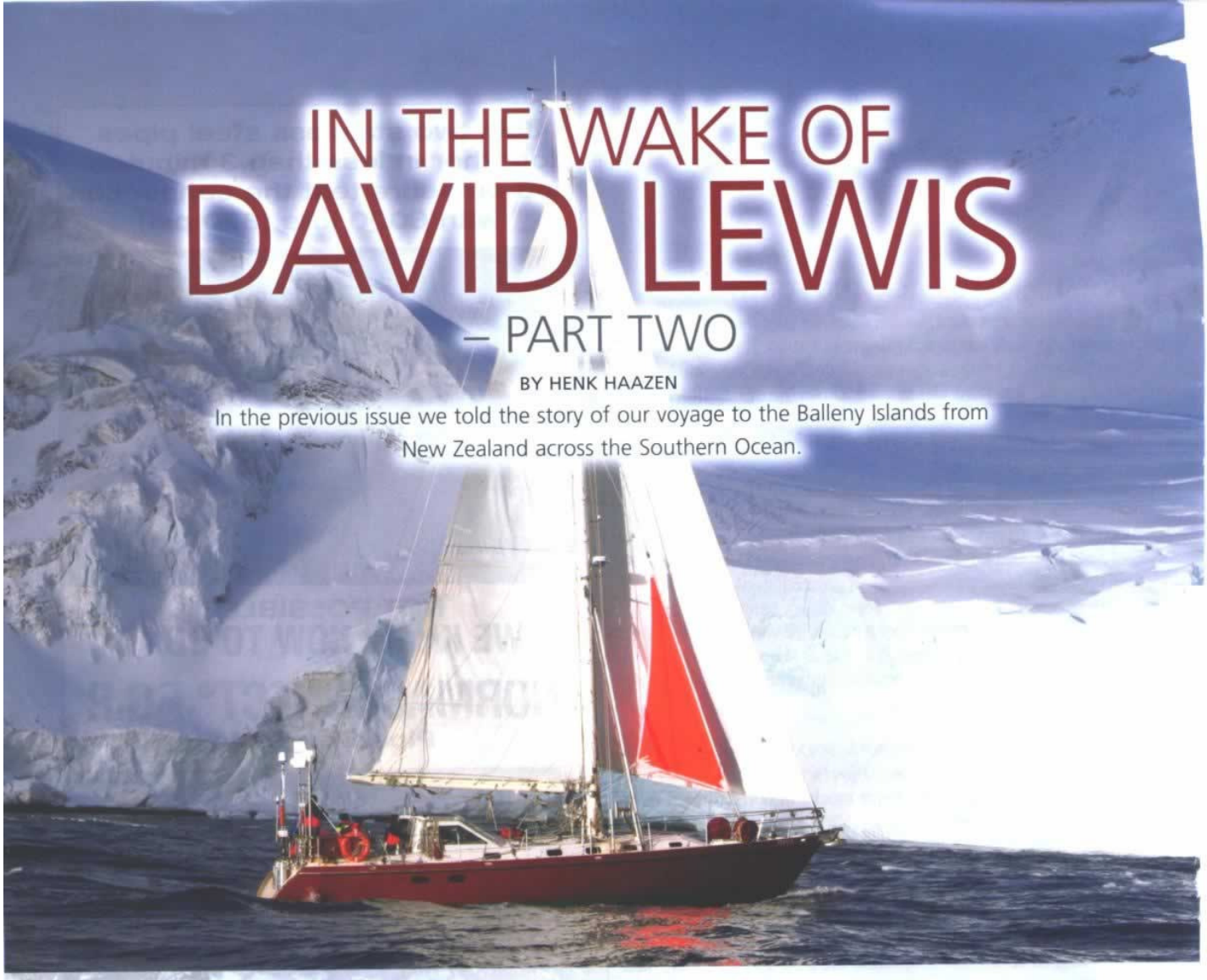
IN THE WAKE OF DAVID LEWIS – PART TWO

BY HENK HAAZEN

In the previous issue we told the story of our voyage to the Balleny Islands from New Zealand across the Southern Ocean.



