

# Ames High Prairie State Preserve

The Richard W. Pohl Memorial Preserve at Ames High Prairie (popularly known more simply as “Ames High Prairie”) is a 22-acre preserve containing a small tallgrass prairie remnant. It is located on the west side of Ames High School within the city limits of Ames in Story County. The land was originally purchased by the school district in 1956 for use as a parking lot. In 1971, however, it was established as an environmental education area as the result of a popular vote in Ames. The property is presently leased by the Ames Unified School District to the Iowa chapter of The Nature Conservancy. It was dedicated as a biological state preserve in 1997.

Located in the Des Moines Lobe landform region, the preserve consists of tallgrass prairie and ravine woodland along Squaw Creek, a tributary of the Skunk River. Most of the prairie in the preserve occurs on relatively dry ridges and slopes. A small wooded stream flows through the preserve. Years ago, the prairie and the surrounding woodland were heavily grazed. The hilltop prairie near the entrance was once used for the storage of heavy equipment.

Nearly 100 plant species have been found at this preserve. Dominant grasses include big bluestem, Indian grass, sideoats grama, and prairie dropseed. In the spring, white false indigo and wild indigo are stately, and a large population of prairie dandelion can be found here. In the summer, the pale purple coneflower and prairie larkspur displays are remarkable. In the fall, the asters and rough and prairie blazing stars make a beautiful showing. Elm, hackberry, honey locust, and black locust are the dominant trees in the woodland, with Tartarian honeysuckle and poison ivy dominating the understory. The control of encroaching trees has been a constant challenge in the maintenance of the prairie.

Over 100 species of birds have been seen at the preserve, with about forty-five species residing in the area at one time or another, including brown thrasher, American goldfinch, and song sparrow. Migrant bird species include the least flycatcher, Swainson’s thrush, common yellowthroat, and white-throated sparrow. The rare regal fritillary and indigo duskywing butterflies have also been observed here.

The Nature Conservancy and the Iowa Prairie Network cosponsor prairie walks monthly starting in June and ending in September. Hunting is not permitted.

Other natural areas in the vicinity include Doolittle Prairie State Preserve and Ledges State Park.

**DIRECTIONS**  
 From the intersection of Highway 30 and I-35 on the east side of Ames, take I-35 north 2 miles to the 13th Street exit (exit 113). Go west (left) 2.5 miles to Grand Avenue. Turn north (right) and go 0.5 mile to 20th Street. Turn west (left) and drive 1 mile into the Ames High School parking lot. There is a small parking area near the preserve on the west side of the high school (sign: Richard W. Pohl Memorial Preserve at Ames High Prairie).

**AREA MANAGER**  
 The Nature Conservancy  
 303 Locust St., Suite 402  
 Des Moines, IA 50309  
 (515) 244-5044  
[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)



## Anderson Prairie State Preserve

Anderson Prairie is a 200-acre preserve containing a native tallgrass prairie on the western edge of the Altamont moraine. It is located 4.5 miles northwest of Estherville in western Emmet County. Dr. Ada Hayden visited this prairie in 1945, which was being used as a hayfield and pasture at that time, and recommended that it be preserved. The Iowa Conservation Commission purchased the area in 1980 from William Anderson. It was dedicated in 1984 as a biological and geological state preserve.

Located near the western edge of the Des Moines Lobe landform region, Anderson Prairie lies in a hummocky landscape created by the melting of the Altamont glacier. A high diversity of prairie habitats is present in the preserve, ranging from very dry, gravelly hilltops to wet swales and marshes. Upland forest, floodplain forest, and disturbed habitats also add diversity. Although most of the preserve was formerly a pasture, the westernmost quarter is natural tallgrass prairie. Of the over 220 plant species in the preserve, the first to bloom in the spring is the pasqueflower, followed by prairie phlox, prairie violet, and hoary puccoon. The summer prairie contains butterfly weed, rattlesnake master, and prairie blazing star. The purples and golds of the late-blooming fall wildflowers are accented by the silvery-white sage. Fall wildflowers include asters, goldenrods, rough blazing star, and gentians.

Five rare butterflies have been found in the prairie, including Poweshiek skipperling, Arogos skipper, silvery blue, regal fritillary, and Iowa skipper. In late summer, masses of monarch butterflies arrive during their annual migration and often roost in the trees. Many other animals are found in the preserve, including twenty-two mammals, twenty-seven birds, and five amphibians and reptiles. Upland sandpipers have nested here and short-eared owls also use this large preserve.

Hunting is permitted.

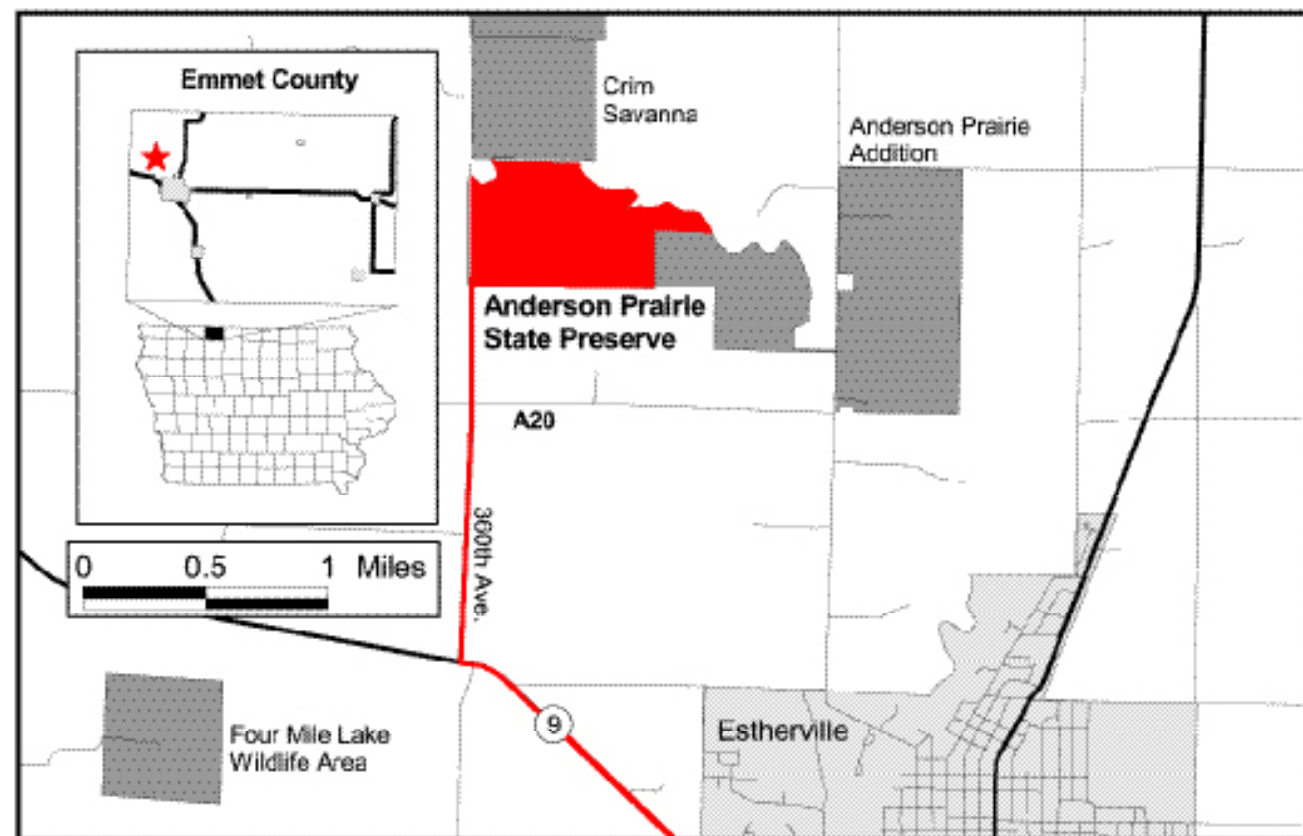
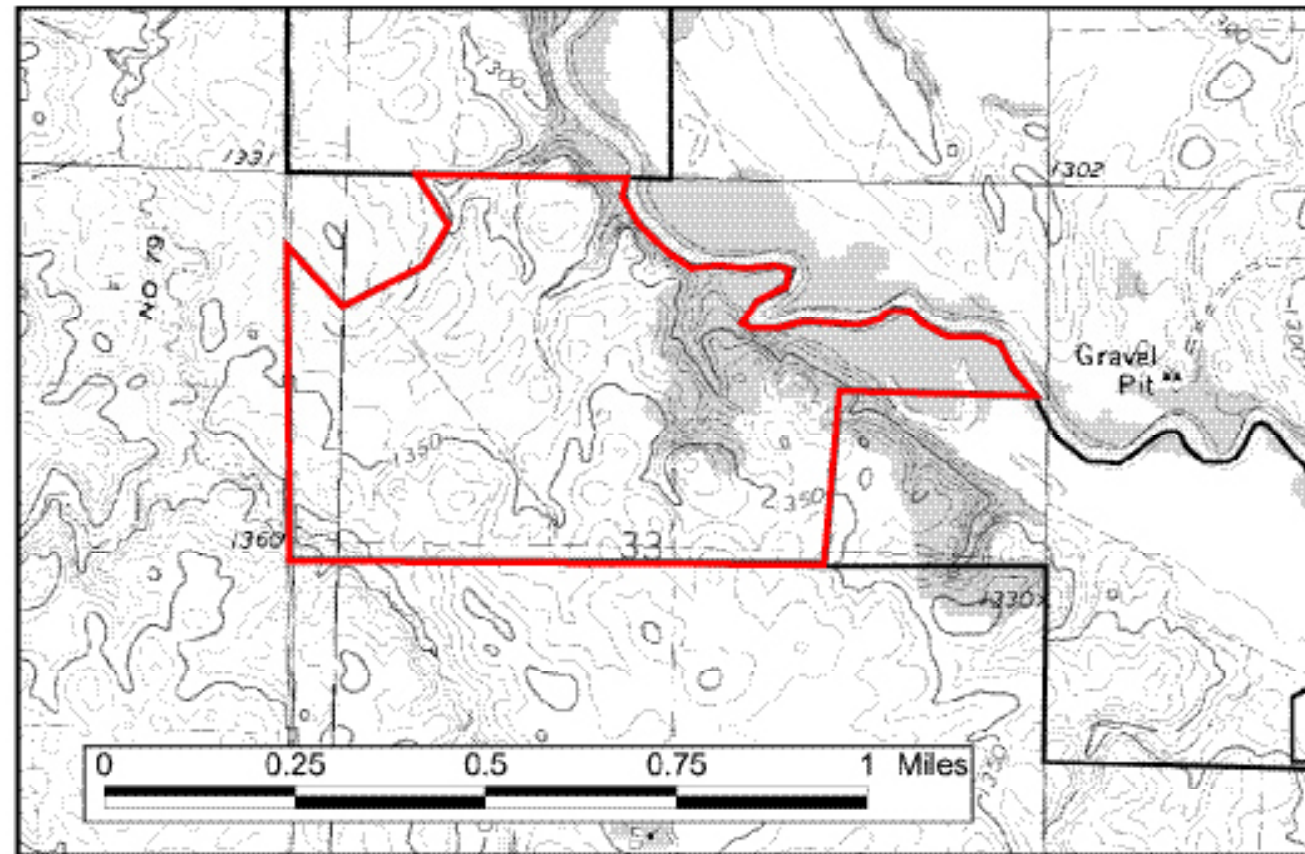
Other nearby public areas include Crim Savanna and Ringham Habitat Area (both just north of the preserve). Recent state wildlife area acquisitions to the east of the preserve bring the total public land area in this vicinity to 800 acres.

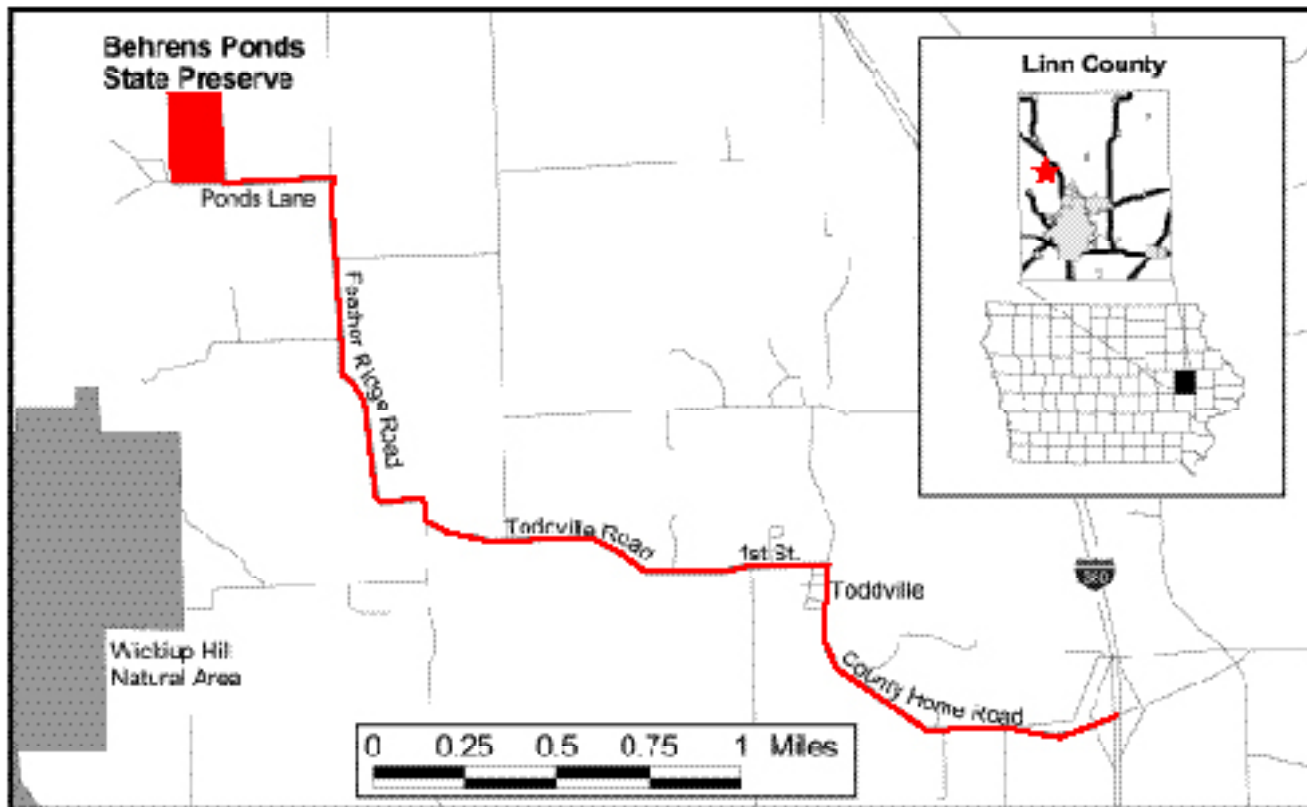
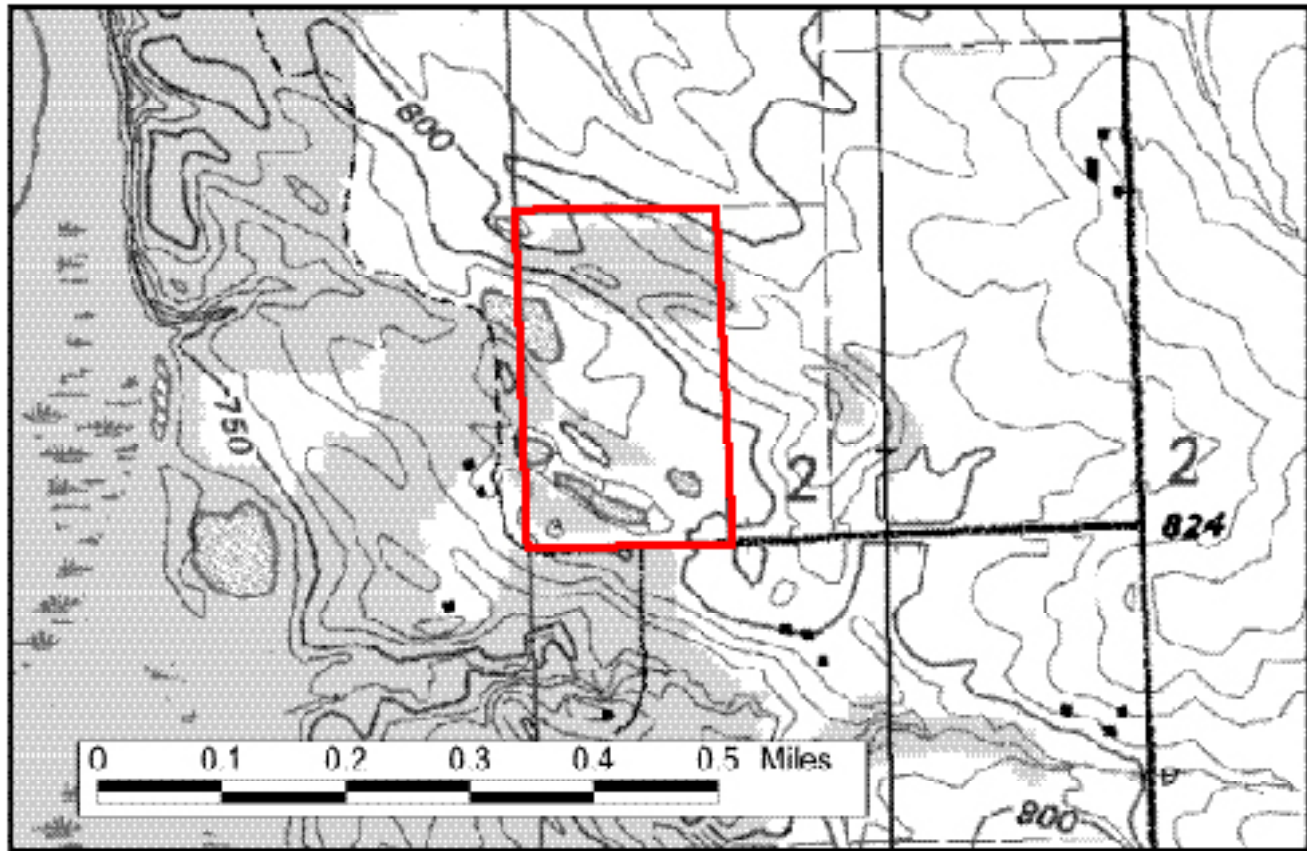
### DIRECTIONS

From the intersection of Highways 4 and 9 in Estherville, take Highway 9 west for 2.5 miles to 360th Avenue (watch for sign). Go north (right) 1 mile to intersection with County Highway A20 (beware of stop sign). Continue 0.5 mile north to the preserve parking area on the east side of the road (sign: Anderson Prairie State Preserve).

### AREA MANAGER

Iowa Department of Natural Resources  
Prairie Lakes Wildlife Unit  
NRCS Office Building  
2109 Murray Road  
Estherville, IA 51334  
(712) 362-2091  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Behrens Ponds and Woodland State Preserve

Karl W. Behrens Memorial Ponds and Woodland is a 29-acre preserve featuring a series of sandy ponds inhabited by the blue-spotted salamander, a rare species in Iowa. It is located 6 miles northwest of Cedar Rapids and 1.5 miles northwest of Toddville in Linn County. The property was deeded to The Nature Conservancy by Karl W. Behrens in 1977 and was dedicated as a biological state preserve in 1982.

Located on the Iowan Surface landform region, the natural features of this preserve are tied to the glacial history of the area. As the immense Wisconsin glacier melted some 12,000 years ago, a variety of sediments were deposited in the nearby Cedar River valley. Sand from these alluvial deposits was later blown onto adjacent uplands to form gently rolling sand dunes. Today, the sandy soil found in the preserve provides a variety of habitats, including oak woodland, thickets, prairie openings, marshes, and several natural ponds.

The ponds and their surrounding woodlands provide excellent habitat for seventeen species of amphibians and reptiles, including the rare blue-spotted salamander. Other species include spring peeper, green frog, cricket frog, ribbon snake, and Dekay's snake. Invertebrates in the ponds include freshwater sponges, bryozoans ("moss animals"), and many insects and crustaceans. Of three main ponds, the two smaller ones are one to three feet deep, and tend to dry up in the summer. The larger pond can be up to four feet deep. Wetland plants found here include mosquito fern, Sphagnum mosses, prairie cordgrass, spikerushes, sedges, rushes, arrowhead, and wood reed. The woodland in the north half of the preserve consists mainly of white, red, and black oaks and shagbark hickory. Woodland herbs include several sedges, enchanted nightshade, Virginia creeper, and bedstraw, along with several species of moss. Over 180 species of vascular plants have been documented from this preserve.

Coe College in nearby Cedar Rapids uses this preserve for scientific research and educational study. Hunting is not permitted.

Other natural areas in the vicinity include Hanging Bog, Rock Island, and Palisades-Dows State Preserves and Palisades-Kepler State Park.

### DIRECTIONS

From the intersection of I-80 and I-380 near Iowa City, take I-380 north to exit 28 (to Toddville). Travel west (left) on County Home Road 1.2 miles into Toddville.

Take 1st Street west (left) and continue on Toddville Road 0.3 mile to Feather Ridge Road (at a T-intersection). Go north (right) 1.3 miles to Ponds Lane. Go west (left) 0.4 mile to preserve (sign: Karl W. Behrens Memorial Ponds and Woodland).

### AREA MANAGER

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303 Locust St., Suite 402  
Des Moines, IA 50309  
(515) 244-5044  
[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Berry Woods State Preserve

Berry Woods is a 42-acre preserve containing an upland oak woodland. It is located 4.5 miles northwest of Indianola in Warren County. Don L. Berry deeded the woodland in 1961 to the Iowa chapter of The Nature Conservancy in honor of his grandfather and father, who had owned and protected this wood for over ninety years. It was dedicated as a biological state preserve in 1980.

Located in the Southern Iowa Drift Plain landform region, Berry Woods occupies the bluffs along the south side of the Middle River. It is dominated by mature white oak, red oak, basswood, and shagbark hickory. Ironwood is the most common understory tree along with Ohio buckeye. Beneath the forest canopy is a diverse understory layer of over 150 species with a spectacular array of spring wildflowers. In early spring, bloodroot, hepatica, and wild geranium make a good showing. By summer thimbleweed, starry campion, and Indian plantain bloom. Fall is abloom with goldenrods and asters, along with the saprophyte Indian pipe.

In 1968, Mr. Berry reminisced about the property:

It was, I think eighty-four years ago this coming summer that I took the first hike in it that I can remember. I was four years old. It was my Grand-father Berry's firewood, post, and rail supply ground. In making the transfer I felt that nothing I could do for the memory of my father and grandfather could be more pleasing to them than to have that tract kept in perpetuity as a nature preserve. I wish you could see it when the bloodroots are in bloom. I haunt the place from the first warm weather in March or April until the bloodroots come, for they come and go so quickly that one misses them if not constantly on the watch. One day there are none. The next day they are scattered thick, and in less than a week, they are gone.

At least forty-two species of birds have been seen in the preserve, including the tufted titmouse, yellow-billed cuckoo, scarlet tanager, and brown creeper. Smooth earth snakes, American toads, and chorus frogs also are found here with common sightings of red fox, white-tailed deer, fox squirrel, and eastern chipmunk.

Berry Woods was the first nature preserve acquired by the Iowa chapter of The Nature Conservancy. Biology classes from Simpson College use the preserve in their studies. Hunting is not permitted.

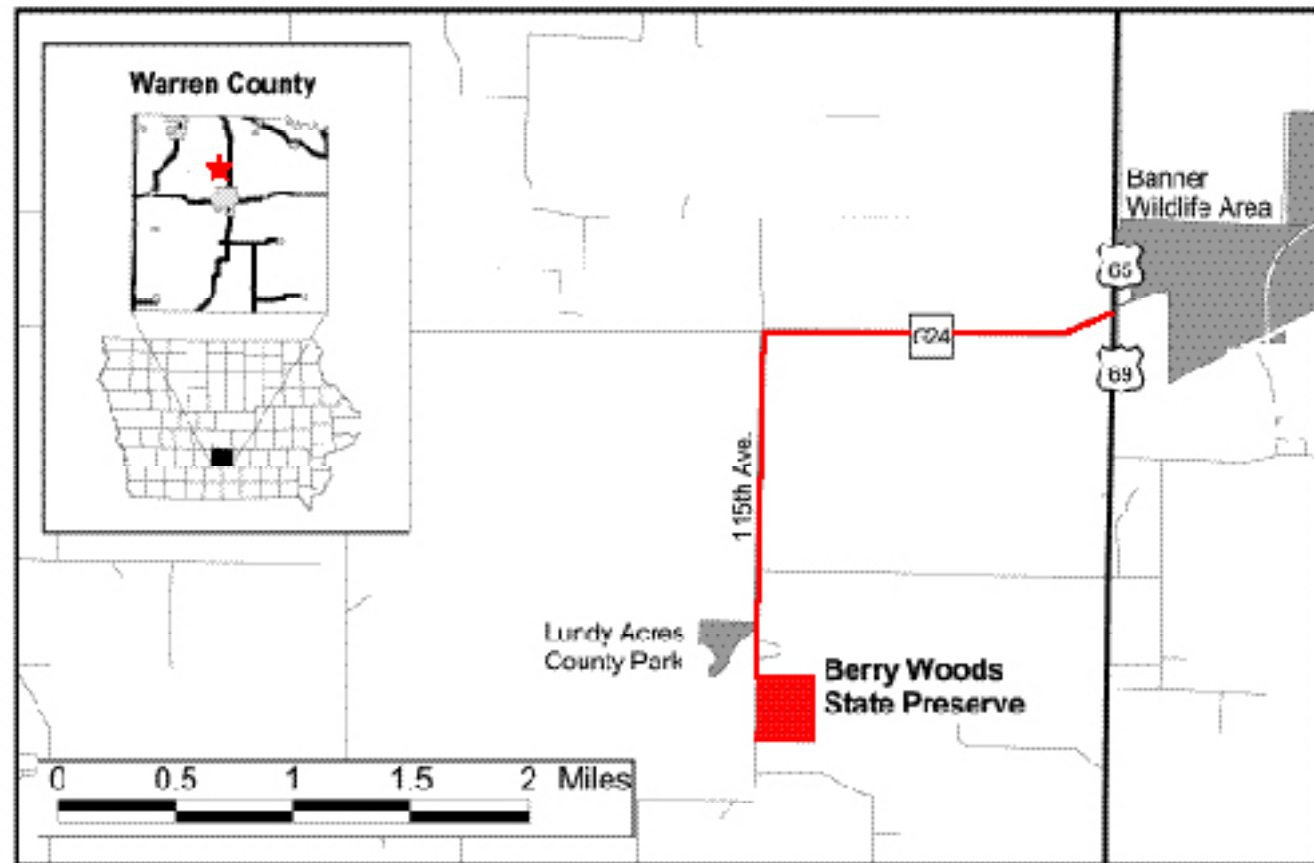
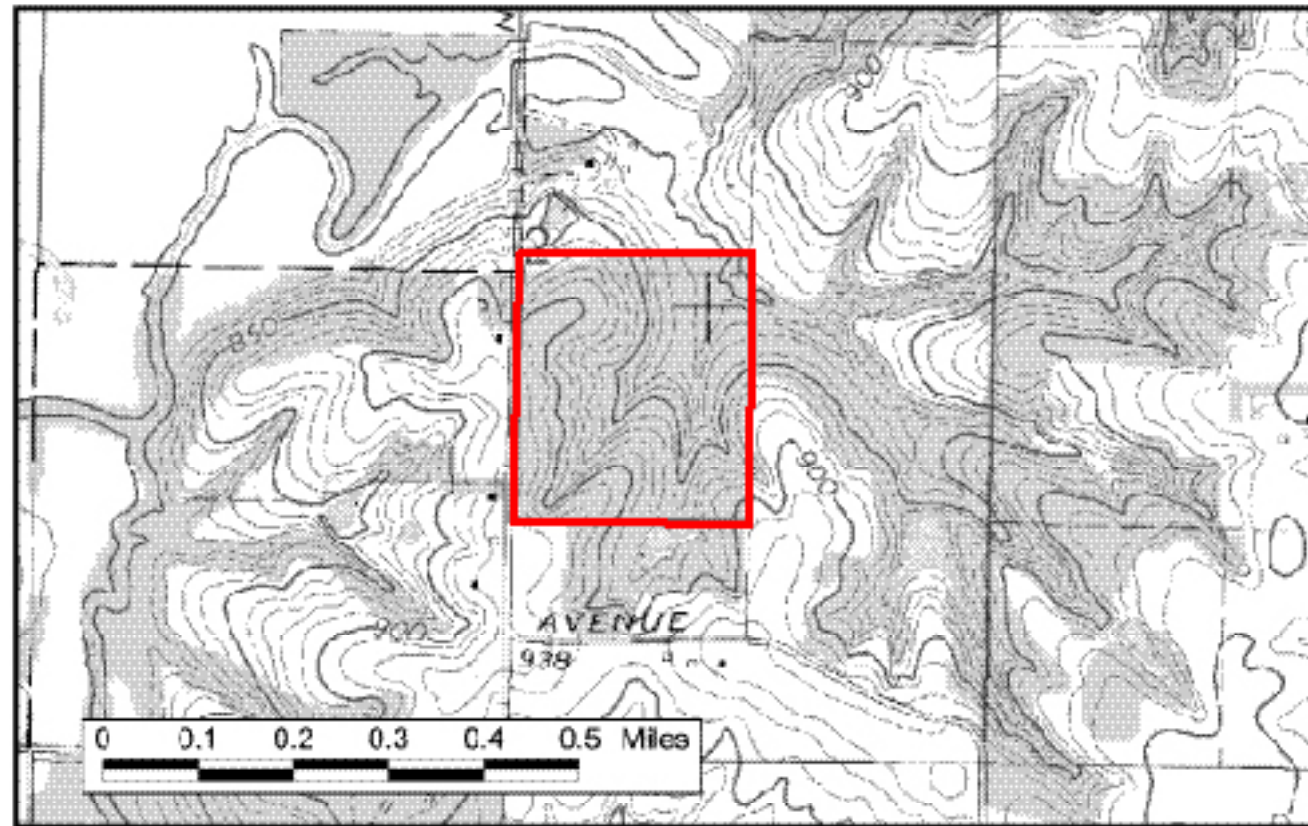
Other natural areas in the vicinity include Woodland Mounds and Rolling Thunder Prairie State Preserves and Lake Ahquabi State Park.

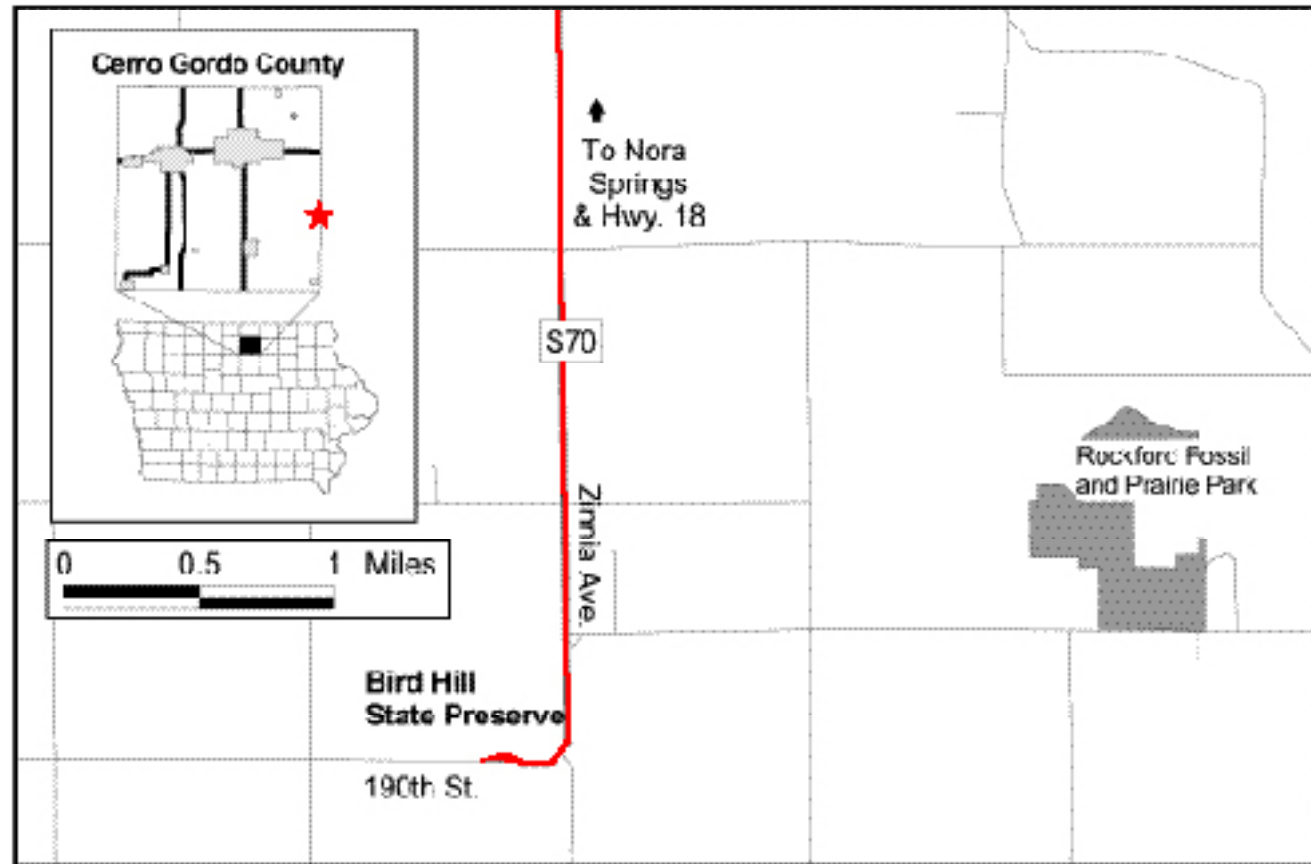
### DIRECTIONS

From the intersection of Highway 65 and Highway 69 on the south edge of Des Moines, drive south 5 miles on the combined Highway 65/69 to County Highway G24. Turn west (right) and drive 1.5 miles west to 115th Avenue. Turn south (left) onto 115th Avenue and drive 1.75 miles to the preserve on the east side of the road (sign: Berry Woods). Access is through a gate in the fence.

### AREA MANAGER

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303 Locust St., Suite 402  
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[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Bird Hill State Preserve

Bird Hill is a 1-acre preserve featuring a fossil-rich outcrop of soft limestone and shale. It is located on the south side of 190th Street, eight miles southwest of Nora Springs in eastern Cerro Gordo County. It was once known as "Fossil Hill" because of the fossils found here. It was purchased by the Cerro Gordo County Conservation Board from the Bird family, after whom the area was named. This roadcut was dedicated as a geological state preserve in 1984 to recognize its diverse, abundant, well-preserved marine fauna and its historic significance as a collecting site. This site is one of three primary reference areas for the world-renowned Lime Creek fossil fauna of northern Iowa.

The Devonian (375-million-year-old) Lime Creek Formation consists of lime-rich deposits left in an ancient tropical sea. This geologic formation was named and described for natural exposures along the Winnebago River, which was originally called "Lime Creek." The Lime Creek Formation is divided into three members (see figure): Juniper Hill, Cerro Gordo, and Owen. The soft limestones and shales of the Cerro Gordo and overlying Owen Members are exposed here, and the abundant fossils in these strata provide an important record of the marine life during Upper Devonian time. A variety of fossils, including brachiopods (shellfish) and molds of gastropods (snails) and pelecypods (clams) are found here, as well as solitary horn corals, colonial corals, and stromatoporoids (sponges). In addition, bryozoans ("moss animals") and echinoderm (starfish family) debris can be seen, along with crinoids ("sea lilies"), the chambered shells of squidlike cephalopods, some trilobites, and numerous microscopic invertebrates. About 2.5 feet of the basal portion of the Owen Member, a more resistant limestone, is seen at the top of the exposure. The Owen also contains abundant fossils.

The exceptional fossils at this site are continually exposed by natural weathering processes, and collecting is permitted.

Other related geological areas in the vicinity include Claybanks Forest State Preserve and the Fossil & Prairie Park State Preserve.

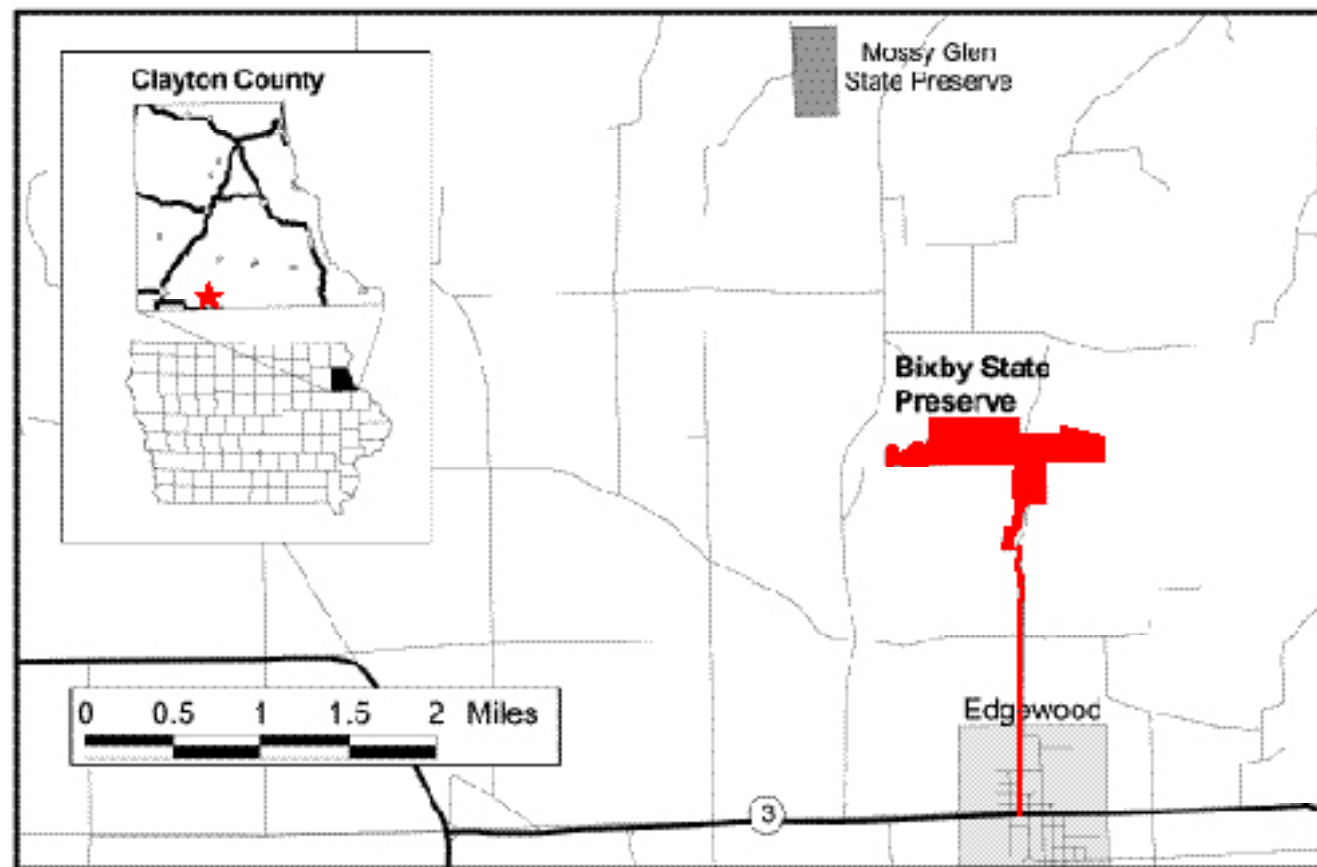
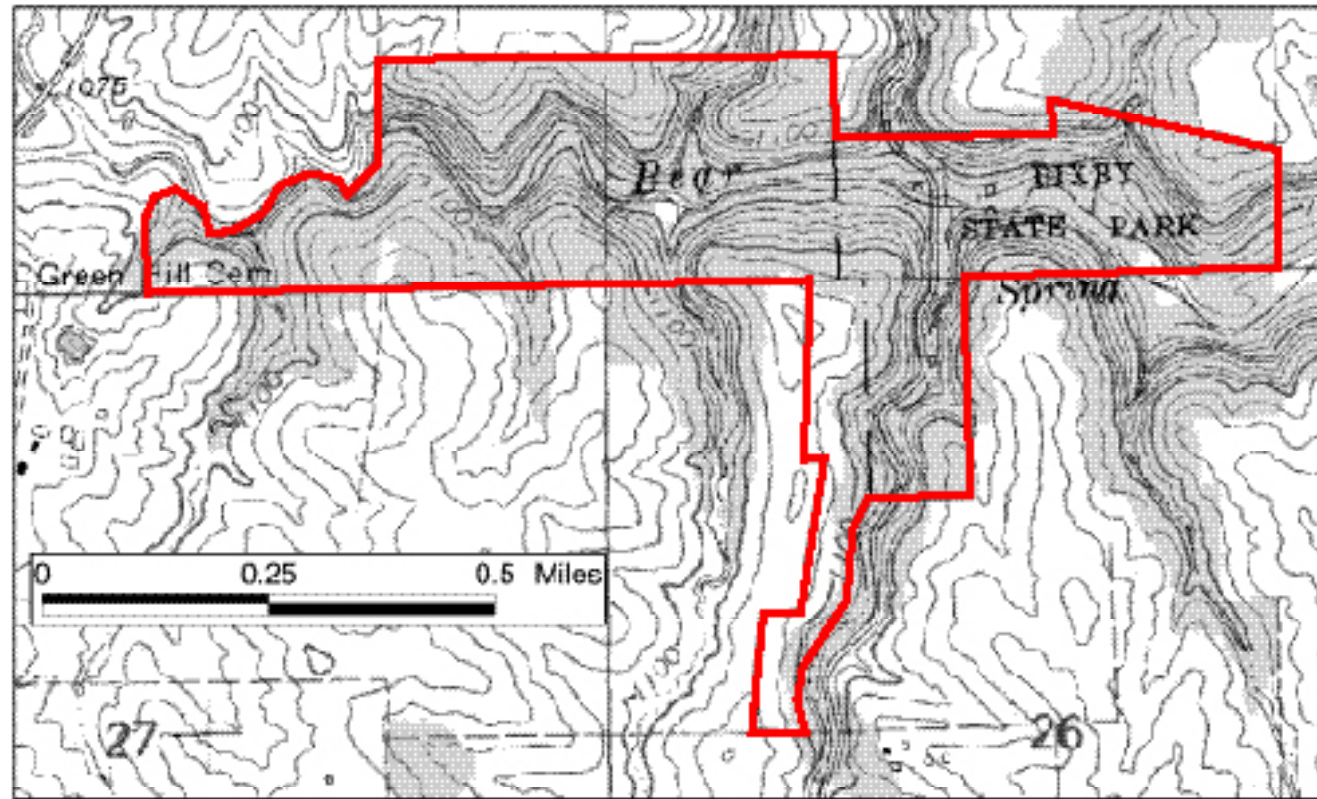
### DIRECTIONS

From the intersection of I-35 and Highway 18 southwest of Mason City, drive east on Highway 18 for 16 miles to County Road S70 (Zinnia Avenue). This local road is on the border between Cerro Gordo and Floyd Counties just southwest of the town of Nora Springs. Turn south (right) onto S70 (Zinnia Avenue) and go south 5 miles to 190th Street. Turn west (right) and go 0.25 mile to the parking area; the preserve is across the road- the rock outcrop on the north side.

### AREA MANAGER

Cerro Gordo County  
Conservation Board  
3501 Lime Creek Road  
Mason City, IA 50401  
(641) 423-5309  
[www.co.cerro-gordo.ia.us](http://www.co.cerro-gordo.ia.us)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Bixby State Preserve

Bixby State Park is a 184-acre preserve containing a rugged forested area along the Silurian Escarpment. It is located in southwestern Clayton County, just north of the town of Edgewood. In 1854, the Bixby family established a homestead here. They allowed the public to use a scenic area on their farm as a park, free of charge. In 1926, the Iowa Conservation Commission purchased the land after residents from the nearby town of Edgewood petitioned to make "Bixby's Park" into a state park. The park was dedicated in 1979 as a biological and geological state preserve.

Bear Creek flows through the preserve in a steep, narrow valley, one of many along the Silurian Escarpment, a belt of rugged bluffs marking the southwestern edge of the Paleozoic Plateau landform region. This small trout stream is fed by many springs along its course, eventually joining the Turkey River several miles downstream. Rising on each side of the stream are 200-foot bluffs of dolomite (magnesium-rich limestone). At the base of the slopes is an accumulation of rock rubble, or "talus." The north-facing bluffs found here receive little direct sunlight, and are also full of interconnecting fissures and crevices with a steady flow of cool, moist air. In some places, cold air flows out of the fissures onto sloping talus deposits, forming unusual habitats called algific talus slopes that support several rare species of plants and snails.

Bixby State Preserve is well known for its ice cave, a large, partially mined fissure with a strong flow of very cold air. It is located a short distance east of the picnic shelter. The cave entrance was enlarged by two men who were purportedly prospecting for lead in the late 1800s. Ice is present in the cave most of the year, forming in the spring as snowmelt, and rain infiltrates the rock from above and freezes in contact with the cold walls of the cave. Melting takes place by late summer in most years, but ice generally remains in the back recesses of the cave. Even during the heat of the summer, temperature of the cave entrance hovers around 52 degrees.

Bixby State Preserve may contain the highest diversity of plants of any Iowa woodland, with over 380 native vascular plant species. The steep slopes are covered with mature oaks, sugar maple, and basswood. Canada yew covers the north-facing slopes along much of the valley. Leatherwood, an uncommon shrub, is also found on these slopes. In spring, snow trillium, wild ginger, Dutchman's breeches, and bellwort, as well as many others, cover the forest floor. By summer, purple joe-pye-weed can be seen blooming. In the fall, asters, goldenrods, Indian pipe, and fall coralroot orchid can be found here.

The preserve is open to hiking and picnicking in designated areas. Hunting is not permitted.

Other natural areas along the Silurian Escarpment are Brush Creek Canyon, Mossy Glen, and White Pine Hollow State Preserves, and Echo Valley State Park.

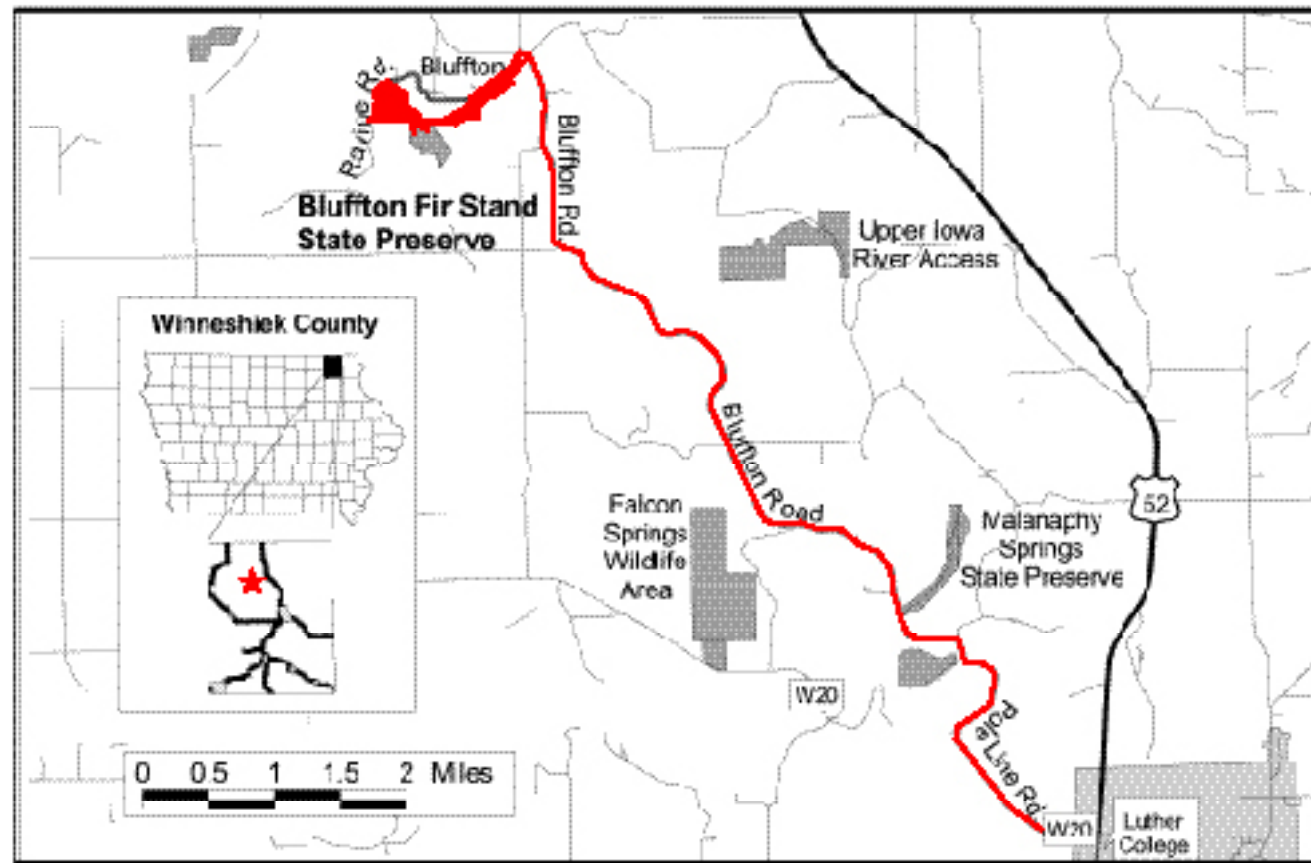
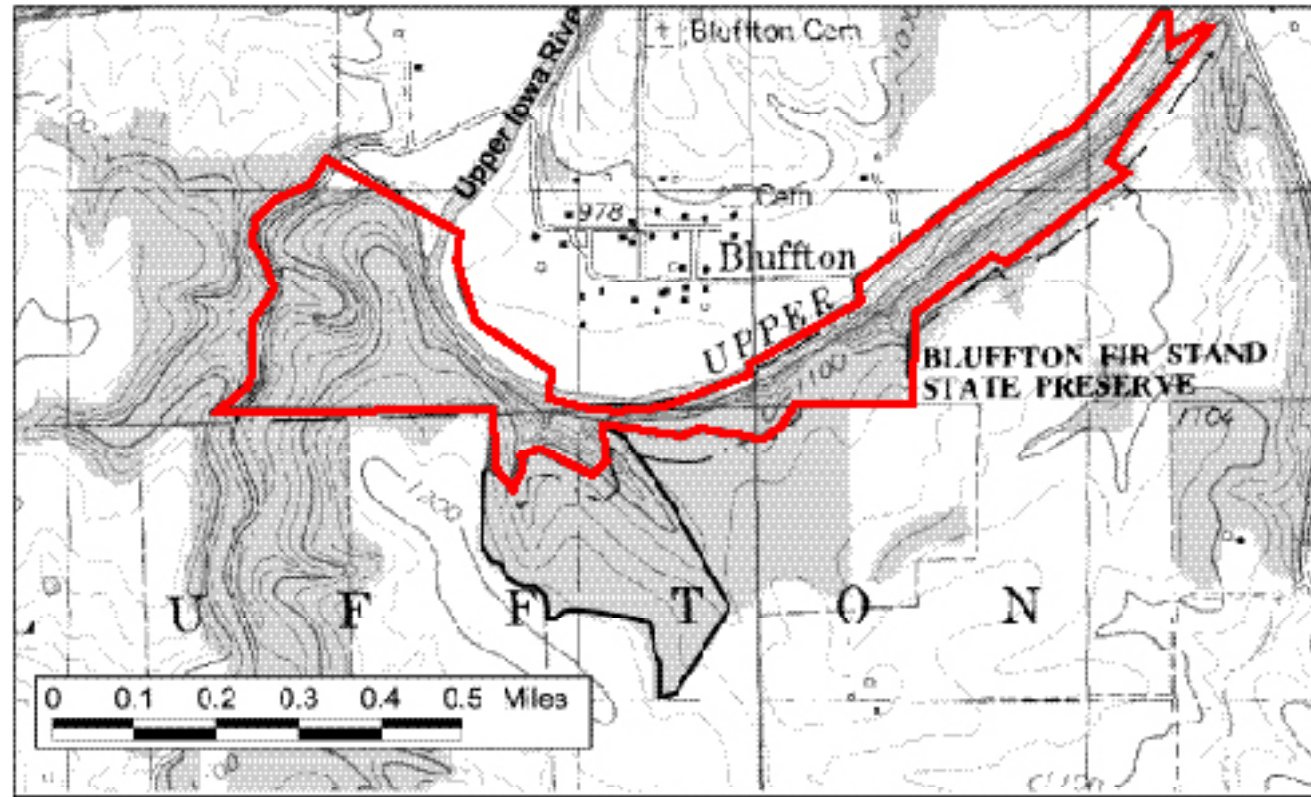
### DIRECTIONS

From the intersection of North Franklin Street and Highway 3 in the town of Edgewood, follow North Franklin Street north to 390th Street. North Franklin Street becomes Fortune Avenue outside of town. Continue north on Fortune Avenue (sign: Bixby State Park) to a parking area on the east side of the road, just north of Bear Creek.

### AREA MANAGER

Iowa Department of Natural Resources  
 Backbone State Park  
 1347 129th Street  
 Dundee, IA 52038  
 (563) 924-2527  
[Backbone@dnr.iowa.gov](mailto:Backbone@dnr.iowa.gov)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Bluffton Fir Stand State Preserve

Bluffton Fir Stand is a 94-acre preserve featuring a sheer limestone bluff up to 140 feet high that contains one of the largest populations of balsam fir in Iowa, a “boreal” tree species typically found much farther north in Minnesota, Wisconsin, and Canada. It is located in Winneshiek County eight miles northwest of Decorah, directly south of the town of Bluffton. Bluffton Fir Stand was dedicated as a biological and geological state preserve in 1969.

Geologically, the most conspicuous feature of the preserve, located in the Paleozoic Plateau landform region, consists of precipitous, Ordovician-aged (450 million years old) limestone cliffs. The balsam firs are found mainly on cliffs on the lower parts of the slopes in the preserve. On the forest floor beneath the firs is a dense understory of Canada yew, as well as nodding wild onion, Canada mayflower, and downy Solomon’s seal.

Over 340 native vascular plants have been recorded at this preserve. The forest canopy on the upper slopes consists mainly of red oak, sugar maple, and basswood. The herbaceous undergrowth here includes bloodroot, snow trillium, and hepatica, which begin blooming as early as March, followed by Dutchman’s breeches, wild geranium, and nodding trillium in April. By June, the early spring ephemerals are replaced by Solomon’s seal, Jacob’s ladder, and thimbleweed. In the fall, asters, goldenrods, and Indian pipe can be found blooming.

In the western portion of the preserve the slopes become gentler. Bur oak, northern pin oak, and eastern red cedar are the dominant trees, with scattered big-tooth aspen among them. Prairie plants can be seen on a goat prairie on a steep, rocky, south-facing slope. Hoary puccoon, bastard toadflax, and early buttercup begin blooming here by May. By July, butterfly milkweed, wild bergamot, and thimbleweed bloom, followed by big and little bluestem and sideoats grama, plus smooth aster, stiff gentian, and field goldenrod.

Hunting is permitted.

Other natural and geological areas in the vicinity include Malanaphy Springs and Decorah Ice Cave State Preserves.

