

16 December, in the pack ice.

Dear folks,

We have had a good trip south and expect to reach the fast ice off Commonwealth Bay tomorrow morning. The trip south started with calm seas and a wonderful run down the east coast of Stewart Island. Everyone was excited to be off, some of us pleased to be at sea again after a day in port, wildlife was abundant with thousands of shearwaters and dozens of diving petrels and prions skimming past the ship. Once south of Stewart our luck held with another relatively calm day before a NW wind bought big seas for the next few days. The waves were big, up to 5m but it was a following sea so relatively comfortable, although the first time passengers would not agree.

Unfortunately this is the one wind that would have prevented us landing on Macquarie Island. We hoped for the best, but on arrival early one morning there was a 5m breaking swell in the only place the ship could anchor and a big surf breaking ashore. It was too dangerous to get people into the zodiacs and even if we had taken that risk, the surf would have prevented us landing. Macquarie Island is a place I have wanted to visit for 40 years and it was most frustrating to be less than a kilometre offshore and unable to land. This island is home to four species of penguins: king, royal (which breeds only on Macquarie), Gentoo and rockhopper. I had never seen Gentoo or royal penguins and had seen only one king penguin before. Kings and royals swam by the ship while we were at anchor so I saw plenty but would love to see them ashore. I was delighted when several of the endemic Macquarie shag flew by the ship, at least I had good views of them.

By midday we decided to continue south and try to get ashore on the return journey. Next day we crossed the Antarctic Convergence where the cold Antarctic waters meet the not quite so cold sub-Antarctic seas. The marine team began deploying a range of instruments 200km north of the front and continued for 200 km after crossing it, so for 36 hours they were busy getting measurements of various marine parameters and for those daylight hours during that period I was doing three 10 minute bird counts. I do enjoy that work but having started work at 6 am I was pleased when light faded too much to continue at 10.30pm. We think it is the first set of continuous measurements of marine parameters across this important marine boundary and almost certainly the first time these can be linked to changes in bird species and abundance.

For the last three days we have been in the pack ice. Until midnight last night we were going well and it looked as if we would be near Commonwealth Bay today. That was not to be; after all day yesterday pushing through dense pack we came to a point where we could go no further, the ice sheet was unbroken and several metres thick. Today has been frustrating, by this afternoon we were only a few kilometres west of where we had been 24 hours previously. A new satellite image showed an alternative route through the ice. This means we will land on the fast ice 67 km north of our destination rather than 50km east but close to the coast which offered greater opportunities for our research and would get the passengers within sight of the continent. Tomorrow two people will go out on the four wheel bikes to reconnoitre a route to Cape Denison. All going well I am in the first science team to go ashore at the Cape where we may be camped ashore for about 5 days. We will see what tomorrow brings.

Hugs Kerry-Jayne

PS 17 December, our arrival at the ice edge has been delayed, should get there sometime this afternoon.