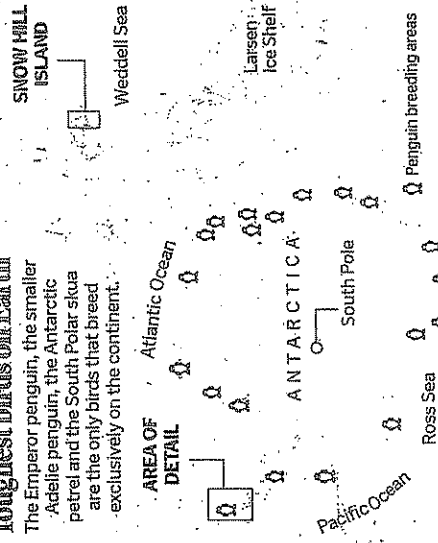


John Ballem for the Calgary Herald  
 Emperor penguins on Snow Hill Island in the Antarctic in mid-October. The colony wasn't discovered until 2004.

**Toughest birds on Earth**

The Emperor penguin, the smaller Adelie penguin, the Antarctic petrel and the South Polar skua are the only birds that breed exclusively on the continent.



Calgary Herald Archive, Associated Press

Calgary mystery writer travels 16,000 km to see the enigmatic Emperor penguins of Antarctica

# Schmoozing with EMPERORS

JOHN BALLEM  
 FOR THE CALGARY HERALD  
 SNOW HILL ISLAND, ANTARCTICA

From an upper deck of the ice-breaker I looked down at the four figures standing on the sea ice.

In the austral twilight they looked like little old men in formal attire, deep in conversation. It was my first glimpse of the enigmatic creature I had travelled 16,000 kilometres to see.

With that same air of unconcerned curiosity their species always seems to display toward human activity, the Emperor penguins were taking note of the long black hull and towering superstructure of the ship that had suddenly appeared in their midst.

Emperors are always curious about us humans and our activities, but never before had they had so much to be curious

about. While it had been suspected for a number of years that a breeding colony existed in the Weddell Sea, it was not until November 2004 that the colony on Snow Hill Island was discovered during a voyage by the

Russian ice-breaker Kapitan Khlebnikov, the same ship on whose deck I now stood.

**ALSO SEE**

Ushuaia, the world's southernmost city

In mid-October 2006, we made the first return visit to the colony. It was early in the season and there was considerable uncertainty about the ice conditions we would face as we got underway from the port of Ushuaia, which enjoys the distinction of being the southernmost city in the world — fin del mundo.

The names in this part of the world are fascinating and drenched in history.

Ushuaia is in the Argentinean province of Tierra del Fuego — Land of Fire — so named by Magellan as he sailed through what is now called the Strait of Magellan and saw the cooking fires of the natives on the shore. We were heading down the Beagle Channel — named for the vessel that transported Darwin on his momentous voyage — to the Drake Passage.

There was no uncertainty about what we would encounter in the Drake Passage. Consistent to a fault, it lived up to its reputation for tumultuous seas. It was a case of "one hand for yourself and one hand for the ship" as the Kapitan Khlebnikov rolled and pitched.

This accounted for the novel sight of servers dribbling water on the tablecloths as they set the tables. The idea was to keep the cutlery and dishes from sliding off.

SEE EMPERORS, PAGE F2

*Blase turn over*

## FROM FI

## EMPERORS: Adaptable penguins live in a frozen fantasyland of icebergs

Seasickness bags were thoughtfully placed on every deck. Clinging to the handrails on the bridge, the passengers — those who weren't laid low with seasickness — were treated to a visual symphony of seabirds. Elegant albatrosses, petrels and shearwaters soared and swooped around.

The first iceberg appeared as we left the bow. Then it was through the Antarctic Passage and entered the quieter waters of Bransfield Strait. Fur seals reclined on ice floes and minke whales shot through the water like the torpedoes they so much resemble.