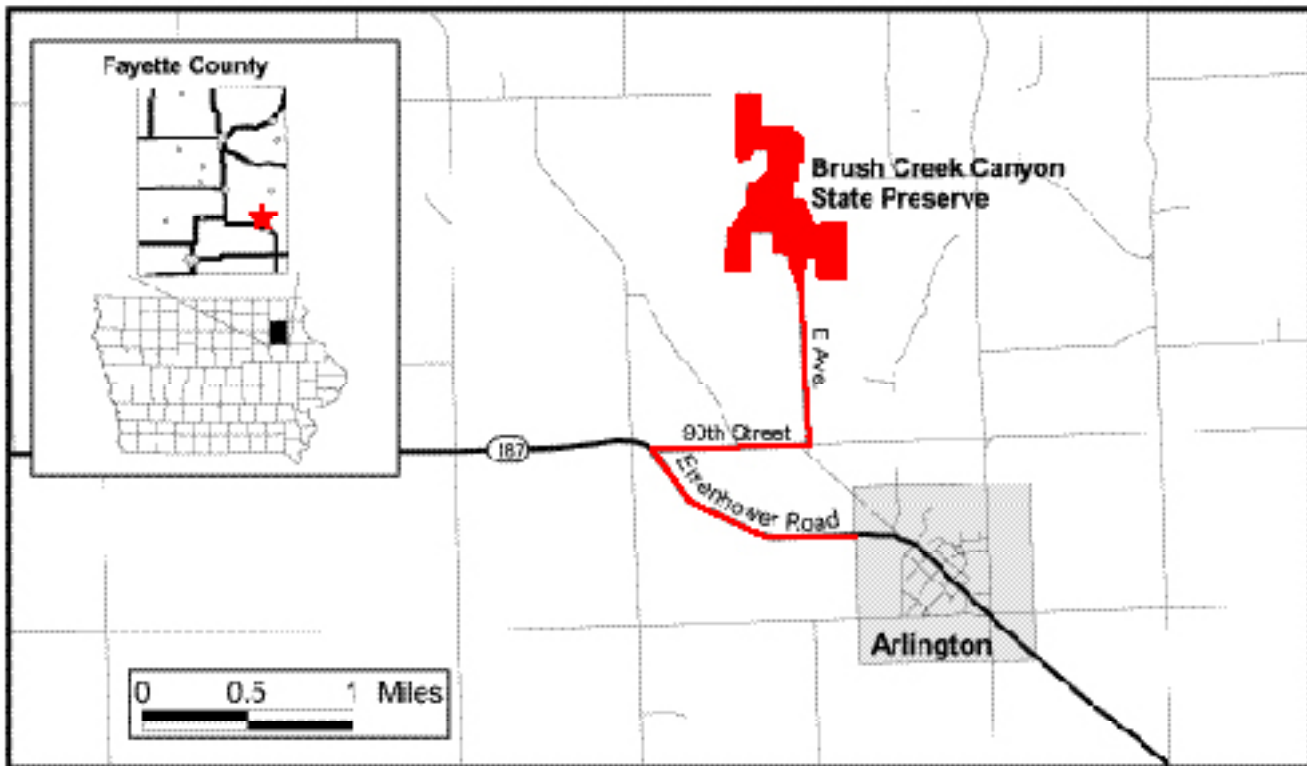
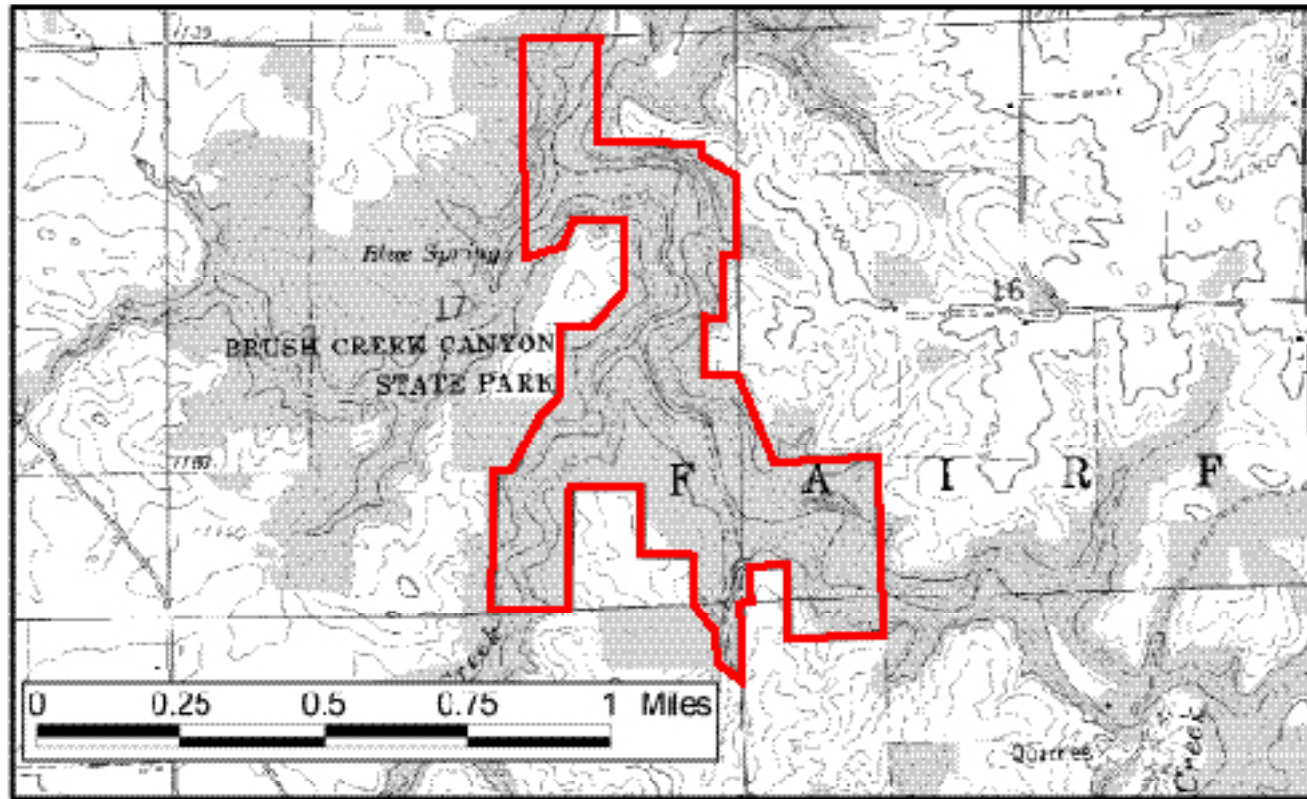
### DIRECTIONS

From the intersection of Highway 9 and Highway 52 in Decorah, take Highway 52 north 2 miles to Pole Line Road (W20). Go west (left) 3 miles to Bluffton Road. Turn north (right) and go for 7 miles on Bluffton Road. Just after crossing the Upper Iowa River, turn south (left) onto Village Road. The parking lot next to the Upper Iowa River by this intersection (sign: Bluffton Fir Stand State Preserve) is for canoe access only. From this parking area, continue driving on Village Road along the river into the town of Bluffton, where Village Road becomes Old Springs Road. At a T-intersection, turn west (left) onto West Ravine Road, cross the Upper Iowa River, and drive 0.25 mile from the bridge to the western end of the preserve. Park on the wide shoulder on the east (left) side of the road.

### AREA MANAGER

Iowa Department of  
Natural Resources  
Upper Iowa Wildlife Unit  
2296 Oil Well Road  
Decorah, IA 52101  
(563) 382-4895  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Brush Creek Canyon State Preserve

Brush Creek Canyon is a 217-acre preserve containing a rugged forested gorge along the Silurian Escarpment. Located two miles north of Arlington in Fayette County, it was dedicated as a biological and geological state preserve in 1968.

Located on the western edge of the Paleozoic Plateau landform region, Brush Creek Canyon exemplifies the dramatic landscape of a prominent ridge extending through northeast Iowa known as the Silurian Escarpment. The steep slopes and exposed bedrock of this preserve are formed by 150-foot-tall outcrops of Silurian (435 million years old) dolomite of the Hopkinton Formation. Older, underlying shales are of Ordovician age (450 million years old). In many places, large blocks of dolomite have separated from the cliffs and slumped onto the soft, wet shales underneath, often rotating and leaning as they shift position. The spectacular bluffs and slump blocks are the result of a long history of natural stream erosion in the Brush Creek valley.

A total of nearly 270 plant species have been found in the preserve. The rugged topography provides a variety of habitats, ranging from north- and east-facing slopes that are deeply shaded, humid, and cool to south- and west-facing slopes that are sunny, warm, and dry. Cliff faces host an interesting community of ferns, forbs, and shrubs, and are often dominated by Canada yew. Red oak, sugar maple, white oak, and basswood are the dominant tree species on the slopes. Blue beech and ironwood dominate the understory, with leatherwood, downy arrowwood and bladdernut found on the upper slopes. Additionally, flat to gently rolling upland woods are found at the top of the slopes. White oak and shagbark hickory are characteristic overstory trees here with beaked hazel, gray dogwood, and wild honeysuckle in the understory. The narrow bottomland forest along Brush Creek is subject to periodic flooding. Box elder, green ash, cottonwood, hackberry, and American elm are common in this habitat. Silky dogwood, ninebark, and nannyberry can be found here along with black raspberry, prickly ash, and poison ivy.

Woodland wildflowers are abundant throughout the forest, with spring beauty and hepatica beginning to bloom in March. In late summer, spotted jewelweed, zigzag goldenrod, crooked stem aster, and arrow-leaved aster can be seen in flower. The fronds of northern lady fern, rattlesnake fern, bulblet bladder fern, fragile fern, interrupted fern, broad beech fern, and northern maidenhair fern add variety to the woodland community. Mats of mosses, liverworts, walking fern, and bishop's cap cover boulders in rocky ravines. A small prairielike area once known as Chimney Rock can be found on top of a large block of dolomite in the center of the preserve.

More than seventy-five species of birds, including many neotropical migrant birds (nesting in North America and migrating to Central and South America for the winter) can be seen at this preserve, with sixty-seven of them finding suitable breeding habitat. Several species that need large tracts of unbroken forest for breeding are found in the preserve, including American redstart, Louisiana waterthrush, ovenbird, and yellow-throated vireo.

The preserve is open to hiking and picnicking. Hunting is not permitted.

Other natural areas along the Silurian Escarpment include Mossy Glen, Bixby, and White Pine Hollow State Preserves, Backbone and Echo Valley State Parks, and Volga River Recreation Area.

### DIRECTIONS

From the town of Arlington, take Highway 187 (Eisenhower Road) west and northwest for two miles to 90th Street (sign: Brush Creek Canyon State Preserve—3 miles). Turn sharply east (right) onto 90th Street and go 1 mile to "E" Avenue (State Park sign). Turn north (left) and go 1 mile to the preserve entrance (sign: Brush Creek Canyon State Preserve).

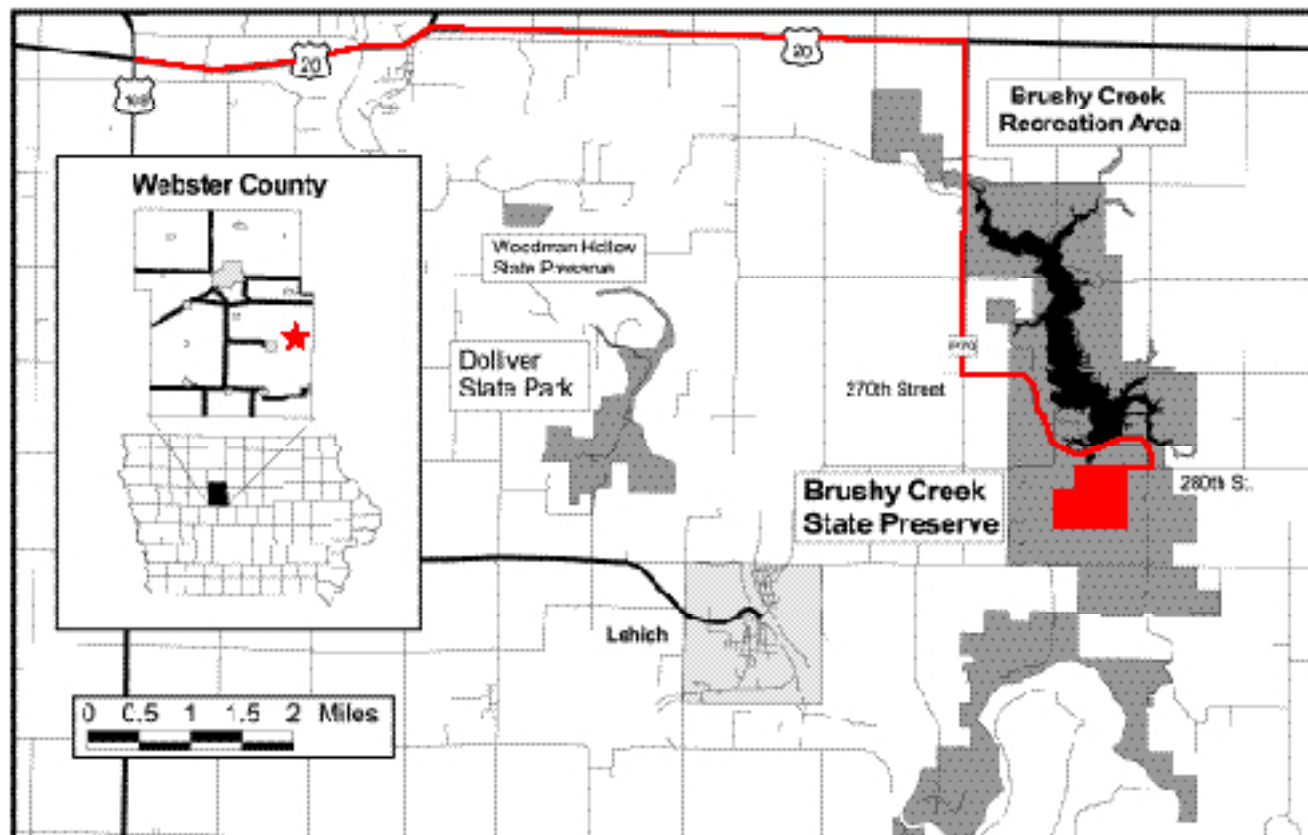
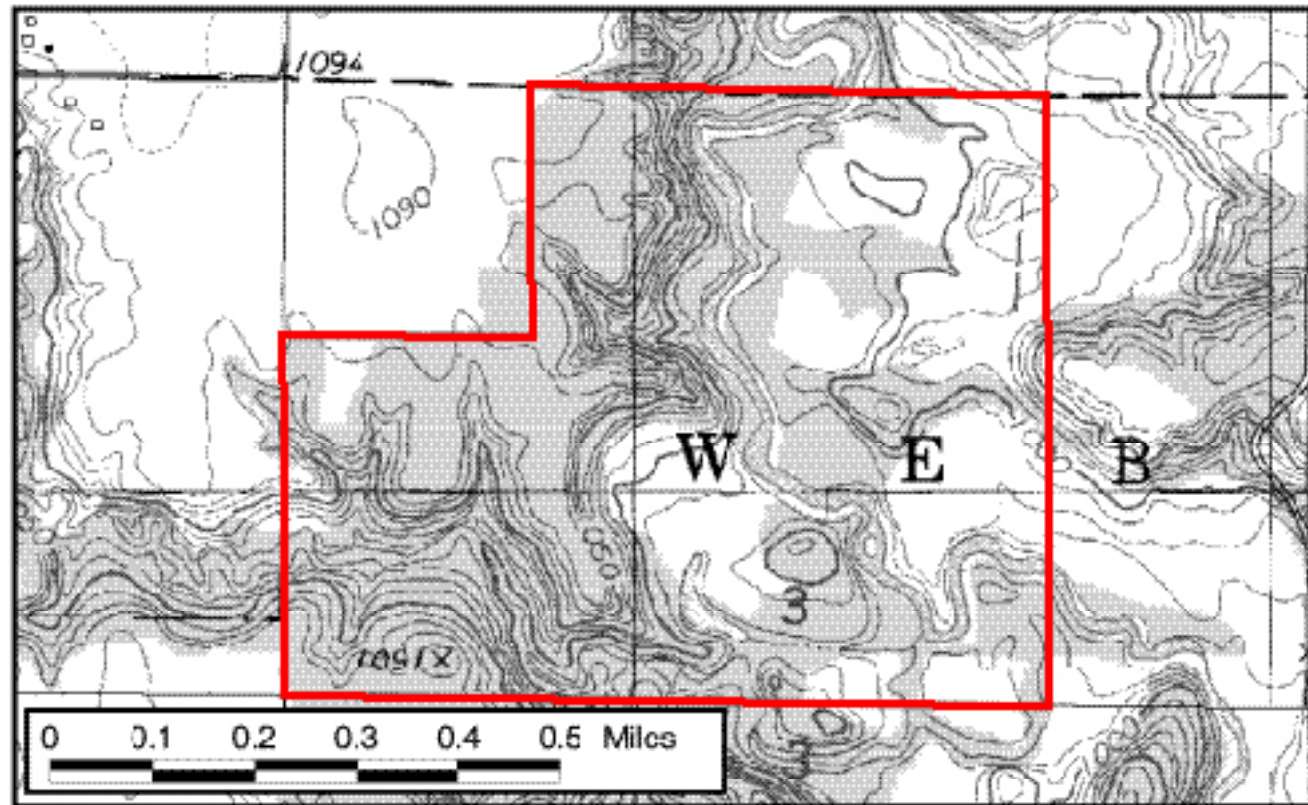
### AREA MANAGER

Iowa Department of  
Natural Resources  
Volga River Recreation Area  
10225 Ivy Road  
Fayette, IA 52142  
(563) 425-4161  
Volga\_River@dnr.iowa.gov  
www.iowadnr.gov/preserves/  
State\_Preserves@dnr.iowa.gov





## Brushy Creek State Preserve



Brushy Creek State Preserve is located in Brushy Creek Recreation Area, a 6,500-acre public area in Webster County located twenty miles southeast of Fort Dodge. During environmental studies conducted as part of a controversial proposal to construct a 1,000-acre recreational lake, a portion of the area was discovered to contain significant geological exposures, archaeological sites, and habitat for the woodland vole, a state-threatened species. In 1988, a 260-acre portion of the recreation area was dedicated as a geological, archaeological, and biological state preserve. A 700-acre lake was later completed upstream from the preserve.

Geologically, the scenic Brushy Creek valley, located within the Des Moines Lobe landform region, contains a remarkable record of 11,000 years of history in its alluvial terraces, benches, and apronlike fan deposits. These features display the effects of glacial melting from the Des Moines Lobe as well as the rapid deepening of the nearby Des Moines River valley. In addition, erosion by Brushy Creek has revealed stratigraphic deposits of a pre-Des Moines Lobe landscape. This geologic record, seen nowhere else in northern Iowa, provides important insights into the evolution of the Iowan Erosion Surface. Fossil wood and plant materials found here are dated at 37,000 years and indicate the presence of a spruce forest similar to the Canadian boreal forest of today.

Natural vegetation found in the preserve includes forest and prairie communities. An old field once used to grow crops is also found here. A small, deep, forested ravine is home to the rare woodland vole. Most of the forested areas on steep slopes are dominated by red oak and basswood, joined by black maple in the deep moist ravines. Bur oak and shagbark hickory dominate the flat uplands. Woodland sedge is common in the understory. The Brushy Creek floodplain is mainly cottonwood, American elm, and black walnut. Former crop fields in the eastern portion of the preserve have been planted with prairie grasses.

Pasqueflower is the first to appear in the small prairie opening in April, with snow trillium, hepatica, bloodroot, and hairy blue violet in the woodlands. By May and June, wild rose, yellow flax, and wild leek are blooming. The fall wildflowers begin in July with several goldenrod species and are followed by round-headed bush clover and Short's blue aster in August. The rich woodland flowers are mixed with several fern species, while the open woodlands are mixed with grasses.

Twenty-five mammal species are found within the Brushy Creek Recreation Area, including bats, squirrels, mice, vole and shrew species, cottontail rabbit, weasel, badger, skunk, and white-tailed deer. At least 100 species of birds have been recorded from the recreation area, including many neotropical migrants: yellow-billed cuckoo, Tennessee warbler, black-throated green warbler, olive-sided flycatcher, Lincoln's sparrow, northern rough-winged swallow, Swainson's thrush, and grasshopper sparrow. Several neotropical migrant species that need large tracts of unbroken forest for breeding may be found here including American redstart, Louisiana waterthrush, ovenbird, and yellow-throated vireo.

A trail open for equestrian use runs through the preserve. Hunting is permitted.

Other natural areas in the vicinity include Dolliver State Park and Woodman Hollow State Preserve.

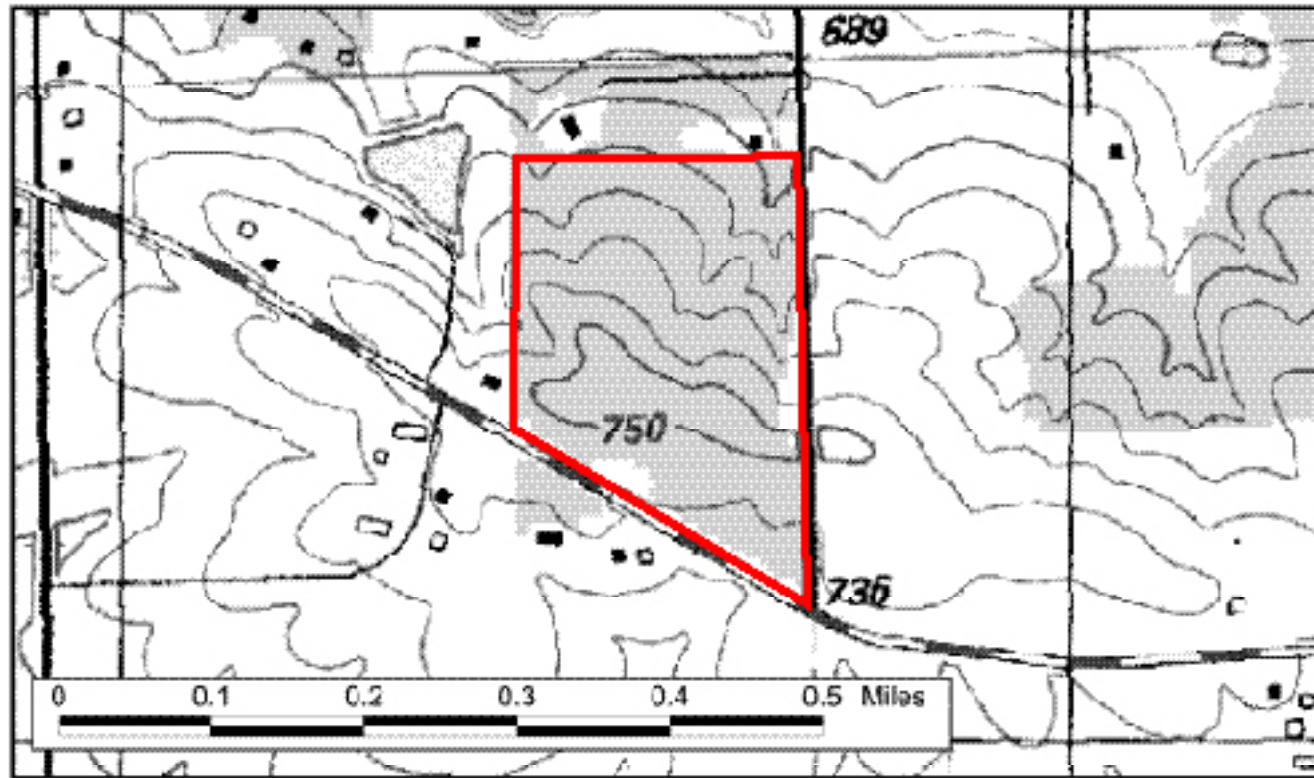
### DIRECTIONS

From the intersection of Highway 20 and Highway 169 southwest of Fort Dodge, take Highway 20 east 9 miles to County Road P73 (Union Avenue) (watch for sign to Brushy Creek Recreation Area on Highway 20). Turn south (right) on P70 and go 3.5 miles to 270th Street. Turn east (left) onto 270th Street and drive 0.5 mile to the official entrance of Brushy Creek Recreation Area. Continue on this curving park road nearly 2.5 miles (past the turnoffs for the campground and picnic area and across the dam forming Brushy Creek Lake) to the intersection of Brushy Creek Road and 280th Street, which is by the park office. Turn west (right) into the parking lot for the lake overlook. From the parking lot, walk downhill to the west and south for 0.1 mile to the Sedge Meadow Mitigation Area, then follow the horse trail along the forest edge for an additional 0.5 mile to the preserve boundary (sign: Brushy Creek State Preserve). This trail continues through the preserve.

### AREA MANAGER

Iowa Department of  
Natural Resources  
Brushy Creek Recreation Area  
Route 1, Box 150  
Lehigh, IA 50557  
(515) 543-8298  
Brushy\_Creek@dnr.iowa.gov  
www.iowadnr.gov/preserves/  
State\_Preserves@dnr.iowa.gov





## Cameron Woods State Preserve

Cameron Woods is a 36-acre preserve containing an upland woods. It is located 1 mile west of Maysville and 8.5 miles northwest of Davenport in central Scott County. The area was purchased in 1977 by the Iowa Conservation Commission and was dedicated as a biological state preserve in 1978.

The preserve's gentle loess-covered slopes are typical of the topography of the eastern portion of the Southern Iowa Drift Plain landform region. The rolling hills of this upland woodland community gradually descend toward Hickory Creek to the north. The forest is dominated by red oak. The preserve is a good representative of a mature hardwood forest, and contains several white oak trees that are about 175 years old.

The preserve has an excellent display of spring flora beginning with bloodroot as early as March. Downy yellow violet, squirrel corn, columbine, and starry false Solomon's seal begin blooming in April and May. Brown creepers, Baltimore orioles, rose-breasted grosbeaks, song sparrows, assorted warblers, and woodpeckers are a few of the resident bird species.

Hunting is not permitted.

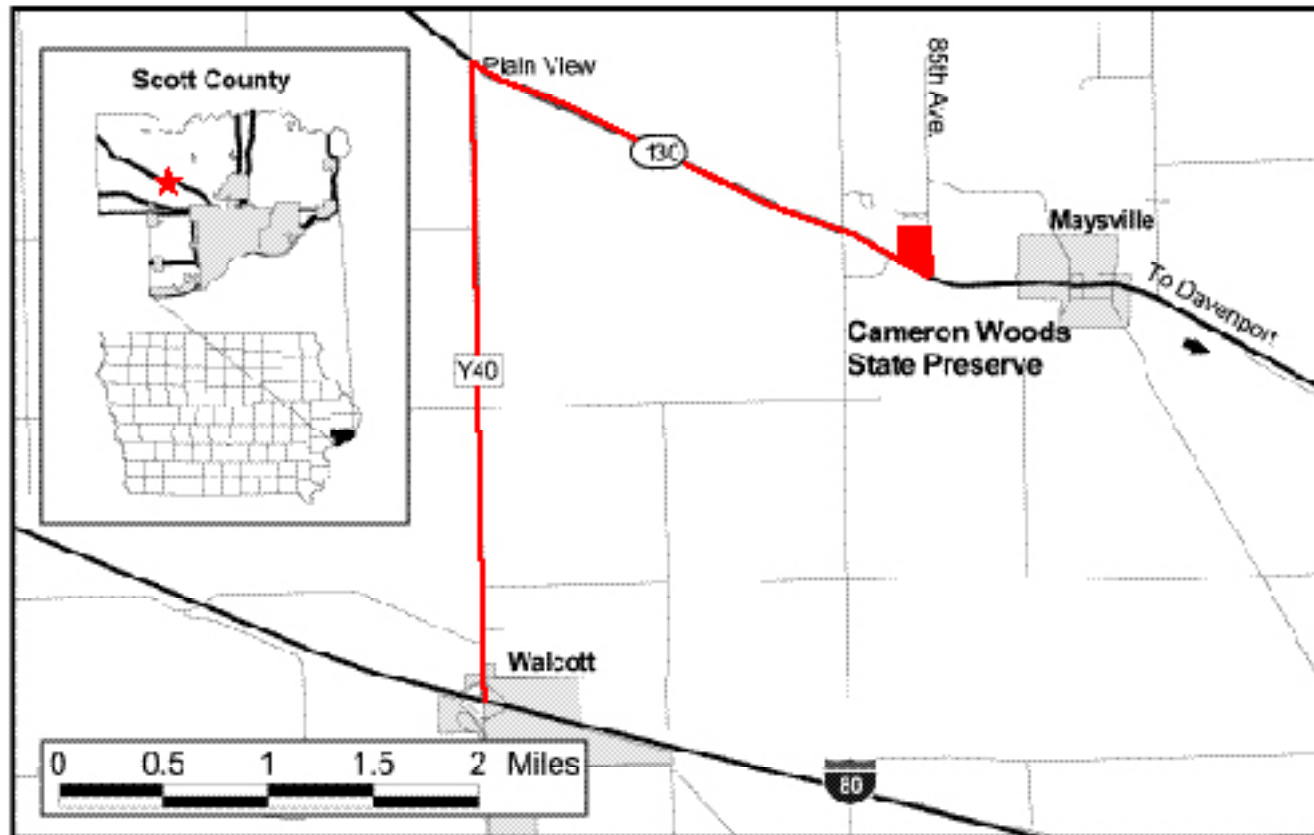
Other natural areas in the vicinity include Rock Creek Island State Preserve and the Wapsi River Environmental Education Center.

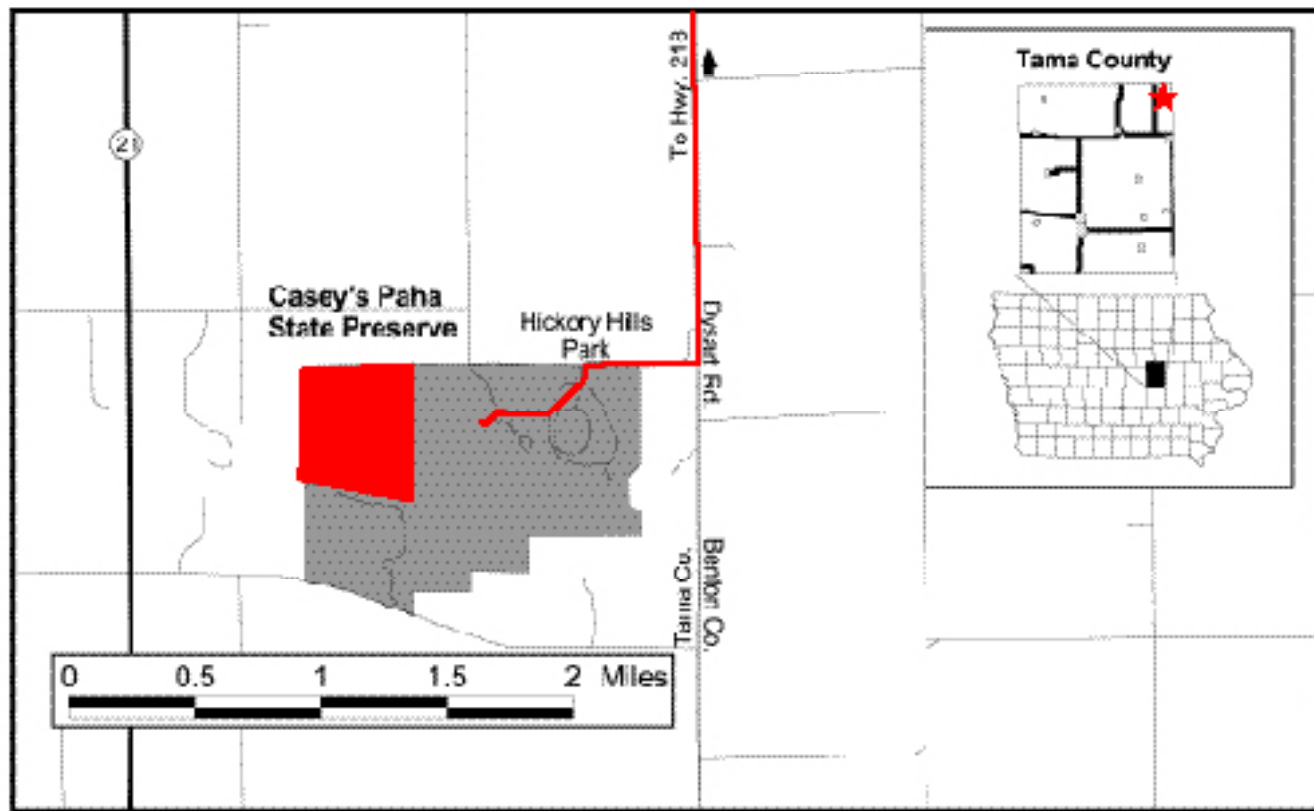
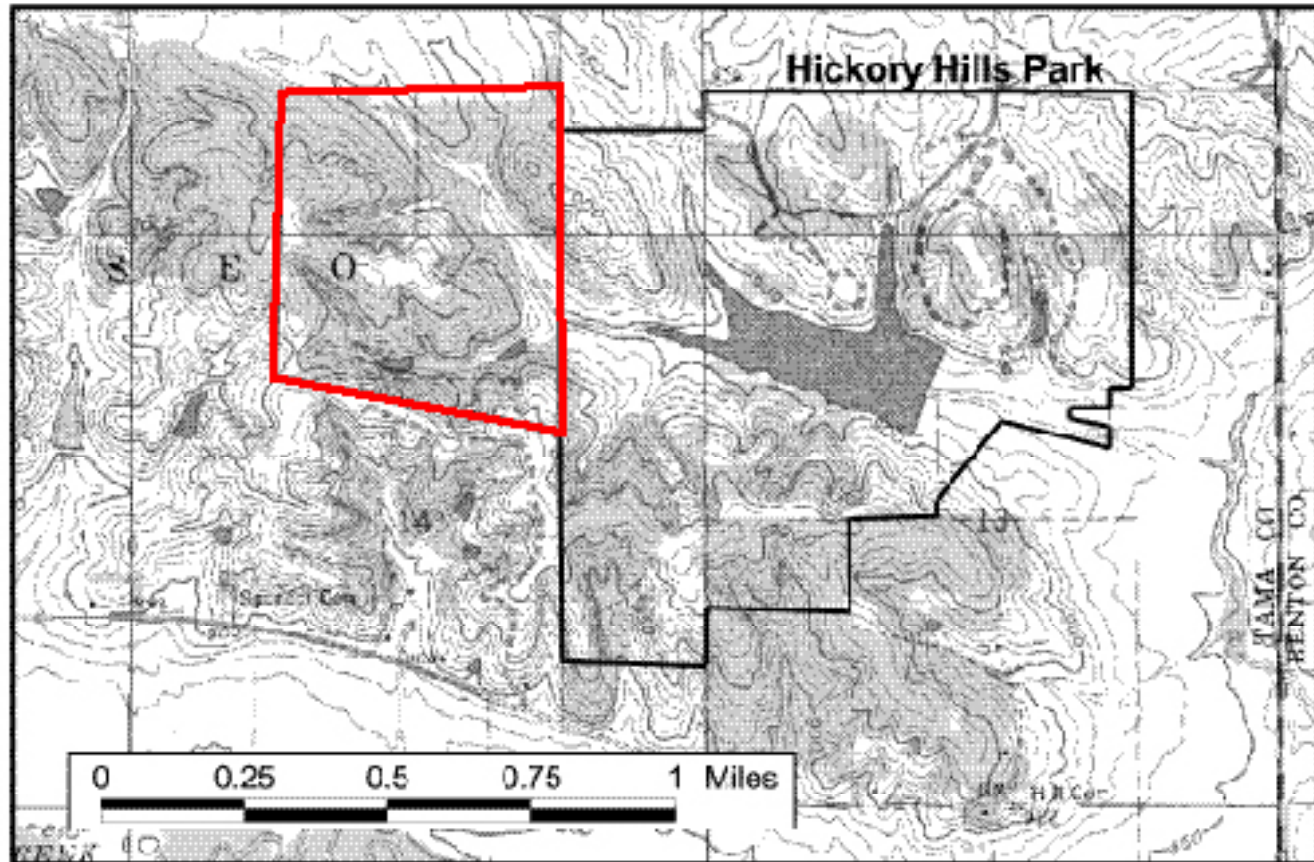
### DIRECTIONS

From the intersection of I-80 and I-680 northwest of Davenport, take I-80 west 3.5 miles to County Highway Y40 (exit 284). Go north on County Road Y40 (60th Avenue) into the town of Plain View. In Plain View, turn east (right) onto Highway 130 and go about 2.8 miles to 85th Avenue. Turn north (left) onto 85th Avenue, park on the roadside, and walk a short distance west along Highway 130 to a path leading into the preserve (sign: Cameron Woods State Preserve).

### AREA MANAGER

Scott County Conservation Board  
 Wapsi River Environmental Education Center  
 31555 52nd Avenue  
 Dixon, IA 52748  
 (563) 843-2855  
[www.scottcountyiowa.com](http://www.scottcountyiowa.com)  
[conservation@scottcountyiowa.com](mailto:conservation@scottcountyiowa.com)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Casey's Paha State Preserve

Casey's Paha is a 175-acre preserve that highlights a half-mile portion of a 2.5-mile-long elongated hill known as a "paha." It is located within Hickory Hills Recreation Area in northeastern Tama County, 13 miles south of Waterloo. This 665-acre area was purchased in 1974 by the Black Hawk County Conservation Board. The western third was dedicated as a geological state preserve in 1989 and named after the Caseys, an Irish family that originally settled in the area.

The gentle paha hills provide most of the topographic relief in a region of the state known as the Iowan Surface landform region. The accumulation of wind-blown silt (loess) topping the narrow elongate ridges reaches forty feet deep in places. An interpretive sign, located at the edge of the beach parking lot, tells of the paha's meaning:

Paha is a Dakota Indian word meaning "hill" or "ridge." It was first used in 1891 by geologist W. J. McGee to describe elongated hills capped with wind-blown silt (loess) and sand in northeastern Iowa. Paha are isolated, northwest- to southeast- oriented ridges that rise above the surrounding plain. These landforms are characteristic of the southern portion of a major landform region known as the Iowan Erosion Surface. Research drilling on this paha in the 1960s was instrumental in establishing that these features are erosional remnants of a higher, once-continuous glacial plain. The deposits beneath the loess in paha are all that remain of these older glacial materials, which are still widespread in southern Iowa.

Paha soils indicate that forests, first coniferous then deciduous, were the native vegetation for several thousand years prior to settlement. These prominences were wooded islands in a sea of prairie grasslands. A perched water table, common on paha, may have helped the woodlands survive in these locations. The trees, in turn, may have had some effect on trapping the 30,000- to 17,000-year-old wind-borne silt and sand that cap the paha. Casey's Paha is also the "type locality," a standard geological field reference, for the Hickory Hills Till, the approximately 500,000-year-old glacial deposit that forms most of the paha's interior.

Vegetation in the preserve is mostly hardwood forest, but includes a large disturbed open area that is to be restored to prairie. An archery trail is located in the southern portion. Several large old trees are found in the southern portion of the preserve along the trails. The oldest tree, a white oak, is nearly 240 years old, and can be found east of the western portion of the archery trail.

Hunting is permitted; another natural area in the vicinity is Mericle Woods State Preserve.

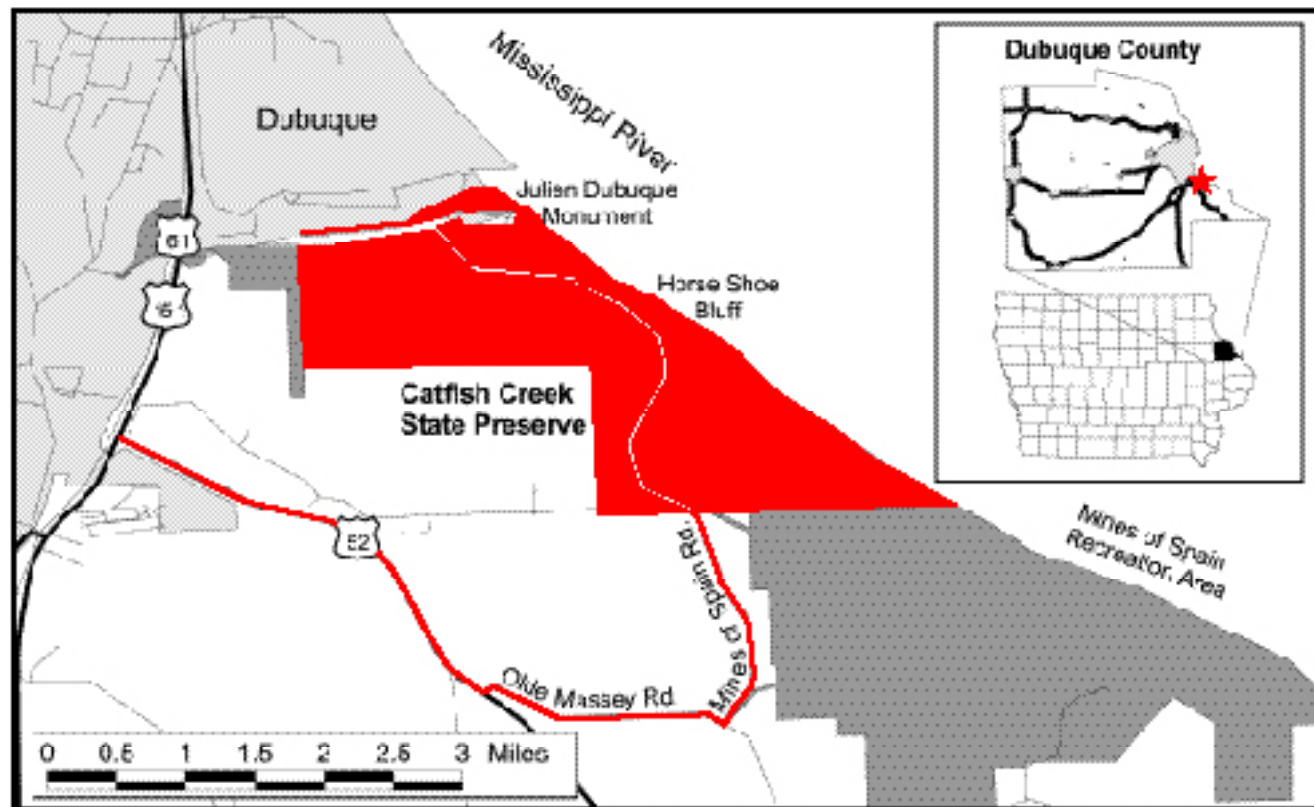
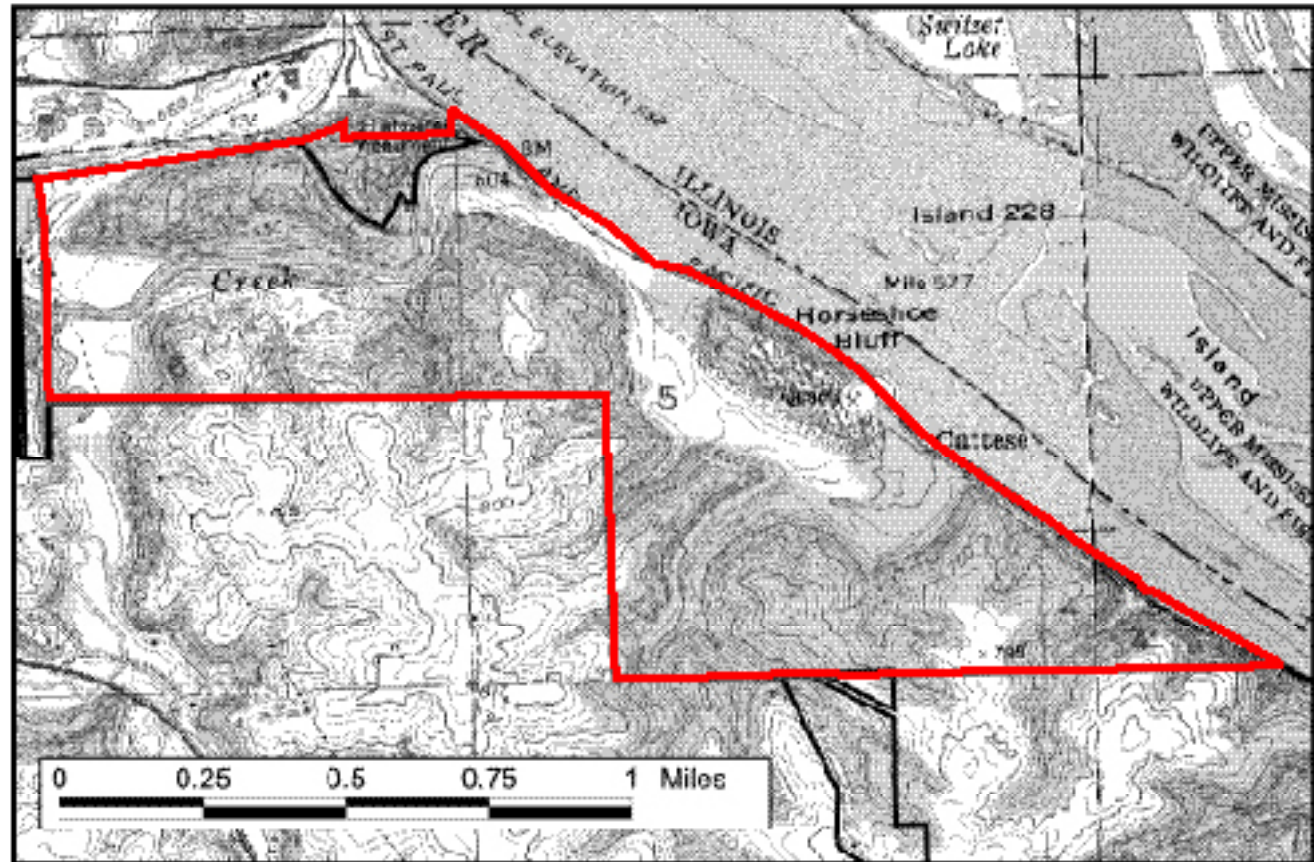
### DIRECTIONS

From the intersection of Highway 20 and Highway 218 on the southeast side of Waterloo, take Highway 218 south to County Road V37 (Dysart Road). Turn south (right) and go 11.5 miles to Hickory Hills County Park entrance (sign: Hickory Hills County Park) on the west (right) side of the road. The preserve is in the far western portion of the county park (sign: Casey's Paha State Preserve). Park in the beach parking lot. From the sign, follow the trail west and south to the preserve.

### AREA MANAGER

Black Hawk County  
Conservation Board  
2410 W. Lone Tree Road  
Cedar Falls, IA 50613  
(319) 266-6813 or (319) 266-0328  
[www.co.black-hawk.ia.us](http://www.co.black-hawk.ia.us)  
[conservation@co.black-hawk.ia.us](mailto:conservation@co.black-hawk.ia.us)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Catfish Creek State Preserve

Catfish Creek Preserve is located in the north half of the 1,300-acre Mines of Spain Recreation Area, on the south side of the city of Dubuque, in Dubuque County. The preserve contains unique historic sites related to the first European settlement of Iowa and geological landforms illustrating stream piracy. The Mines of Spain Recreation Area was purchased by the Iowa Natural Heritage Foundation and later transferred to the Iowa Conservation Commission in 1980. In 1991, approximately 600 acres in the northern half of the recreation area were dedicated as a geological, archaeological, and historical state preserve.

Geologically, the preserve lies within the southern portion of the Paleozoic Plateau landform region. Many characteristics of the Paleozoic Plateau can be found here, including scenic rock outcrops of Ordovician (450 million years old) Galena dolomite, high bluffs, narrow ridges, deeply dissected streams and ravines, seeps, caves, and vertical crevices. The Mississippi River floodplain borders the entire eastern boundary with its entrenched 200-foot bluffs. Catfish Creek (after which the preserve is named) and Granger Creek flow through narrow valleys in the northern section of the preserve. The valleys were altered or abandoned when the Mississippi River, fed by massive glacial meltwater flows, further cut into the bedrock, leaving these good examples of “stream piracy.” Two sections of abandoned valley associated with the former course of Catfish Creek are north of the present-day stream valleys and in the Horseshoe Bluff area.

Vertical bedrock outcrops and steep slopes dominate most of the preserve. Many sites within the preserve exhibit geological features, including the Julien Dubuque Monument, Horseshoe Bluff, the Horseshoe Bluff quarry, the abandoned valley west of Horseshoe Bluff, Fessler Mine, the confluence of Catfish and Granger Creeks, and the bluffs along the Mississippi River. These unusual examples of Quaternary landscape evolution are seen at only one other site in Iowa, in the Little Maquoketa Mounds State Preserve north of Dubuque. Iowa’s portion of the prominent Silurian Escarpment can be observed from the higher elevations within Mines of Spain as a steep wooded ridge along the southwestern horizon.

Archaeologically, the preserve contains a nearly continuous record of occupation by aboriginal peoples dating back to the Archaic period, about 8,000 years ago. The Woodland Indian culture (from approximately 2,500 years ago), known for its pottery, cultivated plants, and burial mounds, used this area extensively. The mounds are believed to have been used primarily for religious, ceremonial, and burial purposes. By a.d. 1200, these hunters and gatherers (who were Iowa’s original gardeners) had been replaced by groups based primarily on agriculture.

Archaeological sites within the preserve related to these earliest occupations include village and campsites at the mouths of Catfish and Granger Creeks, conical and linear burial mound groups, cemeteries, open-air habitation areas, and specialized activity areas such as hunting and plant food processing locales. Artifacts that have been found include projectile points, end scrapers, drill fragments, bifaces, and ceramics.

Historically, Catfish Creek became a fur-trading center for the Indian-French culture beginning in the mid-1600s. In addition, the bedrock contained much lead and zinc ore (known as Mississippi Valley Type deposits). Mines are found throughout the preserve, including many pit mines. The shallow depths

### DIRECTIONS

From the intersection of Highway 151/61 and Highway 52 on the southern edge of Dubuque, take Highway 52 south to Olde Massey Road (watch for Mines of Spain Recreation Area signs). Turn east (left) and follow road to Mines of Spain Road, which is the entrance to the recreation area. Turn north (left) and follow the road into the preserve, which comprises the northern half of the recreation area. Parking is available by Horseshoe Quarry, Catfish Creek, and the Julien Dubuque Monument.

### AREA MANAGER

Iowa Department of Natural Resources  
 Mines of Spain Recreation Area  
 8999 Bellevue Heights  
 Dubuque, IA 52003  
 (563) 556-0620  
[Mines\\_of\\_Spain@dnr.state.ia.us](mailto:Mines_of_Spain@dnr.state.ia.us)  
[www.state.ia.us/parks](http://www.state.ia.us/parks)  
[State\\_Preserves@dnr.state.ia.us](mailto:State_Preserves@dnr.state.ia.us)



of these ores in vertical crevice and cave systems have contributed to a long history of mining activity and geological investigations.

Julien Dubuque was one of the first European settlers who came to the area to mine lead. The Meskwaki Indians had occupied this area since the mid-1700s, and Dubuque located his lead-mining enterprise near their village in the Catfish Creek valley. His settlement included a sawmill, wharf, blacksmith shop and forge, smelting furnace, and trading post. Dubuque's petition to the Spanish government, who controlled the region at the time, gave this area its name—the "Mines of Spain." Many lead mines operated in the area, and some wooded areas in the preserve were heavily cut over for timber and firewood for steamboats.

Specific historical sites within the preserve include the Julien Dubuque gravesite, the buried remains of the Meskwaki Indian village, a large concentration of pit mines, and the Fessler mine. The Fessler mine was one of the last to be mined, and was active until 1914. Archaeological evidence for the lumbering and farming activities that replaced lead mining include stone fences, a series of old roads, several historic foundations, and a small historic family cemetery.

Paul Garvin, in *Iowa's Minerals*, provides a history of early mining in the area; information in the following six paragraphs is drawn from his account.

American mining interests in the upper Mississippi Valley were slowed by the War of 1812, when the mines were controlled by the British and their Native American confederates. By 1822, however, American companies had begun mining operations on the east side of the Mississippi River. On the west side of the river, the Meskwaki continued working Dubuque's old claims. White settlers were not permitted to work the mines until 1833, but the Meskwaki sold lead and lead ash to American traders.

By 1830 American mining companies were well established in Wisconsin and Illinois but not in Iowa, since Iowa lands were still claimed by the Sac and Meskwaki. That year, because of hostilities with the Sioux, the Meskwaki abandoned their mines and sought protection near Rock Island, Illinois. Once their absence was discovered, miners from Illinois and Wisconsin crossed the river.

Competition for claims was so keen that the miners organized and drafted rules of governance. The federal government considered the miners trespassers on what were still Native American lands, and it sent federal troops to drive the miners out. A short time later, under the protection of U.S. army troops, the Meskwaki returned and took up mining again.

Also in 1830, the United States proposed purchasing the Mines of Spain from the Meskwaki, but the asking price was too high. In 1831, the Meskwaki were again at war with the Sioux, and again they left the mines. Early in 1832, George Davenport went to Washington, D.C., with a proposal from the Sac and Meskwaki to sell the lead mines, but unfortunately the government acted too slowly. Eighteen thirty-two was the year of the infamous and tragic Black Hawk War. The treaty ending the fighting was signed on September-21, 1832; it forced the Sac and Meskwaki to cede trans-Mississippian lands to the United States. These lands included Dubuque's Mines of Spain.

The treaty was not to take effect until June-1, 1833, but white settlers and miners refused to wait for the Meskwaki to leave. In September-1832, 150 miners and their families invaded, and again the government intervened. The invaders, some sent by Auguste Choteau from St. Louis, were driven out several times during early 1833. On June-1, white settlers and miners raced across the Mississippi to stake their claims. They were still in violation of the 1807 law requiring that lands be surveyed before they were settled, but this law was not enforced.

The question of ownership of the Mines of Spain was complicated by the fact that Julien Dubuque and Auguste Choteau had a signed document naming Choteau as the grantee upon Dubuque's death. French claimants, operating from St. Louis, demanded title to the lands. The U.S. government refused to acknowledge Choteau's document, stating that the original grant merely pertained to Dubuque as an individual and that he did not have legal right to transfer title to the lands. The matter went to court, where the battle was fought for over forty years, up to the Supreme Court. In the end, in 1853, the government won.

Biologically, the preserve is basically an oak forest, dominated by red and white oak. Bur oak groves are found on the highest hilltops and ridges, and a few patches of paper birch and quaking aspen occur on some slopes that were logged in the past. The steepest slopes support maple-basswood forest, juniper groves, and hill prairies. The sugar maple- and basswood-dominated forest is restricted to the northeast-facing bluffs of the Mississippi River.

In the spring, jack-in-the-pulpit, rattlesnake fern, spring beauty, hepatica, and bloodroot can be found, with wild ginger and false Solomon's seal also found along the Mississippi River. By summer, a multitude of ferns can be seen among the woody vegetation, including maidenhair fern, ebony spleenwort, lady fern, silvery glade fern, fragile fern, crested wood fern, and spinulose wood fern, along with the unusual Indian pipe. Walking fern, bulblet fern, and cliffbrake fern can be found in the steeper areas.

Hill prairies occur as small scattered openings on the driest ridges and hillsides. Spring flowers in these areas include pasqueflower, plantain-leaved pussytoes, hoary puccoon, violet wood sorrel, and alumroot, followed by prairie coreopsis, pale-spiked lobelia, round-headed bush clover, and pale purple coneflower in the summer. The fall flora has sky-blue aster and rough blazing star, with sideoats grama, big and little bluestem, and Indian grass.

The juniper groves, dominated by eastern red cedar, are scattered on limestone outcrops, especially on south-facing slopes and ridges and along the edges of the hill prairies. Forests in the narrow floodplains of Catfish Creek, Granger Creek, and the Mississippi River are dominated by silver maple. Herbs include sedge species, jewelweed, and horsetail. Almost 480 vascular plant species are documented in the Mines of Spain State Recreation Area, and it is likely that most of these species may be found within the preserve.

The Julien Dubuque Monument, the landmark for the Mines of Spain Recreation Area, is located in the northeast portion of the preserve. It offers grand views of the Mississippi River valley gorge and blufflands, the city of Dubuque, the Julien Dubuque bridge, and most of the Mines of Spain. Also seen from the monument is Sinsinewa Mound, an isolated erosional remnant of Silurian-age rocks (430 million years old) across the Mississippi River in Illinois. A trail leads to Catfish Creek from the monument.

A spectacular view of the Julien Dubuque Monument with the city of Dubuque in the background can be seen from Horseshoe Bluff Quarry. The quarry is closed during late winter and early spring when falling rock is most probable.

Rock climbing and rappelling are prohibited. The Fessler Mine is also closed to public access. Hunting is permitted.

Other natural areas in the vicinity include the Little Maquoketa River Mounds and Turkey River Mounds State Preserves and Swiss Valley Park.

The E. B. Lyons Nature Center, which serves as a headquarters for the Mines of Spain, is open Monday through Friday from 9 a.m. to 4 p.m., year-round; weekends 12 to 4 p.m. from April-15 to October-15.

## Cayler Prairie State Preserve

Cayler Prairie is a 160-acre native prairie on the western edge of the Des Moines Lobe landform region. It is located three miles west of West Okobojo Lake in Dickinson County. In 1944, botanist Ada Hayden visited the prairie, which was then being used as a hayfield and pasture, and recommended that it be preserved. In 1958, the Iowa Conservation Commission purchased the property from the Cayler family, who had owned the tract since settlement of the region in the 1860s. Cayler Prairie was designated as a National Natural Landmark in 1966 and was dedicated as a state preserve in 1971. An additional 385 acres of former pasture and cropland to the north and east were purchased by the Iowa Department of Natural Resources in 1998.

The preserve is located on the western limit of glacial advances that pushed into north-central Iowa between 13,000 and 14,000 years ago. Accumulations of glacial debris left behind as the ice stagnated and slowly melted formed the irregular assortment of knobs and basins seen across this preserve and its surroundings. These areas of hummocky terrain (low irregular hills) are part of the Bemis and Altamont end moraines, which mark the outermost lateral positions of the glacier. The moraines continue across the remainder of the Des Moines Lobe region of north-central Iowa, the portion of the state last touched by continental glaciation.

A total of 225 native plant species have been found in the prairie, including 35 species of grass. The prairie is dominated by big bluestem, Indian grass, little bluestem, muhly grass, and blue grama grass. Pasqueflower, golden alexanders, groundplum, and Lambert's crazyweed are very common in the spring. By summer, gray-headed coneflower, Culver's root, sawtooth sunflower, and prairie rose are prominent bloomers. Missouri goldenrod, New England aster, and dotted gayfeather are abundant in the fall.

A total of seventy-two vertebrate species includes four amphibians, seven reptiles, thirty-five birds, and twenty-six mammals. Northern chorus frogs, the eastern tiger salamander, and prairie skink are some of the amphibians and reptiles that might be observed. Common yellowthroat, bobolink, northern harrier, upland sandpiper, grasshopper sparrow, horned lark, and short-billed marsh wren are some of the birds that can be found at the preserve. Mammals found here include the white-tailed jackrabbit, least weasel, and badger. Over twenty-five species of butterflies have been reported from the preserve, including the Dakota skipper, Poweshiek skipperling, Arogos skipper, Ottoe skipper, regal fritillary, and dusted skipper.

Iowa Lakeside Laboratory students use the preserve every summer, and much research has been done over the years. Hunting is permitted.

