

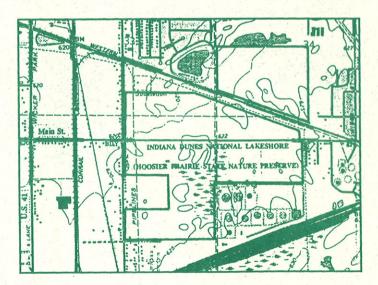
## Directions to Hoosier Prairie Nature Preserve

If you take I-65 north, turn west on S.R. 2 (Orchard Grove exit). Continue west to US 41. Turn north on US 41.

From US 41 go east on Main Street toward Griffith.

The parking lot is on your right after crossing Kennedy Avenue. The trail starts at the parking lot.

If you take 1-80/94, exit south-bound on Kennedy Avenue. Proceed south 3.5 miles to Main Street. Turn east on Main Street and go 0.25 mile to the parking lot on the south side of the road.



# Hoosier Prairie



Division of Nature Preserves, 402 W. Washington St. Rm. W267, Indianapolis, IN 46204-2733

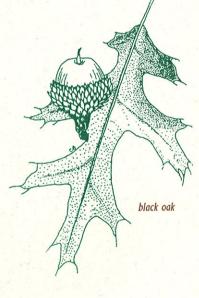
# Visiting a nature preserve

Nature preserves are set aside for nature's sake. They are open to the public for hiking and nature study. Any activity that causes disturbance or harm to the area and its inhabitnats is not permitted (removing anything, hunting, camping, rock climbing, vehicles, etc.). For the same reason, there are no facilities—no bathrooms, no drinking water, no picnic table. Please stay on trails; this reduces erosion and damage to plant communities.

Staff from the Division of Nature Preserves visit each preserve as often as possible, but must also rely on reports from preserve visitors as well. If you notice violations or other management problems, or have comments and suggestions, please contact the division.

Enjoy your visit

The Hoosier Prairie trail system is broken into three segments: a wheelchair-accessible portion, the prairie marsh loop and the savanna loop. The graveled accessible trail will take you along all three of the major habitat types of Hoosier Prairie. The unimproved prairie marsh and savanna trails take you deeper into the various habitats of the preserve.

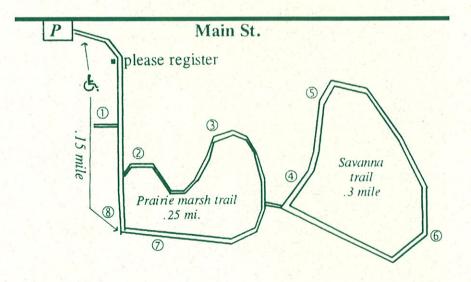


# Periscope to the past

Peer down the scope of history into a prime prairie habitat. Portions of this 690-acre tract of land are virtually unaltered by the hand of man. Your view is not much different than that of the first settlers that arrived here in the 1800s. It is a landscape that once dominated the northwest area of Indiana. Farther west the savannas gave way to the vast open grassland of Illinios and Iowa.

Hoosier Prairie consists of three distinct habitats: tallgrass prairie, marsh, and oak savanna. Each community nurtures a unique set of plants and animals Every member is linked to the others and woven into an intricate tapestry.

Just beyond the boundaries of the prairie, sounds of construction and heavy traffic strike a dissonant chord with the peaceful surroundings. Hoosier Prairie is rapidly becoming an island surrounded by a sea of development.



#### 1 · An old field (accessible)

The 30-acre field which adjoins this parking lot on the south was planted in winter wheat as recently as 1974. It was purchased by the National Park Service and transferred to the State of Indiana to preclude further development and to provide a buffer zone for the prairie.

