Obituary

Alf Howard, (Fig. 1) died on 4 July 2010. He was the last surviving member of Sir Douglas Mawson's 1929–1931 British, Australian and New Zealand Antarctic Research Expedition (BANZARE) that made further extensive claims to sovereignty defining the limits of what was to become Australian Antarctic Territory (AAT) in 1933. He was also the last survivor to have served aboard the coal-fired three-masted wooden ship *Discovery* built in Dundee for Captain Robert Falcon Scott's 1901–1904 National Antarctic Expedition.

In June 1929, Alf, whilst working in the chemistry department of the University of Melbourne was approached by Sir David Orme Masson to join Mawson's scientific staff as BANZARE's chemist and hydrologist. Within 48 hours he took the train across to Perth, voyaged to England on the Orient Steam Navigation's *Orvieto* and after an intensive three months training in hydrology at marine institutes in Plymouth and Hull sailed on the *Armadale Castle* to Cape Town where he boarded *Discovery*.

Much of Alf's work necessitated standing precariously on the edge of a narrow steel mesh outboard platform on the port side of the ship, with only a couple of chains separating him from the cold, turbulent waters below. His oceanographic observations involved determining temperatures with Nansen-Petterson and Ekman water bottles and thermometers, and salinities estimated by the Knudsen method, using international seawater as a standard. He also made chemical determinations of pH, phosphate, silicate, and nitrite, and dissolved oxygen. In the BANZARE reports Mawson wrote as follows. 'His work was a never-ending task. He worked very long hours daily, mainly occupied with the chemical examination of the very numerous sea-water samples obtained. Except in calm weather, the rolling of the vessel rendered difficult the delicate operation involved in the chemical examination of those waters. Howard is therefore to be congratulated upon the extensive series of determinations he ultimately achieved and the unabated enthusiasm and great care with which he prosecuted the task.'

23 year old Alf, the youngest member of the pioneering team, was sailing with legends of the heroic age of Antarctic exploration. Besides Sir Douglas, there was the master of the ship John King Davis and the famous photographer Frank Hurley who developed his film in a small darkroom within Alf's chemical laboratory. Other members of the team included Commander Morton Henry Moyes and Alexander Lorimer Kennedy who had been members of Mawson's 1911–1914 Australian Antarctic Expedition (AAE) and also James William Slesser Marr (Scout Marr) who had accompanied Sir Ernest Shackleton on his final expedition on board *Quest* in 1920–1921. Alf Howard and his colleagues on board were each awarded the Polar Medal (Antarctic Clasp) in 1934.

Born in Canterbury, Victoria on 30 April 1906, his parents had him christened 'Alf' which was not an abbreviation. Alf Howard grew up in Camberwell, was educated at Melbourne's University High School, and graduated from the University of



Fig. 1. Alf Howard revisiting Mawson's hut in 1990; his first visit to Commonwealth Bay since BANZARE in early 1931.

Melbourne with a BSc in chemistry and physics in 1926 and with a MSc in chemistry in 1928.

On his return to Australia in 1931 Alf worked in his old chemistry department for a few months then joined the Commonwealth Scientific and Industrial Research Organisation (CSIRO) initially working at the Irrigation Research Laboratory in Griffith. During the war he transferred to the Division of Food Preservation and Transport to work on the preservation of meat and vegetables by dehydration. In 1949 he moved to Brisbane where he was appointed chief scientist of the CSIRO Meat Research Laboratory at Cannon Hill. His work on the complex interrelation of chemistry and psychology in interpreting flavour differences led to the award of a Doctorate degree in psychology in 1968. After forty years with the organisation he retired in 1971.

Alf was committed to education and had a long association with the University of Queensland as a student, part-time lecturer, research fellow and honorary research consultant in the schools of psychology and in particular human movement studies in which he worked as a research fellow and statistics consultant from the mid 1970s designing and assisting post graduates with complex computer programs, a skill largely self-taught, until he was 97. During these years he was awarded a BA with majors in psychology and linguistics, in 1976, a BA

(Hons) in linguistics in 1980, and in 1984 enrolled in the course Games of Ancient Greece in order to join a study tour to that country. In 1993 the University of Queensland awarded him an honorary Doctor of Science degree and in 1998 Alf Howard was appointed Member of the Order of Australia (AM).

For more than four decades he visited primary schools in Brisbane to share his Antarctic experiences with students and was always delighted to answer their questions even in his 100th year. Passionate about the arts Alf was a patron of the Australian Ballet for many years. He had season tickets for concerts and the ballet and when two events coincided he would find a *chaise longue* in the foyer and take a nap between performances in the Queensland Performing Arts Complex.

Over the years he kept in touch with members of the BANZARE expedition through correspondence and reunions until 1996 when he became the sole survivor. For many years he was patron of the Australian National Antarctic Research Expeditions (ANARE) Club in Queensland but it was not until

he was 90 that he returned to Antarctica for the first of eight visits. As a passenger on the inaugural tourist circumnavigation of the Antarctic continent on board *Kapitan Khlebnikov* (1996–1997) Alf gave a guest lecture about his days with Mawson. On a voyage to Mawson and Davis Stations the following year he 'achieved legendary status when he partied well into the night and essentially propped up the bar with a myriad of entertaining stories for all those around him'. His travels took him to such diverse destinations as the Arctic, Galapagos Islands, Easter Island and Madagascar. In 2001 he received a 'Lifetime of Adventure Award' from the Australian Geographic Society.

Alf Howard will be remembered as a humble, kind and generous man with a wry sense of humour who left a gentle footprint on the lives of all those fortunate enough to meet him. In Antarctica he was honoured by Sir Douglas Mawson on 18 February 1931 with the naming of an embayment between Cape Simpson and Byrd Head (67° 27′S, 61° 06′E): Howard Bay. *Anna Bemrose*