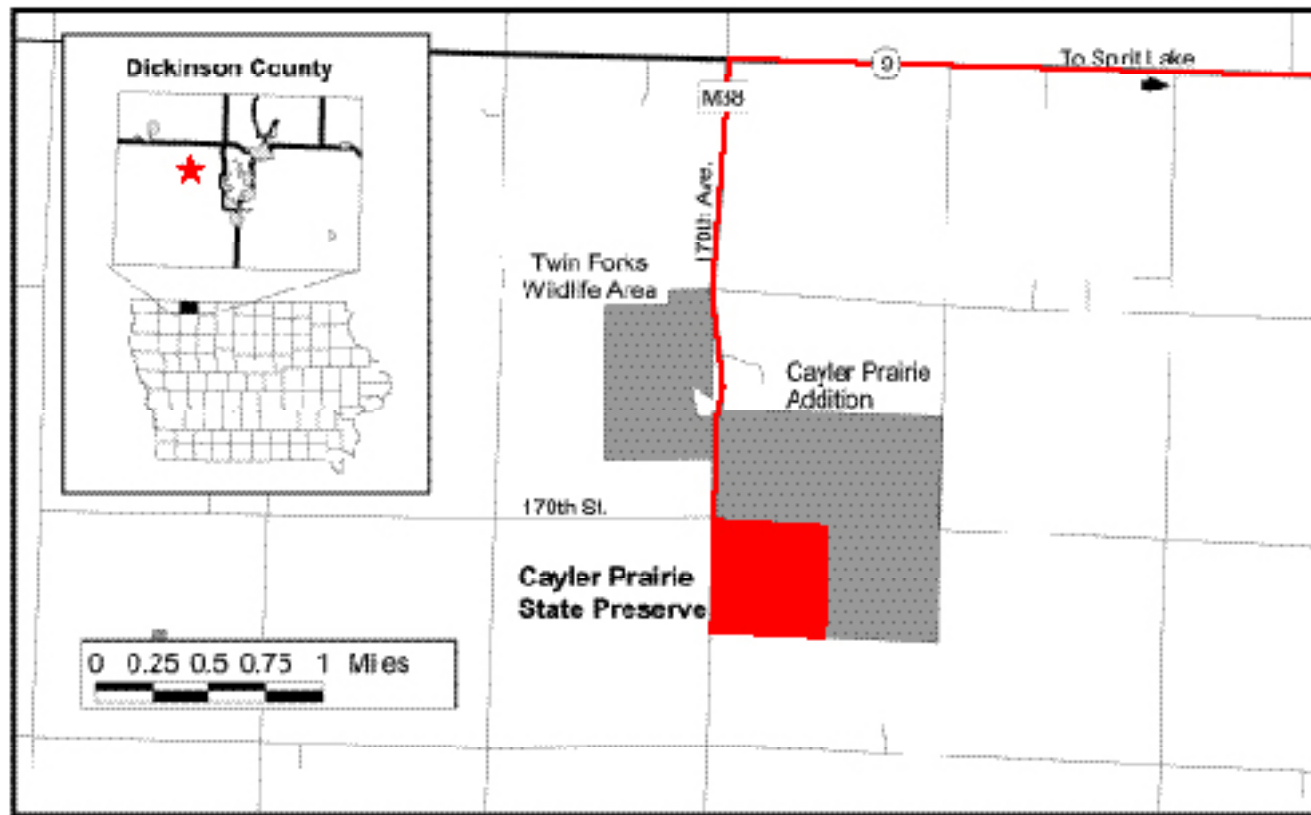
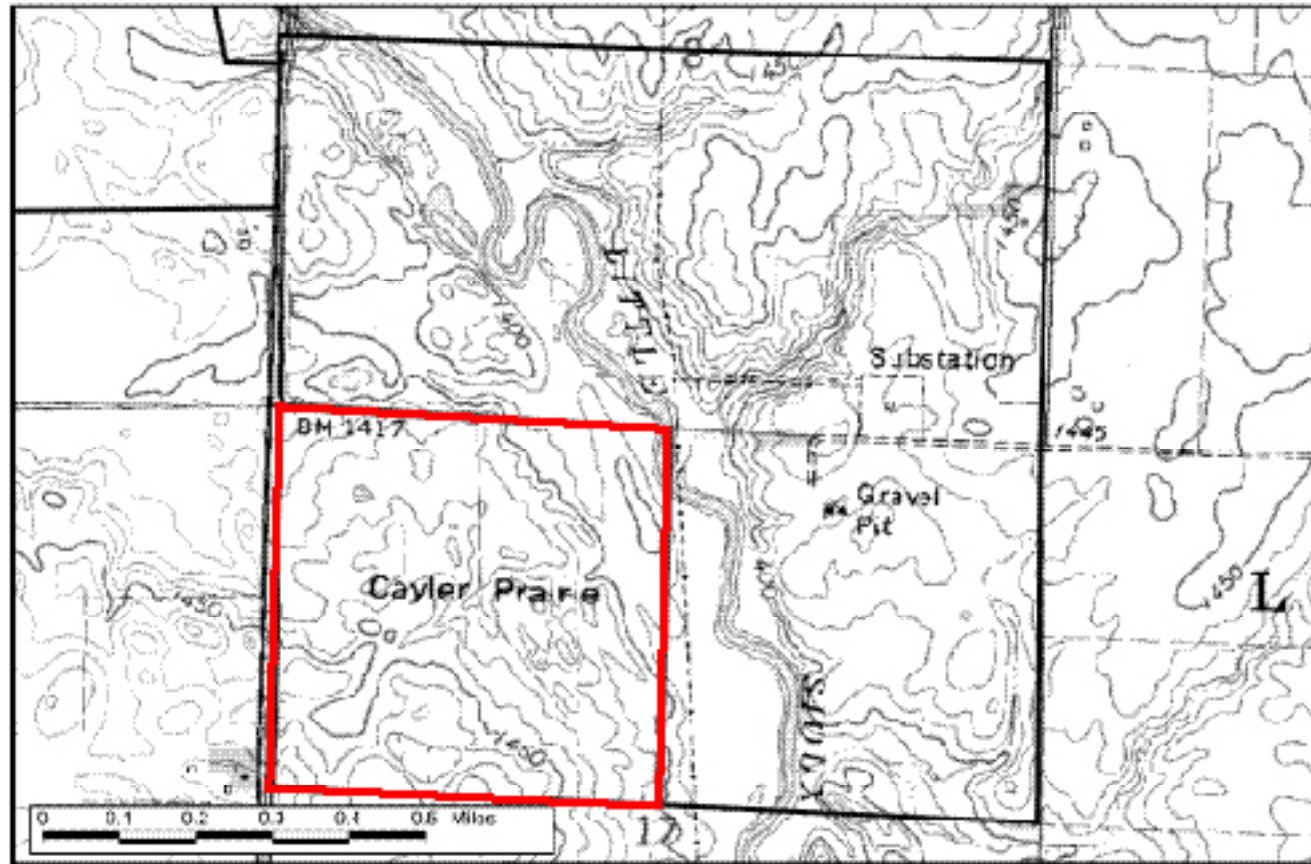
Other state preserves in the vicinity include Freda Haffner Kettlehole, Silver Lake Fen, Anderson Prairie, and Cheever Lake.

### DIRECTIONS

From the intersection of Highway 9 and Highway 86 on the west side of the town of Spirit Lake, take Highway 9 west 3.5 miles to 170th Avenue (sign: Cayler Prairie State Preserve—2 miles). Turn south (left) and go 2.5 miles to the preserve. A parking area is available on the east side of the road (sign: Cayler Prairie State Botanical Monument).

### AREA MANAGER

Iowa Department of Natural Resources  
Great Lakes Wildlife Unit  
2408 17th Street  
Spirit Lake, IA 51360  
(712) 336-3524  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Cedar Bluffs State Preserve

Cedar Bluffs is a 223-acre preserve featuring a scenic forested bluffland with sandstone cliffs. It is located ten miles west of Oskaloosa in southwestern Mahaska County. The interesting flora of Cedar Bluffs caught the attention of botanists as early as 1919. It was acquired in 1990 by the Mahaska County Conservation Board with assistance from the Iowa Natural Heritage Foundation, and was dedicated in 1997 as a biological, geological, and archaeological state preserve.

The preserve is immediately upstream of the confluence of Cedar Creek with the Des Moines River, within the Southern Iowa Drift Plain landform region. The scenic terrain includes 100-foot bluffs of sandstone, box canyons, and small waterfalls. The colorful reddish sandstone outcrops provide one of the best exposures of Cherokee Group sandstones known in southern Iowa. These "channel sandstones" were deposited in ancient river channels that flowed westward across Iowa during the Pennsylvanian period of geologic time, about 300 million years ago. Closer inspection of the rocks reveals intricate cross-bedding, as well as erosional contacts, ripple marks, basal conglomerates, and coalified fossils of plant stems, twigs, leaves, and trees. The sandstone cliffs exhibit huge vertical fractures that have separated large blocks of sandstone from the bluffs in some places. Collapse and breakup of sandstone masses from these fractures have generated large-block talus fields on the lower slopes. Views from the bluff top offer a spectacular vista of the river valley.

Iowa's history is also displayed in cultural resources found here, representing over 8,000 years of use by humans. The Early Archaic through Late Prehistoric sites range from stone tool processing sites to small-size camps to larger habitation sites. A Woodland-period mound is also present. In the mid-1800s, the Des Moines River flowed beneath the bluffs, and was a major steamboat route. The steamboats used to sound their horns while passing the bluffs, which became popularly known as "Echo Rock," a name that persisted into the early 1900s. In 1849, geologist David Dale Owen traveled up the Des Moines River and referred to the sandstone site as "Raven Cliff."

Over 150 plant species have been found here. The upland woods consist of oak forest with an abundance of creeping fragile fern. The cool, moist, north-facing cliffs and slopes are crowned with a maple-basswood forest with a dense understory of ironwood. Narrow lowlands are characterized by bottomland hardwoods, including silver maple, cottonwood, and hackberry. The spring flora is very impressive, with hepatica, bloodroot, Virginia bluebells, and many others. Shallow, acidic soils in the northeastern portion of the preserve have thick coverings of moss. Many ferns are present, including the ubiquitous rattlesnake fern. In addition to vascular plants, twenty-three species of mushrooms have been found at the preserve, including morels and puffballs.

Common species of mammals that occur in central Iowa are found at this preserve. The habitat created by the close proximity of Cedar Creek, nearby sandstone bluffs, and mature forest provides habitat for several species of bats. During the winter, bald eagles often roost in protected valleys along the bluffs.

The preserve is used by William Penn College and Central College. Hunting is allowed.

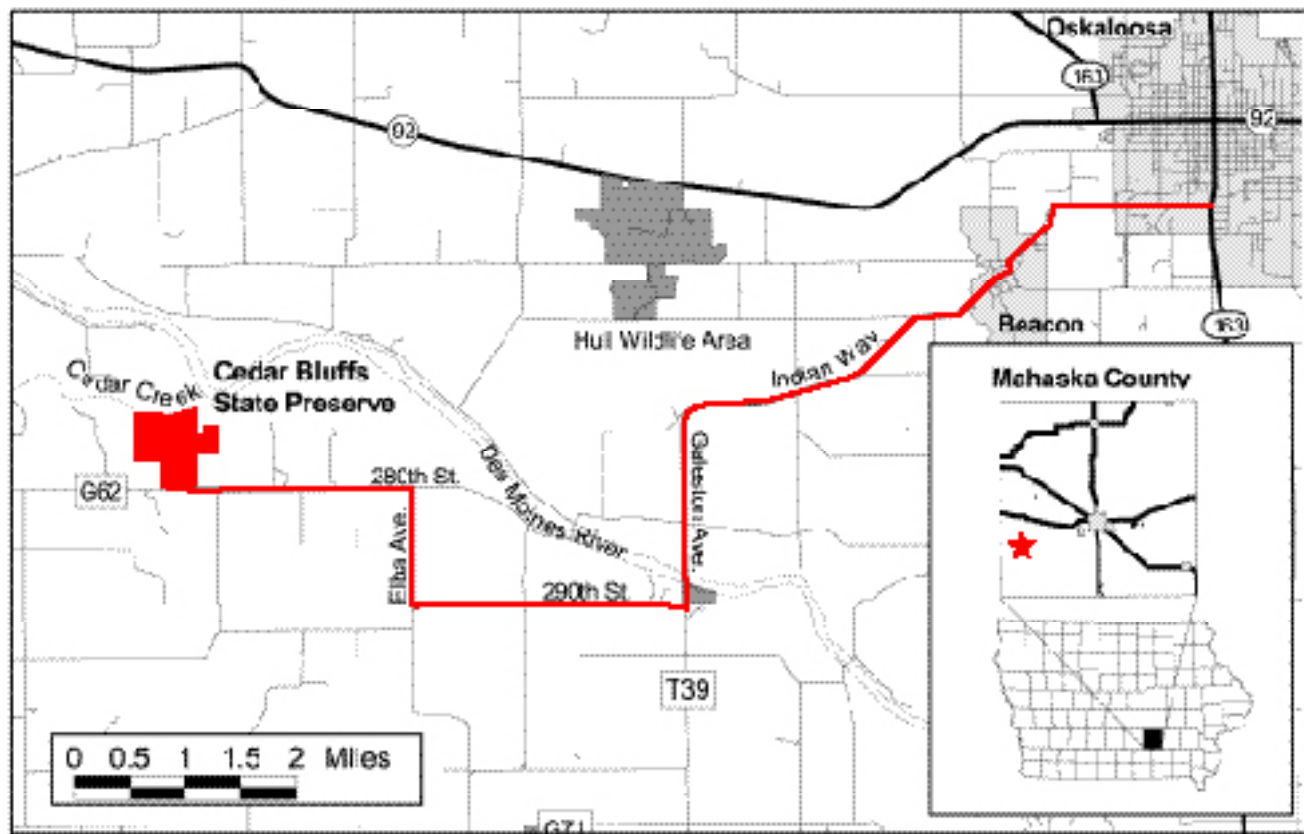
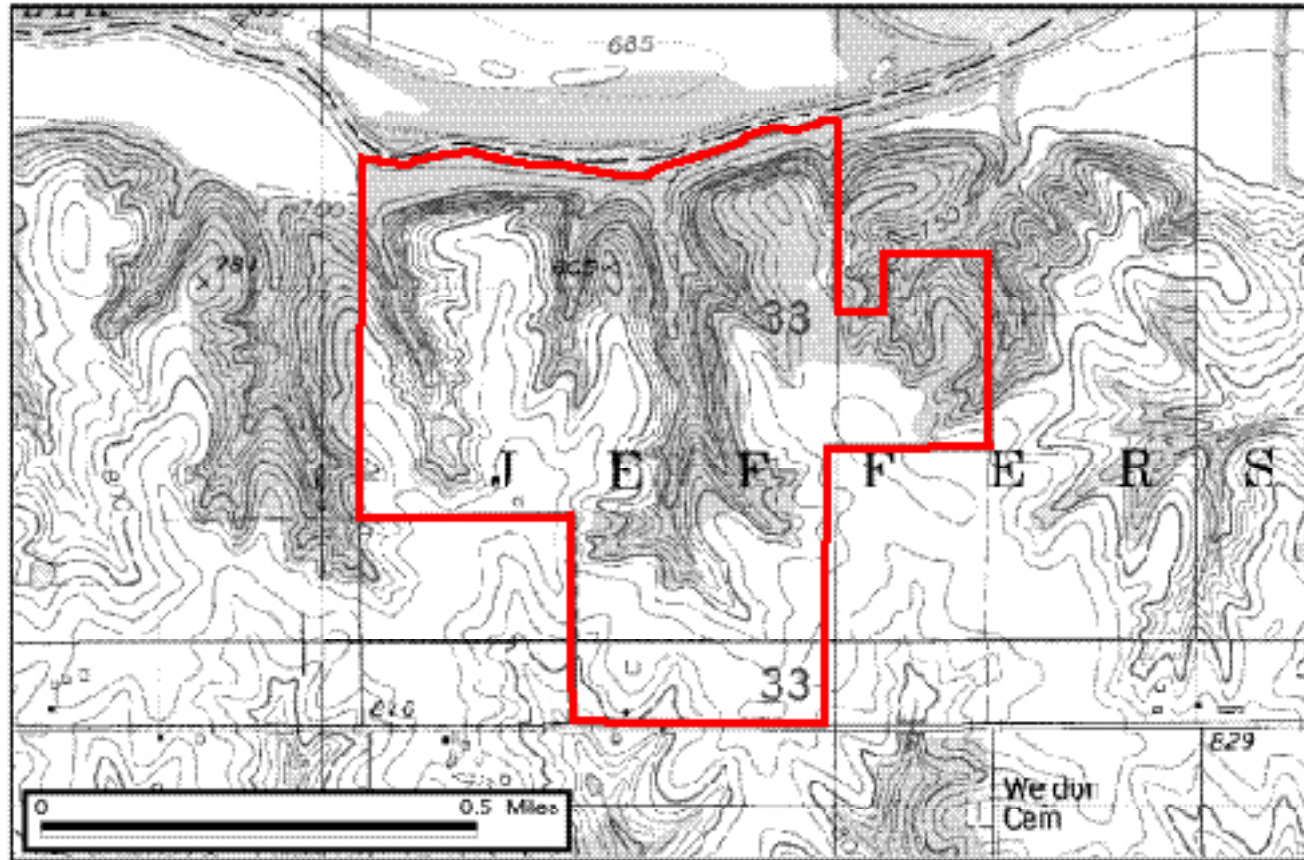
Other public areas in the vicinity include Elk Rock State Park and Quercus Wilderness Area.

### DIRECTIONS

From the intersection of Highway 92 and Highway 163 in Oskaloosa, take Highway 163 south to County Road T39 (Indian Way). Turn west (right) and follow Indian Way through the town of Beacon. Continue west on Indian Way and turn south (left) on Galeston Avenue. After crossing the Des Moines River, turn west (right) onto 290th Street and go 2.5 miles to Elba Avenue. Go north (right) to a T-intersection with 280th Street. Go west (left) 2.25 miles to a parking lot on the north side of the road.

AREA MANAGER  
Mahaska County  
Conservation Board  
2254 200th Street  
New Sharon, IA 50207

(641) 673-9327  
[www.mahaskaconservation.com](http://www.mahaskaconservation.com)  
mccb@kdsi.net  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Cedar Hills Sand Prairie State Preserve

Cedar Hills Sand Prairie is a 36-acre preserve containing a sand prairie, sedge meadow, and small fen. It is located ten miles northwest of Cedar Falls in western Black Hawk County. Formerly known as "Mark Sand Prairie," it has been managed by the University of Northern Iowa Biological Preserves since its discovery in 1969. It was acquired by the Iowa chapter of The Nature Conservancy in 1985 from Wayne Mark. The preserve was dedicated in 1985 for its biological and geological features.

Located in the Iowan Surface landform region, the preserve sits atop a broad sandy divide between the Cedar River and Beaver Creek, and is one of a series of aeolian (wind-formed) sandy ridges found along the Cedar River valley. Within the preserve, dry sand prairie occupies the upland ridges and sedge meadow occupies a large swale in the northeastern portion of the preserve. A small fen is found on seepy, peaty soil in a portion of the sedge meadow. Small marshes are found in the southwest corner of the preserve.

More than 360 native species of grasses and forbs have been identified here, plus at least 107 species of diatoms. Little bluestem, porcupine grass, big bluestem, Indian grass, and prairie cordgrass are common grasses found along a dry to wet gradient. In the spring, marsh marigold is very showy in the swales, followed by hoary and hairy puccoons on the sandy slopes, bird's-foot violet and thimbleweed on the upland prairies, and blue flag iris and shooting star on the moist lowlands. Prairie larkspur, wild rose, and black-eyed Susan bloom in the summer months. In late summer, the purple flowers of rough and prairie blazing stars can be spectacular. Asters and bottle gentian are among the last flowers to bloom in the fall.

Over fifty species of birds can be found here, including bobolink, yellow-headed blackbird, upland sandpiper, grasshopper sparrow, and savannah sparrow. Plains pocket gophers, masked shrews, short-tailed shrews, and western harvest mice are common in the dry sand prairie, while white-footed mice, deer mice, and meadow voles are common in the moist swale and transitional zones of the preserve. Over fifty species of butterflies have been found at the preserve as well, including the regal fritillary, Arogos skipper, Iowa skipper, gorgone checkerspot, two-spotted skipper, black dash, dion skipper, and broad-winged skipper. In August, migrating monarch butterflies gather by the thousands before they continue their journey south.

Hunting is not permitted.

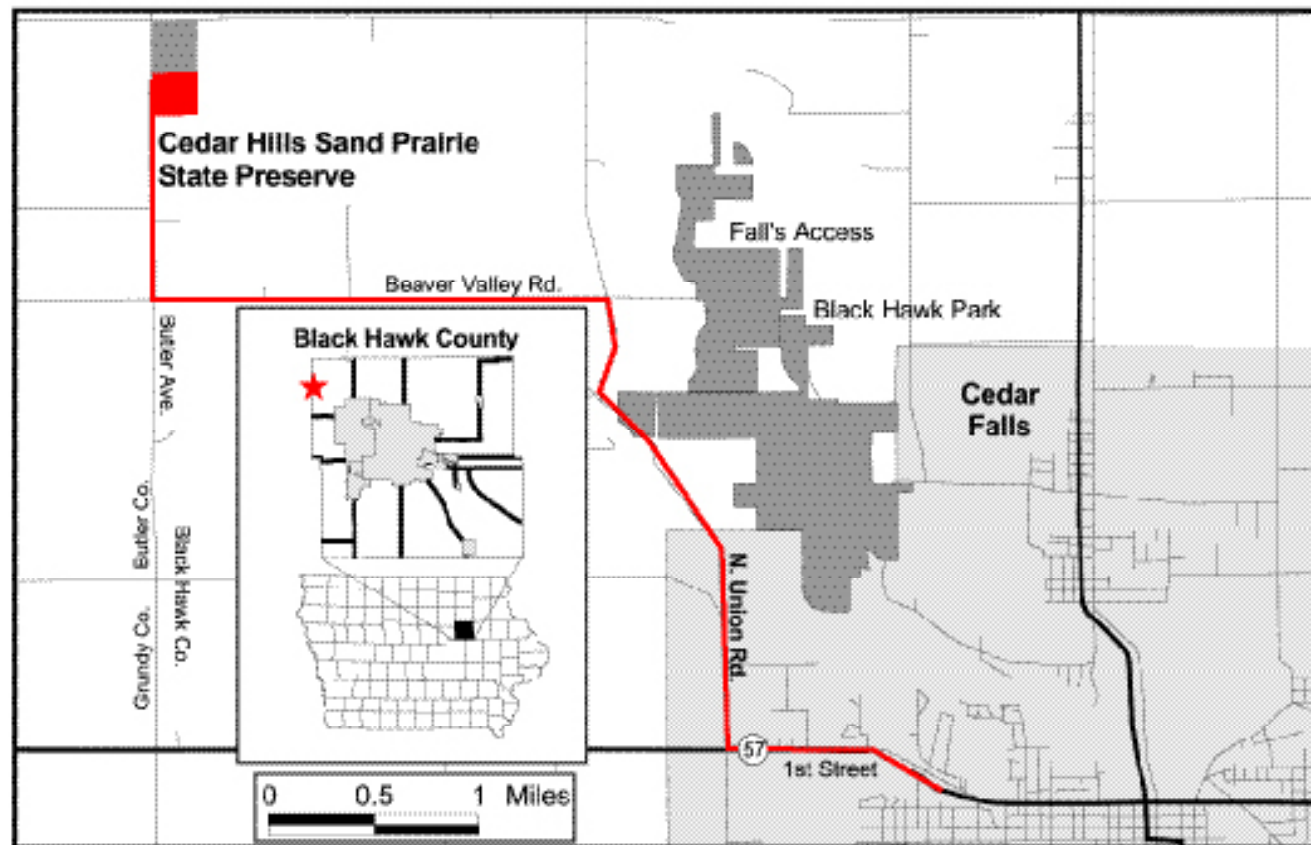
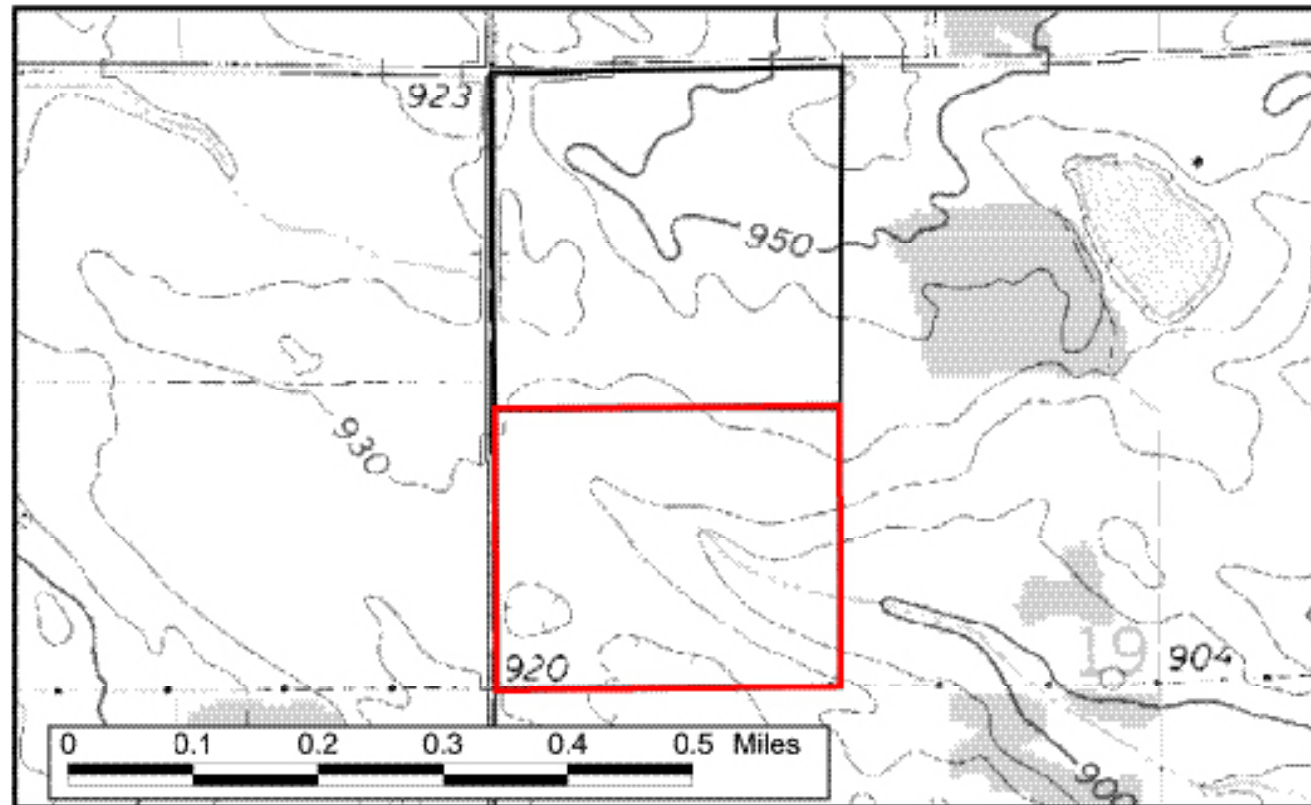
Other natural areas in the vicinity include Clay Prairie State Preserve, Hartman Bluff State Preserve, and George Wyth State Park.

### DIRECTIONS

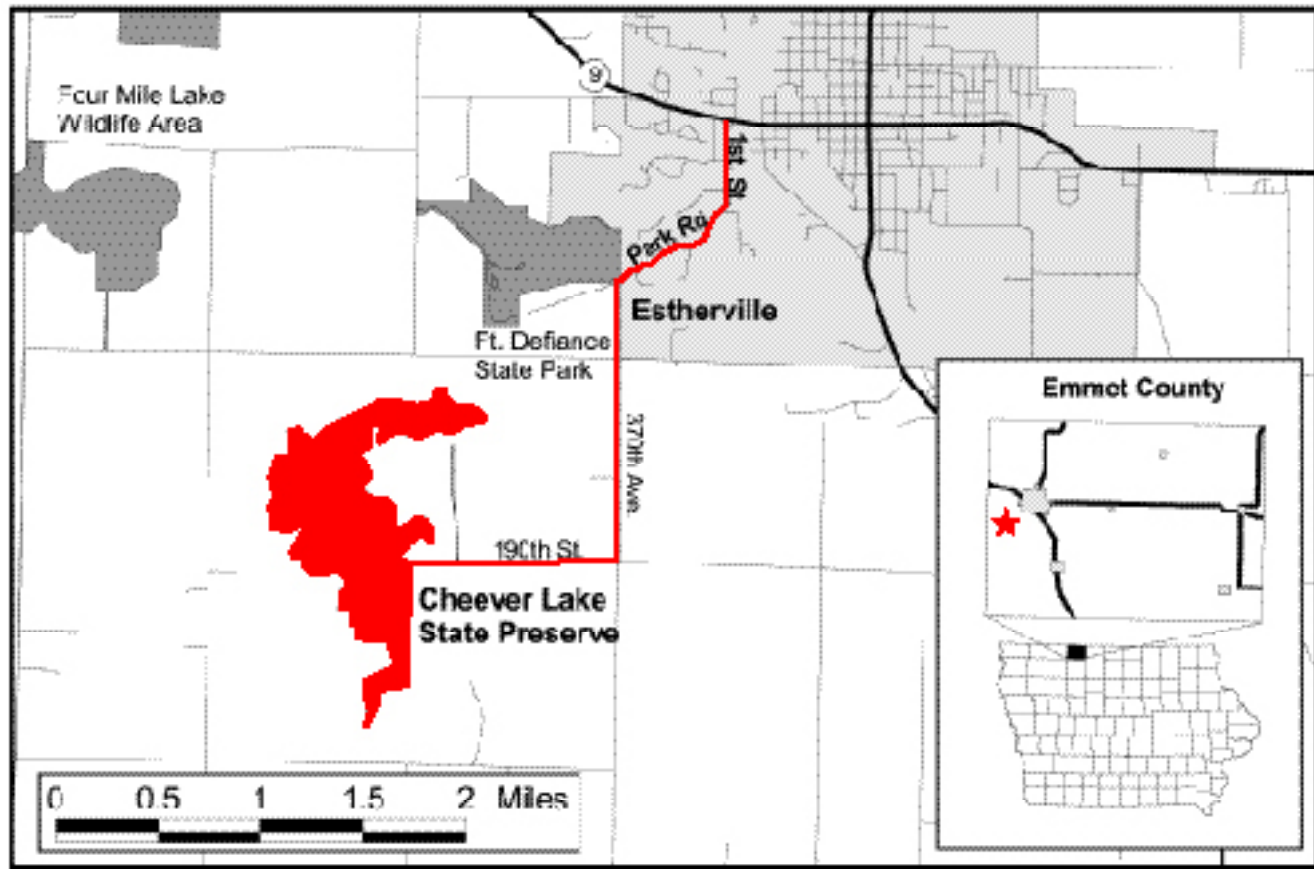
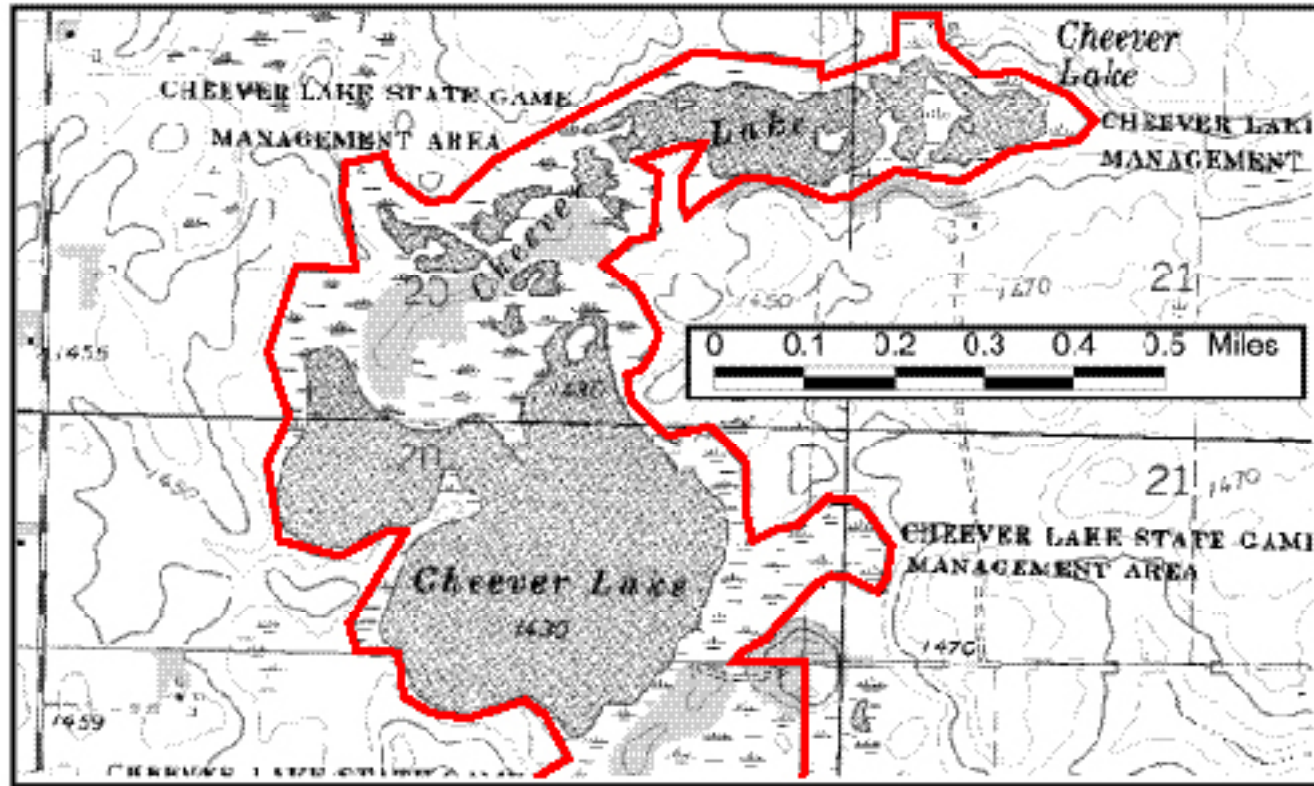
From the intersection of Highway 57 (1st Street) and County Highway T75 (North Union Road) in the northwest part of Cedar Falls, drive north on T75 for 2.5 miles to County Road C67 (Beaver Valley Road). Turn west (left) onto Beaver Valley Road and drive 2.5 miles to Butler Avenue. Turn north (right) and drive 1 mile to the preserve. Park along the road and enter at the gate (The Nature Conservancy boundary sign).

### AREA MANAGER

The Nature Conservancy  
303 Locust St., Suite 402  
Des Moines, IA 50309  
(515) 244-5044  
[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)







## Cheever Lake State Preserve

Cheever Lake is a 367-acre preserve featuring a large, shallow glacial lake with abundant aquatic vegetation. It is located two miles southwest of Estherville in Emmet County. The lake was mapped in 1857 as a “meandered lake,” meaning that the first federal surveyors had to walk around the lake to complete their demarcation of lands in the township to be opened to public sale. Surveyed uplands were quickly sold as farmland. Many meandered lakes were eventually sold as well and were promptly drained. Cheever Lake, however, remained part of the public domain in an undrained condition, eventually coming under control of the Iowa Conservation Commission. Today it is an outstanding example of an undrained natural lake. It was dedicated in 1978 as a biological and geological state preserve.

Located in the Des Moines Lobe landform region, Cheever Lake is typical of many wetlands that were created by glacial activity 12,000 to 14,000 years ago. This extensive lake complex is part of a network of glacial lakes and outwash channels that thread through the irregular “knob and kettle” terrain of the Altamont moraine, occupying part of the route taken by glacial meltwater that once flowed through southwestern Emmet County.

Almost ninety wetland plant species are found here, including wild rice, white water lilies, yellow spatterdock, and bladderwort. Mink, beaver, muskrat, northern leopard frog, western chorus frog, Cope’s gray treefrog, and red-sided garter snake use the marsh edge. Many species of birds nest in the marsh, including yellow-headed blackbird, blue-winged teal, pied-billed grebe, and sora and Virginia rails. In the spring of 1998, several trumpeter swans were released on the lake as part of a reintroduction effort by the Iowa Department of Natural Resources.

Hunting and fishing are allowed.

Other natural areas in the vicinity include Fort Defiance State Park and Anderson Prairie State Preserve.

### DIRECTIONS

From the intersection of Highway 9 and 1st Street on the west side of Estherville, follow 1st Street south and veer west (right) onto Park Road, which continues to Fort Defiance State Park. Veer south (left) past the park entrance onto 370th Avenue and continue south 1.25 miles to 190th Street. Turn west (right) onto 190th Street and follow it 1 mile to a parking area by the lakeshore.

### AREA MANAGER

Iowa Department of Natural Resources  
 Prairie Lakes Wildlife Unit  
 NRCS Office Building  
 2109 Murray Road  
 Estherville, IA 51334  
 (712) 330-2563  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Clay Prairie State Preserve

Clay Prairie is a 3-acre preserve containing a small, unplowed portion of the historic Butler Center Cemetery. It is located fifteen miles north of Parkersburg in central Butler County. In 1961, Joseph B. Clay gave the prairie to the University of Northern Iowa Foundation to be used for research and public education. The prairie is now one of the University of Northern Iowa's biological preserves and was officially dedicated in 1976 as a biological state preserve.

The gently sloping terrain of the preserve is typical of that found in the Iowan Surface landform region. Ninety-eight plant species can be found here, with spring flora displays starting with thousands of shooting stars. Junegrass and porcupine grass, early prairie grasses, can be found among prairie smoke and heart-leaved golden alexanders. As summer approaches, the flowering of New Jersey tea, Indian paintbrush, gray-headed coneflower, and rattlesnake master begins. In fall, the blooms of Canada goldenrod, asters, and downy gentian are mixed with big bluestem, little bluestem, Indian grass, and prairie cordgrass.

Hunting is not permitted.

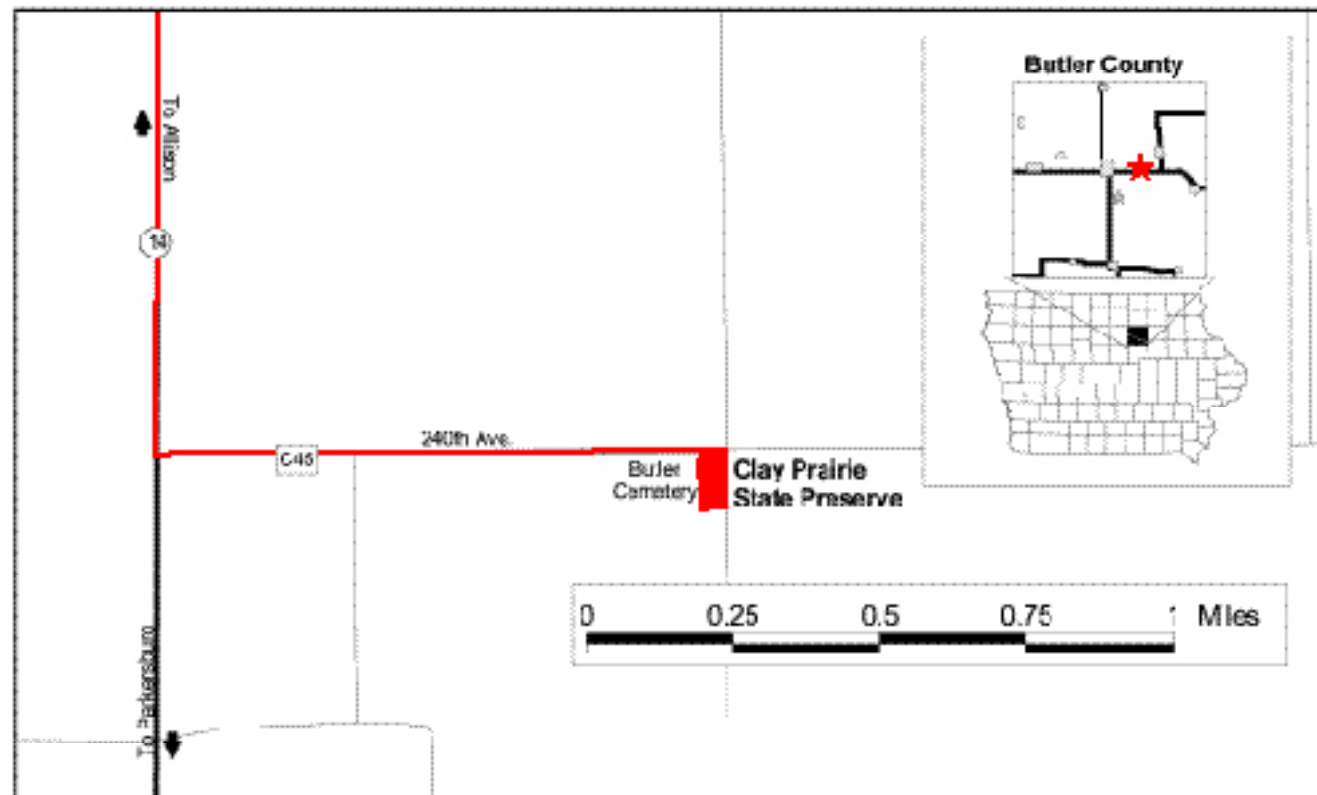
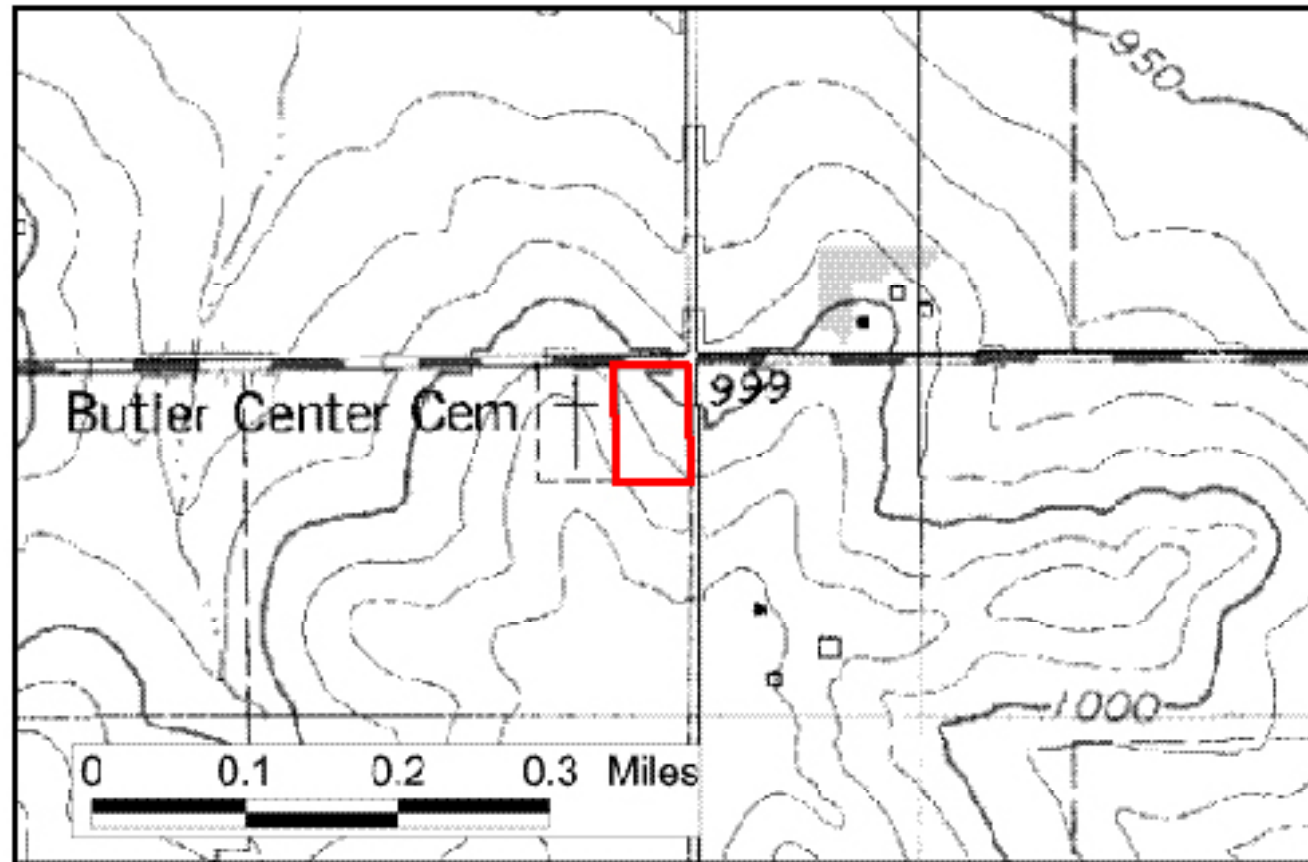
Natural areas in the vicinity include Cedar Hills Sand Prairie State Preserve and Hartman Bluff State Preserve.

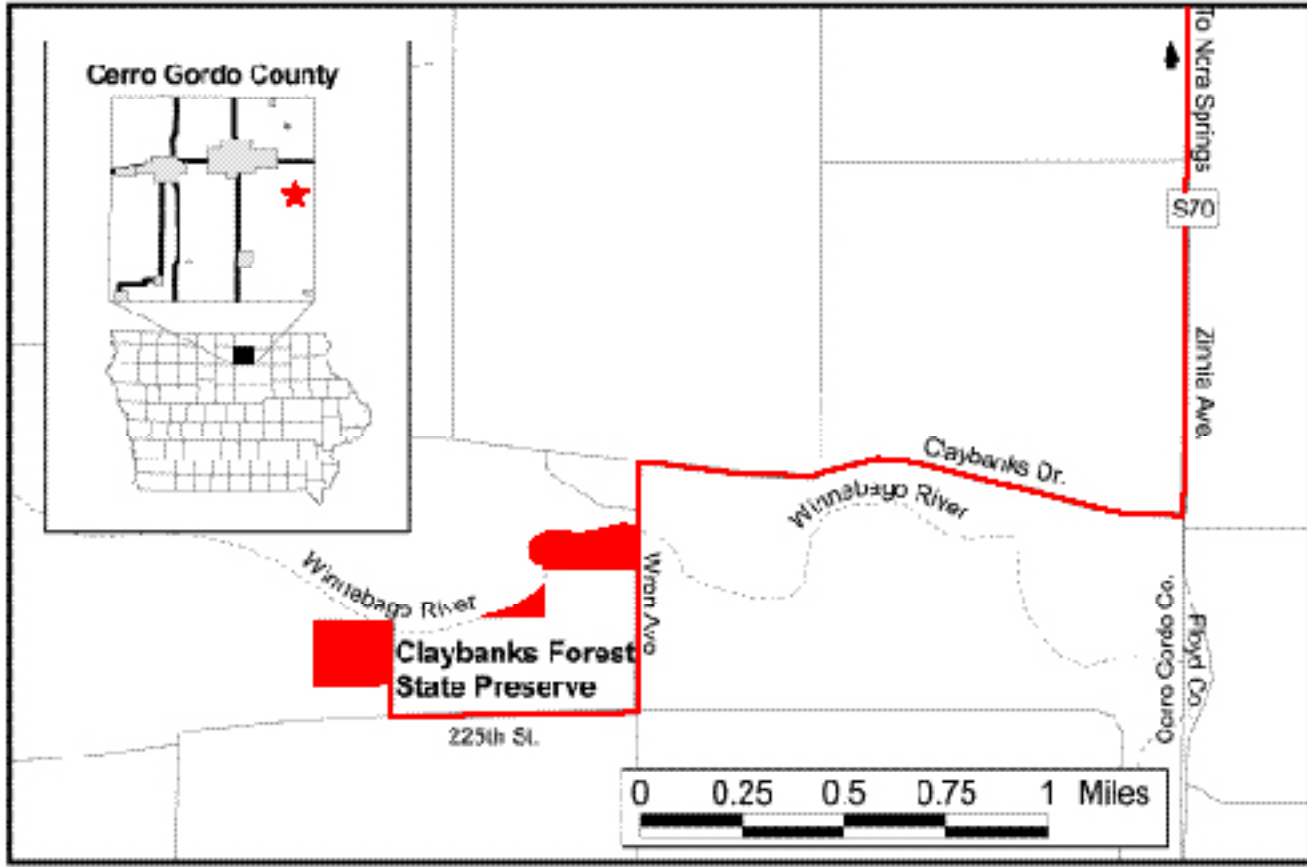
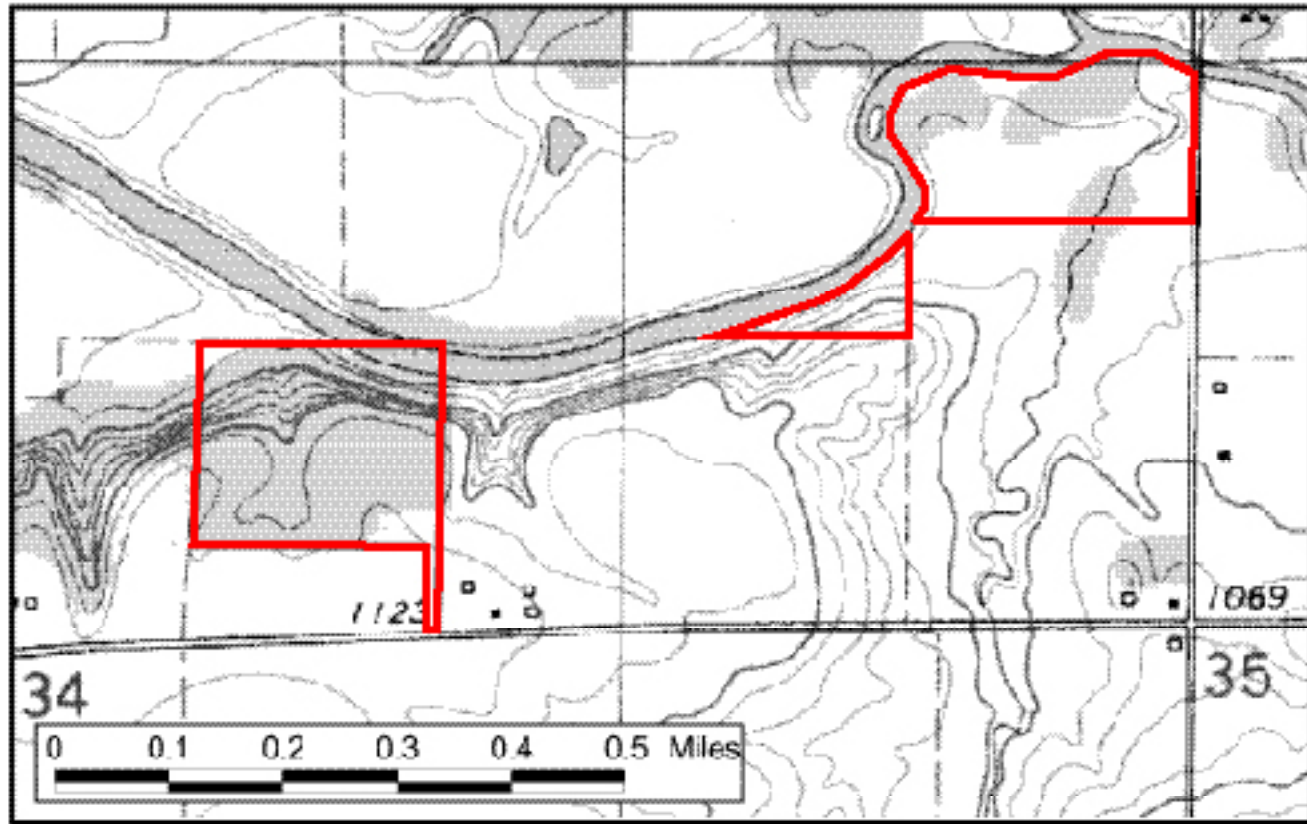
### DIRECTIONS

From Waverly, take Highway 3 west 17 miles to the town of Allison. From Allison, take Highway 14 south 3 miles and turn east (left) onto County Road C45 (240th Avenue). Travel 1 mile to the preserve on the south side of the road, just east of the Butler Center Cemetery (sign: Clay Prairie).

### AREA MANAGER

University of Northern Iowa  
Biological Preserves System  
113 Center for Energy and  
Environmental Education  
Cedar Falls, IA 50614-0293  
(319) 273-2238  
[www.biology.uni.edu](http://www.biology.uni.edu)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





# Claybanks Forest State Preserve

Claybanks Forest is a 56-acre preserve featuring rock outcrops with remarkable, internationally known Devonian fossils. It is located 5 miles southwest of Nora Springs in eastern Cerro Gordo County. Consisting of three separate parcels of land, it was purchased by the Cerro Gordo Conservation Board in 1966. The site was dedicated as a geological state preserve in 1982.

This preserve is known historically as "Hackberry Grove." The name "Claybanks" refers to the light-colored soft limy shales of the 375-million-year-old rocks bearing the fossils. These outcrops of soft shale and limestone found along the banks of the Winnebago River (originally called Lime Creek) are where the "Lime Creek Formation" was first described in the geologic literature and thus represent the "type-locality" for this formation.

The Lime Creek Formation is divided into three members: Juniper Hill, Cerro Gordo, and Owen. The relatively soft limestones and shales of the Cerro Gordo and overlying Owen Members are exposed here, and the abundant fossils within these layers comprise the famous Lime Creek Fauna, also known historically as the Hackberry Fauna. This unit is regarded as one of the premier fossil collecting beds in the United States. A variety of brachiopods (shellfish) and molds of gastropods (snails) and pelecypods (clams) can be found, as well as solitary horn corals, colonial corals, and stromatoporoids (sponges). In addition, bryozoans ("moss animals") and echinoderm (starfish family) debris can be seen, along with crinoids ("sea lilies"), chambered shells of cephalopods (squidlike), some trilobites (three-lobed), and numerous microscopic invertebrates. The lower part of the Owen Member can be seen at the top of the exposure and is between two and five feet thick. This more durable limestone also contains abundant fossils, with branching stromatoporoids, as well as worm tubes and burrows, crinoid debris, clams, gastropods, brachiopods, and other microfossils.

This forested preserve contains large basswoods with some maple and hackberry on a flat upland. Steep slopes occur along the south bank of the Winnebago River. The high bluffs reveal natural exposures of the shallow, tropical sea deposits.

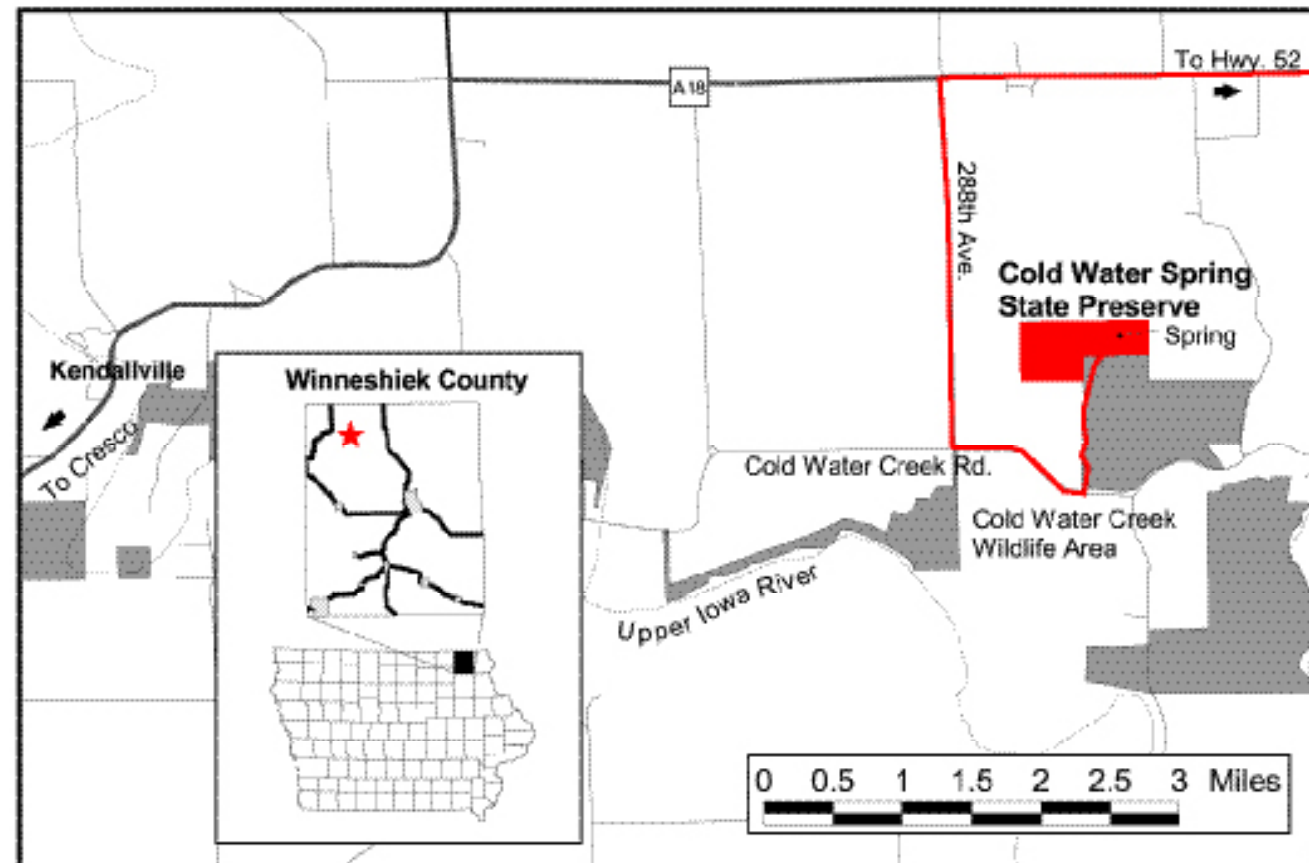
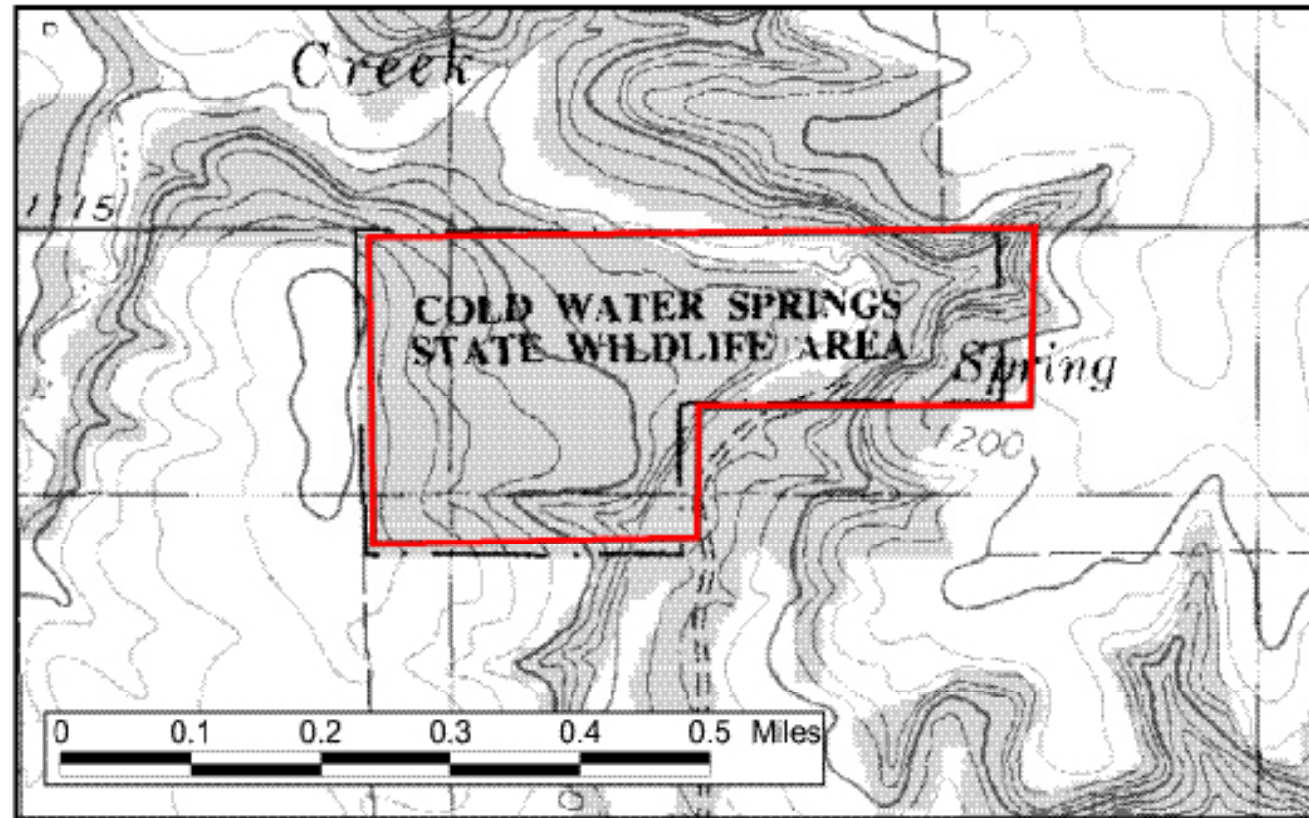
Unlike other preserves, collecting of the exceptionally well-preserved and diverse marine fossils is permitted. The fossils weather free from the soft shales and limestones year after year. Claybanks Forest is fenced but available for hiking and hunting. Please do not trespass on private property.

Other geological sites in the vicinity include Bird Hill State Preserve and Rock Fossil and Prairie Park.

