

GREENLAND SHARKS &amp; NARWHAL

# POLAR PENETRATION

: TEXT AND IMAGES KELVIN AITKEN© 2006

AT ONE METRE PER SECOND A LEAD WEIGHT WILL TAKE APPROXIMATELY EIGHT MINUTES TO TRAVEL 490 METRES. IN VIEW OF THAT I HAD AMPLE TIME TO CONSIDER THE RAMIFICATIONS OF MY FAULTY HARNESS BELT AS I WATCHED TWO PRISTINE NEW WEIGHTS TUMBLE INTO OBLIVION BELOW ME.



**T**rip leader Graham Dickson wouldn't appreciate those lost lumps of lead. I figured he'd paid about \$50 on air freight just to get the two lead weights from Ottawa, Canada, to Arctic Bay, apart from the initial cost of the two errant pieces of ballast. Then I faced the derision of my fellow divers who'd insisted that the belt needed fixing while I insisted it didn't. Thirdly, I had to consider my accelerating ascent to the surface due to the rapid departure of my two weights. The Greenland shark I'd been photographing rolled slightly to watch as I frantically dumped air from my BC and drysuit, knowing that my efforts were pointless. The basic physics dictated my fate - an abrupt meeting of my head with a two-metre thick by 20,000 square kilometre sheet of sea ice. Problem number three was immediately solved.

Arctic Bay has, by my calculations, the second most northerly commercial airport in the world. Resolute, a little further north, has the honour of being number one. Baffin Island, where Arctic Bay is situated, is separated from Dover Island to the north by Lancaster Sound where we intended to spend a couple of weeks camped out on the sea ice photographing various marine mammals and Greenland sharks. On arrival at our camp site our distinctive orange dome tents were up, gear transferred, cooking facilities set up and, most importantly, the dunny tent was pitched downwind. Our home for the next two weeks was about 8-10 kilometres off the nearest landfall, nine hours by skidoo from the nearest town and had stunning vistas of sea ice, distant cliffs and snow laden

mountains. I've travelled to some exotic locations in my day, but the Arctic is the most spectacular and atavistic place I've ever had the privilege to visit.

Next morning when I managed to extricate myself from a very warm and comfortable sleeping bag, my tent buddies, travel companions and members of the famous Beaver Dive Team, Paul Jackson and Saul Gonor, had prepped all their camera gear and assembled their mass of Arctic dive equipment. While they enjoyed lashings of bacon and eggs in the mess tent I set about cleaning the O-rings in my underwater camera units. It's one thing to prep a camera in the warm confines of a hotel and quite another to do it in a tent hindered by multi-layered bulky thermal clothing, bare fingers numb

from the cold, stiff and inflexible O-rings and a constant nasal drip into the camera innards. After a few days I found everyone, including our hardened local Inuit guides, had a constantly dripping snoz. We sniffed, wiped, blew and dripped constantly. Not a pretty sight in the mess tent I can tell you.

While my main interest was in the Greenland sharks, Paul and Saul had a special desire to find marine mammals, particularly belugas and narwhals. We needed a clear ice floe edge which meant that the gentle north breeze had to change - any wind from the north pushed the loose ice inshore against the floe edge, making travel to open water out impossible. A vast plain of jumbled broken ice made even foot travel treacherous. Each day we headed out with high hopes, towing cameras and dive gear on the sleds as we searched for open

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water. White sea ice reflects any sunlight directly up into the atmosphere but any break in the ice shows up as a dark mark in the sky, particularly on cloudy days when the lack of reflected light against the clouds becomes readily apparent. Though we saw small dark areas in the sky, the bulk of the broken ice stayed put.

The lack of open water, vast areas of jumbled ice and lack of whales were frustrating, but I revelled in the beauty of the ice floe. Often we stopped to find clear areas in which to travel, pull a sled off an obstruction, or wait for a guide to climb up a huge slab of broken ice to scan the horizon. Each was an opportunity to photograph sheets of icicles, peer into the mystical blue sunlight oozing out of an icy cavern, stand in awe of the pristine white expanse under a cobalt sky or just crunch around in the frost forming on old snow.

Polar bear footprints were common, heading out over the broken ice towards open water. The huge nailed footprints scuffed across the snow leading to seal breathing holes where the presence or absence of a bloody patch signalled success or failure of a hunt. At times the bear tracks were mirrored by tippy-toed marks of an Arctic fox or the sedate tracks of a female bear would be criss-crossed by the small prints of her curious and energetic cub.

