Antarctic Peninsula, Falkland Islands and South Georgia Island December 29, 2009 - January 24, 2010



Phillip Colla / Oceanlight.com



Sunset en route to South Georgia Island

This is an informal account of my trip to the Antarctic Peninsula, the Falkland Islands, South Georgia Island and the South Orkney Islands with <u>Cheeseman's Ecology Safaris</u>. The original blog posts from which this is derived can be found at

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Ushuaia, Argentina

I arrived in <u>Ushuaia</u>, <u>Argentina</u> with a couple of days to spare, to allow my luggage to catch up in case of delays. Where is Ushuaia, you say? It is a small but growing town at the southern tip of Argentina, situated on the archipelago of Tierra del Fuego. Ushuaia's claim to fame — besides the fact that simply uttering "Ushuaia" is almost as fun as saying *Mu Shu* which is my favorite Chinese dish — is that Ushuaia is the southernmost city in the world! That, and the fact that it is only a two day sail from Ushuaia to the northern reaches of the Antarctic Peninsula across the notoriously rough waters of the Drake Passage and Cape Horn, means Ushuaia is on the itinerary for most people traveling in search of adventure in Antarctica.

Air travel is always unpleasant, but my connections this time were difficult for a couple reasons. I encountered crazy security screening at LAX. I flew on December 26, the day after the <u>Christmas Day Terrorist</u> tried — and failed! — to blow up his own underwear along with his fellow passengers. So in the wake of that event, security at LAX was seriously heightened and took a long while to navigate. It seems they always hand search my backpack, and this day was no exception. However, the TSA guy was a photographer (even able to ID my long lenses "300/2.8! 500/4!"). He was cool and made the search as pleasant as possible given the level of alert. Through Dallas then red-eye to Buenos Aires, where I joined a few others for a taxi from the international airport to the domestic airport. That's where the fun really began. The arbitrary and capricious ticket agents at Aerolineas Argentina put several of us through the wringer for our heavy carryon bags. Jeez, folks, just charge me a fee already and let me on the plane! I was sweating it when they insisted I check my 40 pounds and \$20k worth of gear through as checked luggage, knowing it would either be stolen or trashed. Eventually a "manager" let me carry it on the plane, for a "small fee". Our flight to the southern tip of South America stopped in a few small places on the way, including El Calafate that climbers and trekkers use as a sending off point to reach Monte Fitz Roy and other remarkable Patagonian peaks — next time I should stop there and check out all that mountain stuff. The clouds on arrival to Ushuaia, wrapped around the towering peaks of the southern Andes mountains, were unbelievable. It was like we were flying in an IMax movie, very moving and heavenly. Eventually I reach the hotel, enjoy a nice Chilean wine, cheese and a tough *hamburguesa*, and hit the sack after about 40 hours of no sleep. Crash-ola.



Martial Glacier is a receding cirque glacier, located in the Montes Martial, Fuegian Andes approximately 1050m above sea level and only 4.5km outside of Ushuaia town. It is named for Captain Luis Fernando Martial, head of a French expedition, who visited the area in 1883.

Image ID: 23600

The following morning I take a cab for the short ride to Glaciar Martial (with a hard "T" in the name). It is overcast and chilly, but not too windy. I take the *aerosilla* (chairlift) up to the foot of a beautiful glacial valley, at the top of which is Martial Glacier. The view down the valley and out to the Beagle Channel, and beyond to what I think is Chile, is nice, and would be superb on a sunny day. Very few people are here, I like that! It is quiet. A small stream winds down the valley, melt from the glacier and snow fields above. I hike up to the glacier and look around. A few more people are here as I make my way down to the aerosilla again. I took no photos while up on the glacier, though, as the snow was falling more and more as the morning went on. It is raining hard now, so I make my way back to Ushuaia town and have lunch.



Dilapidated old wooden boat in Ushuaia harbor. Image ID: 23601

The afternoon is lost to reading and wandering along the waterfront between rain squalls where I spot an interesting old scow lying dead in the water in the shallows of the harbor. Well, is this what I have to expect for our trip? Later, my roommate for the trip arrives and we get to know one another a bit. Dinner at the Albatross Hotel dining room with friends wraps up the day.



Ushuaia, the southernmost city in the world, lies on the Beagle Channel with a small portion of the Andes mountain range rising above. Ushuaia is the capital of the Tierra del Fuego region of Argentina and the gateway port for many expeditions to Antarctica.

Image ID: <u>23603</u>

Tierra del Fuego, Argentina

We were scheduled to board the M/V Polar Star late in the day which gave us time to make a whirlwind tour of Tierra del Fuego National Park. We saw some forest, a couple of peat bogs, a beautiful lake and some of the rocky coastline along the Beagle Channel. The coastline reminded me of central California in many ways. It was obvious to me that the Park is beautiful and large, but our limited time gave us only a glance. I felt the way I imagine many day visitors to Yosemite Valley feel: "Wow, time to go already?".



Lago Roca in Tierra del Fuego National Park, Argentina. Image ID: 23607



Beagle Channel from Tierra del Fuego National Park, Argentina. Image ID: 23608

The Beagle Channel

We boarded the M/V Polar Star and soon departed the harbor. As we left <u>Ushuaia</u> behind us, one of the highlights was the sight of Cerro Cinco Hermanos (The Five Brothers, 1280m). Along with <u>Monte Olivia</u>, these rugged peaks rise high above Ushuaia but are often shrouded in clouds. We were fortunate to see them clearly as we departed <u>Tierra del Fuego</u> and motored down the Beagle Channel toward the Southern Ocean and the Falkland Islands.



The Five Brothers (Monte Cinco Hermanos, 1280m) in the Fuegian Andes, a cluster of peaks above Ushuaia, the capital of the Tierra del Fuego region of Argentina. Image ID: 23618



Ushuaia, the southernmost city in the world, lies on the Beagle Channel with a small portion of the Andes mountain range rising above. Ushuaia is the capital of the Tierra del Fuego region of Argentina and the gateway port for many expeditions to Antarctica. Image <u>23602</u>.



Bird watching from the highest deck of the M/V Polar Star as it sails south the Beagle Channel. Image 23621

At Sea En Route to the Falkland Islands

We have a two-night crossing from Ushuaia to the Falklands. During that middle day, as we sailed north-east though the Southern Ocean, we had some good bird watching, including albatrosses, prions (tiny little rocket birds I am not qualified to photograph), small petrels and the larger and more impressive giant petrels. I spent a lot of time on the back deck, admiring the birds and trying to get photos of them when they came close to the ship. (I typically photographed birds from the boat with 300mm f/2.8 lens with 1.4x converter on a full frame body, which was the perfect setup.) We were on the very stable 270' ship M/V Polar Star, and had very calm seas for our crossing, so standing on deck and shooting was a breeze.



Bird watching on the stern of the M/V Polar Star.



Southern giant petrel in flight. The distinctive tube nose (naricorn), characteristic of species in the Procellariidae family (tube-snouts), is easily seen. Image ID: 23681

Today, the birds I photographed the most were the giant petrels, there were just so many of them. They are quite bold, coming alongside the boat often and soaring smoothly, making it easy for even a non-bird-photographer such as myself to get some keeper shots. As for identification, it was not clear to me which species of giant petrel I was seeing. I consulted with two staff members from our trip, Dave Shaw (Fairbanks, AK) and Jim Danzenbaker, both of whom are skilled at bird identification and educated us during our trip about seabird natural history. From them I learned that most of the giant petrels I photographed crossing to the Falklands were Southern Giant Petrels (*Macronectes giganteus*), but after moving south to South Georgia I ended up photographing mostly Northern Giant Petrels (*Macronectes halli*). Does that sound bass ackwards? Their ranges do overlap considerably.



Southern giant petrel in flight. Image ID: 23682

All the giant petrels I photographed on the crossing to the Falkland Islands are, I believe, Southern Giant Petrels. In appearance the two species are quite similar to one another which, combined with their range overlap, can make separating them difficult. Dave suggested that I look for a green bill tip (for Southern Giant Petrels) versus red bill tip (Northern), as well as eye color (pale is more common in Northern, darker eye in Southern). About the only sure thing for identifying giant petrels is the white morph, also known as a "white nellie"; the white morph is only known to occur in the Southern Giant Petrel. The Southern Giant Petrel measures up to 39" long, with a wingspan of up to 81". Adult males weight 11 lb. while females weight up to 18 lb. My hunch is that the large size for females is an adaptation to reproductive demands. Giant petrels as a whole range throughout the Southern Ocean, including Antarctica. The Southern species has a range which is centered somewhat south of that of the Northern species. When in the same location, the two species exhibit temporal separation in their breeding, with Northern giant petrels breeding some six weeks earlier than Southern giant petrels. As of 2009, there are estimated to be 46,800 nesting pairs and the species is listed as "least concern", an improvement over counts and status of a decade ago. The giant petrel, like many pelagic birds, is at risk of injury and death from longline fishing equipment. Giant petrels are members of the <u>tube-nose</u> order (<u>Procellariiformes</u>) and display the characteristic tubular snout above the bill.



White nellie, the white morph of the southern giant petrel. Image ID: 23678

I often photographed the giant petrels at sunset, hoping to put them against a pastel sky and light them with a little flash. The results were most pleasing for albatrosses, but I did get some nice images of giant petrels zooming over the water after dark. I liked this one best:



Southern giant petrel in flight at dusk, after sunset, as it soars over the open ocean in search of food. Image ID: 23680

New Island, Falkland Islands



Tall sea cliffs overlook the southern Atlantic Ocean, a habitat on which albatross and penguin reside. Image ID: 23809

Today is New Years Day, an apropos date on which to land at New Island in the Falklands, our first landing of the trip. Set next to the ocean in a small bight is New Island Settlement, a picturesque set of cottages at the edge of the bay above a sandy beach. We depart from the boat in zodiacs for the shore, leave our dry bags and life preservers in a pile on the beach, and begin an easy walk over wet, grassy hills to a rockhopper rookery. Flightless steamer ducks, kelp geese and upland geese mill about on the sand and through the tall grass. The weather is quite mild so I only need shorts and a light fleece under my foulies. The rockhopper colony is located at the top of sea cliffs several hundred feet above the ocean, in a small bowl-shaped depression. Blackbrowed albatross and imperial shags (cormorants) are mixed in and around the colony as well. To the right of the colony, cut through the cliffs, is a gully that runs steeply down to the water. It is a thoroughfare for rockhoppers, a way for them to pass from the sea to their colony above. Clean penguins coming from the sea pass up the gully to their nests, while muddy penguins descend. I make my way down the gully carefully, eventually reaching the rocky shore. Many rockhoppers are scattered on the rocks, coming and going to sea. A South American sea lion bull patrols the rocks, presumably hoping to catch an unwary penguin. Some of us sit on the rocks and just watch, taking pictures and admiring the rockhoppers.



Photographer Al Bruton, photographing Magellanic penguins on grasslands above the ocean. Image ID: 23799

After a few hours, it is time to make our way to the second landing. Rather than return to the big boat, some of us choose to motor straight there by zodiac. Others opt to hike there. We land on another sand beach, with green hills above. The overcast conditions have lifted and we now are favored with blue skies, scattered clouds and some breeze. The objective is to walk to three locations about half mile apart from one another and the beach we are on now: an albatross colony, a gentoo colony and a white sand beach known for surfing penguins. The first thing I encounter on my walk are a series of Magellanic penguins burrowing in the grass. They are cute, standing at the entrances to their small dirt caves. I stick around for 45 minutes checking them out. I don't see the main group of people so I head off in the direction I think they are, eventually coming to a broad plateau atop the island littered with strange flat, weathered rocks.



Interesting rock formations on plateau atop New Island. Image ID: 23802

Continuing through the rocks, my walk takes me to a long line of high sea cliffs offering spectacular views, with albatrosses nesting in many places. The wind is blowing but it is quite warm. I sit for a while, take some photos and admire the view. I am quite alone here, not able to see anyone else at the moment. I have this section of cliffs to myself, but for the birds. I make some photos. Eventually I hike over a couple promontories to reach the others at a dense colony of penguins, albatross and shags, also atop sheer sea cliffs. There are more animals here but the setting at my previous spot is far more impressive. I take only a few photos, but shoot some videos trying to capture the sounds of the bird life.



Gentoo penguin coming ashore, after foraging at sea, walking through ocean water as it wades onto a sand beach. Adult gentoo penguins grow to be 30" and 19lb in size. They feed on fish and crustaceans. Gentoo penguins reside in colonies well inland from the ocean, often formed of a circular collection of stones gathered by the penguins. Image ID: 23831

Soon I leave to hike over a low saddle in the island to reach the third spot of the afternoon, another beach. On the way there I pass several gentoo penguin colonies, set high on the grasslands above the water. The squawking and clicking is loud and raucous, and constant. I sit and listen for a while. After a while I continue down the grassy hills to the surfing beach and arrive there late. Clouds have stolen the sunshine just as I arrive. The others are all departing, photographers included, so I get the sense I have missed the surfing penguins. Eventually, the last of the passengers and staff head back to our originally landing spot, reminding me the last zodiac off the island is in 90 minutes. However, luck is with me and the clouds soon back off, leaving me alone on a beautiful, wide, white sand beach in late afternoon light. Gentoo penguins are coming ashore, splashing in the surf as they do so, making their way to their nearby rookery. I try to photograph them in action in the surf zone but have a hunch I did not stick any really good shots, we'll see. I spend some time away from the camera, just watching the penguins as they do their thing, and listening to the sounds of the surf, wind and the clucking of the birds.

There are large gentoo colonies on a rise above the beach 100 yards away making a constant, low buzzing sound. I am loathe to leave this idyllic spot, and wait until I only have about 15 minutes to hoof it the mile back to the landing in my goofy muck boots and heavy backpack. Time for a workout! I am sweating but happy when I reach the last zodiac and head back to the boat for a shower and a well-earned meal. What a day. The trip has barely just begun yet I have seen so much already.



Gentoo penguin colony, set above and inland from the ocean on flat grasslands. Individual nests are formed of small rocks collected by the penguins. Image ID: 23806

Westpoint Island, Falkland Islands

Morning finds us at <u>Westpoint Island</u>. We can only see about 200' up into the rolling green hills; heavy cloud cover obscures everything above that. It looks wet in the hills. Our zodiac lands on a small boat ramp, one of the few "dry landings" we will have during the trip. We are told we have the option of hiking 1.5 miles to the albatross rookery, or we can hitch a ride on a Land Rover. I opt for the latter. The countryside is pastoral, lush and soft and would be difficult for most vehicles, but the sturdy Rover has no problems.