**DIRECTIONS**  
 From the intersection of I-35 and Highway 18 southwest of Mason City, drive east on Highway 18 for 16 miles to County Road S70 (Zinnia Avenue). This local road is on the border between Cerro Gordo and Floyd Counties just southwest of the town of Nora Springs. Turn south (right) onto Zinnia Avenue and go south 1.1 miles to Claybanks Drive. Turn west (right) and go 1.5 miles to Wren Avenue. Turn south (left), and drive 0.25 mile, crossing over the Winnebago River. The eastern unit of the preserve is on the west side of the road just south of the river (sign: Claybanks Forest—Cerro Gordo County Conservation). To get to the western unit, continue south on Wren Avenue to 225th Street. Turn west (right) and go 0.7 mile to the preserve entrance on the north side of the road (sign: Claybanks Forest—Cerro Gordo County Conservation). The middle unit is not accessible to the public. Do not cross private property.

**AREA MANAGER**  
 Cerro Gordo County Conservation Board  
 3501 Lime Creek Road  
 Mason City, IA 50401  
 (641) 423-5309  
[www.co.cerro-gordo.ia.us](http://www.co.cerro-gordo.ia.us)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)

## Cold Water Spring State Preserve



Cold Water Spring is the natural exit of an underground stream flowing through Cold Water Cave, the largest and most elaborate cavern system known in Iowa. It is located in northern Winneshiek County, five miles from the Minnesota border. The spring is on land owned by the Iowa Department of Natural Resources since 1943 (managed as part of the Cold Water Creek Wildlife Area), but the presence of the larger cave system was not discovered until 1967. In 1969, a 60-acre tract around the spring was dedicated as a geological state preserve. The spring itself is presently the only part of the cave system that is contained within the state preserve. Part of the cave was designated as a National Natural Landmark in 1987.

Within the preserve, Cold Water Spring issues from the base of a 150-foot-high bluff and flows a short distance into Cold Water Creek, and from there to the Upper Iowa River. The cliff is composed of Galena limestone, a Devonian (375-million-year-old) rock formation. The cave and spring are part of a larger “karst topography,” a term describing a landscape featuring numerous caves, springs, and sinkholes that develop over broad areas underlain by shallowly buried carbonate bedrock. Through time, acidic groundwater seeping along fractures and crevices in the lime-rich rock slowly dissolves openings that can enlarge into passageways and chambers. Karst topography is typical of much of northeast Iowa’s Paleozoic Plateau landform region.

Picnicking is available in the lowland portions of the preserve near the parking area. Hunting is allowed.

Other preserves in the vicinity include Bluffton Fir Stand, Malanaphy Springs, and Decorah Ice Cave.

### DIRECTIONS

From the intersection of Highway 9 and Highway 52 on the west side of Decorah, take Highway 52 north for 12 miles to County Road A18 (by the small town of Burr Oak). Turn west (left) and go 5 miles to 288th Avenue (watch for sign). Turn south (left) and go 1.5 miles to Cold Water Creek Road. Turn east (left) and go 0.5 mile to Cold Water Creek Wildlife Area. Turn north (left) and go down a steep rocky road to the parking lot. From the parking lot, walk across a footbridge and follow the trail 0.5 mile to the spring. You will need waterproof footwear to get to the spring. A gate covers the natural opening behind the spring.

### AREA MANAGER

Iowa Department of  
Natural Resources  
Upper Iowa Wildlife Unit  
2296 Oil Well Road  
Decorah, IA 52101  
(563) 382-4895  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)



## Crossman Prairie State Preserve

Crossman Prairie is a 10-acre preserve containing a remnant of tallgrass prairie. It is located five miles northeast of Riceville, in Howard County. It was donated to The Nature Conservancy in 1976 by Glenn Crossman and dedicated as a biological state preserve in 1980.

The geological setting of this preserve is typical of the Iowan Surface landform region. The weathered and worn boulders that occur on the land surface were transported from Minnesota, Wisconsin, or Canada by glacial ice over 500,000 years ago. The gentle slopes and surface concentration of boulders are the product of extensive erosion that leveled the landscape and removed finer-grained glacial materials during a period of intense cold between 21,000 and 16,000 years ago, when northern Iowa was still free of ice but exposed to permafrost conditions.

The prairie in the preserve provides habitat for over 120 plant species, including the rare bog birch, a shrubby species that reaches only six to eight feet in height. Common plants found here are prairie cordgrass, big bluestem, prairie dropseed, Indian grass, prairie coreopsis, compass plant, and prairie phlox. Early in the spring one can find the impressive marsh marigold, hoary puccoon, and shooting star, followed by blue phlox, prairie smoke, and prairie violet. With summer comes the striking color of wood lily, as well as swamp milkweed, black-eyed Susan, leadplant, and rattlesnake master. Fall brings the blooming of asters and goldenrods.

The northern 3 acres of the preserve were once plowed but have been reseeded. Management includes periodic controlled burns and the removal of aspen trees.

Hunting is not permitted.

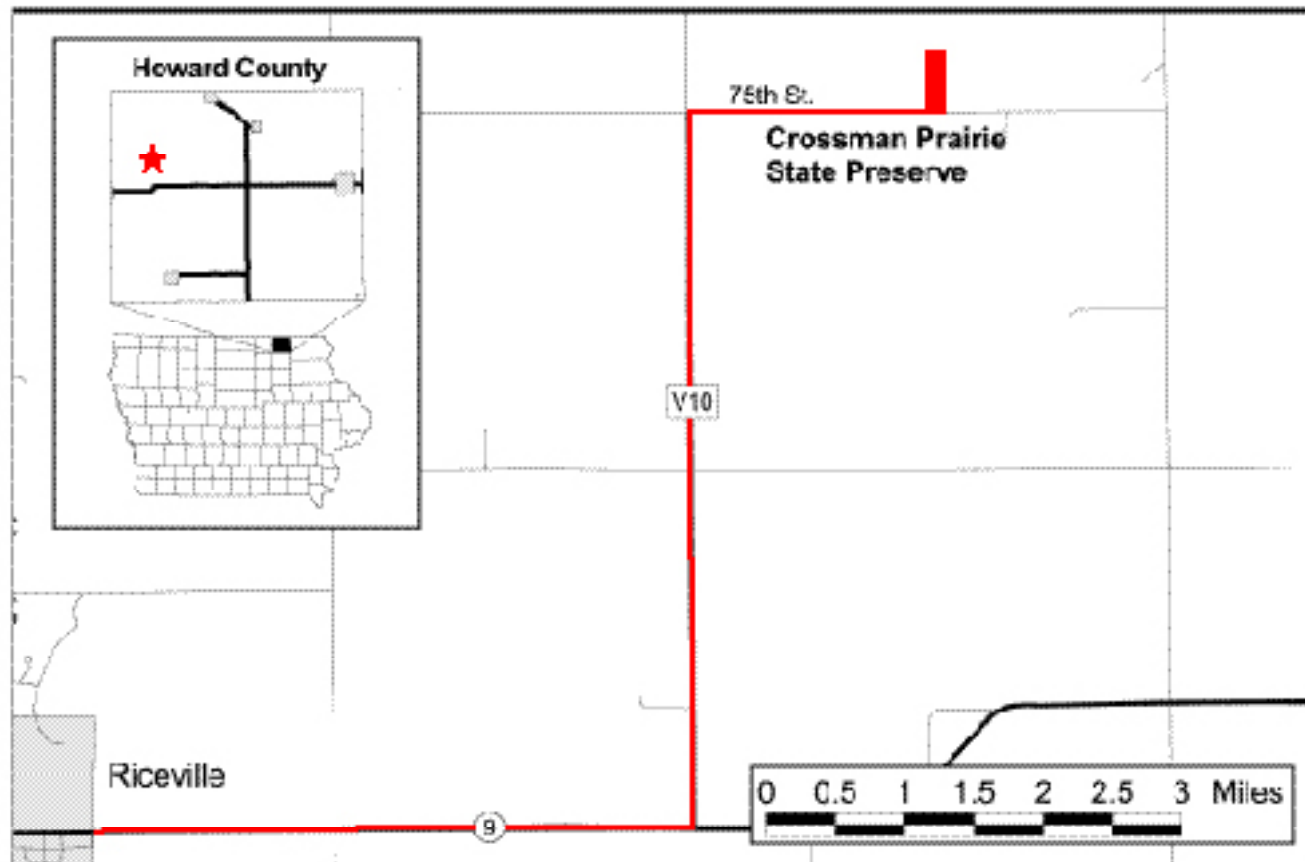
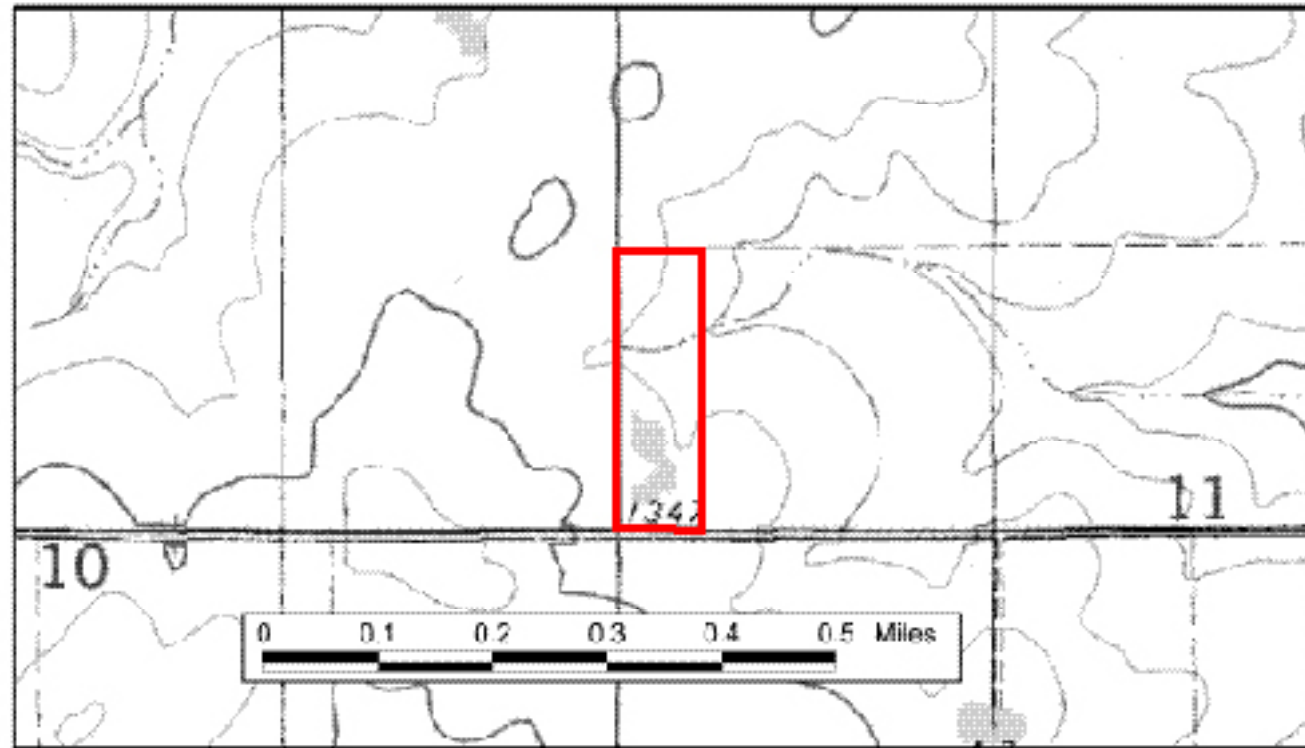
Another natural area in the vicinity is Hayden Prairie State Preserve.

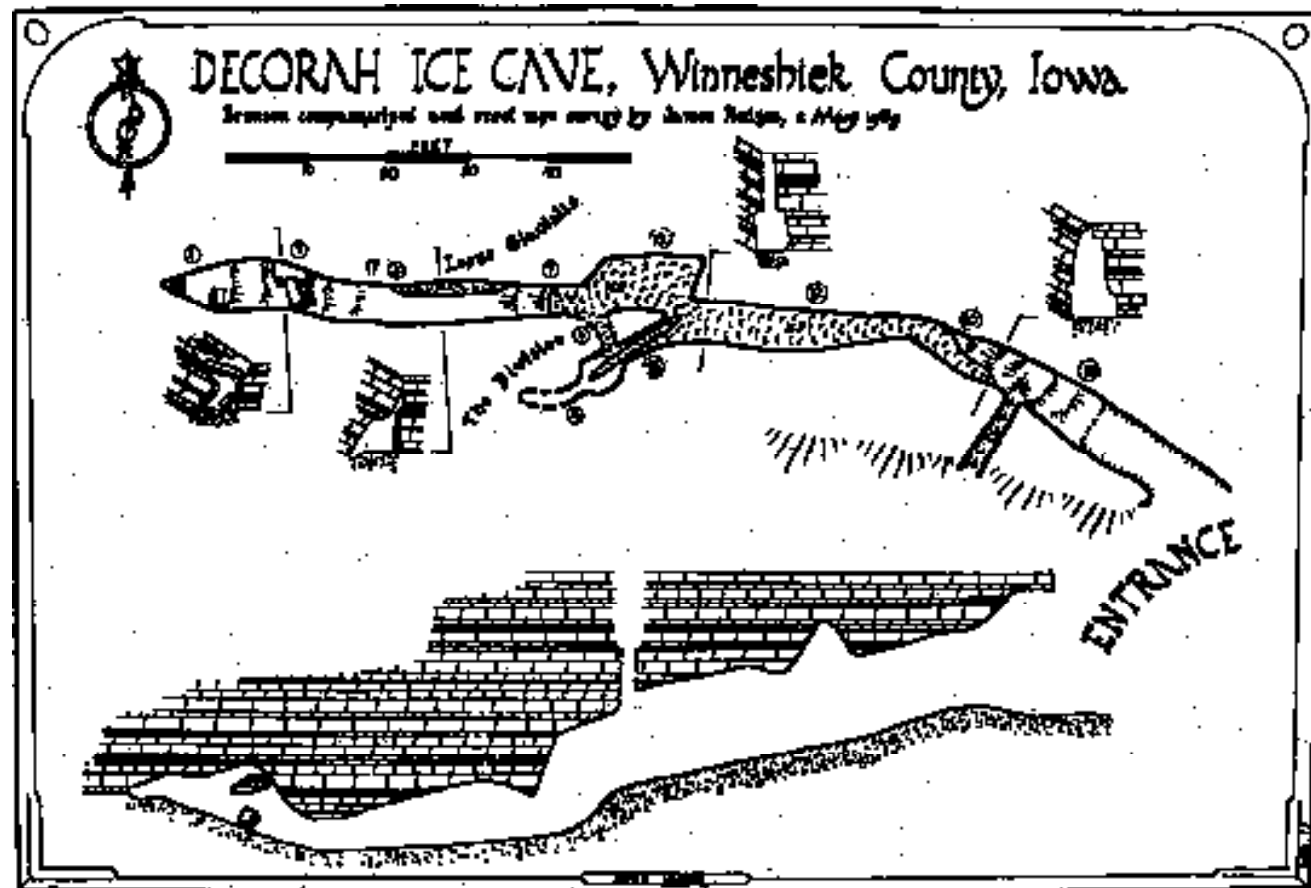
### DIRECTIONS

From Riceville (on the border between Mitchell and Howard Counties), take Highway 9 east 2.5 miles to County Road V10 (Dale Avenue). Turn north (left) and go 3 miles to 75th Street. Turn east (right) and continue 1 mile to the preserve on the north side of the road (sign: Crossman Prairie).

### AREA MANAGER

The Nature Conservancy  
303 Locust St., Suite 402  
Des Moines, IA 50309  
(515) 244-5044  
[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Decorah Ice Cave State Preserve

Decorah Ice Cave is recognized as one of the largest known “glacières” (caverns containing ice) in the Midwest. This 3-acre preserve is located on the southern edge of the Barbara Barnhart VanPeenen Memorial Park, in the northern part of the city of Decorah. It is known for the unusual deposits of ice that coat its walls and floor, usually well into summer. The bluff that includes the cave was acquired in 1954 by the Decorah City Parks Commission and with a gift from Jennie Edmunds Moss in memory of her brother, Roger F. Edmunds. The tract including the cave was dedicated as a geological state preserve in 1973. The cave is owned and managed by the city of Decorah.

The entrance to the cave is up a steep flight of stairs located just east of the parking area. A narrow passage extends into the massive limestone bluff for 120 feet. For the first 10 feet inside the cave, the floor rises slightly and is usually free of ice. For the next 30 feet, the floor slopes gradually, and ice is consistently present along the floor and walls during spring and summer, especially the north wall. Caution is advised, as footing can be hazardous in the cold, dark, slippery environment. Also, rocks may be loose and should not be disturbed.

The cave passage follows a prominent vertical fracture extending through the limestone, and this thin parting has been enlarged by the gradual slippage of massive rock blocks downslope—a geologic process referred to as “mechanical karst.” The shape of the cave results from the outward rotation of limestone on the underlying softer, groundwater-lubricated Decorah Shale. The cave itself is formed in the Galena Group, a 450-million-year-old limestone and dolomite (magnesium-rich limestone) of Ordovician age.

Ice formation is caused as cold winter air sinks into the cave chamber, bringing the surrounding rock walls to temperatures well below freezing. Ice buildup occurs with the spring thaw when surface water seeps into the cave and is frozen by contact with the cold rock walls and the trapped cold air. Ice begins to form in March and usually reaches its maximum thickness of eight to ten inches in early June. Gradually the temperature rises throughout the spring and summer, so that by the middle of summer, the ice-chamber temperature rises above freezing and the accumulated ice begins to melt. By the time cold weather returns in autumn, the cave is usually free of ice and remains relatively dry throughout the winter. These conditions can vary from year to year, depending on seasonal weather patterns.

The cave has an interesting history of scientific investigation and also was commercially shown from 1929 until 1941 at a cost of 10 cents, or 25 cents for a guided tour. Today the cave is open to the public free of charge.

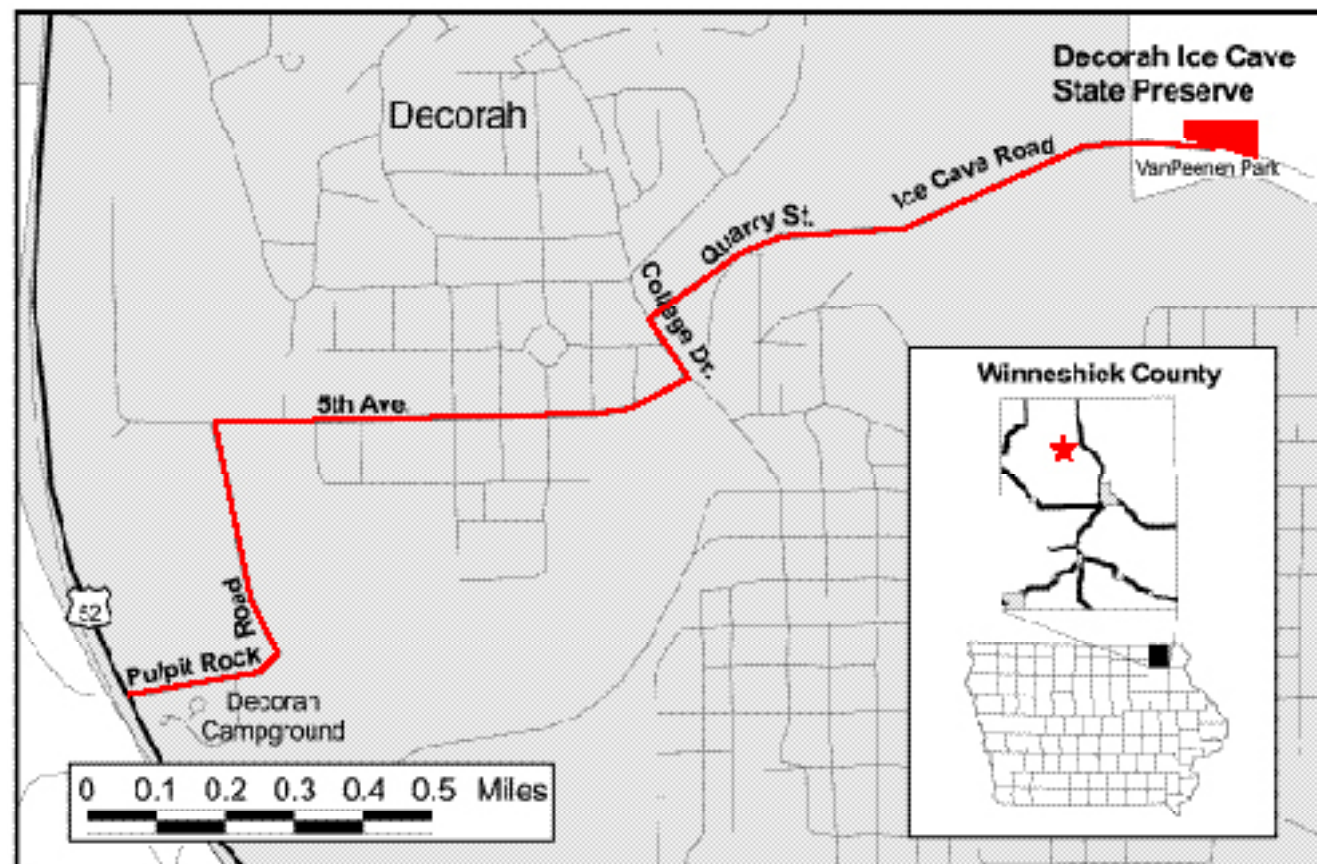
Other state preserves in the vicinity include Cold Water Spring, Malanaphy Springs, and Bluffton Fir Stand.

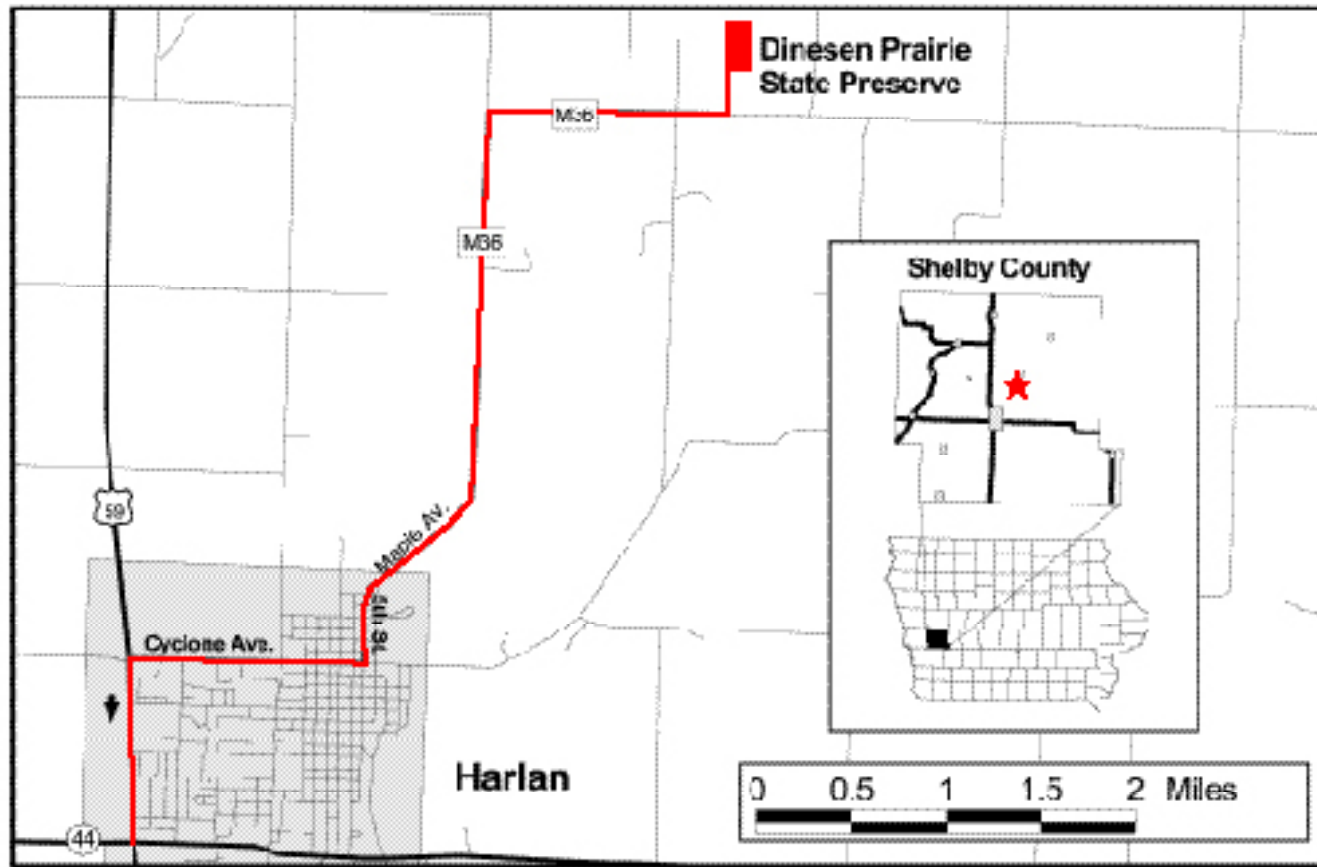
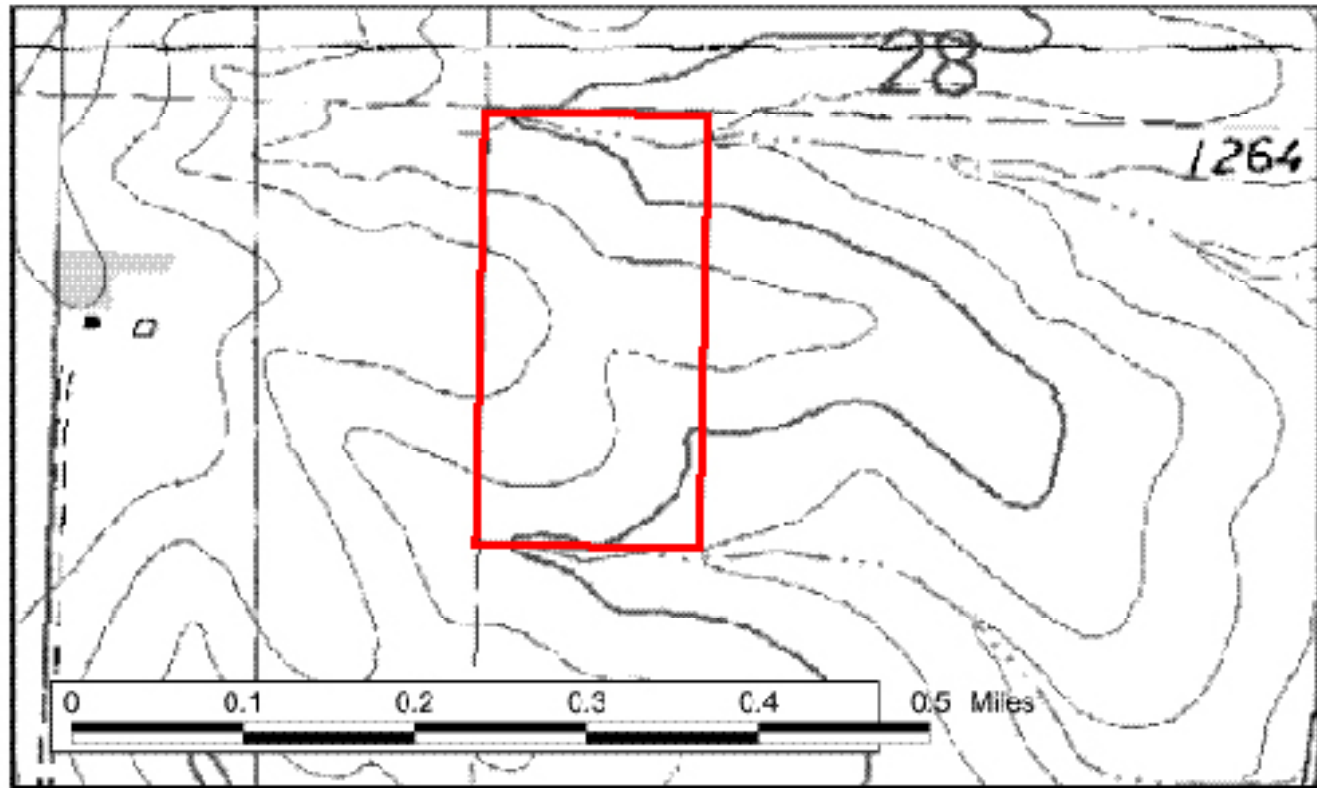
### DIRECTIONS

From the intersection of Highway 9 and Highway 52 in Decorah, take Highway 52 north 1 mile to Pulpit Rock Road (by Decorah Campground). Turn east (right) and follow this road 0.5 mile east and north to 5th Avenue. Turn east (right) and go 0.7 mile to College Drive. Turn north (left), go one block, and turn east (right) onto Quarry Street (which becomes Ice Cave Road) and follow this road 0.9 mile to the preserve parking lot on the north side of the road.

### AREA MANAGER

Decorah Parks and Recreation Department  
801 Park Drive  
Decorah, IA 52101  
(563) 382-4158  
[www.decorahia.org](http://www.decorahia.org)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Dinesen Prairie State Preserve

Derald W. Dinesen Prairie is a 20-acre remnant of native tallgrass prairie. It is located six miles northeast of Harlan in northeastern Shelby County. Derald Dinesen purchased the area in 1943, realizing that the Iowa prairie was nearly a thing of the past. It was dedicated in 1977 as a biological state preserve. He told reporters at the dedication, "I guess the reason I set aside the land was based on instinct. The instinct to leave something behind for posterity of what you believe in. I just wanted to see and have others see the beauty of the land as it existed years ago when the Indians roamed [the land]." Derald Dinesen's gravestone can be seen on the top of the hill and from this vantage point a wonderful overlook of the preserve can be seen. Two stone benches in the parking area are placed in memorial of Dean L. Frederickson, a prairie advocate from the area. In 1983, the preserve came under control of the Shelby County Conservation Board.

The gently rolling native prairie, with its loess-topped ridges typical of the western portion of the Southern Iowa Drift Plain, was formerly hayed every fall. A ridge crosses the preserve from west to east with a gradual drainage eastward to the wide valley of the Nishnabotna River. It is covered with waist-high prairie grasses. Porcupine grass and prairie horsetail are seen here, along with Junegrass, sideoats grama, Indian grass, and Canada wild rye. Forbs are abundant and showy during the growing season, with at least 114 species of plants. In the spring, beautiful swells of prairie phlox, indigo bush, hoary puccoon, blue-eyed grass, lousewort, and bird's-foot violet wave across the prairie, followed by the summer flowers of Canada anemone, rattlesnake master, prairie turnip, prairie coreopsis, leadplant, New Jersey tea, compass plant, and gayfeather. Fall's flora includes several asters, blazing star, Maximilian sunflower, and stiff goldenrod.

The prairie is excellent habitat for prairie species of birds such as bobolink, dickcissel, meadowlarks, vesper sparrow, and upland sandpiper. Many small mammals inhabit this prairie. Some of the more common ones include prairie vole, meadow vole, thirteen-lined ground squirrel, white-tailed jackrabbit, and eastern cottontail.

Another public area in the vicinity is Prairie Rose State Park.

### DIRECTIONS

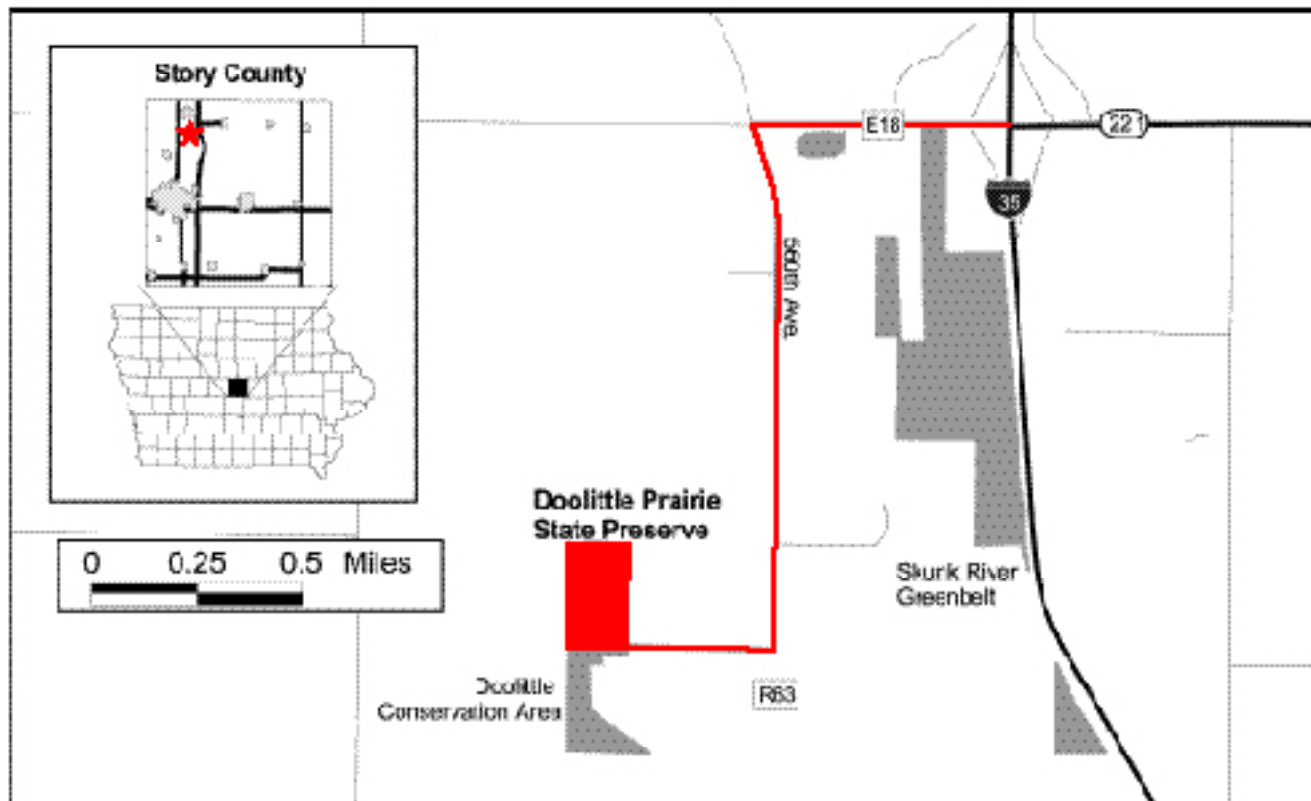
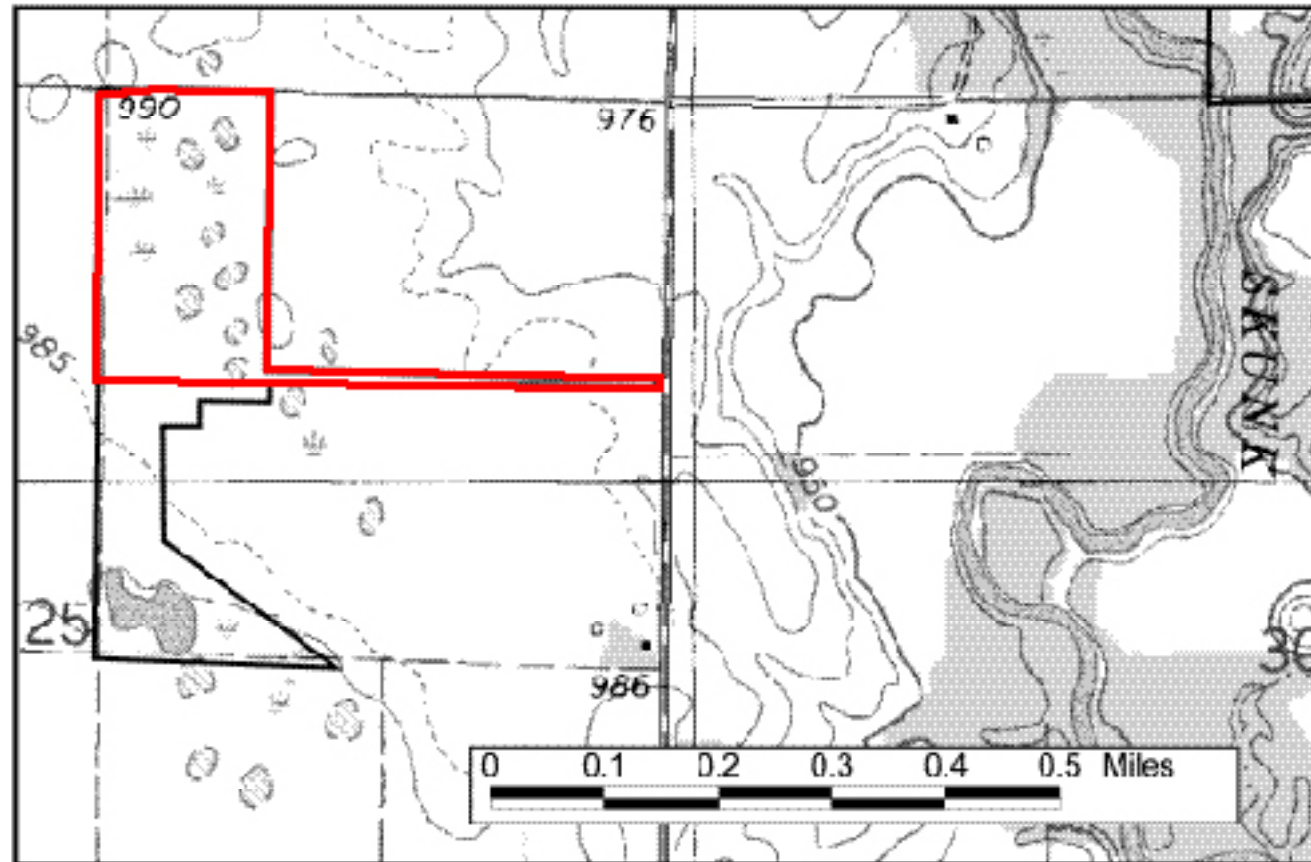
From the intersection of Highway 44 and Highway 59 on the southwest edge of Harlan, take Highway 59 north 1 mile to Cyclone Avenue. Turn east (right) and go 1.3 miles to 5th Street. Turn north (left) onto 5th Street (which becomes Maple Avenue, then County Road M36, which is named Mulberry Road outside of town) and go 3.2 miles to where M36 turns east (and becomes 1400th Street). Follow the paved road east (right) and go 1.2 miles to the preserve access lane on the north side of the road (sign: Dinesen Prairie State Preserve). Follow this narrow lane north to the preserve. A parking area is available.

### AREA MANAGER

Shelby County Conservation Board  
 516 Maple Road  
 Harlan, IA 51537  
 (712) 744-4203  
 sccb@fmctc.com  
 conservation.shco.org  
 State\_Preserves@dnr.iowa.gov



## Doolittle Prairie State Preserve



Doolittle Prairie is a 26-acre remnant of native tallgrass prairie. This state preserve is located two miles south of Story City, in Story County. It is named after the Doolittle family, particularly William Doolittle, who first settled the land in 1855. The property was purchased in 1979 from his grandchildren. It was dedicated as a state preserve in 1980 for its biological and geological features.

The preserve is located on a level upland dotted with temporary and seasonal marshes in a pothole complex that is characteristic of much of the Des Moines Lobe landform region. This region was glaciated about 12,000 to 14,000 years ago, making it some of the most recently glaciated terrain in Iowa. One result of this recent geologic history is a poorly drained landscape. At the time of settlement in the 1850s, this area consisted of numerous shallow wetlands surrounded by tallgrass prairie. Subtle drainage links between these wetland depressions mark the paths taken by glacial meltwater as the stagnant ice of the Altamont glacier slowly melted. Most of these potholes were subsequently drained for agricultural purposes, but Doolittle Prairie is one of the few unaltered prairie-pothole wetland complexes remaining in the Des Moines Lobe region.

The north 15 acres of the preserve was never plowed or grazed, but hay was harvested from this “wild meadow” until the late 1960s. The southern portion of the preserve (south of the former fence row) had a history of grazing. The southwest corner was plowed until 1965, although recently it was replanted with seed harvested from the northern portion. The access road was planted with prairie seed in the 1980s.

Fourteen potholes are found in this preserve. The largest potholes retain water throughout the summer and are characterized by bulrush, sedges, smartweed, water plantain, and arrowhead. Yellow-water crowfoot and common bladderwort are found in the pothole basins in wetter years. The poorly drained wet prairie surrounding the potholes and the wet depressions throughout the preserve are dominated by sedges, bluejoint grass, woundwort, and water horehound. These wetland communities blend into the surrounding prairie, which is dominated by big bluestem, switchgrass, Indian grass, rattlesnake master, purple prairie clover, prairie blazing star, Culver’s root, and compass plant.

This preserve supports a diverse flora and fauna, with a total of nearly 220 native plants, forty-five birds, several mammals, and thirty-one butterflies. The preserve is in continual bloom from April until the first harsh frosts of October. Yellow stargrass, prairie ragwort, violet wood sorrel, bastard toadflax, and spiderwort are among the many beautiful forbs that carpet the prairie on the early days of spring among the porcupine grass and Junegrass. Throughout the summer, many additional species bloom, including swamp milkweed, spotted water hemlock, gray-headed coneflower, ironweed, slender mountain mint, and wild onion. By fall, color is provided by asters, sneezeweed, sawtooth sunflower, rough blazing star, and bottle gentian.

The Story County Conservation Board uses the preserve as an educational site; students from Iowa State University use it for a study site.

Hunting is allowed.

Similar state preserves in Iowa include Hoffman Prairie, Liska-Stanek Prairie, and Kalsow Prairie. All of these tracts have mesic prairies with scattered potholes.

### DIRECTIONS

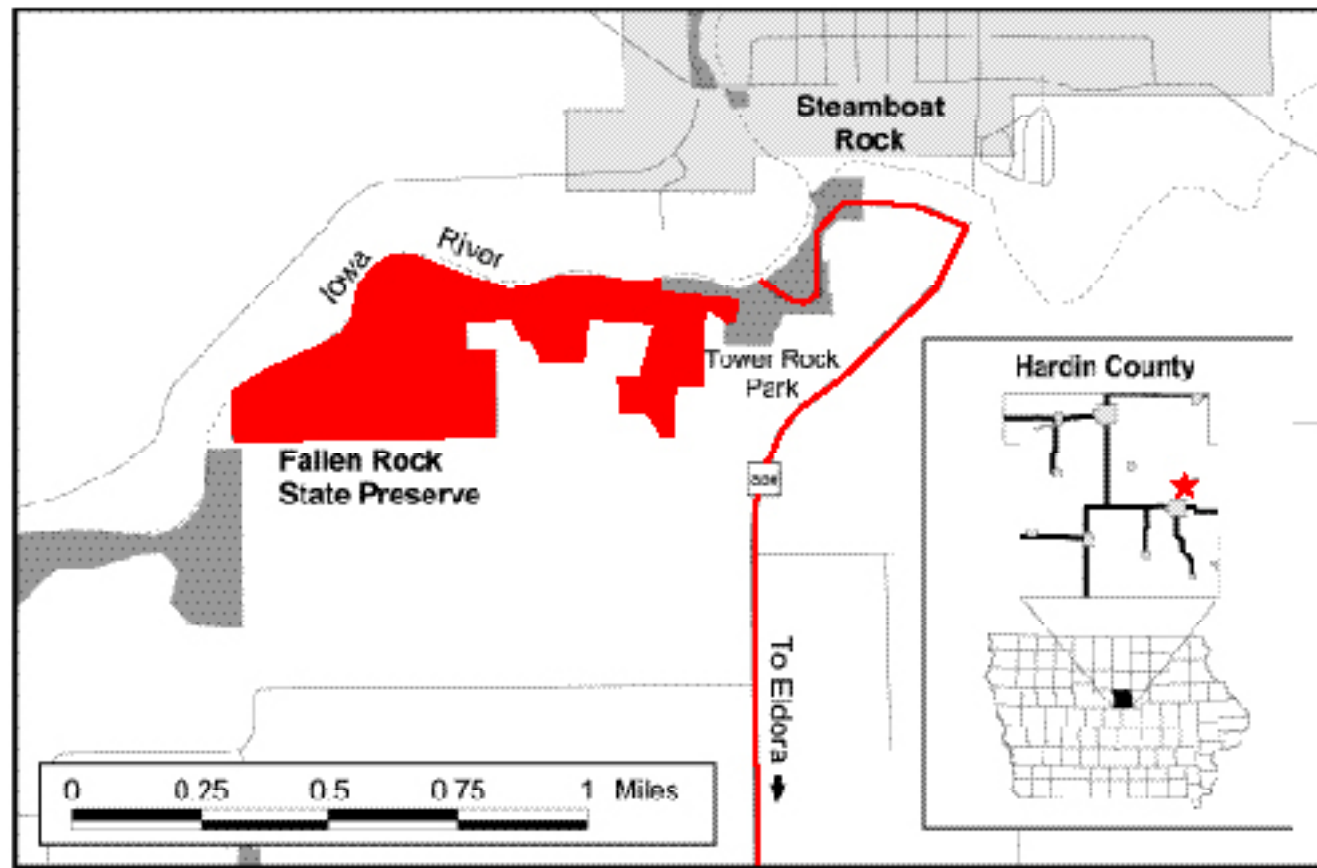
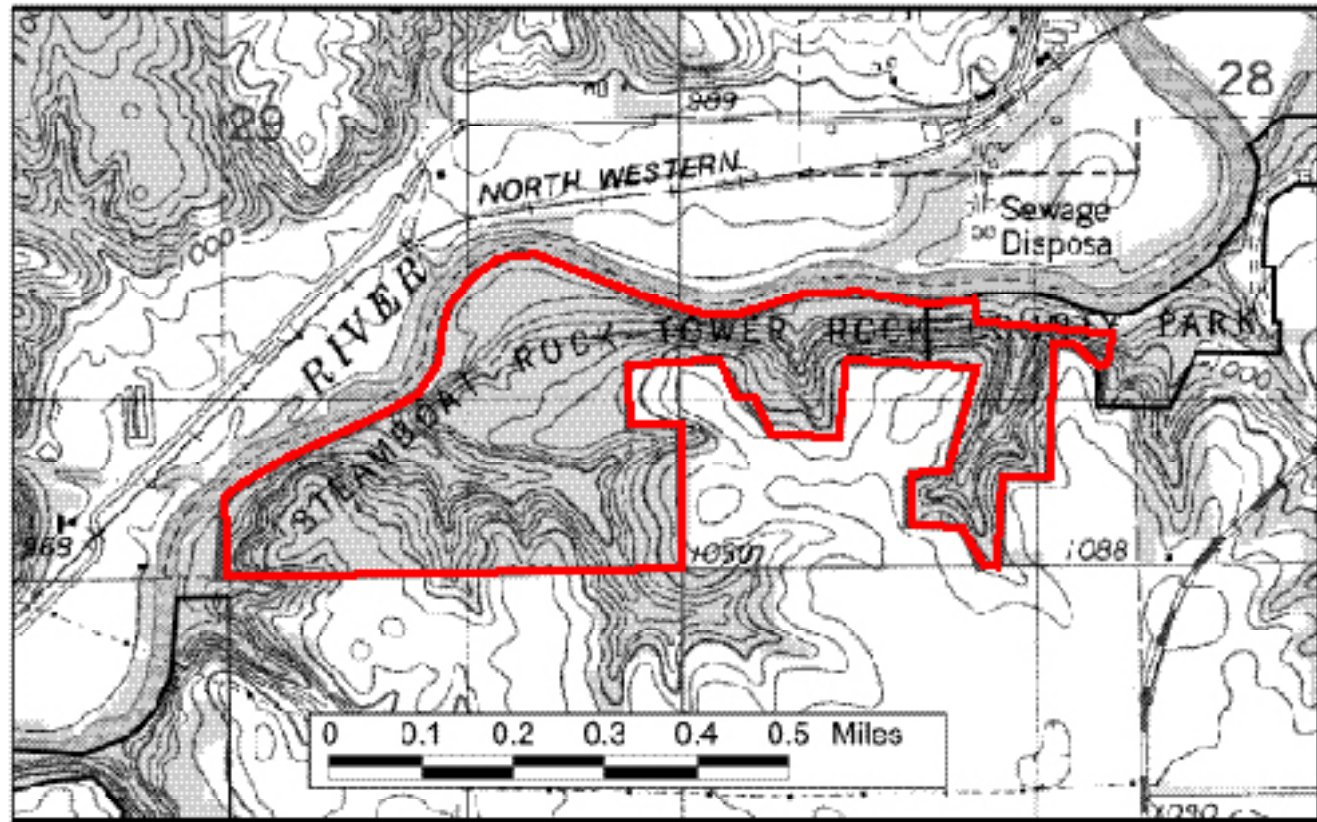
From the intersection of Highway 30 and I-35 on the east side of Ames, follow I-35 north for 11 miles to County Road E18 (exit 123). Go west (left) for 0.5 mile to 560th Avenue (sign: Doolittle Prairie). Turn south (left) and go 1.25 miles to the preserve entry road on the west side of the road (sign: Doolittle Prairie). A parking area is available at the end of the lane. Walk north to the native prairie area.

### AREA MANAGER

Story County Conservation Board  
56461 180th Street  
Ames, IA 50010-9451  
(515) 232-2516  
[www.storycounty.com](http://www.storycounty.com)  
[conservation@storycounty.com](mailto:conservation@storycounty.com)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)







## Fallen Rock State Preserve

Fallen Rock State Preserve is a 122-acre area of scenic forested bluffland with sandstone cliffs. It is located three miles north of Eldora, just south of the town of Steamboat Rock, and immediately west of Tower Rock County Park. It is part of the Iowa River Greenbelt, a band of steep forested land flanking the Iowa River in eastern Hardin County. The Fallen Rock area was purchased in 1974 by the Hardin County Conservation Board and was dedicated as a biological and geological state preserve in 1978.

Sandstone outcrops of Pennsylvanian age (300 million years old) and steep bluffs are well represented in this preserve. The Iowa River in this vicinity also separates the younger glacial deposits of the Des Moines Lobe to the west (14,000 years old) from much older glacial deposits on the east (500,000 years old).

The preserve is almost entirely forested, with some vertical cliff communities and a few small open meadows along the river. Red oak dominates the north-facing forested slopes along the river. Wahoo and leatherwood can be found in the understory. The floodplain supports a mesic bottomland forest community of American elm, black maple, and black walnut. A few mature white pines occur on the sandstone cliffs and rock outcrops. The preserve includes a disjunct stand of paper birch and yellow birch on a talus slope along the river. Large carpets of broom moss and hair-cap moss are also found here.

Over 300 plant species have been found in the preserve with an impressive variety of spring wildflowers. Hepatica, rue anemone, Virginia bluebells, wood anemone, and squirrel corn begin the growing season in March and April. By May, many fiddleheads of fern have developed into great colonies among the rock outcrops. Bishop's cap, downy yellow violet, green dragon, Canada mayflower, false Solomon's seal, and appendaged waterleaf are among the spring flora. Wild honeysuckle, serviceberry, ninebark, and hawthorn are common shrubs. Summer brings the flowering of starry Solomon's seal, Jacob's ladder, and purple joe-pye-weed. Wild four-o'clocks, zigzag goldenrod, blue wood aster, and fall coralroot orchid are the last of the blooming plants for the season.

The Iowa River is an important flyway for raptors. Broad-winged hawks, red-shouldered hawks, Swainson's hawks, or bald eagles may be seen during spring or fall migration. A total of sixty-one bird species can be seen at this preserve, including many neotropical migrants (birds that nest in North America and migrate to Central and South America for the winter) such as Cerulean warbler, scarlet tanager, Acadian flycatcher, least flycatcher, and red-eyed vireo. Barred owl, wild turkey, and belted kingfisher are residents here. Cricket frogs and northern leopard frogs can be found along the muddy banks of the Iowa River as well as an occasional beaver or spiny softshell turtle.

Hunting is allowed.

See also Hardin City Woodland and Mann Wilderness Area State Preserves.

Other natural areas along the Iowa River Greenbelt include Hardin City Woodland and Mann Wilderness Area State Preserves, Wildcat Cave, and Pine Lake State Park.

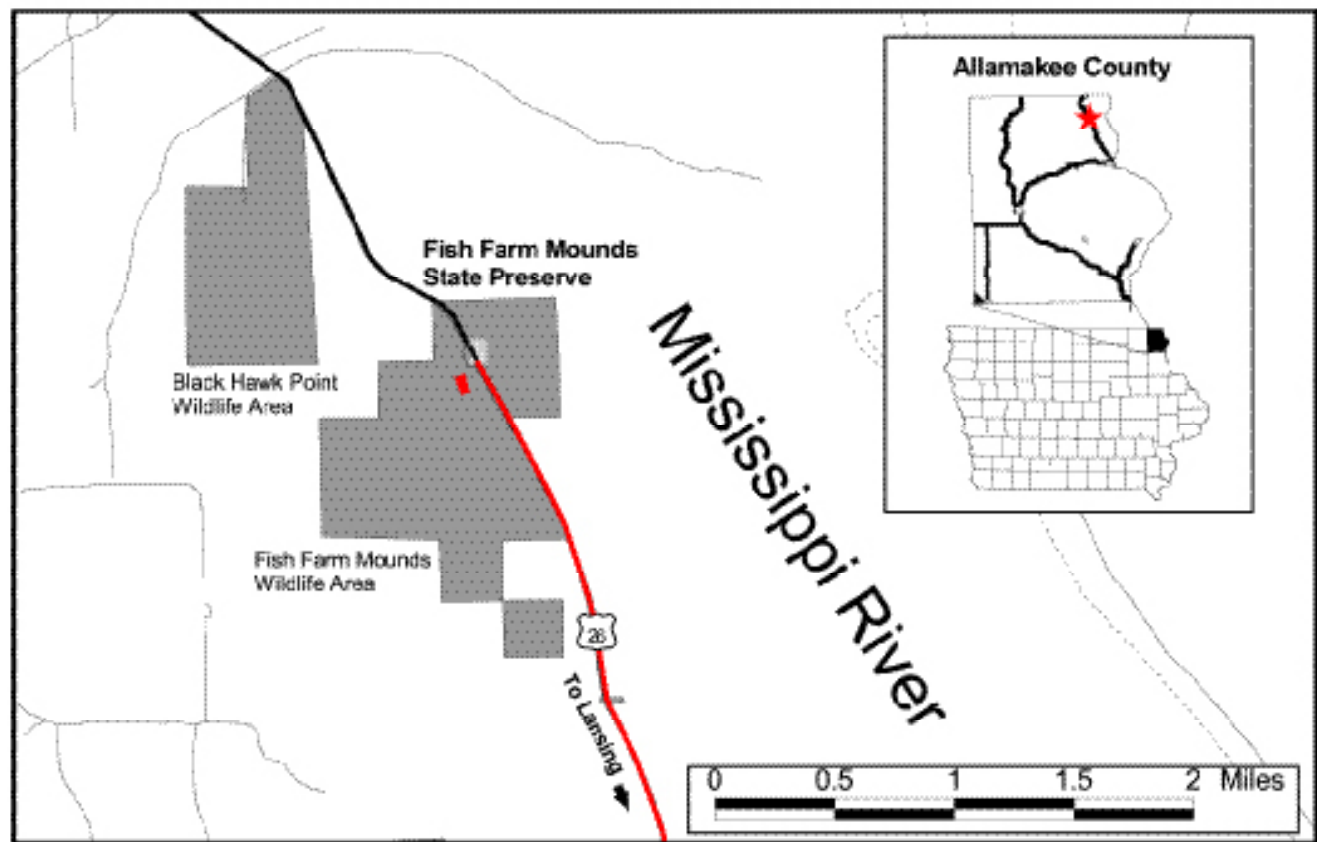
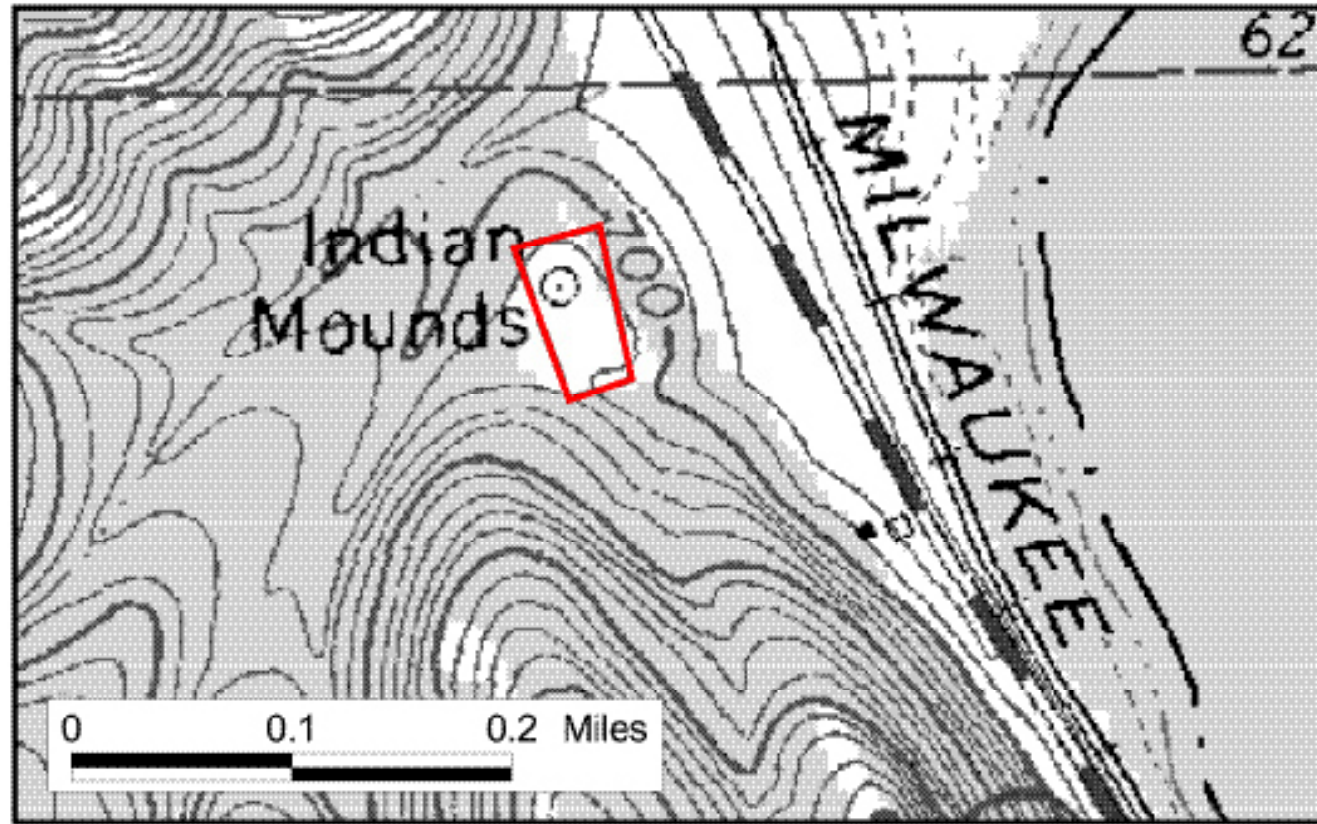
### DIRECTIONS

From the intersection of Highway 175 and Highway 215 in Eldora, take Highway 175 east 1 mile to County Road S56. Turn north (left) and drive on this winding road for 4 miles to the south edge of the town of Steamboat Rock (arrow sign: Tower Rock Park). Turn west (left) into the driveway leading to Steamboat Rock County Park and follow its winding path 0.5 mile to a parking area near the river. From here, follow the path on foot west about 0.25 mile along the river to the preserve.

