## A Voyage to the Antipation of the Peninsula Text and photos by Michael Aw

At 2:00 am, it is already daylight on Pléneau Island, a place where floating icebergs become grounded, a graveyard of diverse towering structures of ice articulated in extraordinary forms. In a quintessential snowy landscape, snowflakes of perfect shape fall over me, a moment of utter isolation. I am the only one awake among the few that have chosen to sleep on ice with a sleeping bag, our way of bonding with the final wilderness—Antarctica, the last of our planet's pristine milieu.



# travel



Penguins head to the water to feed; Expedition members spent the night in sleeping bags on solid ice; Chinstrap penguins keep close bonds with their young

The mere mention of Antarctica triggers the imagination and evokes stunning images of a majestic frozen continent laden with resident penguins, polar bears and whales. In the real world, there are no polar bears in the Antarctic, and there are no penguins in the north Arctic. Though both the Antarctic and Arctic are high latitude, freezing polar regions, the similarities end there. The enormous Antarctic is an un-colonized continent covered with ice, whereby the north Arctic is comprised of a frozen ocean at the North Pole, surrounded by land masses to the south of which some are heavily populated by humans.

Once the domain of explorers who had fallen under its mystical enchantment and of appalling whalers and sealers who came

to exploit the rich bounty of its frigid waters, Antarctica continues to weave its magic, profoundly alluring the modern day adventurer to its freezing shores. My journey began with a three-day flight and transits to Ushuaia, the southernmost city of the world, about 3,300km south of Buenos Aires.

Indeed, this picturesque town endowed with a unique landscape of high snowcapped mountains, sea, glaciers and forests is a fitting gateway for nature tourists on their way to Antarctica. From here, it is purported to be a dreadful 50 hours crossing the Drake Passage, which has earned a place in history as having some of the roughest sea weather in the world.

Drake Passage is dominated

by fast flowing southern ocean waters squeezed between the land masses of South America and Antarctica. Storms frequently whip the ocean into a gloomy gray tumultuous, heaving mass of water, notorious for sinking many ships. My crossing with the Polar Pioneer was to be a lucky one; riding with the southwest wind of 24 knots, the vessel averaging 12 knots, crossing the Antarctic Convergence to see the first icebergs on the second morning. We were in Antarctic water.



BOOKS SCIENCE & ECOLOGY



Late afternoon, the third day of the voyage, we made landfall and landed on Aitcho Island, named for the British Admiralty's

Hydrographic Office, which I read was covered with extensive beds of moss and lichens. There was hardly any in sight. Instead, there was a Middle Kingdom-like landscape with an expanse of ice inhabited by thousands of Gentoo and Chinstrap penquins.

Much like the animals on Galapagos, these flightless birds have no fear of human

PORTFOLIO CLASSIFIED





THIS PAGE: Ice! Views of the ice structures and icebergs of Antarctica

intrusion; they happily go about squawking away and doing little penguin chores, from inflating their chest and pointing beaks towards the sky, letting loose a huge lunch-whistle call to mates, to rearranging pebbly rocks for a brand new nest. Whilst we respectfully stayed at a distance, at most times, it's the birds that approached us so close that we could smell their fishy breath.

I walked right to the far side of the island, up the saddle between two hills to take in the panoramic view of Whalebone Beach in the midst of a spectacular vista tainted with little gray blobs of elephant seals, sea lions and penguins. A few of them, seemingly emerging from a snow storm, were staggering up hill towards me.

#### Antarctica

Though there is lots of snow and ice around, Antarctica is really a desert environment with less than 4mm of precipitation monthly making it the driest continent on earth. The amount of moisture received by the polar continent is comparable to that falling on the world's hottest deserts. Antarctica is also the coldest continent on Earth. The lowest temperature ever recorded was minus 89.2°C at Vostok, at the Australian Antarctic Territory, in 1983. More than 98 percent of Antarctica land mass is covered with an enormous ice cap with an averaging thickness of 2.2km deep.