We left New Zealand with a series of draft charts for the Balleny Islands from the New Zealand charting authority Land Information New Zealand, or LINZ. They were at the time in the process of producing a set of charts for the islands and had given us their latest draft version, which were really only deep-sea soundings with lots of blank spots and a vague, dotted outline of the assumed coastline. We also had some sketches drawn by the few scientists who had managed to briefly visit the islands in the past.

LINZ asked us to do some opportunistic plotting off the capes and prominent landmarks with the help of radar and GPS. This and our scientific research work made Steve comment that we were on a Captain Cook-like expedition, which was a nice but grandiose thought.

From Cape Ellsworth we sailed down the very foreboding eastern coast of Young Island, with steep cliffs and hanging glaciers all along its 29km-long coast. You would not want to be too close to land when one of those house-size hanging ice blocks breaks off and drops from the 200m-high cliffs.

We arrived at Borradaile Island in the evening, and to our great relief we found some shelter in a hook formed by a gravel peninsula on the northwestern cape where the coastal cliffs were only five to 10m high. At 1600 it was a relief to find a sand and gravel bottom at 25m. The shore party made the second recorded landing at the spit (Captain Freeman on the cutter *Sabrina* made the first in 1839), and collected DNA samples from the Adele penguins and Weddell seals that make the spit their home.

The sailors on the *Tiama* could finally relax a bit with a nice cup of tea and bikkies. We spent the next two days diving and doing an underwater survey, counting birds and setting fish traps at night. This routine kept up for the next 10 days.

I take my hat off to the three divers going into the -2° Celsius water with ice all around. Sure they had top gear, but they knew for certain that they would get cold to the bone. It took some doing, but they were at it day after day and loving it in a mad sort of way.

Every other day we got a weather forecast from four different sources, The Australian Bureau of Meteorology (BOM) would email us an area-specific forecast. The New Zealand Metrology Service would send us two weather maps, plus we had a private weather forecaster in New Zealand giving us his interpretation of the situation. I also had an old sea captain mate of mine who would check internet ice charts each day and forward any relevant information.

This was a good combination. If everybody agreed then there was a likelihood that we were looking correctly into the future, giving us a chance to pick the right side of the islands to work on. If we picked the wrong side we could be in for a hiding with nowhere to take shelter.

As the skipper, one of my big concerns for the expedition was the total lack of anchorages at the Balleny Islands. It would

ABOVE: The skipper and first mate on a scouting trip

BELOW: Penguins nest on the high points

be hard work going ashore during the day or doing diving operations and then standing off at sea during the night, keeping full watches to avoid the icebergs and areas of pack ice around the coast.

The fact that we managed to find shelter where previously nobody had found any was because of the different view through the eyes of a small-boat skipper compared with the view from the bridge of a big ship. We can turn around on a penny, as we have a lifting keel that can reduce our draft from 3m to 1.2m in a few minutes, and we can find shelter in shallow waters behind cliffs, sandspits and islands.

