HUGH HELLMUT ILTIS (1925–2016)

With Dr. Hugh H. Iltis, the U.S. lost one of the few remaining veterans of his venerable generation (among them R. McVaugh, J.A. Steyermark, S.J. Carlquist, L. Constance, R.F. Thorne, C.B. Heiser, W.A. Weber, and R.L. Dressler—all of whom Hugh Iltis counted as friends) when he passed away peacefully at his beloved home in the University of Wisconsin Arboretum on 19 December 2016. Iltis’s health began deteriorating in the fall of 2006, limiting his ability to work effectively, but he never lost his interest in and love of plants right up to the very end of life. He married three times and is survived by four sons.

Hugh Iltis was born on 7 April 1925 in Brno, then Czechoslovakia (now Czech Republic), the second of two sons to Hugo Iltis and his wife Anni (Liebscher). Because Hugo was Jewish and a left-wing political activist, the family, fearing reprisals by Nazi troops who by then had occupied the Sudetenland, fled to the United States just a few weeks before the German Wehrmacht moved into the remainder of Czechoslovakia. They settled in Fredericksburg, Virginia, where Hugh botanized and met prominent plant taxonomists working at the Smithsonian Institution and Department of Agriculture (e.g., F.R. Fosberg, F.J. Hermann) while completing his public school education. He entered the University of Tennessee in 1943, was drafted by the U.S. Army in 1944, and served in Europe until 1946 as a medic and intelligence officer, interrogating captured German officers and preparing documents for the Nuremberg trials.

Iltis applied himself to botany from an early age. His father, a botanist, educator, and biographer of Mendel, took the family on summer vacations into the surrounding mountains, where he and his sons would observe and study plants and insects. While there, the boys also grubbed for leftover potatoes in farmers’ fields. After the war Iltis returned to the University of Tennessee, where he came under the influence of A.J. Sharp while studying and receiving his B.A. degree (1948). He then began a long and fruitful association with the Missouri Botanical Garden, working as a research assistant to R.E. Woodson and botanizing in the Ozarks with Steyermark while earning his M.A. and Ph.D. degrees (1950 and 1952, respectively) from Washington University. Iltis accepted a position on the faculty of the University of Arkansas (1952–1955) before joining the University of Wisconsin–Madison as an Assistant Professor of Botany and Curator of the Herbarium (1955), working his way up to full Professor of Botany and Director of the Herbarium (1967), and retiring in 1993. Over the years he held visiting professorships and lectureships at various universities and other institutions in the U.S., Japan, U.S.S.R., Italy, Mexico, Costa Rica, and Venezuela.

Iltis led an astonishingly energetic life, especially during his first two decades at the UW–Madison. He made it one of his prime tasks to build the already respected Department of Botany Herbarium (WIS) into the superlative institution it is today. He continued to expand the “Hughbarium” (sometimes contending with administrative officials whom he viewed as uncooperative) by initiating widespread exchanges, commencing diverse exploration, accepting gifts, making purchases, and incorporating “orphan” collections, all the while carrying on an extensive correspondence, soliciting the borrowing of WIS material, and attending scientific meetings. A great believer in eclectic herbaria, he incorporated coarse plant parts, ethnobotanical samples, “mass collections”, original descriptions, photographs, and pencil rubbings among the specimens. He and his students crisscrossed Wisconsin to amass material on which to help base taxonomic publications dealing with the occurrence of plants in the state, and they went on field trips to Mexico and Central and South America to study plants of the groups on which they were working. Iltis also did field work elsewhere in the U.S., including Hawaii, and the U.S.S.R., and he made six visits to European herbaria. In the field he displayed a broad knowledge of plants, an observant eye, and the compulsion to do general collecting at every opportunity. On the altiplano of southern Peru he and his companions experienced on expeditions; led marvelous field trips;
threw storied parties at his comfortable home; and enjoyed visiting with old friends and young biologists, no matter where they were from or what their interests might be.

An inveterate teacher, Iltis would transform any moment into a learning opportunity. He taught plant geography (undoubtedly one of the great courses in the history of the department) and classification and evolution of the grasses, which he made truly exciting owing to his expertise and enthusiasm; and from time to time, plant taxonomy, advanced plant taxonomy, and taxonomy seminars and journal reviews; and for one or two terms, “Man’s Need for Nature”. Always supportive of his students, Iltis was prone to offering information, suggestions, and advice, sometimes more than they wanted to hear, in an earnest effort to educate them and make them better citizens. He encouraged them to experience botany in the field, take classes at biological stations, attend symposia, and join environmental organizations. He formally mentored 37 graduate students who successfully completed M.S. and/or Ph.D. degrees, many of whom have gone on to successful research and academic careers, and informally taught and helped a number of other students and researchers. He encouraged Mexican biologists to attend UW—Madison, sometimes offering rent-free residence at his home while they studied. He further expanded vital connections between UW—Madison and Mexico by brokering a cooperative academic program between the UW and the University of Guadalajara and later fostering broader formal agreements between the two institutions. Dozens of students and faculty members from at least 12 departments and institutes of the UW have participated under the aegis of these initiatives. In 2010 he endowed the Wisconsin State Herbarium with funds to establish the Hugh H. Iltis Biodiversity Awards for the support of graduate student fieldwork in the area of plant taxonomy.

