

A tribute to Allan Harvey Reddoch (1931–2023), Canadian orchidologist and conservationist

JOYCE M. REDDOCH

548 Rivershore Crescent, Gloucester, Ontario K1J 7Y7 Canada; email: reddoch@magma.ca

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In October 2023, Allan (Figure 1) passed away in Ottawa at the age of 92. He was an Honorary Member of the Ottawa Field Naturalists' Club and a member for 57 years.

Allan is well known for his work on North American orchids done with his wife Joyce M. Reddoch. Their long-term population studies of Ottawa District orchids began in the 1960s and spanned half a century, resulting in many publications, including their classic 1997 monograph “The Orchids in the Ottawa District: floristics, phytogeography, population studies and historic review”. They were key players in some of the most extensive and important work on the biology of North American orchids. Allan’s interest, encouragement, and meticulous review of the work of others were unsurpassed. (Catling *in press*)

Early Years

Allan spent the first decade of his life at the east-end of urban Montreal. His Scottish father, Allan Reddoch, had served in the Royal Navy Reserve during World War I, and came to Canada in 1923 as the marine engineer accompanying the Glasgow-built ship, *Frank B. Baird*, bound for the Great Lakes trade. Using Montreal as his home base, he continued his career on merchant ships, travelling across much of the world until his son Allan’s birth in January 1931. During World War II he served in the Canadian Navy Reserve as a Lieutenant Commander (Engineer). In 1941 Allan Jr. and his Scottish mother, Mary Love Harvey (Reddoch), accompanied his father to postings in Newfoundland and New Brunswick, and then arrived with him in Ottawa the following March. Allan’s short stay in Newfoundland instilled in him a lifelong avoidance of eating—or even thinking about eating—cod.

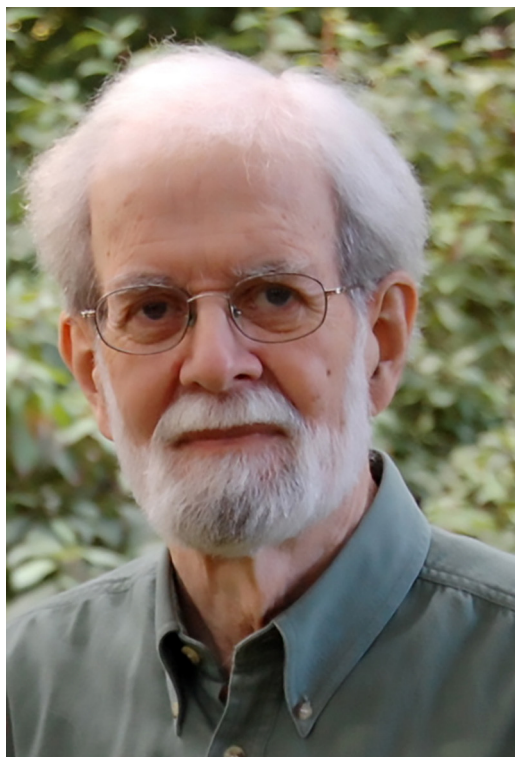


FIGURE 1. Allan Reddoch, 16 September, 2008. Photo: Joyce M. Reddoch.

Once in Ottawa, Allan was enrolled in Crichton Public School by the Scottish Principal, William MacSkimming, after whom the MacSkimming Outdoor Education Centre was named. Allan moved on through Glashan Public School to Lisgar Collegiate Institute, where his primary extracurricular activity was photography. One of his projects was photographing his fellow graduates for the 1949 year book.

His academic excellence was recognized by scholarships and prizes in mathematics, physics, and chemistry, and by the Silver Medal for having the highest marks in the graduating class. (That medal is now in Lisgar archives.)

University

At Queen's University, Allan enrolled in the Engineering Chemistry program in the currently named Faculty of Engineering and Applied Science. This is still the only program of its kind in North America in which the graduates are accredited as both charter chemists and professional engineers. Not that Allan wanted to be an engineer, although he did wear his iron ring until he retired.

In 1952, Allan, in his third year, and two fourth-year undergraduates made up the Queen's team that won first prize in the William Putnam Mathematical Competition, the only time that Queen's ever won the competition. This North American competition is widely considered to be the most prestigious university-level mathematical competition in the world. Among other academic awards at Queen's, Allan received the graduating year Chemistry Medal in 1953. (Allan's Putnam Medal and supporting material are now in the Queen's University Archives, and his Chemistry Medal is held by the Queen's Chemistry Department.)

In his teenage years, Allan had been impressed by Ansel Adams' glorious pictures of Yosemite and the Sierra Nevada, so it was not surprising that he chose to pursue his doctoral studies at the University of California, Berkeley. He and his friends took every opportunity to explore California's mountain landscapes.