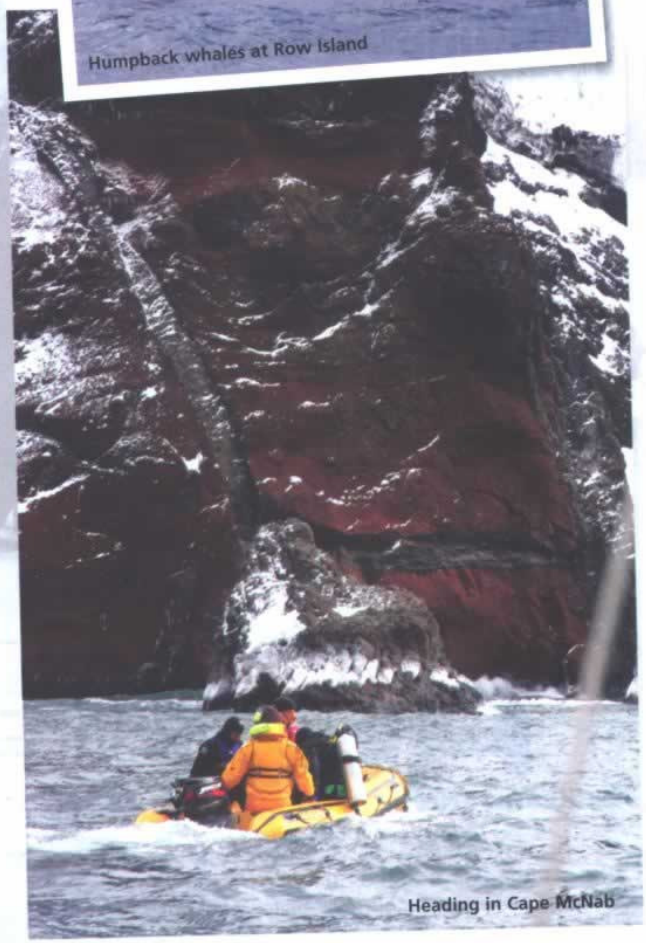
So we were at anchor every night. Most of the better places were close to the partly ice-free capes of the bigger islands or on the sides of the smaller islands that had more gently sloping hills and lower cliffs. Here we could get close in and find bottom without the threat of a house-sized lump of ice landing on the deck.

Unfortunately none of the anchorages that we found allowed the luxury of the whole crew sitting down below over a glass of wine. We always had to have one person on worry duty topsides.

The Northeastern Cape of Buckle Island was by far the worst place that we used. Anchoring in 80m of water with 120m of chain out is not really anchoring. It is more like having a small, precarious foothold. It was combined with an active, calving glacier 600m away that sent regular small rivers of ice our ▶

Take aim – shooting for a DNA sample

Humpback whales at Row Island



Heading in Cape McNab

way, bumping and scraping along the hull, which you can imagine meant none of us slept well that night.

We found some reasonably good anchorages at the southern end of Buckle Island and around Sabrina Island, a smaller island close by. This combination provided shelter from most wind directions, with depths of 20m to 40m and reasonably good holding. It was handy to have a scientific diving component to our voyage because we could lower the underwater drop camera and check the bottom for holding power.

We named one anchorage Tiama Point. It was a peninsula sticking out about 350m from the eastern coast of Buckle Island providing shelter from south through east and nor'easterly winds. It offered good diving opportunities and the team discovered a new colony of chinstrap penguins on the peninsula, exciting the science party no end.

After dressing up in dry suits with emergency camping gear, ice axes, crampons and the cameras in dry bags, yours truly suddenly got cold feet mentally and physically and cancelled our first attempt at landing there. We watched some of the swells break and travel 15m up on the steep boulder beach to break again against the four-metre high ice cliffs.

I was having visions of being squeezed in between a wave and some very hard ice - not pleasant. The swell subsided the next day and we managed to get ashore, the first recorded landing at that site.

Sabrina Island, dominated by the remarkable Monolith, had the biggest penguin colony. We counted over 300 pairs of chinstrap penguins among the thousands of Adelies. During the last count there were only 10 pairs of chinstraps, so this was big news in scientific circles.

At this stage we started to encounter problems with the fresh water tanks. At first I thought that somebody had been sneaking in some un-sailor like long showers. The water level in the tank

Divers leap into the icy cold waters

was low, but when we switched to a new tank the supply soon stopped again, so we had to do some head-scratching.

Freezing of the water was a logical conclusion but we could not see any ice from the small inspection holes. But the bottom of the tank had started to freeze, and rerouting the intake to the top solved the problem. I did have to apologise to the others for raising false accusations of water consumption, but an orange poppy seed cake sorted this out.