Colony of nesting black-browed albatross, rockhopper penguins and Imperial shags, set high above the ocean on tussock grass-covered sea cliffs. Image ID: 23935

The "road" is somewhat ambiguous. We roll by some old wooden gates, a few windmills and some sheep. It is foggy and drizzling. I feel British. Soon we reach a colony of <u>black-browed</u> <u>albatross</u> (*Thalassarche melanophrys*), <u>Imperial shag</u> (*Phalacrocorax atriceps*) and <u>rockhopper penguins</u> (*Eudyptes chrysocome*) dramatically set on bluffs high above the sea. This is our first bout with tussock grass. It is rumored to be awkward to walk through, but at this spot the waist-high maze is fairly easy to navigate.



Western rockhopper penguin, standing atop tussock grass near a rookery of black-browed albatross. Image ID: 23932

The edge of the colony abuts the tussock so that we can stand just a few feet away from the birds but still be behind large tufts of grass. The sounds are wonderful: wind, penguin vocalizations, clucks by the albatrosses. I brought a long lens and immediately realize it is overkill. I return to my bag and pull out my widest lens so that I can shoot some video of the colony.

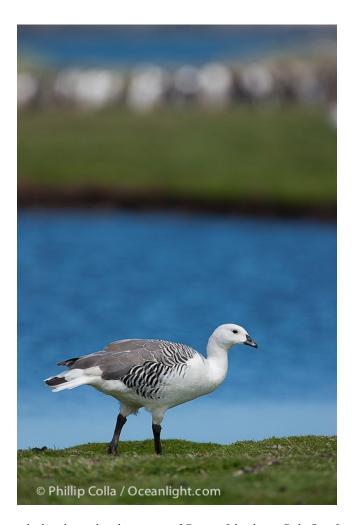


Black-browed albatross, adult on nest with chick. Image ID: 23946

I change locations on the periphery of the colony a few times, photographing and shooting video. At one spot, some rockhoppers march to a small creek to bathe and groom. After a few hours it is time to return to the landing, in the Land Rover again. Such a smooth ride, I must get one of these. We are offered tea and biscuits at the settlement cottage at the landing. I feel British some more. We return to the boat for lunch, and reposition to Carcass Island.

Carcass Island, Falkland Islands

Following our cloudy, drizzly, wet morning on the highlands of Westpoint Island, the weather transitioned to sunny, breezy and warm as the M/V Polar Star made its way to Carcass Island. I was curious about the ominous-sounding name, envisioning dead animals and stench. In fact, the island is named for the HMS Carcass which surveyed the island in 1766. (Why that ship was named for a dead body is beyond me.) We landed in Dyke Bay, across from the island's only settlement which we could just see in the distance. Our direction, however, was the opposite way, across a low-lying isthmus to Leopard Beach. We walked perhaps a third of a mile across the isthmus, passing several ponds alongside which upland geese (*Chloephaga picta*) were meandering.



Upland goose, male, beside pond in the interior of Carcass Island near Dyke Bay. Image ID: 24011

Reaching a sand dune rise on the far side of the isthmus and looking over the top, we were greeted with the beautiful sight of long <u>Leopard Beach</u> below. The waters fronting the beach looked tropical, with light emerald shallows and deep green water further offshore.



Watching gentoo and Magellanic penguins on beautiful Leopard Beach, coming ashore after they have foraged at sea. Image ID: 23973

This gorgeous beach, one of several we were fortunate to visit in the Falklands, was host to throngs of Magellanic penguins (*Spheniscus magellanicus*) and Gentoo penguins (*Pygoscelis papua*) which were coming from and going to sea. The Magellanic penguins gather in burrowing colonies, living underground in what looked like big gopher holes. The gentoos, on the other hand, gathered in exposed circular colonies made of small pebbles, set a few hundred yards in the interior of the island. A long sand dune, covered in tussock grass, offered some small protection from onshore winds, but really what it constituted was something of a barrier to the penguins as they walked to and fro between the ocean and their colonies. Paths through the

tall (overhead to the penguins) tussock grass were obvious, testament to the continual passing of the penguins.



Gentoo penguins walk through tussock grass. After foraging in the ocean for food, the penguins make their way to the interior of the island to rest at their colony. Image ID: 23970

Eventually I made my way down to the sand to admire the penguins coming ashore. I spotted a <u>Magellanic oystercatcher</u> (<u>Haematopus leucopodus</u>), some Steamer ducks and <u>kelp geese</u> (<u>Chloephaga hybrida</u>), and on the way back to the boat, <u>one of the many LBB's</u> I failed to identify on the trip.



Magellanic penguin, juvenile, coming ashore on a sand beach after foraging at sea. Image ID: 23969

Steeple Jason Island, West Falklands

Steeple Jason, one of the Jason group of islands, is to be our only landing today. There has been quite a bit of anticipation for this visit. It is considered one of the major landings of the trip, the location of one of the world's finest natural spectacles. Lots of mention has been made already of how superlative this place is. A couple people who have been here before suggest that it is one of the world's "top 10" wildlife scenes. Morning dawns for us on the southwest side of the island, with myriad birds flying about and cacophonous sounds — an enormous bird rookery — coming from the island about half mile away. The breeze brings with it the scent of the colony. I love that scent! To my dying day, the distinctive briny odor of a shore covered in centuries of guano, borne on a fresh ocean breeze, is something I will always associate with remoteness, wildness and the sea. It is the smell of a vast number of seabirds. I have smelled it in the Galapagos Islands, at tiny Rose Atoll, at Cocos Island, in the Sea of Cortez and now in the West Falklands. It is the smell of life, huge amounts of life, life that is intrinsically bound to sea and air.



Black-browed albatross in flight, against a blue sky. Black-browed albatrosses have a wingspan reaching up to 8', weigh up to 10 lbs and can live 70 years. They roam the open ocean for food and return to remote islands for mating and rearing their chicks. Image ID: 24145

Steeple Jason is steep and rugged, with jutting serrated sea cliffs that raise the ramparts of the island high above the ocean. Sections of lush green tussock grass are mixed with broad areas of reddish brown, shorter vegetation. Around much of the island's western perimeter a white collar marks the seabird colony that lines the coast. Surf pounds the edge of the island, tossing spray high in the air. With a little tectonic nudge, Steeple Jason could easily be two islands. As it is today, the north and south portions are linked by a thin, low-lying isthmus that offers two landing sites, one on each side.



Striated caracara, a bird of prey found throughout the Falkland Islands. The striated caracara is an opportunistic feeder, often scavenging for carrion but also known to attack weak or injured birds. Image ID: 24125

Soon after dawn the freshening wind and swells cause us to move to the other side of the island where we will land at the more sheltered of the two locations, one with thick stands of bull kelp

and macrocystis kelp. I admire the lush kelp forest lining the shore and wish I could dive here. In spite of some trepidation on the part of the staff responsible for getting us safely onto the slippery rocks, the landing is not a problem. Within minutes after starting to hike around the north half of the island I see a <u>caracara take a penguin chick</u>. I feel like Marlin Perkins.



Striated caracara feeds upon a gentoo penguin chick it has just killed. Image ID: 24086

I have switched from my waterproof muck boots to my hiking shoes for the easy one-mile walk to the colony of black-browed albatross (*Thalassarche melanophrys*). It is warm and sunny, with a few clouds - a great morning for a walk. The trail is several hundred feet above the ocean, which boils down below along the rocky coast. I pass a pair of striated caracaras on some rocks. They are comfortable with my presence so I sit and watch them closely. This seems unusual for raptors.



Black-browed albatross colony on Steeple Jason Island in the Falklands. This is the largest breeding colony of black-browed albatrosses in the world, numbering in the hundreds of thousands of breeding pairs. The albatrosses lay eggs in September and October, and tend a single chick that will fledge in about 120 days. Image ID: 24078

After a short while I reach my first view of the colony. It is a fantastic assemblage of black-browed albatross extending along several miles of coast, ringed by tussock grass and shadowed by a lush green ridge above. It is the principle black-browed albatross colony in all the world. Light winds are fostering much flight activity this morning as parents leave or return to the nest, taking turns caring for their chick and foraging at sea. Constant and loud — but not unpleasant — albatross vocalizations are heard, a mix of croaking, high-pitched screeching and subtle clucking. Some of the larger chicks are left alone. Striated caracaras are constantly on the prowl for such easy prey and over the course of a few hours relaxing at the colony's edge I see a couple of caracaras carrying away a meal. Eventually, most of our group makes the hike and arrives along the edge of the colony. We all stand in the waist high tussock, enjoying the incredible array of life spread out before us. Eventually I have had enough sun and feel it is time to hike back around towards the island's isthmus where we landed, to see what else there is to find. In a cove there is a constant stream of gentoos returning from the sea (and some departing), leaping out of the water onto rocks. Back at the gentoo colony that I saw first this morning, the parent of the same dead chick still guards her offspring, keening occasionally and charging the

<u>caracara</u> that continues to try to pick off a piece of the chick's carcass. It is a sad scene. The fortitude of the gentoo in the face of such inevitable and foregone tragedy is astonishing.

After some hours ashore I am now pretty hungry, and eat three sandwiches that the crew has brought ashore to the landing as I sit <u>beside the ocean</u> and realize how fortunate I am to be on this spectacular island. I shoot some videos of the rocky coastline before returning to the boat. I realize that, photographically, Steeple Jason is one of the richest settings I have ever seen. I could easily have used every lens I own, from 15mm fisheye to my longest telephoto. As the M/V Polar Star motors away from the island, black-browed albatrosses and <u>giant petrels</u> fly alongside. We are now on our way to South Georgia Island, a three day sail.

Albatross at Sunset in the Falkland Islands

One of the unexpected joys of the trip for me was the albatrosses. Before this trip, the only albatrosses I had seen were Waved Albatross in Galapagos (but only sitting on nests) and some distant albatrosses as we motored at sea to Guadalupe Island. Now that I have had a chance to really see albatrosses, soaring as they do over the open ocean, I love these birds. On this night we had just left the enormous rookery of black-browed albatross at Steeple Jason Island in the Falklands, on our way to South Georgia Island. While eating dinner I noticed out the dining room window how the sky was growing pink, and I could see albatrosses occasionally flying by the window. I rudely chugged my wine and gobbled the rest of my dinner, made some weak excuse to my dining companions that I would be right back, and quickly made my way to the stern with my camera setup. I stood out there in the fading light and fresh air making a set of what I think of as "painterly images" of albatrosses and petrels.



Black-browed albatross in flight, at sea. The black-browed albatross is a medium-sized seabird at 31-37" long with a 79-94" wingspan and an average weight of 6.4-10 lb. They have a natural lifespan exceeding 70 years. They breed on remote oceanic islands and are circumpolar, ranging throughout the Southern Oceanic. Image ID: 23962

I used a Canon 1Ds Mark III camera with a 300 f/2.8 lens and 1.4x converter. The light was growing faint making it easy to match the available light of the waning dusk with the artificial light from the camera's flash. It was about an hour after sunset, a time when the pastel colors in the sky become quite saturated. I popped a little flash on this beautiful seabird and dragged the shutter to give the shot some blur. I shot several hundred of these images and managed many keepers, each using the fading colors in the sky as a canvas ranging from pink to purple to yellow depending on which direction I pointed my camera. Here is another one, about 20 minutes later, the color is different since this was aimed higher and in a little different direction:



Image ID: 23965

At Sea En Route to South Georgia Island



Sunset clouds create a colorful arch, spanning the heavens from horizon to horizon, over the open sea between the Falkland Islands and South Georgia Island. Image ID: 24073

It is a three day sail from the <u>Falkland Islands</u> to South Georgia Island. Day 1 dawned with leaden gray skies that soon clear, at which time the weather can only be described as great, with following seas, light winds and very little swell. I spent the day on deck trying to photograph and identify seabirds and spot whales. Sunset was stunning, with an arch of red and orange clouds that required a 180-degree fisheye lens to capture in its entirety. Day 2 brings my first <u>Wandering Albatross</u> (<u>Diomedea exulans</u>), enormous and elegant birds that soar over the open ocean swells, arcing and diving to take full advantage of the updraft created by each passing wave.



Wandering albatross in flight, over the open sea. The wandering albatross has the largest wingspan of any living bird, with the wingspan between, up to 12' from wingtip to wingtip. It can soar on the open ocean for hours at a time, riding the updrafts from individual swells, with a glide ratio of 22 units of distance for every unit of drop. The wandering albatross can live up to 23 years. They hunt at night on the open ocean for cephalopods, small fish, and crustaceans. The survival of the species is at risk due to mortality from long-line fishing gear.

Image ID: 24071

Wandering albatross have the largest wingspan of any living species of bird, over 11 feet from tip to tip. When one wandering albatross passed alongside the boat very close I was able to hear the wind as it parted and passed over the wings of this magnificent bird. The wandering albatrosses glide almost the entire time they are in sight; their aerodynamics are so remarkably efficient they rarely need to flap their wings. Most excellent. I am glad to have been able to see this species of albatross out here in the middle of the ocean, where it is so obviously at home and I am so obviously not. The oft-quoted ornithologist Robert Cushman Murphy said it well upon sighting his first Wandering Albatross in 1912: *I now belong to a higher cult of mortals, for I have seen the albatross!*



Sunset viewed through the window of my cabin on the M/V Polar Star, somewhere between Falkland Islands and South Georgia Island. Image ID: 24097

At one point a storm of prions and other small seabirds gather aloft behind the boat, dipping the beaks into the water as they flit and hover above the ocean's surface. It seems to me they are feeding. Simultaneously we spot our first whales. The fact the two species are present here is no coincidence — we must be in an area of food, perhaps krill. Much guessing among my shipmates ensues as to what species of whales they are. I refuse to speculate early on, as I have learned from many hours spotting whales that I need to see at least the dorsal ridge or fluke, preferably both, to hazard a guess. Gradually I decide that they are all fin whales, based on the manner of their round out and dive, the shape and color of their rostrums and their dorsal fins, and their blows. The flock of small birds and our whale sightings eventually lessen, indicating we are leaving the feeding zone (if that is indeed what it was).



Wandering albatross, sunset. Image ID: <u>24092</u>

As the day wears on, periodic individual wandering albatrosses are seen soaring around the Polar Star, always angling and turning to best use the updrafts of the swells to glide. Since the wandering albatrosses tend to stay at a distance from the boat, I needed my longest lens and a teleconverter (500+1.4x), a heavy combination to handhold on the deck a rolling boat. I took a lot of photos and was lucky to manage a few sharp images. I go to bed wondering what South Georgia Island will look like when we arrive tomorrow.

Approaching South Georgia Island



Stern of the M/V Polar Star, foggy weather, sea birds flying in the wake of the ship, at sea. Image ID: 24137

This was our third day sailing for South Georgia Island. We are fortunate to have had calm seas the entire time. Today I woke up at 5am, hoping to see Shag Rock which we were estimated to pass at about 5:30am. However, it was heavily overcast and drizzly. We never saw Shag Rock which is not surprising since, if I were the captain in this weather, I would have steered clear of that hazard by several miles. The water is a different color now, steel gray or sometimes black depending on the light. We crossed the Antarctic Convergence Line sometime during the night, and were now officially in "southern waters". Crossing the convergence line, a transition which can be a brief as 100 yards, led us into water that was only 1°C, about 3-4 degrees colder than yesterday. The air is noticeably colder too, so I put on my heaviest sweater and jacket, gloves and an ugly woolen hat. No more flipflops now (well, until we get to Antarctica that is).

