

Obituary

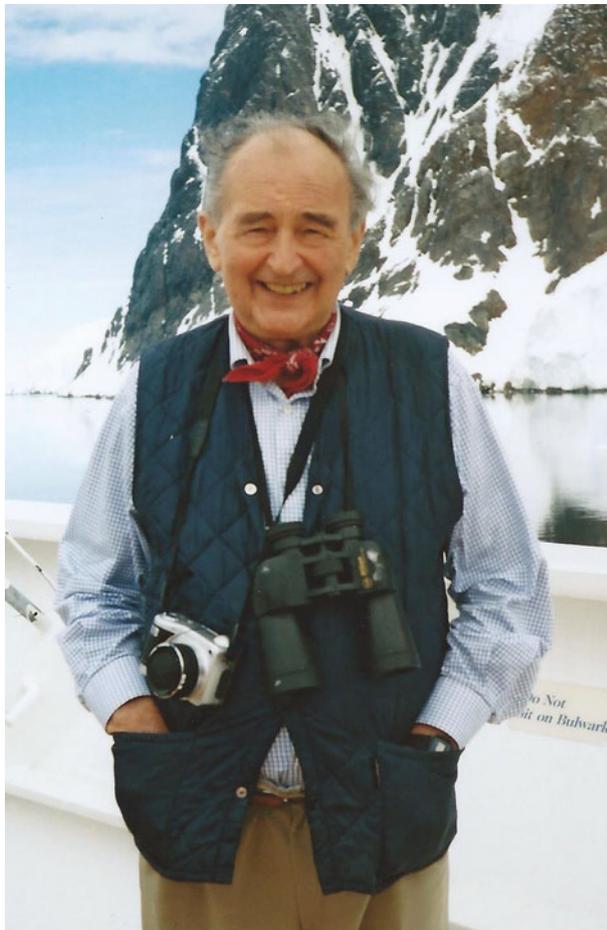


Fig 1. Bernard Stonehouse

Bernard Stonehouse (Fig. 1) died on 12 November 2014 at the age of 88. Best known for his pioneering studies of penguins, Stonehouse's proud claim was that he had been pecked by all the world's 17 species except one (the Galapagos penguin *Spheniscus mendiculus*). He was one of the few people to have spent three consecutive years in the Antarctic and was latterly involved with the Antarctic tourist industry both as a lecturer aboard cruise ships and as leader of a long-term study on its ecological impact.

Stonehouse was born on 1 May 1926 at Kingston upon Hull. At the age of 17 he trained as a pilot with the Royal Navy and afterwards volunteered as meteorologist with the Falklands Islands Dependencies Survey. Arriving in February 1947 at Base E, Stonington Island, in Marguerite Bay, Stonehouse became not only the base 'metman' but second pilot of an Auster aircraft nicknamed 'Ice-Cold Katy' after the title of a popular song. He also involved himself with zoological studies that were the start of a long career in polar biology.

During his second year at Stonington Island Stonehouse made a 500 mile round sledge journey to Adelaide Island where he found a colony of emperor penguins (*Aptenodytes fosteri*) on the tiny Dion Islands. This was only the third colony ever discovered. That summer, Stonehouse was due to return home but the pack-ice in Marguerite Bay remained solid and prevented the relief of the base. The stranded men became known, by the press, as 'The Lost Eleven'. Stonehouse was able to put his third, enforced, winter to good use by spending two months on the Dion Islands. Living in a tent with temperatures dropping to -40°C , he made the first study of the breeding habits of the emperor penguin. He discovered, for instance, that incubation of the eggs was left to the males while the females fed at sea.

After reading Zoology and Geology at University College, London, Stonehouse set himself the task of studying the king penguin (*Aptenodytes patagonicus*), the second of the large *Aptenodytes* penguins. With Nigel Bonner as assistant, he set up camp in a garden shed at Ample Bay, on the edge of the Bay of Isles, South Georgia. Over a period of a year (October 1953 to December 1954) Stonehouse was able to elucidate the unusual protracted breeding season. It takes a pair of king penguins about 15 months to rear their single chick so they produce only two chicks in three years.