### AREA MANAGER

Hardin County  
Conservation Board  
15537 "S" Avenue  
Ackley, IA 50601-7734  
(641) 648-4361  
www.  
hardincountyconservation.com  
hardinccb@  
hardincountyconservation.com  
State\_Preserves@dnr.iowa.gov





## Fish Farm Mounds State Preserve

Fish Farm Mounds State Preserve is a 3-acre prehistoric cemetery (mound group) located in the southern portion of Fish Farm Mounds Wildlife Area. It is located seven miles north of Lansing in Allamakee County, in the Paleozoic Plateau landform region of northeast Iowa. The burial mound group was given to the state in 1935 by the Fish family, after whom the preserve is named. The area that contains the mounds was dedicated as an archaeological state preserve in 1968, and has geological significance as well. In 1988, the preserve was listed on the National Register of Historic Places.

The area contains a cluster of thirty conical mounds of various sizes. Most are twenty to forty feet in diameter and resemble some of the conical mounds at nearby Effigy Mounds National Monument. The ancient mounds were built by Middle and early Late Woodland peoples from 100 b.c. to a.d. 650. Earthen mounds are believed to have been constructed primarily for religious, ceremonial, and burial purposes. Conical-shaped mounds were built by basket loads of soil placed over one or more bodies lying either on the ground or on a specially prepared surface. On occasion, additional burials were later added to a mound, increasing the size of the earthen feature. Some individuals were buried with funerary offerings.

The mound group sits on a wooded alluvial terrace above the modern floodplain of the Mississippi River, in the Quad-State Region of the Upper Mississippi River Valley. The terrace is underlain by sandy river sediments deposited during an earlier stage of the valley's evolution, when the Mississippi River floodplain was nearly 100 feet higher than it is now. This remnant of the former floodplain surface probably dates from glacial meltwater discharges of the past 10,000 years. Renewed downcutting and erosion by the river left this feature sheltered in this small side valley. The terrace is situated below towering 300-foot bluffs of much older, Cambrian-age sandstone bedrock (500 million years old).

The site was recorded as early as 1887, and was mapped by Ellison Orr of the Iowa Archeological Survey in 1910. Additional mapping was conducted in 1988.

Burial mounds are protected by law.

Other sites in Iowa with archaeological mounds include Catfish Creek, Gitchie Manitou, Hartley Fort, Little Maquoketa River Mounds, Malchow Mounds, Slinde Mounds, Toolesboro Mounds, Turkey River Mounds, and Woodland Mounds State Preserves and Effigy Mounds National Monument.

### DIRECTIONS

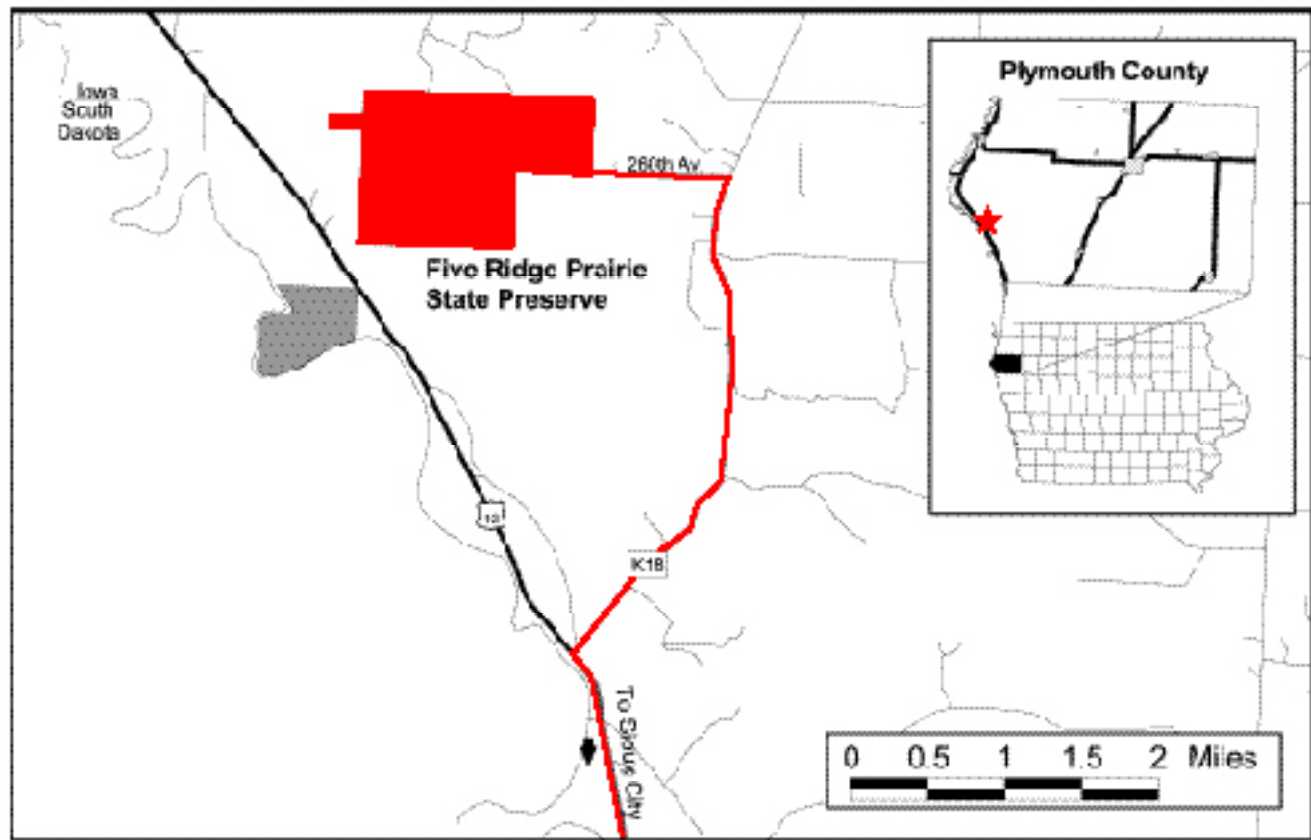
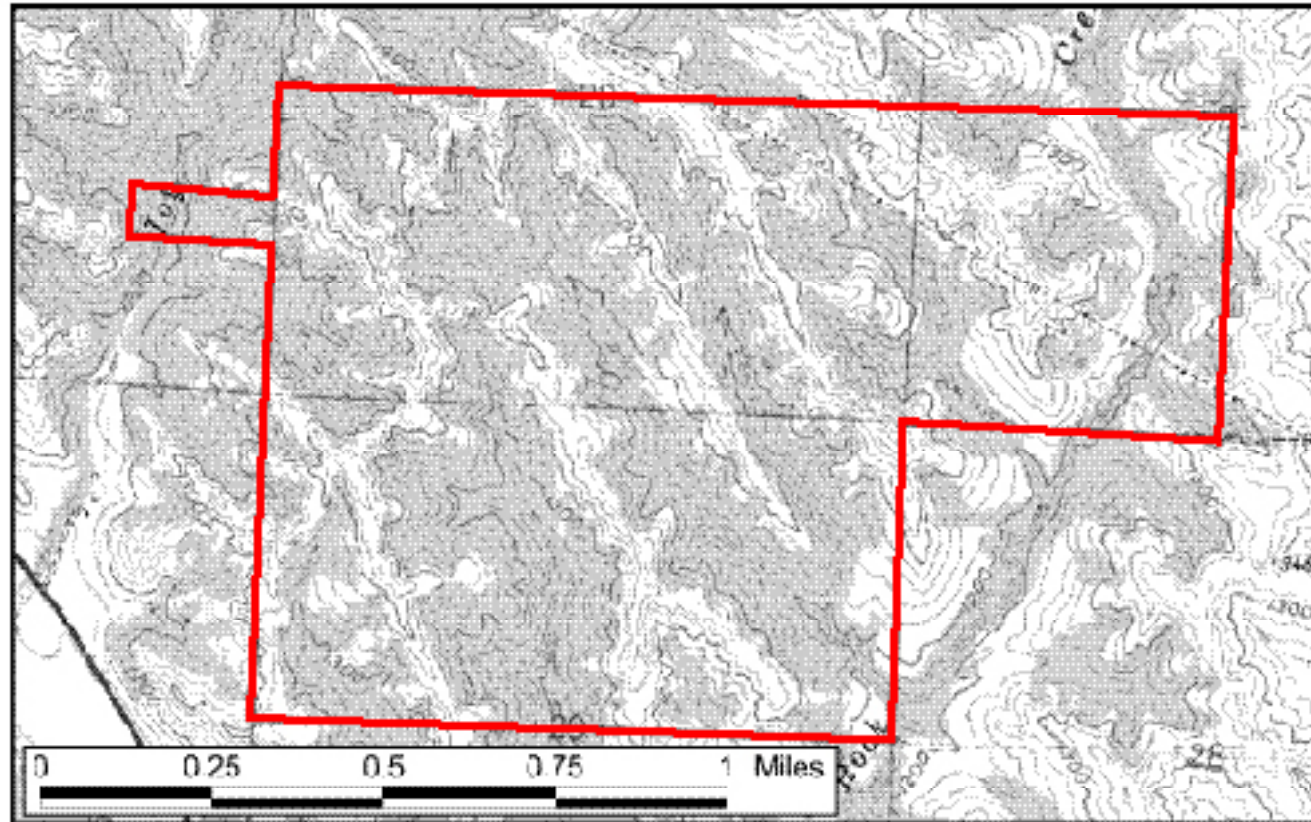
From Lansing, take Highway 26 north for 6 miles to Fish Farm Mounds Wildlife Area, on the west side of the road (sign: Fish Farm Mounds Wildlife Management Area). To get to the preserve from the parking lot, climb the wooden steps to the mounds.

### AREA MANAGER

Iowa Department of  
Natural Resources  
Upper Iowa Wildlife Unit  
2296 Oil Well Road  
Decorah, IA 52101  
(563) 382-4895  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)



## Five Ridge Prairie State Preserve



Five Ridge Prairie is a 790-acre preserve at the northern end of the Loess Hills. Located south of Westfield in Plymouth County, it is one of the largest tracts of land in the Iowa State Preserve System. The property was purchased in 1981 by the Plymouth County Conservation Board with assistance from The Nature Conservancy and the Iowa Department of Natural Resources. It was dedicated as a biological and geological state preserve in 1986.

The preserve straddles landscape of dramatic narrow ridges that are separated by deep, wooded valleys, and was named for five major northwest-to-southeast trending ridges that extend through the area. Loess dominates this landscape. The loess originated in the nearby valleys of the Missouri and Big Sioux Rivers. Between 30,000 and 12,000 years ago, these valleys carried large amounts of glacial meltwater and “rock flour” ground from glacial activity to the north. Strong winds scoured the silt from broad expanses of exposed floodplain during the drier, low-flow winter seasons and carried the airborne silt eastward out of the valleys. The thickest deposits of loess lie just east of their alluvial sources. The loess is not as thick in this reach of the Loess Hills as it is farther south. Consequently, Cretaceous-age bedrock deposits of marine origin, layers of limestone and shale, can be seen in scattered outcrops throughout the area. These sedimentary rocks are 80 million to 90 million years old.

Prairie and woodland are the two dominant natural ecosystems today. The prairies are found on all major ridges, dominating the sunny south and west-facing slopes, and covering approximately 300 acres of the preserve. They are dominated by little bluestem and sideoats grama, and contain a blend of plants characteristic of the eastern tallgrass prairie as well as of the Great Plains mixed-grass prairies. Woodland dominated by bur oak cover approximately 370 acres. A dense zone of dogwood and smooth sumac separates the forest from the prairie areas.

Approximately 300 plant species are known from the preserve. Twenty-five species are more typically western plants on the eastern edge of their range, such as yucca and cut-leaf iron plant. Starting in late March, pasqueflower blooms on the hillsides. By May and June, the ridges are dotted with blue-eyed grass, hoary puccoon, prairie moonwort, biscuitroot, and Lambert’s crazyweed. The woodlands are also in bloom with spring wildflowers such as bloodroot, bellwort, and Virginia waterleaf. The warm days of summer see a changing display of prairie forbs grasses.

With both prairie and woodland habitats here, the diversity of birds is great. At least eighty-nine species use the preserve, including grassland birds such as dickcissel and vesper sparrow. In the woodland edges or thickets, western kingbird, blue grosbeak, and northern bobwhite can be found. However, the woodlands have the greatest diversity, with ovenbird, yellow-billed cuckoo, indigo bunting, and scarlet tanager as well as migrating warblers, alder flycatcher, and blue grosbeak.

A total of twenty mammals have been noted on the preserve, including the Plains pocket mouse, northern grasshopper mouse, the white-footed mouse, and western harvest mouse. The Plains spadefoot toad, Great Plains toad, and the eastern hognose snake can be found here, as well as forty-nine butterflies.

Hunting is permitted.

Other natural areas in the vicinity include Broken Kettle Grassland, Sioux City Prairie, Stone State Park, and Mount Talbot State Preserve.

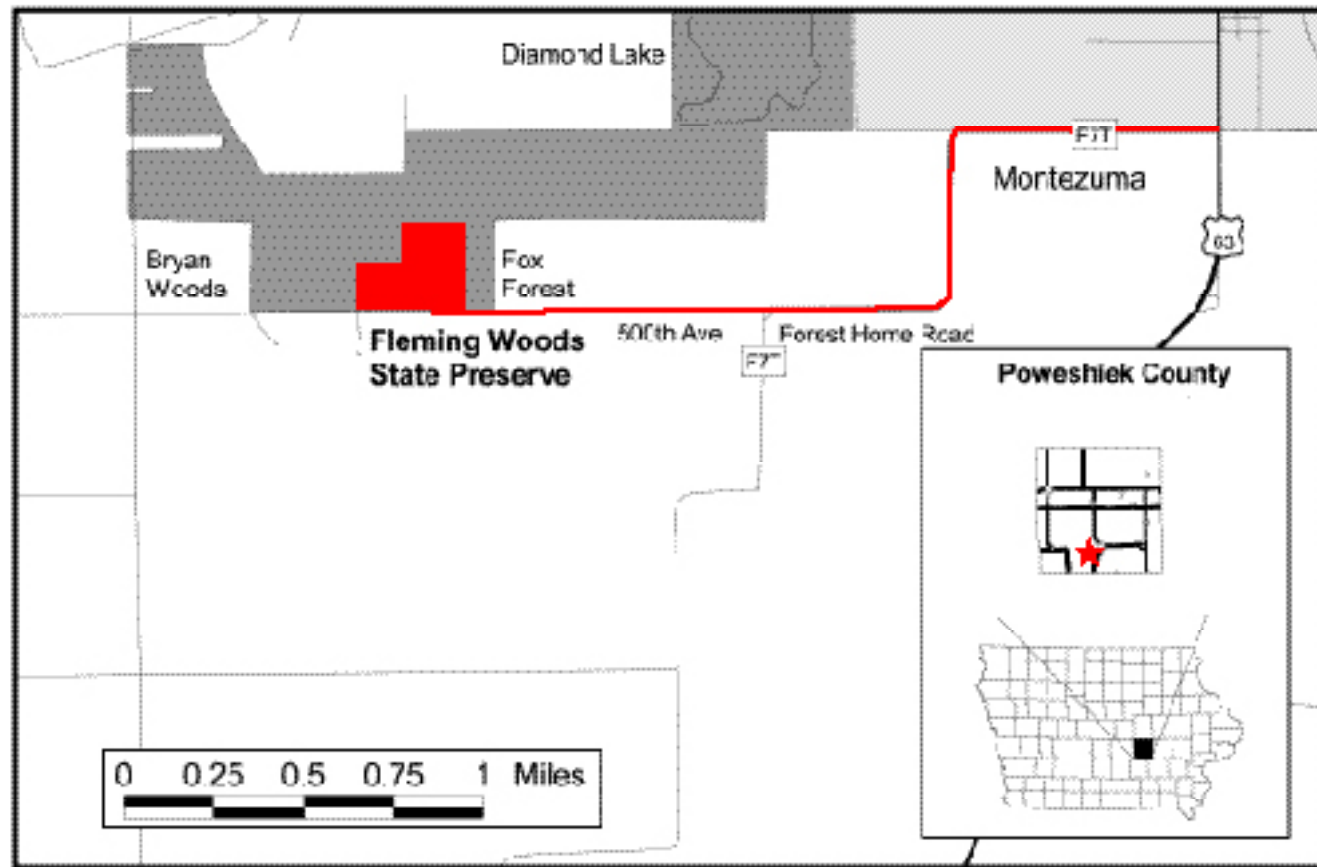
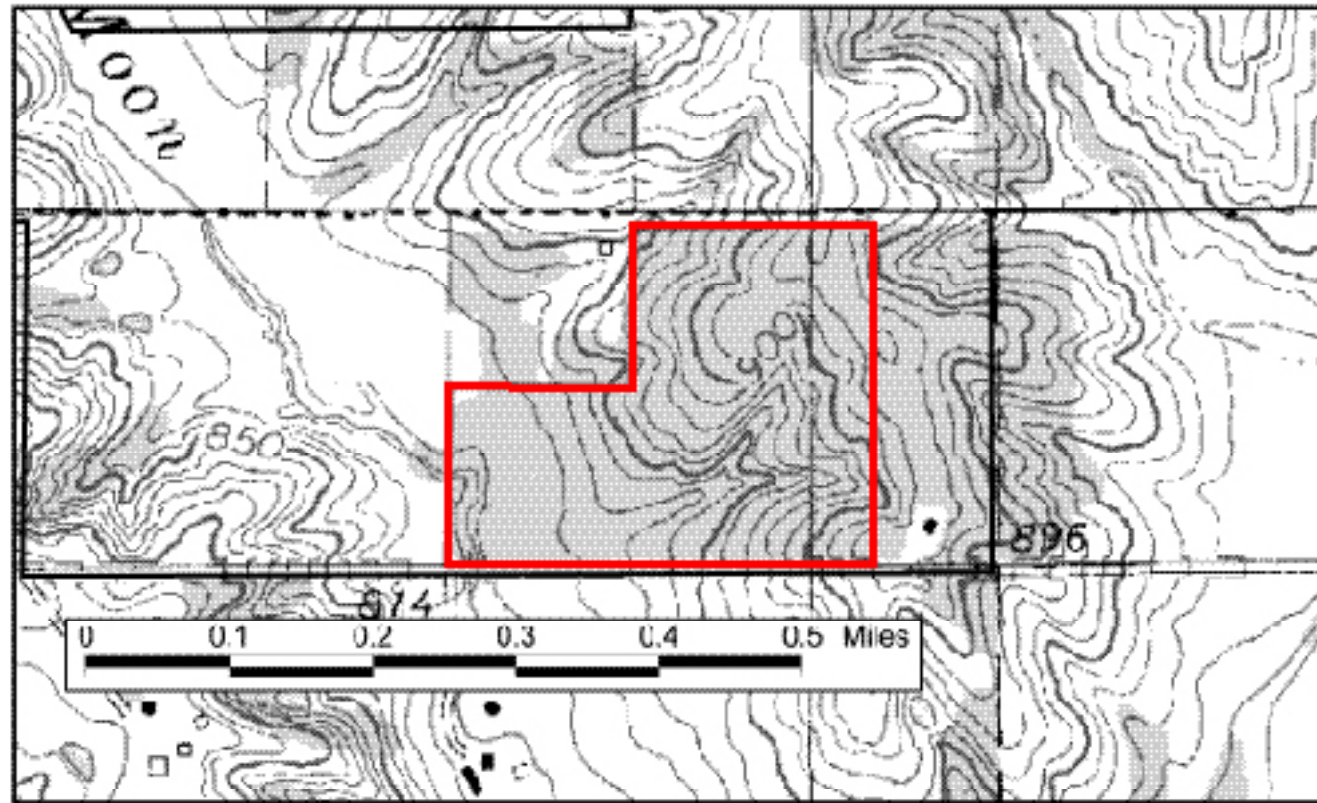
### DIRECTIONS

From the intersection of I-29 and Highway 12 (exit 151) on the west edge of Sioux City, drive 9 miles north on Highway 12 through the town of Riverside and past Stone State Park to the second turnout for County Road K18. Turn east (right) onto K18 and go 3.5 miles northeast to 260th Avenue (watch for County Conservation sign). Turn west (left) and travel 1 mile to the preserve entrance (sign: Five Ridge Prairie State Preserve).

### AREA MANAGER

Plymouth County  
Conservation Board  
PO Box 1033  
Hinton, IA 50124  
(712) 947-4270  
conservation@plymouthcountyparks.com  
www.iowadnr.gov/preserves/  
State\_Preserves@dnr.iowa.gov





## Fleming Woods State Preserve

Fleming Woods is a 38-acre preserve containing an upland oak woods. It is located three miles southwest of Montezuma, in southern Poweshiek County. Mr.-and Mrs.-Wayne Fleming of Montezuma donated this woodland to the Iowa Natural Heritage Foundation in 1982, which in turn donated the land to the Poweshiek County Conservation Board. It was dedicated as a state preserve in 1983.

The preserve has several forested ravines that are typical of the rolling landscape of Southern Iowa Drift Plain landform region. This upland forest is dominated by white oak, red oak, and shagbark hickory, with basswood and maple appearing in the lower valley of the creek. Wildflowers are abundant in the understory, especially in the spring. Yellow violets begin blooming in April, later joined by wild geranium, blue phlox, mayapple, and Solomon's seal. Yellow pimpernel, Jacob's ladder, and false Solomon's seal bloom throughout May and into June. By July they are joined by thimbleweed, purple joe-pye-weed and zigzag goldenrod, which bloom among the maidenhair fern and rattlesnake fern.

Other state preserves in the vicinity include Pilot Grove and Indian Fish Trap.

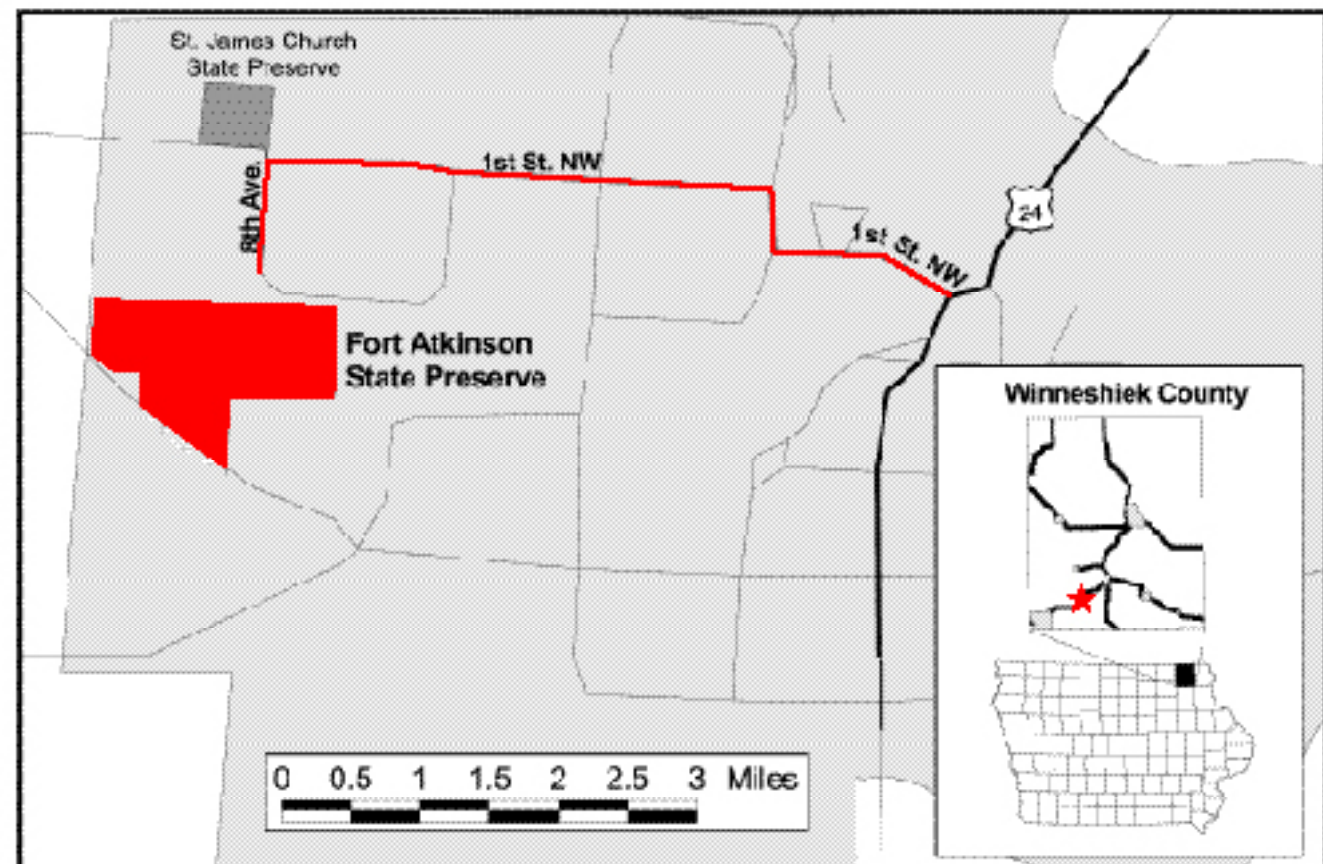
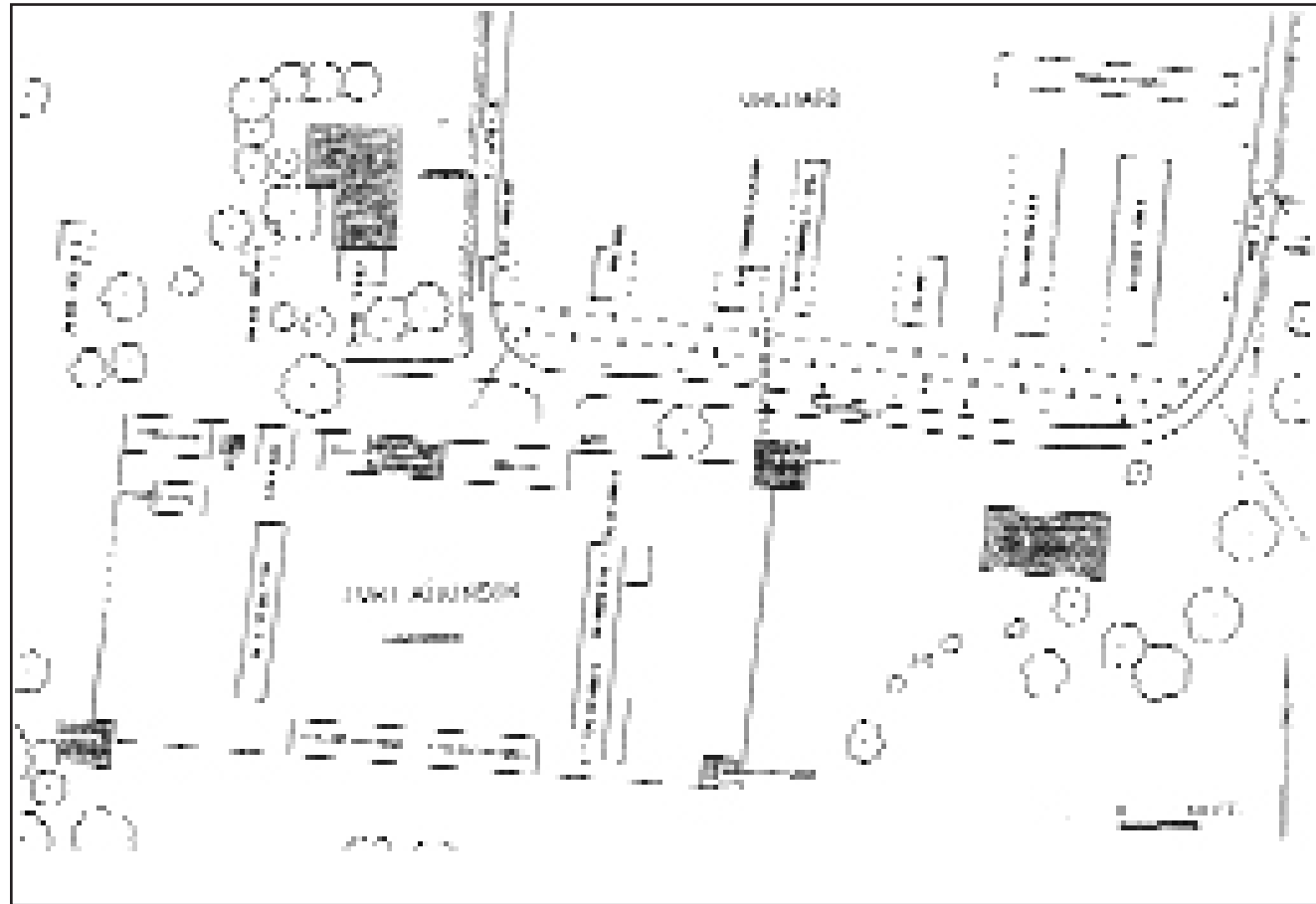
### DIRECTIONS

From the intersection of Highway 63 and County Road F7T (495th Avenue) on the south edge of the town of Montezuma, take County Road F7T west, south, and west again for 1.75 miles. As it twists and turns, F7T is sequentially named 495th Avenue and Forest Home Road. At the intersection of Forest Home Road (F7T) and 500th Avenue, continue west (straight) on 500th Avenue for 1 mile to the preserve on the north side of the road (sign: Fleming Woods State Preserve).

### AREA MANAGER

Poweshiek County  
Conservation Board  
Box 666  
Montezuma, IA 50171  
(641) 623-3191  
[www.poweshiekcountyparks.org](http://www.poweshiekcountyparks.org)  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Fort Atkinson State Preserve

This 5-acre preserve contains the remains of historic Fort Atkinson, an 1840s federal military post. It is located on the west side of the town of Fort Atkinson in southern Winneshiek County. It was dedicated as a state preserve in 1968 for its historical, archaeological, and geological features.

Fort Atkinson was located in the "Neutral Ground," a forty-mile-wide strip of land extending from northeast to central Iowa that was established to separate the Sioux Indians from the Sauk and Fox (Meskwaki) Indians. Ostensibly, another purpose was to protect the Winnebago (Ho-Chunk) Indians who had been relocated into the area, as well as prevent them from returning to their ancestral home in southwest Wisconsin.

The fort was named in honor of Brigadier General Henry Atkinson, who was the highest-ranking military officer stationed in the West at the time. As such, he was the commanding officer in charge of the Winnebago resettlement efforts.

The fort was constructed in this locality because of the plentiful sources of building stone. A limestone quarry west of the fort furnished stone for foundations and buildings. This limestone is the geological type-section of the "Fort Atkinson Limestone," a rock unit within the larger Maquoketa Formation of Ordovician age (450 million years old). The quarry is one of only a few places where this unit is exposed and is a classic reference for geological studies.

The Maquoketa Formation was named for exposures in the Little Maquoketa River valley in Dubuque County, but none of the five members of the formation have a type locality there. Four of the members (Elgin, Clermont, Fort Atkinson, and Brainard) are named for localities in northeastern Fayette County or southwestern Winneshiek County. A fifth member, the Neda, is poorly exposed in Iowa; its type locality is in eastern Wisconsin.

The fort was built by a crew of fifty workmen. The original layout of the fort site included a total of twenty-four buildings and a wooden picket stockade wall. Inside the stockade, a central parade ground was enclosed by two stone officers' quarters and two log barracks for the soldiers, one of which included a hospital, school, and chapel. Cannon houses at the northeast and southwest corners, which guarded the approaches to the fort, as well as the powder magazine in the southeast corner were all made of stone. A quartermaster's storehouse (commissary) and a sutler's store were both made of logs and were located in the northwest corner of the fort. There was a big gate at the east end of the north barracks, one at the west end by the guardhouse, and one at the west end of the south barracks. Outside the eleven-foot, nine-inch stockade wall were fourteen buildings: four large stables, a granary, a carpenter shop, a blacksmith shop, a bakehouse, three laundresses' huts, a root house, an ice house, and a dwelling house, most of which were located on the north side of the fort.

Dragoons (mounted troops) were one of the primary regiments stationed at the fort. The fort was never attacked and daily life was peaceful for the 150 people garrisoned here. In 1846, the regular army troops were sent to Mexico and the Southwest to participate in the Mexican-American War. Volunteer troops from Iowa then took up residence at the fort and

### DIRECTIONS

From Highway 24 (1st Street) in the town of Fort Atkinson, take 1st Street NW (sign: Fort Atkinson Historic Site) west three blocks to 8th Avenue (watch for Historic Site signs). Turn south (left) and go to the preserve entrance (sign: Fort Atkinson—U.S. Military Fort).

Hours: Summer, 11:00 a.m. to 5:00 p.m. Friday, Saturday, Sunday, and holidays. The museum is open for special events and by appointment. None of the buildings are handicapped accessible.

### AREA MANAGER

Iowa Department of Natural Resources  
Volga River Recreation Area  
10225 Ivy Road  
Fayette, IA 52142  
(563) 425-4161  
Volga\_River@dnr.state.ia.us  
www.state.ia.us/parks  
State\_Preserves@dnr.state.ia.us



performed many of the same duties as the regular army. They stayed until January-1849, when the post was abandoned after the Winnebago Indians were moved to a new reservation in Minnesota.

In 1855, the buildings at the fort were sold for \$3,521. The land was given to the General Land Office for regular distribution and sold to settlers for \$1.25 per acre. Settlers building homes found the fort a wonderful source of glass, hardware, and building stone. Windows and doors were taken as well as hasps, hinges, lumber, and so forth. Most of the buildings were destroyed except the southwest blockhouse, the powder magazine, and a portion of the north stone barracks. The stockade was used for firewood by travelers.

In 1921, the citizens of the town of Fort Atkinson encouraged the state of Iowa to acquire the fort. It was initially classified a state park. In the late 1920s, the northeast blockhouse was rebuilt by volunteers. From 1939 to 1941, Sigurd Reque cleared the building foundations surrounding the parade ground and reconstructed part of the stockade. Restoration of the surviving barracks and development of the museum exhibits began.

The Iowa Conservation Commission resumed reconstruction work in 1958. By 1962, the north and east stockade wall, and enough of the stockade around the blockhouses to outline the original stockade, were replaced. The main gate was replaced, the north barracks and hospital building were stabilized, and a museum was established with artifacts and information on display pertaining to the fort and the military forces who served there. Signs and markers were placed to identify each fort building.

In 1966, an archaeological study excavated china, glassware, and other artifacts from the privies behind the officers' quarters. The fort was dedicated as a state preserve in 1968.

The southwest blockhouse, powder magazine, and one-third of the north stone barracks (the exposed white plaster and fireplaces were part of the hospital) still remain in their original structure. The reconstructed northeast blockhouse, well, and parade ground still exist. The foundation walls of the commanding officer's quarters, B Co. 1st Dragoons', K Co. 1st Infantry's and I Co. 1st Dragoons' barracks, guardhouse, commissary, and sutler's store are exposed.

The root house, ice house, stables, B Company's stables, granary, quartermaster's stable, bakehouse, blacksmith shop, carpenter shop, the three laundresses' huts, and the washhouse no longer exist, but their locations are known and archaeological deposits associated with some of these buildings have been identified.

The stockade is a replica of the original. The west and south walls have been reshaped to show where they once stood. Museum artifacts on display include guns, small tools, clothing of the period, an Indian canoe, photographs of soldiers, prints of Indians, old letters, orders, maps, a drawing of the fort, and many other items pertinent to the history of Fort Atkinson.

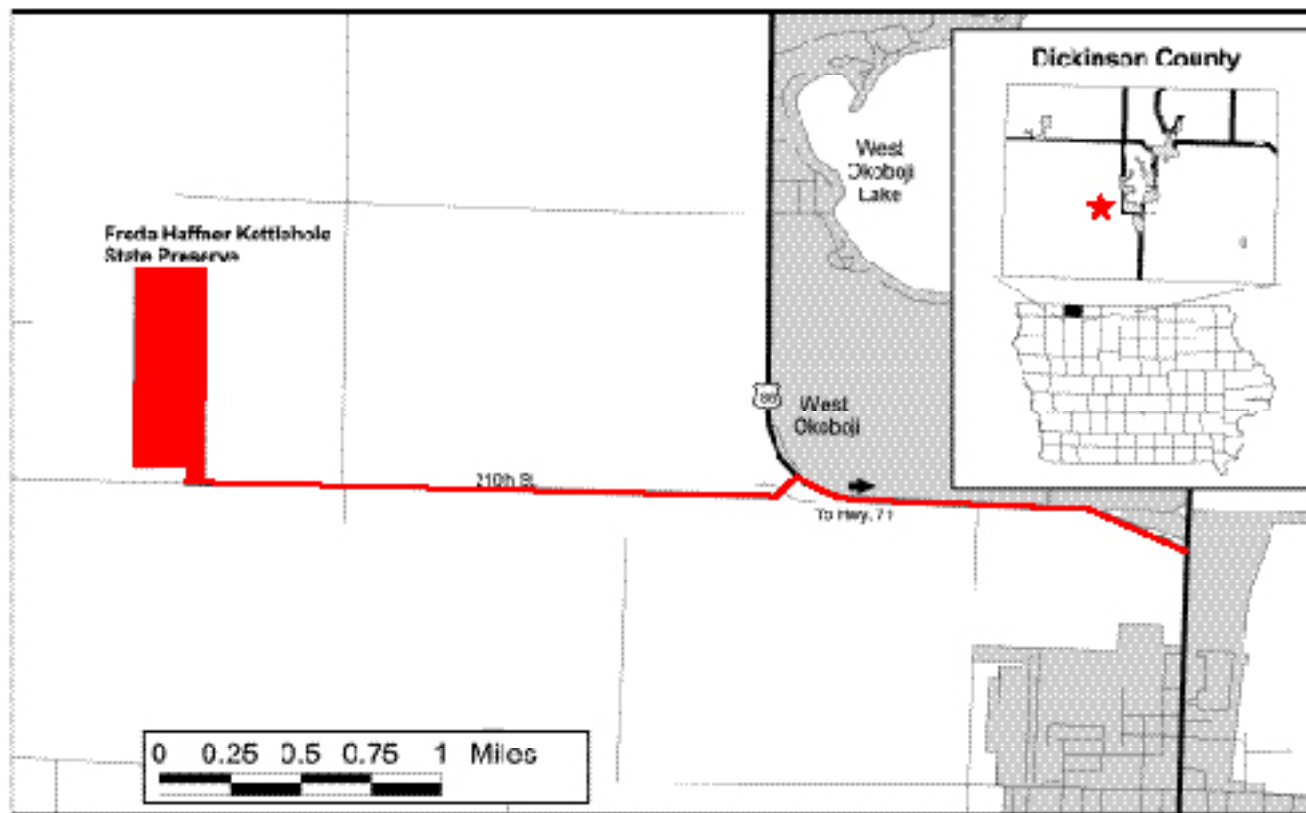
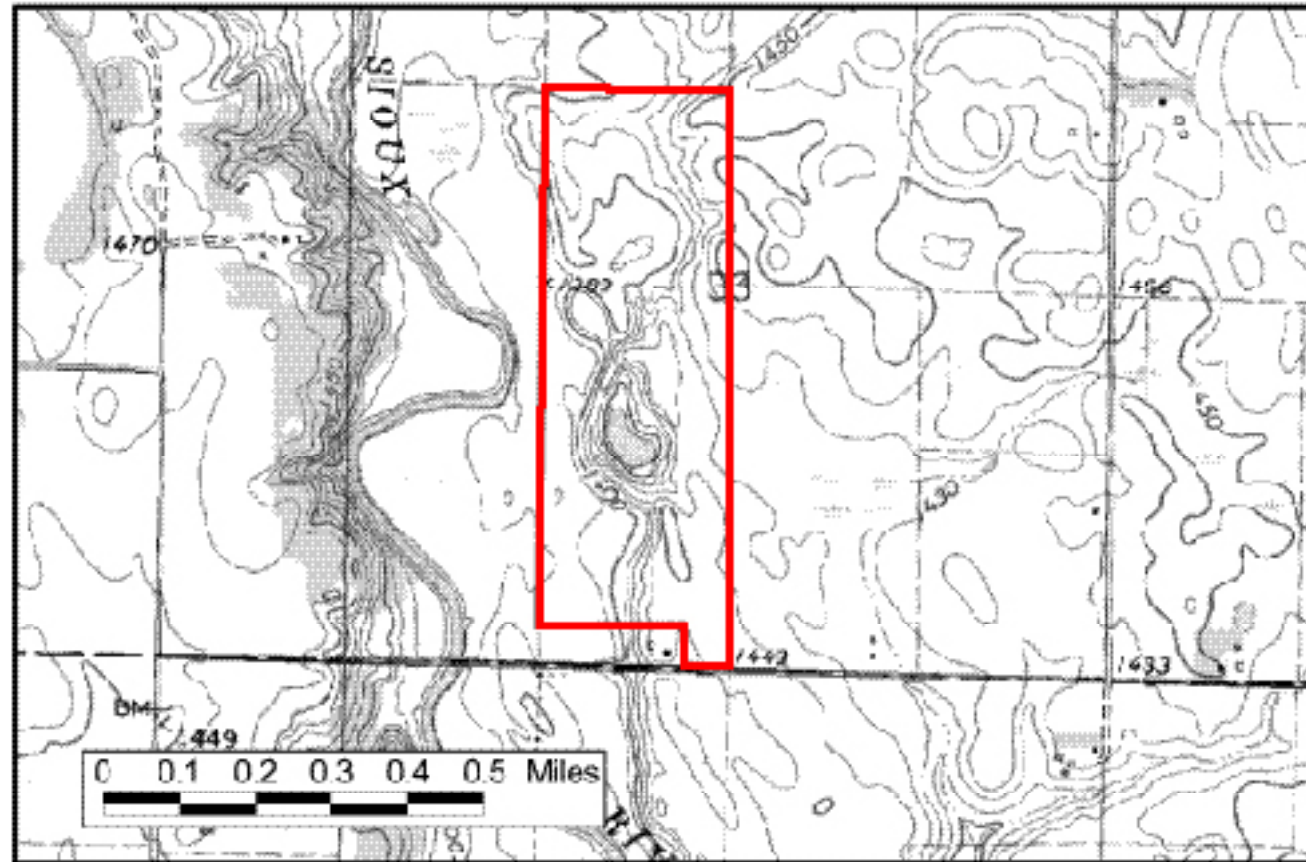
During the fall of 1977, the Iowa Conservation Commission joined the Iowa Development Commission for the first "Fort Atkinson Rendezvous." Craftspeople, buckskinners, and military reenactors gathered to trade their goods and provide visitors with an interpretation of Iowa's history. An annual rendezvous has been held ever since during the last full weekend in September. Visitors have an opportunity to experience a taste of military life

on the frontier as it existed in the 1840s. Cannon drills are held every hour on the hour, with flint and steel contests, shooting demonstrations, and tomahawk and knife-throwing matches occurring throughout the weekend. A historic movie of Fort Atkinson is also shown every half-hour during the rendezvous.

The fort is open from Memorial Day weekend through the Rendezvous at the end of September. There is no admission charge.

Another historical preserve in the immediate area of the preserve is Saint James Lutheran Church.

## Freda Haffner Kettlehole State Preserve



Freda Haffner Kettlehole is a 110-acre preserve containing the largest glacial “kettlehole” in Iowa, created by the melting of a block of glacial ice some 13,000 years ago. A highly diverse native prairie community is also found here. It is located 2 miles west of West Okoboji Lake, approximately 4.5 miles northwest of Milford in Dickinson County. Once known as “Arend’s Kettle Hole” and the “Big Kettle,” the first 12.4 acres were given to the Iowa chapter of The Nature Conservancy in 1972 by local conservationist Freda Haffner. The area was dedicated as a biological and geological state preserve in 1976.

The preserve sits on a broad alluvial terrace adjacent to the Little Sioux River valley. It is part of a regional band of “knob and kettle” topography that is distinctive of the terrain formed around the margins of the Bemis and Altamont ice advances of the Des Moines Lobe landform region some 13,000 to 14,000 years ago. Large blocks of ice were carried by the swiftly flowing glacial meltwater. Freda Haffner Kettlehole is the resulting depression left after the partially buried glacial ice melted; it is the largest glacial kettle in Iowa. The kettlehole is about 500 feet across and about 30 feet deep. The kettlehole habitat has a rich flora and fauna that extends from the marshy interior pool, up the steep-sided slopes to the dry gravelly rim of the kettle.

The preserve supports a flora of over 360 vascular plants, plus thirty-four bryophytes (mosses and liverworts) and numerous lichens. This plant diversity reflects the presence of several habitats ranging from a wetland in the center of the kettle to very dry, gravelly ridges around its rim. The marsh in the kettle contains numerous wetland plants. The water is very soft (low in dissolved minerals) and supports high populations of desmids, along with duckweed, naiad, pondweeds, and coontail. The wet marsh edges have American manna grass, rice cut grass, and prairie cordgrass, bulrushes, sedges, spikerushes, broad-leaved arrowhead, burreed, and hornwort. The surrounding wet meadow is home to many wet prairie species. Meadow voles, western painted turtles, muskrats, and masked shrew can be found in the lower part of the kettle as well as the rare dion skipper.

The mesic tallgrass prairie species that can be found on the steep slopes include big bluestem, porcupine grass, sideoats grama, switchgrass, and ticklegrass, the forbs Canada goldenrod, tall cinquefoil, New Jersey tea, false boneset, golden alexanders, wood lily, and wild rose. American toad, northern leopard frog, northern prairie skink, and short-tailed shrew inhabit the mesic hillsides as well as red-winged blackbird and common yellowthroat.

The dry ridges around the kettlehole have a great diversity of plants. This community is characterized by little bluestem, blue grama, hairy grama, sideoats grama, prairie dropseed, Junegrass, plains muhly, porcupine grass, Missouri goldenrod, Lambert’s crazyweed, and groundplum. Along the rim surrounding the kettle, large piles of freshly excavated soil can be found, evidence of the plains pocket gopher. Plains garter snake, badger, and deer mouse also are found on the upland hills, in addition to several butterflies, including the Poweshiek skipperling, Ottoa skipper, Arogos skipper, checkered white, and regal fritillary.

Hunting is not permitted. Other state preserves in the vicinity include Cayler Prairie, Silver Lake Fen, Cheever Lake, and Anderson Prairie.

### DIRECTIONS

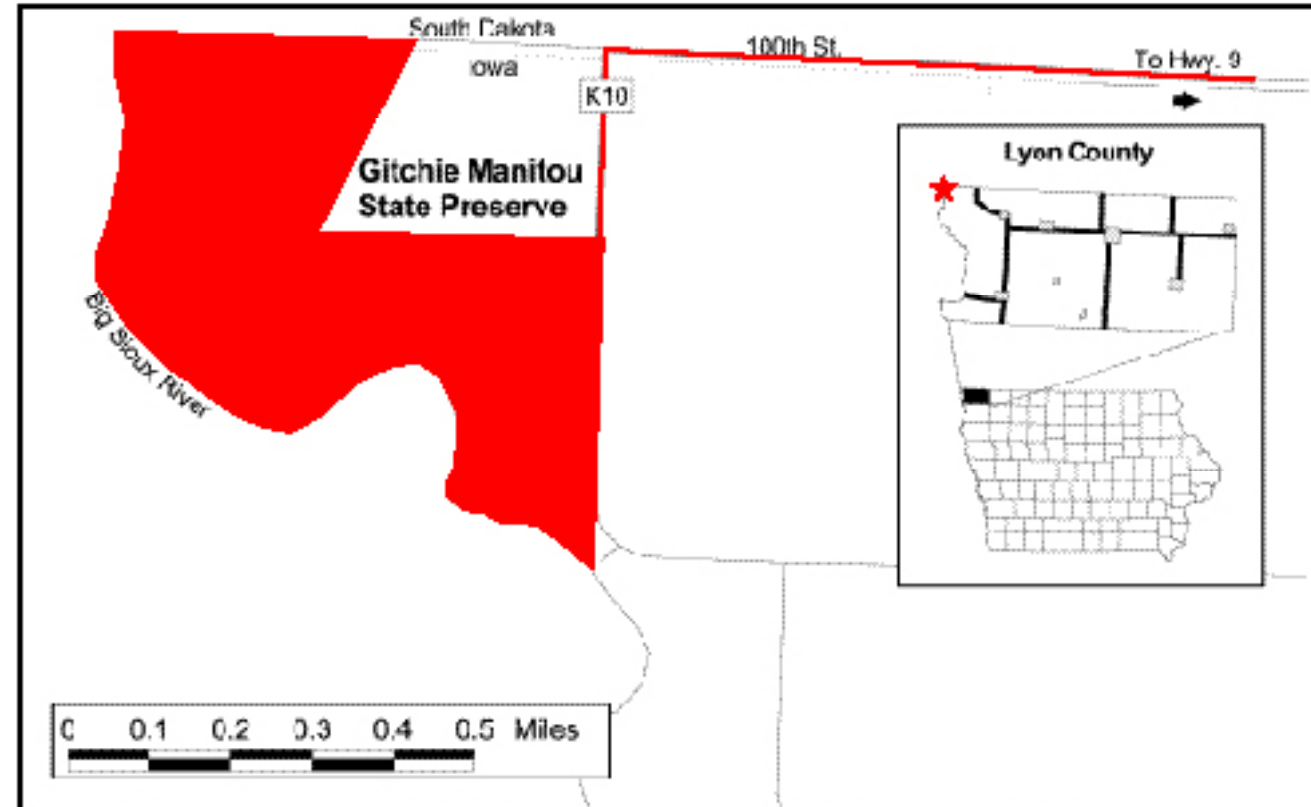
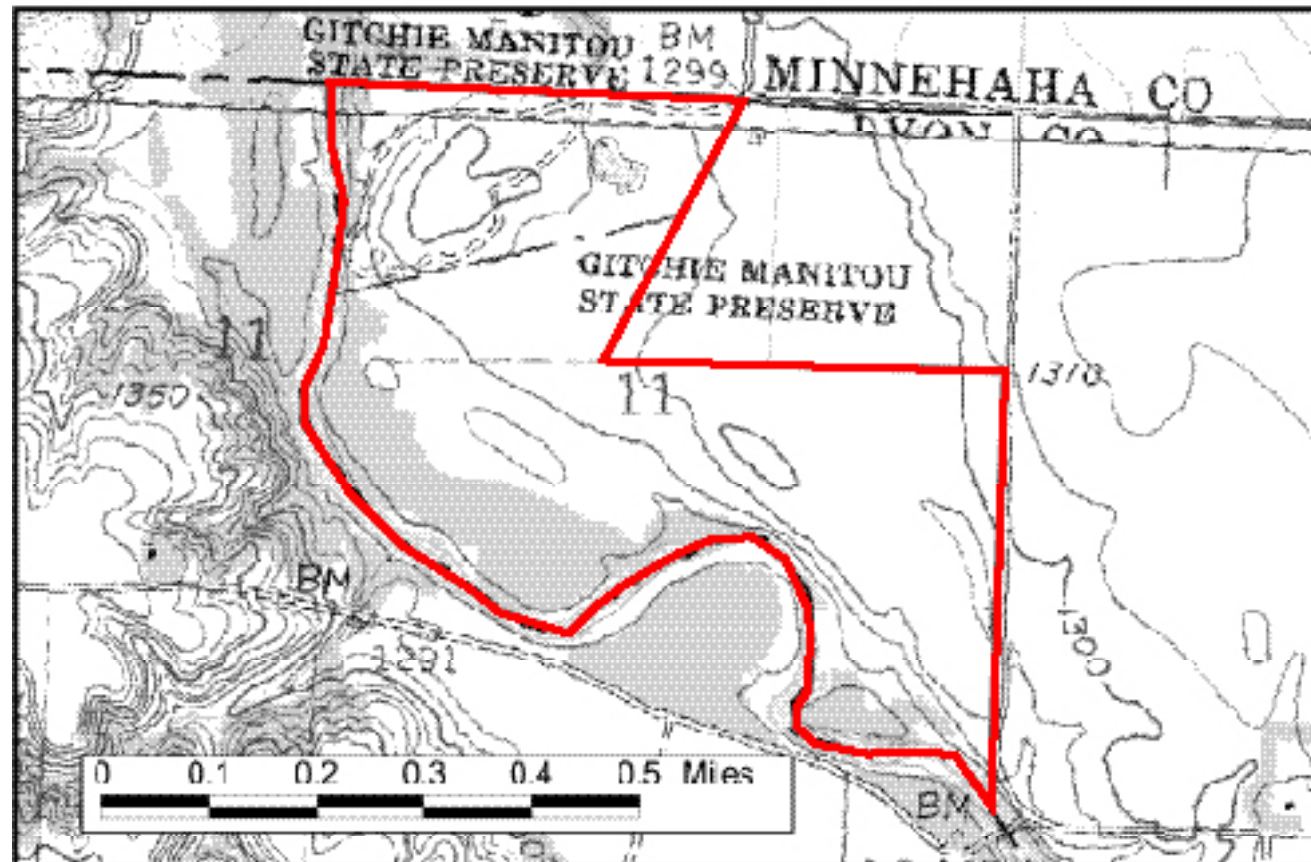
From the intersection of Highway 71 and Highway 86 north of Milford, take Highway 86 west for 1.5 miles to 210th Street (where Highway 86 curves to the north). Turn west (left) onto 210th Street and go 2 miles to the parking area for the preserve on the north side of the road (sign: Freda Haffner Kettlehole).

### AREA MANAGER

The Nature Conservancy  
303 Locust St., Suite 402  
Des Moines, IA 50309  
(515) 244-5044  
[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Gitche Manitou State Preserve



Gitche Manitou is a 91-acre preserve best known for a natural outcropping of Sioux Quartzite. It is located in the extreme northwest corner of Iowa in Lyon County, just southeast of the suburbs of Sioux Falls, South Dakota. In 1916, the state of Iowa purchased the first 47.5 acres for use as a quarry, but later transferred the area to the Board of Conservation. The area was initially classified as a state park, and later a "preserve." It was formally dedicated as a geological, archaeological, historical, and biological state preserve in 1969. The preserve was named after a Sioux Indian name meaning "Great Spirit" or "Great Force of Nature."

Geologically, the preserve contains distinctive rock outcroppings of smooth, wind-polished, pink-colored Sioux Quartzite. At 1.6 billion years old, this is the oldest bedrock that can be seen at the land surface anywhere in Iowa. These outcrops are part of a 135-mile-long, east-west-trending ridge of ancient bedrock whose main axis extends from New Ulm, Minnesota, to Mitchell, South Dakota. The Iowa outcrops lie along the southern flank of this buried ridge. The name "Sioux Quartzite" was assigned to the rock unit by geologist Charles White in 1870 from the exposures at this site. Thus, Gitche Manitou State Preserve contains the designated "type section" of the Sioux Quartzite, where its defining features were first described in the geological literature. From the 1890s to 1920, quartzite was quarried from what is now the northeast corner of the preserve. The quarry is now filled with water and is called "Jasper Pool."

Archaeological features of the preserve include seventeen conical mounds in the southern portion of the preserve and several Woodland or Great Oasis habitation sites. Further research is needed to understand the significance of these sites, which may be part of a larger complex including nearby Blood Run Historic Landmark.

Historically, Lyon County's first post office and land office were located at the northern edge of the preserve in the 1880s, at the "Rock Ford Crossing" of the Big Sioux River (used by stagecoaches en route to Sioux Falls). This was in a short-lived settlement named Gibraltar. The foundation of the post office is still visible. Later, the area was used for picnicking, and a stone shelter was constructed from the Sioux quartzite in the 1930s by the Civilian Conservation Corps.

Biologically, the preserve contains a prairie among the Sioux Quartzite outcrops with over 130 species of plants. In addition to big and little bluestem and leadplant, the prairie here also supports rare species on the eastern edge of their natural range such as blue grama, buffalograss, fameflower, and western cliff fern. Many interesting plants can be found among the quartzite outcrops, such as Whitlow grass, tumblegrass, and rock spikemoss. In the spring, pasqueflower, hoary puccoon, and spiderwort can be found blooming. Summer brings white and purple prairie clovers and ironweed. Fall continues with aromatic aster, dotted gayfeather, and downy gentian. In addition to the native prairie, other plant communities include the woodlands and wetlands around Jasper Pool, a successional grassland community in former cropfields in the southern part of the preserve, and a narrow floodplain along the Big Sioux River. A grand total of over 300 vascular species are known from the preserve, plus many additional species of bryophytes.

Hunting is permitted.

Other natural and cultural sites in the vicinity include the Blood Run National Historic Landmark and the Big Sioux Wildlife Area.

### DIRECTIONS

From the intersection of Highway 9 and Highway 75 on the west side of Rock Rapids, take Highway 9 west and north for 19 miles (through the towns of Lester and Larchwood) to 100th Street on the South Dakota/Iowa border (sign: Gitche Manitou State Preserve). Turn west (left) and go 4 miles to County Road K10 (Adams Avenue). Turn south (left) and drive 0.5 mile to a parking area for the preserve on the west side of the road (sign: Gitche Manitou State Preserve). Walk northwest about 0.5 mile along an access lane to the natural portion of the preserve.

