



## **A HISTORY OF THE LEGACY OF FOUNDATIONAL IDEAS AND APPLIED APPROACHES THAT HAVE ARISEN OUT OF THE CHICAGO REGION - 1620 TO THE PRESENT**

*The following is a progressive awareness through history of our relationship to the earth, not as dominators and destroyers, but as respectful stewards and caretakers.*

*Relevant history is shown in standard typeface. Those outside of the region who have added significantly to our understanding of the land and landscape are shown in a **blue typeface**; contributions made by people in the southern Lake Michigan area are shown in a **red typeface**; contributions made by our team are shown in a **dark red typeface**.*

- 1620 Western agriculture and worldview arrives in North America, bringing a significant change in the relationship between human culture and the warp and weft of soil and life.
- 1634 Rene Descartes publishes *The World*, soon followed by other philosophical works that attempt to reduce our understanding of the world to component parts with targeted solutions. Contemporary myths are set aside in favor of the scientific method.
- 1753 Linnaeus publishes *Species Planetarium*, transforming the study of plants from objects of herbal interests to the discovery and naming of individual taxonomic entities following a binomial nomenclature.
- 1779 George Rogers Clark marches his small army from Kaskaskia to Vincennes across the water-filled prairies of southern Illinois, wades across the Wabash River.
- 1815 Expanded drainage and tillage of much of Ohio, Indiana, and much of Illinois. Settlers began to notice significant differences between the overworked lands of the east and the fresh vitality of the soils of the newly secured Old Northwest Territory.
- 1818 Illinois incorporated as a state, but agricultural and western cultural approaches limited to south of the Indian Boundary and transportation easement from Lake Michigan to the Illinois River.
- 1825 Artists of the Hudson River School, such as Thomas Cole and Asher Durand, begin to display a nostalgia for landscapes unsullied by Man, propagating the idea of the “forest primeval.” Although this view discounted the humanity of the “savage”, it nevertheless recognized that the contemporary culture’s resource-extractive doctrine provided little celebration or respect for God’s creation.
- 1832 End of the Blackhawk War; Chicago soon incorporated. With the opening of the beautiful prairies and open forests of northern Illinois and Wisconsin—still pristine.
- 1836 Ralph Waldo Emerson publishes his essay on *Nature*, in which he divided nature into four usages: commodity, beauty, language, and discipline. Such distinctions defined the ways by which humans use nature for their basic needs, their desire for delight, communication with each other, and an understanding of the world apart from the raw exploitation of its “resources.”
- 1848 Wisconsin incorporated as a state, the first year of student matriculation occurring a year later at the University of Wisconsin at Madison.
- 1854 Henry David Thoreau writes of his musings on Walden Pond and in the surrounding woodlands.

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- 1858 Charles Darwin publishes the *Origin of Species*, which demythologized creation and spoke to a “natural” ascent of Man and all things.
- 1860 A 22-year old John Muir graduates from the University of Wisconsin, captivated by the ambient natural beauty. He would later become a key figure in the preservation of natural land in national parks. Also, Jens Jensen born, who would revolutionize the rather formal iterations of landscape architecture to reflect a more “naturalistic” scene.
- 1870 Established by Steven Forbes, the Illinois Natural History Survey begins to study the plants and animals of the Illinois River and its valley.
- 1874 Amos Sawyer publishes an essay entitled *The Reason For Climate Change in Illinois*, which points at the impact of agricultural ditching and the draining of the land.
- 1891 Higley and Raddin publish the first *Flora of the Chicago Region*, which delineated each known species and a little about its local habitat in Cook County and part of Lake County, Indiana.
- 1896 William Wirt Calkins, through the Chicago Academy of Science publishes a *Lichen Flora of Chicago and Vicinity*. At the turn of the century, Chicagoans are becoming more and more interested in the natural history of the region.
- 1899 Engineers reverse the flow of the Chicago River to flow into the Illinois River. The low lake levels of the Lake Michigan combined with the increased population equivalent of the city, all life in the Illinois River was annihilated in the pollution of the 1920’s. Only sewage fungus and sludge worms could survive in the waterway from Chicago to Alton.
- 1899 Henry C. Cowles, who pioneered the science of ecology from his post at the University of Chicago, publishes the *Physiological Ecology of the Vegetation on the Sand Dunes of Lake Michigan*, soon followed by other ecological monographs.
- 1908 The Chicago Prairie Club began to organized hikes into the country so urban-dwellers could have sojourns of respite, relaxation, and community in the bucolic open lands and natural areas ambient to the city. It played a prominent role in the establishment of the forest preserve system, the Indiana Dunes State Park, and the Indiana Dunes National Lakeshore.
- 1909 Daniel Burnham produces the *Plan of Chicago*, which inspired the preservation of lands in the metropolitan region to give citizens respite from the hustle, bustle, and pollution of the city.
- 1913 Illinois Forest Preserve act enacted, largely due to the efforts of Jens Jensen and Dwight Perkins.
- 1915 Cook County forest preserves were established throughout the county, which soon led to the establishment of similar organizations in the ambient counties of Illinois.
- 1915 Wilhelm Miller published *Prairie Spirit in Landscape Gardening*, which responded to the growing interest of Illinoisans in the beauty and hardiness of native plants.
- 1918 Post-war industrialization of agriculture, which accelerated soil loss and water pollution.
- 1927 High school teacher at Lakeside, publishes a *Flora of the Chicago region*, with identification keys and enhanced annotations and habitat descriptions; its region expanded from Higley and Raddin to include Lake, Du Page, and portions of Will counties.
- 1930 Donald Culross Peattie publishes the *Flora of the Indiana Dunes*, still a popular local guide.
- 1934 “Dust Bowl” begins, worn-out soils blow away, collapsing much of the agricultural economy of the Midwest. Soon after, numerous studies address the impact of poor soil husbandry.