Before industrial whaling, the waters below our ship were teeming with behemoth <u>blue whales</u>, right whales, fins, <u>humpback whales</u> and <u>sperm whales</u>. In the depths over which we are now sailing whalers plied their bloody trade, taking hundreds of thousands of whales. In terms of biomass, whale hunting in the Southern Ocean, which is <u>still ongoing</u>, is arguably the greatest killing spree mankind has ever embarked upon, more than any of humanity's wars. South Georgia whalers were a major part of that gruesome machine. The whaling station at Grytviken,

which we will visit in a few days, was active into the 1960s and took more whales than any other station in the Atlantic. It is a somber thought. We see no blows today.



Icebreaker M/V Polar Star approaches Elsehul harbor on South Georgia Island. Image ID: 24323

For much of the day I assumed a spot on the back deck hoping to see more albatross. Since we were now only about 150nm from South Georgia, today figured to be a better day for bird sightings than yesterday. Albatrosses – black-browed, gray-headed and occasional wandering – could be seen soaring through the troughs and over the peaks of waves, riding the updrafts of the wind that was following us, but they were hard to see. The looked like ghosts as they appeared along the edge of the fog surrounding us. Prions and other small seabirds flitted about the boat throughout the day and I tried to photograph them. Epic fail. They are too damn small and fast. I could not track them they moved so quickly and erratically. Big, slow birds are what I prefer. I take very few photos today, instead listening to Mark Isham's *Vapor Drawings* on my iPod and staring out to sea. Chill. We are scheduled to arrive at South Georgia Island about 6pm hoping to make a evening visit at Elsehul (Else's Bay) after dinner. The visit may morph into a Zodiac ride along the shore if there are too many Antarctic fur seals on shore. It is mating season for fur seals. They come ashore in such vast numbers, and are so stoked up on hormones, territoriality

and sex, that it may be impossible for us to traverse the beach at Elsehul. A few hours before we sight the island, we began to see Antarctic fur seals swimming in groups in the open ocean. The fog lifts occasionally letting the sun through, then it settles in again around the boat. It feels very "South", quite different than the balmy temperatures and sunny skies we experienced in the Falklands. This is the weather I expected.



South Georgia Island coastline, showing the island's characteristic rugged topography. 56% of the island is covered by 161 glaciers, which have created numerous large bays and inlets that provide excellent habitat for marine animals and seabirds. Mountains meet the sea in steep-sided sea cliffs covered with sparse vegetation. The highest point on South Georgia Island is Mt. Paget at 2,915m. Image ID: 24317

Finally, after three days of quite comfortable and uneventful sailing, we make our first sighting of South Georgia Island. As we approach, the island rises steeply out of the ocean. A brief clearing of blue sky closes out and we find ourselves below the cloud layer that envelops the island. It is ominous and exciting. The island is imposing. Tortured earth. I wonder about the geologic tale of upheaval and torment that is written in the rocky sea cliffs that burst from the depths and reach hundreds of feet into the air. This island was once part of the Andes Mountains. I would love to see the eons-long time lapse movie illustrating the tumultuous forces that parted this island from it's mother South America, leaving it so distant, rugged and alone. I really look forward to going ashore.

Right Whale Bay, South Georgia Island



Antarctic fur seal colony, on a sand beach alongside Right Whale Bay, with the mountains of South Georgia Island in the background, sunset. Image ID: 24315

Upon reaching South Georgia Island late in the day today, we made straight for Elsehul, a small bay at the north end of the island. The island is rugged, with sea cliffs rising almost vertically from the ocean. The peaks above, some of which are hidden in clouds, rise to over 9,000′. They are covered in snow and glaciers. Glaciers lead from the peaks down almost to sea level and are clearly what has formed the many bays, inlets and notches to define the coastline. Gray-headed albatrosses are seen here, the first I have seen of them on the trip, flying alongside the boat and about the cliffs at Elsehul upon which they nest. Antarctic fur seals are swimming in the waters of the bay. Using binoculars one can easily see that the beaches at Elsehul, however, are so plugged with fur seals that a landing is untenable, so we move down the coast to Right Whale Bay. After dinner the staff surveyed the beaches within Right Whale Bay and decided that there was room for us to land without disturbing the inhabitants, so at 7:30 pm we made for shore.

Antarctic fur seals (*Arctocephalus gazella*) cover this beach too (a common theme for the trip, as we shall see). At our landing spot there are many bull fur seals (adult males) managing their harems of females. Occasionally a bachelor male will move too close to a harem, perhaps

hoping to pick off one of the females on the outskirts and and try for a quick opportunity at mating, but usually the harem's bull will quickly chase the interloper away.



Antarctic fur seals, adult male bull and female, illustrating extreme sexual dimorphism common among pinnipeds (seals, sea lions and fur seals). Image ID: 24324

Pups are literally strewn about on the sand, small and black, some near there mothers while others gather in small groups a few yards away from the adults. About 100 yards in from the ocean the sand beach transitions to a gravel alluvial flood plain created by streams leading down from the mountains that rise so quickly above us. King penguins (*Aptenodytes patagonicus*) occupy much of the plain — singletons, small groups and gatherings of <u>hundreds and thousands</u>. Dead fur seals lie in the stream, testament to the difficulty of survival here. Giant petrels and skuas <u>bury their heads</u> deep into the carcasses, emerging with blood covered beaks <u>draped with</u>

bits of entrails. Dominant skuas chase away lesser competitors from some of the better carcasses. We walk along the outskirts of the fur seal colony, watching them and taking photographs. The sun is behind the mountains already and it is growing dark. About the time we must depart the beach and return by zodiac to the big boat for the night, we receive a final surprise: the clouds above catch their last sunlight of the day, lighting up with pink and orange. Awesome!



M/V Polar Star, an icebreaker expedition ship, lies at anchor in Right Whale Bay, South Georgia Island. Antarctic fur seals on the beach, and the rugged South Georgia Island mountains in the distance. Sunset, dusk. Image ID: 24318

Fortuna Bay, South Georgia Island



Fortuna Bay, with icebreaker M/V Polar Star at anchor. Image ID: 24593

This morning we awake anchored in Fortuna Bay. Some early birds opt for a 6am landing, while others wait until after breakfast to go ashore. I go early. The beach has many fur seals and king penguins, more broadly spread about than what we saw yesterday. It is very overcast, and the light is low. The animals are soaking wet, as is the grass in which the fur seals bed down. I decide to shoot portraits, using as much lens as I have. My goal is to illustrate the long whiskers that are characteristic of Antarctic fur seals. The fur seals use these whiskers when foraging for food, although the exact sense that the whiskers provide is not yet fully known. The whiskers may serve as a crude form of close-proximity radar at depths so great there is no light, providing exceptionally sensitive touch for sensing vibration in the water caused by their prey: squid and fish.



Antarctic fur seal, adult male (bull), showing distinctive pointed snout and long whiskers that are typical of many fur seal species. The long whiskers are exceptionally sensitive and are believed to help the fur seal find food in the ocean by sensing vibration and movement of nearby fish and squid. Image ID: 24632

Most of the group arrives after breakfast by which time the fog is lifting and it is getting brighter. Above us, on the lower slopes of the mountains that tower above Fortuna Bay, is a small herd of reindeer and an area with nesting terns. I hike about 300-400' up to see the reindeer, and am surprised to find many fur seals that have settled down on the grassy slopes high above the beach. Why do they feel the need to climb so high? It must be for the view. After returning down to the beach I sit down to watch a group of king penguins, several of whom approach me so closely I can photograph a single king penguin's head full-frame. Their plumage is really something to behold. What great birds. There are fur seal pups scattered among the tussock grass and playing in small pockets of water on the beach. I find one leucistic antarctic

<u>fur seal pup</u>, so lacking in pigmentation that it appears blond. We will only see a few leucistic fur seals then entire trip, they are quite uncommon.



King penguin, showing ornate and distinctive neck, breast and head plumage and orange beak. Image ID: 24581



An antarctic fur seal pup plays in the water. Image ID: 24605



Antarctic fur seal, on grass slopes high above Fortuna Bay. Image ID: 24583

Stromness Harbour and Shackleton Hike, South Georgia Island

After lunch on the boat we return to the far side of Fortuna Bay to set out on a 3.5m hike over a mountain pass to Stromness. This hike will follow the final leg in Ernest Shackleton's heroic journey from Elephant Island to South Georgia Island. As Shackleton crossed over South Georgia Island, his goal was Stromness Harbour where he knew he could find help from the whaling station there. However, he mistakenly descended into Fortuna Bay. Upon realizing this, he made for Stromness Harbour by the most direct route, over a low pass. Our hike today is a reenactment of that final short traverse, one that he performed in winter. Thanks to the forgiving weather, our walk turns out to be fun and easy, but the thought of hiking up on the mountains above in winter as Shackleton did holds no appeal.



Walking up the slopes of South Georgia Island above Fortuna Bay. Image ID: 24591



Crean Lake near the pass over South Georgia Island between Fortuna Bay and Stromness Harbour. Image ID: 24589

We leave from – what else – a small cobblestone beach with fur seals and elephant seals. The initial ascent is steep but simple, with open views of still-overcast Fortuna Bay below. The route (not a trail) is a over <u>some type of slate scree</u>, a fascinating debris that must be revealing the geologic history of the rock below but which I can't read. I just like the footing it offers, and I can travel easily and quickly. On the way to the top of the saddle I pass a stream and several small lakes, and patches of snow. It is drizzling lightly. Once over the pass I see my first views of Stromness Harbour and the whaling station there. Several glaciers in the surrounding basin feed into the stream that winds across a wide flat alluvial flood plain below. A steep snow patch blocks the way – nothing to do but descend. Others who have gone before me have slid down on their butts but I left my foul weather pants on the boat so decide to schuss-ski the 300 yards run on my feet. It's really fun. Below the snow I find Shackleton's Falls (not sure what the actual name of this waterfall is), dropping in several parts nearly all the way to the flood plain. I shoot a few photos and a video, then head off across the wet plain alongside the stream. From this point a hill blocks Stromness Harbour from sight, so that one must either go over or around. I go up and over. Atop the hill there are a few colonies of gentoo penguins (why so far inland and high up?), skuas laying in grass, and lichen-covered ancient-looking rock formations. The

drizzle now changes to snow, and I am forced to put my jacket on. Reindeer are running over the grassy hills a half mile away across a gap, traveling up the mountainside as far as the lower reaches of snow. More waterfalls can be seen from the top of this hill, each descending to the flood plain and into the bay at Stromness. The abandoned whaling station at Stromness can be seen clearly from atop this hill. It is a decrepit wreck of rusting metal, docks, cranes, barrels and old roads. I descend through beautiful spreads of tall tussock and mounds of short grasses to the beach below, passing by bachelor fur seals and gentoos walking from the water to their hilltop colonies.



Looking down on Stromness Harbour from the pass high above. Image ID: 24582



Glacial melt waters, runoff, flows across an alluvial flood plain between mountains, on its way to Stromness Harbour. Image ID: 24587



 $Gentoo\ penguins,\ permanent\ nesting\ colony\ in\ grassy\ hills\ about\ a\ mile\ inland\ from\ the\ ocean,\ near\ Stromness\ Harbour,\ South\ Georgia\ Island.\ Image\ ID:\ \underline{24635}$

Hercules Bay, South Georgia Island

It is snowing this morning. We are anchored at <u>Stromness</u> but can hardly see the mountains over which we <u>hiked yesterday</u>. The <u>M/V Polar Star</u> is covered with snow. The beaches surrounding our anchorage are dusted with snow and look cold. During breakfast we slowly motor north to <u>Hercules Bay</u>, anchor and prepare for a look at more penguins and seals. <u>Hercules Bay is a spectacular *cirque*</u>, a snow-topped bowl that rises on three sides of us. A waterfall drops hundreds of feet to a narrow cobblestone beach on which king penguins, fur seals and elephant seals reside.



Macaroni penguins, on the rocky shoreline of Hercules Bay, South Georgia Island. One of the crested penguin species, the macaroni penguin bears a distinctive yellow crest on its head. They grow to be about 12 lb and 28" high. Macaroni penguins eat primarily krill and other crustaceans, small fishes and cephalopods. Image ID: 24390



Macaroni penguins and Hercules Bay, South Georgia Island. Image ID: 24391

It continues to snow as we motor in the zodiacs. As we arrive in a small rocky cove, the stench of bird guano and pinniped poop is stunningly strong, a bracing waft of lung-shaking malodorous fumes. Nothing like a group of elephant seals lying in puddles of their own making to open up one's sinuses. Everyone winces. Ahhh, to be alive on South Georgia Island! Indeed, this is the smell we traveled halfway around the world to experience. For a hour or so we watch Macaroni penguins (*Eudyptes chrysolophus*) as they walk to and fro from their nests in the tussac grass on bluffs overlooking the bay down to rocks at the water's edge. As we do, we must avoid Antarctic fur seals and elephant seals resting on the rocks. Two lone chinstrap penguins are hassled by the larger macaronis, which we now realize are nothing more than 24" bullying avian thugs. Clouds break and the sun begins to light the beach. The air is actually fairly warm now yet snow still falls. What a morning! It is beautiful here, wow.



Hercules Bay, with the steep mountains and narrow waterfalls of South Georgia Island rising above. Image ID: 24417



Antarctic fur seal, adult male (bull). Image ID: 24569



King penguins gather in a steam to molt, below a waterfall on a cobblestone beach at Hercules Bay. Image ID: 24557

After an hour we move by zodiac to another cove a short distance away, the one we saw earlier with a waterfall dropping into it. On a small cobblestone beach with mountains rising high above us, a group of about 100 molting King penguins (*Aptenodytes patagonicus*) are standing in the fresh water as it flows the short distance from the cliff to the ocean. A few young fur seals move about the edge of the king penguin group. Feathers dropped during the penguin's molt gather in clumps in the stream, and blow about in the air when a breeze rises. They are very photogenic and cooperative. Besides the photos I take of them, I shoot a video to show my kids later, hoping that the audio track captures the croaking of the penguins, barking of the fur seals and elephant seals and the soft tap-tap-tap of the still-falling snow. Eventually it is time to leave Hercules Bay and the staff gathers the zodiacs back on board. As we motor away toward Grytviken, the skies open up and show us how really gorgeous this bay is.