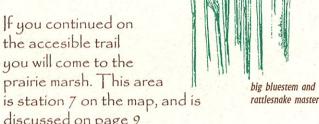
In the absence of annual cultivation prairie vegetation is beginning to re-establish itself in this plot. State natural resource managers have stepped in to enhance the process, cutting out trees and brush, burning periodically and scattering prairie seed. Imposing stalks of big bluestem prairie grass, tall coreopsis, goldenrods, and asters are appearing in greater numbers each year, their tall dried stems obvious even in winter.

A short spur off the main trail allows for a closer look and experience of senses in this recovering tall grass prairie. Listen for meadowlarks,

sparrows, goldfinch and perhaps a bobolink.

> If you continued on the accesible trail you will come to the prairie marsh. This area discussed on page 9

The fork in the trail is the beginning of the Prairie marsh trail.

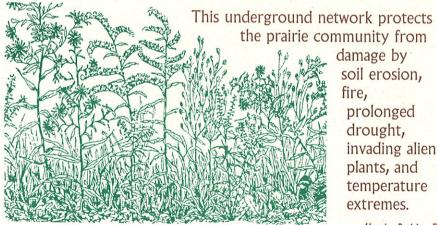


Prairie marsh trail

## 2 · Adaptations

The narrow band of trees through which you have just walked marks the entrance to a true virgin prairie. Although it may not look very different at first from the old field behind you, a closer look will reveal a very different collection of plants. Almost all of them are native to this region, and they are adapted to live in areas which burn periodically. As long as fires are not excluded from the preserve, these plants will reproduce themselves indefinitely.

A few of the prairie plants here are annuals, species which sprout, produce seeds and die in a single growing season. But most are perennials. Although their aboveground parts wither each autumn, the plants are kept alive through the winter by an underground storage network of roots and specialized stems and stem parts called rhizomes, bulbs, corms, and tubers. Perennials may produce a few new plants each year from seeds, but they mainly maintain and extend their territory by sending up new shoots each spring-many for twenty years and some for much longer-from the joints or nodes of these stems. The rhizomes of some prairie plants spread horizontally for five to 20 feet, and the stem and root systems of different species may extend vertically to depths ranging from a few inches to more than 16 feet.



### 3 · Tall grass prairie

Some of the plants before you on the higher ground of this undulating prairie are typical of dry prairies elsewhere in the Midwest. Examples include little bluestem grass and June grass, downy sunflower and rough blazing star.

Many more, however, are typical of a mesic prairie, a habitat in the middle of the moisture gradient. Among the most prominent of these are grasses such as big bluestem and Indian grass, and flowers such as white wild indigo, wild quinine, rattlesnake master, and leadplant. The grasses may reach summer height of more than six feet, and the flowers, of every size and hue, bloom in overlapping succession from spring to fall.

Mesic species are typically found in the dark rich soils of west central Indiana and central Illinois. But they can also occur on sandy ground. A water table close to the surface may partly explain this phenomenon. When the Great Lakes began forming in glacial meltwater here as the Ice Age ended, the land beneath Hoosier Prairie developed on beach sand over lake bottom clay. The water level receded from this portion of the dunes area about 9,000 years ago.

If you continue on the prairie marsh loop, the next numbered post is station 7 (page 9), which talks about the prairie marsh.

Continuing on from there will take you back to the Accessible trail.

This trail fork is the beginning of the longer Savanna trail.

## Savanna trail

#### 4 · Bracken & sweetfern

The lake plains are also home to a number of northern forest species. These botanical immigrants, forced south while the glaciers advanced, remained here when the ice receded. Among those that found niches in the Indiana Dunes, including Hoosier Prairie, are the bracken fern and sweetfern visible from this point and at various intervals along the trail.

The bracken, in particular, is a very important component of several plant communities at Hoosier Prairie. Like most prairie plants, it thrives on periodic fire. The habitat here is similar to the pine savanna where this fern is frequently found in the North Woods. Bracken is also unaffected by the antibiotic properties which a number of prairie wildflowers contain and

which make the prairie soil unsuitable for some invading species.

