

# THE INDIANA ACADEMY OF SCIENCE AND THE EARLY PRESERVATION OF NATURAL AREAS

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**ABSTRACT:** The Academy's original Natural Areas Preservation Committee (1953-56) laid the groundwork for preserving the Pine Hills tract in southwestern Montgomery County. Due to the Committee's effort, The Nature Conservancy organized an Indiana Chapter in 1959. Pine Hills was the first project of this Chapter, and the project's success provided the stimulus which led to the establishment of the Division of Nature Preserves in the Indiana Department of Natural Resources. The idea to establish the Division of Nature Preserves was first, and effectively, proposed in May 1964 by an Academy representative (Alton A. Lindsey). Members of the Indiana Academy of Science worked both inside the Academy and independently toward setting up the Indiana Dunes National Lakeshore. They also provided the scientific survey data that were used to justify protecting the valleys of Sugar Creek and Big Walnut Creek from planned impoundments.

**KEYWORDS:** Division of Nature Preserves, Ecologists Union, Hasselman family, Indiana Academy of Science, Indiana Dunes National Lakeshore, Nature Conservancy, Nature Preserves, Pine Hills, pioneer preservationists, and State Parks.

## INTRODUCTION

The preservation of small natural areas in the United States is the result of a socio-political-scientific movement of which the broader currents were initiated and guided by a few outdoor scientists and pushed to spectacular success by many people of a more pragmatic nature.

The unwisely named Ecologists Union was organized in 1945-46 as an activist offshoot of the Ecological Society of America. In 1951, urged by its Executive Director, botanist George B. Fell, the Ecologists Union changed its name to The Nature Conservancy, and the spectrum of its membership began to broaden. The Indiana Chapter did not exist until 1959, but six years earlier the Indiana Academy of Science had set up an equivalent agency.

The Academy's Centennial Volume, *History of the Indiana Academy of Science* (Daily and Daily, 1984), does not mention the Natural Areas Preservation Committee or its work for dates earlier than 1968, thus omitting its productive original period. The present writer, who organized and chaired the first such committee and is now its only survivor, is placing on record this first-hand account of early preservation history.

## PINE HILLS, THE FLAGSHIP NATURE PRESERVE

Pine Hills was the first Nature Conservancy project in Indiana. This project was the reason why the Indiana Chapter of TNC was established, and later it led to the creation of the Division of Nature Preserves in the Indiana Department of

Natural Resources. Therefore, the Pine Hills story covers the initiation of both the systematized private and official actions in this field.

Since 1911, 600 acres on Sugar Creek upstream from the 1878 covered bridge on SR-234 had been owned by the Hasselman family of Indianapolis. Meanders of Clifty Creek and Indian Creek as well as a stretch of Sugar Creek had cut deeply into the Mississippian sandstone to form four precipitous "backbone" ridges and two more obscure ones, each rimmed with white pines and hemlocks. From reading the publications by Friesner and Potzger (1933) and McCormick (1962) as well as through leading Purdue plant ecology field trips there twice yearly since 1947, Alton A. Lindsey (1969) came to value the Pine Hills area very highly. Primarily to protect this one tract "in perpetuity," he induced the Indiana Academy of Science to establish on 15 May 1953 (Daily, 1954, p. 10) a Natural Areas Preservation Committee and served as its Chairman until its temporary dissolution four years later. Other members of the original Committee were Richard A. Laubengayer, botanist of Wabash College, J.O. Cottingham, real-estate professional and amateur mycologist, and Kenneth Shockley, an attorney.

Considering that there was no Indiana Chapter of TNC, that only about 17 Hoosiers belonged to TNC, and that the Army Corps of Engineers had threatening designs on Sugar Creek Valley, the Academy approved the Committee's recommendation to buy and maintain a few "model" natural areas for preservation, science, and education. On 14 October 1954, the Academy also advanced the Natural Areas Preservation Committee from a temporary (special) committee to a standing (permanent) one and authorized (without any appropriation) the Committee to raise funds through gifts solicited from Academy members and the public (Daily, 1955, p. 15). No Academy money was ever allocated for the Committee's work, and, as it turned out, the Committee members never claimed or received reimbursement for travel and other expenses.

Of the Hasselmans, only elder brother Victor remained in Indiana by 1953, and his health was precarious. When the Committee Chairman first talked with him, the family was unwilling to sell Pine Hills. However, after several visits, the family set the price at \$40,000. After further visits, the family became so enthused at the prospect of preservation that the price went down to a nominal \$15,000 for the 600 acres. Cottingham's search yielded 17 abstracts for the land parcels which the Hasselmans had combined into the Pine Hills property.

In 1954, Helmut Kohnke and Alton Lindsey invited TNC chief George Fell to Indiana and showed him a few natural areas. In 1955, the Lindseys had George and wife Barbara as house guests. Miss Barbara Garst had been an undergraduate in Lindsey's plant ecology course at the University of New Mexico in about 1946. After their marriage, the Fells had worked, more than merely full time, without any salary for three years, building up the Ecologists Union and its successor The Nature Conservancy.