Grytviken, South Georgia Island

Following our morning at Hercules Bay, we motor during lunch to Cumberland Bay and the whaling settlement of Grytviken. Grytviken lies below – you guessed it – scenic mountains that rise almost straight up. It is insanely windy at times today, and snow flurries fall on and off all afternoon. A visit to the remains of the whaling town, and the museum, is interesting. I finally have a chance to set up my first time lapse shoot of the trip, of clouds moving over the mountains across Cumberland Bay. I find a spot out of the wind in the lee of an overturned boat on the beach, and walk away from my camera as it click-click-clicks away every five seconds. Back in the comfort of the boat, I enjoy a glass of wine with Doug Cheeseman while my camera stays outside in the cold and does it work. We enjoy a fine barbecue on deck tonight. A small group of Grytviken residents, including researchers from the British Antarctic Survey who offered a short presentation earlier in the day, join us. After dark I fetch my camera. The computer stays up all night processing the 2000 images into a short time-lapse video. It turns out pretty neat!



Mountains, glaciers and ocean, the rugged and beautiful topography of South Georgia Island. Image ID: 24580



Antarctic fur seals, on tussock grass slopes near Grytviken. Image ID: 24414



Grytviken whale station, abandoned storage tanks. Image ID: $\underline{24464}$



Grytviken Chapel, at the old whaling station of Grytviken, South Georgia Island. Image ID: 24415

Salisbury Plain, South Georgia Island

Usually I am somewhat reserved in my written descriptions of places and things. In the following post, I am sure I have failed to communicate the profound depth of emotion that I experienced standing beside the King Penguin colony at Salisbury Plain. At times it was just overwhelming for me, all I could do was stand, watch, listen and soak it in. I tried to burn what I saw into my mind, because I realized at the time that what I was seeing was really special, and I did not want to ever forget it. I've seen a lot of fantastic natural history in my 20 years as a professional photographer, so when I say that something is a "must see" spectacle I do not say it lightly. Suffice it to say that Salisbury Plain is one of the must-see wildlife spectacles. I can't wait to return.



Panoramic Photo of Salisbury Plain, Bay of Isles, South Georgia Island. Image ID: 24682

This morning the weather is overcast but calm. The light is beautiful. The water is glass smooth and small waves lap along the edges of the Bay of Isles in which we are anchored. Snow-covered mountains line the horizon in almost every direction. We are offshore the long sand beach that fronts famous Salisbury Plain, site of one of the world's major King Penguin (Aptenodytes patagonicus) colonies. To the left of the plain is Lucas Glacier, to the right Grace Glacier. A quarter of a million king penguins occupy Salisbury Plain, in various stages of nesting, molting, preening and egg laying. There is a constant flow of penguins into and out of the water. A broad plain extends in from the beach on which penguins and fur seals reside. While the fur seals and elephant seals are here in large numbers too, they are simply overwhelmed by the teeming masses of penguins. The king penguin colony itself seems to have fairly distinct margins that can be easily seen from afar, but as one nears the colony the boundary is less easily discerned.



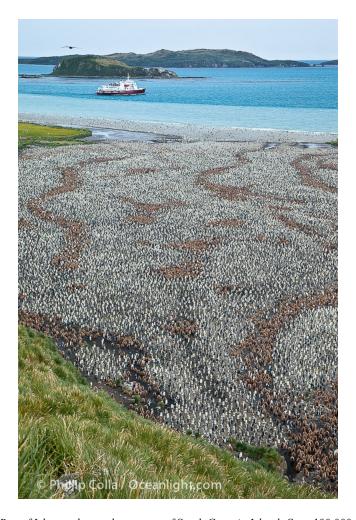
King penguin colony. Over 100,000 pairs of king penguins nest at Salisbury Plain, laying eggs in December and February, then alternating roles between foraging for food and caring for the egg or chick. Image ID: 24388

We make a 6am landing and walk across the grassy plain toward the colony. The beach itself is so densely covered with animals that we cannot traverse far on the sand. As we approach the mass of penguins, we take a winding path to avoid the many single and small groups of animals, penguins and seals, that are scattered widely on the fringe of the main colony. There is a deep buzzing sound, separate from the sounds of the individual animals near us. The buzzing is the cacophony of the colony itself, and grows louder as we grow closer. Eventually we find the edge of the colony, and view it from the perimeter, standing in tussock grass.



Icebreaker M/V Polar Star anchored in the Bay of Isles, offshore of the vast king penguin colony at Salisbury Plain. Image ID: 24397

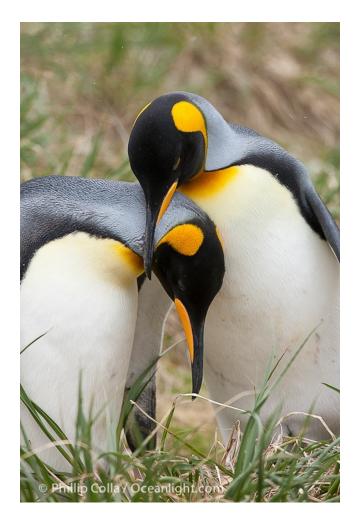
It is a sea of penguins. Adults sitting on eggs (the eggs are not often visible, tucked below the penguin for protection from the cold), adults and juveniles moving toward to the beach or returning to find their spot in the colony after a foraging session at sea, and "oakum boys", the yearlings that are covered in a thick, light brown plumage that clearly distinguishes them from the adults. The colony occupies a vast area of the plain and also extends up the shoulder of an adjacent hill. I walk to the back of the hill and hike up to the top. I had been told that the climb through tussac grass was treacherous and tiring, but in truth the effort is not difficult and I reach the top in 20 minutes or so. The tussac grass on the steeper areas is actually helpful, providing a handhold for balance.



King penguin colony and the Bay of Isles on the northern coast of South Georgia Island. Over 100,000 nesting pairs of king penguins reside here. Dark patches in the colony are groups of juveniles with fluffy brown plumage. The icebreaker M/V Polar Star lies at anchor. Image ID: 24402

On the top of the bluff, the view is astounding. I can see the entire colony from above. While individual penguins can be discerned in the mass, the impression from here is abstract, a canvas of silver, black and white penguins edged with green tussac grass. Veins of brown flow randomly through the expanse – these are oakum boys congregating in groups distinct from the adults. The Polar Star lies at anchor offshore. I shoot some photos and a few videos. It is now about 9am and the wind has started in earnest. I move to a few different vantages atop the hill to see the colony and surrounding bay and mountains from different angles. The wind increases and snow begins to fall. I'm glad I skipped breakfast and made the early landing, since from the whitecaps in the bay it is clear the visit may be terminated early due to the declining weather. I

make my way down to the plain and again stop alongside the colony, listening to the buzzing. I've taken plenty of photos, and prefer to just stand here and admire the scene.



King penguins, mated pair courting, displaying courtship behavior including mutual preening. Image ID: 24438



Oakum boy, juvenile king penguins at Salisbury Plain, South Georgia Island. Named 'oakum boys' by sailors for the resemblance of their brown fluffy plumage to the color of oakum used to caulk timbers on sailing ships, these year-old penguins will soon shed their fluffy brown plumage and adopt the colors of an adult. Image ID: 24405

Oakum boys and juveniles are curious and often approach within a few feet, standing next to me and looking me over. A couple even give me a soft tap on the leg, flap their wings and cluck softly. I doubt they understand the difficult life that they will undertake soon. I feel privileged to simply have them appraise me and find me interesting enough to occupy their attention and warrant their approach. By midday it is time to return to the landing. Snow is blowing horizontally and covering my camera to the point I can no longer see through the viewfinder. The staff is challenged to get everyone into zodiacs and through the waves to the boat. It is a wet ride and we take a wave or two over the bow of the small inflatable, but no real danger. Back on board I dry my cameras off and warm up with a hot lunch. It continues to snow, although the wind has lessened. Our afternoon visit to see Wandering Albatross at nearby Prion Island is

looking iffy. The serious birders on the trip consider seeing Wanderers a high priority and will be disappointed if we have to scrub it. Perhaps we can go ashore after dinner if the weather improves. All I can say is that the weather here is changeable. We'll see.



Image ID: <u>24406</u>

Prion Island and Wandering Albatross, South Georgia Island

We wait out the bad weather that arrived while we were on <u>Salisbury Plain</u> on the <u>icebreaker M/V Polar Star</u>, which is anchored in the lee of a nearby small island. Although the weather is cold, dark and snowing, it is also gradually improving. A warm and hearty lunch, and some time reading a book, recharges me after the cold morning and I am hopeful we make another landing today in spite of the weather. After dinner, Ted Cheeseman makes the decision to go ashore at <u>Prion Island</u> to see nesting <u>Wandering Albatross</u> (<u>Diomedea exulans</u>).



Wandering albatross, on its nest at the Prion Island colony. The wandering albatross has the largest wingspan of any living bird, with the wingspan between, up to 12' from wingtip to wingtip. It can soar on the open ocean for hours at a time, riding the updrafts from individual swells, with a glide ratio of 22 units of distance for every unit of drop. The wandering albatross can live up to 23 years. They hunt at night on the open ocean for cephalopods, small fish, and crustaceans. The survival of the species is at risk due to mortality from long-line fishing gear. Image ID: 24428

We had seen Wandering Albatross in flight over the open ocean when we made our crossing from the Falklands to South Georgia, but since then I had not seen one. Wanderers have the greatest wingspan of any bird, up to 12' from wing tip to wing tip. They are at their most impressive when in flight. The birders on the trip are eager to see more of them, and consider the Wandering Albatross a very special bird. Only small groups of visitors are permitted, and only on a restricted walking path, to avoid disturbing these highly endangered birds. It is dark, and stormy looking, but the seas are reasonably calm and we experience an easy zodiac ride and landing. Once ashore, a short walk amid fur seals brings us to the summit of the small island. A dozen or so nesting albatrosses are seen, including one which is only about 10' from the walkway. My long lens, brought in anticipation of more distant nests, is overkill but at least I get some tight portraits of the huge, snow-white seabird. In spite of the excitement of being in the presence of these noble albatrosses, the gloomy weather also makes Prion Island seem forlorn. Snow patches surround the albatrosses, wet snow falls occasionally, the wind is blowing and the skies are dark and ominous. If I had to stay here with the gear I have with me, in the conditions we have right now, I would surely die in a few days. These elegant birds are incredibly hardy.

Godthul, South Georgia Island

Our plans to visit St. Andrews Bay this morning are scuttled. There is a strong SE wind that is sending big waves onto the beach at St. Andrews making a landing ill-advised. This is a great disappoint but we all know weather-related challenges are part and parcel for this sort of travel, and we hope to find a substitute landing for more time ashore. We move north a short ways to Godthul and find the conditions are calm enough to land, so after breakfast we do. Godthul, named "Good Hollow" by the Norwegian whalers who once anchored here, is a well protected bay surrounded on several sides by steep grassy slopes and the omnipresent South Georgia snow-covered mountains. There are kelp beds along some of the shoreline. We land at a derelict old whaling facility. There some small old buildings, in, on and under which fur seals are lounging — they appear to have reclaimed this area now that the whalers who used to maintain a floating processing platform here in the early 1900's have long since departed.



View of Godthul, from the grassy slopes of South Georgia. The name Godthul, or "Good Hollow", dates back to Norwegian whalers who used this bay as a anchorage. Image ID: 24745

The beach here is narrow and long, littered with decaying old whale bones, and is populated by Southern Elephant Seals (*Mirounga leonina*), King Penguins (*Aptenodytes patagonicus*) and Antarctic Fur Seals (*Arctocephalus gazella*). There are enough elephant seals and fur seals to make walking the length of the beach difficult, so after a short while I elect to head up the bluff to see the plateau above. The bluff is choked with tussac grass, and many fur seals, so many that finding a path through the waist-high grass without getting bitten is a challenge. I take it slow, making sure there is no fur seal laying under a tuft of grass where I am about to step. After some time I am through the tussac grass maze and onto the higher ground, which is clear and easy walking. Some Gentoo Penguins (*Pygoscelis papua*) are descending from the plateau, a clue that there must be a colony above.



Gentoo penguin stealing nesting material, moving it from one nest (hidden behind the clump on the left) to its nest on the right. Snow falling. Image ID: 24721

I go higher and as the terrain begins to flatten, sure enough I find the first of several gentoo colonies, set on a spectacular expanse of open land, with broad views of the ocean and bay below and mountains above. The colony is totally exposed to weather but high enough above the beach that there is no risk to the gentoos from aggressive fur seals. I think I can hear the sharp calls of terns echoing off the sides of the mountains, and see some small white birds flittering

about in the distance. I walk further until the land crests to a plateau and am pleased to find a lake <u>set below the steep snow-covered flanks of the peaks above</u>. The lake is wide and appears shallow and has several small groups of gentoos nesting around it, and swimming in it. Then gentoos enter the water dirty and emerge clean and white. Beyond the lake the mountains rise steeply, and a waterfall of perhaps 400-500' drops from the cloud-strewn heights.



Gentoo penguins, calling, heads raised. Image ID: 24690

I settle down beside one gentoo colony for 90 minutes or so, laying in the grass and watching their activities at the nest. There are some courtship displays (I think that's what I am observing) and there is much nest building and tending. Some penguins walk to and from the lake, while others head off down the hills to the ocean. A few gentoos stay beside their humble nests and then, when no one else is looking, brazenly steal nesting material from their colony-mates and add it to their own nest. I realize this is one of those seminal moments were all have when traveling: here I am, laying down in soaking wet grass, freezing my ass off, thousands of miles from home, trying to make photos with wet gear, laughing at the seemingly comic behaviors of the stout little penguins that are going about their business as if I am not even there. I attempt to videotape the scene but not sure whether I succeeded, the sound of wind and snow is filling the

microphone. The weather is now pretty grim again, but not yet harsh enough that we must leave. The wind blows snow sideways one minute, then abates letting the snow fall softly the next. After some time my fingers are too cold to operate my camera. I pack up my gear and head down to the beach, choosing the wrong path several times before finally finding the route that has few enough fur seals that I can get back to the zodiac. I'm the last passenger on board, ready for lunch.

Drygalski Fjord, South Georgia Island

The weather today continued to turn for the worse after we departed Godthul, so a decision was made to travel to Drygalski Fjord at the south end of South Georgia Island in lieu of an afternoon land visit. So, after lunch and a few few hours of travel down the coast of the island, we found ourselves sailing into the narrow gorge that is Drygalski Fjord. The fjord pierces the island dramatically, cutting deep into the interior. High peaks, of which we could occasionally get glimpses through the heavily overcast skies, tower above. As we approached the terminus of the fjord, we found the water clogged with brash ice. Occasional small chunks would calve from Risting Glacier, the obvious source of all the floating ice. It was beautiful. At one point a "shooter" broke the surface with a big splash, and its wave cleared an opening in the brash ice. A "shooter" is a chunk of ice calved off the submarine portion of the glacier, sometimes very deep, which then accelerates as it floats upward to the surface. By its very nature, a shooter is a complete surprise and can easily damage a boat, so the captain kept a safe distance from the Risting Glacier.



