ROBERT E. ROUGHLEY (1950–2009)

TRIBUTE AND BIBLIOGRAPHY

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A Tribute

The entomological community has lost one of its classic figures. Rob Roughley passed away suddenly at his home on 9 November, 2009 at the age of 59.

Rob was an authority on water beetles, especially the Dytiscidae, and spent much of his professional life at the University of Manitoba, Canada. He completed his B.Sc. (Agr.) in Entomology in the Department of Environmental Biology at the University of Guelph in 1974. He was part of the cadre of young entomologists, inspired by Dave Pengelly, who emerged from Guelph at about that time. While an undergraduate student, Rob spent two summers at the Agriculture Canada Research Station in Harrow, Ontario, where he worked on insect pathology with Bob Jaques, and with Bill Elliott on aphids on vegetable crops. It was perhaps during the time he spent with Bill Elliott, and the following summer on Dave Pengelly's field crew to replenish the ravaged Natural History of Insects collection, that Rob became fascinated by taxonomy and systematics. Rob stayed on at Guelph to revise the genus *Hydaticus* (Dytiscidae) for his M.Sc. (1976), which involved spending some of his time working at the Canadian National Collection in Ottawa. Rob went to the University of Alberta for his Ph.D. under the supervision of George Ball; his thesis research was a revision of the genus *Dytiscus*, using characters from adults and immature stages. In 1982, even before he defended his Ph.D. thesis, he accepted a faculty position in the Department of Entomology at the University of Manitoba. For the next year, he worked day and night to complete his Ph.D. thesis, which he defended in 1983.

Water beetles, especially Dytiscidae, formed the focus for Rob's research. He was a world authority in dytiscids and related groups, and his expertise was much in demand. His taxonomic advice was sought by curators, amateurs and consultants needing specimen identification, and he often visited museums and provided curatorial assistance in the areas he knew best. He worked particularly on the dytiscids of North America and the water beetle fauna of Middle America, and had a great deal of involvement with the Instituto Nacional de Biodiversidad (INBio), in Costa Rica. At INBio, he taught water beetle collecting techniques to parataxonomists, and was team leader for the aquatic Coleoptera group. Rob's combined effort with David S.

White on the chapter on aquatic Coleoptera in the fourth edition of An Introduction to the Aquatic Insects of North America (2008) is a lasting contribution to his discipline. Rob was involved with the scientific community in many areas of endeavour, particularly those dealing with conservation; he was an active participant in the Biological Survey of Canada, the Nature Conservancy of Canada, the Committee on the Status of Endangered Wildlife in Canada, CANPOLIN, and the International Union for the Conservation of Nature.

Rob was never shy about tackling less familiar areas of research, and he assumed supervision of graduate students in many areas beyond his own field of systematics. He supervised students who examined the integrated control of purple loosestrife, and others who worked on the biodiversity of spiders, carabids, bees, and flies, especially those associated with prairie grassland and subarctic habitats in Manitoba. He encouraged his students to work hard and gain a sense of pride in their own accomplishments as they saw their own expertise grow. His encouragement extended to undergraduate students as well. Rob had an unorthodox lecture style. He was always very relaxed, but you never knew what approach he might take. He sometimes delivered lectures in a classic sense, but he also explored an open-ended style, where students were expected to contribute substantially to the learning process. Rob enjoyed a high level of interaction in his lectures, and he delivered his lecture material from many different angles. In recognition of the success of this approach, he received a Students' Teacher Recognition Award at the University of Manitoba in 1995. For many years, he and Peter Kevan taught a course in boreal and arctic entomology, in Churchill, Manitoba, as part of the offerings of the University of the Arctic.

One of Rob's great loves was collecting insects, and he traveled the world in the pursuit of water beetles. His extended field trips with students or colleagues were legendary: they would start out from Winnipeg heading west, hit the coast, travel south, turn east, keep going until they hit the sea, and then wend their way back. Several visiting postdocs received their initiation to North America on just such trips. Rob traveled extensively in Europe, Asia, Australia, and Costa Rica, gaining taxonomic insights from the beetles he collected and the habitats he visited. It was perhaps these insights that were so valuable to his colleagues and for which his advice was so often sought.

Rob also carried a large portion of the load for extension calls in the Department of Entomology. These calls came on the telephone, through the mail, via e-mail or where an unannounced visitor would appear at the door with concerns or curiosity about some entomological dilemma. He met thousands of people this way, sharing his experience and enthusiasm with each and every one. At one time he was a popular voice on local radio for ask-the-bug-doctor programmes. It was always a treat to tune in because you never knew what people would call in to ask, and you could never guess how Rob was going to respond. He served the agricultural extension service through his contacts with Manitoba Agriculture, Food and Rural Initiatives to provide identification of known and new pest problems. In 2007, his record of dealing with over 12,000 extension calls during his career was recognized by his receipt of a University of Manitoba Annual Outreach Award.

Rob was an untiring supporter of collections and collection management in Canada, and when he assumed the curatorship of the entomological museum upon arrival in

Winnipeg, the collection immediately began to expand. In 1983, the museum was given the title, the J.B. Wallis Museum of Entomology, to commemorate the contributions and early development of the collection by J.B. Wallis. Rob presided over the small naming ceremony, and was clearly in his glory in dedicating the museum to the memory of a former water beetle specialist. From that time, the collection has grown from a modest 50,000 - 60,000 specimens to where it stands today, at an estimated 2,000,000 specimens. Over the years, as the collection grew and several collections in Winnipeg were orphaned and donated to the JBWM, space available to work efficiently shrank. In 2000, Rob was integral in obtaining Canadian Foundation for Innovation funding to expand the museum facilities and to implement one of the first bar-coded databases for entomological museums in Canada. The museum now has enough space to accommodate many years' contributions of specimens, and, since May 2011, has had a new official name: the J.B. Wallis/R.E. Roughley Museum of Entomology, a fitting tribute to two water beetle specialists.

Rob had a big voice, a big personality and a big heart. There are few entomologists more generous with their time and expertise. He was endlessly supportive of students, and always provided the encouragement and enthusiasm for all things entomological that seemed to inspire so many of them. If you needed assistance, a reference, some specimens, an opinion, or an update on scores in the NHL games the night before, Rob was always there. He reveled in seeing some strange and unusual insect; he was always excited by whatever you had to share with him, even if it wasn't a beetle.

Rob has been an important component of the entomological community in Canada and he will be sorely missed. Rob is survived by his wife, Pearl, children Amy (Mike), grandsons Nicholas and Maxwell, Kate, Keegan, and stepsons Ryan and Chad.

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