

Peter Belton passed away the morning of 1 April 2019 at the age of 88. Peter led a full life, and touched the lives of many. He moved with Bryan Beirne's lab to Simon Fraser University in 1967, and became one of the founding faculty members of the Master of Pest Management Program, where he stayed until his retirement in 1994.

I met Peter at my MSc defence. In the audience, filled largely with people I knew, sat an elderly gentleman genuinely interested in my research. After meeting Peter, I knew he had to be on my PhD committee; I am forever grateful that he accepted. In the over 12 years that I knew Peter, we spoke a lot about research, of course, but also about his life, the family he loved so very much, his graduate students, and everything from murder mysteries, to how the Vancouver Canucks were doing. On a drive down to a conference in the United States in 2008, Peter let me record his story. Selections of that, with information he provided since, follow.

Peter was born, an only child, in Driffield, a small Yorkshire town, on 6 September 1930. His dad, who worked for the civil service, was a keen gardener and beekeeper. On weekends, the family would pack up an old Morris Ten, and go to tend their bees on the Yorkshire moors. These weekends sparked Peter's interest in all things entomological.

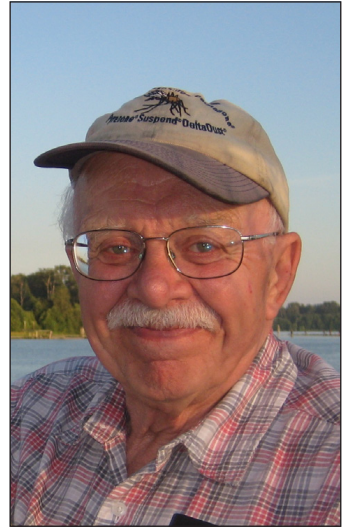
When his dad was promoted, the family moved to London, during the Blitz. Always one to find a silver lining, when recounting this move, Peter commented that it meant the family was able to get a fantastic deal on a house, and that going to the basement during the raids was rather exciting. The gardening and beekeeping continued, and to those hobbies, Peter added trainspotting, stamp collecting, and rearing of any Lepidoptera larvae he could find. It was during this time that Peter knew he would become an entomologist.

Peter's national service was deferred for a year after his dad's untimely death in 1948, and his mum's poor health. He took the opportunity to work for the Ministry of Food at Sheffield Market, in the meat and egg sector. He enjoyed candling the eggs as a form of quality control.

After working for the Ministry, Peter did his 2 years of national service in the RAF. He specialized in wireless radio-work, which fueled his interest in electronics. He was put in charge of a transmitter station in Norfolk, and worked his way up to Corporal. Peter's experience playing rugby during his school days gave him an 'in' with the officers, and landed him a spot on their rugby team. The 2 years passed quickly.

Peter entered the Applied Entomology Program at Imperial College, London. A strong student, Peter's success in his physical chemistry course saw the Chemistry Department try to convince him to change his program. Luckily for us, Peter stayed with entomology. He went back briefly for some work in civil service, but finished his degree, doing an honours project in his last year. Under the supervision of Peter Haskell, Peter's research on tiger moth tympanal organs yielded recordings from moth tympanal nerves. His first journal article, detailing these groundbreaking recordings, was published in *Nature*.

During this final year, Peter won a grant to attend a prestigious conference in Oxford. There, he met Elizabeth, a young entomologist studying the taxonomy of weevils. When Peter started his PhD in Glasgow, he was surprised to find her in the zoology department; Elspeth, as most



**Peter Belton
(1930–2019)**

of us know her, was doing her degree there. Peter quickly realized he would have to brush up his Scottish country dancing skills, as Elspeth was a keen dancer. Dressed in a kilt given to him by a fellow graduate student, Peter impressed Elspeth, and the two of them became part of the university's dance team. They married in February, 1957.

Peter's supervisor, neurophysiologist Graham Hoyle, convinced Peter to work on the nerves and muscles of the Lepidoptera leg. Peter had originally gone to Glasgow to study moth tympanal organs, but Hoyle worried that an American lab was further ahead in the research. When it came time to defend, although Hoyle felt Peter's research was complete, external examiner John Pringle thought more work was needed. Most of this work was completed under neurologist Harry Grundfest's supervision, because Peter and Elspeth moved to New York for Peter to work with Grundfest at Columbia University. His thesis was completed in 1960.

Peter loved his brief time in New York. The Grundfest lab spent the summers at Woods Hole, studying the nervous system of lobster walking legs; the meaty claws were always spared, but never wasted! Elspeth worked for Asher Treat as a lab instructor for his general biology course, and Peter and Elspeth would visit Treat's summer cottage on the occasional weekend. Unfortunately for Peter, moths were not available for purchase, so he spent his time working on mealworm muscles, because the larvae were readily available from local pet stores. He also did some work on the slow muscles of frogs, which were somewhat similar to insect muscles. His breakthrough research was showing that action potentials in the mealworm muscles could be produced with potassium.

Thanks to Asher Treat meeting George Wishart at an international conference, Wishart learned of Peter, and convinced Bryan Beirne to interview him for a job in Belleville. When Peter and Elspeth went to Ontario that June for the interview, they were caught off guard by a late snowfall. Despite that cold introduction to Ontario, they moved to Belleville. Peter taught electrophysiology as an adjunct at Queen's University, and was a research scientist and group leader at the Agriculture Canada Research station. They welcomed a daughter and son while in Belleville, then had another son after they moved to Vancouver.

In terms of research, Peter is best known for his work on mosquitoes, and his 1983 book on the mosquitoes of British Columbia. However, Peter remained fascinated by all things bioacoustic, and participated in many projects, right until his death. He treated everyone as equal, was a patient teacher, encouraged original research, and never spoke poorly of others. This brief piece only touches on a few aspects of Peter's life, and cannot do justice to the amazing person he was.

Before Peter died, I was fortunate enough to visit and say my goodbyes. During that last visit, Peter said he felt very lucky to have lived such an incredible life; and, in the fashion suiting a gentleman, he asked that I let people know he was doing well. He didn't want anyone to worry, or to cause a bother.

The world is a little dimmer for the loss of such a brilliant person. Father to three children he adored, grandfather to seven, and academic father to years of students, both undergraduate and graduate, Peter will live on in the fond memories each of us has of him.

Mel Hart
Regina, Saskatchewan