

Obituary

Harry Roy Burton

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On 21 September 2024 in Hobart, Tasmania, we lost an Antarctic stalwart.

Harry Roy Burton (born 6 August 1940), husband, father, mentor, friend and visionary, was a pioneering and influential figure in Australian Antarctic science. Known for his intense intelligence and vision, Harry made significant contributions to our understanding of the Antarctic environment and its ecosystems.

Harry (Fig. 1) was born in Victoria, Australia. An insatiable reader and keen observer, Harry developed a profound interest in the natural sciences from an early age. Only a few weeks before he passed Harry told the story, around his old and creaking (under the weight of the many books he was reading) wooden kitchen table in his home at Mary Street, of discovering treasure in the form of a library in the farmhouse his family had bought. Taking advantage of this treasure trove of knowledge and adventure, Harry read voraciously and took inspiration at the age of 10 from classic texts like Darwin's *On the Origin of Species*, Wallace's *The Malay Archipelago* and Jean Henri Fabre's *The Life of the Fly*. This all led him to amassing an unparalleled and vast knowledge of the world and to pursuing a career in research and exploration. After completing a degree in agriculture at Dookie College (where some describe the state of his room as 'utterly squalid' - not due to dirt, but because of all the books and papers he was reading), Harry first worked in the tropics across Melanesia and Queensland, and then ultimately he took on a position at the Australian Antarctic Division (AAD). It was his work at the AAD that changed what we know about the continent, from its physics through to its ecosystems. Harry's generosity in sharing his vision inspired so many of us following in his footsteps to understand this, the most important, beautiful and alluring continent, as well as the seas that surround it.

Harry's work focused on the biological and ecological aspects of the Antarctic, and he was responsible for groundbreaking research into the hypersaline lakes in the Vestfold Hills. He participated in two overwintering expeditions at Australia's Davis Station and several summer expeditions to Antarctica and the sub-Antarctic, where he conducted extensive research on marine life (primarily southern elephant seals), limnology and climate change impacts on polar ecosystems. Harry's discoveries and research have been instrumental in shaping policies related to environmental conservation and management in the Antarctic.

Throughout his career, Harry collaborated widely with many national and international scientific organizations, contributing to numerous publications (197 in total) that advanced the field of

Antarctic science. He was also an advocate for the importance of scientific research to understanding global climate patterns and their implications for the future. Harry was instrumental in the Scientific Committee on Antarctic Research (SCAR) seal specialist group and a driving force behind the International Antarctic Pack Ice Seals (APIS) Program, an ambitious research project with the aim of counting how many ice seals (Weddell, crabeater, leopard and Ross seals) live in the Antarctic. Thanks to this pioneering work, the research community was able to reduce by orders of magnitude the error in seal numbers and improve greatly our understanding of the distribution and behaviour of these difficult-to-study animals. This changed how we think about the broader Antarctic ecosystem.

In recognition of his contributions, Harry was awarded the Australian Antarctic Medal in 1987, and Burton Lake in the Vestfold Hills is named after him, solidifying his legacy as a pioneer in Antarctic research. Harry's dedication to science and the environment continues to inspire future generations of researchers and conservationists, many of whom now hold research, policy and conservation leadership positions across the world.

Harry's work remains as relevant today as it ever was because Harry could see far into the future, and his vision set the foundation for understanding the many challenges posed by climate change and environmental degradation in polar regions. Harry's commitment to advancing scientific knowledge and promoting



Figure 1. Harry Burton, Macquarie Island 1993. Photo by Simon D. Goldsworthy.



Figure 2. The 1993 elephant seal team at Macquarie Island. L-R Paul (Tussock) Davis, Harry Burton, John (Snake) van den Hoff and Clive McMahon. Photo by Simon D. Goldsworthy.

environmental stewardship has left a lasting legacy on the field of Antarctic science, and we owe him much.

On a personal note, Harry was my great mentor, instilling in me the value of thoughtful enquiry, deep thinking, pragmatism and downright hard work. It was on Harry's invitation that I came to Australia to work with him on elephant seals at Macquarie Island in 1993 (Fig. 2). We lived, worked, learnt and laughed together

catching and weighing seals, writing papers and breaking new ground (and, when we both returned to live in Hobart, eating many a tripe dinner, much to the dismay and possibly horror of his sons, Hector and Horatio). Those were and remain heady days. I am extremely privileged and honoured to have had such a wise and knowledgeable mentor and close friend.

Rest peacefully, my friend!