M/V Polar Star approaches the glacier at the end of Drygalski Fjord. Image ID: 24688



Drygalski Fjord, packed with brash ice which has broken away from Risting Glacier at the end of the narrow fjord. Image ID: 24743

Cooper Bay, South Georgia Island

This morning we are again presented with difficult weather. Our plans had originally been to visit Gold Harbor or St. Andrews Bay, two of the most notable and popular locations on South Georgia Island, but these locations are exposed to open ocean wave energy and we are thwarted by rough seas. Ultimately will not see either one this trip, but not for lack of trying. The staff makes the decision to try for Cooper Bay. Conditions are marginal, but because they know how disappointed we are at missing Gold Harbor and St. Andrews, the staff and crew work very hard, coping with large swells at the gangway, to ferry those who wish to go ashore. Some choose not to make the landing, staying onboard for the morning. I know that I will probably not see anything this morning that I have not already seen elsewhere on the island, and there is a good chance it will be too snowy and wet for me to do any meaningful photography. I will not pass up this landing, or any landing on this trip, as the exhilaration of simply being ashore in such a wild and remote place is too good to pass up. I love being on this island, and only wish we had more time here.



Snow covers tussock grass and macaroni penguins, above Cooper Bay. Image ID: 24695

After a bumpy and very wet zodiac ride, we arrive in a pocket cove protected by rocky outcroppings and covered with cobblestones. Wave energy surges into the cove so timing the landing of the zodiac is important, and we quickly scramble out of the inflatable before the next wave arrives. The shore and slopes of Cooper Bay are covered with snow. It is beautiful. It is snowing, a wet and heavy snow, and it is cold.



Macaroni penguin, amid tall tussock grass, Cooper Bay, South Georgia Island. Image ID: 24733

We make a short hike to a bluff-top colony of <u>Macaroni Penguins</u> (<u>Eudyptes chrysolophus</u>). The birds are preening and resting, singly or in pairs. They are nestled in — what else? — waist-high tussac grass. I do not see any nests or chicks and suspect they are hidden by the snow and grass. We are on a shoulder of the island, looking down at the colony below. Beyond the penguins and

grass is a rocky promontory covered with many more macaroni penguins that overlooks the sea. M/V Polar Star is anchored a ways out, and periodically a zodiac passes between the landing cove and the big boat. The inflatables sure look small in these conditions. This is a short visit since the weather continues to worsen, and I am thankful we came ashore when we did or we may have had no opportunity to visit here at all today. When I return to the beach to return my gear back into my dry bag, I find a fur seal pup lying atop it. The tiny furball, which looks like a sweet little stuffed animal, may grow into a big gnarly bull one day. Once back onboard, the staff decides to leave South Georgia. It is not clear that we will gain any additional time on the Antarctica Peninsula by leaving South Georgia early, but the weather is such that there is no point is staying the remainder of the day. So off we go, heading south for our long-awaited introduction to Antarctica.

In the Scotia Sea En Route to the South Orkney Islands

Soon after ending our land visit at <u>Cooper Bay</u>, we leave <u>South Georgia Island</u> in our wake and begin sailing southwest towards the <u>Antarctic Peninsula</u> and the <u>Weddell Sea</u>. I am somewhat melancholy. South Georgia Island is fantastic, rich with wildlife and spectacular terrain, surrounded by open ocean on all sides, and very remote. I would like to return. There is so much I have not seen here that I am already thinking about when I can schedule the time for another trip out to this remarkable island.



Clouds, weather and light mix in never-ending forms over the open ocean of Scotia Sea, in the Southern Ocean. Image ID: 24758

Our next destination is the South Orkney Islands, a natural stopping point since it is almost directly inline with our route to Antarctica and roughly halfway. We should be there in about 36 hours. As we sail, we are passing through some significant open ocean weather, which means clouds. There are beautiful, ever-changing cloud formations on all points of the compass, some dark, ominous and threatening. We also begin to see our first icebergs of the trip, massive tabular bergs that hint at the riot of ice that is to come as we make our way south in the days ahead. I spend much of my time on deck, bundled up against the wind and increasing chilly weather, trying to make appealing photographs of the clouds, icebergs, sea and sky.



Tabular iceberg. The edge of a huge tabular iceberg. Tabular icebergs can be dozens or hundreds of miles in size, have flat tops and sheer sides. Scotia Sea, Southern Ocean. Image ID: 24793



Iceberg and clouds, Scotia Sea, Southern Ocean. Image ID: 24756

Coronation Island, South Orkney Islands

We arrive at Coronation Island, the largest of the South Orkney Islands, around dawn. This is our first opportunity to really see some impressive <u>icebergs</u> at close range. While we are here to visit <u>Shingle Cove</u>, the approach to the island on its own is magnificent. <u>Coronation Island</u> is largely covered in snow and glaciers, with mountainous slopes and jagged peaks, reaching 4,153' above sea levels at its summit. It is really a rugged place.



Coronation Island, is the largest of the South Orkney Islands, reaching 4,153' (1,266m) above sea level. While it is largely covered by ice, Coronation Island also is home to some tundra habitat, and is inhabited by many seals, penguins and seabirds. Image ID: 24850



Iceberg, ocean, light and clouds. Light plays over icebergs and the ocean near Coronation Island. Image ID: 24779



Iceberg detail, at sea among the South Orkney Islands. Image ID: 24794



Two icebergs, South Orkney Islands. The foreground berg is a tabular iceberg, canted with a slight angle, showing the characteristic flat top and sheer sides of tabular icebergs. Image ID: 24795



Dawn in the South Orkney Islands. Sunlight breaks through clouds to light up icebergs and the mountainous southern coast of Coronation Island. Image ID: 24796

Shingle Cove, Coronation Island, South Orkney Islands

Midway through our crossing from <u>South Georgia Island</u> to Antarctica we pass the South Orkney Islands, a small group of islands that lie almost exactly between South Georgia and the <u>Antarctic Peninsula</u>, making them a natural place to pause during our crossing and make a landing to stretch our legs a little. After our sunrise approach to <u>Coronation Island</u>, the <u>icebreaker ship M/V Polar Star</u> anchors and we go ashore at Shingle Cove to visit a colony of <u>Adelie penguins</u> (<u>Pygoscelis adeliae</u>). The colony is set atop a bluff above the ocean, subject to blasting wind and snow. The wind is so strong that it knocks a chick over now and then.



Adelie penguin chicks, huddle together in a snowstorm for warmth and protection. This group of chicks is known as a creche. Image ID: 25026

Many of the chicks are huddled together for warmth in *creches*. Adjacent to the bluff is a snow covered slope that the penguins descend to reach a cobblestone beach. The thousands of birds in the colony have worn dirty winding poop-covered paths in the snow. I spend most of my time on the cobblestones, watching the penguins pass back and forth. Entering the water is a dangerous proposition for a penguin, since leopard seals often patrol the shallows waiting to strike.



Adelie penguins rush into the water en masse, from the cobblestone beach at Shingle Cove on Coronation Island. Image ID: 25028

So the penguins gather in nervous groups at the water's edge, making a few false starts before one of the braver individuals finally commits and dives in. Immediately the rest of the group follows suit, rushing into the water in a chaotic sprint. As the waves washing in and out are hard to judge, some penguins mistime their dives and land head first on the rocks, only to pop back up quickly and try again. In a few seconds it is over – the rocks are empty. The departing penguins can now be seen porpoising at great speed out to sea to spend time foraging for food. Penguins returning to shore arrive in smaller groups or individually, but speed through the water in the same nervous way, ending their swim with a leap and an agile stand-up landing onto the rocks.



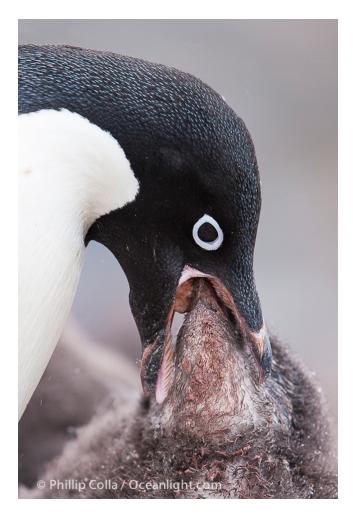
Southern elephant seal, juvenile. The southern elephant seal is the largest pinniped, and the largest member of order Carnivora, ever to have existed. It gets its name from the large proboscis (nose) it has when it has grown to adulthood. Image ID: 25029

After a while I spot an elephant seal lounging in a pool on rocky reef. I spend some time laying on the rocks (uncomfortable) trying to photograph it at its eye level. I'm not sure I succeeded. After that, a visit to the nesting area is in order, to see the chicks and especially the adults feeding their young. On the snowy slope between the beach and the rookery I witness a southern giant petrel's attack on a chick that ventured too far from the nest. The result is gory and tough to watch. The giant petrel does not dispatch its catch quickly. It takes about 10 minutes for the chick to die, during which time the skua consumes a good part of it.



Southern giant petrel kills and eats an Adelie penguin chick, Shingle Cove. Image ID: 25027

Afterward, all that is left is a tattered penguin carcass lying on the dirty snow and a blood-covered skua guarding its kill. The scene is not enjoyable to watch, but I do feel privileged to have witnessed it. It drives home the fact that the dramatic wildlife spectacles we are here to observe are a perpetual and unforgiving struggle for the participants. We leave Shingle Cove about midday, sailing along the South Orkney Islands for a while. Icebergs large and small pass by, set against the snow covered mountains of Coronation Island. One tabular berg that we encounter is measured by the ship's radar at over 3 miles long. The thing is so large that it takes much longer to reach that expected, distance and size being quite difficult to judge in the clear dry air.



Adelie penguin, adult feeding chick by regurgitating partially digested food into the chick's mouth. The pink food bolus, probably consisting of krill and marine invertebrates, can be seen being between the adult and chick's beaks. Image ID: 25008

Pack Ice at the Edge of the Weddell Sea

"The Weddell Sea is, according to the testimony of all who have sailed through its berg-filled waters, the most treacherous and dismal region on earth." – from The White Continent by Thomas R. Henry (1950).

This morning finds us on the northern edge of the <u>Weddell Sea</u>, approaching the northern tip of the Antarctic Peninsula from the northeast. We had been told that these waters can be choked with ice. The ice originates in the Weddell Sea, where enormous ice shelves produce <u>tabular icebergs</u> which in turn break apart into vast spreads of ice pieces. I wake up about 5am and peek outside the window and see nothing but ice. Big chunks, small chunks, periodic chunks big enough to be called bergs, and a few huge distant tabular bergs. I have waited a long time to see a seascape like this, and the sight of this much ice is awesome.



Pack ice, a combination of sea ice and pieces of icebergs. A larger tabular iceberg is visible on the horizon. Weddell Sea. Image ID: 25025

I go out on deck. It is quite cold. I walk up to the bow and take some fisheye photos, and shoot some video clips, including a time lapse of the boat pushing through the ice. (The resulting

video is interesting but if watched too many times the novelty wears thin and the jitteriness becomes irritating.) We are moving somewhat more slowly than yesterday, but nevertheless the icebreaker M/V Polar Star is able to push aside or split the ice pieces easily, and it seems to me that we make good progress through the morning.

However, we have a long way to go yet before reaching <u>Paulet Island</u> in the Weddell Sea, and the captain decides to speed our passage by avoiding the pack ice, changing course to take us through the Antarctic Sound to reach Paulet from the west (rather than the more direct approach through the Weddell Sea from the northeast). Eventually our course change takes us out of the pack ice and our speed increases. We continue to see occasional tabular bergs, along with a few whales including two orca. <u>Albatross</u> sightings are now on the wane, and we won't see many more until the Drake Passage at the end of the trip.

Paulet Island, Antarctica

We arrive early in the morning at Paulet Island, our first taste of the Antarctic Peninsula. As we navigate our approach through ice-filled channels around the island, large groups of <u>Adelie penguins</u> (*Pygoscelis adeliae*) are seen swimming in the water and gathered on the edges of bergs and fast ice. While the day dawns cloudy, it will clear periodically later today, with broken clouds and beautiful Antarctic weather on and off. Strong currents roil the waters about the Paulet Island, moving bergs and brash ice constantly. It takes the captain of the <u>icebreaker M/V Polar Star</u> some time to make a firm anchor.



Icebergs floating in the ocean near Paulet Island. Image ID: 24834

When the boat is securely anchored, we venture out in zodiacs for some cruising among the ice. Adelie penguins abound. The island is literally covered with Adelies and their curious stone nests, while groups of them are found on the beautifully sculpted ice everywhere we look. When they leave their ice perches and take to the water, their porpoising across the glassy sea is marvelous to watch. They are like small speedy footballs leaping out of the water, only to

disappear and reappear again every few seconds as their sturdy wings propel them forward. They are nearly impossible to photograph while porpoising, for me at least, and I resign myself to admiring them and trying to photograph the ones standing still on the ice. Simple photos for simple photographers.



Adelie penguins, in a line, standing on an iceberg. Image ID: 25018



Paulet Island, near the Antarctic Peninsula, is a cinder cone flanked by lava flows on which thousands of Adelie Penguins nest. Image ID: 24824



Enormous colony of Adelie penguins covers the hillsides of Paulet Island. Image ID: 24836

After returning to the big boat, I gather my gear and take a second zodiac ride to land ashore on Paulet Island. It is still morning, but I decide in advance to skip lunch and just stay onshore all day, knowing that each hour with my feet on the ground in Antarctica is exceptionally valuable and is my motivation for making this journey. What a place, so much life here! A cacophony of penguin sounds fills the air, for the many hours that I am ashore. The colony sections themselves are so dense and vast that we stay along the perimeters, in the thin strip of ice- and boulder-covered beach the penguins traverse as they make their way between the ocean and their nests. In the colony itself, the birds are spaced in a highly-regular fashion, with their nests just a few feet apart from one another. I am struck by this aspect of the colony, having seen it earlier in the trip at the phenomenal black-browed albatross colony at Steeple Jason in the Falkland Islands. It seems that each member of the species has exactly the same tolerance for others of its kind, needs exactly the same room to maintain its sanity, leading to the spatial pattern before me that is repeated as far into the colony as one can see. Indeed, when viewed from the boat, the colony takes on an almost abstract look. Mother Nature employs her wonderful mathematics again, producing yet another example of regularity and order out of the chaos that is Life.



