

## A Liber Amicorum: Irwin Brodo

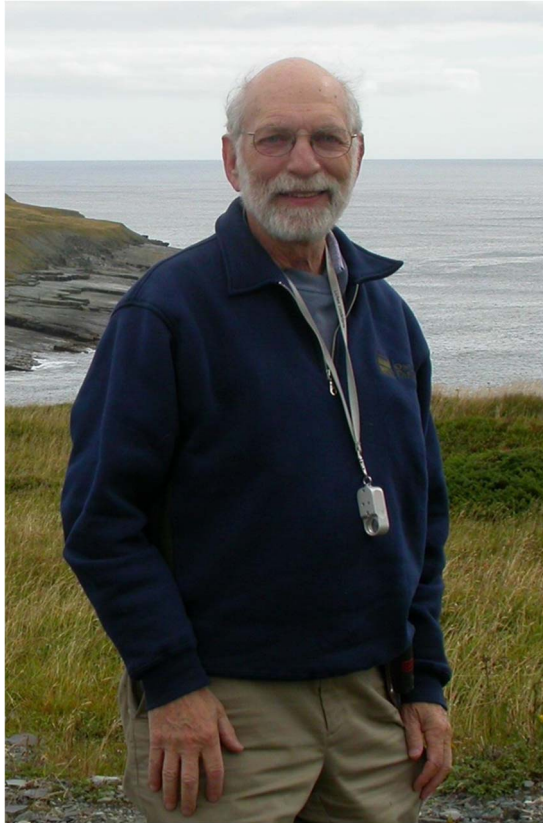


FIG. 1. Irwin Brodo in Newfoundland, Canada, 2007.

This issue of *The Lichenologist* is dedicated to Irwin (Ernie) Brodo (Fig. 1) on the occasion of his 80th birthday.

Ernie has been a mainstay in North American lichenology for over 50 years. He was born on November 7, 1935 in New York City, where he obtained an undergraduate degree in biology at the City College of New York (now part of the City University of New York) in 1957. In 1959, he received a master's degree from Cornell University in Ithaca, New York, where his distinguished

career in lichenology began. The absence of a lichenologist at Cornell prompted Ernie to seek the assistance of Mason Hale at the Smithsonian Institution to complete ecological studies on lichens, but he was largely self-taught during this time. With his interest in lichens piqued, Ernie headed to Michigan State University (MSU) to complete a doctorate under the supervision of Henry Imshaug. He received his Ph.D. in 1965 for a series of ecological and floristic studies on the lichens of Long Island.

