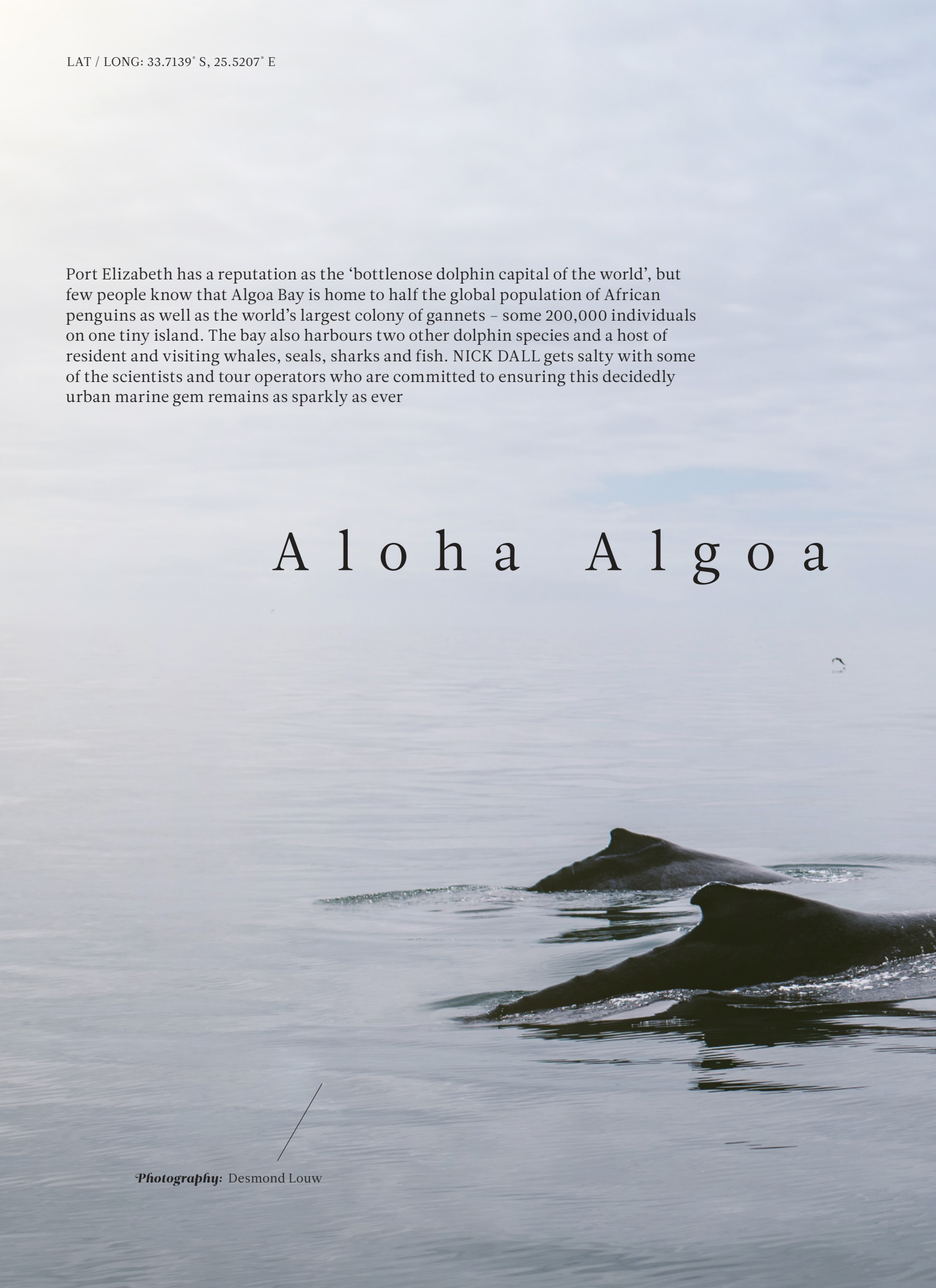


LAT / LONG: 33.7139° S, 25.5207° E

Port Elizabeth has a reputation as the ‘bottlenose dolphin capital of the world’, but few people know that Algoa Bay is home to half the global population of African penguins as well as the world’s largest colony of gannets – some 200,000 individuals on one tiny island. The bay also harbours two other dolphin species and a host of resident and visiting whales, seals, sharks and fish. NICK DALL gets salty with some of the scientists and tour operators who are committed to ensuring this decidedly urban marine gem remains as sparkly as ever