The continent itself, which is the size of the United States and Europe combined, is comprised of 5.4 million sq miles, but in the









Split view of iceberg above and below the water's surface; Life on Antarctica—expedition member plays music for the locals; Territorial disputes are bound to erupt amongst close neighbors



backpack and dive gear from the dive deck to join the shore excursion group at the bow! I came to conclude that it was not freezing water of the polar region or the reptilian-like leopard seal that is dangerous, but the thoughtlessness of a

Austral winter of June to October, the environ of surrounding heavy pack ice increases in area to more than seven million square miles. If these were to melt with the current trend of increasing global temperature, seven million cubic square miles of water would be released, resulting in the ocean rising between 45 to 60m! This catastrophic event would not only flood numerous coastal cities, but the entire world's weather would be thrown into irreversible mayhem.

#### **Shooting in Antarctica**

My personal objective for participating in a photography and dive expedition was to capture a sample of an above and below portfolio of the Antarctica Peninsula. I soon realized that I was too ambitious. For the shoot, I had to carry a 30kg backpack of cameras, a pole cam for each landing, and I had to fight with an expedition leader who had a mission in life to make sure I failed.

Shooting in Antarctica is a challenge for the photographer and equipment to survive the elements; sub-zero temperatures, melting ice, powdery snow and volcanic ash don't really go very well with cameras. To pursue better quality time with the animals and a space to work without the tourists, arrangements were made for me to go off on my own during shore excursions. On every occasion, the expedition leader-from-hell would disrupt the plan, and in one instance, he had me scamper in icy conditions suited up in a dry suit, lugging a polecam, underwater housing, 30kg



## Antarctica

dense expedition leader. Nevertheless I persevered, grasping on every window of opportunity to encapsulate the splendor of Antarctica's magnificent wilderness. With an intensity unfelt since puberty, I fought to retain the

infinite impressions that flooded the senses.

Towering mountains rose abruptly out of the sea, shrouded with steep glaciers plundering down to deep freezing waters. Superlatives necessitate a new meaning. Sunsets expand the consciousness with colors that I have never seen before, bizarre and vivid, tinted in delicate shades of rose, orange, lavender and gold that never seemed to end.

Icebergs came in a myriad of sizes from the colossal to the petite in fanciful shapes and impossible hues of aqua, palest blue to mint green

PROFILES PORTFOLIO CLASSIFIED





Adelie penguin (Pygoscelis adeliae) peeks into the camera; Common seal raises his head; Colony of Emperor Penguins

floated on mirrored waters like roughcut diamonds sculptured by artisans from heaven. Antarctica fulfills the childhood dream of adventure, exploration, and fantasy with its ethereal landscape. It shimmers with a savage beauty, unique wildlife and raw power exceeding any expectations. The term, *immense*, took on a new-found significance, as I obstinately attempted to freeze the moment onto film. I could only try.

#### Abundant life

One morning at Charlotte Bay, while the divers got their first taste of diving in sub-zero water temperature, I managed to find a quiet locale to work on an over and under picture of an ice flow. Nearby, there were two Weddell seals, and a few Gentoo penguins ambled by, going somewhere, going nowhere. In the

distance my lens, fell upon a leopard seal sun-basking on an ice flow right in the vicinity of the divers. That would have made an awesome over-under picture.

Despite the apparent hostility of Antarctica, the coastal region, especially at the peninsula, teems with a profusion of wildlife. However, the animals are highly specialized, and whilst diversity is relatively low, overall densities of individual species are in astronomical numbers; there are tens of millions of penquins alone.

In this most fundamental of environments, this sheer number of wildlife flourishes each spring and into the late summer as the Antarctic Peninsula "reawakens" from its cold dark slumber. As my trip began at the end of November, this was the time for the penguins, seals and birds to start to convene to court and

breed for the next generation.