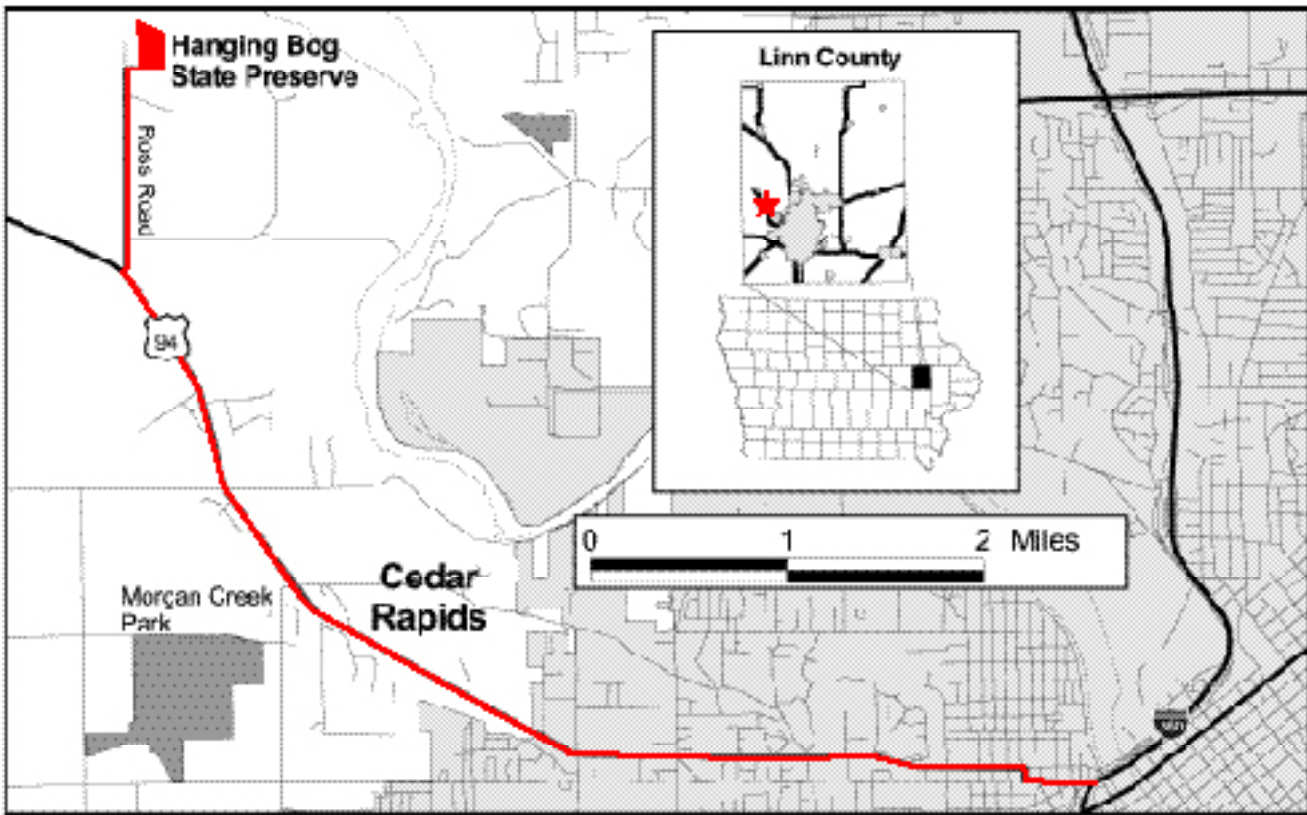
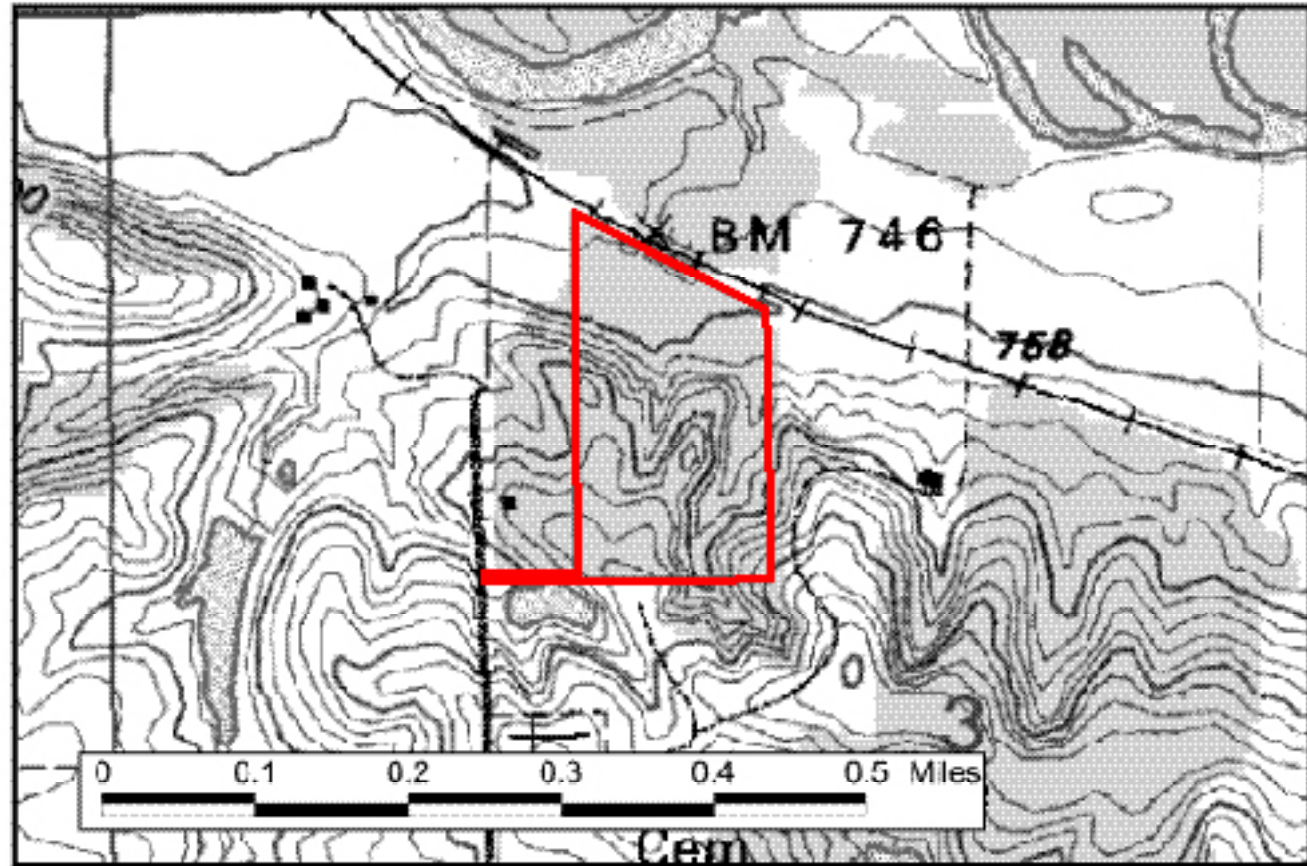
### AREA MANAGER

Iowa Department of Natural Resources  
Great Lakes Wildlife Unit  
2408 17th Street  
Spirit Lake, IA 51360  
(712) 336-3524  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)



[www.iowadnr.gov](http://www.iowadnr.gov)





## Hanging Bog State Preserve

Hanging Bog is a 16-acre preserve containing a deeply shaded hillside seep with a large population of skunk cabbage. It is located six miles northwest of Cedar Rapids in Linn County. This area was deeded to the Iowa chapter of The Nature Conservancy by Leslie F. Clark in 1968 and was dedicated as a biological state preserve in 1981.

The hillside seep in this preserve is formed by the emergence of mineral-rich groundwater flowing laterally across an impermeable layer of buried bedrock. Large deposits of porous lime called "tufa" have formed a jumbled series of saturated, slumped terraces on the lower slope of a wooded hillside. This has created ideal conditions for the growth of skunk cabbage, a distinctive plant that is the first sign of spring, often emerging through a cover of snow as early as February. It gets its name from the large, cabbagelike leaves that develop during the summer and from the skunklike odor the plant emits when damaged. Marsh marigold and jewelweed also occur on the seep with the skunk cabbage.

The surrounding forest is dominated by black maple, red oak, and basswood. Over 170 plant species, plus twenty-three species of bryophytes (mosses and liverworts), have been recorded for the preserve. An abundance of spring wildflowers can be seen here, including the yellow anthers of the woodland sedge, the white flowers of hepatica, the maroon flowers of prairie trillium, the blue flowers of Jacob's ladder, or the white flowers of Dutchman's breeches. Ferns are also abundant throughout the forest.

The preserve is an important educational resource for local public schools and colleges. Hunting is not permitted.

Other state preserves in the vicinity include Behrens Ponds and Woodland, Rock Island, and Palisades-Dows.

### DIRECTIONS

From the intersection of I-380 and Highway 94 in Cedar Rapids, take Highway 94 west 6 miles to Ross Road. Turn north (right) and go to the end of the road. Park on the roadside. To get to the preserve, walk east on a path through woods on the north side of the fence for about 200 yards (look for a sign at the preserve) to a stile. Cross over the steps to get to the preserve.

### AREA MANAGER

The Nature Conservancy  
303 Locust St., Suite 402  
Des Moines, IA 50309  
(515) 244-5044

[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)

[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)



## Hardin City Woodland State Preserve

Hardin City Woodland is a 25-acre preserve containing an upland forest. Named for the nearby remains of Hardin City, an early settlement, it is located six miles north of Eldora in the Iowa River Greenbelt of Hardin County. The area was purchased by the Iowa Conservation Commission in 1959 and was dedicated as a biological state preserve in 1968.

Located near the eastern edge of the Des Moines Lobe landform region, the preserve contains a steep, north-facing slope along the narrow divide of a large meander of the Iowa River. The meander loop surrounds an alluvial bench formed by floodwaters associated with the melting of the Des Moines Lobe glacier 10,000 to 13,000 years ago.

The upland portion of the woodland here is dominated by black maple, red oak, and basswood. Bitternut hickory, black maple, ironwood, basswood, and alternate-leaved dogwood are common occurrences in the understory. The floodplain portion contains a combination of silver maple, black walnut, red elm, butternut, and green ash in the overstory with common elder and greenbrier in the understory. The moist upland and hillslope provide excellent habitat for spring wildflowers. Snow trillium begins blooming in March and is quickly followed by spring beauty, hepatica, Dutchman's breeches, nodding trillium, jack-in-the-pulpit, and mayapple.

Other natural areas along the Iowa River Greenbelt include Fallen Rock and Mann Wilderness Area State Preserves, Wildcat Cave, and Pine Lake State Park.

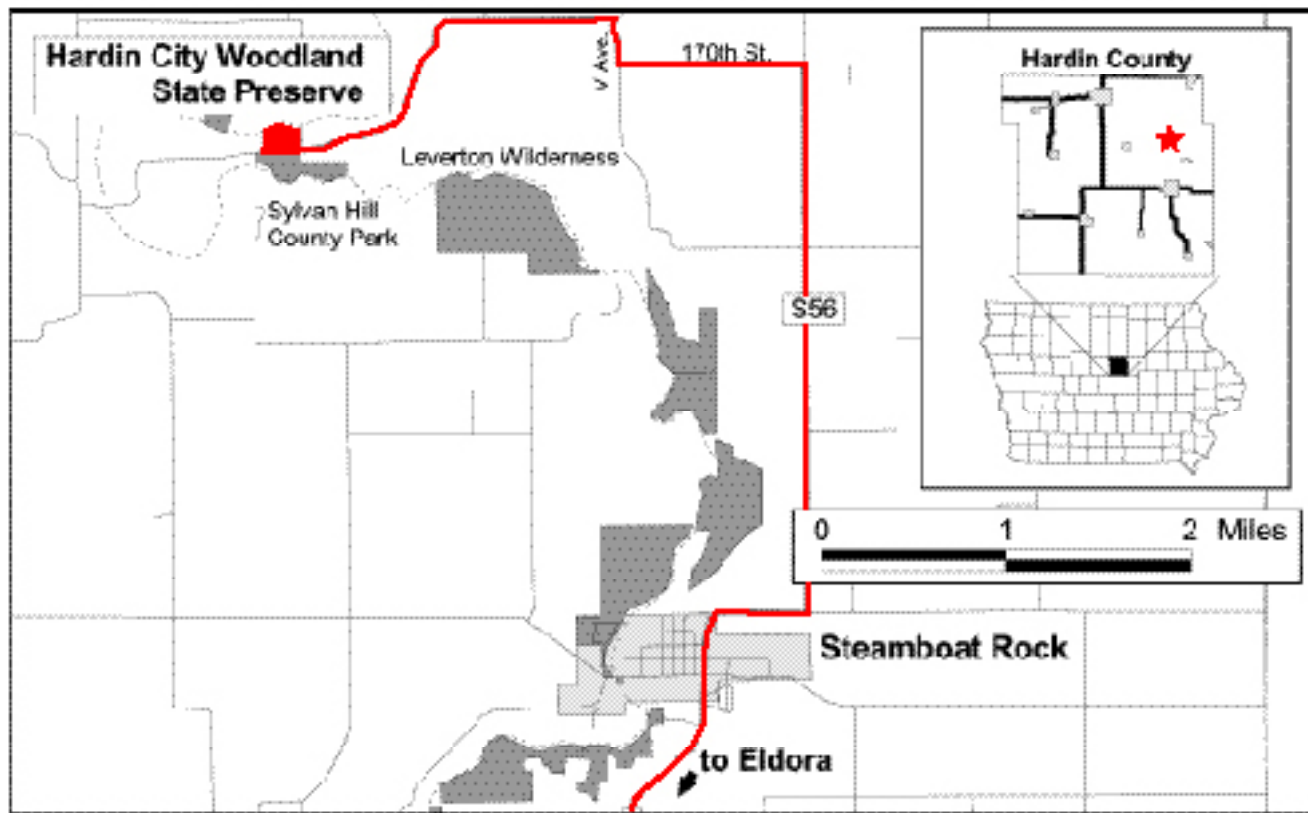
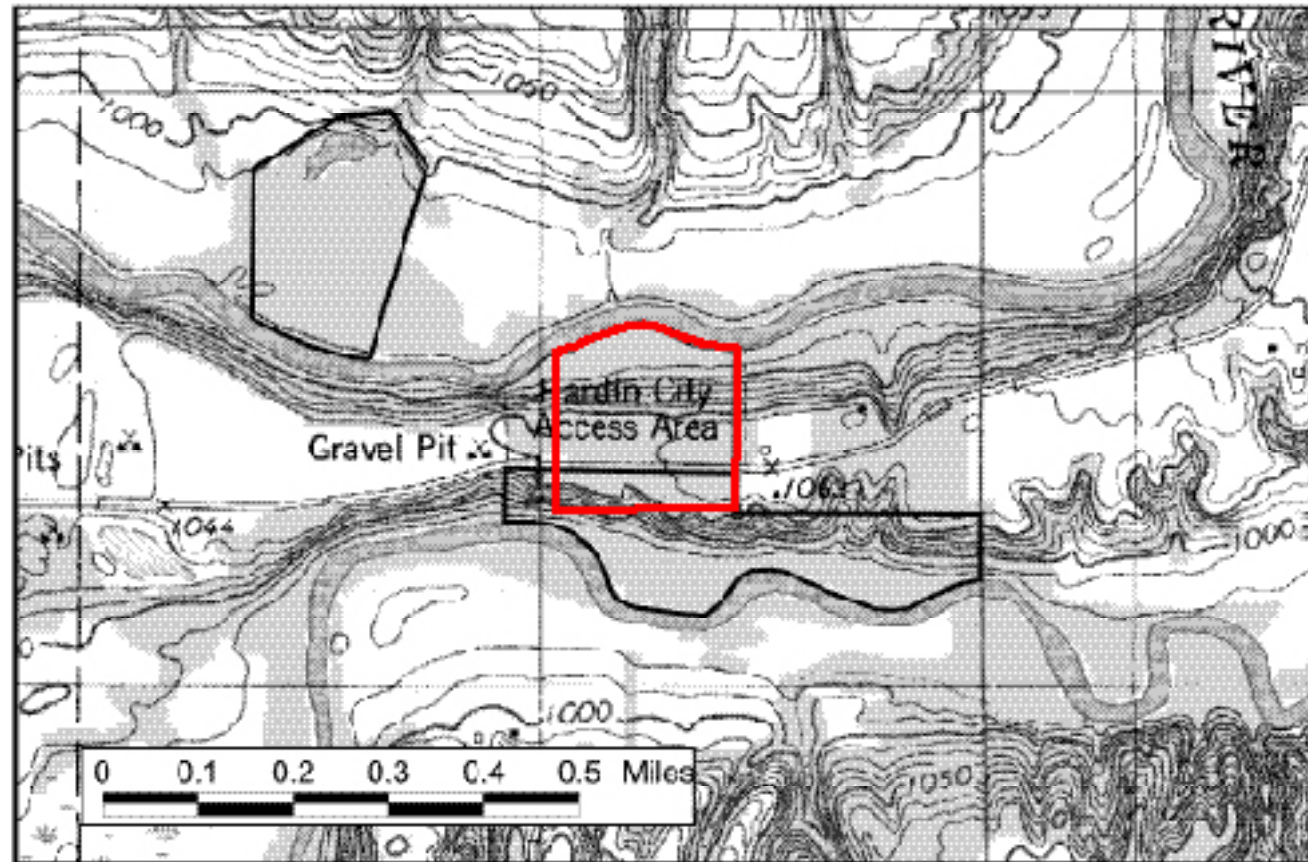
### DIRECTIONS

From the intersection of Highway 175 and Highway 215 in Eldora, take Highway 175 east 1 mile to County Road S56. Turn north (left) and drive on this winding road for 4 miles to the town of Steamboat Rock. Continue north through the town on County Road S56 for 3.5 miles, then turn west (left) onto 170th Street (sign: Iowa River Greenbelt Scenic Drive). Drive west 1 mile on 170th Street to a T-intersection with V Avenue. Jog north (right) 0.25 mile on V Avenue, then turn west (left) onto a continuation of 170th Street. Go 2.5 miles on this winding road to the parking area on the south side of the road (sign: Sylvan Hill Park). The preserve is on the north side of the road (sign: Hardin City Access).

### AREA MANAGER

Hardin County  
Conservation Board  
15537 "S" Avenue  
Ackley, IA 50601-7734  
(641) 648-4361

www.  
hardincountyconservation.com  
hardincb@  
hardincountyconservation.com  
State\_Preserves@dnr.iowa.gov



## Hartley Fort State Preserve

Hartley Fort State Preserve features the remains of a prehistoric fortified village. This 2-acre, privately owned preserve is located along the Upper Iowa River in Allamakee County. Early archaeological investigations of this area date back to the late nineteenth century. The site was studied by the Office of the State Archaeologist in 1964 and was dedicated as an archaeological state preserve in 1970. Additional studies were carried out by the Office of the State Archaeologist in 1993.

The preserve sits on a terrace marking the position of an ancient floodplain. As the river meandered across the valley between 14,000 to 17,000 years ago, it deposited alluvium whose surface is now about eighty feet higher than the present valley floor. The first known human occupants of this site, about a.d. 1000, were Woodland Indians. They constructed a large, square palisade or stockade reinforced by a ditch and earthen embankment to enclose the main village area. They also constructed nine conical mounds near the village. Later, Oneota people also occupied the site. Ceramics collected from the preserve have shown influence from the Mill Creek culture of northwest Iowa and the Late Woodland culture in southern Wisconsin. The site is significant for understanding the interaction of late prehistoric groups in the Quad-State Region of the Upper Mississippi River valley. The human remains recovered from the site have been repatriated to the Iowa and Otoe-Missourian tribes and reburied.

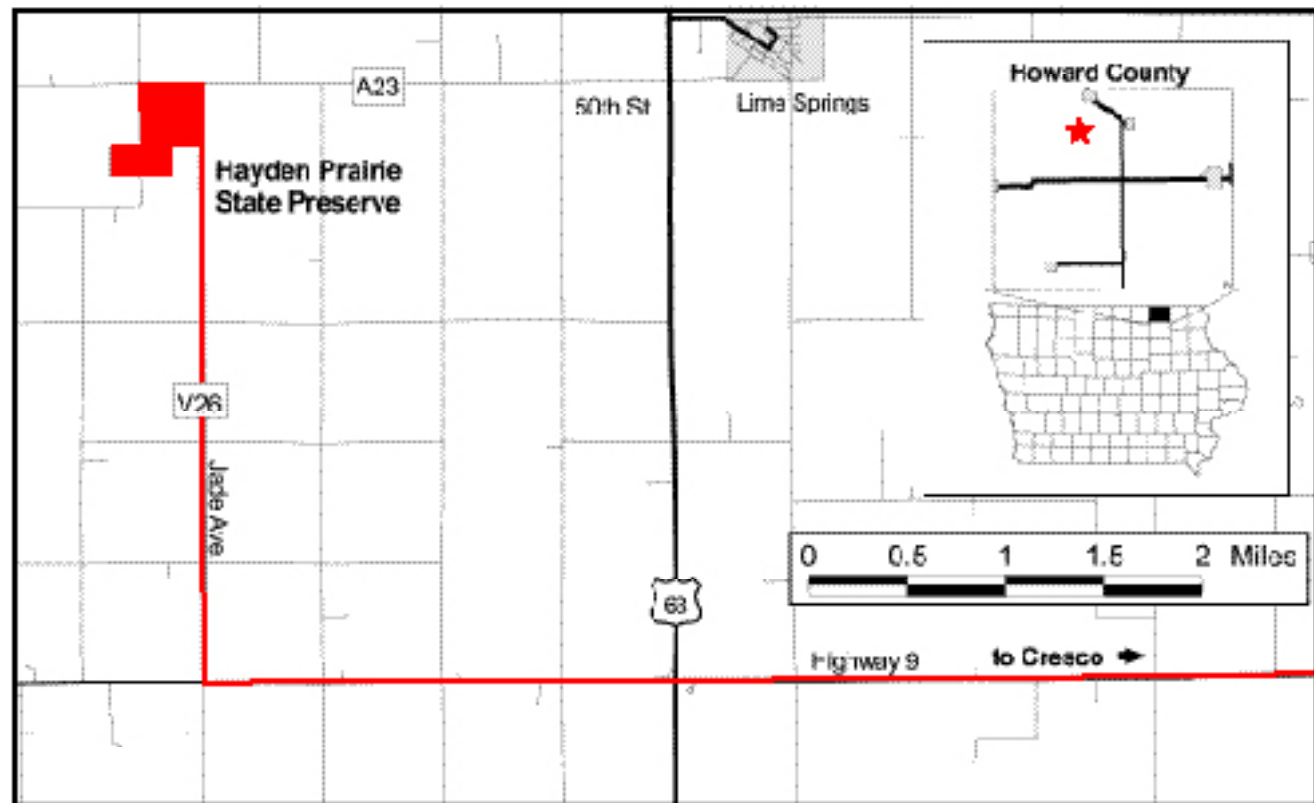
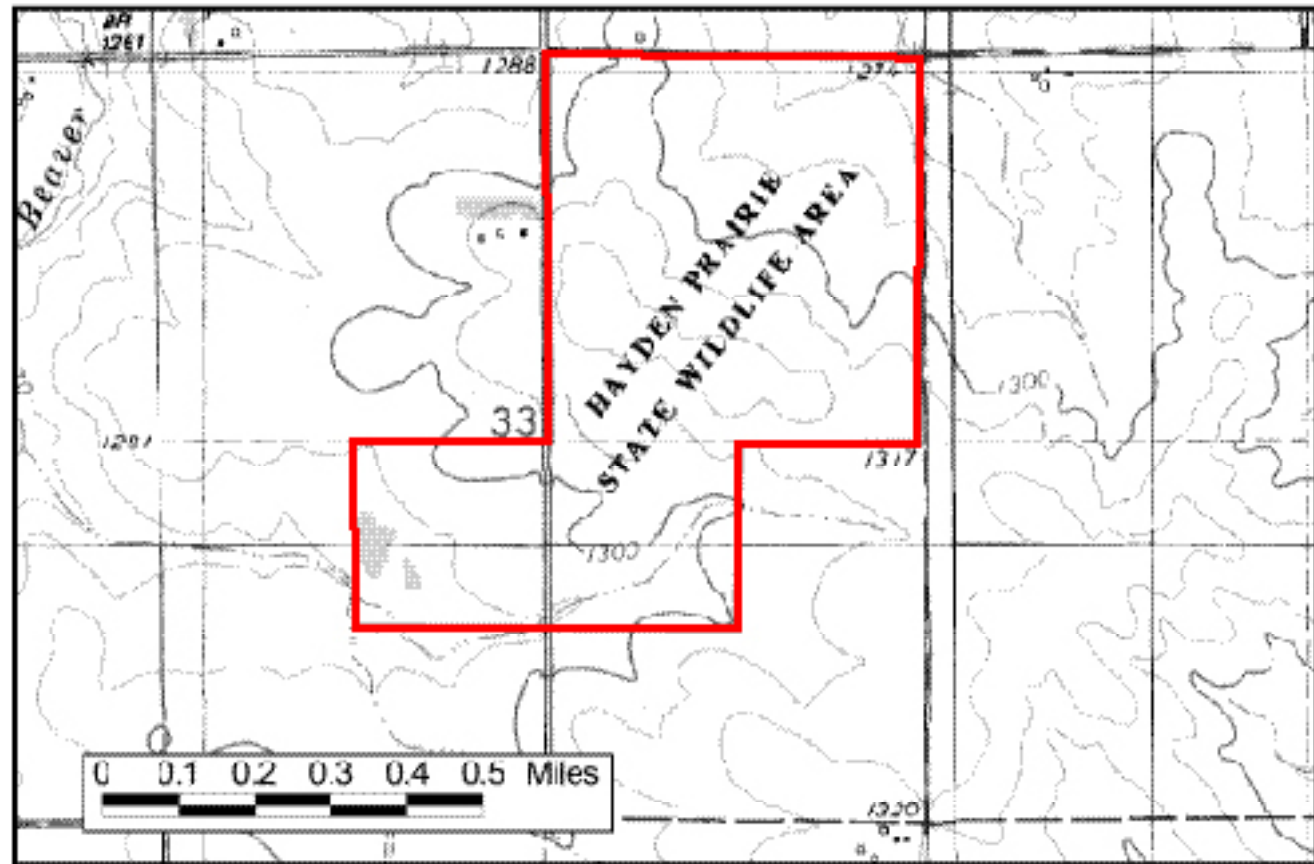
Other archaeological sites in Iowa include Fish Farm Mounds, Little Maquoketa River Mounds, Malchow Mounds, Slinde Mounds, Toolesboro Mounds, and Turkey River Mounds State Preserves and Effigy Mounds National Monument.

This preserve is privately owned and is not open to the public.

### CONTACT

Iowa Department of  
Natural Resources  
Upper Iowa Wildlife Unit  
2296 Oil Well Road  
Decorah, IA 52101  
(563) 382-4895  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Hayden Prairie State Preserve

Hayden Prairie is the largest prairie in Iowa outside of the Loess Hills. This 240-acre preserve is located in northern Howard County, thirteen miles northeast of Riceville and four miles west of Lime Springs. It was investigated in 1945 by Dr. Ada Hayden, a botanist who first promoted the preservation of native prairie in Iowa. The prairie was purchased by the Iowa Conservation Commission in 1945 and was named in honor of Dr. Hayden after her death in 1950. It was recognized as a National Natural Landmark in 1966 and was dedicated as a biological state preserve in 1968.

Located in the gently rolling terrain of the Iowan Surface landform region, Hayden Prairie contains over 200 plant species. Big bluestem, Indian grass, and prairie dropseed dominate the upland prairie. Bluejoint grass, cordgrass, and sedges dominate the wet habitats. In the spring, a spectacular array of shooting stars can be seen, with bird's-foot violet, blue-eyed grass, hoary puccoon, golden alexanders, and prairie-smoke adding to the display. In summer, Michigan lilies, wild rose, prairie blazing stars, and leadplant are conspicuous. There is also blue flag iris, marsh vetchling, water hemlock, and many others in the wet prairie lowlands.

Several native grassland birds are among the forty-six species of birds that have been found here, including bobolinks, meadowlarks, dickcissels, grasshopper sparrows, upland sandpipers, northern harriers, short-eared owls, and Henslow's sparrows, as well as the introduced ring-necked pheasant and gray partridge.

Over twenty butterflies are found in Hayden Prairie, including many prairie species such as the great-spangled fritillary, eastern-tailed blue, pearl crescent, and eyed brown. The black dash and two-spotted skipper have been seen in the wet prairie areas, while Poweshiek skipperling, silvery blue, regal fritillary, wild indigo duskywing, two-spotted skipper, and Acadian hairstreak use the drier prairie areas.

Hunting is allowed.

Another state preserve in the vicinity is Crossman Prairie.

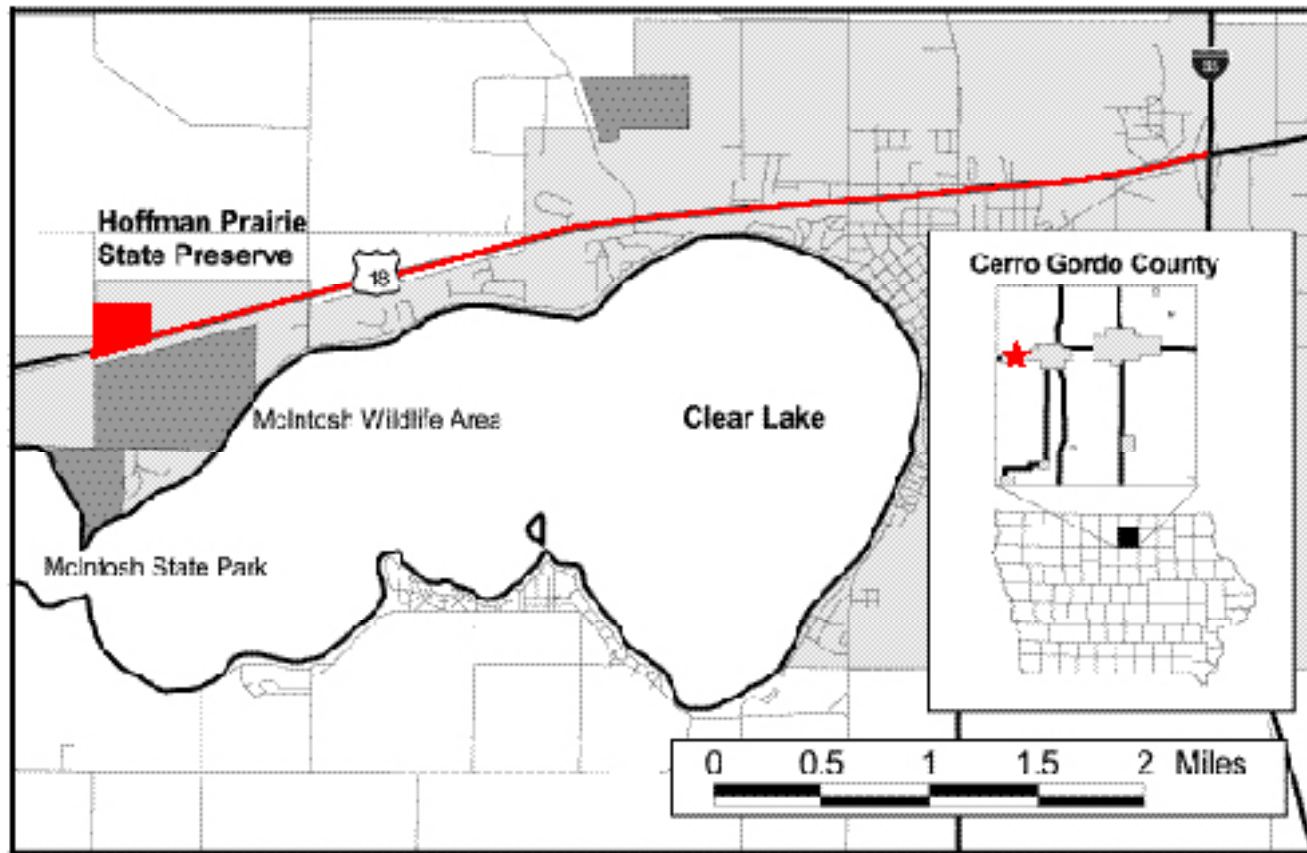
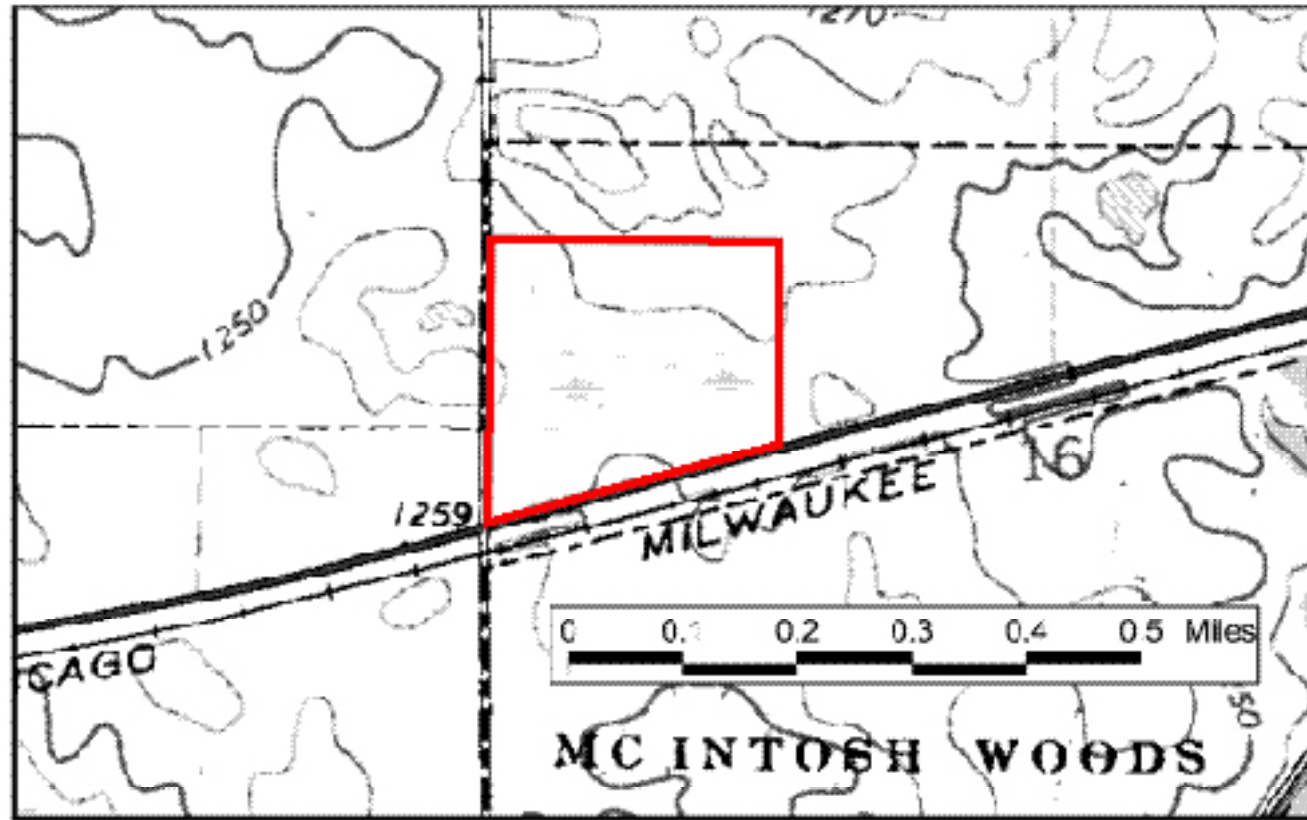
### DIRECTIONS

From the intersection of Highway-3 and County Road-V58 (3rd-Street) in Cresco, drive west on Highway 3 for 13 miles to Jade Avenue. Turn north (right) and go 5 miles to 50th Street. Turn west (left) and go 0.25 mile to the preserve parking area on the south side of the road (sign: Hayden Prairie State Preserve).

### AREA MANAGER

Iowa Department of  
Natural Resources  
Upper Iowa Wildlife Unit  
2296 Oil Well Road  
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State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Hoffman Prairie State Preserve

Hoffman Prairie is a 36-acre preserve featuring a prairie pothole—a shallow marsh surrounded by native tallgrass prairie. It is located two miles west of Clear Lake in Cerro Gordo County. The Nature Conservancy purchased the property from Larry Hoffman in 1985. It was dedicated as a biological and geological state preserve in 1986.

Hoffman Prairie is located in the Des Moines Lobe landform region, and owes its origins to glacial advances into north-central Iowa about 13,000 years ago. The small marshes contained in the depressions on this preserve are surrounded by knobby terrain with numerous glacial erratics, all characteristic of the Bemis and Altamont glacial moraines of this landform region. The vegetation ranges from cattail-dominated wetlands to mesic prairie on uplands dominated by big bluestem. The northern portion was formerly a cornfield and is being replanted to prairie using seed harvested from this and other prairies in the area.

Over 150 plant species are found in this preserve. In the spring, a variety of color is found with the yellow of hoary puccoon, marsh marigold, yellow stargrass, and golden alexanders, the violet of bird's-foot violet and wood sorrel, the white of pussytoes and thimbleweed, and the pink of prairie smoke and prairie phlox. In the summer, butterfly weed, swamp milkweed, leadplant, marsh bellflower, Indian paintbrush, bastard toadflax, prairie coreopsis, prairie larkspur, showy tick-trefoil, pale purple coneflower, rattlesnake master, blue flag iris, wood lily, compass plant, nodding ladies'-tresses, and white camass can be seen. Fall brings the appearance of prairie blazing star, rough blazing star, sky-blue aster, smooth aster, side-flowered aster, Riddell's goldenrod, showy goldenrod, bottle gentian, and downy gentian. A variety of grasses can also be found here including prairie dropseed, Junegrass, and porcupine grass, as well as bulrushes, sedges, and cattails.

Twelve butterflies can be found, including the black dash, dion skipper, and broad-winged skipper that use the marsh, and the Poweshiek skipperling and Arogos skipper in the upland prairie. Bobolink, yellow-headed blackbird, blue-winged teal, mallard, sedge wren, dickcissel, and red-winged blackbird also use this preserve.

Hunting is not allowed.

Other natural areas in the vicinity include Union Hills Wildlife Area and Pilot Knob State Preserve.

### DIRECTIONS

From the intersection of I-35 and Highway 18 in Clear Lake, take Highway 18 west for 5 miles to Balsam Avenue, just west of the preserve (sign: Hoffman Prairie). Turn north (right) and park on the roadside. Walk east into the preserve.

### AREA MANAGER

The Nature Conservancy  
 303 Locust St., Suite 402  
 Des Moines, IA 50309  
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[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Indian Bluffs Primitive Area State Preserve

Indian Bluffs is an 845-acre, privately owned preserve located southeast of Monticello in Jones County. The area was dedicated as a state preserve in 1981.

Located on the northeastern edge of the Southern Iowa Drift Plain landform region, this preserve contains the deep, narrow, entrenched valley of the South Fork of the Maquoketa River. The river and its tributaries have cut through the resistant Silurian dolomite (430 million years old), forming tall bluffs and rugged topography.

Within the preserve, Eby's Mill is the former location of a historic grist mill dating from the mid-1800s. A rock wall and several rock shelters and campsites are evidence of historic occupation and prehistoric occupation of the area by Woodland peoples.

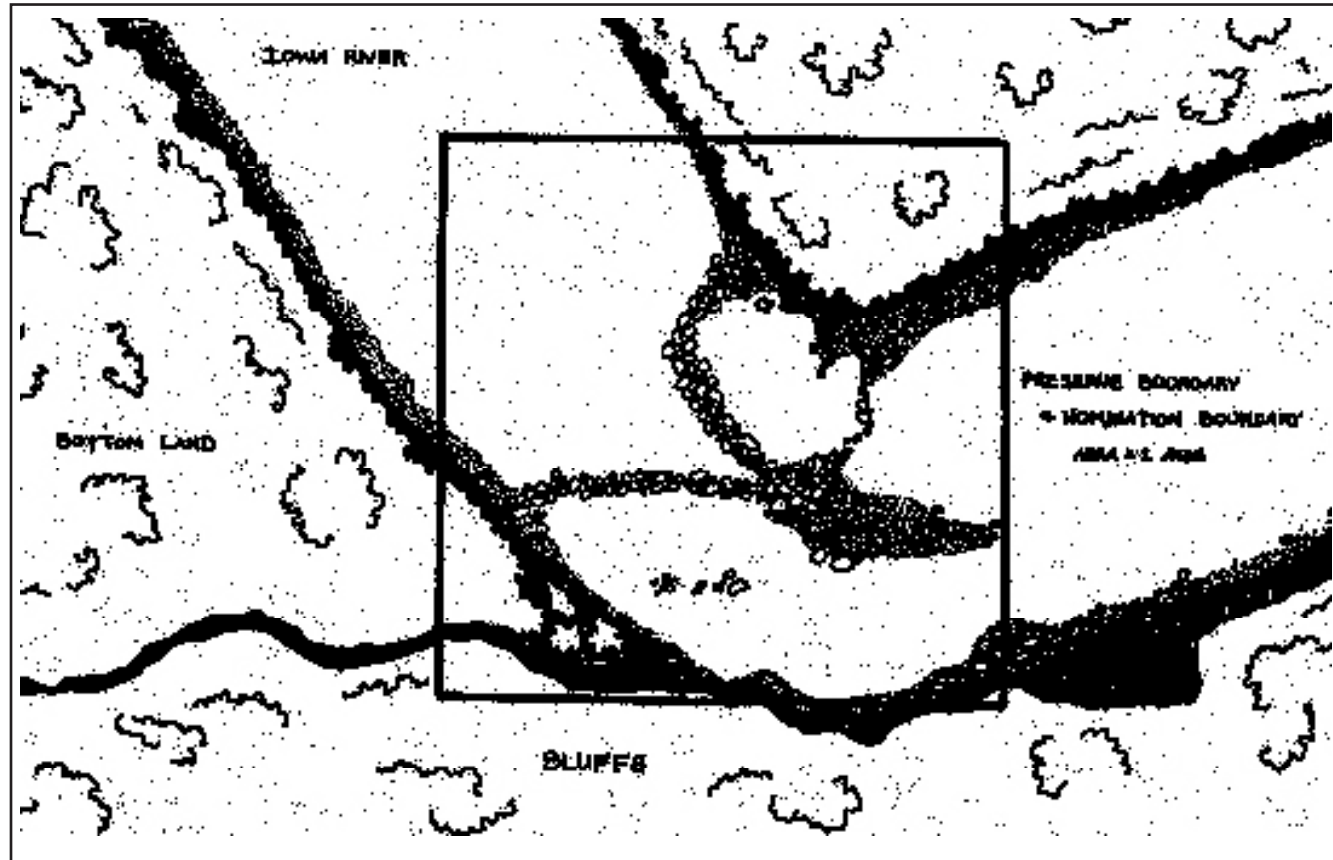
Other natural areas in the vicinity include the adjacent Indian Bluffs and Pictured Rocks wildlife areas, Searryl's Cave and Catfish Creek State Preserves, and Maquoketa Caves and Wapsipinicon State Parks.

This preserve is privately owned and not open to the public.

### CONTACT

Iowa Department of  
Natural Resources  
Maquoketa Wildlife Unit  
18670 63rd St.  
Maquoketa, IA 52060  
(563) 357-2035  
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State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Indian Fish Trap State Preserve

Indian Fish Trap is a 1-acre preserve featuring a prehistoric fish trap constructed as a rock weir in the channel of the Iowa River. It is located two miles northwest of Homestead in Iowa County.

The weir was discovered by early pioneers and noted on a General Land Office map in the 1840s. In 1925, Iowa archaeologist Charles R. Keyes wrote about the fish trap. The weir was relocated in 1952 and was dedicated as an archaeological state preserve in 1976. It was placed on the National Register of Historic Places in 1988.

The fish trap was probably constructed of glacial boulders from an adjacent bluff sometime in the Late Prehistoric period or Early Historic period, less than 1,000 years ago and possibly fewer than 200. Similar structures across the United States are associated with historic Indian tribes. The low barrier of piled rocks and sticks stretches across the river in a V pointing downstream. Each wing of the dam is nearly 150 feet long. On the downstream side of the north wing is another line of rocks that forms a roughly circular enclosure, probably serving as a holding pool (see figure). Presumably, fish were driven downstream into the funnel portion of the weir by people wading the river. The fish were then speared, netted, or caught in a basket or by hand as they funneled through a narrow opening at the apex of the weir, and then placed into the holding pool.

The weir is not as high as it once was, as indicated by the height of a sheltered section near the north riverbank and the fact that many stones are strewn downstream in the riverbed. Today, the pool of Coralville Reservoir partially inundates the preserve, making the fish weir less visible.

Other state preserves in the vicinity include Fleming Woods and Pilot Grove.

### DIRECTIONS

From the intersection of I-80 and Highway 151 (Exit 225), take Highway 151 north to Highway 6. The parking area for the preserve is northwest of this intersection.

A 1-mile trail leads north from the parking lot to the preserve. The weir may not be visible during periods of high water.

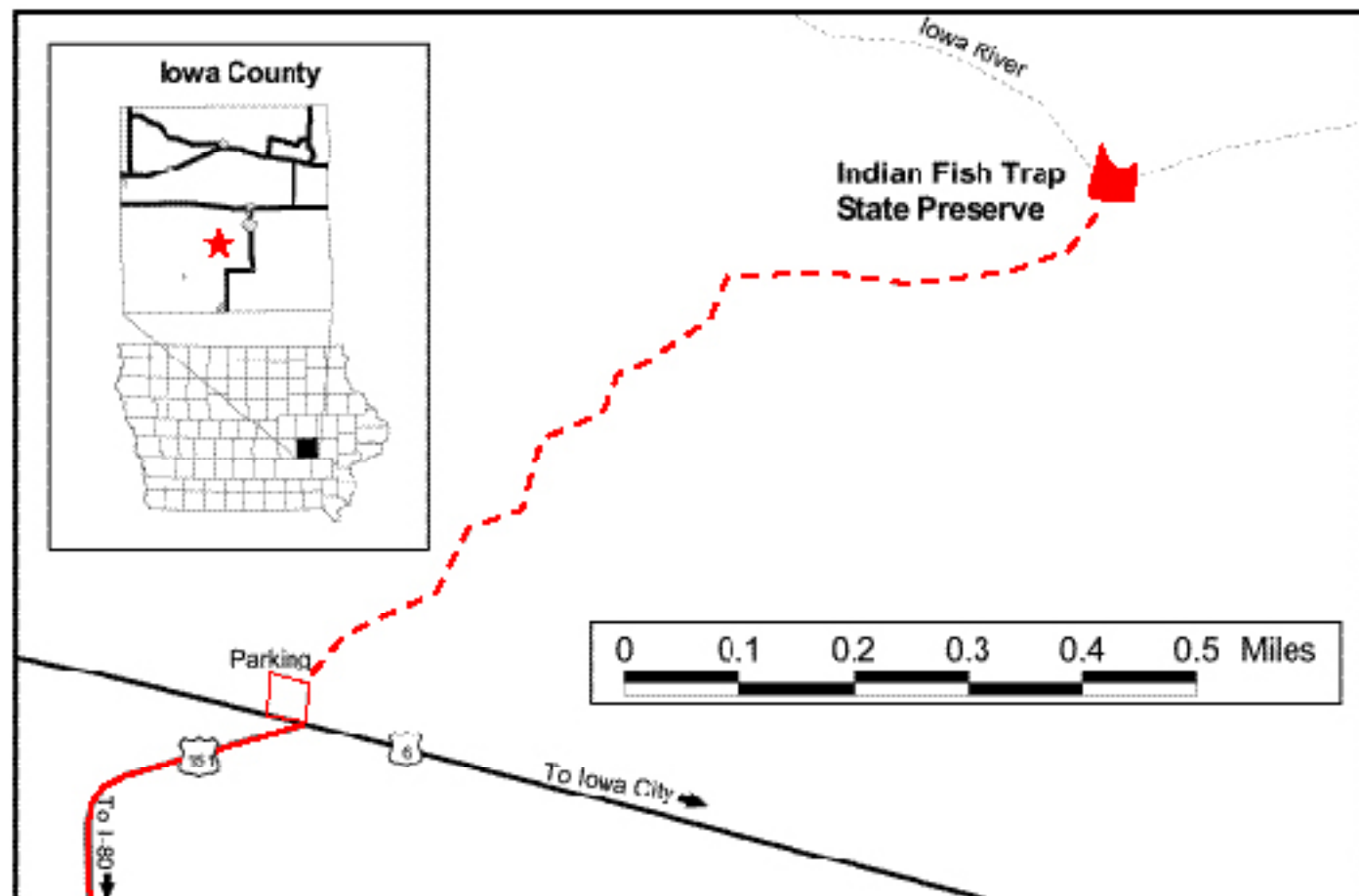
### AREA MANAGER

Amana Forestry  
Box 189

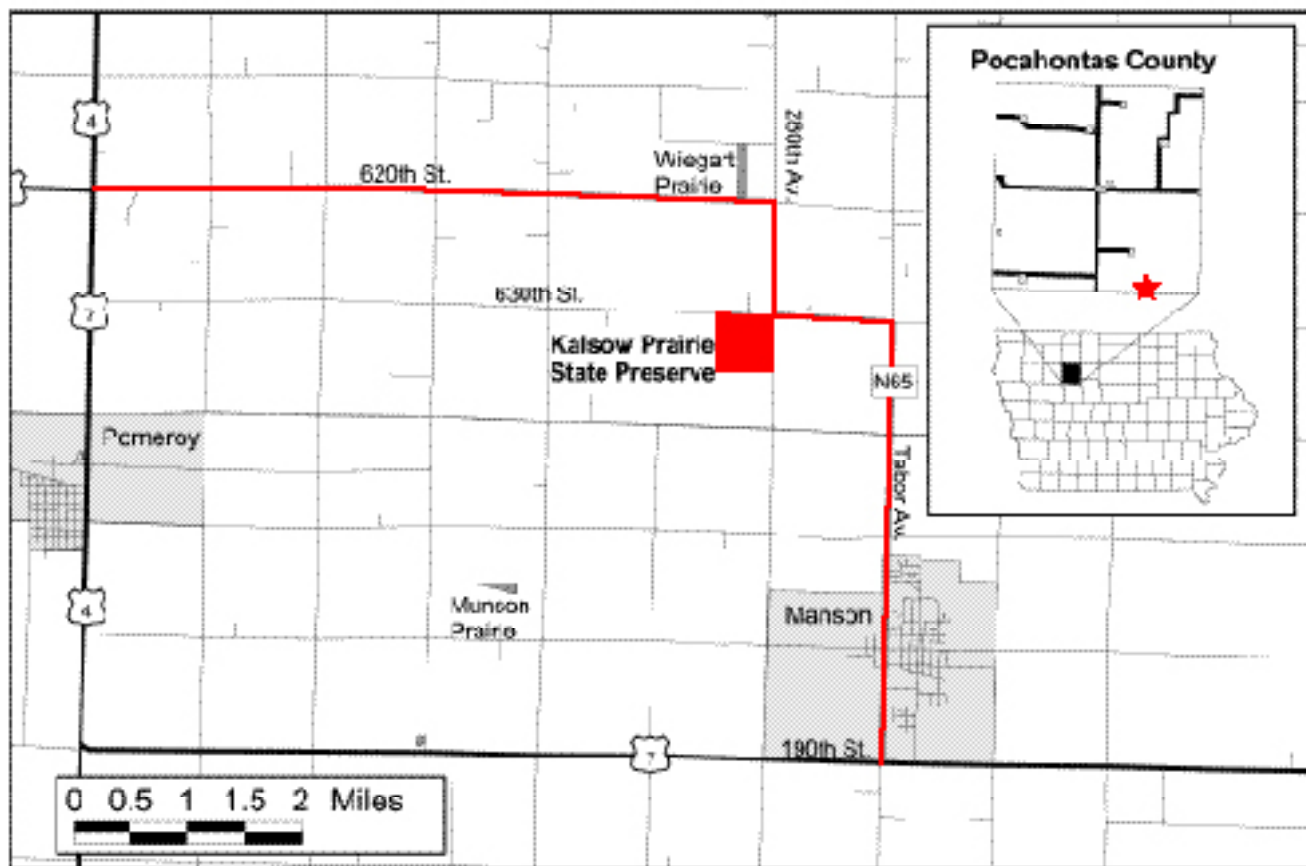
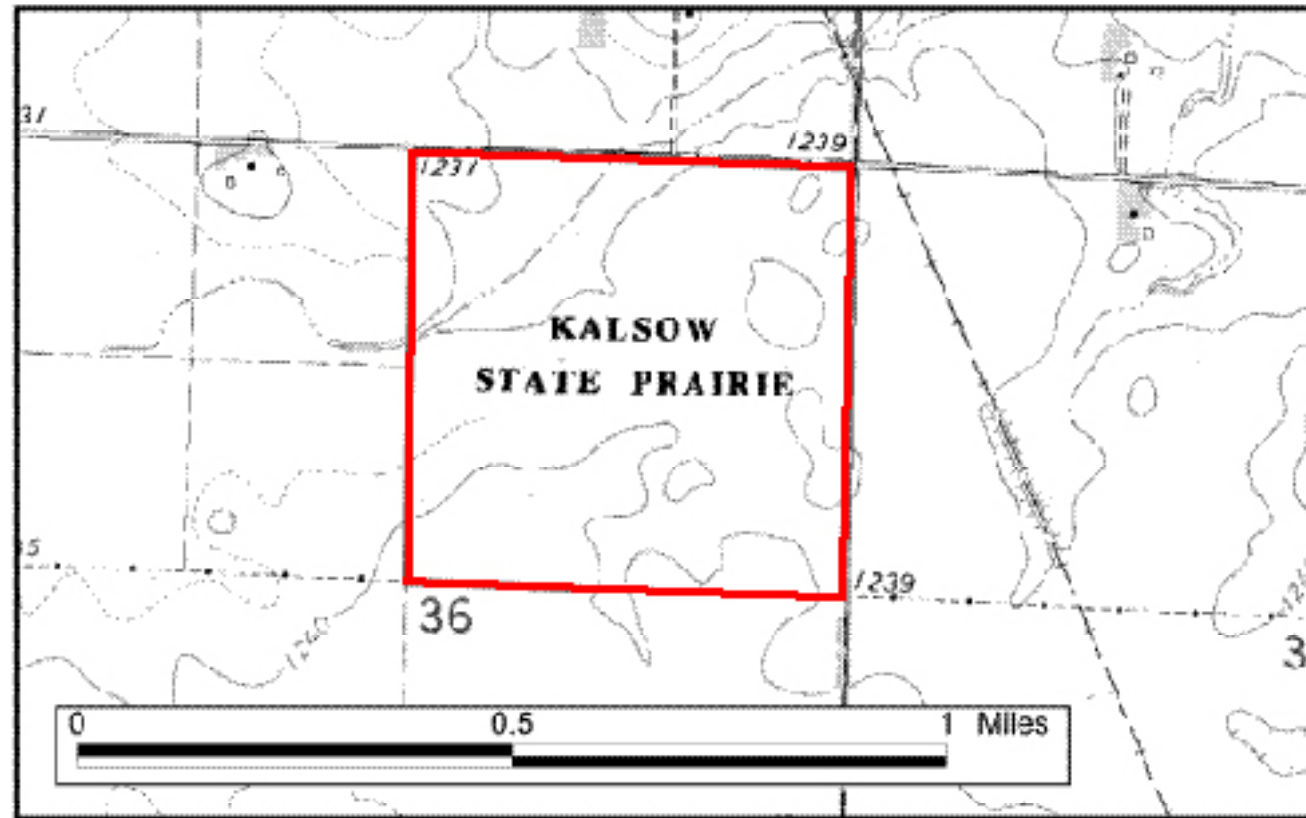
Amana, IA 52203  
(319) 622-7554

Aforest@netins.net

[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Kalsow Prairie State Preserve



Kalsow Prairie is a 160-acre prairie with many small potholes once typical of the Des Moines Lobe landform region. This preserve is located 5.5 miles northwest of Manson in southern Pocahontas County. Dr. Ada Hayden first described Kalsow Prairie in 1945 during the "Prairie Project" sponsored by the Iowa Academy of Science. As a result of her recommendation, the Iowa Conservation Commission purchased the tract in 1948 from the Kalsow family, who had traditionally used the prairie as a hayfield and pasture. The prairie was dedicated as a biological state preserve in 1968.

The prairie contains over 250 plant species, of which 24 are grasses. After winter has disappeared from the prairie, the fresh colors of the spring flowers appear with prairie buttercup, spiderwort, golden alexanders, yellow stargrass, pussytoes, and prairie smoke. In summer, a variety of colors is contributed by black-eyed Susan, purple milkweed, compass plant, wood lily, grassleaf goldenrod, rattlesnake master, ironweed, prairie rose, New Jersey tea, purple coneflower, and purple prairie clover. Fall follows with its predominantly purples and golds, including several asters, goldenrods, blazing stars, sneezeweed, and bottle and downy gentian.

A complex of fourteen potholes is scattered across the preserve. Prairie cordgrass, sedges, bluejoint grass, spikerushes, and smartweed characterize the edges of the potholes. Surrounding low areas contain great lobelia, swamp milkweed, germander, swamp lousewort, Indian hemp, water horehound, American germander, and blue flag iris.

Among the forty-six species of birds found at Kalsow Prairie are grassland species such as bobolink, western meadowlark, and upland sandpiper. Amphibians and reptiles include Blanchard's cricket frog, northern prairie skink, and the smooth green snake. Twenty species of mammals, including the masked shrew, short-tailed shrew, plains pocket gopher, western harvest mouse, deer mouse, meadow vole, and meadow jumping mouse inhabit the preserve. Five of the twenty-five butterflies found here are rare in the state, including the regal fritillary, Arogos skipper, checkered white, two-spotted skipper, and dion skipper.

Of geological interest, the preserve is nearly centered over the glacially buried Manson Crater, which was formed by the impact of a large meteorite during the late Cretaceous period.

Hunting is permitted.

Other public areas in the vicinity include Sunken Grove and Leo Shimon Marsh Wildlife Areas.

### DIRECTIONS

From Storm Lake, drive east on Highway 7 for 30 miles to the intersection of Highway 7 and Highway 4. Cross this intersection and continue east on County Road C66 (620th Street) (sign: Kalsow Prairie 7 miles) for 6 miles to 280th Avenue (sign: Kalsow Prairie 1 mile). Turn south (right) and go 1 mile to 630th Street (sign: Kalsow Prairie).

From Fort Dodge, drive west on Highway 7 to the intersection of Highway 7 and Tabor Avenue (County Road N65) on the south edge of the town of Manson. Turn north (right) and follow Tabor Avenue for 4 miles to 630th Street (sign: Kalsow Prairie 1 mile). Turn west (left) and go 1 mile to the preserve (sign: Kalsow Prairie).

### AREA MANAGER

Iowa Department of Natural Resources  
Blackhawk Wildlife Unit  
Box 619

Lake View, IA 51450  
(712) 657-2639

[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Kish-Ke-Kosh Prairie State Preserve

Kish-Ke-Kosh Prairie is a 16-acre native tallgrass prairie. It is located half a mile south of Reasnor in southern Jasper County. The prairie was purchased in 1980 from Nicholas and Linda Keplinger by the Iowa Conservation Commission and was dedicated as a biological state preserve in 1981. The preserve was named after the Fox (Meskwaki) Indian chief, Kish-Ke-Kosh, who was a well-known friend to the European settlers in the area.

Upland prairie encompasses a major portion of the preserve, blending into moist drainageways and wet swales. Although this preserve was formerly grazed, the prairie vegetation is recovering. In spring, the prairie hosts hoary and hairy puccoons. Blooming peaks in June and July, as indigo bush and prairie larkspur begin to fade and leadplant, prairie coreopsis, and pale purple coneflower start to appear. Prairie rose, purple prairie clover, sand primrose, and partridge pea emerge among purple rough blazing stars. By the end of September, prairie sunflower, sky-blue and silky asters, sweet everlasting, and Missouri goldenrod provide yellow, blue, and gold blooms.

Red-tailed hawks can often be seen flying in the updrafts along the edges of the hills. Eastern meadowlarks, dickcissels, and horned larks are commonly heard here with an occasional appearance by upland sandpipers or shrikes. Ten species of butterflies have been seen here, including black swallowtail, orange sulphur, pearl crescent, and wood satyr.