A l o h a A l g o a



Photography: Desmond Louw



WET SET

(From top) a fungus grows on the skin of a bottlenose dolphin; Captain Jamie Edwards; a humpback tail – adult whales can be up to 16 metres long and weigh about 36,000 kilos



It's 8.45 on a Wednesday morning and the sun is high above the pond-placid waters of the Indian Ocean. I'm sitting at the bow of a 35-foot catamaran with Dr Pierre Pistorius, head of the Marine Apex Predator Research Unit at Nelson Mandela University, chewing the fat as we make our way towards St Croix Island, about 20 kilometres from downtown PE and four kilometres from the massive new Ngqura deepwater port. To our right a few ramshackle fishing boats bob at anchor, their crews cleaning

decks and brewing coffee, while on the left I can see but not hear the buzz of rush-hour traffic on the N2. 'The weather gods must have known you were coming,' says Pierre with a smile. 'It's not normally this flat.'

I lean back against the cabin and try to let the serenity wash over me. Just as we reach the kind of speed that requires me to hold my hat down, the engines cut and we glide to a halt. 'Humpback whale,' says Captain Jamie Edwards, poking his head through the window, 'at about... 11 o'clock.' We jump to our feet, but by the time we've focused on the spot where Jamie is pointing, the whale has disappeared. Humpbacks can dive to depths of 200 metres and spend up to 40 minutes underwater, but fortunately we don't have to wait that long.

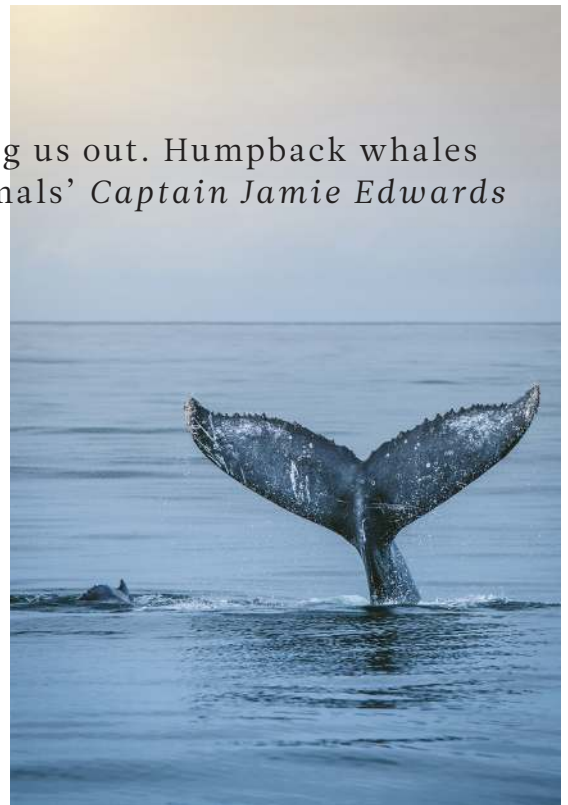
I hear it before I see it. A loud, spluttery grunt that takes me back to my days as a loosehead prop. Then, silently, a massive – much, much bigger than the southern right whales I'm used to seeing in the Western Cape – barnacled flank scythes to the surface no more than ten metres away before disappearing again. A few seconds later we hear another 'plurp' and a second, smaller whale makes an appearance a few metres to the left. 'It's a mother and calf,' explains Pierre, 'heading back to the Antarctic from their northern breeding grounds, possibly off Mozambique.'

At a few points during the next half hour or so we think the humpbacks have moved on, but each time they resurface. On this side of the boat and that. Here and there. By law, boats aren't allowed to get within 50 metres of whales, but nothing can prevent the animals from approaching boats. 'They're just checking us out,' says Jamie. 'They're very curious animals.'

Humpbacks' inquisitive nature has made them a mainstay of ☺



'They're just checking us out. Humpback whales are very curious animals' *Captain Jamie Edwards*



whale tourism all over the world, but in days gone by it very nearly contributed to their extinction, says Pierre. In the 19th and 20th centuries more than 90% of the global population was wiped out by the whaling industry (there was a whaling station in Algoa Bay in the 1800s) but since a worldwide moratorium was enforced in 1966, numbers have rebounded dramatically to at least 80,000 individuals.

Majestic though the whales are, we have to leave them eventually; we have an appointment with 7,000 breeding pairs of penguins. Jamie

starts the engines and, perfectly on cue, the mother bids us farewell, her immense, scarified tail breaking the surface with a gush that shatters the muted morning haze.