The studies of emperor and king penguins resulted in a doctoral thesis that earned a D. Phil. from the University of Oxford. In 1957 Stonehouse was appointed leader of the British Ornithologists' Union Centenary Expedition to Ascension Island that would study the breeding cycles of 11 species of seabirds and four species of introduced landbirds. A small team, including Stonehouse's wife Sally as camp manager, spent 18 months studying a large colony of wideawake (sooty) terns (*Sterna fuscata*) with an unusual nine-month breeding cycle on the main island and making frequent visits to nearby Boatswain Bird Island to study frigate birds, tropic birds, boobies and other species. Philip Ashmole remembers that Stonehouse's Antarctic experience was invaluable for organising a small party working in primitive and remote conditions and that he always gave the impression of quiet competence and unflappability.

In 1960 Stonehouse was appointed senior lecturer at the University of Canterbury, Christchurch, New Zealand. This gave him the opportunity for research work, not only in New Zealand but also in Antarctica where, in co-operation with both New Zealand and American programmes, he was able to return to the study of penguins. By developing techniques of aerial survey, Stonehouse discovered new colonies of both Adélie and emperor penguins and assessed annual fluctuations in their populations. He also reported on the significance

of polynyas on the ecology of marine mammals and birds.

An important strand of Stonehouse's research was the impact of human activity on animal populations and he was able to persuade the New Zealand and American authorities to restrict visits to penguin colonies, especially by helicopters. He was also concerned about the emergence of Antarctic tourism. Initially opposed, he soon realised that tourists had more concern for the wildlife than many of the administrators and scientists working in Antarctica and that some were influential enough to bring pressure to bear in high places.

After eight years in New Zealand, there was an interlude of work in the Arctic, and teaching in a school in Scotland while also developing a career in writing technical and popular books. Titles were as diverse as *Animals of the Antarctic* (1972), *The way your body works* (1974), *The biology of marsupials* (1976), *Antarctica: The Traveller's Guide* (1996) and *Britain from the air* (1982). However, writing took a back seat in 1972 when Stonehouse moved to the University of Bradford to develop a School of Studies in Environmental Sciences with a four-year degree course. Although successful, there were no opportunities for polar fieldwork and, after 11 years, Stonehouse moved to Cambridge where, from 1983 to 1992, he was editor of *Polar Record* based at the Scott Polar Research Institute (SPRI). He revolutionised the journal, first by acquiring SPRI's first computer and then bringing the journal into the modern era by introducing desk-top publishing. The layout was revised, and printing and distribution were contracted out to the Cambridge University Press.

While still editing this journal Stonehouse initiated Project Antarctic Conservation in 1991, as part of the Polar Ecology and Management Group at SPRI. Its objective was to investigate the development and impact of the growing ship-based tourist industry in Antarctica. Field camps were set up at Hannah Point, Livingston Island, and on Half Moon Island and Cuverville Island to mon-

itor landings from cruise ships. The extreme sensitivity of vegetation to trampling was recorded and the behaviour of penguins towards human presence studied intensively. The heartbeat of selected penguins was monitored as they incubated artificial eggs fitted with remote sensors. The results showed that a slow, careful approach by people induced a negligible reaction. As a supervisor, writes Kim Crosbie, one of the team at Cuverville Island, he was wonderfully non-conformist, challenging his students in many different ways and forcing us to think laterally in problem-solving. She treasures the copy of the *Oxford English Reference Dictionary* he gave her on gaining her PhD. It is inscribed: 'Kim, this is for the occasions when, for whatever reason, you need the orthodox spelling'.

After retirement from SPRI Stonehouse continued to mentor and inspire PhD students. He turned his attention to the history of British Arctic whaling from 1750 to 1850 and set out to record and transcribe documentation, extracting valuable information from parliamentary reviews, port records, ships' logs, journals, muster rolls and so on. His work provides a massive database on the whaling industry for the benefit of other researchers. A paper still awaits publication in this journal. Stonehouse often remarked how he was good at 'finding work for others to do'. Dinah Malloy has described Stonehouse as a 'very unselfish academic'. The International Steering Committee of the International Penguin Conferences recently recognised him with a Lifetime Achievement Award to celebrate his achievements in a lifetime of penguin research. He is generally credited as the true father of penguin biology.

Robert Burton

Reference

- Cruwys, E. and B. Riffenburgh. 2002. Bernard Stonehouse: biologist, writer and educator. *Polar Record* 38 (205): 157–169.