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- 1940 Charles C. Deam publishes his *Flora of Indiana*, which greatly expanded the format of floras written up to that time to include detailed geographic and habitat descriptions for Indiana plants. It even included some lists of associated species, which much inspired a young Floyd Swink.
- 1945 Post-war expansion of industrial agriculture, soon to include pesticides, fertilizer, exaggerated and mechanized irrigation, and eventually genetically modified “products.” Surface and air transportation systems expanded greatly.
- 1949 Aldo Leopold publishes *A Sand County Almanac*, which appeals to our culture to develop a land ethic that enfranchises the plants and animals into our public policies.
- 1951 The Nature Conservancy founded to preserve land, with botanist George Fell as its first director; he, with others, conceived the approach of having remnant land purchased, stewarded, and eventually owned by private interests. It has inspired numerous other organizations to pursue similar goals.
- 1953 Floyd Swink publishes *A Guide to the Wild Flowering Plants of the Chicago Region*, which provided the novice naturalist with an innovative letter-coded key for identification.
- 1955 May T. Watts, student of H. C. Cowles and head of education at the Morton Arboretum, in Lisle, Illinois, publishes the *Flower Finder* to provide the untrained citizen with an unintimidating way to identify many local wildflowers.
- 1958 William J. Beecher, visionary educator, brings environmental and natural history studies to the Chicago Academy of Science.
- 1960 Initiatives to save the beauty, structure, and biodiversity of the Indiana Dunes began in earnest. Perhaps headed up by another student of H. C. Cowles, Victor Shelford, an accomplished zoologist, many individuals were involved, including Floyd Swink.
- 1962 Rachel Carson publishes *Silent Spring*, which awoke a nation and the world to the idea that the headless use of pesticides may be generating a cascade of negative consequences that had not been, nor even could have been predicted.
- 1962 Raymond F. Schulenberg begins the restoration of a prairie in worn-out farmland at the Morton Arboretum. Within a decade it was the richest, most beautiful *de novo* restoration in existence---and remains so a half century later. This effort inspired hundreds of such efforts throughout the region.
- 1963 Illinois Nature Preserves Act enacted, which led to the bordering states establishing similar legislation.
- 1963 OpenLands Project is established to preserve and steward Chicago area landscapes. A year later, headed up by May T. Watts, the first reaches of the Illinois Prairie Path were established along defunct railroad beds.
- 1965 Pepoon’s flora now out of date and out of print, Herbert Lamp, of Northeastern Illinois University, asked Floyd Swink, late of the Cook County forest preserves, then of the Morton Arboretum to distill a list of the plants of the Chicago area from M. L. Fernald’s 8<sup>th</sup> edition of Gray’s Manual, which include all of the plants of the northeastern United States. This typescript “Lamp List” was soon mimeographed and in the hands of all the local naturalists. A growing number of students, teachers, and citizens were hungry for a deeper knowledge of the local flora.
- 1966 Mill’s, Starrett, and Belrose, of the Illinois Natural History Survey, published *Man’s Effect on the Fish and Wildlife of the Illinois River*, which brought home the idea that our relationship with a tract of land has ramifications all the way downstream in the watershed.
- 1969 Californian, David Brower, active in the Sierra Club, founds Friends of the Earth, and goes on to establish several enlightened institutes and organizations, including Earth Day, which began as an annual celebration a year later.