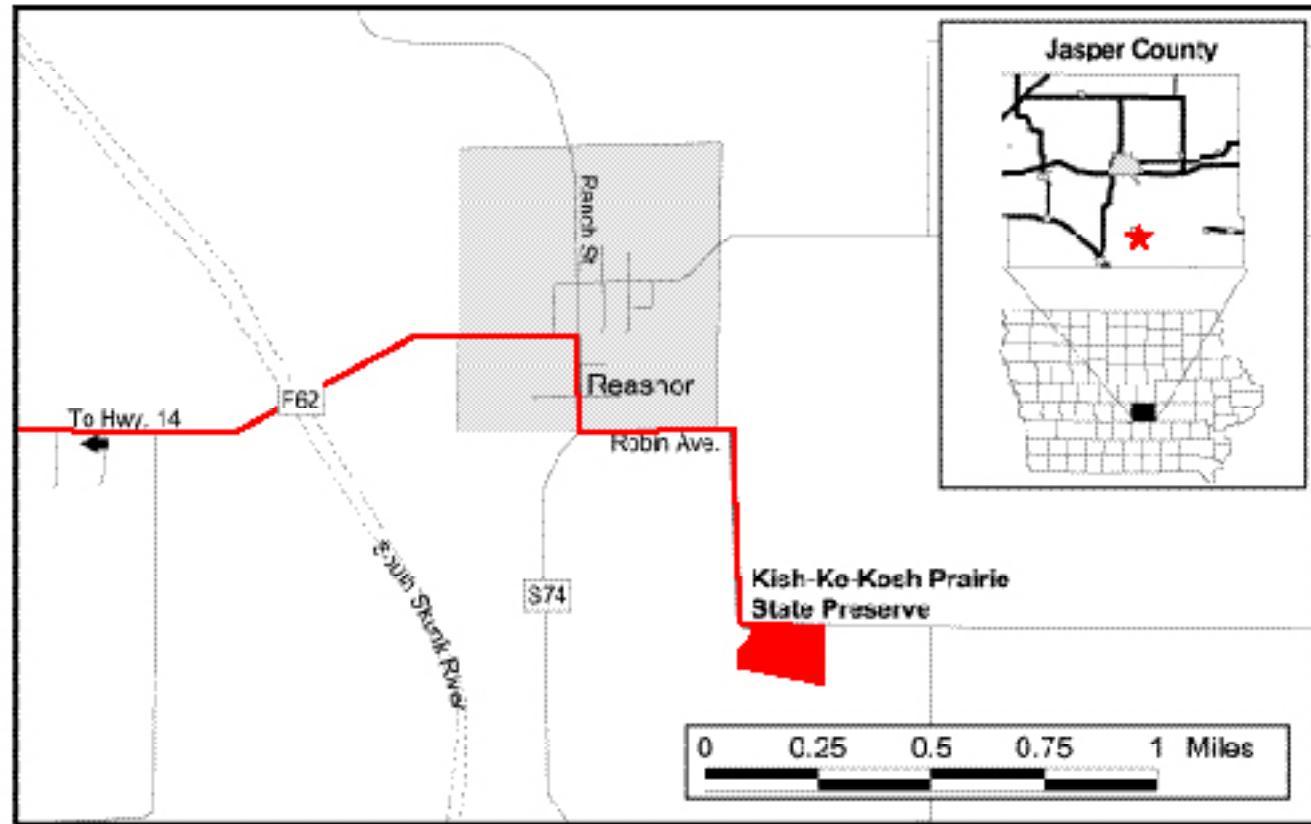
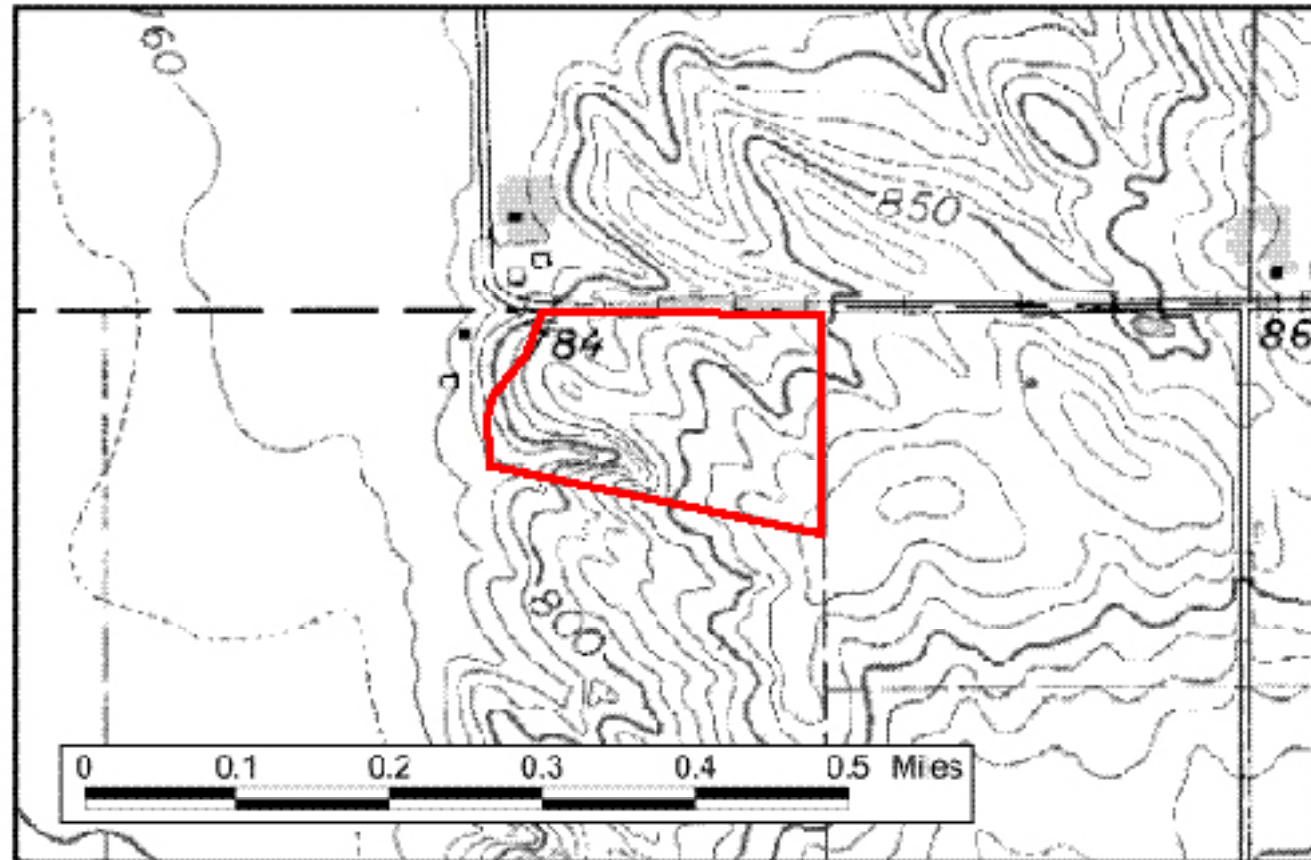
Another public area in the vicinity is the Neal Smith National Wildlife Refuge, where a major tallgrass prairie restoration effort is under way.

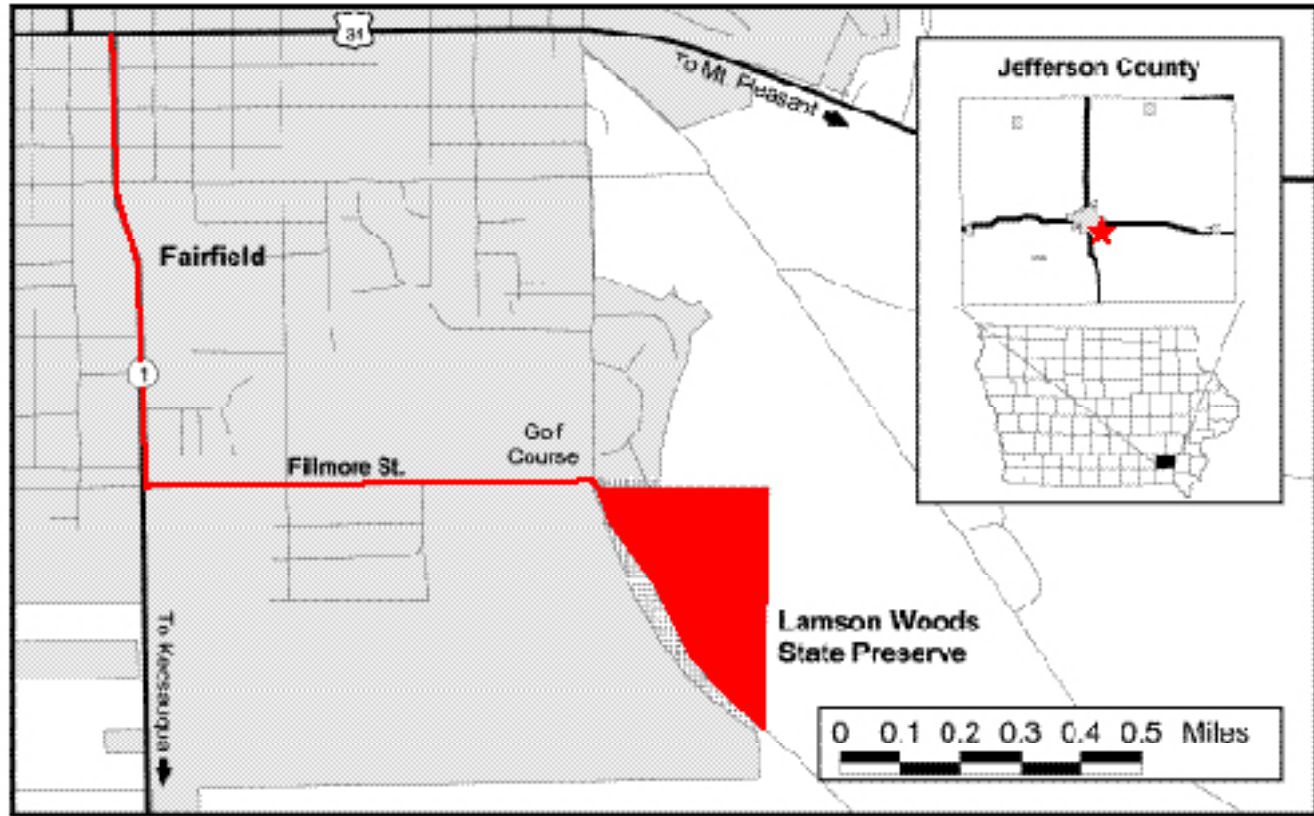
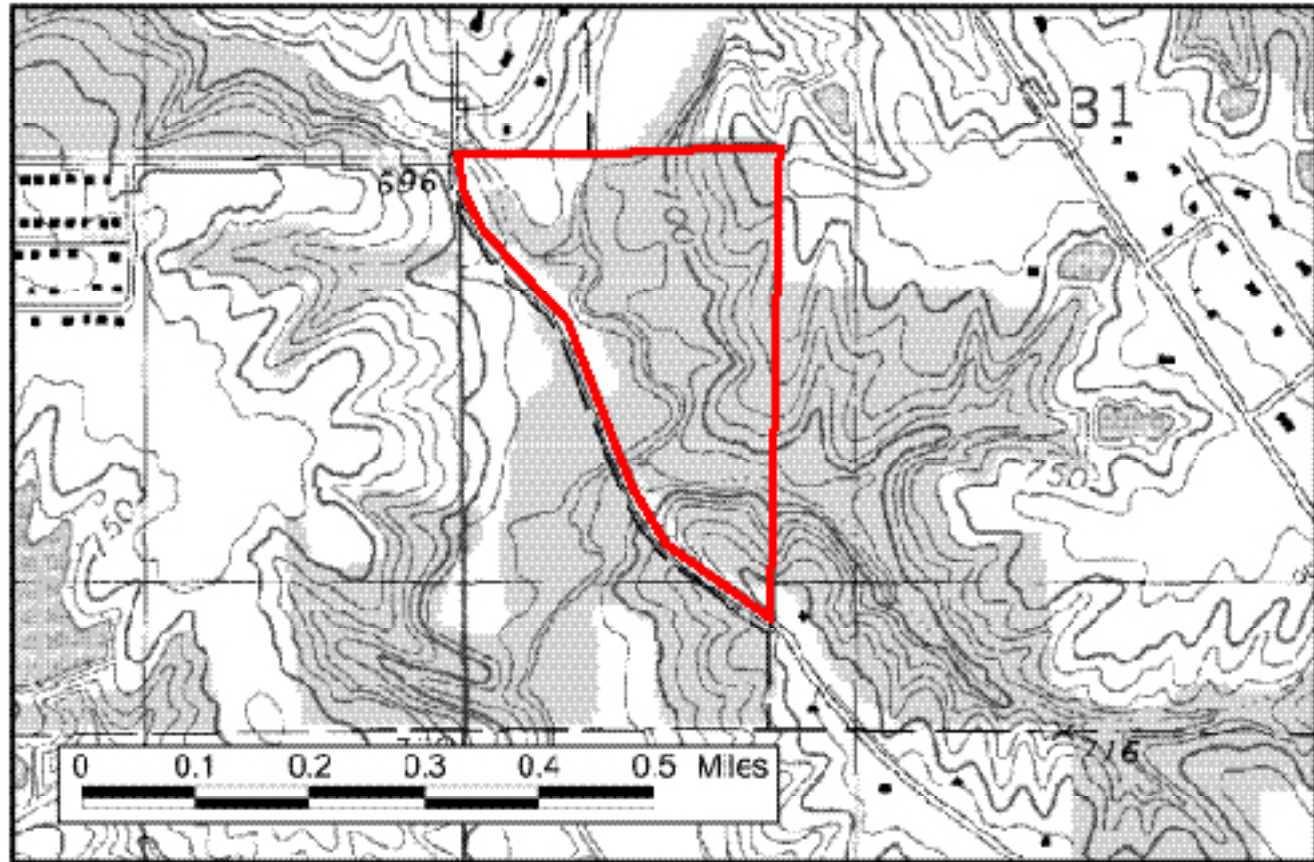
### DIRECTIONS

From the intersection of I-80 and Highway 14 (Exit 164) at the southwest edge of Newton, go south on Highway 14 for 7 miles to the second turnoff for County Road F62. Turn east (left) and drive 4 miles into the town of Reasnor. Turn south (right) on Main Street (which becomes Ranch Street outside of town) and go 0.25 mile to Robin Avenue. Turn east (left) and follow this winding road 1 mile to the preserve, on the south side of the road (sign: Kish-Ke-Kosh State Preserve). Park along the roadside.

### AREA MANAGER

Jasper County Conservation Board  
 115 N. 2nd Avenue East  
 Newton, IA 50208  
 (641) 792-9780  
[www.co.jasper.ia.us/conservation](http://www.co.jasper.ia.us/conservation)  
[conservation@co.jasper.ia.us](mailto:conservation@co.jasper.ia.us)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Lamson Woods State Preserve

Lamson Woods is a 43-acre woodland preserve located on the southeast edge of Fairfield in Jefferson County. This hilly, wooded area was willed to the city of Fairfield by Carrie Lamson Ross in 1930. Originally “Lamson’s Pasture” was a park that included Fairfield’s first golf course. The golf course was in a pasture for cows and pigs along a small woodland, and was dubbed “cow-pasture golf.” It was a favorite area for hiking and nature study for people of all ages. The woodland was dedicated as a biological state preserve in 1978.

The preserve is a mixture of upland and lowland forest. Mesic and dry woodland species occupy the slopes and ravines that are cut into Pre-Illinoian glacial deposits (500,000 to 2.5 million years old) typical of the Southern Iowa Drift Plain landform region. Trees occupying the canopy include cottonwood, white oak, bur oak, shingle oak, shagbark hickory, American elm, hackberry, and black cherry. Ohio buckeye can be found in the understory with hazelnut along the woodland edges. A planted pine grove is located in the southwest corner of the preserve.

The spring wildflower display begins with the blooming of bloodroot, bluebells, and spring beauty, followed by prairie trillium, toothwort, white trout-lily, blue phlox, wild geranium, mayapple, Solomon’s seal, swamp buttercup, and wild hyacinth. By May, moonseed and Jacob’s ladder can be seen in flower followed by jumpseed and pale touch-me-not in July. August brings the blooming of hog peanut among the sensitive fern and maidenhair fern fronds. In the fall, the bright red leaves of Virginia creeper can be seen crawling up the trunks of trees or along the ground.

Another natural area in the vicinity is Woodthrush Woods State Preserve.

### DIRECTIONS

From the intersection of Highway 34 and Highway 1 in Fairfield, take Highway 1 south for 0.75 mile to Fillmore Street. Turn east (left) and go 0.75 mile to Mint Boulevard. The preserve parking area is located across and slightly south of the T-intersection (sign: Lamson Woods State Preserve).

### AREA MANAGER

Fairfield Parks and Recreation Department  
1000 West Burlington  
Fairfield, IA 52556  
(641) 472-6159  
cityoffairfieldiowa.com  
www.iowadnr.gov/preserves/  
State\_Preserves@dnr.iowa.gov



## Liska-Stanek Prairie State Preserve

Liska-Stanek Prairie is a 20-acre tallgrass prairie located five miles southwest of Fort Dodge in Webster County. The prairie was part of the original land claim acquired by the pioneer Stanek family in 1858. It was willed to Mr.-Stanek's sister, a Liska. It was purchased by the Webster County Conservation Board in 1972 and was dedicated as a biological state preserve in 1976.

This gently rolling prairie features several shallow potholes. This landscape originated 14,000 years ago following the glaciation of north-central Iowa and is typical of the terrain in the Des Moines Lobe landform region.

Although this preserve is fairly small, over 130 native plant species have been found, including over twenty grasses. Big bluestem dominates the upland prairie. Other grasses include Canada wild rye, switchgrass, sideoats grama, and prairie cordgrass. In spring, you will find a blend of colors, with large populations of white Canada anemone and yellow golden alexanders. As spring turns to summer, compass plant appears along with butterfly weed, silvery scurf-pea, gray-headed coneflower, purple prairie clover, leadplant, prairie sunflower, prairie blazing star, prairie larkspur, and wild onion. Fall continues with downy gentian, rough blazing star, goldenrods, and asters.

Birds that have been noted from this preserve include bobolink, dickcissel, western meadowlark, red-winged blackbird, swamp sparrow, vesper sparrow, grasshopper sparrow, and blue-winged teal.

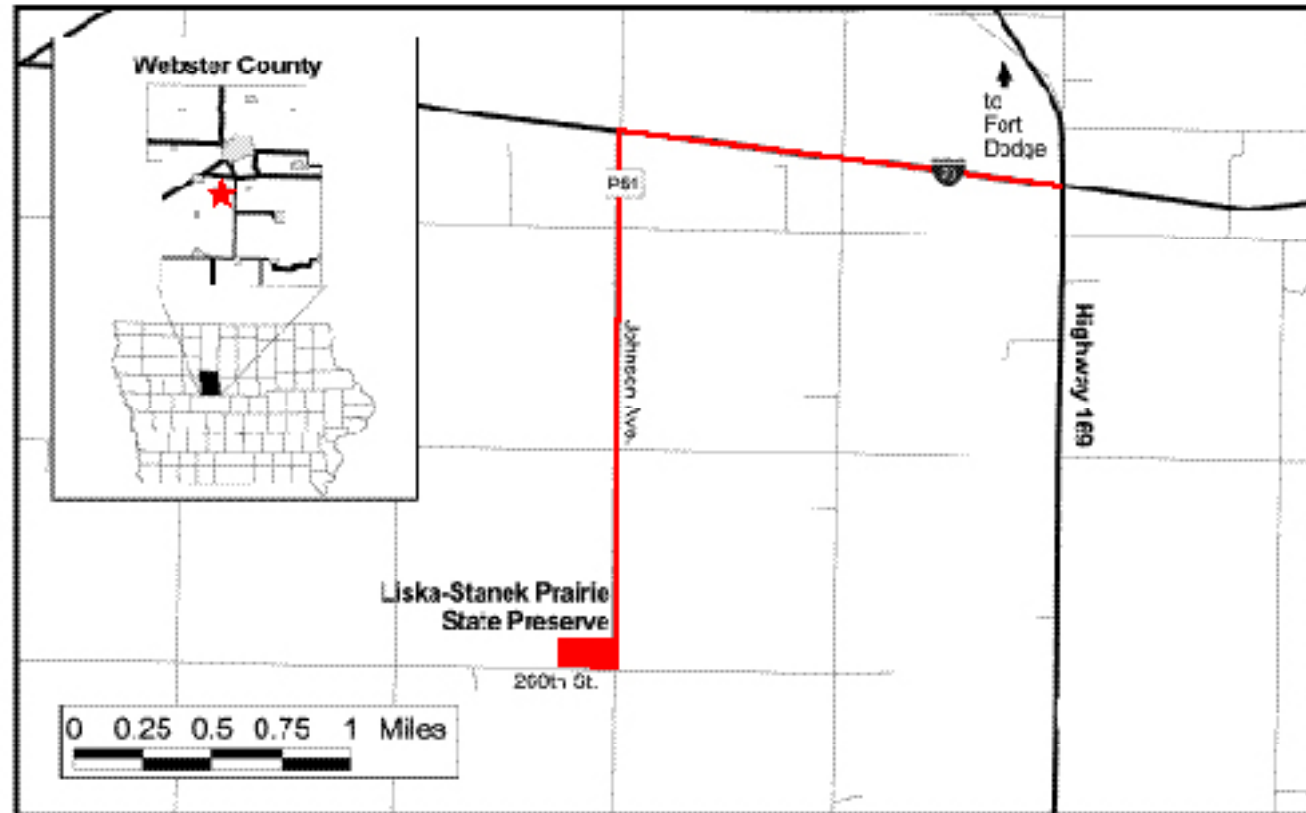
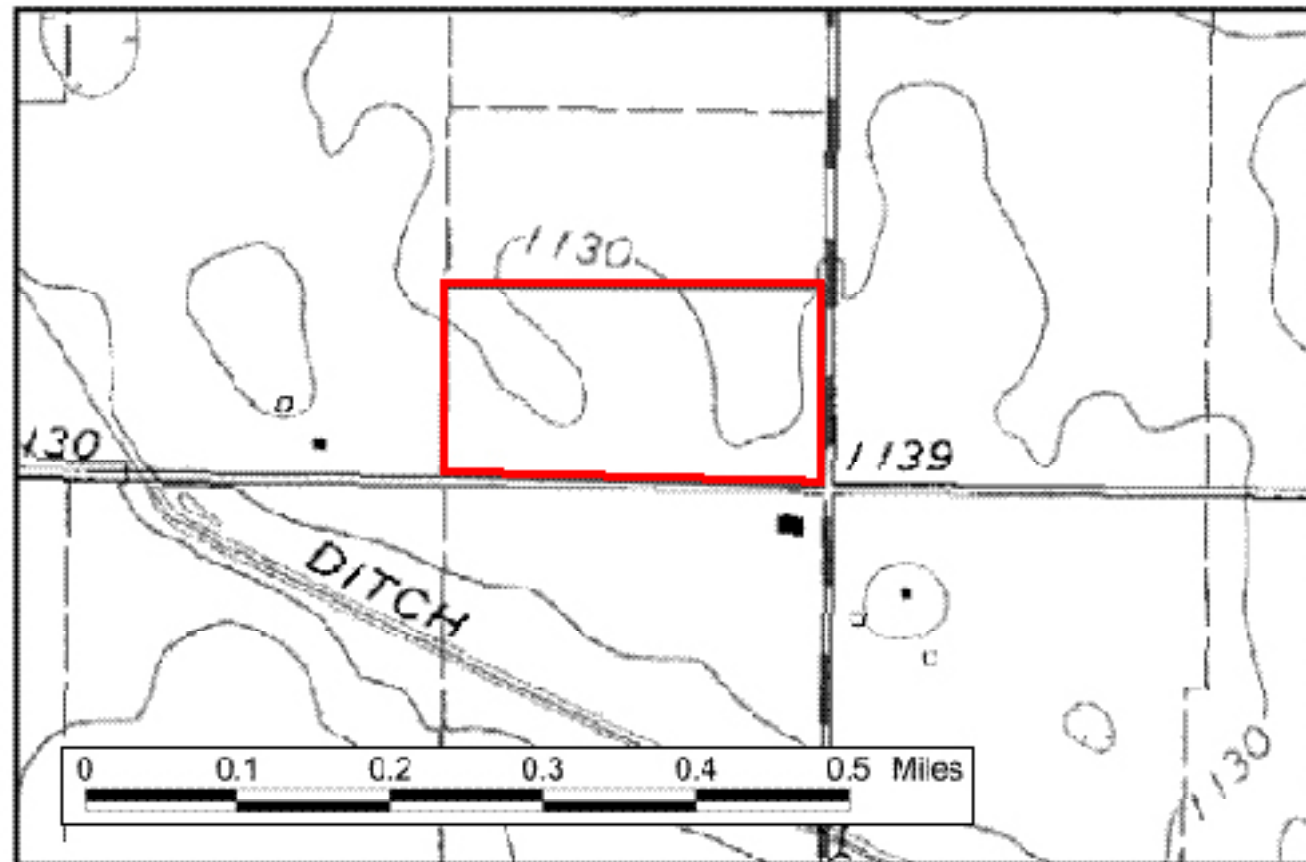
Other natural areas in the vicinity include Dolliver State Park and Woodman Hollow State Preserve.

### DIRECTIONS

From the intersection of Highway 169 and Highway 20 southwest of Fort Dodge, take Highway 20 west to Johnson Avenue. Turn south (left) and go 2.5 miles to 260th Street. Turn west (right) and park on the roadside (sign: Liska-Stanek Prairie).

### AREA MANAGER

Webster County  
Conservation Board  
1415 Nelson Avenue  
Fort Dodge, IA 50501-8525  
(515) 576-4258  
conservation@webstercountyia.org  
www.webstercountyia.org/  
State\_Preserves@dnr.iowa.gov



## Little Maquoketa River Mounds State Preserve

Little Maquoketa River Mounds is a 42-acre preserve containing an ancient burial mound group. This preserve is located south of Sageville, two miles north of Dubuque, in Dubuque County. It was purchased by the Iowa Department of Transportation in 1977 with assistance from several federal, state, and local agencies working in cooperation with Native American representatives. It was dedicated as an archaeological and geological state preserve in 1981.

There are thirty-two conical and linear burial mounds in the preserve, ranging from six inches to four feet in height and from twelve to forty feet in diameter, and occupying a total area of about 3 acres on the summit of a tall ridge. They were constructed during the Late Woodland period between a.d. 700 and 1200. It is thought that the mounds were constructed for both burial and ceremonial purposes.

Geologically, the mound group sits atop a narrow ridge of resistant Ordovician-age Galena dolomite (450 million years old) which stands nearly 200 feet above the surrounding valleys. It is in the landform region of northeast Iowa known as the Paleozoic Plateau. Thousands of years ago, the Little Maquoketa River flowed around this fingerlike projection to the southeast through the now abandoned Couler Valley in Dubuque to join the Mississippi River. A narrow divide separating the Mississippi River from the Little Maquoketa drainage was then breached and the flow of the Little Maquoketa River was diverted to a shorter, more direct route to the Mississippi River. This erosional process is known as "stream piracy."

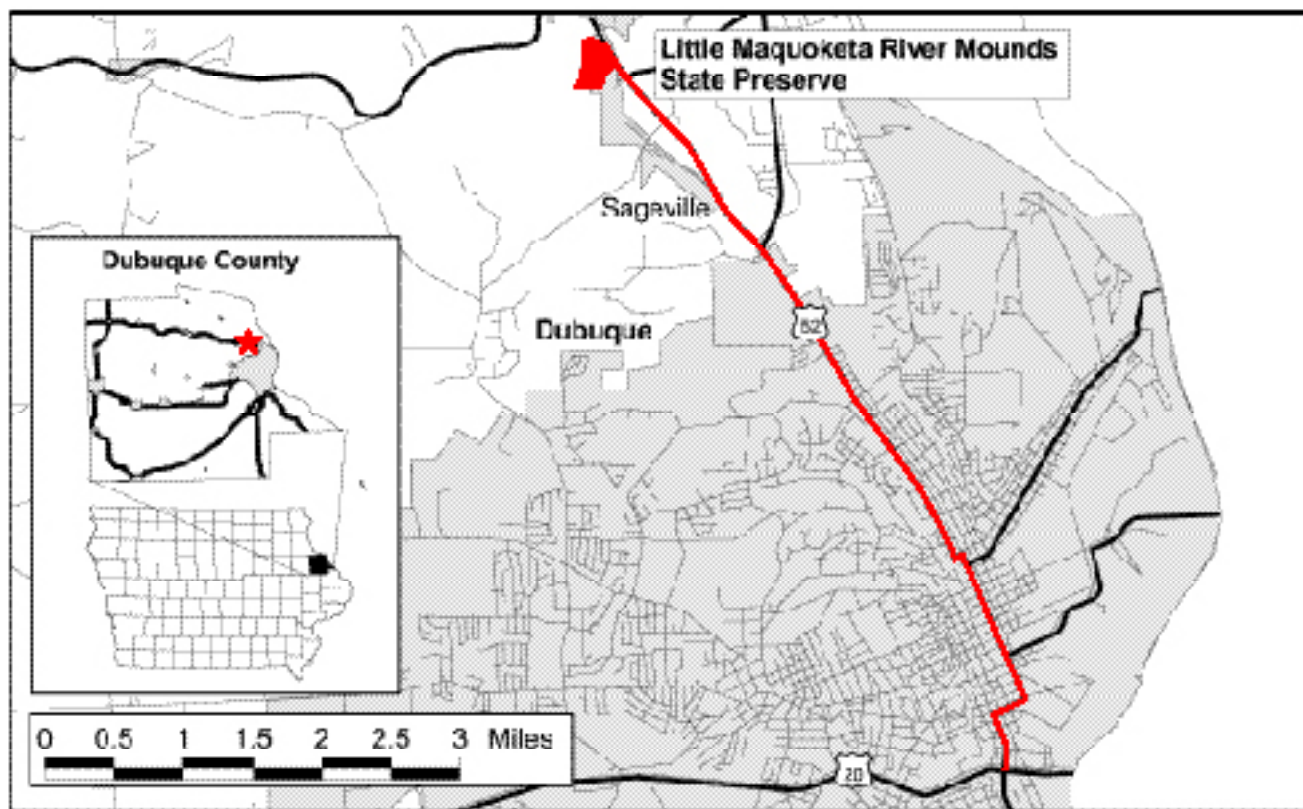
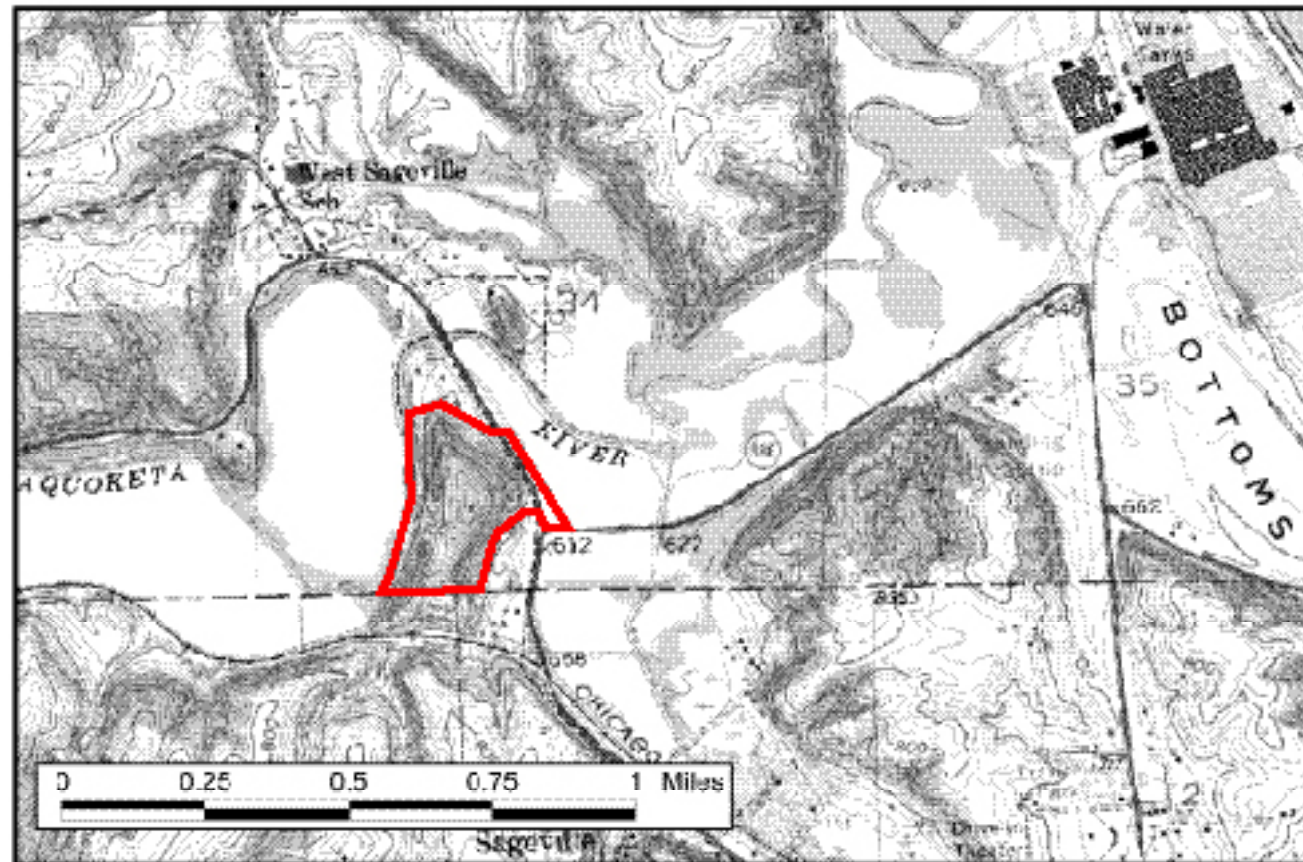
Other archaeological sites in Iowa include Catfish Creek, Fish Farm Mounds, Gitchie Manitou, Hartley Fort, Malchow Mounds, Slinde Mounds, Toolesboro Mounds, Turkey River Mounds, and Woodland Mounds State Preserves and Effigy Mounds National Monument.

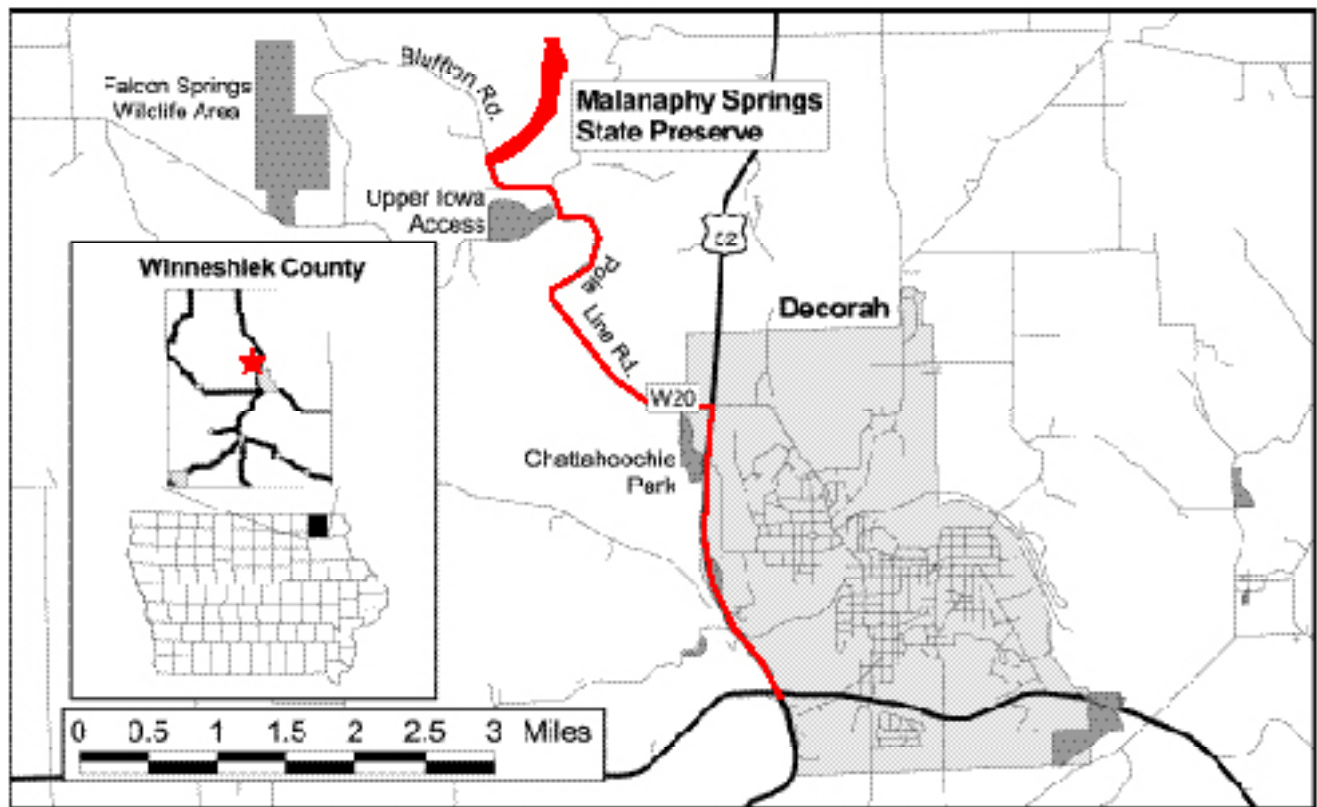
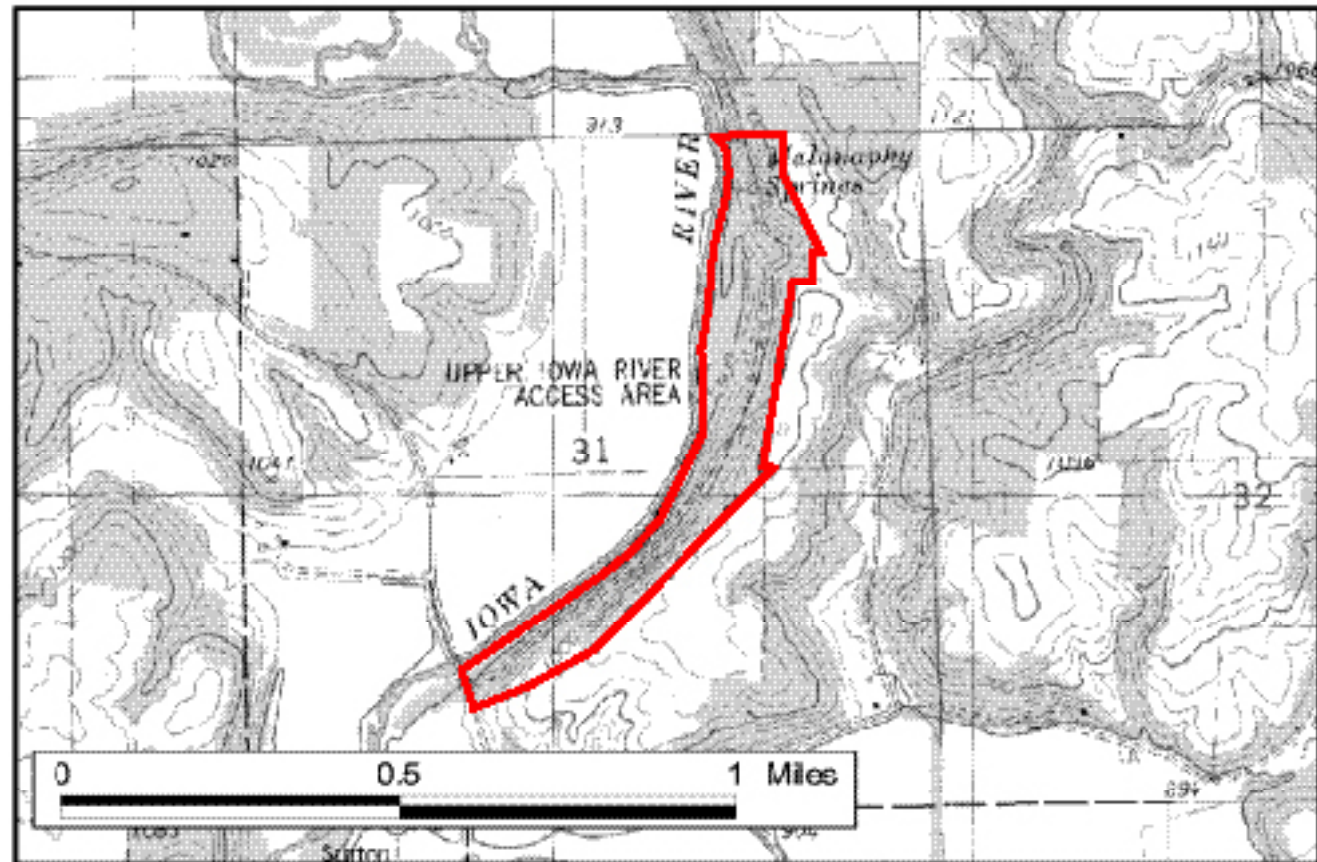
### DIRECTIONS

From the intersection of Highway 20 and Highway 52 in Dubuque, take Highway 52 north through Dubuque to Sageville (5.5 miles), just past the second turnoff for John Deere Road (Highway 386). The preserve is on the west side of the road (sign: Little Maquoketa River Mounds). A parking area is available (sign: Little Maquoketa River State Preserve). Follow the trail 0.25 mile uphill to the mounds.

### AREA MANAGER

Dubuque County  
Conservation Board  
13768 Swiss Valley Road  
Peosta, IA 52068  
(563) 556-6745  
[www.dubuquecounty.org](http://www.dubuquecounty.org)  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





# Malanaphy Springs State Preserve

Malanaphy Springs State Preserve is a 64-acre area featuring a rugged forest area with a large spring and waterfall. It is located along the Upper Iowa River two miles northwest of Decorah in Winneshiek County. Part of the land was a gift from Fred Biermann of Decorah, which helped facilitate the state's first purchase of 51 acres in 1947. The area was dedicated in 1994 as a state preserve for its geological and biological qualities, and was named after a previous landowner.

The preserve is located in the center of the Paleozoic Plateau landform region. A trail from the parking area leads north to a prominent spring issuing from a crevice in a high cliff. The cliffs in the preserve are made up of Galena Group dolomite of Ordovician age (450 million years old). Of particular beauty and interest is a series of cascading falls ending in a ten-foot waterfall. The waterfall flows over "tufa" (a porous lime deposit) that has accumulated at the base of the cascades. Older shelves of tufa in the vicinity relate to other spring outlet channels in the geologic past.

The steep west-facing slopes support a mesic forest with numerous dolomite outcrops, slump blocks, and talus. Over 300 native vascular plants occur in the preserve. Sugar maple, basswood, and red oak dominate the forest canopy with an understory of ironwood and scattered blue beech. The southern portion of the preserve contains extensive moderate cliffs and small algalic talus slopes, many of which are covered with Canada yew. Cliff faces support walking fern, bulblet bladder fern, and smooth cliff-brake. Several rare snail species can be found in these habitats. Please do not walk on these sensitive slopes.

Skunk cabbage begins blooming in a small seep near the south entrance in late February, followed in the upland woods by bloodroot, snow trillium, and hepatica in early April. By late April, wood anemone, wild ginger, spring beauty, Dutchman's breeches, and woodland sedge can be found in bloom. Summer wildflowers include red baneberry, great Indian plantain, Solomon's seal, yellow pimpernel, and hairy wood mint. A number of showy shrubs occur here, including rough-leaved dogwood, alternate-leaved dogwood, ninebark, red-berried elder, and bush honeysuckle. By late August, several asters and goldenrods are blooming. Throughout the growing season the foliage of many ferns add to the beauty of the woodland.

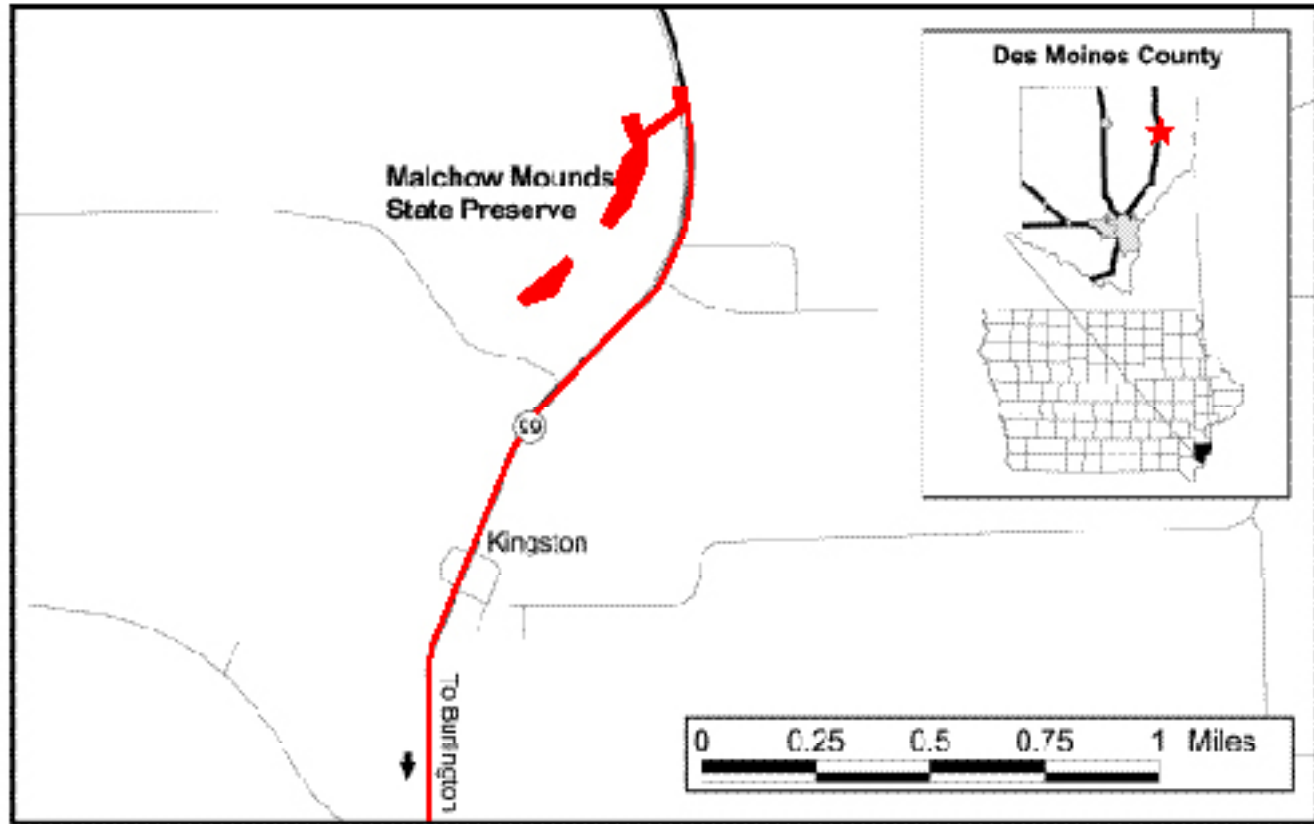
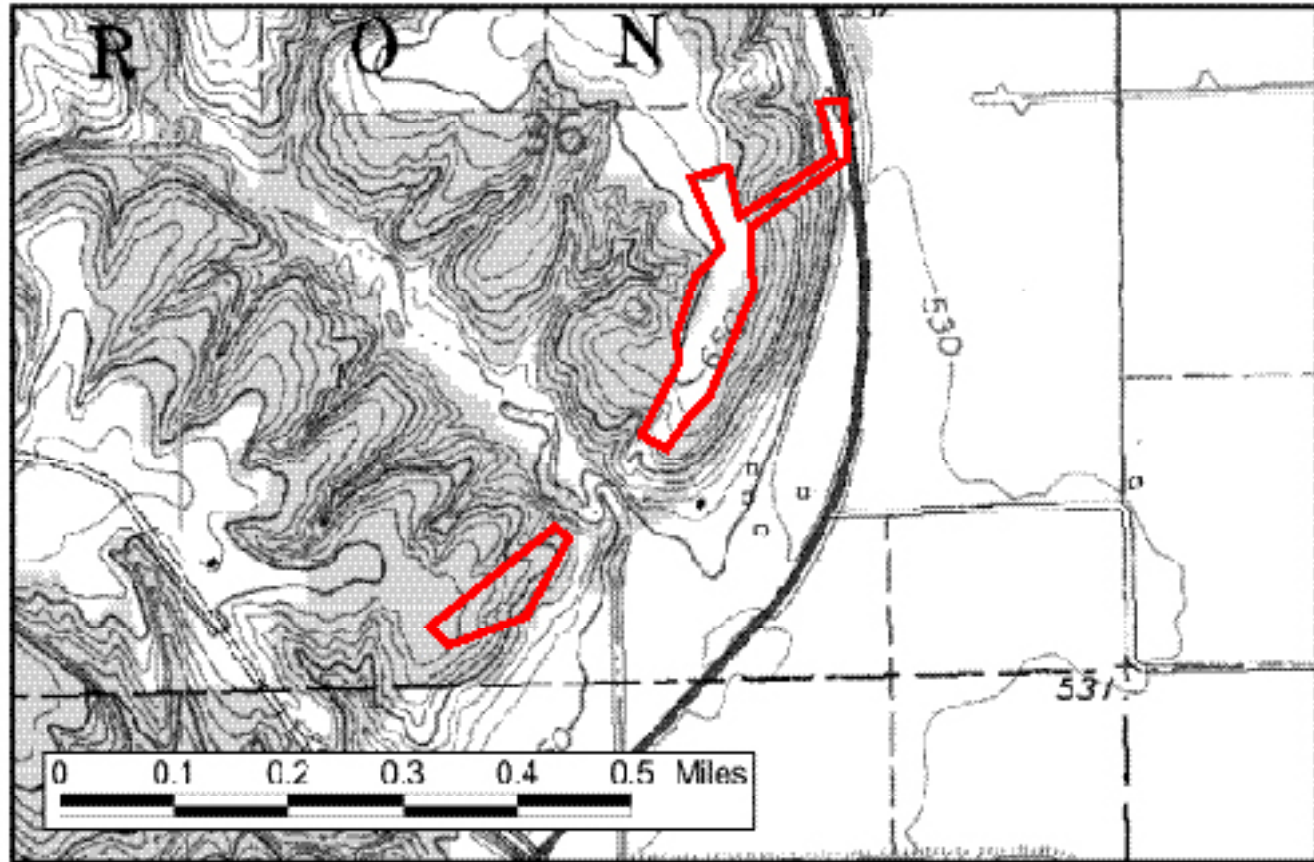
The preserve provides habitat for many animals including seventeen land snails. Many of the birds are neotropical migrant species. Among these are the black-billed cuckoo, Acadian flycatcher, rose-breasted grosbeak, red-eyed vireo, and scarlet tanager.

Cross-country skiing is permitted on the trail. Hunting is permitted. Other state preserves in the area include Bluffton Fir Stand, Decorah Ice Cave, Cold Water Spring, Fort Atkinson, and Saint James Lutheran Church.

**DIRECTIONS**  
 From the intersection of Highway 9 and Highway 52 in Decorah, take Highway 52 north for 2 miles to Pole Line Road (W20). Turn west (left) and follow this winding road 3 miles to Bluffton Road. Turn north (right), cross the Upper Iowa River, and go 0.75 mile on this curving road to a parking area for the preserve on the north (right) side of the road (sign: Malanaphy Springs State Preserve). A walking trail leads northeast from the parking lot.

**AREA MANAGER**  
 Iowa Department of Natural Resources  
 Upper Iowa Wildlife Unit  
 2296 Oil Well Road  
 Decorah, IA 52101  
 (563) 382-4895  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Malchow Mounds State Preserve

Malchow Mounds State Preserve features a prehistoric cemetery with a concentration of sixty conical and linear mounds probably constructed during the Middle Woodland period (100 b.c.–a.d. 300). This 6-acre preserve is located one mile north of Kingston and thirteen miles north of Burlington in Des Moines County. The mounds were surveyed in 1934 by famous Iowa archaeologist Ellison Orr and again in 1968 by the University of Iowa. They were donated to the state in 1974 by Charles A. Poisel and were dedicated as an archaeological state preserve in 1978. The area is named after Lewis H. Malchow, a previous owner.

The Middle Woodland people are noted for their refined artwork, elaborate death ceremonies, and extensive trade networks. They probably lived in small villages or farmsteads near rivers and streams. They lived on game and plants gathered from the large river valleys and the squash, tobacco, and native grain crops harvested from their gardens. Middle Woodland peoples are also known for their stone effigy pipes depicting frogs, rabbits, birds, and other animals. They exchanged ideas and raw materials with other cultures in the Midwest in what is termed by archaeologists as the “Hopewell Interaction Sphere.” Items such as flint, volcanic glass, marine shell, copper, mica, pipestones, ceramic vessels, and possibly perishable materials came from as far away as the Yellowstone Park area, the Appalachian Mountains, the Atlantic coast, Lake Superior, the Gulf of Mexico, and the Rocky Mountains.

Burial mounds of this period are more complex than earlier or later mounds. The earthen mounds are believed to have been constructed primarily for religious, ceremonial, and burial purposes. Conical-shaped burial mounds were built by basket loads of soil placed over the deceased lying either on the ground or on a specially prepared surface. On occasion, other burials were later added to a mound, increasing its size. Some individuals were buried with funerary offerings. Similar mounds are found from the Missouri River to New York and south to Florida.

Burial mounds are protected by law.

Other archaeological sites within Iowa include Effigy Mounds National Monument and Fish Farm Mounds, Little Maquoketa River Mounds, Slinde Mounds, Toolesboro Mounds, and Turkey River Mounds State Preserves.

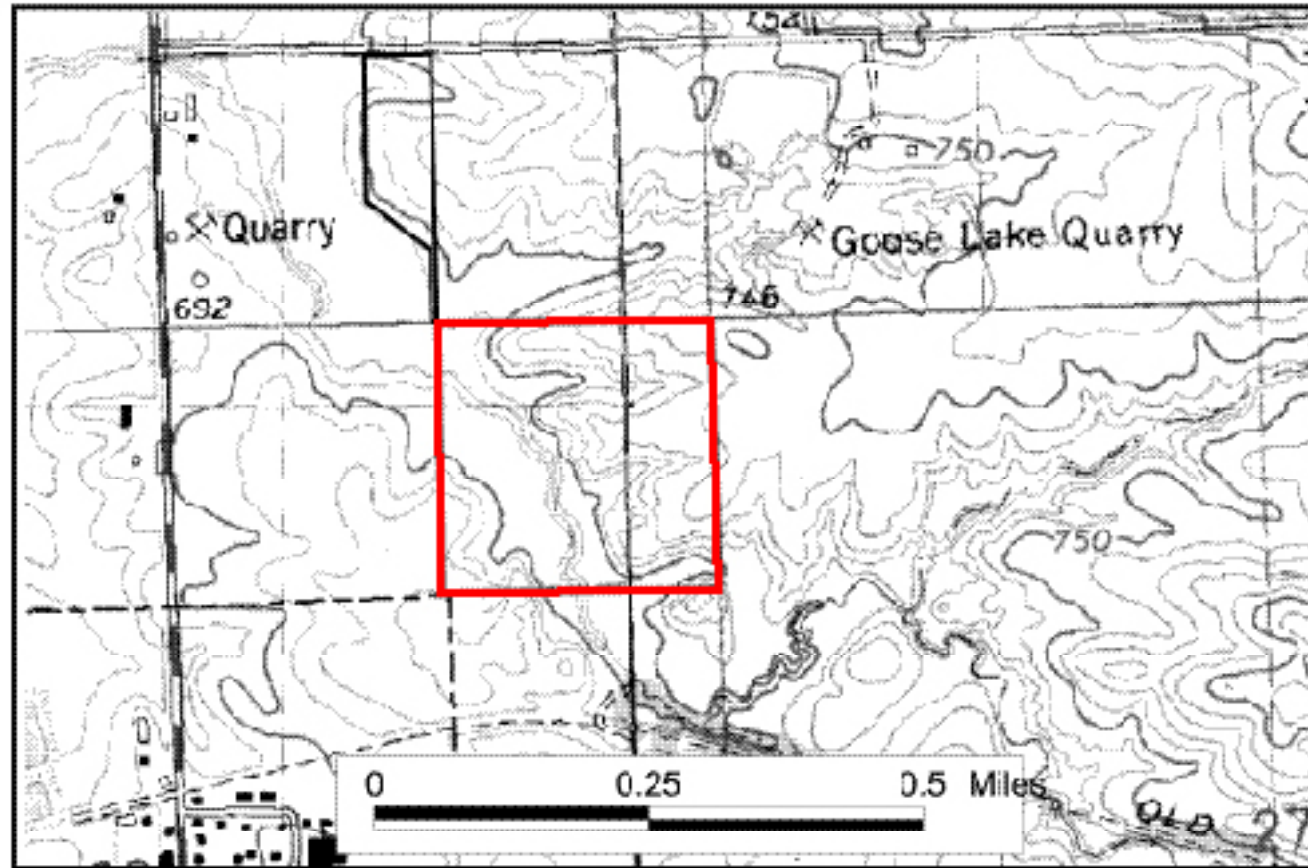
### DIRECTIONS

From Burlington, take Highway 99 north through Kingston. From Kingston the preserve is 1.25 miles on the west side of the road (sign: Malchow Mounds State Preserve). There is a parking lot. The uphill walk to the preserve is short but strenuous.

### AREA MANAGER

Iowa Department of  
Natural Resources  
Odessa Wildlife Unit  
260 Mulberry  
Wapello, IA 52653  
(319) 523-8319  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Manikowski Prairie State Preserve

Manikowski Prairie is a 40-acre prairie on dry, shallow soils over a limestone bedrock. This preserve is located a half mile north of the town of Goose Lake in Clinton County. The area was purchased by Clinton County Conservation Board with the assistance of the Iowa Natural Heritage Foundation in 1985 from the Manikowski family and dedicated as a biological and geological state preserve in the same year.

Located in the easternmost portion of the Southern Iowa Drift Plain landform region, this prairie grows in thin soil among low rock outcrops of Silurian-age dolomite (430 million years old). These bluffs are along the eastern edge of an ancestral valley of the Mississippi River known as the "Goose Lake Channel," which was carved into the bedrock thousands of years ago when the river was carrying huge flows of glacial meltwater.

The prairie is dominated by little bluestem and sideoats grama with over forty species of plants. Early in the spring, shooting stars prevail among the rock outcrops, along with rockcress, indigo bush, bastard toadflax, and alumroot. Cliff-brake ferns grow on exposed ledges, while leadplant, false gromwell, columbine, mountain mint, pale purple coneflower, and rock sandwort grow on deeper soils in the prairie. Later in the year, prairie blazing stars and Great Plains ladies'-tresses grow among Indian grass, prairie dropseed, and big bluestem.

