## **OBITUARIES**

The Society is sad to announce the death of two distinguished Fellows



## JACK COHEN CBIOL FRSB (1933–2019)

REPRODUCTIVE 'BIOOLOGIST' AND SCIENCE-FICTION CONSULTANT

Zoologist Jack Cohen CBiol FRSB (or FIBiol as it was in the days of the Institute of Biology) has died aged 86. Cohen had two lifelong passions: bioology and science fiction, and was a character who few who had encountered him would forget. "Bioology", some of you may be saying? Well, Cohen thought that 'biology' needed an extra 'o'. This will possibly give you an insight into what he was like.

Cohen grew up in Stoke Newington and at an early age was selling tropical fish in London. The profits from this enabled him to go to Hull to read zoology (or should that be zoo-ology?) and get both his BSc and PhD (on feathers) by the age of 26. He then started to specialise in reproductive biology. He began his career in earnest at Birmingham University, working there from 1959 to 1987, after which he spent a while working in IVF clinics.

Cohen was an active member of the Institute of Biology and served a number of stints on various committees including its Council and its Biomedical Sciences Committee. He helped draft the Institute's Royal Charter and contributed to the West Midlands branch.

Science fiction (SF) was Cohen's other passion and he was well known from the 1970s onwards at Britain's national SF event, the Eastercon. His talks at SF conventions were not to be missed, recurring themes being exobiology and biological oddities. Cohen helped SF authors such as Larry Niven, Anne McCaffrey and Harry Harrison with the fictional biology in their work.

Cohen was also known for his occasional appearances on TV, his popular science books and, for biologists, his textbooks. His books included *Living Embryos* (1963, 1967, 1980), *Spermatozoa, Antibodies and Infertility* (with W F Hendry, 1978); and *The Privileged Ape* (1989).

After his IVF work in the late 1980s, he ended up down the road from Birmingham at Warwick University, where he worked in part with mathematician Ian Stewart. The two went on to write *The Collapse of Chaos* (1994 and 2000) and *Evolving the Alien* (2002).

Meanwhile, in SF, Cohen knew of one fan, Terry Pratchett, who was then largely unknown but who had begun writing and seemed to be heading places. Eventually Cohen introduced Pratchett to Stewart and not long after a collaboration resulted in *The Science of Discworld*, which spawned three sequels.

Cohen spent his final years at a retirement complex in Poole with his fourth wife. There, in their living room, was an inevitable tropical fish tank. On the news of his passing, well over a hundred messages were sent to the family. For bioologists, the most fitting words were read at his funeral, penned by one of his former students, the Nobel Laureate Professor Sir Paul Nurse. "Jack was an inspirational teacher of biology: highly knowledgeable about animals, intelligent, stimulating, challenging, eccentric, an enthusiast who thought out of the box, not infrequently wrong but always in an interesting way. Every university department needs one Jack Cohen."

**Jonathan Cowie** FGS, science writer and former Head of Science Policy and Books at the Institute of Biology.



## DR HERBERT AUBREY HAWKES (1921–2019)

'FOUNDING FATHER OF FIELD ECOLOGY'

Born in 1921, Bert Hawkes commenced his further education at Huddersfield Technical College in 1939, but it was interrupted by the Second World War. Subsequently he graduated from Leeds University in 1947 with a BSc (Hons) in botany and zoology.

He completed an MSc in 1950 while working as a biologist with the former Birmingham Tame and Rea District Drainage Board. However, he did not obtain his doctorate from Aston University until almost 50 years later, in 1998, for his thesis 'Ecological Studies on River Pollution Control', which comprised a collection of some 44 publications.

In 1962 Hawkes joined Birmingham College of Advanced Technology (now Aston University) and remained there until his retirement in 1984. He continued teaching on a part-time basis well into the 1990s.

Alongside his studies on sewage treatment processes, he pursued research into methods for biological surveillance of river water quality. With his groundbreaking work to develop methods for controlling the flies that breed in biological filters, Hawkes was a founding father of field ecology.

He was an active Fellow of both the Institute of Biology and the Institute of Water Pollution Control, and became a consultant to many organisations, including the World Health Organization. For his outstanding contribution in the field of sewage treatment, Hawkes was awarded the William Dunbar Medal in 1984 by the European Water Association.

Hawkes passed away shortly after his 98th birthday in April 2019, leaving his wife, two daughters, four grandchildren and a great granddaughter. He is fondly remembered by his colleagues and the hundreds of students he taught.

Dr Peter Hedges, Aston University.