ANCIENT MARINER

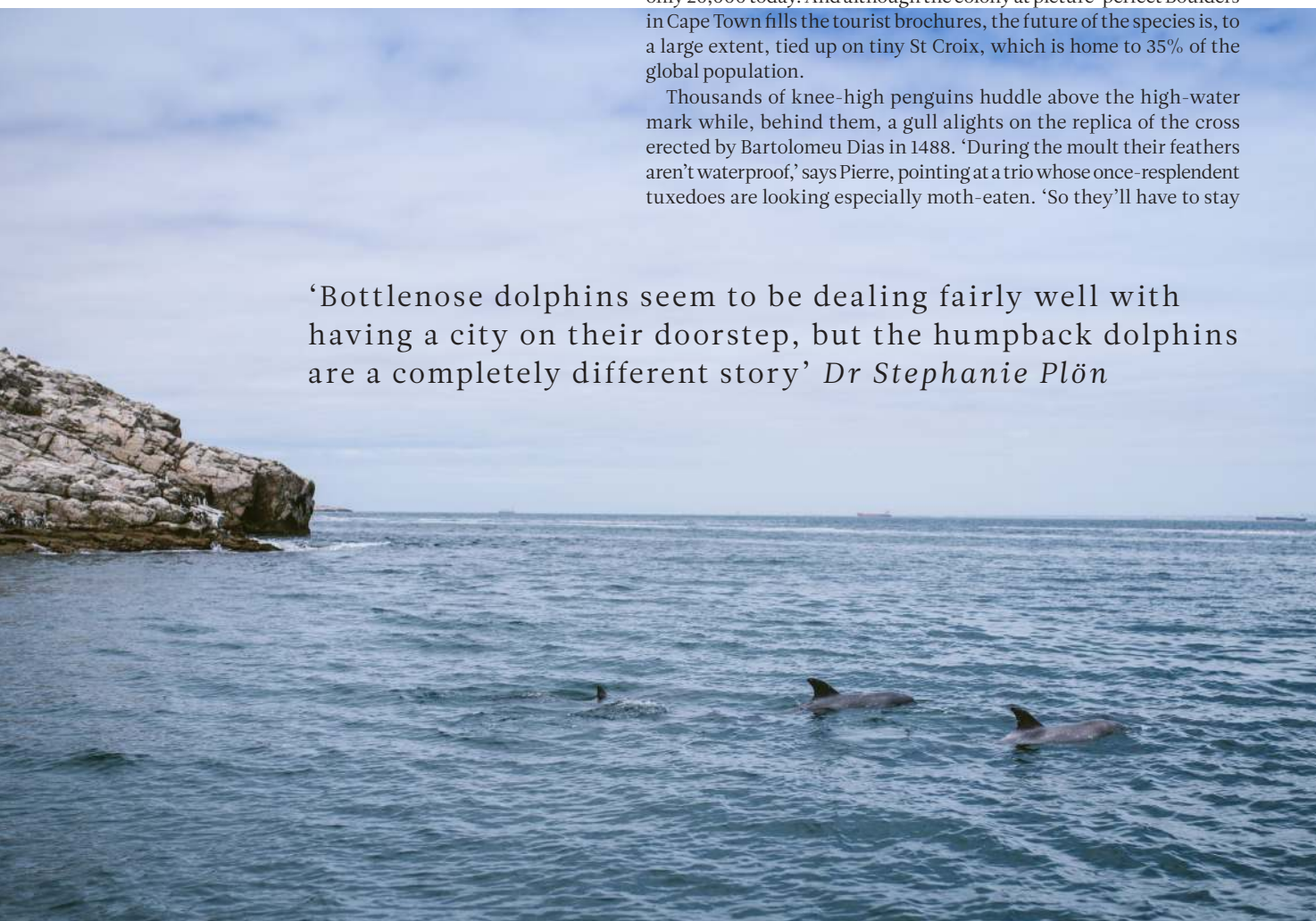
(From left) marine guides Rodrigo Martinez-Catalan from Spain and Ewa Malinowska from Poland collect refuse from the ocean; bottlenose dolphins swim near St Croix; the guano-covered island

We speed across the bay, past a grimy cargo ship and the bulging meringue that is the Nelson Mandela Bay Stadium, before stopping alongside St Croix Island. The boat rocks from side to side as waves break against the tiny jagged outcrop, at turns revealing and concealing the bright green ring of intertidal algae beneath the guano-streaked summit. To the human eye this rocky, sun-baked pinprick is a pretty inhospitable place, but birds clearly see things differently. The

brown-black Cape cormorants that crowd the western side of the island are – Pierre informs me – an important breeding colony of this endangered species. The island is also a refuge for terns, gulls and oystercatchers, not to mention two very special lizard species.