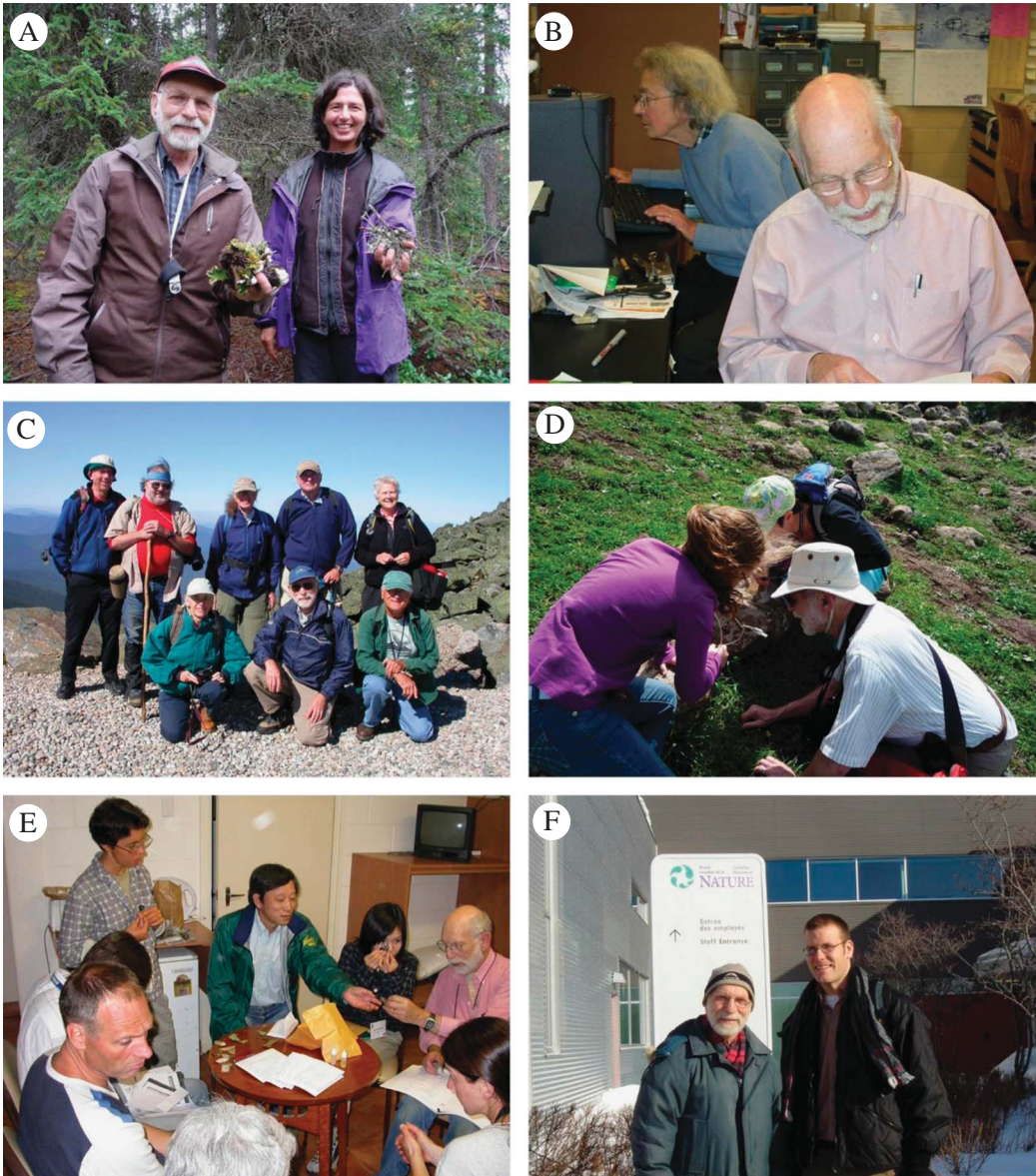


FIG. 2. Irwin Brodo. A, in the field with Jennifer Staniforth in the Yukon Territory, Canada; B, in the laboratory with Chicita Culberson at Duke University, USA; C, atop Mount Washington with notable north-eastern American cryptogamists, New Hampshire, USA; D, in the field in Israel; E, identifying specimens in Australia; F, in front of the new Canadian Museum of Nature Building with the first author in 2006, Québec, Canada.

These studies led to his first publication in *Ecology* and a 330-page book on the lichens of Long Island that was published in 1968 and remains in print. His volume on Long Island lichens was the first, and until this

year remained the only, taxonomically comprehensive treatment of lichens in any part of the North American Coastal Plain. The Coastal Plain is a vast coastal region renowned for its biodiversity and scenic

beauty that spans the entire eastern United States, as well as parts of Canada. His seminal work in this region is still one of the few floristic studies on North American lichens with a comprehensive treatment of crustose species.

After graduating from MSU, Ernie's first position was at Chatham College in Pittsburgh, Pennsylvania, as an assistant professor teaching biology and botany. Less than a year later, he moved to Canada after accepting the position of Curator of Lichens at the National Museum of Natural Sciences of Canada (now the Canadian Museum of Nature). When he arrived, there were only 18 000 lichen specimens in the collection. Over the subsequent decades Ernie led the effort to transform the institution's holding into a globally important collection of over 124 000 well-annotated specimens. He also made considerable contributions to the lichen collections of other herbaria, particularly through his *Exsiccati* (*Lichenes Canadenses Exsiccati*) of 225 numbers that were distributed to herbaria throughout Canada and internationally.