After the four of us spent 20 September 1955 at Pine Hills (letter from George B. Fell of 1 July 1980 to A.A. Lindsey), TNC agreed to take Pine Hills on as a high priority project. The next day the Fells took our abstracts and an attorney to Victor Hasselman and obtained an option to purchase. (Also, that day in Indianapolis, we four attended the funeral of John E. Potzger, eminent ecologist of Butler University.)

By this time, opposition to this project had developed within the group's leadership, some of whom considered it inappropriate for the Academy to own land. In 1956, the Executive Committee (Daily, 1957, p. 8) unexpectedly appointed Alton Lindsey as the Academy's representative "for Pine Hills of the Nature Conservancy." Otherwise, the natural or scientific areas committee was dissolved (Daily, 1956, p. 15).

To enable TNC to acquire property in this State, an Indiana Chapter was required. By 14 July 1959, the national organization counted 39 members living in Indiana (TNC, unpublished report). With these as charter members, Dr. Lynton K. Caldwell of the Government faculty at Indiana University organized the Indiana Chapter and became its first Chairman. Twenty-one of the original members were college or university science professors. Along with Caldwell at Indiana University were James Canright, Charles B. Heiser, Jr., and Barbara Shalucha. Botanists John F. Pelton and Mrs. Jeanette S. Pelton represented Butler University. At Purdue were Durward L. Allen, Irving W. Burr, David H. Dunham, Clarence J. Goodnight, Helmut Kohnke, Alton A. Lindsey, M. Guy Mellon, and S.A. Rifenburg. At Notre Dame University were Cornelius Hagerty and Robert P. McIntosh. At Wabash College was Richard Laubengayer; at Valparaiso University, Milferd H. Eggerding; at Manchester College, Philip Orpurt; at Marion College, Margaret Hodson; and at Earlham College, W.D. Dennis. Among the non-academic founders were Mrs. Eli Lilly, who had become a life member of TNC in 1956, and Martha Mosier Reynolds, whose son David, a judge, was to serve as President of the Indiana Chapter in the 1970's. Though not listed as Chapter founders, Howard Michaud of Purdue and Reynold Carlson of Indiana University had long been teachers of preservation.

About 1958, the late Dr. Jack McCormick, an Ohio ecological consultant who had in youth been a summer naturalist at Shades State Park, accepted the unpaid task of obtaining the funds for TNC to buy Pine Hills (about \$15,000, or \$10,000 plus enough to retire the mortgage), most of which he raised. The Indiana Chapter raised a fraction from its own members and the public. In 1960, the Indiana Chapter bought the tract, except for the 20 (?) acres near the covered bridge, owned by Wabash College and including Hemlock Lodge, which was still standing then.

One day in 1960, this writer was on a hike alone through apparently deserted Pine Hills, privately celebrating the long-sought change of ownership. While entering the scenic portion at Turkey Backbone, he unexpectedly encountered the departing Dr. and Mrs. Jack McCormick, who had driven from their Columbus, Ohio, home for the same purpose.

Academy President Carrolle Markle restored the Natural Areas Preservation Committee in 1966 after a decade's lapse, appointing as Chairman the late Robert Owen Petty (1966), plant ecologist of Wabash College (Dineen, 1967, p. 20). During his long tenure, he was active in behalf of Big Walnut, Pine Hills, Beckville (Calvert-Porter) Woods, Caster's Woods, Rush Woods, and Allee Memorial Forest. Petty wrote in 1980 that he went to Indianapolis in 1974 and placed the transfer papers for Wabash College's donation of 20 acres of Pine Hills into the hands of Natural Areas Division Director William Barnes (annotation on a copy of a letter dated 13 February 1969 from Lindsey to The Nature Conservancy's Washington office regarding Wabash College's 20 acres).

The importance of the Pine Hills Nature Preserve (Figure 1) is shown by the number of formal dedicatory gatherings held there over the years. The first of these was part of a national TNC and American Institute of Biological Sciences annual meeting held at Purdue University. On Sunday, 7 August 1961, Alton Lindsey led a joint field trip through the new preserve, during which the national TNC officers held a religious service dedicating it on the broad forested summit of Pine Backbone. On 16 October 1961, civil dedication ceremonies were sponsored by the State Department of Conservation. In 1970, the Department of Natural Resources dedicated the Preserve as a National Natural Landmark, jointly with the National Park Service. On 23 April 1990, the Department of Natural Resources celebrated the Preserve's first 30 years, rededicating it with a ceremony and tour. Attendance was by invitation to those with the most long-term connection with it. One speech was by Matthew Welsh, who as Indiana's Governor had spoken at the State Department of Conservation's dedication on 16 October 1961.

### ORIGIN OF THE DIVISION OF NATURE PRESERVES

The Nature Conservancy donated Pine Hills preserve to the State in 1961, when the State Parks Division began managing the first State Nature Preserve. This arrangement was and still remains workable in this specific case, because Pine Hills adjoins Shades State Park, personnel of which occupy a house across SR-234 from Pine Hills. However, A.A. Lindsey considered this a poor precedent for future state nature preserves, few of which would be close enough to a state park for supervision and management. Hence, he wrote on 30 May 1964 to environmental activist Thomas E. Dustin, an advertising executive of Fort Wayne, proposing that Dustin persuade conservation groups to push for a new agency in our state government to handle nature preserves only, since their main purpose differs from that of recreationally oriented parks.