But, of course, it's the penguins that everyone gets most excited about. Since guano collectors in the 18th and 19th centuries pillaged their island habitats off the Namibian and South African coasts, the African penguin population has dropped from about 3 million pairs to only 20,000 today. And although the colony at picture-perfect Boulders in Cape Town fills the tourist brochures, the future of the species is, to a large extent, tied up on tiny St Croix, which is home to 35% of the global population.

Thousands of knee-high penguins huddle above the high-water mark while, behind them, a gull alights on the replica of the cross erected by Bartolomeu Dias in 1488. 'During the moult their feathers aren't waterproof,' says Pierre, pointing at a trio whose once-resplendent tuxedos are looking especially moth-eaten. 'So they'll have to stay



‘Bottlenose dolphins seem to be dealing fairly well with having a city on their doorstep, but the humpback dolphins are a completely different story’ *Dr Stephanie Plön*

put on this rock for about three weeks', surviving off the fat reserves amassed in the weeks leading up to the moult.

As we round the island, Ngqura Port and its floating fuel stations come into view. 'A spill would be disastrous,' Pierre says matter of factly. There haven't been any major leakages yet and the port authorities are confident in their disaster management plan. But having the world's most important population of African penguins a stone's throw from a major commercial harbour is 'not ideal, and authorities need to be constantly watchful for possible oil spills'. Part of the challenge of being an environmentalist, he points out, is finding a way for tourism, commerce and conservation to coexist.

And with that a small pod of bottlenose dolphins frolics into view. At first I am overawed by their grace, but then Pierre and Jamie point out the collapsed dorsal fin on one animal and the ring-shaped fungus on another's skin. We have what is arguably the world's biggest population of bottlenose dolphins, says Jamie, 'but they're not all as healthy as they could be'.

The morning after our cruise, we head to PE's main pier for a sunrise rendezvous with Dr Stephanie Plön, from the university's Earth Stewardship Science Research Unit – the woman who knows more about Algoa Bay's dolphins than anyone. It's not even 6.30am but already a pair of fisherman is trying their luck with the mullet which shoal just behind the breakers and a few intrepid long-distance swimmers are training for next year's Ironman. Way out to the east, a lone kayaker surges towards the horizon while on the beach a group of bathers is making the most of the always-tepid Indian Ocean water. It sure beats my normal pre-work routine.

In 2010, using data gathered in the 1990s, explains Stephanie, two scientists estimated that Algoa Bay was home to about 28,000 bottlenose ☺



OF SHIPWRECKS AND STOLEN TREASURE

Shortly after midnight on 17 July 1755, the *Doddington*, a 500-ton East Indiaman bound for Madras, struck a reef near Bird Island. Of the 270 people aboard, the vast majority perished and by the time day broke, only 23 sorry survivors had made it ashore. The coast of the tiny island was littered with flotsam: from among the dead bodies, the survivors were able to salvage some hunks of salted pork, a cask of flour, candles, gunpowder, carpenter's tools and 'several hogsheads of brandy and beer'.

Realising that they had a (heavily injured) carpenter among them, the 23 turned their attention to building a boat that could sail them back to civilisation. In the weeks and months that followed, using timber from the wreck and subsisting on gannet (the island has a colony of 200,000 birds) and penguin eggs, the men struggled to complete a 30-foot sailboat. Midway through the construction the ship's treasure chest was mysteriously plundered and although all 23 men denied involvement, not one was willing to take an oath. Putting the small matter of gold coins aside, they continued building their vessel until, eventually, on 16 February 1766, writes Third Mate William Webb, they 'got her into the water... at 10 o'clock and named her the *Happy Deliverance*'.

Battling unfavourable winds, they sailed east, stopping regularly to barter provisions from local tribesmen. Just more

than two months later – having jettisoned nine men who chose to walk instead – the *Happy Deliverance* finally reached Delagoa Bay (modern-day Maputo), where they happened upon the *Snow*, a British galley involved in the ivory trade. On 25 May, having been rejoined by six of the nine landlubbers (the others died), they sailed in convoy with the *Snow* to Madagascar, from where they were able to bum a lift to Madras.

