hris Hinks, former research scientist at Agriculture and Agri-Food Canada (Ottawa and Saskatoon), died on 12 November 2016 in Bodmin, Cornwall, United Kingdom, after a lengthy battle with cancer.

Born on 10 March 1939 in Hayle, Cornwall, Chris developed an early fascination for insects, collecting moths and butterflies, and rearing larvae, as a small boy who enjoyed exploring the nearby dunes, woods and other wilderness areas. In 1952, the Hinks family emigrated briefly to the Western Australian Outback, as 'Ten Pound Poms'. However, they returned to Britain in 1954 due to his mother's poor health, settling first in Somerset, before eventually moving back to Cornwall. Here, Chris completed high school, then worked as a trainee forester (1957) before reporting to the British Army for National Service in 1958 (one of the last men conscripted). He served 2 years as a Specialist Regimental Signaller in Cyprus as part of the British Peace-keeping Force during the unrest between Turkish and Greek Cypriots. Interestingly, Chris carried his Imms' 'A Textbook of Entomology' with him, and a tent mate, noting this,



Christopher Frederick Hinks (1939 – 2016)

encouraged Chris to apply to Imperial College, University of London, after his army stint. Following his discharge from the Army, Chris refocussed on his education, completing his pre-university A-level entrance requirements at Cornwall Technical College in 1 year, rather than the usual 2! At Imperial College, he was much influenced by O.W. Richards and R.G. Davies, receiving his BSc (Hons) in Zoology in 1964. He remained at Imperial College for his PhD (1968) under the supervision of N. Waloff, investigating the endocrine control of circadian rhythms in moths. While a PhD student, Chris published a landmark paper in *Nature* (Hinks 1967), demonstrating a role for the bioamine serotonin in controlling circadian rhythm in moths. An outcome of this work was strong encouragement to apply for positions in the United Kingdom (Imperial College), Australia (CSIRO, Division of Entomology, Canberra) and Canada (Department of Forestry, Government of Ontario, Sault St. Marie; Entomology Research Institute, Government of Canada, Ottawa; and Department of Biology, Carleton University, Ottawa).

Chris opted to take up a post-doctoral fellowship at Carleton University, studying virushost relationships of insect-transmitted plant and insect viruses using electron microscopy and autoradiography. It was during this period that Chris met, then married (in December 1968) Elizabeth, at the time a student working in the same laboratory. The post-doctoral stint lasted less than a year (till October 1968) before Chris was appointed as a Research Scientist at the Entomology Research Institute (ERI), Canada Department of Agriculture. When the ERI was reorganised to become the Biosystematics Research Institute, Chris' group liaised closely with taxonomists, becoming involved in programs to examine histological and biochemical differences among species. Unfortunately, government bureaucracy left Chris frustrated and disappointed, leading to his resignation in 1978 and a return to Cornwall. Here, Chris and Elizabeth first operated a shop in Hayle, selling, books, cards, stationery and a selection of health foods and supplements. Then, in 1981, after selling that business, they bought a fledgling florist shop in Camborne, quickly developing it to become an Interflora agency over the next 2 years. From their half acre garden with its large greenhouse and tunnel, Chris supplied some of the flowers and plants they sold.

Chris and Elizabeth returned to Canada in 1983 with his appointment as an Insect Toxicologist at the Agriculture and Agri-Food Canada - Saskatoon Research Centre. His expertise in insect physiology and insect - plant interactions was ideally suited to the team that was tasked to develop population management strategies for grasshoppers and other insect pests of cereal crops. Chris very quickly re-adapted to the challenges of scientific research and immediately took a lead role in quantifying the impacts of different diets (crop plants) on grasshopper biotic potential (nutrition, growth and development). This research led to a number of promising leads in the field of host-plant resistance in cereal crops, perennial grasses and pulse crops. Although, his research was focussed primarily on grasshoppers and cereal crops, his expertise was also sought after by wildlife (insecticide residues) and biological control researchers (predation, insect pathology). His keen interest in entomology, often with stimulating questions, resulted in many discussions that prompted new research approaches at the Centre. His publication record during his brief time at AAFC-Saskatoon was extensive, including two important reviews dealing with the resistance of cultivars of cereal crops and grasses to grasshoppers (Hinks and Olfert 1992) and nutrition and protein economy in grasshoppers and locusts (Hinks et al. 1993). In December 1993 while renovations to labs at AAFC - Saskatoon Research Centre were underway, Chris had a transfer of work to Silwood Park, the Imperial College field station. He retired to Cornwall in May 1995.

Even after returning to his beloved Cornwall, Chris maintained his scientific interests. He conducted many beetle surveys, collecting, identifying and recording beetles for the Cornish Records. He collaborated in a survey of the Red River region, near Hayle, and coauthored the report to the Cornish County Council which outlined the group's findings and recommendations. He was an active member of the Cornish Wildlife Trust, serving as a trustee on the Board and a member of its Conservation Committee.

Chris was an avid gardener, and he designed and developed beautiful gardens wherever he lived. He was also a skilled woodworker, producing fine pieces of furniture. He read widely and was knowledgeable on many subjects.

## References

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