After Allan had completed his degree in chemical physics (Ph.D. 1960), he returned to Ottawa as a Postdoctoral Fellow at the National Research Council of Canada (NRC). He subsequently became a Research Officer there, remaining until his retirement in 1991. His work involved the application of electron spin resonance spectroscopy to a variety of studies in physical chemistry and solid state physics. Allan was fortunate that most of his NRC career was during NRC's golden years. A change of government in 1984 resulted in declining support for scientific research.

Orchid Studies

Back in Ottawa, Allan continued to hike and photograph, but it was only when he joined an Ottawa Field Naturalists' Club (OFNC) field trip in 1967 that his interests began to focus on orchids. The trip leader was the widely respected researcher of North American and Mexican orchids, Ed Greenwood (Reddoch and Reddoch 2002). When Ed realized at the beginning of the trip that they had similar educational

backgrounds, he introduced Allan to Joyce Dunston.

Allan and Joyce joined Ed's Native Orchid Location Survey that had as its goal to search out and record the orchid colonies in the Ottawa District (within 50 km [30 miles] of the Parliament Buildings in Ottawa). In the next decade the group mapped over 4000 locations. Allan and Joyce discovered that they were a great team, not only in orchid research but in the rest of life, and they were married in 1970. They shared a lively curiosity about nature (Figure 2), a passion for conservation and nature education, enjoyed being outdoors (Figure 3), and had complementary research skills to apply to botanical questions.

They were curious about how long orchid colonies lived, how long individual plants lived, and many other aspects of orchid ecology and taxonomy. They set out to answer some of these questions for some species in the Ottawa District: some, quantitatively, by marking every plant (Figure 4) and following them for one to several decades, and others, qualitatively, to find out whether colonies were still there from year to year. They also investigated the species status of Lesser Round-leaved Orchid (*Platanthera orbiculata* (Pursh) Lindley) and Greater Round-leaved Orchid (*Platanthera macrophylla* (Goldie) P.M. Brown). Allan wrote the statistical and other programs required to analyze the data from these studies. They published their results in many publications including their 1997 monograph "The orchids in the Ottawa District: floristics, phytogeography, population studies and historical review" (Reddoch and Reddoch 1997). Their herbarium base was the Canadian



FIGURE 2. Allan Reddoch and a Mourning Cloak (*Nymphalis antiopa*) butterfly in the Larose Forest, Ottawa, 2 July 2010. Photo: Joyce M. Reddoch.



FIGURE 3. Allan Reddoch on the boardwalk of the Mer Bleue Bog Conservation Area, Ottawa, 20 August 2014. Photo: Joyce M. Reddoch.

Museum of Nature, where they were Research Associates. Their work was recognized by Honorary Memberships in the OFNC in 2000 (OFNC 2023; conferred in 2021) and by Certificates of Recognition from the

Canadian Orchid Congress in 2014. The latter specifically recognizes their production of the largest assemblage of long-term studies in Canada.

Serving the Ottawa Field Naturalists' Club

Allan and Joyce joined the Club in 1967 in the midst of a decade of intense conservation activity, aimed primarily at educating the National Capital Commission on the biological significance of the Mer Bleue Bog and Gatineau Park. Allan became chairman of the Research and Briefs Committee in 1973. A year later that committee was combined with the Natural Areas Committee to form the Conservation Committee. Allan was the chairman of that committee in 1974 and 1975 and remained on it preparing briefs throughout the 1970s. The committee's major accomplishment during that decade was identifying and describing significant natural areas in the Regional Municipality of Ottawa-Carleton (now City of Ottawa) as guidance for the Region's Official Plan. The Club's submissions were based on the knowledge of its members and extensive field work by Conservation Committee members, and included, for example, the 76-page brief submitted in 1978 (Dugal *et al.* 1978). During his time on the OFNC Council (now Board of Directors), Allan also served



FIGURE 4. Allan Reddoch measuring a Ragged Fringed Orchid (*Platanthera lacera* (Michaux) G. Don) in the Larose Forest, Ottawa, 25 June 2007. Photo: Joyce M. Reddoch.



FIGURE 5. Allan Reddoch constructing a garden arbour in 2006. Photo: Joyce M. Reddoch.



FIGURE 6. Allan Reddoch and Paul Catling examining Paul's recent discovery of Great Plains Ladies'-tresses (*Spiranthes magnicamporum* Sheviak) in the Burnt Lands Alvar, Ottawa, 19 September 2013. Photo: Joyce M. Reddoch.

as Corresponding Secretary.

Other Interests

Allan's interests were widespread and included wood identification, woodworking (Figure 5), astronomy, history, eastern art and architecture, and family history. He and an Australian cousin traced their rather uncommon surname back to Linlithgow, Scotland, where their ancestors had lived at least as far back as 1600, when parish records began.

Acknowledgements

Many thanks to Paul Catling (Figure 6), Barbara Beake, and Marilyn Light for their insights and suggestions. This account is based on Allan's notes and family knowledge, a copy of his 4-cm-thick Conservation Committee Diary, and my own memories.

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