Adelie penguins, nesting, part of the enormous colony on Paulet Island, with the tall ramparts of the island and clouds seen in the background. Adelie penguins nest on open ground and assemble nests made of hundreds of small stones. Image ID: 25024



Melting ice along the shore of Paulet Island. Image ID: 24833

I move to the edge of the island to watch the penguins that are departing to forage at sea. They are not unlike a little river: birds constantly "flowing" from their nesting areas on the plateau above down into the water. Hanging over the cobblestone beach on which I sit is a small cliff of melting ice. Every 30 seconds or so a group of penguins approaches along the edge of this ice, using well-worn paths left behind by thousands of small feet, until they reach a gap in the ice

cliff through which they can jump down onto the cobblestone. From there they gather at the water's edge into nervous groups of 10 to 50 before rushing *en masse* into the water, strategically using their numbers to foil any predatory leopard seal that may be waiting underwater. I setup my camera and tripod in a location where I am sure the penguins will come by. I then move away, and wait. Soon a curious group gathers around the camera, looking at it inquisitively, clucking softly and gently pecking at it to discover what it might be. As they do so, I use my wireless trigger (\$20 on Ebay) to take a few pictures of them — from 50' away. The camera is set to operate as silently as possible to avoid startling the little birds, and the technique works great. When the penguins finally leave, I am able to go inspect my camera and see the images I got; a few look like keepers. I try my remote-cam technique a few more times and am happy with the results. Here are a couple examples; I could have been sipping a margarita in a beach chair while taking these, if it were not so cold:



Adelie penguins navigate a steep drop-off, to get from their nests down to a rocky beach, in order to go to sea to forage for food. Image ID: 25020



A group of Adelie penguins, on packed snow. Image ID: 25021

As the day passes, I realize that the movement of the penguins here cannot be conveyed in a single image. So I spend my last two hours on shore arranging several time-lapse sequences, composed of hundreds of photos that together are arranged into a short movie. One never really knows how the result of a time-lapse effort will appear until the final product is finished on the computer. I did not finally see the result of these efforts until six months after my day on Paulet Island.

Zodiac Cruising in Antarctica

I was able to spend quite a bit of time sightseeing and photographing from a Zodiac (inflatable) while in Antarctica. These hours were some of the most special of the trip. In some ways, one has more freedom of movement while in a zodiac than one does on land in Antarctica. Certainly the perspective one gains, while moving about at the water's edge, is appealing. After spending the day ashore at Paulet Island, I elected to join Hugh Rose and Patrick Endres in a zodiac that they were driving, to look for penguins on small icebergs and just enjoy the surroundings before we departed that evening. We came upon some beautiful small bergs that afternoon, the most interesting of which was this pockmarked chunk:



Iceberg with scalloped erosion. The eroded indentations on this iceberg were melted when this portion of the iceberg was underwater. As it melted, the iceberg grew top-heavy, eventually flipping and exposing this interesting surface. Image ID: 24789

Later, we had the very good fortune to raft up alongside an iceberg that was carrying some inquisitive <u>Adelie penguins</u>, who immediately walked across the berg to meet us and seemed as if they wanted to hop in our boat! (See my blog entry about the <u>penguin encounter</u>.) The sun cleared some clouds and cast low, warm, flat light on the little birds, while the clouds in the

distance remained dark — a photographer's dream. I was able to shoot some fun images of them, including the one below as well as one that became the <u>recent cover of Nature's Best Magazine</u>.



A curious Adelie penguin, standing at the edge of an iceberg, looks over the photographer. Image ID: 25015

Patrick was keen on photographing the ice, so the rest of us in the boat took notice (at least I did) and made some photos too. It is just like photographing snowflakes, no two views are alike. I knew I was never going to be able to photograph even a tiny fraction of the beautiful Antarctic ice that surrounded us, and resigned myself to just trying to make a few good ones.

After we returned to the icebreaker M/V Polar Star, the captain took us on a long cruise through some nearby channels, offering us sunset views that I will never forget. I lashed one of my cameras to the ship's wheel house and shot a cool <u>time-lapse of our sunset cruise</u>.



Photographer Patrick Endres works alongside an iceberg near Paulet Island. Image ID: <u>24996</u>



Iceberg detail. Image ID: 24900



Tabular iceberg, Antarctic Peninsula, near Paulet Island, sunset. Image ID: 24778



The edge of the fast ice along the shore, near Paulet Island. Image ID: $\underline{24788}$

Devil Island, Antarctica

Arriving at Devil Island, the morning presented the most spectacular blue-sky weather we experienced during our entire voyage. Devil Island rose above us after we anchored, twin peaks about 800' high framing a saddle about half that. On the slope of the island before us was a broad colony of penguins. Many grounded small bergs were nestled up against the side of the island, having become caught there at a previous low tide and remaining trapped. Some were cracking and breaking under their own weight as the tide dropped through the morning, producing occasional loud popping sounds following by waves radiating out from the busted up piece of ice.



Adelie penguins at the nest, part of the large nesting colony of penguins that resides along the lower slopes of Devil Island. Image ID: 25013



Adelie penguin. Image ID: 25044

I elected to hike to the <u>summit of the Devil Island</u>, foregoing any time in a zodiac, since I figured the view was too good to pass up and I wanted to bag a new peak. I shot some great video of the colony on the shoulder of the island, and then followed Ted, Ross, Markus and Jo up to the top. Many others got up there too. The view from the top of the right horn of the island was superb, a full 360 degrees including the channel separating Devil Island from the Antarctic continent on one side, and clear across the Gerlache Strait on the other side. Nothing but blue sky and sun, finally, after weeks of crap weather. It was warm, only the thinnest fleece was required, and sunglasses and sunscreen the order of the day. Not much to say beyond that. I spent as much time at the top as I could, watching the tiny zodiacs far below slowly circumnavigate Devil Island, dodging bergs as they did so. In many places, one could see down through the clear, still water to the ocean bottom below. This would definitely have been a good place to hop in the water with drysuit and camera housing for some u/w shots of bergs, but that will have to wait for next trip. About lunch time we left Devil Island in our wake, motoring further down the channel for our first step on the continent proper at Brown Bluff.



Ice, ocean, clouds and sun, Antarctica. Image ID: 24814



Summit of Devil Island with portions of the Erebus and Terror Gulf region of the Weddell Sea in the background. Image ID: 24816

Brown Bluff, Antarctica

Our approach to <u>Brown Bluff</u> took us across a broad sound complete with blue sky and many scenic bergs, then into a thick fog bank as we left the sound and entered a narrower passage with clouds and cold air pouring down to the water from the glaciers on each side (glaciers make their own weather).



Tabular iceberg in the Antarctic Sound. Image ID: 24783



Tabular iceberg in the Antarctic Sound. Image ID: 24784

Brown Bluff, an aptly named large rock promontory situated between two glaciers, appeared before us as we approached through a clearing in the fog. Many small bergs were floating just offshore of the bluff, so the big boat was anchored a ways off and we accessed the bluff and its cobblestone beaches with a half mile zodiac run. Several types of penguins nest below the bluff, and are constantly leaving and arriving via the beach. I headed away from the penguins and people to a swath of beach that fronted a long, rolling edge of an ice field.



Brown Bluff, the eroded remains of an extinct volcanic structure, below which many penguins and seabirds nest. Image ID: 24809



Horizontal striations and layers in packed snow, melting and overhanging, seen from the edge of the snowpack, along a rocky beach.

Image ID: 24782

The 30' ice field ended abruptly almost at the water, leaving a strip of about 50' of cobblestone beach upon which to walk. The edge of the ice revealed horizontal striations about a foot apart. Were they created by seasonal accumulations of dark dirt blown on top of white snow, or where they perhaps picked from the soil below? I think this interesting "wave" of ice overhanging the beach was the edge of an ice field, rather than a glacier proper, but am not sure. I set about trying to photograph it with my widest lens, contrasting the undulating striations in the wall of ice against the more uniform dark of the beach and the water. It grew cloudy. Water dripped off the ice, wetting the cobbles that would otherwise be dry. I waded out into the water to inspect a few small bergs that had grounded on the shore. Penguins would occasionally swim by me, nearly bumping my legs as they zoomed through the shallows to exit the water onto the beach. Sometimes one would notice me and stop, sticking its head above water and giving me a lookover, swimming about my legs once before moving on its way. Curious little guys.



Adelie penguin on an iceberg. Image ID: <u>25006</u>



Adelie penguins walking on a stone beach. Image ID: <u>25012</u>

After scrambling over the rocks to get back to the landing site, I rejoined some others and looked about the bluff area to get a sense of all the different bird activity that was happening. Vic was lying down on the cobbles, allowing groups of penguins to pass him by as they walked along the beach. I joined him and soon had a group of 20 or so birds approach far too close for me to take any pictures. They chose a spot 3' in front of me to make their mad dash into the water. I did not see any leopard seals so I think their concern – and their panicky group entrance into the ocean – was unwarranted, but they must use that method always out of habit or instinct.



*Icicles and melting ice, hanging from the edge of an blue iceberg. Is this the result of climate change and global warming? Image ID:*24803

Later we hopped in a zodiac with Hugh and cruised around among the bergs. This was the highlight of the day. Hugh managed to find a group of <u>Adelie penguins</u> (*Pygoscelis adeliae*) that

were diving into the water from a sloping edge of a berg, and we got some nice shots. He then topped that with a group of 14 birds on an even-more-scenic berg, all of whom entered the water from a 5' ledge. Some of the photos that others (with wider lenses than I) got in that instance were stunning, really suitable for fine art. I got a keeper too. Finally he drove our boat into the basin of a hand-shaped berg, with all five fingers protruding 10-20' out of the water. A 50' wide basin about 10' deep was formed between the fingers, large enough for us to take the boat into and slowly maneuver. The whole thing glowed with that cool iceberg blue glow. It sounds simple and unremarkable but the colors were simply out of this world and everyone in our little group was moved by how stunning the color and shape of this berg was. By now the fog had returned and we could see neither beach, nor boat. We were zipping on grey water upon which no horizon could be discerned, between white and blue bergs. Eventually we found the big boat, and the landing, and reclaimed our stuff from the beach before returning to the big boat for dinner.



Enjoying an inflatable ride through the strange environs of a bizarrely-shaped iceberg, on a cloudy day. Image ID: 24995

Bailey Head, Deception Island, Antarctica



Chinstrap penguins at Bailey Head, Deception Island. Chinstrap penguins enter and exit the surf on the black sand beach at Bailey Head on Deception Island. Bailey Head is home to one of the largest colonies of chinstrap penguins in the world. Image ID: 25455

The forecast for this morning was not encouraging: winds up to 35 knots which would generate waves large enough to shut down our ability to land on this steep, exposed, black-sand beach. However, at 6am we found relatively calm seas and little wind at Deception Island, with a smallish swell that caused a little anxiety and some minor mishaps with the zodiacs due to the very steep beach but was not enough to keep us from landing ashore. Bailey Head is a large volcanic plug towering over a long, beautiful black sand beach. Cliffs run the length of the beach. Penguins occupy the edge of the beach for several hundred yards, a mass of black-and-white specks on a black expanse of sand. Seemingly endless columns of chinstrap penguins (*Pygoscelis antarcticus*) waddle back and forth between the beach and the rim of the volcano that comprises the island.



Sunrise in the South Shetland Islands, near Deception Island. Image ID: 25459



Distant icebergs, mountains, clouds, ocean at dawn, in the South Shetland Islands, near Deception Island. Image ID: 25460

On the beach, chinstraps nervously gather together waiting for a moment when they can rush en masse down the slope to plunge into the water, swimming rapidly through the shallows to avoid a leopard seal that patrols the shore. What I am seeing is a fascinating spectacle. The sheer number of chinstrap penguins and the constant flow of animals between the heights above and the surf below is impressive. Light rain and some wind comes and goes during our four hours ashore. The light is flat, making for difficult photography. I shoot a few time lapse series, hoping to illustrate the nature of the movement of the many penguins, but it is not easy since we are constrained from going up on the hills above the penguin highway for a better look for fear of displacing the animals from their route. I also shoot some video which will probably be more appealing than the photos, since the video captures the cacophony of the birds and the sounds of the surf. By 11am I am back in a zodiac headed for the boat. I skipped the novelty visit to the hot springs after lunch due to the declining weather. Instead, we watched the hardier folks swimming in the mix of hot springs and icy ocean water, under falling snow and blowing wind.



Chinstrap penguins, Bailey Head, Deception Island. Image ID: 25456

Cierva Cove, Antarctica

We begin our morning today in <u>Cierva Cove</u>, directly south from yesterday's landing at <u>Bailey Head on Deception Island</u>. Cierva Cove is said to be a good location to see marine mammals. However, this morning the skies are dark and the air is cold. Cierva Cove is choked with <u>brash ice</u>, and light rain has been falling on and off all morning. Some choose to remain aboard the <u>Polar Star as it is anchored just offshore of the cove</u>, enjoying coffee in the warm lounge on the top deck and watching the morning pass through the large windows. Not to be put off by a little weather, most of the folks on board hop in zodiacs and set off for some cruising and sightseeing amid the ice in Cierva Cove.



Brash ice and pack ice in Antarctica. Brash ices fills the ocean waters of Cierva Cove on the Antarctic Peninsula. The ice is a mix of sea ice that has floated near shore on the tide and chunks of ice that have fallen into the water from nearby land-bound glaciers. Image ID: 25531



Antarctic icebergs, sculpted by ocean tides into fantastic shapes. Image ID: 25502

Moving about through the ice maze proves to be a bit difficult in the zodiacs and we take it slow, choosing our route carefully. Currents stir the waters in the cove, and the ice is constantly moving albeit slowly. At times, the narrow channels we use close soon after we pass through so that we cannot return the way we came, so we just proceed onward. It is fun going. There are three species of pinniped to be seen in Cierva Cove: leopard seal (*Hydrurga leptonyx*), Weddell seal (*Leptonychotes Weddellii*) and Crabeater seal (*Lobodon carcinophagus*), and soon we have seen them all. Of the three, the Weddell seals are my favorite, exhibiting beautiful spotted coats more attractive than any other seal species I have seen. It is difficult to keep the cameras dry as rain continues to fall, so I am glad I have weather covers for my gear.



Weddell seal in Antarctica. The Weddell seal reaches sizes of 3m and 600 kg, and feeds on a variety of fish, krill, squid, cephalopods, crustaceans and penguins. Image ID: <u>25501</u>



A leopard seal in Antarctica. The leopard seal is a large predatory seal, up to 1300 lb and 11 ft in length, feeding on krill, squid, fish, various penguin species and other seabirds and occasionally, other pinnipeds. Image ID: 25526

Three glaciers flow into Cierva Cove, plowing down from the inland slopes above us with towering walls of ice leading the way. These glaciers shed enormous blocks of blue ice, frozen

floating progeny that will soon drift away from the cove and disperse into the ocean. Occasionally we see ice break from the face of the glacier and fall, calving with loud cracking sounds that echo around the cove. When the blocks plunge into the water they create long rolling swells that generate low rumbling sounds as the bergs around us bump together. Argentina's Primavera Research Station is located on an exposed rocky peninsula nearby, a group of small red buildings and several radio antennae. Given the weather we have today, the station looks like a very cold workplace indeed.