This proliferation of nature was astonishing to watch as it took place in the frozen, unforgiving landscape, which harbors it. Yes, I did capture auite a few frames of mating Gentoo -my first of penguins doing naughty things. Along with the Adélies and Chinstraps, Gentoos belong to the genus Pygoscelis, meaning "brushtailed" and so-called because of their long paint-brush shaped tails. But really there are only two kinds of penguins in the Antarctica—the white ones walking towards you and the black ones walking away from you. Penguins are mostly whitebreasted with a black back!

Though I remember my fingers were numb beyond comprehension submerged for those over and under shots, I was too immersed in enthusiasm to feel the pain and the







cold. But as I am writing this back home over a cold Australian winter, how I wish I was born a penguin.

Those tuxedoed birds are a resourceful bunch when it comes to dealing with cold weather; they are able to make their own heat and carry it with them wherever they go. Like seals and sea lions, penguins are also endowed with a natural layer of blubber developed from a diet of krill, squids and planktonic oils. This thick layer of blubber is an excellent insulator and also serves as fuel for the long, cold breeding season. This is nature's evolutionary design in natural heating technology.

We all know that air is the best insulator; any one spending time on the ski field will recognize the significance of wearing many layers of clothing with plenty of air between them. All outdoor cold weather-wear is borne of this concept.

Now the penguin's equivalent of a PATAGONIA polar suit are their tightly overlapping, ruffle-resisting feathers, which trap a layer of warm air against its skin. Each feather is also fluff down at its shaft, and the down layer provides added insulation. The feathers are also shiny, long, curved and overlapped liked carefully laid roof tiles. So to speak, penguins are ingeniously air and water tight.

#### Exploration

Six days into the voyage, we sailed into Galindez Island to visit Vernadsky<sup>1</sup>, the Ukraine Antarctic Center (UAC). Originally, it was the British Antarctic Survey (BAS) Faraday station first built during the British Graham Land Expedition (1934-37). Vernadsky to date is the oldest operational station in the Antarctic Peninsula area, and it is here where the hole in the ozone layer was first discovered.

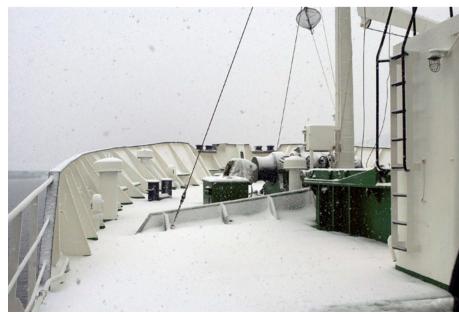
I met with the resident marine biologist, Andrei Utevsky, who regularly dives beneath the ice in a 7mm wet suit and is still using some 1950's camera system for his research. Now that is tough, putting those of us in our place who dive in drysuits in 20°C water. His passion is overwhelming, especially to be working 24/7 in one the loneliest outermost posts at the bottom of the



THIS PAGE: Scenes from colony life of the Emporer penguins (Aptenodytes forsteri)

### PROFILES PORTFOLIO CLASSIFIED





LEFT TO RIGHT: Snow on the deck of the ship; The rugged ice and awesome scenery of Antarctica; What in the world are they thinking?

world. The station is snowed in for about eight months of the year and only receives 250 days of snowfall and barely 800 hours of sunshinei.e. about 70 days in a year! I am sure he is glad that it's only a 13-month posting.

Human beings are relative newcomers to Antarctica. The search for the continent was the last great achievement of global exploration—an epic tale spanning centuries of high adventure, from the "unknown southern land" of the ancients to the first recorded

sightings in 1820. Of course, Antarctica was finally explored, and plundered, during the Age of Discovery by senseless men through the ages, and it did not take long for our species to take advantage of trusting, defenseless wildlife and ruthlessly plunder the continent's biological richness to the point that the whales and fur seals were commercially extinct. Whaling activities continued into the mid-1980's.