After a few unsuccessful though enjoyable days we set up to bring in a Greenland shark. Not far from our camp a huge lead in the sea ice split the floe for many kilometres. The floe's slight movement kept the crack open, breaking up any thin sheets of surface ice. Paul, having the most

insatiably curious mind, calculated the water depth to be around 1600 feet, or 450-500 metres. While Greenland sharks do come to the surface and can be found in very shallow water, particularly in summer when hunters clean their catch, they're more comfortable and more common in deep water. Our technique used the same principle as most shark dives; some bait and a burley trail. We had burley at the surface, but the quickest way to get a shark to the surface was to first attract it with a bottom bait. We set up lines, dropped the bait and cut out a working platform on the edge of the crack then left it all for a couple of days. When your subject lives deep in such cold water there's no sudden activity. Back to the tents and a good book.

The next day the Beaver Team checked our ice crack. Amazingly we found not one but three large Greenland sharks! A world-first? Our bait had proved irresistible. Saul and I kitted up to dive while Paul, who'd photographed this species before, settled for a hydrophone session, recording and tracking seal and whale calls underwater.

Due to the chance of strong currents or the crack closing on us, we had to wear a safety rope which made solo diving more practical.

This page: The break or lead in the ice floe from topside and below • Our campsite on the sea ice, with distant cliffs and snow laden mountains. •

Opposite: The arctic duck • Fabulous crevices with unforgettable light • Narwhal came in from the gloom to investigate. Many females had young calves with them and occasionally a small group of tusked males would swim past, rolling on their sides or backs to get a better look. •



Slipping on as much insulation as possible I squeezed into my drysuit, grateful that Divers Supplies had done a good job on my seal and zip replacements - this was no place for a leaky suit, but all the extra layers made it impossible to put on my fins. Some who shall remain nameless had less flattering suggestions for my lack of mobility. Fins, BC with tank, mask, then finally dry gloves were all donned with Paul's help then I slipped into the water for my first ice dive. Twisting around and sliding into the crack, I felt small chips of ice on the surface bouncing off my suit. Hanging onto the edge of the ice with one hand I nervously let my suit vent then dipped my face into the water. I could see nothing beyond my mask except for ice slurry until my buoyancy dropped and I slid under the mushy surface.

I was stunned. It was absolutely beautiful. I could see one of the sharks gently sculling around below with its large lobed tail. The visibility was fantastic, at least 20 metres or more. A second shark was near the surface about 10 metres away. The water was peppered by pulsing jellies and salps searching for forerunners of the summer



Greenland sharks belong to the dogfish or dogshark family, including the spurdogs and lantern sharks found around southern Australasian coasts. They're generally scavengers, feeding on dead seals, whales, fish and anything else that happens by. One was caught with the entire dismembered carcass of a reindeer in its stomach. Given the right incentive they will also actively hunt living animals.

plankton bloom which would blow the viz. The sea ice was at least 1.5 metres thick with black nothingness below. The large crack let in streaks of daylight, a cathedral-like trail of light contrasting with the dark gloom under the ice floe. The faint spiralling call of a ringed seal could be heard wailing above the hiss and rattle of my regulator. My face rapidly numbed in the icy water, easing the painful icy stings on my unprotected skin.

I clumsily checked the camera set-up, fumbled in my thick insulated gloves for the strobe power switches and fired off a test shot. A miracle, everything was working. I even had film loaded - for once I hadn't stuffed up. Or maybe it was the effects of too much lunchtime Polish sausage. I secretly hoped that none of my early nose drippings would jam the film. I took a few minutes to get my buoyancy under control then headed for the nearest shark. Besides the distinct paddle shaped dogshark tail, the most obvious feature of the Greenland shark was the string-like parasites clinging to its eyes. It's common with almost all individuals of this species, each eye usually having one or two parasites embedded in the cornea. No

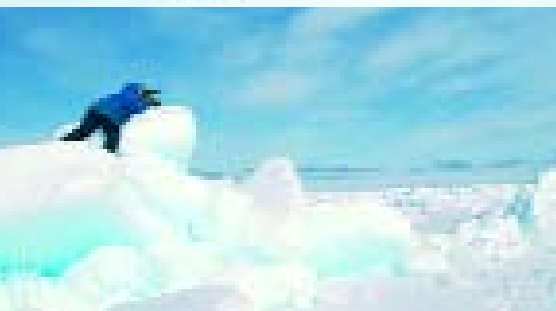


certain reason is known for this but the parasites may help the near-blind shark by attracting prey with their bioluminescence. The superb electrical and temperature sensors on the snout and pressure wave sensors on the shark's lateral line plus a keen sense of smell enable it to find prey in the black depths.