Beginning with his early work on the lichens of his native city and its unique environs, Ernie established a diverse research programme grounded on careful and meticulous studies of ecology, taxonomy, and systematics that continues to this day. His formal titles have changed over the years (Curator of Lichens, 1965–1991; Chief, Botany Division, 1981–1989; Research Scientist, 1989–2000 – retired; Research Scientist Emeritus/Research Associate, 2000–present), but the quality of his work and his enthusiasm for sharing it with others has remained consistent. He has made major advances in the field of lichenology through over 140 publications, including important revisions of several lichen genera: *Cocotrema* (1973), *Alectoria* and its allies (1977), the *Lecanora subfusca* group (1984), *Amygdalaria* (1987), *Ochrolechia* (1990), *Cladonia* of the Queen Charlotte Islands (now Haida Gwaii) (1996), and *Haematomma* (2008). He has described, usually with colleagues, over 50 species or subspecies and two genera, *Bryoria* (1977) and *Nodobryoria* (1995), and has made over 60 new combinations. Floristically, Ernie has given

considerable attention to Haida Gwaii, globally unique hyperoceanic islands off the coast of British Columbia in western Canada, which has resulted in numerous publications, over 20 species new to science, and a list of over 570 species. He has also done important floristic work closer to home in southern Ontario, particularly in the Ottawa region, which led to an identification guide for the 260 known species. There can be little doubt that the best known of his works is an award-winning 795-page, co-authored book titled *Lichens of North America*, an encyclopedic guide with over 900 beautiful photographs that was published in 2001. Over 15 000 copies have been sold. It has profoundly increased interest in, and accessibility of, the lichens in North America. Indeed, this book was one of the primary reasons why one of us (JL) entered the field of lichenology.

Contributing to professional organizations was also a regular part of Ernie's career. He held a variety of positions, including terms as president of the Canadian Parks and Wilderness Society (1975–1977), American Bryological and Lichenological Society (1978–1980), Canadian Botanical Association (1988–1990), Ottawa Field-Naturalists (1990–1992), and the International Association for Lichenology (2004–2008).

Ernie's contributions and dedication to the field of lichenology have earned him many accolades. Major awards include the Acharius medal for lifelong contributions to lichenology from the International Association for Lichenology, the Mary Elliot Award for service to the Canadian Botanical Association, and the George Lawson Medal for contributions to Canadian botany and for his book, *Lichens of North America*. He has also been honoured by having several species named after him (some in this special issue of *The Lichenologist*), and one genus named after him, *Brodoa* (1986). In 2013, Carleton University (Ottawa, Canada) also awarded him an honorary doctorate.

When one of us (TM) first came to the Canadian Museum of Nature in 2005 with a large pile of lichen specimens from his master's research, Ernie cleared his schedule and spent several weeks running TLC plates and helping to identify all of the material.

This experience exemplifies that while Ernie is a gifted lichenologist with a celebrated career, he is also very kind and generous with his time. For decades he has regularly made time to help visitors (including FL in the early eighties) at the National Herbarium (CANL), given presentations to botanical and naturalist groups, and given workshops throughout North America, including an annual week-long course on crustose lichens at the Humboldt Field Research Institute in Maine for the last 14 years (Fig. 2). He was also the main advisor for two M.Sc. students (Sharon Gowan and FL), but trained many more lichenologists including Stephen Clayden.

In 2015, FL approached JL with the idea of co-editing a Festschrift for Ernie. Peter Crittenden then graciously agreed for *The Lichenologist* to serve as a venue for a series of contributions by some of those who have known and been influenced by Ernie over the years; Ernie has been a staunch supporter of the British Lichen Society and served on the Editorial Board of *The Lichenologist* from 2001–13. We are fully aware that many more lichenologists would have liked to have

contributed to this Festschrift, and we apologize for being unable to include them. As demonstrated by the 16 articles included here (65 authors from 13 countries), the popularity of Ernie far exceeds the capacity of this special issue and its editors. Considering everything that he has done for others and the field of lichenology, we are honoured to dedicate this issue to Ernie Brodo in celebration of his 80th birthday. While we are elated to mark this occasion, readers should not be misled into thinking that it means Ernie shows any signs of slowing down. Indeed, at the beginning of 2016 he published a 427-page book updating the keys from *Lichens of North America*.

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and François Lutzoni**

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