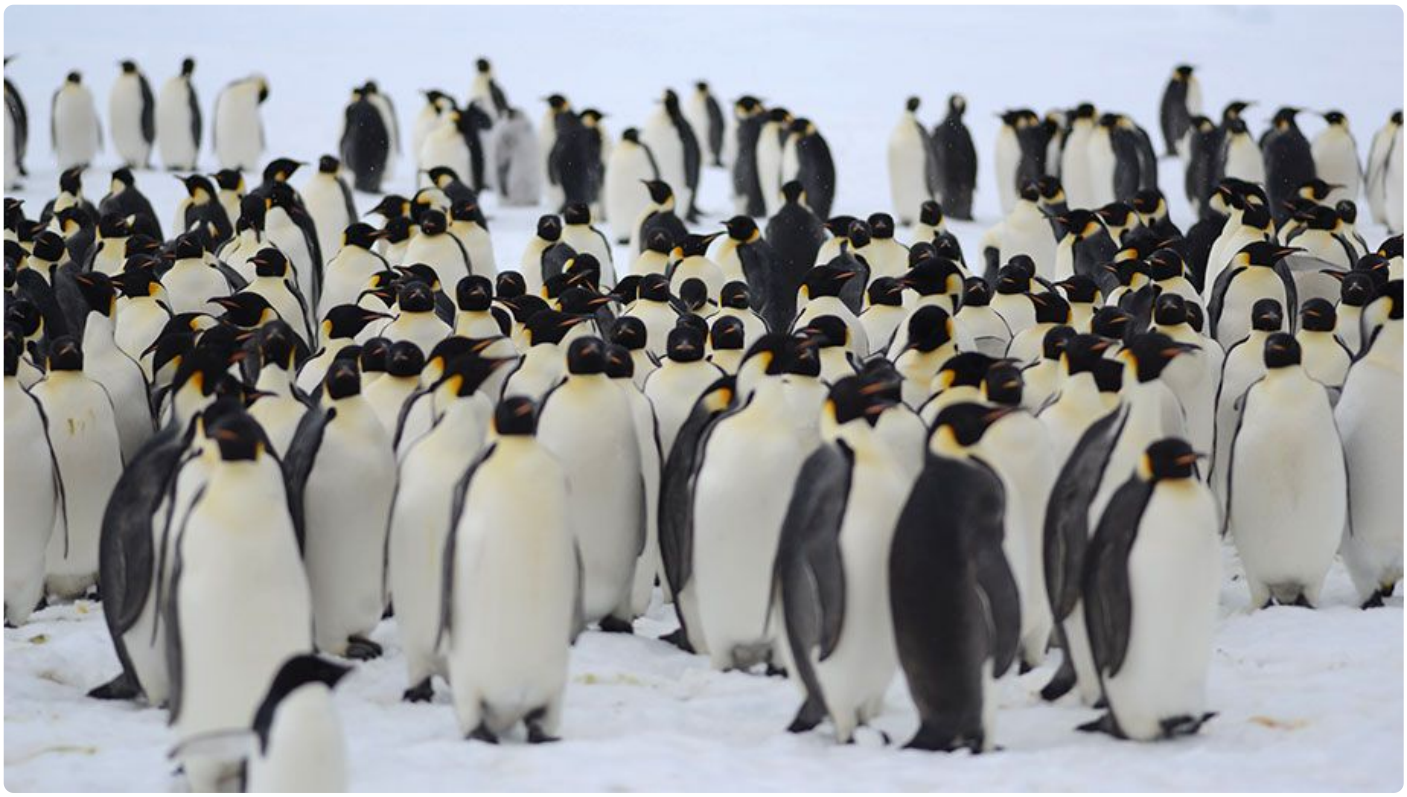
PENGUIN COLONY REVISITED



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Jos Van Hemelrijck recounts the time he spent visiting an emperor penguin colony on the coast of the King Baudoin Ice Shelf with members of the BELARE team.

One the trail of penguin poo

Two years ago, Alain Hubert and Kristof Soete made headlines as the first humans to confirm the existence of a newly discovered colony of emperor penguins.

In a 2009 study, two scientists from the British Antarctic Survey (BAS) discovered potential locations for a number of new emperor penguin colonies around the coast of Antarctica that had previously not been known to science. Using satellite imagery, Peter Fretwell and Phil Tratham spotted from space stains left by penguin poo on the ice. Where there's penguin poo, this is a strong indication that penguin colony exists.

One of the proposed new emperor penguin colonies was supposed to be in the vicinity of the King Baudoin Ice Shelf. Alain had read about Fretwell and Tratham's study, and took advantage of few free days during the 2012-13 season when he was already out on the ice shelf to see if he could confirm the location of the colony. After a bit of searching, he managed to find a thriving colony, validating Fretwell and Tratham's observations.

