

IN MEMORIAM —DANIEL D. PALMER

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The Michigan botanical community lost a treasured colleague and friend with the passing of Daniel Dooley Palmer (Nov. 12, 1930–Oct. 14, 2024). Dan had an unbridled love for the natural world, a compassion for all living things and endless curiosity about the world around him—history, rocks, trees, and especially, ferns.

Dan was born in Frankfort, Michigan. As a young man, he worked as a life-guard and in a pharmacy. Through his exploration of forests, dunes and wetlands, he developed a life-long love and commitment to land and biodiversity of Northern Michigan. Dan left for the University of Michigan in Ann Arbor, where he met his future wife, Helen who was a fellow student of pharmacology and would be his lifelong companion and partner in his ventures. He stayed on to earn his medical degree and went on to serve in the U.S. Airforce in Japan, and at the Mayo Clinic. Finally, he followed Helen to her native Honolulu, Hawaiʻi, settling in the Mānoa Valley, where they raised four children, Sean, Erin, Bridget, and Finn. Dan taught Pharmacology to the first cohort of students at the University of Hawaiʻi in 1966, and continued teaching until 2002 while maintaining a successful dermatology practice (Vasquez 2025).

In his 70+ years exploring remote mountains of the Hawaiian Islands, Dan came to know plants and birds in imperiled habitats that have now disappeared from living memory, after suffering the ravages of avian malaria and wave after wave of invasive species. Guided by his sense of adventure, his love of nature and his extraordinary field knowledge of a more intact, diverse Hawaiʻi, he began to tackle problems in Hawaiian fern taxonomy. As their children grew older, he decided to retire early, so he and Helen could devote time to travel internationally, and he could pursue his second career as a botanist. Dan took the opportunity to visit herbaria including Leningrad's Komarov Institute, London's Royal Botanic Gardens, Kew, Tokyo University, and Paris's Jardin de Plantes. With his deep commitment to botanical scholarship and original research, he studied Hawaiʻi's earliest collections and addressed centuries-old misunderstandings through careful examination of type specimens. He resolved misapplications of names, at a time before the digitization of taxonomic literature and specimens greatly facilitated such work. Much of this research (Palmer 1994; 1997; 2002; 2005, Smith and Palmer 1995; Wagner et al. 1999) culminated in



FIGURE 1. Dan Palmer in the Palmer Woods Forest Reserve, Leelanau Co. August 14, 2017. Photo courtesy Heather Higham (<https://snaphappygal.com/>).

Hawai'i's ferns and fern allies (Palmer 2003), an authoritative reference, and the first comprehensive treatment since Hillebrand (1888), who coincidentally was also an accomplished doctor of medicine. Dan continued to mentor students and colleagues working on Hawaiian fern and lycophyte diversity and to participate in research (Ranker et al. 2019) until the end of his life. He donated 2,600 specimens to the Joseph F. Rock herbarium (HAW) at the University of Hawai'i, Mānoa where they will continue to serve researchers.

In addition to his rich botanical life and medical practice in Hawai'i, Helen and Dan frequently returned to his native Northern Michigan to enjoy the spring ephemerals and idyllic summers of the northern forest with children and grandchildren. After the completion of the fern and lycophyte flora of Hawai'i, Dan began to work in earnest on *Michigan ferns and lycophytes: A guide to species*

of the Great Lakes region, published in 2018. A thoughtful presentation reflecting many years of intimate field experience, Great Lakes botanists will find well-organized tables outlining traits for challenging genera like *Botrychium*, and helpful comparisons of hybrids to progenitors in *Equisetum*, *Dryopteris* and *Woodsia*. Dan left another gift to the world through his interpretation of our extraordinary natural heritage, making it accessible to a popular audience and valuable to professionals in the form of a beautifully written and illustrated flora that provides a foundation for continuing research.

In addition to his many contributions as a pteridologist, Dan had a great interest in sustainable forestry and conservation. Around 1980, Dan and Helen began acquiring forested land in Leelanau County in the vicinity of Sleeping Bear Dunes National Lakeshore. They pieced together more than a dozen individual parcels, ultimately representing the largest privately-held contiguous tract of forest remaining in a rapidly gentrifying Leelanau County. Dan managed the land as a working forest, with the goal of sustainable timber harvests and stand improvement, while also providing habitat for abundant wildlife, including 230 native vascular plant species (May 2014). In 2015, the land was transferred from the Palmer family to the Leelanau Conservancy. With recent additions, Palmer Woods Forest Reserve now encompasses 1156 acres and more than 43 miles of trails open to the public.

Dan's passion for ferns and land stewardship intersected along a stream at the site of an old sawmill in the Palmer Woods property (Figure 1). In addition to an impressive number of native ferns already growing wild on the property, Dan started assembling a collection of regionally native ferns that thrived in the unusual organic soils derived from old sawdust leftover from the historic mill. The area has now been formally designated the Helen and Dan Palmer Fern Garden, and a boardwalk has been constructed and signage installed to educate the public on the extraordinary diversity of ferns and lycophyte of the Great Lakes. The Leelanau Conservancy continues to expand the collection to include as many species from the region as possible, providing a unique educational opportunity, and a peaceful place to contemplate the remarkable legacy and the vision that resulted in the long-term conservation of one of Leelanau County's last forested places.

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