Through the enthusiasm of the great explorers, Robert Scott, Ernest

Shackleton, Douglas Mawson and Ronald Amundsen—who ventured deep into the vast whiteness of the interior in search of the final "holy grail" of discovery, the South Pole-Antarctica did much to generate interest in the frozen continent. The lessons of the 18-month-long International Geophysical Year (1957-1959) shed indepth knowledge on Antarctica, which steered an era of scientific and conservation movements.

The continent's history reached a pinnacle with the signing of the



Antarctic Treaty<sup>2</sup>, protecting the last continent for centuries and future generations. The 1961 treaty is abided by 12 nations: Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the Soviet Union, the United Kingdom and the United States. It recognizes that in the interest of all humankind that Antarctica should continue forever to be used exclusively for peaceful purposes and should not become the object of international discord. Well, that was done with good intent.



Family of Chinstrap Penguin (*Pygoscelis antarcticus*)

Adelie penguin feeds youngster; Spreading their wings at the bottom of the world (below) NEXT PAGE: Chinstrap penguins climb up huge hill to reach their nesting sites

#### **Deception Island**

On the eighth day, we reached Deception Island to land at Bailey Head. Here lies one of Antarctica's biggest Chinstrap penguin rookeries; there are more than 200,000 mating pairs—a magnitude beyond words, beyond imagination. Whatever compels the little penguins to establish nesting sites, some up to 2km up hills, is beyond human comprehension. Especially since it is life's greatest inconvenience, as every so often, it is necessary for them to totter down a 'pink' highway to the sea, porpoise madly for food, returning with a hop, splash on the beach, shake, shake and step, step... and waddle back up the beaten track to their nest.

The penguin highway, as I see it, is the most amazing wildlife phenomenon I've ever seen. As I watched, I stood humbled by the power of nature's resourcefulness. The hundreds and thousands of

Unlike expeditions undertaken by the early explorers, the advent of modern day air travel and special interest agents have made organizing a voyage to Antarctica a relatively easy feat, albeit an expensive one. Compared to some of my diving expeditions, which take sometimes up to a year to organize, an Antarctica voyage is like a walk in the park. All it takes is booking an airline ticket to Ushuaia and a reservation with one of the expedition companies such as Aurora Expeditions aboard the *Polar Pioneer*.

Literally, it is really that simple, and you do not need to have the fitness of an Olympian either; a 12-year-old can do it, as well as a 75-year-old. The average age on board on one of these tourist boats is 50. As such, for the last two summers, approximately 14,000 tourists were carried to Antarctica by 14 IAATO<sup>3</sup> member companies. And if you are one of those who just wants to brag about having been there, there is always the easy, economical couch-potato option of booking a 12-hour turn-around flight from Sydney, Australia, to see Antarctica in the comfort of a Boeing 747.



## Antarctica





1

1

: . :

1,6

111

54 4

1.

•

1





CLOCKWISE FROM LEFT: Ominous cliffs of an iceberg; Reclining fur seal; Antarctic lanscape; Emporer penguins wary of hunting sea lions cautiously enter the water







penguins making the trek from their nests in the hills down to the sea to feed required the agility and strength equivalent to a triathlon competitor. From my

observation point up on the hill, I spotted some birds approaching the shore. I picked out one and watched the swell dump it up onto the beach. It stood erect and step, step, step and halt. Shake. It joined the endless flow of penguin traffic highway, uphill on the left, downhill on the right. I timed the

journey; it took the bird 70 minutes to reach his colony. The hike up that mountain was quite a trek even for the

average person. How a bird the height of my calf and with legs the size of my toe can do it is sheer bewilderment.