A renowned taxonomist, Iltis’s research pertained mainly to the Capparaceae and Cleomaceae, families on which he authored or coauthored 66 floristic or monographic papers and notes, many in close collaboration with X. Cornejo S. or T.S. Cochrane, but he was also a student of the floras of Wisconsin and western Mexico. An alpha-taxonomist, he dealt with the taxonomy and distribution of species and subspecies, placing less emphasis on taxonomy at the generic level until late in life. He regarded his 1957 paper “... Evolution and phylogeny of western North American Cleimoideae” as a landmark among his works. However, my personal suspicions are that biogeography, especially of the Americas, was of stronger interest than taxonomy per se, and that he considered his espousal of long-distance dispersal (at a time when others belittled or dismissed that theory) as a major contribution. Having learned from his father and E.S. Anderson and P. Weatherwax, all of whom were intrigued by maize, and teaching the “grass course”, which included the evolutionary history of cereal grains, Iltis was stimulated to investigate the taxonomy of Zea and the origin of maize, about which he developed an understanding that was unparalleled in scope.

In the mid-1950s Iltis launched his long-term commitment to environmental issues and his determination to bring them to public attention. Over the course of five decades he testified at hearings, granted interviews, wrote letters, and published some 45 eloquent writings on environmental issues. He spoke on hundreds of occasions around the U.S. and in other countries (mostly in Latin America) to various educational groups, conferences, and general audiences, (in the words of Professor Emeritus S.A. Temple) “packing each lecture with gibes at religious leaders for opposing population control, politicians for holding short-sighted, environmentally damaging, world views, industry for being greedy, and anyone else for being ignorant”. He liked to finish lectures by admonishing students “to be a good ancestor” and leave the world a better place. Informed, articulate, and passionate, he achieved a well-earned reputation as one of our most active and knowledgeable environmentalists. He contributed directly to the founding of the Wisconsin Chapter of The Nature Conservancy, acquisition of a number of iconic natural areas in southern Wisconsin, outlawing of DDT in Wisconsin, formulation of Hawaii’s Natural Areas Law, and creation of the 345,000-acre Sierra de Manantlán Biosphere Reserve in western Mexico.

Iltis emphasized the importance of scientific study of nature and the necessity of practicing a conservation ethic. As early as 1964 he advocated for (1) human ecology, the idea that mankind has adaptations to and biological needs for nature, natural beauty, and biodiversity, and by 1974 for (2) in situ preservation of genetic diversity as the necessary concomitant of continuing evolution, including in indigenous crops and their ancestral species. Meanwhile, he discussed (3) societal and biological issues resulting from human population growth, economic development, and the continuing and accelerating magnitude and complexity of modern technological civilization. He railed against the heedless destruction of biological diversity, the mindless consumption of material possessions, and the unsustainable increase in human population, weaving together a remarkable amount of information from seemingly disparate fields to demonstrate biodiversity’s relevance not only to habitat destruction, over-population, over-exploitation, extinction, and pollution but also biodiversity’s relationship to agriculture, ecological services, human well-being, business, culture, and leisure. Hearing Iltis preach that we are neither separate from nature nor immune to its laws was an epiphany for people holding contemporary conservative values, especially those not immersed in academia. Like Darwin, he had a much deeper sense of our place in the natural world than did people who disagreed with or even loathed his brand of liberalism. Iltis was fond of saying everyone needs a built-in “crap detector” to cut through the talk, prejudice, and muck to get to the truth, which is that the world is under siege and that above all else we must preserve the natural systems on which all life depends.

Over the course of his long career Iltis was elected a fellow of the American Association for the Advancement of Science (1972)
and the Linnean Society of London (1982), was made a Ph.D. Honoris Causa of the University of Guadalajara, Mexico (2007), and received the Presidential Award of the Republic of Mexico (1987), Asa Gray Award of the American Society of Plant Taxonomy (1994), Puga Medal of University of Guadalajara, Mexico (1994), Merit and Centennial Awards of the Botanical Society of America (1996 and 2006, respectively), Botanist of the Year Award of the Society for Economic Botany (1998), Distinguished Alumnus Award of the Missouri Botanical Garden (1999), and Medalla al Mérito Botánico of the Botanical Society of Mexico (2013). Other honors include conservation awards from The Nature Conservancy, State University of New York, Syracuse, Conservation Council of Hawaii, National Wildlife Federation, and Society for Conservation Biology. The Wisconsin Conservation Hall of Fame inducted Iltis in its 2017 class. He was a member of many conservation organizations. Scientists have thought it fitting to name one genus, 19 species (one a nom. nov.), one variety, and one forma of vascular plants after Iltis.

Iltis was of average size and build, but was endowed with a strong character. His voice was characterized by a slight central European accent, and his speech was frank. Daring, defiant, and driven, he could easily irk colleagues, who, however, never doubted his conviction as to the correctness of his views. He could just as easily be gracious and thoughtful, and if he wanted, downright charming, and he was the most generous of people when one needed help and support. His imagination, inquisitive mind, and boundless energy inspired and motivated people. Angry outbursts or occasional displays of meanness or eccentric conduct toward his fellow men repulsed others. Those close to him know that over the last one-and-a-half decades of life his character evolved into being much less on edge; he seemed have become in a kinder, gentler man. Strong-willed, temperamental, but loyal; opinionated, judgmental, but naturally entertaining … colleagues, associates, and acquaintances will each remember different traits of his personality.

Through his intellect, energy, and great love of plant diversity Hugh Iltis helped make the programs of the Wisconsin State Herbarium and the Department of Botany as a whole unquestionably outstanding. He also touched the lives of many non-scientists, teaching them about evolution and conservation. He expected all who learned from him to carry on his war against ignorance and stupidity and to fight on behalf of the environment. Iltis was a shining example of an environmentally, politically, and socially aware scientist, teacher, and citizen.

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Literature cited


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