Then it was through the Antarctic Sound into the Erebus and Terror Gulf in the Weddell Sea. Erebus and Terror resonate with polar history both Antarctic and Arctic. Two ships, with strengthened hulls and watertight compartments, bearing those names had been used by Sir James Clark Ross in a Royal Navy Antarctic expedition.

Subsequently, equipped with new alloy engines and retractable screw propellers, they carried Sir John Franklin on his ill-fated search for the Northwest Passage. Franklin knew of the two ships from his controversial term as governor of Van Diemen's Land (now Tasmania).

The scene opening before us was a frozen fantasyland. Tabular icebergs, mile-long tops as flat and level as airport runways, were frozen in place, waiting for the ice to melt and set them free. Twisted spheres, arches and hand ice palaces, formed as the ice melted and refroze each year, dotted the magical seascape.

The ice gods smiled on us. Kapitän Khibnikow easily pushed its way through the loose pack ice and parked at the edge of fast ice off Snow Hill Island, being observed by the aforementioned four penguins.

Having satisfied their curiosity, they uttered their strange, wild call and began to move off. After much thought, I finally decided "braying" came closest to describing that sound, like no other in nature.

To answer the most frequently asked question, the average male Emperor is just over one metre tall and weighs 38 kilograms. The female is slightly smaller.

After waddling for a few steps, the Emperors flopped down on their rounded bellies and began to toboggan, their preferred mode of locomotion on land. Tomorrow we would visit them at their rookery.

All 17 species of penguins are the product of evolving to accommodate changing conditions in their environments. That change was radical. When

cute and toy-like in grey down, their little black eyes peering out from white cheeks — were already two and three months old.

The older ones had begun to gather in creches, returning to the parent birds to be fed. In mid-December, the adults would abandon the chicks and go back to the sea. The chicks would make their way to the edge of the ice and remain there for a month, fasting and feeding their adult plumage before diving into their new world, and in some cases, the waiting jaws of leopard seals.

In another example of how the Emperors take advantage of their polar environment, when it's time for the chicks to make their pilgrimages to the sea the ice will have retreated, leaving only a few miles for them to traverse.

Ignoring the clamour, I mentally reviewed the average, eventful, year in the life of an adult Emperor, poignantly portrayed in the documentary film, *March of the Penguins*.

End of March, leave the sea and join other members of the colony to proceed nearly 100 kilometres or more over the ice to the traditional site of the rookery.

Mid-April, find a mate and breed. Mid-May, female lays one egg, which is immediately transferred to the male for incubation.

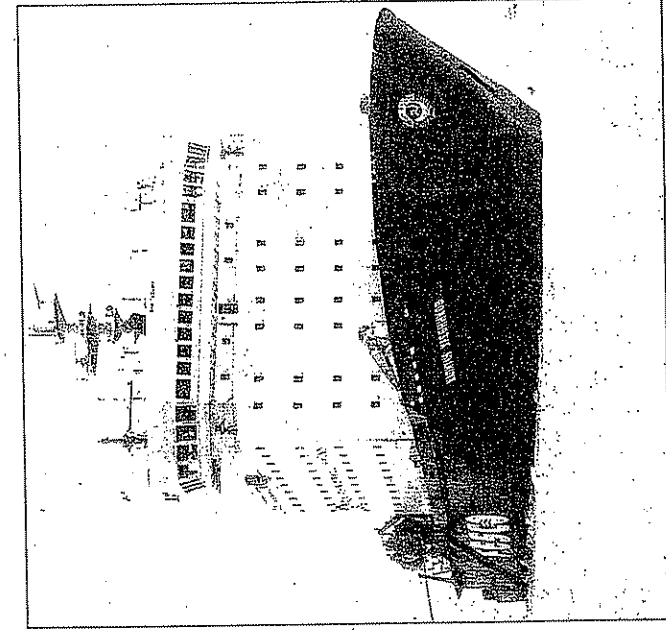
During the lengthy incubation period, the egg, insulated from the cold in a pouch, rests on the male's feet. The female heads back to the sea. The male fasts for 17 days until she returns.