We sailed onto Sturge Island, the most southern island of the group, carrying on with the science work as we went. We spent a night in Solo Harbour and it had changed from when David Lewis was there. The gravel spit had been swept away and we could only see three of the four rock stacks that he reported 28 years ago. We suspected one had been knocked over by an iceberg. Solo Harbour was not much of a harbour at all anymore, sorry David.

We sailed round Sturge Island and went back up the western coast of Buckle Island to almost complete our circumnavigation of the entire island group, but the weather forced us to sail along the eastern coast of Young Island again, going back over old ground for the first time.

The science programme had been ambitious to start with, but the good weather and having so little ice around meant that we could work long days, and in the end we managed to do about 90 percent of the work. The scientists would collect specimens all day and then work well past midnight dissecting and preparing them for transport back home.

We had been watching the weather carefully and departed the Ballenys on February 25 due north, keeping a wary eye on every low crossing our route. In the end it all depended on what the weather gods had in mind for us. We set out in freshening 30 knot westerly winds that soon turned into a stiff 50 knot nor'westerly exactly on the nose. Most of the weather systems pass over ▶

Nick Shears photographs the penguin population at Sabrina Island

in two to three days, but there is always another big low not far behind the last one.

As we slowly worked our way north, we paid for those favourable wind directions on the southbound voyage, as we got hit with three big systems coming over us, each having northerly winds of up to 55 knots. The storm sails got a good workout, flying almost all the time as we sailed and at times motor-sailed our way up through the latitudes.

We arrived back in Bluff on March 5, after five weeks at sea, with only a few minor cases of cabin fever onboard. I'm happy to report that we did not break much gear, in fact I only spent $150 in the hardware shop to replace a few lost and broken items. This is less then what we break on our regular New Zealand sub-Antarctic trips.

Two days after we tied up, the Minister of Fisheries, Jim Anderton, held a press conference. The ministry was extremely pleased with the results of the expedition, which provided them with good data to support a proposal to the international community to establish a marine protection zone around the Balleny Islands.

In the world of Antarctic research, it is accepted that you can only do real research work with big ships. This might be true in many cases, but we were able to prove that this is not always the case. There is a place and time for small, purpose-built expedition vessels, especially those that stay in an area for an extended period with a smaller science party. On our return to New Zealand the expedition was hailed as a very successful New Zealand Antarctic marine research trip, dollar for dollar.

I want to applaud MFish for creating this opportunity. I also acknowledge all those small-boat explorers and researchers who have gone before us to this region and can appreciate much more

now both the risks and the adventures that they faced.

This was definitely the biggest expedition to date for the good ship *Tiama* and her crew, and I'm still on a high when I think about it.

Our contact at MFish asked if we wanted to do another trip. I thought that this was a great idea, but suggested that we should have a year's break in between to give the skipper a chance to catch his breath and put his feet by the fire at home.

See www.tiama.com

ACKNOWLEDGEMENT

I would like to acknowledge the assistance we received from Aurora expeditions, Heritage Expeditions, the New Zealand Ministry of Foreign Affairs and Trade, the National Institute of Water and Atmosphere, the Department of Conservation and Antarctica New Zealand.

The weather remains brisk

Working along the coast of Sabrina Island

Henk Haazen is the owner and operator of the 15.5m RV Tiama, *a steel sailing vessel designed and built for high-latitude expedition and research work. She was launched in 1997 and has travelled over 70,000 miles, much of it in the Southern Ocean.*

For the last five years the Tiama *has been working out of Bluff as a logistical support vessel for scientific and private charters to New Zealand's sub-Antarctic islands and to Antarctica. Haazen has been going to sea professionally for the last 25 years, specialising in high-latitude ventures. He is a former crewmember of the Greenpeace ship* MV Gondwana. *He built the* Tiama *himself from plans drawn by the New Zealand marine architect Alan Mummery.*

See www.tiama.com