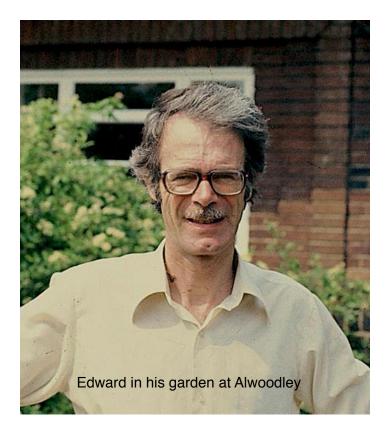
Preview: will be included in the 2020 issue of Psocid News

Obituary-Edward Broadhead. 8th Jan1920- 29th October 2018

Charles Lienhard has asked me to write an obituary for the Psocid News.

Edward Broadhead died in October 2018 just a few months short of his 99th birthday. The only other obituary of Edward Broadhead I know of is the one posted on the Leeds university website¹, written by his last PhD student, Nigel Franks, now Emeritus professor at Bristol University. As a PhD student of Edward myself, from 1969-1972, I found Nigel's 'very fond obituary' perfectly summarises the academic supervisor/student relationship that Edward fostered. Always warm and caring, thought provoking, and challenging he has left lasting and fond memories in all those he worked with.



I too remember visiting his home in Alwoodley, Leeds, being looked after by his lovely wife, Elcy, and being shown round his beautiful garden. Later when the garden became too much of a burden they moved to a flat in Harrogate, North Yorkshire, very close to the Royal Horticultural Gardens at Harlow Carr so that Edward could still get his garden fix.

Throughout his academic career his focus was on aspects of psocid ecology, although with Nigel he deviated to army ants and eventually to rainforest insects in general in Panama. As a zoology undergraduate at Oxford University (1938-41) he was taught by Charles Elton, one of the founding fathers of the new science of Animal Ecology. Edward's contribution to the war effort following graduation was to be sent to the Government Pest Infestation Laboratories to study the biology of *Liposcelis bostrychophila*, a species of booklouse that I too have studied extensively and which I admire for its amazing abilities to use man's modes of transport to effectively reach all parts

¹ <u>https://www.leeds.ac.uk/secretariat/obituaries/2019/broadhead_edward.html</u>

of the world, ranking as one of the most efficient but fortunately relatively benign insect pest species.

Edward was appointed lecturer in Zoology at Leeds University in 1947, where he stayed his whole academic life until retirement in 1985, promoted to Senior Lecturer in 1959, and Reader in 1964. In 1944, after attending a seminal meeting of the British Ecological Society on the biology of closely related species, Edward's research had a lifetime focus, specifically how could different species of psocids apparently coexist in the same place. Ian Thornton was his first PhD student to explore this problem, looking at three Elipsocid species living on Larch trees in woodlands near Leeds. Ian sadly died in 2002 and in a commemorative volume² Edward wrote a mainly autobiographical, but essentially typically philosophical, paper on how he saw ecology as applied to psocids. This is a useful source for more detail of his students and their research.

Edward then turned his attention to two co-existing *Mesopsocus* species on larch trees. With Tony Wapshere as his research assistant their 4 year study ended with the publication of a detailed paper in Ecological Monographs in 1966 which earned them the 1968 Mercer prize from the Ecological Society of America for an outstanding paper in ecology. His work with *Mesposocus* continued with Bob Cheke looking at the impact of a mymarid egg parasitoid on their dynamics and with Christine Popescu investigating the role of melanism on predation rates by birds. Modelled on Kettlewell's famous peppered moth studies, she showed similar results, that selective bird predation favoured melanic forms living on polluted sooty branches.

I had 'discovered' psocids on a field course as an undergraduate at Royal Holloway College, London University, and was surprised at how little the entomological bible of the time, "Imms Textbook of Entomology", had to say about them, seeing how common they appeared to be on the trees I had beaten. I went to meet Edward at his home in Leeds at Christmas 1968, to see whether I could work on a PhD at Leeds on psocids with him. At the time I was spending Christmas at my future wife's home in Huddersfield and the drive over to Leeds on a cold snowy day was not the easiest. This was the first time of meeting with Edward, sporting as I recall a stamp size piece of tissue paper stuck on his cheek to stop the bleeding of a shaving cut, but I was immediately put at ease by his charming welcome. Whilst he 'interviewed' me, Elcy warmly entertained Judy and her parents. It was there he talked of his desire to push the interest in psocid ecology to the tropics, in particular to Jamaica where the Kingston campus of University of the West Indies was situated close to the Blue mountains. He must have had considerable faith in me being able to cope. It was a steep learning curve for me, the first time I had ever been abroad, with no idea of what the place was like, whether I could find psocids (actually found 83 species in the end), and more importantly if I could work up an acceptable PhD project. There was of course no internet in those days and communication between us was by weekly airmail letter and carbon copied pages of my notebooks. Edward visited me for a month about halfway through my two years in Jamaica. We had a wonderful time as I showed him round the island, which by then I knew well. Three lasting memories; sitting most evenings in the senior common room garden having a beer and talking as the sun went down; finding moss laden, dripping wet, elfin or cloud forest, only 20 foot high, above Hardwar Gap; and nearly losing control of the Landrover and sending us over a precipice on the gravel hairpin road as we drove up to the start of the stiff climb (done at night) to Blue mountain peak to watch the sun rise. Edward gave us a pottery vase as a wedding gift, still much treasured today. It has a green leafy pattern which he said reminded him of that beautiful elfin woodland.

This Jamaican experience was the start of Edward's practical interest in Tropical ecology. He sent Howard Evans out after me to build on my initial studies but unfortunately there was an increasing level of lawlessness in Jamaica at that time which made it dangerous for Howard, and so Edward had to move him to Trinidad which was not as suitable, not least because he had to start from scratch again.

Edward next went to East Africa to look at the altitudinal distribution of psocids on three 2000+ metre high mountain systems but then in 1977 he discovered his dream location, Barra Colorado Island in Panama. He sent Nigel Franks there. Nigel's love was for army ants not

² Aldrete, Lienhard and Mockford 2004, Thorntoniana Pub. Espec. 20. Inst. Biol. UNAM, Mexico

psocids but Edward was still fascinated in the way the predator prey dynamics operated. Edward went out there several times in the next three years culminating in overseeing a big fogging study of the insects on rain forest trees. He sent the 80,000+ insect specimens to expert taxonomists for further study and the ecological findings were recorded in two publications with Henk Wolda in the year he retired.

After Elcy's death in March 2011 he sold their flat in Harrogate and moved down to West London to live with his daughter Margery and her husband Bob Smith. Two years later he moved into a retirement home for the active elderly in Highgate where he happily lived until a few days before his death in hospital from a stroke.

It was a privilege to know Edward and he taught me much. He was a very good supervisor, being there when needed and not being there when not needed and letting me fly on my own. This approach is one I hope my own students could say of me in the way I supervised them. He also taught me the importance of having other interests outside of university life. He loved gardening, all things Italian and particularly painting, which he pursued in classes at his retirement home almost to the end of his very full and fulfilling life.

Bryan Turner

First International Psocid Workshop, Rogate Field Station, Kings College London 13-17th August 1984



From left to right:

Edward Broadhead, David Fisher, John Sellick, Tim New, Khalaf Ahmed, Ed Mockford, Alfonso Garcia Aldrete, Charles Lienhard, Bryan Turner, Courteney Smithers, Elaine Spratt, Mike Sullivan