As if we need to be reminded

of the errors of the past, after Bailey Head, the Polar Pioneer sailed around the corner, negotiated the narrow Neptune's Bellows passage and landed on Whalers Bay, an old whaling station located in the inner caldera of Deception Island—a bleak landscape of decaying buildings, fuel tanks and boats that once supported the outpost of human brutality. The place is a very clear paradigm of human exploitation of the land and the sea; thousands of whales were slaughtered at Whalers Bay during the station's operation. I felt ashamed of the human race.

#### Afterthoughts

I perceive Antarctica in a different light after the voyage. Rather than a destination to conquer, or to prove that one has earned his manhood by reaching the South Pole, or to ski cross-continent, Antarctica should be protected and be

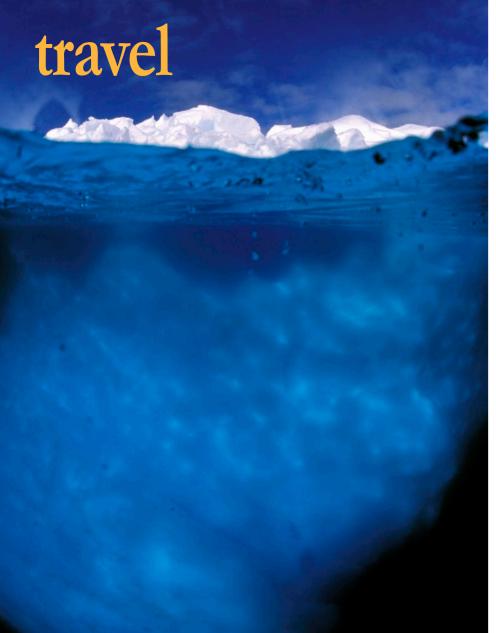


## **Antarctica**

inscribed into the UNESCO World Heritage list. All competitive feats should be banned. Humans do not have a good track record when it comes to treatment of the ocean; our very existence is very dependent on the world's most isolated continent the engine room for much of the world's weather. The future of this sensitive region depends on our diligence to protect and manage the wildlife and preventing pollution and contamination of the land, sea, air and ice.

Nature tourism should be carefully reviewed, restricting vessel capacity to 50 or less. Mass tourism of 500 on a cruise ship is making a joke out of our planet's final pristine frontier. Perhaps some rich American should replicate Antarctica right on the Las Vegas Strip, along side the mockeries of the Eiffel Tower and the Pyramids—which

BOOKS SCIENCE & ECOLOGY EDUCATION PROFILES PORTFOLIO CLASSIFIED



seems to satisfy the simple-minded. The preservation of this magical part of our planet is dependent on its remoteness, far away from human encroachment and exploitation. It is an international treasure, a biosphere that we must preserve for future generations. Will I be back? Absolutely, it is a spiritual experience, a place to see before one dies!

NOTES: 'Vernadsky is the first Ukrainian Antarctic station. It is operated in the field of Upper Atmosphere and Climate Science. Data is collected and analyzed in several scientific disciplines: ionospheres, magnetospheres, geomagnetism, meteorology, glaciology and ozone research. Several of these data sets are the longest continuous runs in Antarctica. According to the Memorandum of Understanding between the UAC and the BAS, Ukrainian scientists will continue and supply BAS and buy all science results of the long-term measurements of total ozone layers, magnetic, meteor and ionosonde data.

Michael AW is an internationally published author and photographer. He is a Fellow of the Explorer Club in New York and a Fellow of the International League of Conservation Photographers. He is also Ambassador for Seacam. For more information, visit: www. MichaelAW.com



Chinstrap penguins (below) battle the the surf on their way feed on fish, squid and krill up to 50 miles off shore. RIGHT: Map of Antarctica



Views of icebergs from under and over the water's surface



X-RAY MAG: 37: 2010 EDITORIAL FEATURES TRAVEL NEWS EQUIPMENT BOOKS SCIENCE & ECOLOGY EDUCATION PROFILES PORTFOLIO CLASSIFIED

## Antarctica

