Pick up a penguin

Last year, Lewis H
the Crozet Archipe
Here are some ext
Indian Ocean tsun

10 November 2004

I glimpse the king penguin colony, la Grande Manchotière, in 'Baie du Marin' for the first time. I am here to study the penguins' physiology and behaviour. Research buildings of various size, style, age and colour litter the beach. It's functional, even industrial. But later I begin to see this as only a small human intrusion onto the island, allowing the handful of scientists to painstakingly investigate the enigmas of this remote wildlife, with minimal disturbance.

24 November 2004

Amongst my research tools are a water channel, gas analysers and computer programs that together let me investigate the energetic costs of swimming in king penguins. King penguins can dive to over 400m and swim surprisingly fast. Most impressive is their cornering ability – useful for chasing down fish in the open ocean. First, I need to clean the channel since it hasn't been used for a year. I get inside myself. I suppose this is only fair, but before I get it dirt-free for my penguins it smells really bad!

28 November 2004

Long before starting my research, I take 14 king penguins from the beach and start training them in the channel. Some take to it better than others. The eight best divers move to a pen where I visit them regularly – Ken and Roy are two of my favourites! The rest are released.

25 December 2004

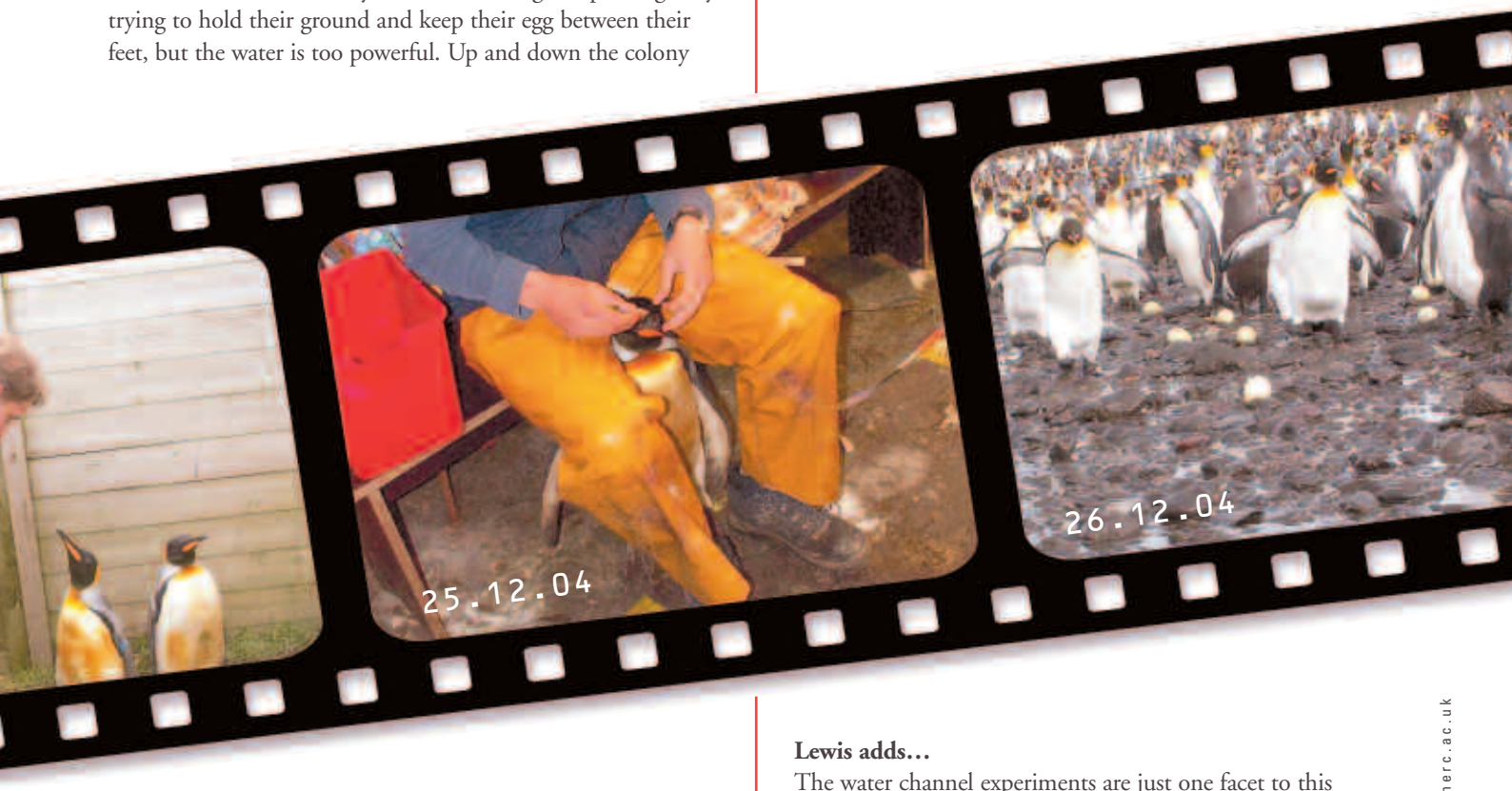
Penguins forage at sea, so although they don't usually eat while ashore, I feed them to make the swimming trials more realistic. King penguins can eat more than seems feasible – they weigh about 10 kg when they go fishing, yet can eat over a kilo of fish at a time. Roy is quick to learn, making the job easy. He gulps the food down and stands to attention, looking expectantly for more. After 1014g of chopped fish, Roy restfully digests the food for 24 hours before the water channel test. I go back to the base for the Christmas party!

alsey spent a couple of months researching king penguins on Possession Island in elago, Southern Indian Ocean. We asked him to tell us what fieldwork is really like. tracts from his diary and photo album, including the 26th December, when the ami reached this remote island.

26 December 2004

I'm about to start my experiment with Roy in the water channel when I notice a strange spectacle. The water in the mouth of the river flowing through the beach rises rapidly and, almost in slow motion, backs up along the river banks. This is the brooding season for king penguins and there are literally thousands sitting on eggs either side of the river. It is clear the water will flood the colony, and that I can do nothing. The sun shines, the air is still, and the penguins remain serene as the silent grey-blue mass of water rolls in. Then, inevitably, the water bursts over the flimsy river banks. Penguins panic, grimly trying to hold their ground and keep their egg between their feet, but the water is too powerful. Up and down the colony many abandoned eggs roll in pools of water or lie half buried in the now-muddy sand. Then, as if rewinding, the water retreats. Many birds are dragged into a whirlpool close to the shore, but penguins are strong swimmers and can hold their breath for many minutes. Back up on the beach, however, there is devastation and alarm. Many animals have bloodstained feathers from the rioting. Some of the scientists at the beach are crying from the shock. It is only later on that we learn of the earthquake near Indonesia and the true scale of the disaster. We'd witnessed the remnants of the tsunami.

But work goes on. When I first put Roy into the water channel he is not too keen, and splashes the electrical equipment. I know I'll have to spend a lot of time coaxing such equipment through these gruelling studies. After a while Roy gets the knack and calmly swims up and down the water channel from one box to the other and back again. I make notes while running up and down the side of the channel, trying to decide which box Roy is likely to surface into next, or which one he has just dived from. I get tired before he does.



Lewis adds…

The water channel experiments are just one facet to this project. In total, I've spent four months at Crozet. We've now gathered lots of data on how king penguins expend their energy during breeding cycles and other life stages. Once analysed, the data should help us use seabirds to spot changes in the ecology of the Southern Ocean, caused either by climate change or commercial fishing.

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