No aggression was evident, just curiosity and a lazy swimming motion. The small mouth held rows of teeth different to the single point or cusp of a typical whaler shark, they were comb-like teeth with multiple sharp points ideal for sawing through bone or cutting out large chunks of flesh. Shooting from below I could see its belly was mottled and only slightly lighter than the rest of the body, not pale or white like most other sharks. Two of the sharks remained while I was in the water, one a male with short claspers. I was surprised at how warm I was. Above the surface it was cloudy, dull and cold with an uncomfortably chilly wind. It was also very late, around nine pm, though the sun was still shining bright under the cloud edge down near the horizon. With wind chill it was around -10° while underwater it was no colder than -2°, the freezing point of salt water.



Very pleased with myself after shooting off most of a roll without a mucous-clogged jam or my strobe batteries dying in the cold, I decided to get below the sharks to shoot up. And that's when I dropped my weights, the loose pouching swinging around as I duck dived instead of sensibly adjusting my BC and dropping feet first. The velcro flap gave up due to years of fluff and hair tangled in the tiny plastic hooks and the increased leverage of the loosely swinging pouch. Nine pounds of lead whizzed past my nose, barely missing my chin and the possibility of a cracked jaw or shattered teeth. The first person on this



**Narwhal:** The myth of the unicorn came from the long spiral tusks found on male narwhals, which are actually teeth that erupt from the jaw forming a long hollow tusk growing up to three metres long. On rare occasions a male may even have two tusks. The primary use of the tusk is for pre mating behaviour with males jousting for dominance.

planet who came up with the word 'idiot' had the same look on their face as Graham did when I appeared at the surface. See, I can inspire others.

Hot lamb cutlets waited for us back at camp so we called it a day. We bashed and banged our way over the ice floe back to camp, excited at our adventure under the ice with the sharks.

On the last day of the trip we woke to a white out. A thick soupy haze blocked the sun and made the ice surface dangerous and difficult to judge for holes and cracks. This would be a packing day, too dangerous to travel in the skidoos. Then late in the afternoon it cleared and we could see the black sky of open water - the floe edge had opened! Arriving at the edge Paul put down his hydrophone and soon picked up the surreal wail of a diving seal and a weird series of soft clicks. As they grew louder I looked out over the open water and there they were, the mottled backs of a pod of narwhal coming to feed under the floe edge. Saul scrambled for his dive gear while I set up the tripod for some surface shots. Slapping on a 1000 mm lens I could get close shots of their speckled backs and occasionally, the males' spiralled horn.

A forlorn Saul trudged across the snow with his old latex dry hood completely torn apart. His hurried efforts had been too much for it. Since he'd only be lying on the surface we figured a temporary repair could get him in the water; a few strips of gaffer tape and he was away. After an hour or so I joined him, swimming out from the ice edge for about 50 metres. As the narwhal came through we'd lie still on the surface as they swam beneath us, gazing up and clicking furiously at us. Many females had young calves with them and occasionally a small group of tusked males would swim past, rolling on their

Massive cliffs dwarf the sled and skidoo  
 • The broken ice was impossible to cross and made travel almost impossible • At times the weather closed in but the view was still spectacular • Using the ice to balance the cameras • Polar bear tracks were often seen heading to or from a hunt site.

sides or backs to get a better look. They were definitely interested in us but generally kept a reasonable distance. While we waited, the chill sea made our fingers and toes ache, especially Saul whose left sleeve was now filled with water. But when the narwhal swam through all was forgotten as we gazed at one of the oceans most enigmatic creatures.

Hypothermia, failing light and departure of the narwhal finally forced us out onto the ice, shivering but ecstatic. We waited on the floe edge hoping our body temperature would rise and the whales return, but neither happened. A lone sea duck, totally oblivious to it's own safety swam along the floe edge and sat on my semi submerged fin, a friendly Arctic ambassador. Eventually we went back to the sleds, and headed for camp.

On the day-long, uncomfortable, cold, spine-thumping ride back to Arctic Bay I played back in my mind our whale encounters, the shark dives and the stunning icescapes that had filled our senses. As I gazed at the massive sea cliffs and sea ice expanse, I was already beginning to miss the cold, the discomfort and the privations of our trip. Civilisation had nothing on the harsh beauty of those sea ice plains. I'd definitely be back.