Their journey was over but the mystery of the *Doddington*'s treasure was only just beginning. Not long after the episode, Gerrit Cornelius van

Bengel, an 'eccentric Dutch East India Company corporal' journeyed to Bird Island where he uncovered a

dozen iron chests which he was unable to open. On the very night of their discovery, he claimed, they were stolen from him by cutlass-wielding seamen.

He ended up losing his mind and dying in an asylum in Holland.

Two hundred years later, in 1977, two Port Elizabeth divers uncovered artefacts from the wreck, but the treasure evaded them too. Or did it? Nearly two decades later the treasure came up for auction in London. The sellers? Two anonymous divers who had apparently salvaged it from international waters, not Bird Island. A legal dispute followed, but once 300 of the 1,200 gold coins had been returned to the South African government as 'tax', the remainder was auctioned in 2000.



WATER BALLET

They may be ungainly on land, but in water African penguins can reach speeds of up to 20km/h, cruise at four to seven kilometres an hour and dive down to 130 metres







dolphins. This led Lloyd Edwards, owner of Raggy Charters and Jamie's dad, to describe PE as the Bottlenose Dolphin Capital of the World. Being a scientist, Stephanie isn't prepared to stick her neck out quite so far, but she does admit to being curious about why Algoa Bay has such massive groups – pods of 500 dolphins are common and they can get as big as 800.

In fact, she's hellbent on finding answers to this and many other questions. 'Algoa Bay was pristine until around 2000,' she explains, but since then the city itself has expanded, shipping traffic in the bay has more than trebled, and boat-based wildlife tourism has grown out of nowhere. 'People often tell me that it used to be different in the old days,' she laughs. 'That's great, but as a scientist I need data to prove it.'

Between 2008 and 2011, Stephanie carried out a survey to establish

'People often tell me that it used to be different in the old days. That's great, but as a scientist I need data to prove it' Dr Stephanie Plön

the distribution in space and time of the dolphins and whales in the bay. She's still crunching the numbers to get an up-to-date estimate of the bottlenose population (identifying individuals through the unique markings on their dorsal fins gives new meaning to the word 'painstaking') but she has shown that Algoa Bay's whales have made a stunning comeback.

Now that Stephanie has established the baseline data, she and her students are investigating the anthropogenic impacts on whales and dolphins to use these animals as indicators of ocean health. One study is looking at the effect of shipping noise on cow-calf whale pairs, while another is extrapolating the bottlenose dolphin data from the 2008-2011 survey. 'Bottlenose dolphins seem to be dealing fairly well with having a city on their doorstep,' she says, 'but the humpback dolphins are a completely different story.'

Before we go, I have one last question. What about the dolphin we saw with a deformed dorsal fin? 'We don't really know what causes it,' says Stephanie. 'They used to think it only happened to animals in captivity – especially orcas – who were confined to small pools. But we've been seeing more and more examples in the wild.' Does it affect how they swim? 'We don't know that either... But some dolphin species don't even have dorsal fins, so maybe it doesn't really matter.'

As usual, there are more questions than answers. I sense another research paper coming on. ■

WATER SPORTS

Originally called Angra da Roca, or bay of rocks, by the first Europeans to land there, the bay was later renamed Bahia da Lagoa, or bay of the lagoon, which became Algoa Bay



WHO'S WHO IN THE BLUE?

Dr Stephanie Plön's foolproof guide to identifying the three dolphin species that call Algoa Bay home:



1 **Indo-Pacific bottlenose dolphin** (*Tursiops truncatus*) is the species that most people refer to when they talk about dolphins. They occur in unusually large groups throughout Algoa Bay. Stephanie believes these animals form part of a larger population that ranges from the Wild Coast to the Southern Cape Coast.



2 **Indian Ocean humpback dolphins** (*Sousa plumbea*) are easily confused with bottlenose dolphins, but occur in much smaller groups of three animals on average and also have a characteristic hump with a very small dorsal fin. Because they don't stray further than 500 metres from the coast, human activity has a big impact on their wellbeing. Historically, Algoa Bay had a relatively large population but numbers have declined to fewer than 400 individuals in recent years and they're now classified as endangered.



3 **Long-beaked common dolphin** (*Delphinus capensis*) is the smallest species of the three and is easily identified by the characteristic hourglass pattern on its flanks. This species is most commonly associated with the Sardine Run, but in Algoa Bay is usually seen towards the edge of the bay in deeper water, often feeding on bait balls (tightly packed schools of fish).



British Airways flies daily to Port Elizabeth from Johannesburg, Cape Town and Durban.