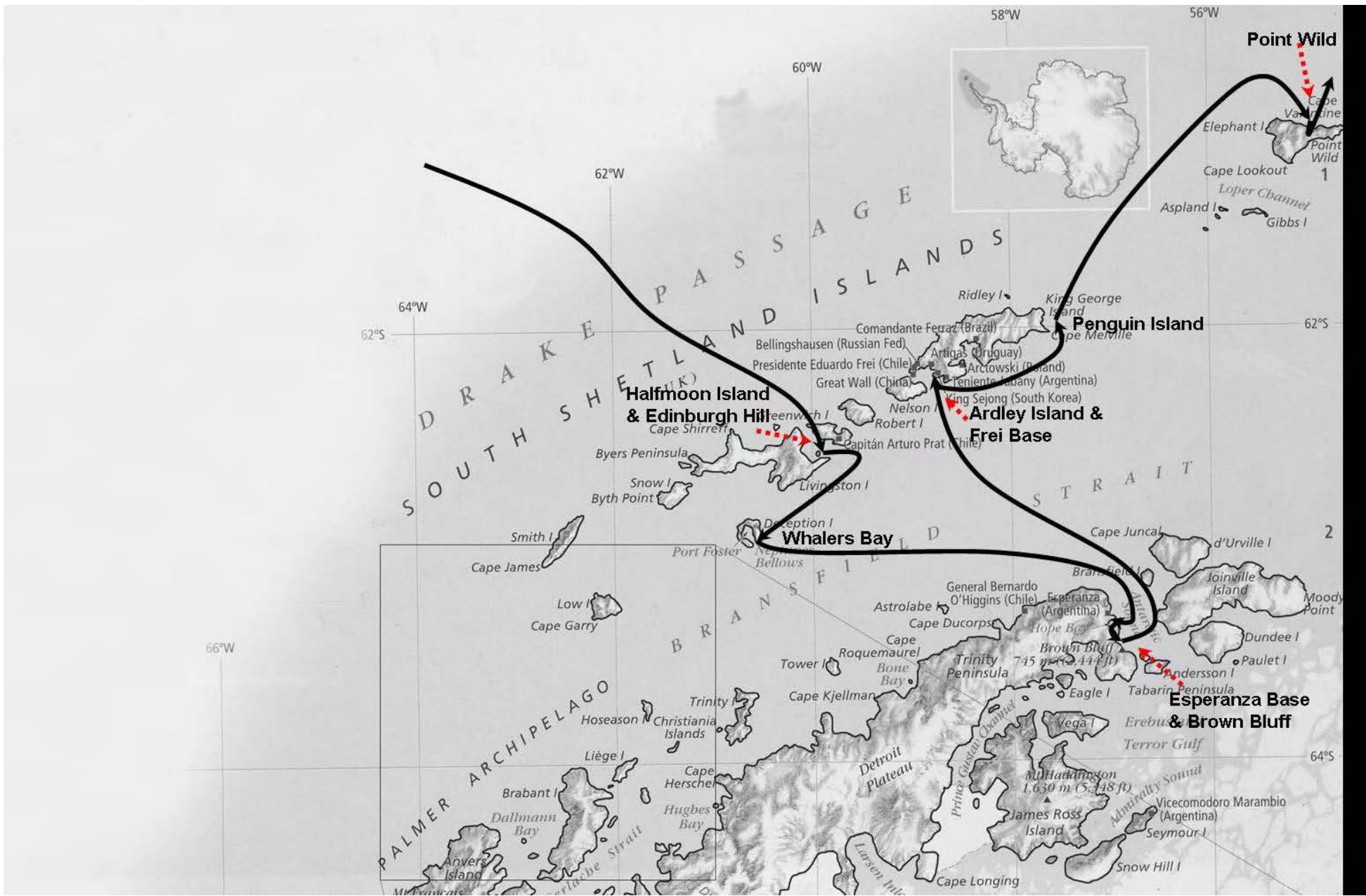
**THE FALKLAND ISLANDS**

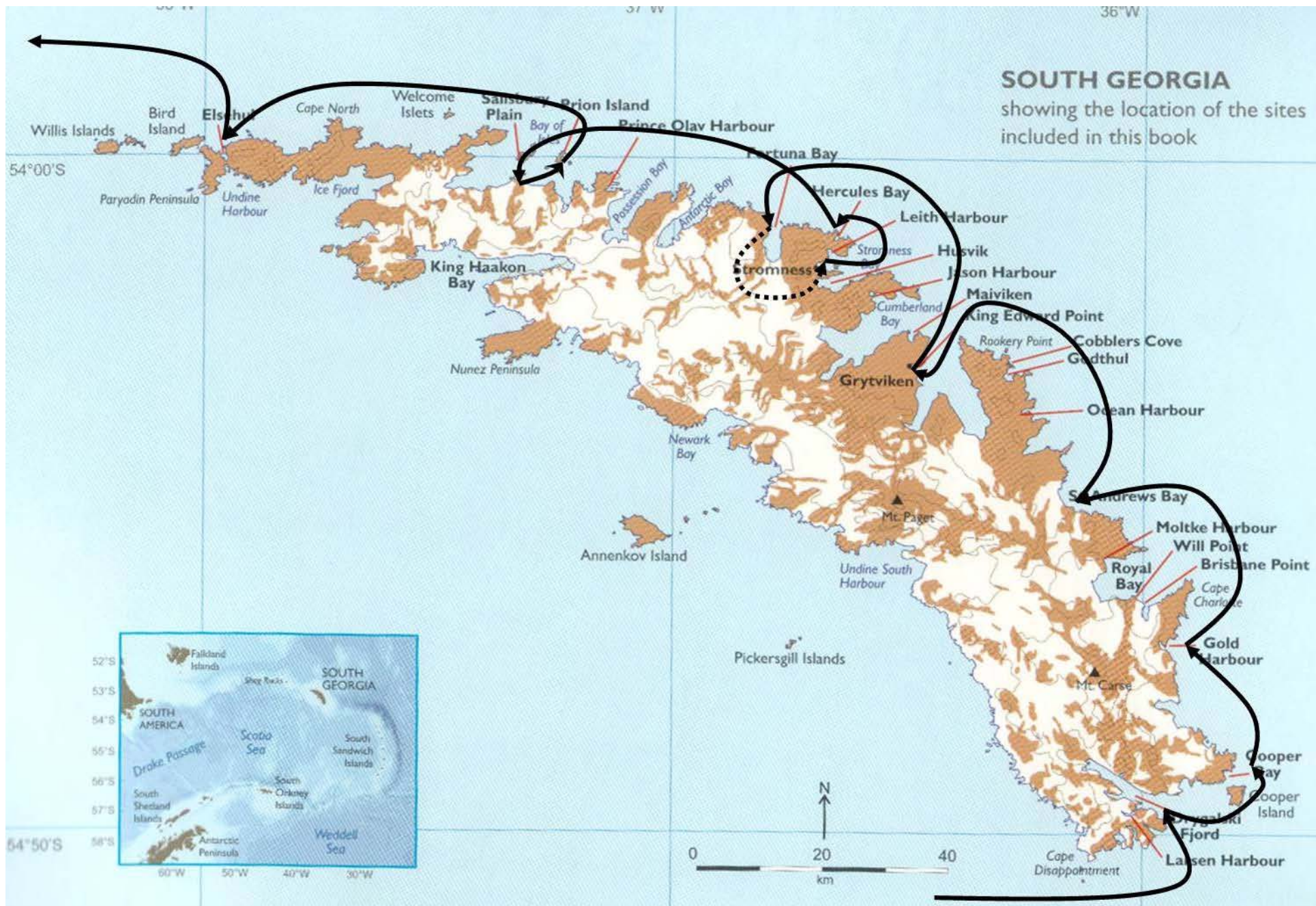


**Polar Star Expeditions  
ANTARCTIC FINALE**  
Antarctic Peninsula, South Georgia, Falkland Islands  
28 February – 18 March, 2010









# THE FALKLAND ISLANDS