Primavera Base, (Argentina) on the slopes above Cierva Cove, Antarctica. Image ID: 25556



Zodiac cruising in Antarctica. Tourists enjoy the pack ice and towering glaciers of Cierva Cove on the Antarctic Peninsula. Image ID: <u>25590</u>

Eventually we leave the thick brash ice and motor about in the open water a mile or so offshore, in hopes of seeing a whale. Indeed, we soon come across a few minke whales, fast and sleek. They seem inquisitive and swim near our zodiac a few times, then disappear with nary a clue as to where they have gone. Other zodiacs see minkes throughout the morning. Soon a small group of humpback whales are spotted. Doug Cheeseman, who is driving our zodiac this morning, has had years of experience boating near whales and does a great job of predicting where the humpbacks will surface. For 30 minutes or so the whales simply surface and sink back under. Eventually, however, they begin raising their flukes as they dive, providing the photographers on our inflatable with great ops. After watching the whales for a long time, everyone on the zodiac is eventually chilled to the core and we head back to the M/V Polar Star to warm up and move to the afternoon's landing at Cuverville Island. This morning offered our best views of marine mammals on the trip so far.



Southern humpback whale in Antarctica, lifting its fluke (tail) before diving in Cierva Cove, Antarctica. Image ID: 25518

Cuverville Island, Antarctica



Gentoo penguin tending to its two chicks. The nest is made of small stones. Image ID: 25551

We are gradually working our way south along the western flanks of the Antarctica Peninsula. This afternoon we reach Cuverville Island after a 60 mile transit through the Gerlache Straight from our morning's visit to Cierva Cove. Cuverville Island hosts a colony of Gentoo Penguins (Pygoscelis papua) and our timing coincides with the Gentoos' rearing of their chicks. Gentoo nests are made of small stones, and the adults will frequently (almost constantly) steal stones from one another's nests. It is a humorous situation to watch but I realize the incessant watchfulness and robbery required of their species' lifestyle must be tiresome for these small kleptomaniacs. Watching the chicks as they are tended by their parents is the highlight of my time on Cuverville Island. They are so tiny and yet incredibly hardy to survive in such bitterly

cold and windy surroundings. A Gentoo penguin chick's home is literally a small shallow ring of stones built on bare rock, exposed to harsh wind, rain, snow and mist from the nearby ocean, with only the bulk and warmth of its parent penguin to offer any meaningful protection from the elements. Brown skuas are constantly present nearby, awaiting an opportunity to swoop in quickly and attack an unprotected penguin chick. Life is difficult here.



Gentoo penguin colony, Cuverville Island. Image ID: 25533

Port Lockroy, Antarctica

It was quite early in the morning that our day began, traveling down the Neumayer Channel to tiny Goudier Island on which the Port Lockroy base resides. The skies were heavily overcast, so we did not have an opportunity to see the magnificent surroundings that the Neumayer Channel is reputed to offer. (It looks like the weather will remain poor, so our chance to see the Lemaire Channel in all its glory later today is not looking good either.) Port Lockroy is a "living museum", a former British base, once abandoned but restored in the 90's by volunteers of the British Antarctic Survey and now tended by four keepers for this season. Port Lockroy offers a look back at what conditions were like for the British Government exactly what they were doing on this tiny island during the war, but it is suspected that they were collecting weather data and making forays through the area looking for enemy naval activity. I bought the girls a few souvenirs at the small gift shop and relaxed watching the penguins on their nests just a few feet from the small buildings that make up Port Lockroy.



Blue whale skeleton in Antarctica, on the shore at Port Lockroy, Antarctica. This skeleton is composed primarily of blue whale bones, but there are believed to be bones of other baleen whales included in the skeleton as well. Image ID: 25604

Nearby is another tiny island — Wiencke Island — that we visit to see an old <u>blue whale</u> <u>skeleton</u>, surrounding by yet more penguin colonies. Actually, the skeleton is made up of bones of a number of whale species, including blue whales. Having seen many blue whales near San Diego from my boat, it was nice to walk about this skeleton and admire how large the bones are, especially the jaw bones which, I believe, are the largest bones in the entire animal kingdom. A few penguins walked idly through the assembled skeleton. Winds blew pretty hard and a little rain fell. This particular landing had more penguin aroma than any other in the past several days, and by the time I am done on Wiencke Island my boots were pretty nasty and needed a real cleaning in the ocean before I was able to hop aboard the zodiac for a ride back to the big boat.



Image ID: <u>25631</u>

Lemaire Channel, Antarctica

Soon after leaving Port Lockroy in our wake, we arrive at the famous Lemaire Channel, noted for its narrow confines and spectacular cliffs rising on each side. About six miles long, the Lemaire Channel takes about one hour to navigate (depending on how much ice is in the channel). Conditions were – surprise! – very cloudy for our passage through the strait. It was nevertheless beautiful, with several sections filled with brash ice and small bergs. We did get a partial sense of the heights and dramatic peaks that rise almost vertically from the edges of the narrow strait but we clearly could not see all the walls and peaks the we knew were hanging above us in the mist.



Lemaire Channel: mountains, sea, ice and clouds, Antarctica. The Lemaire Channel, one of the most scenic places on the Antarctic Peninsula, is a strait 11 km long and only 1.6 km wide at its narrowest point. Image ID: 25602



Image ID: 25614

Peterman Island, Antarctica

Soon after passing through the <u>Lemaire Channel</u> we arrive at Peterman Island. Peterman Island is a relatively low-lying, somewhat flattish granite island with scattered <u>gentoo penguin</u> (<u>Pygoscelis papua</u>) colonies and some small ponds. Rounded rocks along the edge of the island are awash with small waves, and I make my way to one attractive point away from the penguins (I have had enough of photographing penguins by this point) to make pictures of the water swirling ashore with peaks and clouds in the distance. I stand about thigh deep in the ocean water, but its not as cold as I expected – my boots and pants keep me dry.



Waves rush in, sunset, Antarctica. Ocean water rushes ashore over the rocky edge of Peterman Island, Antarctica. Image ID: 25610

After about 15 minutes, I hear a rustling behind me. A gentoo penguin has snuck up on me, standing on a ledge at my shoulder only about 3' away, watching me and nosing my backpack lying next to him. We both stand still for a few moments, checking one another out. Is it making sure there is nothing to be fearful of? Perhaps. Eventually, the gentoo starts nibbling some clean white snow next to me. I go on with my picture taking. When I turn around a few minutes later, it is still there watching me, now joined by another gentoo. I set one of my cameras on the granite and put a self timer on it, and let it take a few photos of the two little birds (see next image). Soon they waddle down to the water and swim off.



Gentoo penguins, Peterman Island, Antarctica. Image ID: 25613

I pack up and hike about the island, past many more penguins on their nests feeding their pairs of chicks:



Gentoo penguin adult tending to its two chicks. The chicks will remain in the nest for about 30 days after hatching. Image ID: 25601

Before returning by zodiac to the ship, I visit a lonely memorial to three BAS (British Antarctic Survey) scientists who were working at the small research hut on Peterman Island some years ago and trapped there by partially frozen seas with insufficient provisions. The ice conditions were such that the three BAS staff could not safely walk out, nor could a boat reach them. They waited weeks for help. Eventually a BAS ship reached Peterman Island, but instead of finding the researchers only a note was discovered. It is believed all three BAS scientists perished after attempting walk across the thin ice to another research station 9 miles away, likely falling into the strait through the thin ice. The memorial is a poignant reminder of the unforgiving nature of life on the Antarctic Peninsula.



Argentine research hut on Peterman Island, Antarctica. Image ID: 25605

Neko Harbor, Antarctica

I awoke this morning to find us in the calm anchorage of Paradise Bay. The water was glass, and bergs were slowly drifting by the boat, riding tidal currents. I set up a time lapse sequence on the stern of the boat and went below for breakfast. An hour later the sequence was finished, and it turned out to be pretty good when viewed in HD. The gentle swing of the boat on its anchor combined nicely with the slow movement of the berg and the passing clouds. Soon after breakfast we motored for about an hour to Neko Harbor, passing a smaller ship (with 250 passengers, crowded!) on our way into Neko Harbor. What a spectacular place. This was one of my favorite spots on the entire peninsula because we finally had a full day of encounters with mammals. (I had had my fill of penguins well before this morning). Light rain and some snow eventually cleared to broken sunshine lighting up the peaks that tower about the ice-filled bay. Two glaciers calved large bergs periodically, including a large snow avalanche that blew apart into a cloud of snow late in the afternoon.



Southern humpback whale in Antarctica, with significant diatomaceous growth (brown) on the underside of its fluke, lifting its fluke before diving in Neko Harbor, Antarctica. Image ID: 25647



A glacier cracks, as the leading edge of the glacier fractures and breaks apart as it reaches the ocean. The pieces will float away to become icebergs. Image ID: 25654

On my morning zodiac outing, Al picked out some good ice for us to inspect, and Patrick took us in for a close look. Huge columns of fractured blue ice defined the leading edge of a glacier. We took a lot of pictures of those formations, and also simply motored by them admiring them. Once back on the big boat for lunch I learned that another group was blessed with an inquisitive minke whale which stayed right next to their zodiac for 90 minutes, spy-hopping and circling the 9 lucky viewers. One of the group mentioned to me, in a somewhat reverential tone, that it was a "life moment" for her. I recall some of my earliest, best encounters with whales at close range, and I understand what she must have felt. Good for them. Throughout the day most of the us were fortunate to see scattered crabeater seals (*Lobodon carcinophagus*), Weddell seals (*Leptonychotes weddellii*) and leopard seals resting on bergs, along with an occasional minke whale and many good views of humpback whales. I managed to take a few nice photos of

humpback whales (*Megaptera novaeangliae*) fluking up in front of ice, a shot which I had tried for years before in Alaska with no luck. At 4:30pm it was time to wrap it up and head out, too soon to leave Neko Harbor but we had to begin the long sail north through the Gerlach Strait and on to Hannah Point.



A crabeater seal, hauled out on pack ice to rest. Crabeater seals reach 2m and 200kg in size, with females being slightly larger than males. Crabeaters are the most abundant species of seal in the world, with as many as 75 million individuals. Despite its name, 80% the crabeater seal's diet consists of Antarctic krill. They have specially adapted teeth to strain the small krill from the water. Image ID: 25650

Humpback Whales in the Gerlache Strait, Antarctica

As we sailed north from Neko Harbor to the South Shetland Islands, we came upon a large assemblage of humpback whales (Megaptera novaeangliae) feeding in the Gerlache Strait. They were on krill, as evidenced by the color of their waste, but the water was too rough to make out patches or balls of the invertebrate stuff. At one point Jim estimated we had seen over 45 humpbacks in the area about 2 miles long by half the width of the strait. One group of five whale provided some excellent examples of surface lunge feeding. While not the coordinated bubblenet feeding that is normally associated with Alaskan humpback whales, the behavior of these whales did include some bubble displays.



Humpback whale lunge feeding on Antarctic krill, with mouth open and baleen visible. The humpback's throat grooves are seen as its pleated throat becomes fully distended as the whale fills its mouth with krill and water. The water will be pushed out, while the baleen strains and retains the small krill. Image ID: 25648



Humpback whales lunge feeding on Antarctic krill. Image ID: 25649

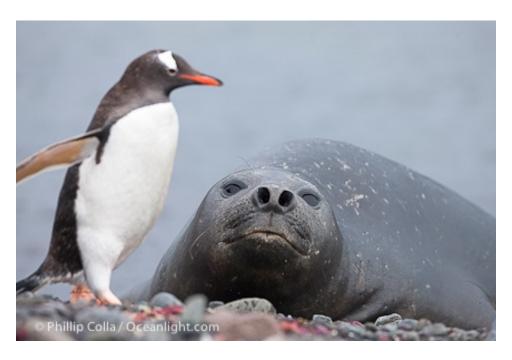
In fact, it was easy to know when the group of five was about the surface since one of the five predictably produced a subsurface blast of air a few seconds before surfacing. With a little practice it was possible to put the camera near the spot at which the whales would surface and then it was a matter of luck, firing the frames as quickly as possible and hoping the whales would surface with open mouth and full, pleated throat in the frame. We watched the whales until at least 10:30pm, when I finally got a shot of them coming toward the boat. One shot in particular illustrates the baleen, tongue and fully-engorged throat of a krill-feeding humpback. It would have been inconceivable to get this image 10 years ago when I was shooting film, at such a late hour in dim, overcast light, but the modern cameras allow for this sort of photo with relative ease. ISO 1600, lens wide open at f/4, hand-holding a stabilized 500mm lens on a rocking boat at only 1/500, and yet three of the four frames of that sequence are sufficiently sharp for publication. Wonders never cease. About 11pm we finally leave the whales and continue north through the Gerlache Strait, leaving the Antarctic Peninsula in our wake about dawn. Alas, Antarctica is now just a memory.



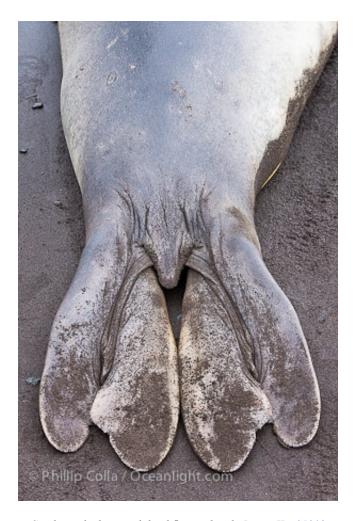
Scenery in Gerlache Strait. Clouds, mountains, snow, and ocean, at sunset in the Gerlache Strait, Antarctica. Image ID: <u>25680</u>

Hannah Point, Livingston Island, South Shetland Islands

Our final land visit was at Hannah Point in the South Shetland Islands. The crossing to Livingston Island from the northern tip of the Antarctic peninsula was, in a word, snotty. Decent swells, snow and rain, and high winds. Not drama-queen rough, but rocking and rolling enough that I preferred to sit down with a tea and watch the world go by through the big windows in the upstairs salon than spend my time on deck with a camera. It also meant that the prospects of making a landing were not looking good. But Hannah Point was on the lee side of Livingston Island this morning, and once in the bight of the island (formed by a portion of a volcanic caldera) that makes up the approach to the landing, the seas settled down somewhat and a landing was made. On the point itself are, surprisingly, more penguins. Notably, however, there is also some vegetation, something we saw very little of over the past week in Antarctica. A long, curving black-sand beach in the distance showed some juvenile southern elephant seals (*Mirounga leonina*), so I passed by the penguins and headed down to watch the elephant seals mock-fighting in the water.