Alain returned last season to check on how the colony was doing, and this season he went back for a third visit. I had the opportunity to go with him this time!

Time to see the penguins!

The penguin colony is situated at the eastern end of the King Bauduoin Ice Shelf, a mere 100 kilometres from the Drill Camp where the IceCon scientists from the Université Libre de Bruxelles (ULB) were working this season.

One day when the weather was calm, Alain decided it was time to pay the emperors a new visit to see how they where doing. I was invited to go along, together with mechanic Kristof Soete and field guide Christophe Berclaz.

I was thrilled!

The skidoo drive was long and tedious. The sky was overcast. But I could care less.

At 9:00 in the evening we arrived at a waypoint marked with a red flag on a bamboo pole. It indicated the entrance to the valley where the penguins live. Unlike valleys back home, this valley was made entirely of ice. Known as a rift in scientific terminology, the valley forms due to a disturbance in the flow of the ice shelf caused by some obstacle at the bottom, such as a projecting piece of rock that splits the ice shelf right where it reaches the sea.

The lack of sunshine made it to hard to distinguish any features in the snow. It took us more than an hour to pick out a safe way down the steep slopes of the rift. We even unloaded the extra fuel cans we brought to make our skidoos lighter for the final plunge.

Then suddenly we found ourselves driving across sea ice, passing between 30 metre-high walls on our left and right formed by the broken ice shelf. In spite of the grey weather, the scenery was spectacular.

A healthy colony

After two kilometres, we saw the first sign of the penguin colony: a brownish line on the horizon in the distance. When we drew nearer, we began to see individual dots. We stopped our skidoos not far from the colony, and all of a sudden, we could hear the din.

Thousands of penguin chicks where squawking, yakking and flapping their little wings vigorously as if they wanted to fly. The air was heavy with the smell of fish.

We stood still for some time, watching in awe.

Taking special care not to come in contact with the penguins or disturb them, we ventured towards the edge of the penguin rookery - where young chicks are nursed.

The penguin chicks paid no attention to our presence. They looked cute in their brown down, which made them look like they were wearing a fur coat. They tottered about clumsily with a funny rolling gait that made me smile.

We spotted a few adults, although not as many as I had expected.

“This is a nursery,” Alain explained. “The chicks wait here until one off their parents comes back from the sea to feed them.”

“Both male and female penguin parents spend equal time caring for their offspring,” Alain continued. “Each couple has one chick per season, which makes it very easy to count them. For each chick we see, there are two adult emperor penguins in the colony.”

We witnessed an adult feeding several chicks. Was it mom our dad doing the feeding? Impossible to say. The chick begs for food by pushing its head against its parent’s chest. The parent then regurgitates the content of it’s stomach, and the chick greedily gobbles it straight from the parent’s throat.

Alain Hubert was beaming. “I can hardly believe my eyes!” he said. “The colony has definitely grown since the last time I was here.”

Alain estimated that there were as many as 2,000 chicks in one rookery. Last time Alain came, there were five rookeries of the same size. As we looked around, we counted an additional rookery, making a total of six rookeries full of noisy penguin chicks. That’s one more rookery than there was two years ago. This was wonderful news!

Alain estimated the colony had as many as 20,000 penguins, adults and chicks combined.

Patrolling predators

By the end of the season, when the sea ice breaks up, all of these young penguin chicks will have mooted, and must be ready to fend for themselves in the sea.

“Let’s go to the edge of the ice!” said Alain “You can see the adults queuing to take their turn to dive into the water and go fishing.”

The colony is spread out over a very large area and the rookeries are several kilometres away from the sea. I drove my skidoo to the sea, passing many penguins on their way to feed their chicks, and others that were on the way back to the sea to go fishing again. The penguins were sliding on their bellies, propelling themselves with their feet and steering with their wings.

At the edge of the ice, we found many adults, but they were not queuing to go fishing. They were huddled together in a tight, nervous band. It was obvious that no penguin was going for a swim today.

The reason soon became clear: alarge seal was patrolling the waters, and it wasn’t just any kind of seal: it was a leopard seal, also known as a sea leopard. This ferocious predator would have caught any penguin that dove off the ice into the water.

I noticed some small heads further out at sea. There were penguins out there that wanted to get back onshore to feed their chick. In order to do so, they would have to run the gauntlet and dodge the sea leopard. I positioned myself close to the waters’ edge, hoping to film their attempts.

I knew the sea leopard was close, but I never expected him to do what he did next.

Suddenly he threw himself up out of the water and onto the sea ice and opened his mouth, in search of a penguin to eat. I jumped back completely startled at this magnificent sea predator. The animal was huge. It must have been three metres long and weighed at least 300 kilos.

After writhing about on the sea ice for a couple of metres, and spotting no penguins to feast upon, he gave up and dove back into the water.

What an encounter! Antarctica is a wild place!