Sweetfern is actually not a fern but a shrub with fern-like leaves. It emits a strong, pleasant odor on warm summer days or when its leaves are crushed.



blazing star & white-footed mouse

#### 5 · Oak savanna

A savanna is usually defined as an open stand of widely spaced trees, which in the Midwest, are usually oaks with an understory of prairie wildflowers and grasses. Its appearance is superficially similar to that of a domestic orchard. Oak savannas were integral parts of the North American prairie before European settlement. Black oaks and white oaks, like those here at Hoosier Prairie, were present in many such savannas. They were able to survive in the drought-prone prairie environments because their sturdy taproots extend much deeper into the ground than many of the plants around them.

Oak savannas have become even rarer than native grassland habitats. They were often cut for timber in earlier times by wood-starved prairie pioneers. But the greatest threat to their survival is the absence of fire, which has caused many of them to evolve into denser oak forests. Random wildfires can no longer be permitted to burn, of course, because of the danger they pose to human developments. Controlled burns, managed

by experts for optimum effect have replaced them. Every 2-3 years ground fires are set to top-kill the rapidly growing brush and remove accumulated litter. This allows sunlight to reach the ground, which promotes the growth of sun-loving plants.

## 6 · Look beyond the small oak trees

This lowland or wet prairie habitat differs both from upland prairies and from marshes although it may contain a number of species common to both. Prairie cordgrass and bluejoint grass are found here along with a variety of sedges adapted to live in water for part but not all of a typical year. Wet prairie wildflowers at Hoosier Prairie include the delicate grass pink orchid, marsh blazing star, prairie sundrops, and the dark pink blossoms of marsh phlox.

At the fork in the trail, you have arrived back to the Prairie marsh trail. Continuing to the left will take you to stations 7 and 8. Going to the right will take you back to station 3.

# Prairie marsh trail

## 7 · Prairie marsh

Most prairie marshes have a richer mix of species than the more widespread cattail communities, and this marsh at Hoosier Prairie is no exception. Although cattails have grown more numerous in recent years, species like swamp milkweed, slender gerardia and blue flag are also still present.

Marshlands are havens for salamanders, reptiles, and a great variety of birds and insects. In fact, life in a marsh is more abundant than that of almost any other natural habitat.



blue flag and grass pink

#### 8 · A word about animals:

Although prairie plants are the touted attractions on this trail, hikers in spring or summer are also likely to see or hear or happen onto the tracks of the animal inhabitants.





Yellowthroats, swamp sparrows, and song sparrows seem to sing from every thicket on sunny mornings; woodcocks do their elaborate mating dance at twilight on spring evenings; and red-tailed hawks soar over the prairie at irregular intervals in search of such delicacies as white-footed mice or meadow voles. The tracks of white-tailed deer, minks, red foxes, and woodchucks may also be seen at any time but are most clearly visible in winter snow.

You are now at the south end of the Accessible trail. Follow this trail back to the parking lot.

Be sure to come again at another time of the year and get know Hoosier Prairie in all its colors.

Thank you for visiting.

# Prairie supporters

No discussion of Hoosier Prairie could be complete without mentioning the many local citizens, organized under the capable leadership of individuals like Irene Herlocker-Meyer and organizations like the Save the Dunes Council and the Hoosier Prairie Committee. These people worked tirelessly for years to secure protection and preservation for this rare landscape.

The Indiana Department of Natural Resources purchased the prairie in 1976 and dedicated it is a state nature preserve. It is managed by the Division of Nature Preserves. It also lies within the boundaries of the Indiana Dunes National Lakeshore and is a registered National Natural Landmark.

For more detailed information, including lists of flora and fauna, contact:

Indiana Department of Natural Resources Division of Nature Preserves 402 W. Washington St., Rm. W267 Indianapolis, IN 46204-2733 317-232-4052

Indiana Dunes National Lakeshore 1100 N. Mineral Springs Road Porter, IN 46304 219-926-7561