Southern elephant seal watches gentoo penguin. Image ID: 25915



Southern elephant seal, hind flipper detail. Image ID: <u>25918</u>

The bulls had by this time of year all cleared off the beach and were out at sea foraging for food. Only younger animals remained, wallowing on a bluff 50' above the water or down on the sand beach. I tried to make some images of them in the water, wrestling and tossing water about. Occasional blasts of sand-strewn wind would howl down the beach in an effort to bowl us over. Gentoos would regularly swim in to the beach and waddle on the sand to their rookeries a few hundred yards away. Twice I witnessed wind blasts topple the small but sturdy birds, only to see them pop up a moment later and continue on their way as if nothing had happened. I am continually impressed with their hardiness. My final attempt at a photograph on land for this trip was to lay down in the blasting sand, which was growing worse by the hour, and try to illustrate how the sand raked over the seals. I got a few shots that I am reasonably happy with but may be picking sand out of my camera for months. About noon we depart, heading off for what promises to be a fun-filled two days in the Drake Passage.



Southern elephant seal, juveniles mock sparring. Image ID: <u>25923</u>

The Drake Passage, Southern Ocean

The Drake Passage is rumored to be the nastiest, meanest, toughest ocean crossing in the world. Many who round Cape Horn at the southern tip of South America relate the impressiveness of the Drake's ocean swells. It is a crossing of the Drake, typically a two-day affair during which the Southern Ocean unrelentingly lashes a ship broadside, that affords one a full sense of how much the ocean can dish out. Or at least that is what I hear. In truth we did not experience much distress while crossing the Drake Passage from Antarctica to Tierra del Fuego. I think the swells topped out at about 5-8m (15-24') on the second day, with a few that probably got up to 10m or so scattered throughout the day. The wind was a steady 25-35 knots, less than the prediction of a few days earlier had forecast. The real telling fact was that most of the passengers were present in the dining room for all three meals rather than in their bunks groaning and retching.



Icebreaker Polar Star, bow plunging through high seas during crossing of the Drake Passage between South America and the Antarctic Peninsula. Image ID: 25949

So, in hindsight we were comfortable, more so than expected, and we did not really have a crossing of which we could boast. I spent some time on the forward observation deck

overlooking the bow, trying to photograph green water coming over a bow that was sunk deep into an oncoming swell. In spite of my efforts I managed just two frames that show any significant water over the rail.

As we gradually crawled north toward Ushuaia and our flights home, I thought about those seafarers of a century or two ago, those who braved the Drake Passage in small wooden boats, relying on sextant and grit to find their way, without any real knowledge of how far they had to go to reach "the other side". Now those were men.

Recommended Photography Equipment

Following is what I took on my recent trip, along with comments about how useful it was and how it will change for my next trip. Yup, I took too much, but most people do and next time I'll have it dialed in. Weight and bulk are an issue on this sort of trip, and one wants to be nimble on shore without too much gear. Take note of my comments about 300/500 vs. 200-400 below.

- Canon 1Ds Mark III primary body. I love this thing. You can have it when you pry it from my cold, dead hands.
- Canon 1Ds Mark II used for time lapse sequences, and as back up body. Just a few years ago this was the standard by which other 35mm digital cameras were judged, and mine is still going strong after probably 200,000 frames.
- Canon 5D Mark II used for video, and as a landscape body. Attached 24-105 remained on camera the entire trip to minimize dust issues. This is something of a toy camera, it just does not feel right, too light and plasticy. It does NOT have the ability to withstand harsh weather that the 1D series bodies have, so be careful with it in the rain, snow and spray! The files, however, are quite nice and I am going to have a lot of fun with the video capabilities of this thing.
- Canon 500 f/4 great for portraits, and for isolating subjects due to its narrow field of view (almost half of the view angle of a 300). I used this for portraits of penguins, and for many subjects in Falklands. Once at South Georgia and in Antarctica, this length was no longer needed. I even used it handheld with 1.4x (700mm equivalent) for photographing Wandering albatross in flight, since they rarely came near to the boat. Granted that is quite a load to handhold on a moving boat, but it was the only way I could fill the frame with those distant birds. The images are quite sharp.
- Canon 300 f/2.8 most useful of the prime telephoto lenses, crazy sharp on its own and still very sharp as a handheld flight lens with the 1.4x converter (420mm equivalent). If I were to take just one prime telephoto, this is the one.

- Canon 70-200 f/4 probably the most useful of all lenses for this trip. Great for much of the wildlife and many of the landscapes. You want the f/4 version due to its lightness since it makes handling two lenses easier. With today's high ISO camera bodies there is little need for the f/2.8 version, which is rumored to be softer than the f/4 version anyway. I love this sharp little lens.
- Canon 24-70 f/2.8 brought this along as a back-up in case the recently purchased 24-105 failed to live up to expectations. I only used this lens for a few time lapse experiments. For a trip on which weight is an issue, this lens is too heavy and not as versatile as the 24-105. Next time it will stay home.
- Canon 24-105 f/4 kept it permanently attached to my 5D Mark II. It performed well, although like the 5DII this lens is not well-suited to wet or harsh environments. But it is so light, small and sharp that, provided it is cared for properly, it has a place in my gear bag in the future. It does have some barrel distortion at 24mm.
- Canon 16-35 f/2.8 II this is often too wide but I did break it out a few times in ice or when we had clear or dramatic skies. Sharper and with less distortion than the 17-40 f/4, but heavier too.
- Canon 15mm f/2.8 fisheye ok, if you don't understand why you want a fisheye in Antarctica, you need to rethink being a photographer.
- Gitzo 1327 Tripod with RRS BH-55 ball-head and Wimberley Sidekick. The Wimberley Sidekick was used only for the 500 and will be left at home next time. The RRS BH-55 ball-head is strong enough to handle a 300/2.8 or 200-400/4. I may bring a light monopod next time, as many times I would have preferred that. But a tripod is needed for 500 or longer, or when shooting time lapse, video or in low light.
- Think Tank Airport Acceleration v2 Backpack this thing performed wonderfully in the airport and in the field. I had no problems with it at all. I was able to pack even more stuff in this pack than my huge Lowepro, so much so that my pack was damn-near too heavy on the flight down to Ushuaia. This pack comes with a rain cover but I did not use it in the field since the pack sheds rain and snow so well. This is what I packed on the trip down: 1DsIII/1DsII/

300/500/70-200/16-35/1.4x/hard-disks/laptop/couple chargers/spare clothes. (The 5DII/ 24-105/15 went in a small second bag.) That's a lot in one pack.

- NRS 3.8 Liter Heavy Duty Dry Bag. I used a really big, strong dry bag from NRS. It was large enough that I could slip my entire backpack into it, along with spare sweaters, shoes, jacket, whatever. I would leave it at the landing site and return to it if I needed to exchange gear, or remove clothes if it got too warm, etc. This thing is built like a tank, reinforced at all stress points with double thick material on the boat for abrasion resistance. Be warned: this particular bag is big. I needed a big bag to put my big backpack in, and I am big enough to heft it around. You may want to go with a smaller dry bag, especially if your camera backpack is small.
- Laptop computer, three Seagate Freeagent Go 500gb portable drives and one Hyperspace Colorspace 320gb photo storage device. My computer (a very small Sony Vaio) is used for writing, playing movies and downloading images. I do not do any serious editing while traveling. The Seagate Freeagent Go drives are great, so tiny and light and they do not require their own power source (using USB power from the computer). The "Colorspace device" is much faster at downloading images than a computer, but is less flexible when it comes to doing a quick review in the evening. The Hyperspace Colorspace, while not a full-fledged computer, is sophisticated enough that it can be configured to read/write to my 500gb external hard disks which is helpful if the computer were to die during the trip. Probably the ideal solution, for someone who did not want to bring a computer, would be to bring two Colorspace devices (two backups is safer than one).

I always had the 5DII / 24-105 with me, as well as the 70-200 mounted on a body. The only question was, do I have along a longer lens (typically in Falklands) or a wider lens (Antarctica). South Georgia had so much variety that I ended up carrying more gear there than anywhere else.

NOTE: One major change I will make next time will be to leave the 300 and 500 lenses at home in favor of the **Nikon 200-400 f/4**, probably on a D300 crop body (equivalent 300-600mm). I owned a 200-400 and D3 briefly and just loved that combo, but could not justify the expense at that time and sold them after one shoot. The 200-400 is so absolutely perfect for this trip that I simply must have one in spite of the fact it is not quite as sharp as a prime, and loses a bit more quality with crop bodies which I avoid whenever possible. But on this trip the versatility of the

200-400 is enough to make up for it, and it almost doesn't matter whether it is paired with a crop body (D300) or full frame (D3/D3x/D700). I would guess that bird photographers will want the D300 for tighter bird stuff. Carryon luggage can be an issue on this trip (special thanks to the *arbitrary and capricious ticket agents* at Aerolineas Argentina when flying between Buenos Aires and Ushuaia!) and exchanging two big primes for one big zoom will ease my carryon situation a lot.

Note also that I do not carry high-speed bodies. I just don't feel a need for them. I have used most of Canon's bodies and have never really been satisfied with the image quality of the 1.6x crop bodies after becoming accustomed to the full frame quality. And the only shooting situations I have found that absolutely required high frame rates are photographing surf and action sports. Perhaps the 1D Mark IV will tempt me if the AF is good enough, but for now the 1DsIII and 1DsII were more than enough to handle the AF and frame-rate situations I encountered on this trip.

Conclusion, the ideal setup for me would have been: 1DsIII and 5DII with 15 / 16-35 / 24-105 / 70-200, and D3/D3x with 200-400.

Gear Recommendations

This is what I used on my recent Antarctica, South Georgia and Falklands trip. Photo gear will be described tomorrow as that is a whole nuther issue. I'll take virtually the same gear next time, with one small alteration.

Clothing

In general my main concern on this trip was staying dry in the rain and snow, and not overheating on longer walks. Layers and synthetics worked great. The only time I actually felt cold was on a few zodiac rides, and then putting on an extra fleece jacket under my Goretex shell did the trick.

- Goretex jacket / shell. I use North Face Goretex jackets. I took two of them, one for use ashore that soon got dirty and smelly since I often lay down on the ground to photograph. The other was for use on the ship and remained clean. Both have dual zippers that allow North Face and Marmot fleece sweaters to be zipped into the jacket. The shell does not need insulation, in fact it is better to insulate with polar fleece sweaters separate (see next). The shell should have a hood for rain and for wet zodiac rides. You will get bird guano on your outer jacket.
- Polar fleece jacket. I took three, one each of all three Polartec weights, that zip into the North Face jackets. Usually the mid-weight one was enough but a few times I wore two of them for warmth.
- Gortex Pants. I use <u>Cabela's GORE-TEX® Guidewear® Uninsulated Bibs Tall</u>. They are big, heavy duty and I am very happy with them. I have never had any rips or worn areas with these pants in spite of many hours scrambling around on rocks and the ground for photos. They are tougher than most people need, but the big pockets are great for gloves, camera stuff, hats, etc. If you use a more lightweight material don't be surprised when they tear, in which case rubber cement or duct tape will save the day. You will get lots of bird guano on your pants.

- Waterproof Boots. I use <u>Muckboots</u>, the <u>Wetlands</u> model. Your boots absolutely must be waterproof and comfortable. I observed that NEOS overboots did not perform well for those that brought them; they eventually borrowed plain-old rubber boots provided by the Polar Star. I found my Muckboots to be quite comfortable and since they are neoprene they are very warm, I only needed to wear a single pair of athletic socks even in the coldest places we went. They do fit a little on the loose side but were still serviceable for long hikes. Wear extra layer of socks to make them fit more snugly. You will walk through vast areas of bird guano in your boots, and then you will rinse them off on deck when you return to the boat.
- Chest waders: I may use chest waders in lieu of pants and boots on my next visit, since there were a few times I wanted to wade into the water up to my waist. The key is finding a set of chest waders that are comfortable to wear for 6-10 hours at a time.
- Inner wear: Do not wear cotton. Wear synthetics to ensure that you dry quickly if you are sweating or if you get wet. Cotton does not dry well, and if you get wet you will stay wet and eventually get cold. I prefer to wear Nike quick-dry athletic shirts under my sweater, and either shorts (in Falklands) or light-insulation pants (such as REI quick-dry synthetic pants or thin fleece or pile pants) under my heavy duty waterproof pants. Long-johns, thermal underwear, are often mentioned for this sort of trip but I did not bring them nor did I need them, however, if you are old or have poor circulation you might consider thermals of some sort.
- Gloves: I took several different pairs mittens and gloves plus a sturdy pair of glove underliners that themselves can also serve as lightweight gloves. You may find you prefer lightweight gloves for time ashore when you are handling camera equipment or walking sticks, and heavier gloves (such as neoprene/wetsuit gloves or waterproof ski gloves) for the often wet zodiac rides. Your gloves will get bird guano on them.
- Hat. I took a warm ski hat for cold days and a lightweight baseball hat for sunny days. My mistake is that I forgot to pack my Sun Precautions Hat, which I use in the tropics or on my boat. In the Falklands we had sunny, dry, warm weather and my neck, face and ears got burnt even with sunscreen on.
- Shades. Bring at least one good pair of polarized sunglasses. They should be suitable for marine use since you will be wearing them around water much of the time.

- Shorts and comfortable shoes for around the boat. Flip flops if you are from California.
- Luggage. I use an REI wheeled duffel, it can carry all of my clothes, boots, tripod and loads of camera stuff.

Dry Bag / River Bag

• NRS 3.8 Liter Heavy Duty Dry Bag. I used a really big, strong dry bag from NRS. It was large enough that I could slip my entire backpack into it, along with spare sweaters, shoes, jacket, whatever. I would leave it at the landing site and return to it if I needed to exchange gear, or remove clothes if it got too warm, etc. This thing is built like a tank, reinforced at all stress points with double thick material on the boat for abrasion resistance. Be warned: this particular bag is big. I needed a big bag to put my big backpack in, and I am big enough to heft it around. You may want to go with a smaller dry bag, especially if your camera backpack is small.

Personal

- Sunscreen. SPF 1000 is good. I ran out and had to borrow. Bring plenty.
- Chapstick. Wow, I ran out and boy was I sorry. Your lips will get wind-burnt and chapped. Bring 3-4 chapsticks.
- Hand lotion. My hands got really dry and the skin cracked.
- Medications. Make sure to have proper antibiotics if you have a history of infections, as well as plenty of Advil for sore muscles. Tamiflu if you can get it and are worried about someone bringing flu onto the boat. H1N1 flu vaccine if you can get it. Seasick medication, including the prescription "patch". I generally do not get seasick and yet I packed Bonine and the patch just in case. Hand sanitizer is good to have for any travel. Bring your own supply of bandaids and Neosporin ointment, the last thing you want is for a small cut to become a problem infection.

- Ear plugs. Get some good ones, the kind that are shaped (sort of) ergonomically, they can really make the difference between a good night's sleep and sleep deprivation.
- Converter plugs. I went to a lighting and electrical shop in Ushuaia and bought two converters which I used together on the ship: one to change two-prong marine/ship outlet to South American three-prong 220V and a second to convert South American three-prong 220V to North American three-prong 220V/110V.