## Large animals and wide horizons

Richard M Laws, edited by Arnoldus Schytte Blix; Ian and Chris Parker

## Reviewed by Suzannah Goss

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Richard Maitland Laws was born on 23 April 1926 in Northumberland, and educated at Dame Allan's School; he won a scholarship to read Natural Sciences and Zoology at St Catharine's College, Cambridge, where he became a research scholar (1944–1947) and in his sixth decade, Master of St Edmund's College (Cambridge).

Described by Laws as both an autobiography and a memoir, Large animals and wide horizons was penned after he retired. Sadly, Laws suffered a series of strokes while writing the book, and was unable to finish the project. Wellrespected by colleagues and

academia alike, three close friends stepped in to complete the task. Arnoldus Blix carefully arranged the many different drafts, some of which had been compiled on obsolete computer programmes. Later, Ian and Chris Parker, aware of their longstanding friend's autobiography in progress, painstakingly edited the 51 chapters down to 30, removing duplication and filling in the blanks. Parker after all worked with Laws in Uganda and Kenya in the 1960s and with his renown encyclopaedic memory was an ideal editor. And we are fortunate for the diligence of Laws' friends in rescuing the personal records of an erudite zoologist, who spent his life in meticulous scientific research and analysis.

Laws was shaped by two families, his biological family and a wartime family, the Woods, whom he lived with for four years when he was evacuated to Windermere during World War II. He reflects on not having had a particularly happy childhood at home, with "few warm moments'. On the other hand, he writes that Freda Wood "was like a mother to me" and

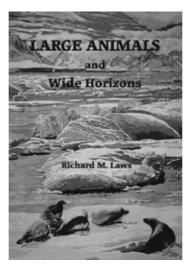


Figure 1. Front cover

describes his time in Windermere was "an idyllic period that was one of the most formative of my life".

While Laws' main area of study was in the fields of population biology, ecology and ecosystems, his research covered multiple disciplines: geology. geophysics, palaeontology, glaciology, atmospheric physics, dendrochronology, medical research and marine and freshwater biology, botany and by default conservation management. For instance Laws warned of the over-exploitation of large whales, and formulated two important conservation conventions, The

Convention for the Conservation of Antarctic Seal, and the Convention of Antarctic Marine Living Resources.

Working as a biologist with the Falkland Islands Dependencies Survey (later British Antarctic Survey; BAS), in a team led by Sir Vivian Fuchs, Laws found that the age of a seal (and indeed many other mammals) can be accurately assessed from the study of growth rings in the teeth—a discovery that revolutionised studies of the population dynamics of mammals.

In 1961, disenchanted by the "ineffectiveness" of the International Whaling Commission, Laws transferred his interest from elephant seals and whales to elephants and hippos, and left Antarctica (for a while) for Africa, exchanging polar ecosystems for equatorial savannah. The chapters that will most likely interest *Pachyderm* readers are Part II, Law's seven years in East Africa, 1961–1968, where he was director of the Nuffield Unit of Tropical Animal Ecology in Uganda (1961–67) and later director of the Tsavo Research Project in Kenya (1967–68).

*Large Animals and Wide Horizons* contains a wealth of interesting details providing historical perspective and a pool of information on conservation management

in the 1960s:

In Uganda, Laws discovered that Hippo wounds heal efficiently, noting that it was probably due to the pachyderm's 'sweat glands', and further study had potential for human medical research.

We learn that in Kenya wildlife had always been prioritized: at the 1961 Arusha conference Lord Salisbury, Prime Minister between 1895-1902, stated that: "...Britain would not allow a repeat of the disappearance of wildlife as has happened to the American bison and the immense game herds of South Africa." It was a political message, to be heeded by the emerging economies as they navigated their coming independence. Laws sat next to John Owen, Director of Tanganyika National Parks; Mervin Cowie, Director of Kenya National Parks; Rocco Knobel, Director of South Africa's National Parks, Captain Charles Pitman, once warden in Uganda and Tom Odhiambo doing his PhD in zoology at Cambridge, marking a seminal moment at the commencement of Laws' career in Uganda.

He also made the discovery on clanhood among elephant, and that individuals moved en mass and clumped together in the rainy seasons, observing that this behaviour was "allied to the availability of water" and allowed elephants to "adopt optimal social and foraging configurations in relation to resources", previously the opposite had been understood.

Other areas of Laws' work have become more controversial—namely the culling programmes of the 1960s. To those who would have preferred that the prolific data collection, had been gathered from elephants who had died from natural mortality (and there were a fair number), the recounting of elephant and hippo culling will make for uneasy reading—animals were culled in front of members of their family herds. Even Laws admitted that much data gathering was done by aerial work "observation in the field could largely replace much of the need to cull".

The main justification for the culling of pachyderms in Murchison Falls National Parks (MFNP) and Tsavo NP at the time, however, was to reduce the impact of elephant damage on the vegetation mosaic and other species, as elephants began to be compressed into protected areas. While Laws approached the culling programme with cool nerves and self-assured certainty that in Uganda his team were doing the right thing there was also a measured gravity, which perhaps increased in later years. In recognition of the sentience of elephants, Laws wrote:

".... To an impartial scientist there should be no difference between taking the life of a mouse and an elephant, but no one is that impartial! Somehow doing what we were with these fantastically interesting entities with all their analogies to humans, and in the very places set aside for them to be safe from people, generated strong emotions of distaste in all involved."

Laws also reflects that he was:

"Conscious that this beautiful environment was disfigured by our activities [in MFNP]" And "how incredibly successful these huge mammals had been acknowledging the evidence that elephant populations across the African continent once numbered in their millions."

Tragically, Idi Amin's armies the following decade were to eliminate all but 200 of the MFNPs population of elephants.

Laws was also a skilled artist, and the book is illustrated with his paintings and sketches.

After reading the 120 pages concerning MFNP and Tsavo NPs, readers will no doubt turn their attention to the chapters about whales, elephant seals, seals and Antarctic birdlife. It is sad that Laws didn't live to see his book published, he died on 7 October, 2014. As well as co-authoring the book: *Elephants and their Habitats* (1975), together with Parker and Johnstone, Laws wrote over 260 scientific articles and reviews. He earned several awards for his work in the Antarctic as well as the scientific medal for the Zoological Society of London 1966.

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