

CONSERVATION OF ILLINOIS AREAS OF
BOTANICAL VALUE

BY

HENRY C. COWLES

University of Chicago, Chicago

INTRODUCTION

In discussing areas of botanical value I shall consider two points of view: First, that of the preservation of rare and interesting species of plants, and second, that of the preservation of areas of ecological interest. It happens, fortunately, that many of the areas of ecological interest and many of the areas that have rare species in them are also places of scenic value and therefore are likely to be recommended for preservation by all who are interested in the conservation of natural scenery for the sake of its beauty or for historical interest. For example, Starved Rock State Park, our first and largest State park, was established largely for its scenic value and its historical interest, and at the same time this area harbors many of the most interesting plants of Illinois and many of our most interesting ecological types. The same may be said of many another of our areas that are already State parks or have been recommended for such. Not only are our State parks likely to be places of interest botanically, but also our State forests. In this connection may be noted the proposition now before us of having a large national forest in Illinois. If this is organized and developed it will doubtless harbor many rare and interesting plants and many important ecological areas. In similar fashion, our county forest preserves, like those of Cook County, which include almost all the wild land still left in the county, are likely to have many species and areas of interest. In addition there may be noted the possibility of such city preserves as Trout Park at Elgin, which contains the finest colony in the State of arbor vitae (*Thuja occidentalis*).

STATE PARKS

First I shall mention the State parks that are already organized and some of their interesting botanical features. In Starved Rock State Park we have perhaps Illinois' southernmost station of the white pine, the arbor vitae, yew, and Canada blueberry, and doubtless some

others. It is also interesting in that it contains fine examples of canyons, rock bluffs, and floodplains and offers most interesting ecological studies.

Giant City Park at Makanda, with its canyons and rock cliffs, is also interesting for its ecological types, being one of the finest places in the State for the study of sandstone vegetation.

The White Pine State Park in Ogle County, which contains our finest stand of white pine (*Pinus strobus*), was brought into being mainly for the preservation of this beautiful tree in its fine setting, and is a good example of the conservation of an area in which botanical value is the primary feature. This park also contains other interesting plants, such as the Sullivantia and a very fine display of yew (*Taxus canadensis*).

At the Mississippi Palisade Park near Savanna are many interesting plants and ecological types. There is a very fine display there of some of the orchids which are at the present moment in some danger of destruction due to the introduction of sheep into the park—a procedure that cannot be too highly condemned. The State forest in the southern part of Illinois includes a fine display of bald cypress in Horseshoe Lake, where one of the most interesting ecological and taxonomic types of the lower Mississippi is now conserved.

The Cook County Forest Preserve has interesting floodplains which give us all aspects of floodplain successions. Also certain rare trees and other plants are found in the realms of the Cook County preserves. There, for example, is an isolated colony of the buckeye, found nowhere else in the northern part of the State, so far as I know. The cork elm and ginseng, both rather rare plants in northern Illinois, are found in the Cook County preserves.

AREAS WORTHY OF CONSERVATION

Certain additional areas should be included in the conservation scheme. In Apple River Canyon of Jo Daviess County we have ecological limestone types and also many rare species. Perhaps the most interesting plant of the canyon is the arctic primrose, *Primula mistassinica*, which is unknown elsewhere in Illinois and which has been described by Dr. Pepoon in a previous meeting of the Academy. White pines are found in this canyon and also the rare *Zygadenus*. There has been some talk of preserving all this area as a State park on account of its scenic and historic value; the plant value alone would be enough to justify its conservation. All interests, therefore, should combine in urging the preservation of this interesting area.

A second area of great interest is the Rock River area between Oregon and Dixon. This is very close to the Ogle County pine woods. Its conservation would insure the permanence of a most interesting flora and also striking scenic features, such as Castle Rock and the Devil's Backbone. This rock is of the same formation as that of Starved Rock and has many of the same plants, such as the white pine and Canada blueberry. It also contains the southernmost Illinois station, so far as known to me, of the yellow birch and white birch. It happens, oddly enough, that the southernmost station of these two trees is on the very same rock, on the south side of the river at Grand Detour.

A third area of great interest is Rock Canyon on Kankakee River near Kankakee. This is a most picturesque limestone canyon and contains a striking colony of *Sedum ternatum*. This colony, so far as I know, is isolated and considerably detached from other colonies of the species farther south.

A fourth area is that of the Waukegan Flats in Lake County, containing the last remnant of the Lake Michigan dune flora within our State. Many of the typical plants of Indiana and other dunes are plentiful here, notably the creeping juniper, the bearberry, and many other plants rarely found elsewhere in the State. There is a very interesting station here of the western painted cup (*Castilleja sessiliflora*). Both ecologically and taxonomically this area is very rich and should by all means be preserved. It would be a great pity if the State should fail to own the only bit of natural lake shore land within its boundaries.

A fifth area of extraordinary interest is what is known as the Wolf Lake area of Union County in southern Illinois. Here is the only large stand of southern yellow pine, *Pinus echinata*. We have already preserved the only large area of white pine and it certainly would be well worth while to preserve the only large area of the southern yellow pine. By preserving this area we should also hold for all time the only known station in our State of the flame azalea, *Rhododendron nudiflorum*.

The areas cited above are representative of types of things that should be saved for future generations. In these areas would be included most of the important ecological types in our State and many of the rare and interesting species. There are many other areas that should be presented in a complete and all-embracing paper, which this does not pretend to be. Doubtless in Dr. Pepon's forthcoming survey of the state, many new plants and areas may be added to my short list of those desirable for preservation.

Two types of areas not spoken of above should be mentioned. There is nothing more typical of Illinois than the prairie, but it presents the type most difficult to preserve. Most of the prairie areas have been destroyed by agriculture and cities. Some of the finest original prairies in our state are now within the city limits of Chicago. There are small areas that might be preserved in and near Cook County if public interest could be sufficiently stirred up. Very few people, however, are interested in prairie preservation, inasmuch as the prairie has no features of striking scenic value, although there is nothing much more beautiful than a prairie in full bloom.

One of the most interesting ecological types in the state is presented by the peat bogs or tamarack swamps. Tamarack swamps are found only in Lake and McHenry counties and are very few in number but several are still in a good state of preservation, and one or more of them might be taken over by the State. One of the chief difficulties here, however, is the small area involved and the fact that these areas are of small interest to the average citizen who is not botanically inclined. It would be a pity, nevertheless, to have all of these bogs destroyed, just as it would be a pity to have all the prairies destroyed. It might be that some society, such as the Friends of our Native Landscape or the Wild Flower Preservation Society, could be induced to finance the preservation of such areas as prairies and tamarack swamps, whose conservation cannot be too strongly urged.

I have the hope that this paper may stimulate, in some small degree, an interest in the preservation of botanical areas, whether scenic or not, and that no opportunity will be lost to interest people in such conservation.