

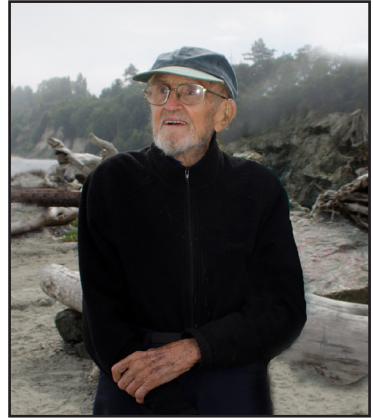
Roy Pickford passed away on 14 January 2014 in Victoria, British Columbia, aged 96. Roy grew up and received his school education in the Moose Jaw area of Saskatchewan. From 1940-1945, he served in the Second World War with the Survey Regiment of the Royal Canadian Engineers, and it was during this service that he met Ada ter Braake in Holland. They married in 1948. After demobilization, Roy began his university education, receiving a BSA in 1949 from the University of Saskatchewan. It was during the later part of his undergraduate studies that Roy's career-defining association with entomology emerged when in the summer of 1948 he was employed as a seasonal assistant at the then Dominion Entomological Laboratory in Saskatoon.

As Riegert (1990) noted 'From then on entomology to Roy meant grasshoppers, a group of insects to which he devoted all of his research years.'

Roy began full-time employment at the DEL in 1949, but for the next 2 years the data he collected was used for his Master's research. In 1951, Roy received a MSc from the University of Saskatchewan. His thesis, supervised by J.G. Rempel, looked at the biology of *Arphia conspersa* (speckle-winged grasshopper) and *Pardalophora apiculata* (coral-winged grasshopper), two species that, unusually, overwinter as nymphs on the Prairies.

For the next 25 years, in a wide range of field and laboratory studies, Roy focused his attention on the biology, ecology and management of grasshoppers. In particular, he was involved in the annual surveys and forecasting of outbreaks, testing the effectiveness of organic insecticides for population control, investigating the nutritional ecology of several species (showing, among other things, that some species don't eat much 'grass', but prefer a variety of broad-leaved plants), and conducting a range of biological studies including parasitism and, especially, reproduction. A significant outcome of the laboratory side of this research was the development and selection of a non-diapause strain of the migratory grasshopper (*Melanoplus sanguinipes*), the single most important grasshopper pest species on the Prairies, in which embryonic development was immediate and complete after egg laying, removing the requirement for a lengthy exposure of eggs to low temperature (Pickford and Randell 1969). This strain has since been extensively used by many experimental entomologists across North America.

Shortly after I joined the Department of Biology at the University of Saskatchewan in 1965, I had a visit from the department head with Roy in tow. Roy wished to do a PhD, and was I prepared to supervise him. Roy's reason for someone approaching 50 wanting to do a PhD was very simple: he wished to prove to himself that he was capable of such a project! He had no interest in comparing himself to or bettering other colleagues: it was solely for his personal satisfaction. Thus, this friendly, good-natured individual became my first graduate student, a remarkable arrangement given that he was old enough to be my father and had almost two decades more experience than I on North American acridids! Roy's thesis project, a study of the reproductive biology of the migratory grasshopper, generated some fascinating data, especially about the role of the male, a highly promiscuous beast that produces, on average



Ben Pickford

**Roy Pickford**  
**19 September 1917**  
**– 14 January 2014**

seven spermatophores during a single mating. Roy also showed that during mating the male transfers chemicals to the female which 'advise' her that she now has sperm available and can proceed to produce multiple eggs that are fertilized as they are being laid. Likely related to his early retirement, Roy may not have received full credit for these discoveries, as I am sure that he would have continued as part of the research group looking at the nature and roles of these fascinating chemicals. Through other graduate students and post-doctorals, my lab continued to examine these materials for several decades. Indeed, even today, almost 15 years after my own retirement, there is collaboration between members of the Biology Faculty and Martin Erlandson (AAFC, Saskatoon) aimed at unravelling the mysteries of accessory gland substances in the male migratory grasshopper.

Roy completed his PhD in 1971 and almost immediately took leave of absence to spend a year based in London, England, at the then Anti-Locust Research Centre. This included a trip to Africa (Mali, Ghana, and Nigeria) to study locusts up close. Roy's return to active service at the Saskatoon Research Laboratory of AAFC was a relatively short one as he retired in September 1975, though not before serving as the President of the Entomological Society of Saskatchewan in 1973.

Initially, Roy and Ada moved to Brentwood Bay, British Columbia, but some years later moved to Thetis Island where they built a home in the forest and began an intensive gardening operation with fruit trees, vegetables, herbs and flowers. Grafting fruit trees was one of Roy's specialities. Roy also enjoyed woodworking, reading, and sailing. Indeed, he and Ada were founding members of the Saskatoon Sailing Club in 1963 and significantly involved in the Club's acquisition of land on which to build a clubhouse on the shore of Redberry Lake, Saskatchewan, in 1965.

## References

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