John Curtis

At the Arboretum, we have a prairie named for him; in the classroom, we have a vegetation book authored by him; and as part of our department and beyond, we have his legacy of research and conservation. All were solid reasons for the Botany Department and Arboretum to celebrate the 100th anniversary of Curtis's birth, which occurred in Waukesha in 1913.

Who was John Curtis? Curtis received his A.B. at Carroll College in 1934 and his PhD in Botany at UW in 1937, where he was first an instructor, then a professor (assistant 1940, associate 1945 and full 1951). He was a Guggenheim Fellow in 1942 and in 1956. From 1952-55, he chaired the State Board for Protection of Natural Areas, and from 1954-1961, he was a research associate with the Milwaukee Public Museum. Three papers, published in the journal Ecology (1949, 50, and 51) were: “A study of relic Wisconsin prairies by the species-presence method;” “The interrelations of certain analytic and synthetic phytosociological characters;” and “An upland forest continuum in the prairie-forest border region of Wisconsin.” These and the many dissertations that his students wrote about plant communities led to his book, “The Vegetation of Wisconsin: An Ordination of Plant Communities, published 1959.

One might wonder how a plant physiologist interested in orchids managed to accomplish the above. Obviously, he drew substantially from the work of his 39 graduate students, who included Roger Bray, Grant Cottam, Bob McIntosh, and Orie Loucks. Together they developed ways to depict vegetation in 3-D graphs (ordination, now a subset of ecological science), described vegetation as a continuum, rather than discrete communities), and alerted broad audiences to the increasing fragmentation of woodlands (Cadiz Township map x time).

Curtis died in 1961 and left a legacy much larger than the above summary implies. His carefully-sampled field sites (>1000, of which >300 were forests, see map bottom right) depended on a detailed approach to data collection and storage; those data have been archived and used extensively by Don Waller and his students, who have resampled and assessed changes in Wisconsin forests. A plaque at Wyalusing State Park recognizes his role in establishing the state’s Scientific/Natural Areas Program. And the “world’s oldest restored prairie” now bears his name, signifying his many advisory roles at the Arboretum.

Plate 65.—Model of three-dimensional ordination of stands in southern upland forest. The balls represent the amounts of red oak (*Quercus borealis*) in each stand, with the size of the ball proportional to the basal area per acre.