Mid-July, egg hatches and male gives the chick its first meal, a gloopy mixture specially saved in the male's throat sac for that purpose. Female returns, belly stuffed with food. Male leaves to feed and bring back food.

Early September, chicks begin to form creches. Mid-December, adults abandon chicks. Mid-January, chicks fledge, adults moult. February to end of March, free time for adults.

On another tugging trek to the rookery we came across a Weddell seal lying on the ice with her pup, the bloody scar of the umbilical cord still visible on the pup's belly. The enormous bulk of the mother seal was another example of polar survival, where prolonged fasts can be part of the life cycle.

In the high Arctic, polar bears eat only the blubber of their seal kills to prepare for the long winter, which the female will spend in a snow cave giving birth and nursing her cub, not to emerge until April. But the Weddell seal's adaptation to its environment is



John Ballerl for the Calgary Herald  
The Russian icebreaker Kapitän Khibnikow in the Weddell Sea area of Antarctica.

we marvelled at the colour of the icebergs, compressed over thousands of years into an iridescent aquamarine on both sides and tops.

On the ground, our route to the rookery was marked by flags placed by the staff. We walked over untrodden crusted snow. All too often the crust would give way and we would sink.

More than once, as I lifted a leg out of knee-deep snow, I found myself envying the Emperors smoothly tobogganing past.

At this advanced stage of the breeding season there was a constant traffic of adult birds going back and forth to the sea to feed themselves and their chicks. We were careful to follow instructions and stay a respectful distance away from the birds, but the rules didn't apply to them. Time after time, one or more would waddle over to within a few feet of where we stood and peep up at this strange new species.

The wild braying grew even louder as we drew near to the sprawling rookery. In early spring, when other birds were just beginning to think about housekeeping, the chicks —

not yet perfect nor complete. It rains air holes in the ice by nibbling and chewing at the edges. This wears its teeth down to the point where the seal can no longer catch fish, effectively cutting the animal's 40-year life span in half.

We lingered overly long in the company of the Emperors. The ice gods (read "winds") turned against us, blowing from the south to fill the Gulf with 10/10 pack ice (floating ice in which the concentration is 10/10 and no water is visible). We were planned up against the lee of an iceberg.

The captain ordered all six of the ship's diesel engines to go on stream, but their 24,000 horsepower made little impression on the ice. After a day of chugging at the ice, backing up and changing again, our forward progress was precisely 33 kilometres.

I couldn't help but think of Yamal, the nuclear icebreaker that had taken me to the North Pole the previous summer. With his 75,000 horsepower and armoured steel bow, he would have sliced through this ice at 9 km/h or better. (Unlike conventional ships that take the feminine pronoun, icebreakers are always "he").

While Khibnikow strained and shuddered, we consoled ourselves with the knowledge that if the wind shift had occurred a few days earlier, we would never have made it to Snow Hill and would have been forced to turn back without seeing the penguins.

On days like this when there are no landings, the time is spent with informative lectures by onboard experts on subjects such as the life cycle of penguins, seabirds, seals and whales.

In the late afternoon of the second icebound day, we were treated to a unique and fascinating presentation, not by a professional lecturer, but by a passenger. Her grandfather had been the engineer and photographer on the 1901 Scott Discovery expedition, and she had inherited his photographs and diaries. Those remarkable black-and-white photographs and diary entries were a direct and personal link to the historic days of polar exploration. Thrilling!

Filing out of the lecture room at the end of this spellbinding talk, we found ourselves in open water. The deck began to throb under our feet as we picked up speed.

JOHN BALLERL IS A CALGARY LAWYER AND NOVELIST WHO TRAVELS EXTENSIVELY AROUND THE WORLD. HIS 12TH NOVEL, A VICTIM OF CONVENIENCE, A MURDER MYSTERY SET IN CALGARY, WAS PUBLISHED THIS FALL.