

Graham C. D. Griffiths (1937 – 2009)

Graham Griffiths was best known as a brilliant but controversial dipterist who expressed his strong opinions about morphology, phylogeny and people in books, reviews and papers as well as a legacy of letters to administrators, editors, committees and bureaucrats. His opinions, and how they were expressed, sometimes alienated colleagues. However, his contributions to biology were indeed impressive, including a 1972 book that remains an extremely important synthesis of information about morphology and phylogeny of the higher Diptera as well as a clear and concise summary of Hennigian cladistic methodology. He was also an extraordinary taxonomist and an encyclopedic storehouse of information about various groups of flies, especially the large and difficult families Agromyzidae and Anthomyiidae. His knowledge of the latter family was particularly important and his passing leaves a huge gap in our collective ability to deal with the diversity of this very important group of mainly phytophagous flies.



His incredible knowledge about Diptera and his productive publication record are all the more remarkable given that he started out in the arts but became a scientist and turned a hobby of collecting flies into a biological career that later involved almost as much botany as entomology.

Early years and education

Graham Charles Douglas Griffiths was born to Peggy and Arthur Griffiths in Cardiff, Wales. Graham went to school there and in London, England (1941-1955). While at school he studied piano but also started a life-long interest in flies. After finishing school, Graham served two years in the British Army. With the aid of various scholarships, he attended Christ's College, Cambridge (1958-1961) and obtained a BA (Honours) majoring in classics and philosophy. After graduation, he worked in the United Kingdom Ministry of Agriculture, Fisheries and Food (1961-1967).

Based on letters of recommendation rather than an education in biology, Graham was granted admission to graduate studies at the University of Alberta under the supervision of George E. Ball (1967-1971). From 1972 to 1974, he held a Killam Special Postdoctoral Fellowship awarded by the Canada Council. In 1970, Graham married Deirdre Webb, who was a park naturalist at Elk Island National Park. (Graham's first marriage ended after he came to Canada.) After post-graduate work, Graham became self-employed as an entomological and botanical consultant based in Edmonton. Deirdre helped part-time with illustrations and co-wrote several of the consulting reports.

Publications

Graham was a prolific writer with over 130 publications. These included a book, 83 scientific notes, papers and book chapters; 21 reviews of scientific papers and books; 5 translations; 21 major reports; 8 botany and agricultural articles; and many single-copy reports for various governmental departments and industries. His scientific publications primarily dealt with the taxonomy of Agromyzidae (leaf-miner flies) and Anthomyiidae (root-maggot flies).

Graham's first research, on Syrphidae (flower flies), was published in 1954 when he was at Mill Hill School (= high school). About 1953, Kenneth Spencer got Graham interested in agromyzids and the two developed a lasting friendship based on their interest in these flies (Spencer 1992). While still at school, Graham also published descriptions of two new species of these flies. During his time with the army and the civil service, he continued to publish on agromyzids and their parasites. By rearing leaf-mining larvae to adults, he was able to connect the flies with their hosts as well as their parasites.

Graham's PhD thesis was expanded into a book about the evolution of higher flies (Griffiths 1972), a subject area to which he had earlier contributed by translating Hennig's revolutionary approach to systematics into English (Griffiths, 1965). His post-doctoral work dealt with the foundations of biosystematics (Griffiths 1973, 1974).

In 1977, Graham initiated and edited *Flies of the Nearctic Region*, designed as a companion to the *Palaeartic Series*, *Die Fliegen der Paläarktischen Region* (flies of the Palaeartic), which started publication in 1924. The *Flies of the Nearctic Region* is a series of monographs published in taxonomically arranged Parts. Each Part covers an inclusive taxonomic unit such as a family or genus of New World Diptera. This series has now reached 9 volumes with numerous parts, all published without public funds. Since 1982, Graham produced 15 Parts on anthomyiids, which total 2635 printed pages (e.g. Griffiths 2004). In these publications, he described nearly 170 new species.

Graham's studies of phytophagous flies led him to learn a great deal of botany. In 1988, he published his first plant, rather than insect, paper. His proficiency at identifying plants by their leaves, stems and roots rather than by their flowers led to consulting contracts from pipe-line companies, which to fulfill their environmental impact assessments, needed to avoid rare plant habitats.

Languages

Graham was multi-lingual. During his army service in Cyprus, he learned modern Greek in order to interrogate suspected rebels. In 1965 and 1975, he translated and re-published two German papers in English. In 1987, as a visiting scientist at the Russian Zoological Institute, he delivered lectures in Russian in Leningrad and Moscow. In the early 1990s he started to translate the "Flora of the Russian Arctic" into English. The first three volumes (330, 233 and 472 pages) were published between 1995 and 2000. He was still working on translating the remaining volumes when he died.

Service

Graham served in various capacities for several professional and environmental societies. These included:

- National and Provincial Parks Association of Canada (Chair of Edmonton Chapter, 1972-1974; editor for book on the Swan Hills, 1975);
 - Environmental Protection Subcommittee of the Public Advisory Committee on the Environment for the Government of Alberta (member 1972-1976, 1978-1984 and Chair 1980-1982);
 - Environment Policy Committee for the Alberta New Democratic Party (Chair 1982);
 - Publications Committee of the Entomological Society of Canada (member 1984-1988);
 - Council for International Congresses of Dipterology (Chair 1986-1994 and Past Chair 1994-1998);
- and
- Editorial Board of the *European Journal of Entomology* (1992-2009).

Honours

Between 1962 and 1987, five entomologists (M. Fischer, K.A. Spencer, J.T. Nowakowski, V.K. Sehgal and C. Hansson) named four anthomyzid flies and two of their hymenopteran parasites

griffithsi. In 1998, Graham was elected an honorary member of the International Congresses of Dipterology during the 4th International Congress of Dipterology. This is one of a maximum of seven living dipterists who can be so honoured. In 2003, he was elected a Special Life Member of the British Entomological and Natural History Society. Graham was a member of this society for an extraordinary 57 years.

Final years

After moving permanently to Athabasca, Alberta in 2001, Graham continued his research and consulting work but also volunteered to give talks to children and the general public on his biological studies of Muskeg Creek and Crooked Lake. He also worked through Athabasca University's herbarium checking and doing identifications as well as documenting plants of interest for the Alberta Native Plant Council. In late 2006, Graham, after months of what he thought was a minor irritation, was diagnosed with throat cancer. In early 2007, after various cancer treatments, he had difficulty speaking and had to use writing to communicate with most people. However he continued with field work, a revision of the genus *Fucellaria*, and identifying plants for the Alberta Biodiversity Monitoring Institute. Unfortunately the cancer spread and Graham died in Athabasca, just short of his 72nd birthday.

Graham is survived by his mother, two sisters (Eileene and Angela) and his wife Deirdre. Most of Graham's collections will go to the Strickland Museum at the University of Alberta.

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