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- 1969 Floyd Swink, with the help of Raymond Schulenberg, published *Plants of the Chicago Region*, which detailed each species of plant the 22-county region around Chicago, and provided annotations with regard to associated plant species. The Morton Arboretum printed only 250 copies of the esoteric treatise, unable to conceive its immediate popularity.
- 1970 The Environmental Protection Act signed into law, which required a significant assessment of the impacts likely to result from any new proposed alterations or development of lands in the United States.
- 1972 The National Water Pollution Control Bill, known as the Clean Water Act was signed into law.
- 1973 The National Endangered Species Act was signed into law, which stimulated nearly all of the states to follow suit with their own assessments of the condition of their native species.
- 1973 Goose Lake Prairie, southwest of Chicago was the first large tract of remnant prairie land to be identified and preserved by state government, mostly through the efforts of Robert F. Betz, student of Floyd Swink and professor at North Illinois University, along with William Rutherford, of the Sierra Club.
- 1974 Floyd Swink published an update of *Plants of the Chicago Region*, which included newly discovered plants and refined associate lists, aided again by Raymond Schulenberg. 500 copies were made—nowhere nearly enough to satisfy the growing demand. Also involved in the effort was a young Gerould Wilhelm, who had worked on one of the first large environmental impact studies in the United States while in the U. S. Army Corps of Engineers. The study involved proposed duplicate locks and 12-foot channel on the Illinois Waterway.
- 1975 May T. Watts published *Reading the Landscape of America*, which enable one easily to see how a landscape changes in response to Man's relationship with it. The public's interest in our landscape continued to burgeon.
- 1976 An inventory and assessment of the remnant landscapes of Illinois, headed up by Jack White, was initiated as the Illinois Natural Area Inventory.
- 1977 Gerould Wilhelm publishes a *Natural Area Inventory of Kane County, Illinois*, which included a new methodology and array of metrics for assessing and describing the habitat quality of all undeveloped landscapes.
- 1977 The North Branch Prairie Project, a volunteer group headed up by Steven Packard, was initiated to work with the Cook County Forest Preserve District to apply rehabilitation, restoration and stewardship activities to areas along the North Branch of the Chicago River.
- 1979 In response to an exponential growth in the interest of local plants and natural areas, Floyd Swink and Gerould Wilhelm published a 3<sup>rd</sup> edition of *Plants of the Chicago Region*. This book updated the 1974 edition but added identification keys and a much more detailed description and application of the Floristic Quality Assessment system that Gerould Wilhelm had introduced in 1977. All of the non-native species in the text were rendered in an *italic* type font so the still-learning user could see immediately that the area he was in was prevailingly weedy or native. About 2000 copies were printed.
- 1979 This current iteration of *Plants of the Chicago Region* enabled Lori Otto, Pat Armstrong, and others to identify which plants were native and which were introduced. They almost immediately started the landscape gardening idiom known as the WildOnes.
- 1980 Gerould Wilhelm produces for the National Park Service a biological monograph on the flora and ecology of the Indiana Dunes National Lakeshore, which he updated in 1990.
- 1986 Fermi National Laboratory, under the direction of Robert F. Betz, began the largest landscape prairie restoration to date. The chief of the laboratory once remarked that the effort may one day be the more signal legacy of the lab.

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- 1994 Floyd Swink and Gerould Wilhelm produce, through the Indiana Academy of Sciences, an update and refinement of the 3<sup>rd</sup> edition of *Plants of the Chicago Region*. This 4<sup>th</sup> edition began to drift away from the 50-year-old nomenclature of the previous editions and to deploy a more contemporary names and concepts. 5500 copies of the book were printed, 40% of which were sold out due to a pre-publication sales offer!
- 1996. A coalition of numerous conservation groups, private businesses, and resource agencies formed Chicago Wilderness, which emphasizes through education and public awareness the aggregation of preserved and stewarded lands and waters in and about the Chicago metropolitan region.
- 2016 Again in response to the public's ever more sophisticated demand for information on the local plants, animals, and local ecosystems, Gerould Wilhelm and Laura Rericha will produce a flora of the Chicago region that will have all of the attributes of the book *Plants of the Chicago region*, but will add significant new elements. Genera will have descriptions and an example illustration. Species will have descriptions and be nomenclaturally and conceptually more in line with contemporary governmental lists and current taxonomic thinking. Moreover, the associate lists are being much expanded to include all of Laura's records on animals, insects and others, that have more than casual contact with local plants. This latter innovation has never before been included in a state or regional flora. It will make the book of interest to biologists all over the world.

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