Under the letterhead of the State Chapter of the Izaak Walton League, of which Dustin was secretary, he replied on 10 June 1964 as follows (pers. comm. with A.A. Lindsey): "Dear Alton: In regard to your recent question on whether or not I am in a position to urge establishment of a state natural preserves commission, the answer is yes; however, I am just slightly backlogged at the moment. The idea sounds just great, and might serve as a counterbalance to some public and private bodies which fail to recognize the long-term values of setting aside some of our most outstanding natural areas for permanent protection. As soon as the smoke clears a little, I'll run the idea up a few flagpoles, and see who salutes."

As a result of Dustin's vigorous effort, including his enlisting Fort Wayne attorney James M. Barrett III, a member of the IWL and ACRES Inc., to write the legislation, Act S. 176 was approved on 11 March 1967. It created a Division of Nature Preserves within the DNR and set up an official system of State Nature Preserves.

On 14 February 1968, the DNR shifted William B. Barnes from its Fish and Wildlife Division to become the first Director of its new division. Throughout his first year in the post, Barnes was on salary but had no appropriated funds for running an office or to cover his work and travel expenses. His tenure was otherwise very effective and continued until his retirement in 1977.



Figure 1. Vertical airphoto of central Pine Hills in about 1950. At the top (north), Indian Creek loops around to form Pine Backbone (center). Clifty Creek turns back toward itself (lowermost left) to form Turkey Backbone. The trail along its crest does not show here, but runs across the light-toned, nearly bare steep-slope swath at a right angle. The best known feature, Devil's Backbone, is where the sharpest bend of Clifty Creek closely approaches Indian Creek. The trail atop the caprock of Devil's Backbone leads eastward up a steep slope before, hidden by trees, it veers northward along the ridge of Pine Backbone. The fine old-growth beech and sugar maple stand in Pine Hills is on the second-terrace within the northern loop of Indian Creek. Well outside the photograph to the left, Indian Creek joins Sugar Creek, no part of which is shown.

## THE INDIANA DUNES NATIONAL LAKESHORE CONTROVERSY

The scope of the sandstorm over the proposal for a National Lakeshore in the Lake Michigan dunelands in Indiana is shown by the present 71.5 feet of shelf-length of papers about it in the Calumet Regional Archives in Gary.

Academy members served as scientific advisors to the Save-the-Dunes Council (of which Dustin was the public-relations volunteer). The advisors mobilized the scientific community of the State and the national Ecological Society of America. The Ecological Society and the Indiana Academy of Science made and publicized their endorsements, the first time either group had taken an official position in a political controversy. The signatures of several hundred scientists were used effectively in the U.S. Congress. The National Park Service printed the Academy's statement on the front cover of its Lakeshore publicity brochure.

Without knowing that Rachel Carson was dying of cancer, the Council requested and received a letter of support from her. Especially helpful was a strong and heart-felt endorsement by Nobelist James D. Watson, whose start in biology had come as a serious young naturalist of Chesterton, Indiana, exploring the nearby dunes area for birds and trees.

## LEADING PRESERVATIONISTS IN THE SIXTIES

Following the 39 charter members of the Indiana Chapter of The Nature Conservancy during the 1950's, these additional persons were among the leaders in the preservation of Indiana's natural areas during the 1960's (as were others mentioned herein whose names need not be repeated): Ethyle B. Block, Jane Dustin, Clarence W. Efrogmson, Henry Gray, Irene Herlocker-Meyer, Marion T. Jackson, Rev. John Klotz, Robert Menke, Fred Meyer, Victor Riemenschneider, Lee A. Rieth, Mary Jane Rieth, Richard O. Ristine, Forest Stearns, Sylvia Troy, Robert Weber, J. Dan Webster, Dennis Wolkoff, and Lester Zimmer. Most were members of the Indiana Academy of Science.

## ADVISORY SERVICES INCLUDING PRESERVATION

In 1971 and 1972, the Academy supported an office in downtown Indianapolis and employed Dr. Helmut Kohnke, newly retired from Purdue, to work there several days a week to improve access by governmental and business groups to scientific and conservation information. Again, the Academy's otherwise excellent Centennial Volume makes no mention of this activity.

The Nature Preserves Act of 1967 stated that the current Academy President shall be our representative to the State Natural Resources Commission. In 1971, the Academy stimulated a change in the law so as to have a continuing member of that Commission, who would be better qualified in this field than most Academy Presidents. Since 1975, Fr. Damian Schmelz, Provost of Saint Meinrad College, has served the Academy and the public in this capacity.

A number of other effective preservation organizations and facilities were active within the time frame of this paper. However, they did not have sufficient direct contact with the Indiana Academy of Science to be discussed herein.

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