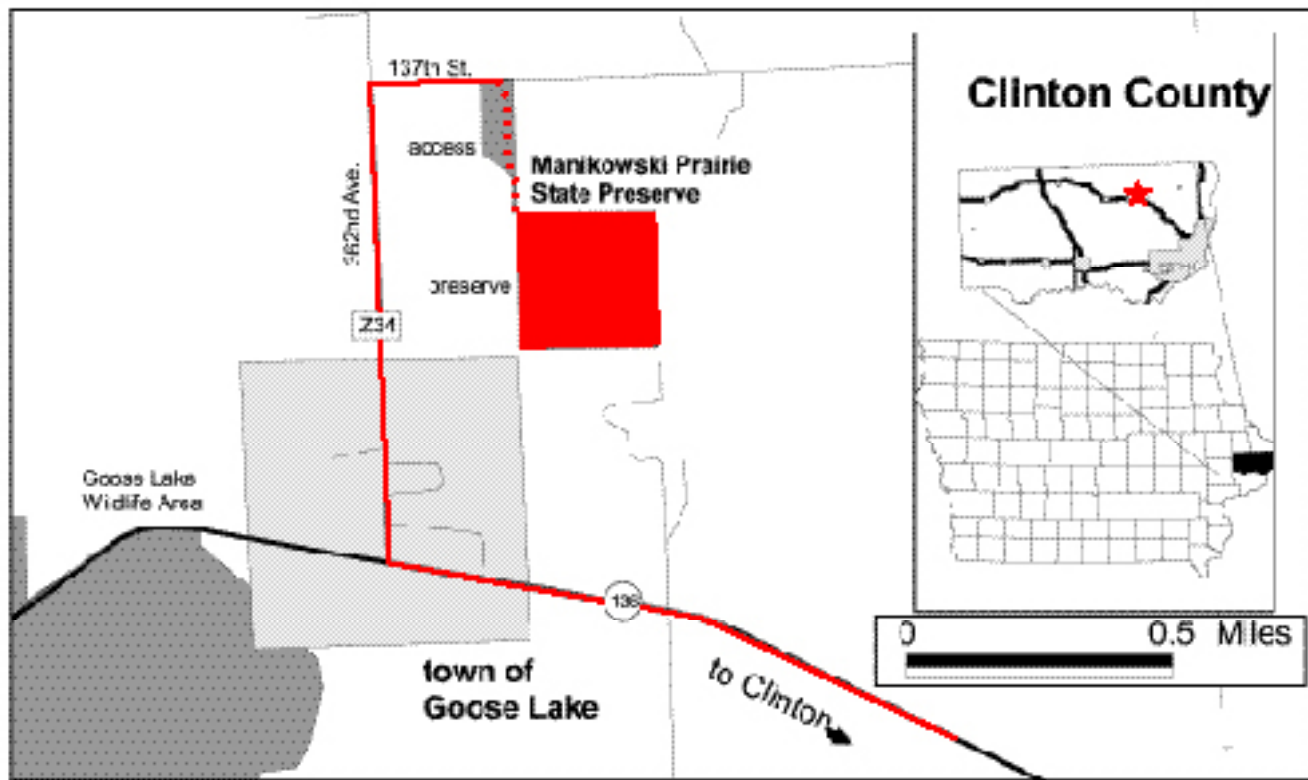
A number of animals are known to use this preserve, including butterflies such as the Ottoe skipper, wild indigo duskywing, columbine duskywing, zabulon skipper, and regal fritillary.

### DIRECTIONS

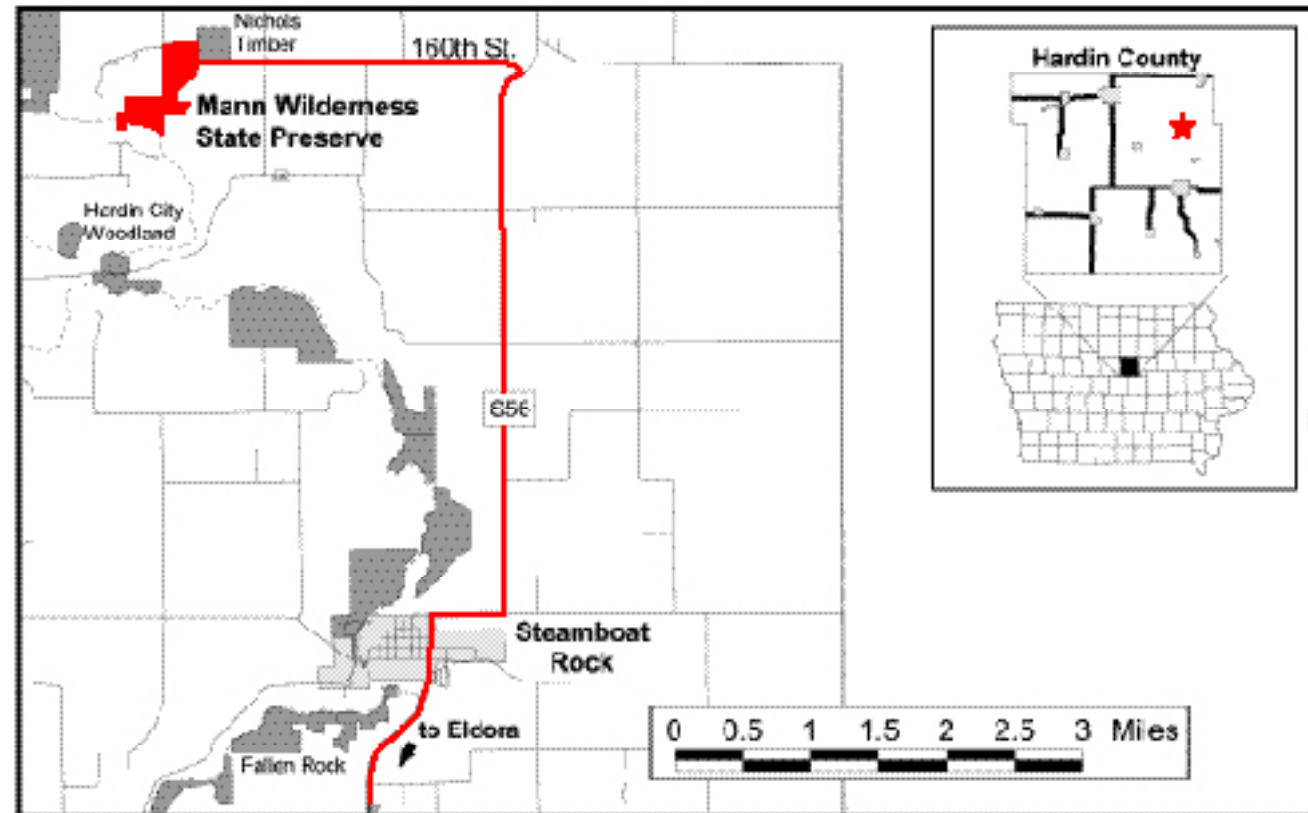
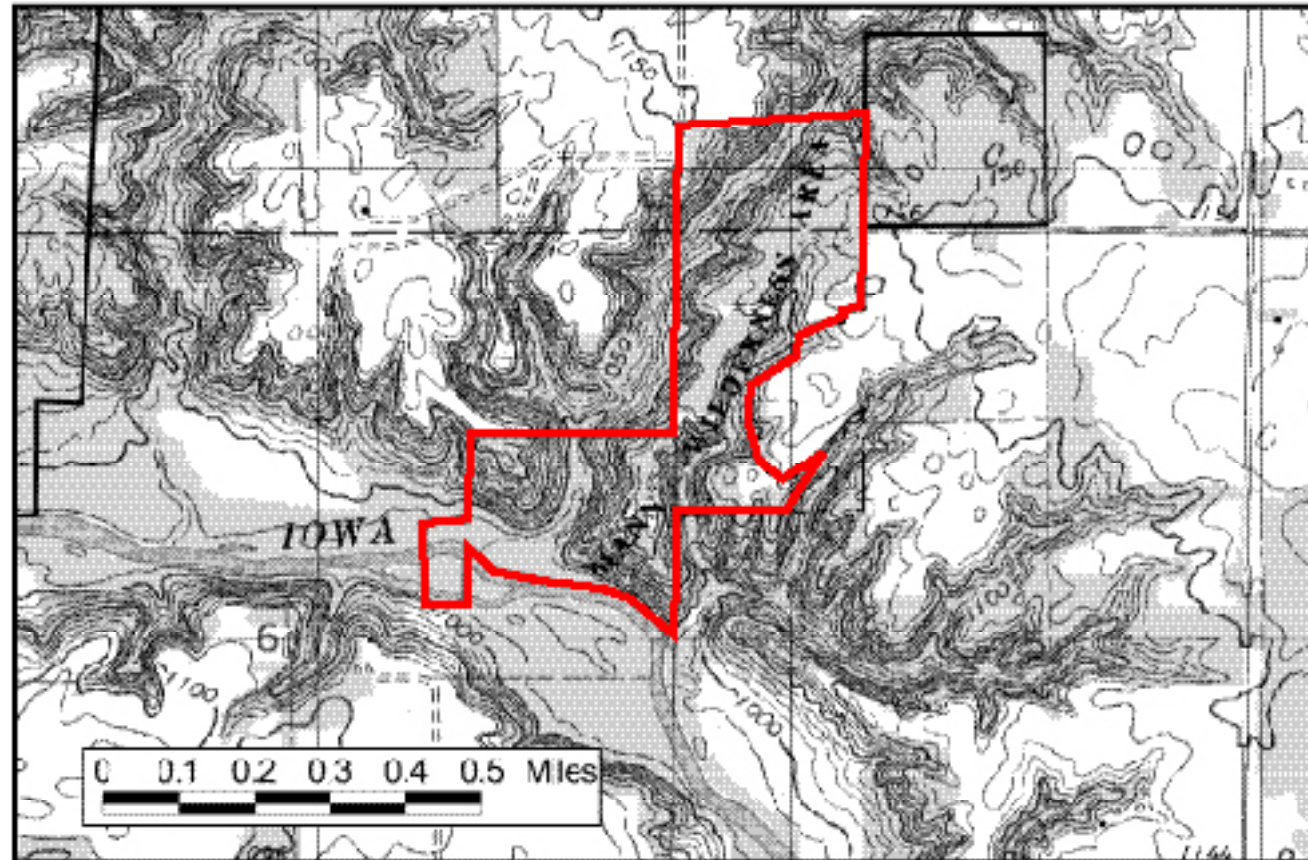
From the intersection of Highway 76 and Highway 136 in Clinton, drive west (becoming northwest) on Highway 136 for 13.5 miles to the town of Goose Lake. From the intersection of Highway 136 and County Road Z34 in Goose Lake, turn north (right) and drive 0.75 mile on Z34 (which becomes 362nd Avenue outside of town) to 137th Street. Turn east (right) onto 137th Street and drive 0.25 mile to the preserve access on the south (right) side of the road. Walk south 0.25 mile to the northwest corner of the preserve.

### AREA MANAGER

Clinton County  
Conservation Board  
2308 255th Street  
P.O. Box 68  
Grand Mound, IA 52751  
(563) 847-7202  
[www.clintoncounty-ia.gov](http://www.clintoncounty-ia.gov)  
[conservation@clintoncounty-ia.gov](mailto:conservation@clintoncounty-ia.gov)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)



## Mann Wilderness Area State Preserve



Mann Wilderness Area is a rugged forested area along the Iowa River Greenbelt. This 103-acre preserve is located five miles north of Steamboat Rock in northeastern Hardin County. The Hardin County Conservation Board purchased the rugged area from Joe and Flossie Mann in 1960. It was dedicated as a biological and geological state preserve in 1979.

Located near the eastern edge of the Des Moines Lobe landform region, the topography of this preserve is dominated by a long, narrow ridge paralleled by deep ravines draining into the entrenched course of the Iowa River, which forms most of the preserve's southern border. This highly dissected landscape was formed by downcutting streams that eroded through soft glacial deposits to the underlying limestone bedrock. Rugged topography with frequent outcrops of these Mississippian (350-million-years-old) limestones along the valley walls contribute to the scenic character of the Iowa River Greenbelt.

Forest vegetation within this preserve varies greatly from place to place, reflecting the influences of slope, aspect, and past land use. Mature deciduous forest of white oak, red oak, and shagbark hickory prevails on the steepest slopes where logging and grazing were infrequent. Several large white oaks over 130 years old can be found along the edge of the ridge top. A large population of paper birch indicates sites where past logging and grazing were more recent and more intense. Ironwood, basswood, and ash are common in the understory of these communities. A large plantation of thirty- to forty-year-old pines is also found on the ridge top where the land was previously cleared for agriculture. Black walnut is the dominant tree in the narrow floodplain of the Iowa River where small patches of alluvium have formed. Other woody plants in the preserve include blue beech, bitternut hickory, hazelnut, wahoo, chokecherry, and downy arrowwood.

Over 170 plants occur here. Spring-blooming plants are abundant here with snow trillium, bloodroot, spring beauty, and rue anemone. By summer, starry false Solomon's seal, honewort, tall sunflower, and white snakeroot can be seen. The forest is also rich with ferns including northern maidenhair fern, dissected grape fern, and creeping fragile fern. Woodland sunflower begins blooming in July followed by zigzag aster and blue wood aster in the fall.

Chorus frogs, gray tree frogs, and cricket frogs can be found here. Raccoon, opossum, fox squirrel, and white-tailed deer are commonly seen. The Iowa River is a migration corridor for many raptors, including bald eagles, Cooper's hawks, and Swainson's hawks. Blue-winged warbler and scarlet tanagers are found here during the nesting season, and woodcock can infrequently be found during spring migration. Pileated and other woodpeckers can be frequently seen and heard, as well as many other songbirds and migrants.

Hardin County is rich in archaeological sites spanning at least 11,000 years. Ancient people used the Iowa River Greenbelt extensively, as evidenced by many mound groups and campsites in the valley along this part of the river. Several prehistoric sites dating between 3000 b.c. and a.d. 500 (Archaic through Middle Woodland time periods) are located within or adjacent to this preserve.

Hunting is permitted.

Other natural areas along the Iowa River Greenbelt include Hardin City Woodland and Fallen Rock State Preserves, Pine Lake State Park, and Wildcat Cave.

### DIRECTIONS

From the intersection of Highway 175 and Highway 215 in Eldora, take Highway 175 east 1 mile to County Road S56. Turn north (left) and drive on this winding road for 4 miles to the town of Steamboat Rock. Continue north through the town on County Road S56 for 4.5 miles, then turn west (left) onto 160th Street. Drive west on 160th Street for 2.5 miles to a dead end at the preserve entrance (sign: Mann Wilderness Area).

### AREA MANAGER

Hardin County  
Conservation Board  
15537 "S" Avenue  
Ackley, IA 50601-7734  
(641) 648-4361

www.

[hardincountyconservation.com](http://hardincountyconservation.com)

[hardinccb@](mailto:hardinccb@)

[hardincountyconservation.com](http://hardincountyconservation.com)

[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)

[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)



[www.iowadnr.gov](http://www.iowadnr.gov)



## Marietta Sand Prairie State Preserve

Marietta Sand Prairie is a 17-acre preserve featuring aeolian (windblown) sand deposits and a sand prairie. It is located seven miles northwest of Marshalltown in Marshall County. The area was purchased in 1983 from the Conrad family by a lifelong Marshall County resident who wanted to give a lasting gift to the county. The prairie, initially named "Conrad Sand Prairie," was renamed "Marietta Sand Prairie" after the township in which it is located. The area was dedicated as a biological and geological state preserve in 1984.

Located along the northern edge of the Southern Iowa Drift Plain landform region, this upland sand prairie was created when strong winds blew sand to here from abundant sources in the nearby Iowa River valley. The sand had originally been deposited in the valley following the melting of the Des Moines Lobe glacier about 12,000 years ago. This sand was then picked up from the valley bottoms by the wind and redeposited on the nearby uplands. These aeolian sands are up to thirty-six feet deep in places and form an unusual habitat where sand-loving prairie plants prosper.

The majority of the prairie is dry upland prairie, which grades into soggy sedge meadow at the base of a hill. A moist woodland is also present on the property. The variety of habitats found here supports nearly 200 species of plants. In April, an abundance of hairy puccoon can be seen, along with golden alexanders and marsh marigolds. Sand milkweed, green milkweed, wild four-o'clock, spotted horsemint, sand primrose, shaggy false gromwell, and purple lovegrass bloom later in the upland prairie. In the wet meadow, marsh bellflower, marsh St. John's wort, great lobelia, and marsh fern can be seen blooming during the summer. As fall approaches, the yellow blossoms of partridge pea, prairie sunflower, and several goldenrods can be found among the bobbing heads of round-headed bush clover and the silvery leaves of white sage in the upland prairie. The wetter habitats contain the purple hues of panicked aster and bottle gentian.

The preserve provides a habitat for a number of birds, including song and field sparrows. Common snipe and American woodcock can also be seen displaying over the open sandy prairie in the spring. The loose, sandy soil provides habitat for Plains pocket gophers, as well as badgers that prey on the pocket gophers.

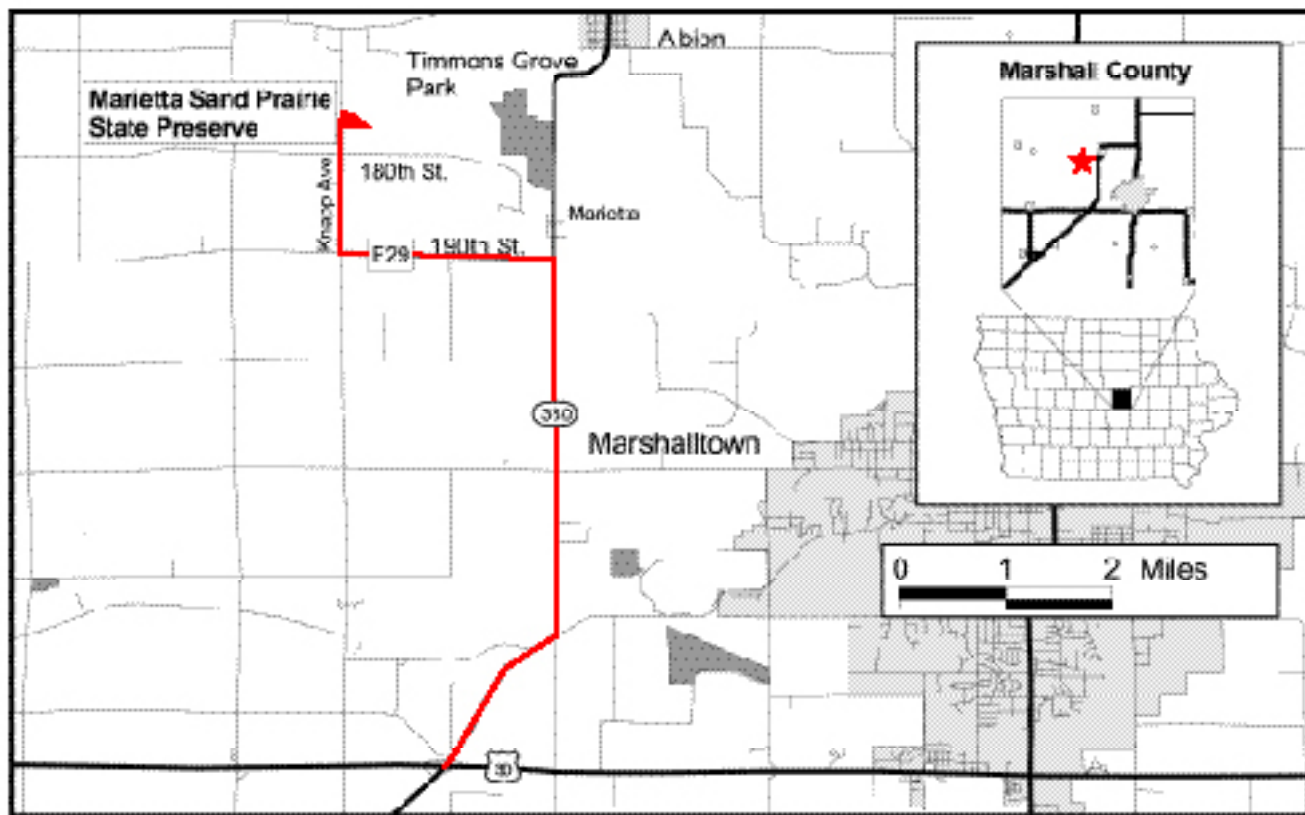
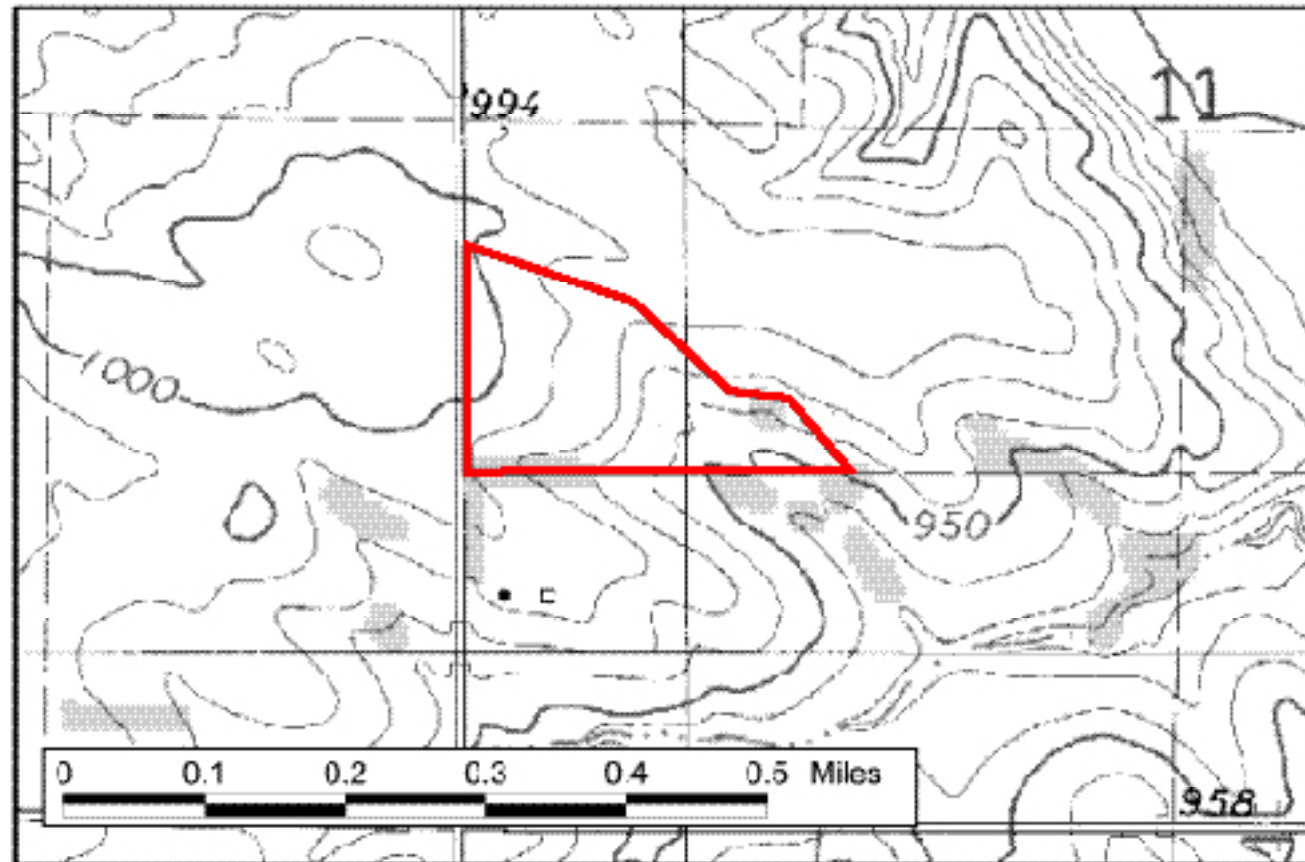
Other public areas in the vicinity include Hendrickson Marsh and Wehrman Prairie.

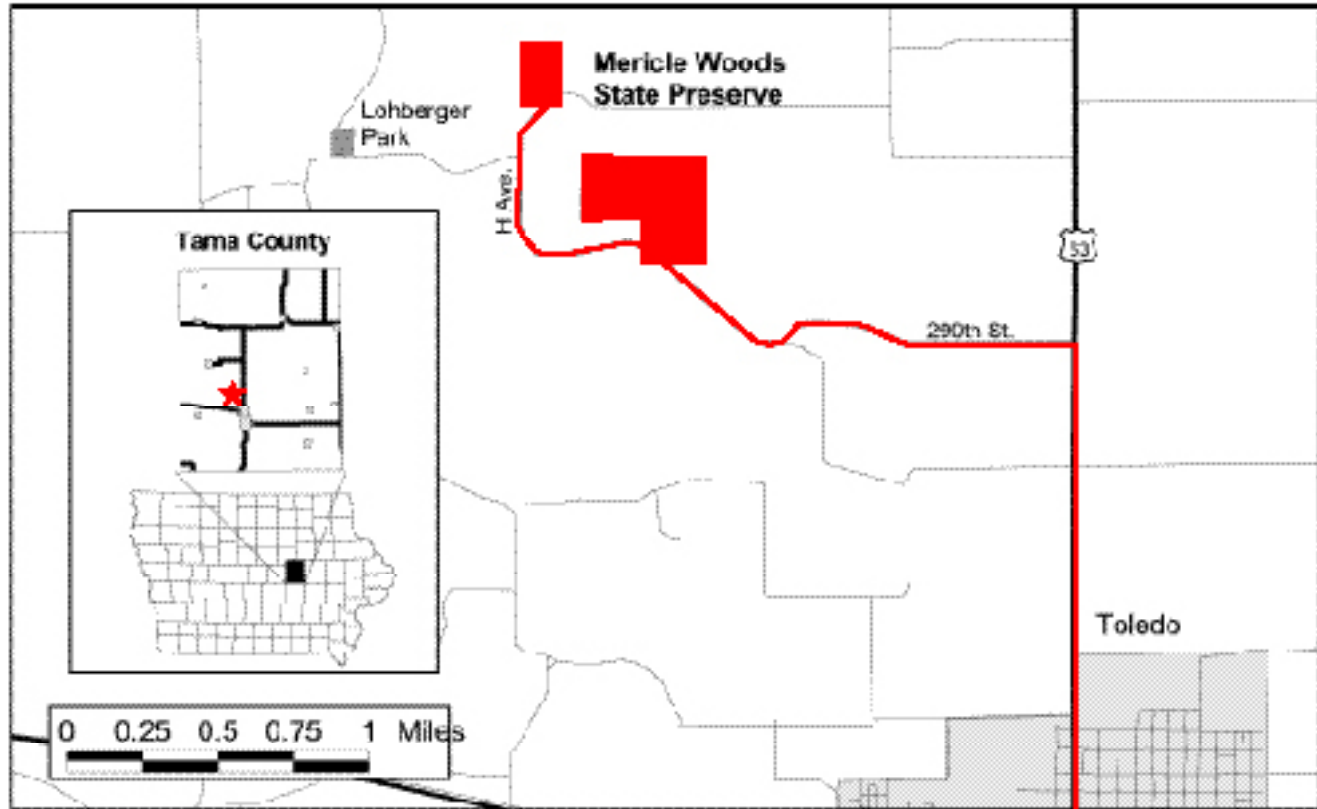
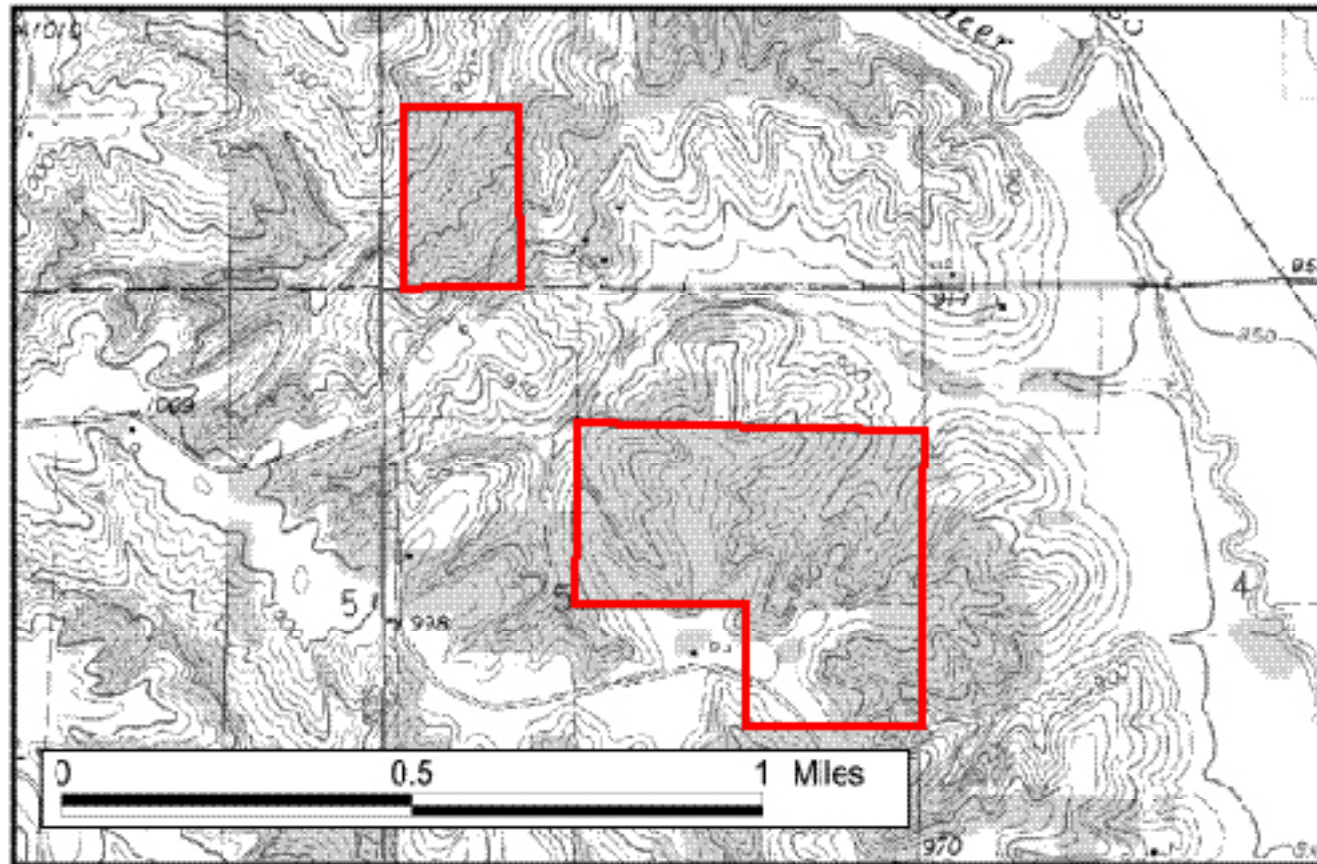
### DIRECTIONS

From the intersection of Highway 30 and Highway 330 west of Marshalltown, take Highway 330 north to 190th Street. Go west (left) 2 miles on 190th Street and turn north (right) onto Knapp Avenue (sign: Marietta Sand Prairie Preserve). Go 1.25 miles to the preserve on the east side of the road (sign: Marietta Sand Prairie Preserve).

### AREA MANAGER

Marshall County  
Conservation Board  
2349 233rd St.  
Marshalltown, IA 50158  
(641) 752-5490  
[www.co.marshall.ia.us](http://www.co.marshall.ia.us)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Mericle Woods State Preserve

Mericle Woods State Preserve is a 132-acre area of mature oak forest. It is located three miles northwest of Toledo in southern Tama County. Two separate tracts of land comprising this preserve (110 acres and 22 acres) were donated to the Iowa Department of Natural Resources in 1984 by Burrell and Nellie Benjamin and were dedicated as a biological state preserve in 1986. The Benjamins named the preserve “Mericle Woods” as a memorial to Nell’s parents, who had a great interest in the preservation of wildflowers.

The gently sloping, dissected topography of the preserve is representative of the Southern Iowa Drift Plain near its border with the Iowan Surface landform region. The areas are representative of a mature hardwood forest. Both parcels contain several trees that are over 200 years old. The dominant vegetation is mature upland oak forest. The upper slopes and ridges are dominated by white oaks, with some blue beech occurring in the understory. Red oaks are dominant mainly on the slopes, along with basswood on the steeper and more mesic sites. In the northern parcel, the bottomland forest includes a small stream whose floodplain is dominated by bur oak. Ironwood is very common throughout both forested areas.

Approximately 130 plants have been identified in the preserve. Early blooming wildflowers include bluebells, bellwort, and toothwort. They are followed by Virginia waterleaf, starry false Solomon’s seal, Jacob’s ladder, and moonseed. Over ninety species of birds have been noted at the preserve, including barred owl, Swainson’s thrush, American redstart, Tennessee warbler, blackpoll warbler, and solitary vireo.

Another natural area in the vicinity is Casey’s Paha State Preserve.

### DIRECTIONS

From Tama/Toledo, take Highway 63 north 1.5 miles to 290th Street. Turn west (left) and go 2 miles to the larger parcel of the preserve (sign: Mericle Woods State Preserve) on north side of the road. To reach the smaller parcel, continue west on 290th Street to “H” Avenue (a T-intersection), then continue north another 0.1 mile to the preserve on the west side the road (signs: State Preserve boundary).

### AREA MANAGER

Iowa Department of  
Natural Resources  
Iowa River Wildlife Unit  
51 Escort Lane  
Iowa City, IA 52240  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Merritt Forest State Preserve

Merritt Forest is a 20-acre “virgin” old-growth forest. It is located four miles south of Guttenberg in Clayton County. Several trees over 300 years old are scattered throughout the preserve. The area was given to the Iowa Conservation Commission in 1968 by Gertrude Merritt and was dedicated in 1969 as a biological state preserve.

Within the Paleozoic Plateau landform region, the preserve is located on a gentle, north-facing slope near the head of a large forested valley. The forest in the preserve is dominated by white oak, red oak, sugar maple, and basswood. Blue beech, ironwood, witch hazel, alternate-leaved dogwood, and leatherwood can be found in the understory. A total of nearly 200 plant species can be found in the preserve. Blooming of the spring flora begins in March with bloodroot, spring beauty, and hepatica. April and May continue with woodland sedge, bishop’s cap, downy yellow violet, blue cohosh, toothwort, wood anemone, white trout-lily, bellwort, nodding trillium, and swamp buttercup. The white-ribbed leaves of numerous puttyroot orchids are conspicuous on the forest floor. Maidenhair fern, walking fern, northern lady fern, bulblet bladder fern, Goldie’s fern, dissected grape fern, rattlesnake fern, and interrupted fern also grace the woodland.

Over forty species of birds have been observed at the preserve, including Cooper’s hawk, wood duck, turkey, pileated woodpecker, tufted titmouse, veery, wood thrush, warbling vireo, red-eyed vireo, American redstart, Canada warbler, scarlet tanager, black-billed cuckoo, Acadian flycatcher, and least flycatcher.

Hunting is not permitted.

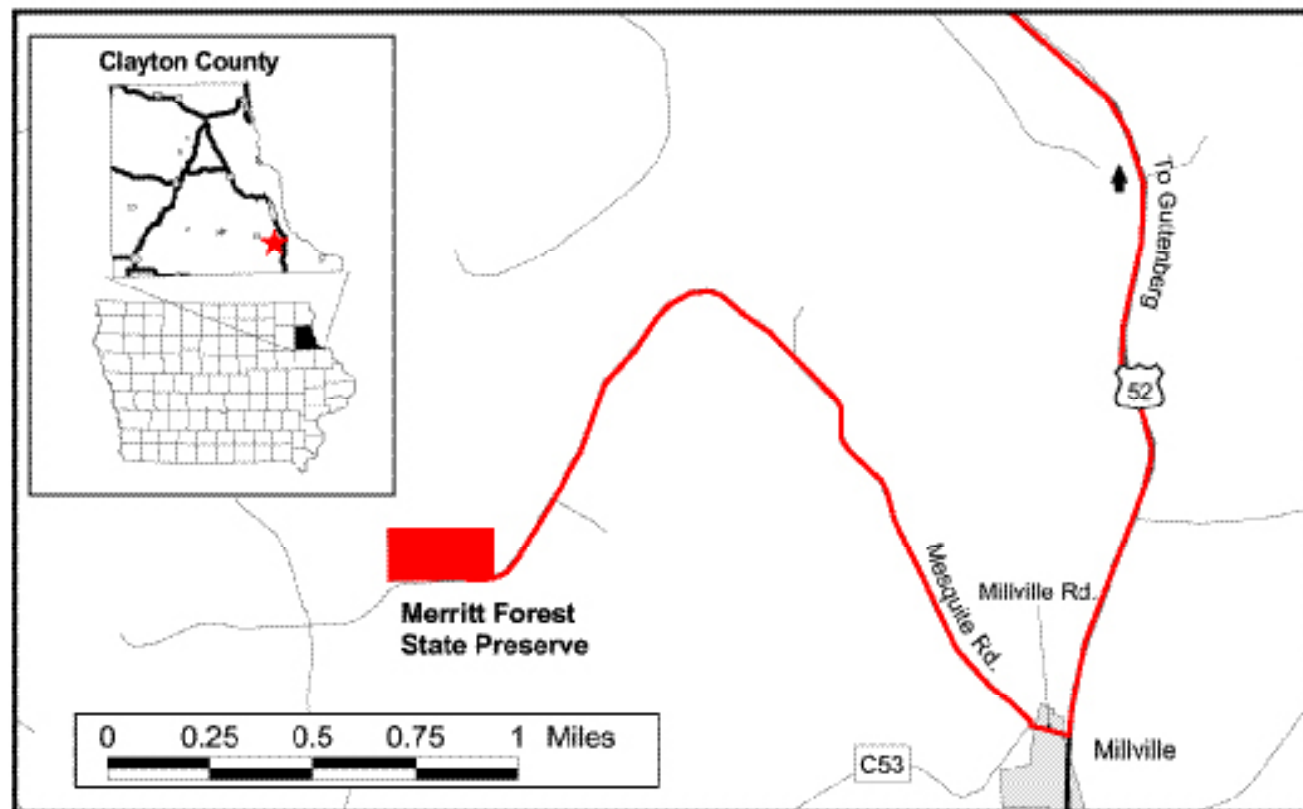
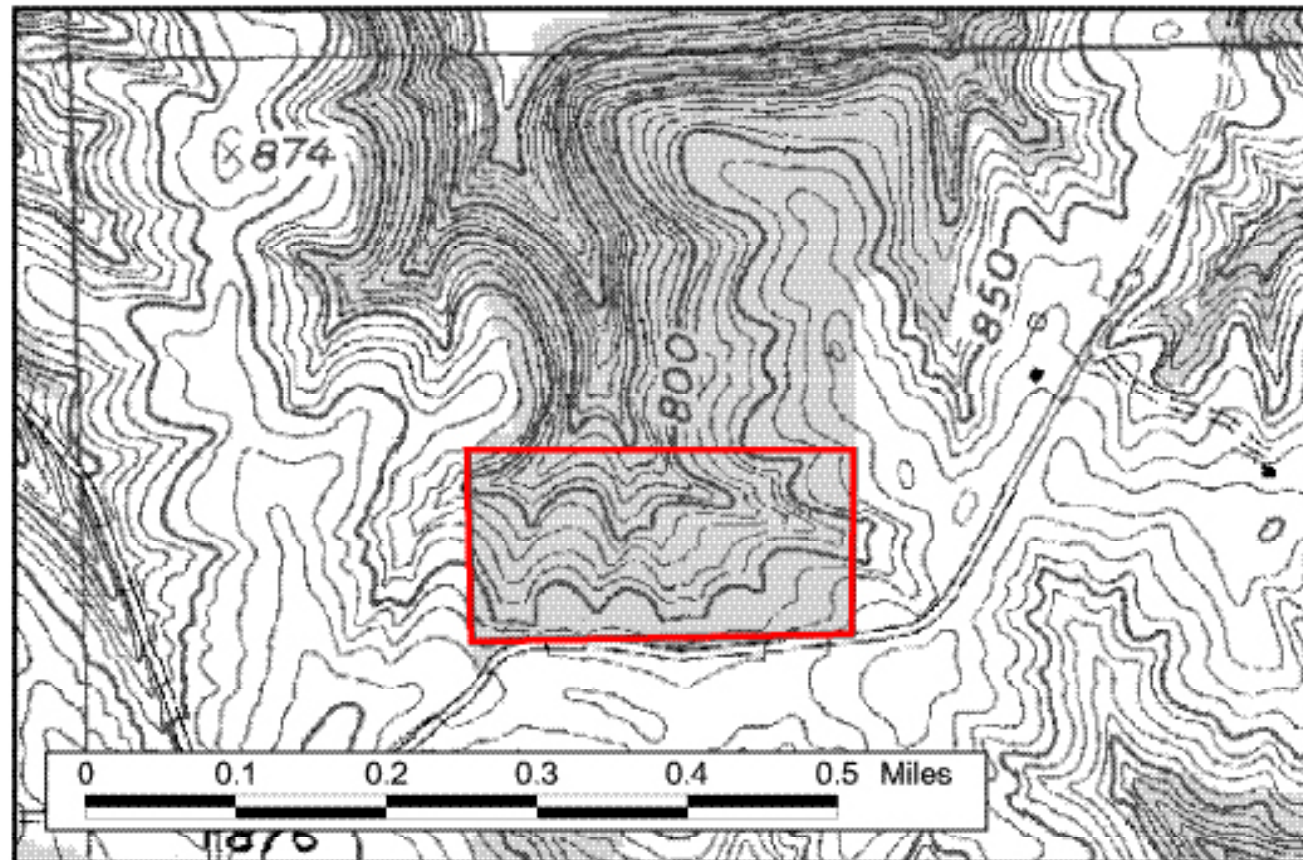
Other natural areas in the vicinity include Turkey River Mounds and White Pine Hollow State Preserves.

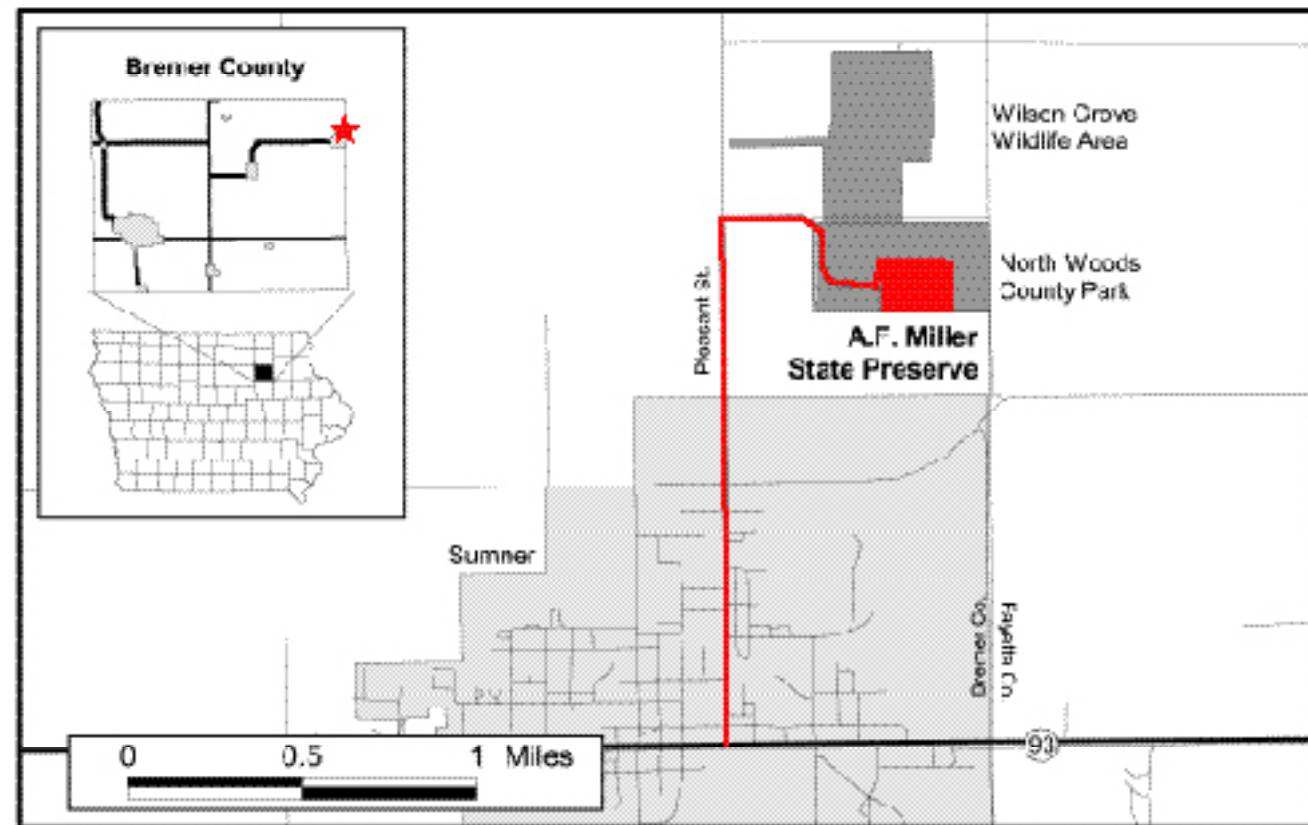
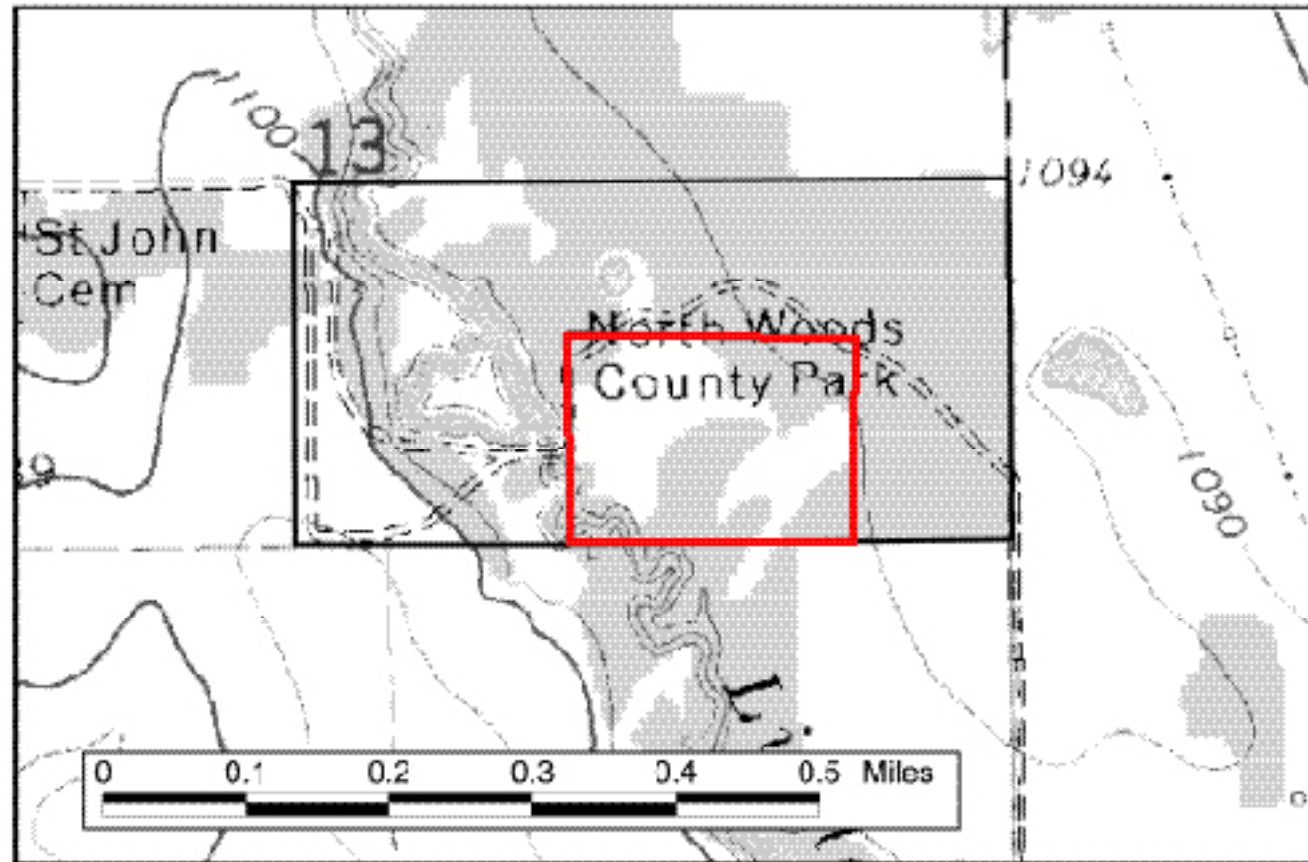
### DIRECTIONS

From Guttenberg, take Highway 52 south 6 miles to Noble Road. Turn west (right) and follow Noble Road for 2.5 miles to the preserve on the north side of the road (sign: Merritt Forest State Preserve).

### AREA MANAGER

Iowa Department of Natural Resources  
 Yellow River State Forest  
 729 State Forest Road  
 Harpers Ferry, IA 52146  
 (563) 586-2254  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## A. F. Miller State Preserve

A. F. Miller State Preserve is a 10-acre area containing a peaty, oxbow wetland with several rare plants. It is located in North Woods County Park in the northeastern corner of Bremer County. The area comprising the park was purchased by the Bremer County Conservation Board in 1961. The oxbow in the park was dedicated as a biological state preserve in 1984. The name of the preserve commemorates A. F. Miller, a former Bremer County Conservation Board member who was instrumental in the acquisition of North Woods Park.

Located in the Iowan Surface landform region, the preserve contains an old oxbow in the floodplain of the Little Wapsipinicon River. It contains a peaty wetland with approximately 140 plant species. In the spring, you will find marsh marigold, heart-leaved golden alexanders, southern yellow wood sorrel, and yellow water crowfoot. In early summer tufted loosestrife, northern bog violet, blue flag iris, and indigo bush will start blooming. By midsummer, meadow phlox, wood lily, and marsh bellflower will appear. By the end of summer, grass-of-Parnassus is flowering and nodding ladies'-tresses and swamp lousewort will begin blooming. Along with flowering plants, many bulrushes and sedges occur at this preserve.

Four of the eleven butterflies found at the preserve are rare species including the broad-winged skipper, black dash, dion skipper, and the Acadian hairstreak.

Hunting is not permitted.

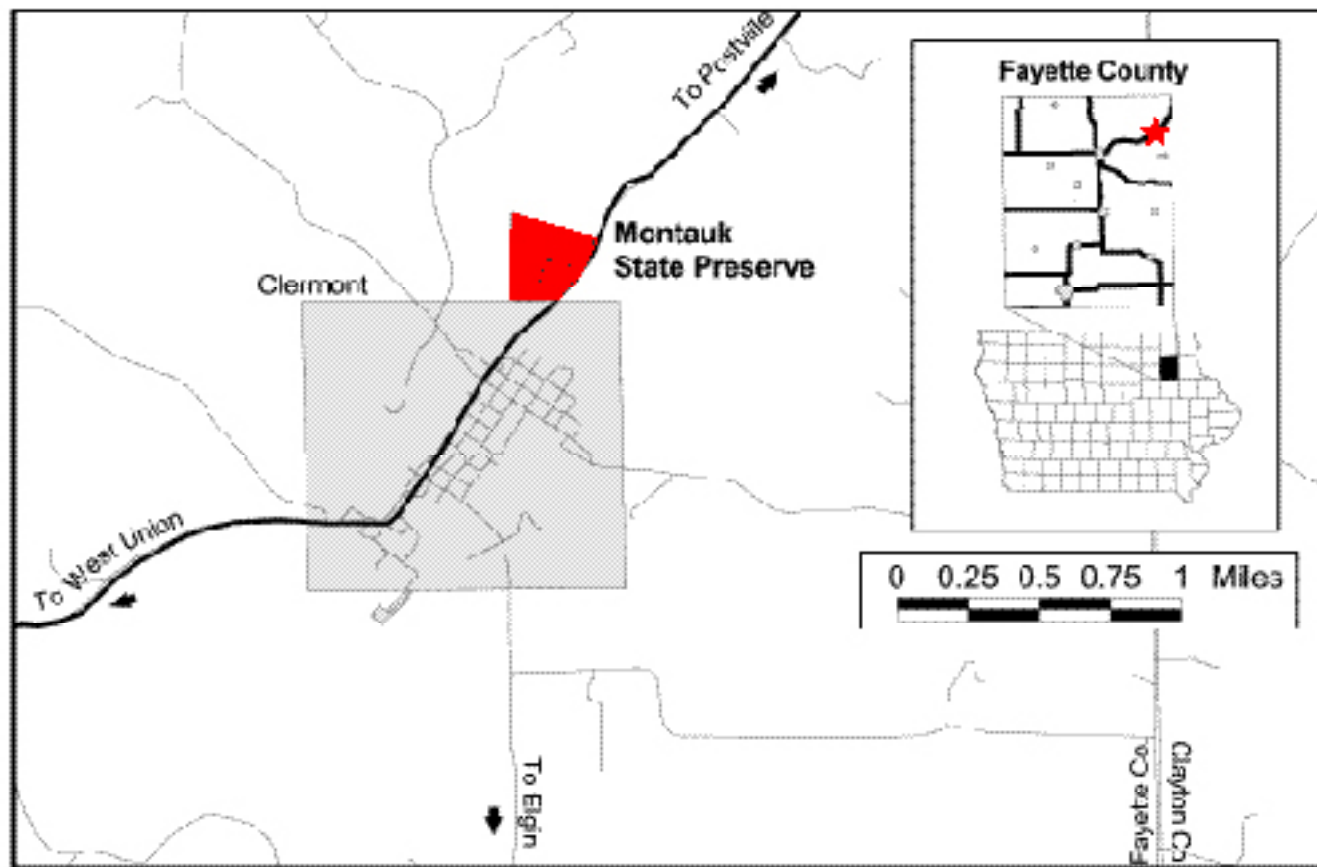
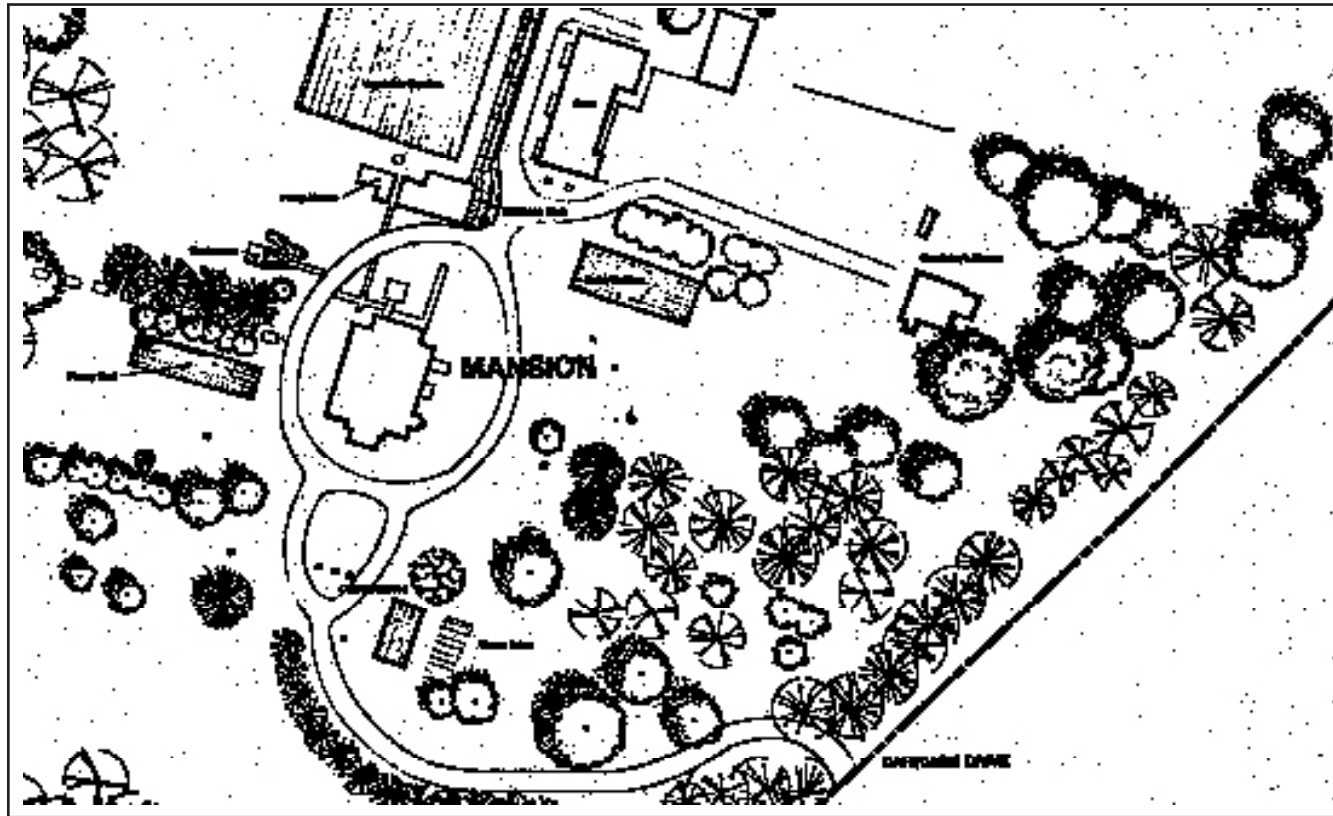
### DIRECTIONS

In Sumner, take Highway 93 to Pleasant Street. Go north and then east (right) 1.5 miles to North Woods County Park. Follow the park road to the preserve in the east side of the park (sign: A. F. Miller State Preserve).

AREA MANAGER  
Bremer County  
Conservation Board  
1104 S. Main Street  
P.O. Box 412

Tripoli, IA 50676  
(319) 882-4742  
[www.co.bremer.ia.us/  
conservation@butler-bremer.  
com](http://www.co.bremer.ia.us/conservation@butler-bremer.com)  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Montauk State Preserve

The historic Montauk estate was the home and estate of William Larrabee, Iowa's twelfth governor (1886–1890). This 46-acre preserve is located one mile northeast of Clermont in northeastern Fayette County. Constructed in 1874, Montauk was added to the National Register of Historic Places in 1974. In 1976, the Larrabee heirs donated Montauk to the State Historical Society. It was dedicated as a historical state preserve in 1984.

The preserve sits atop a bluff overlooking the town of Clermont. In addition to the historic mansion and its landscaped grounds, the estate contains several other buildings and structures, including a caretaker's house, water tower, well house, laundry, creamery, workshop, barn, corncribs, sheds, vegetable garden, orchard, and statuary. The vintage two-story house was designed by E. Thomas Mix and built in 1874 for \$20,000. This twelve-room, Italianate house was made of brick and limestone from a local quarry. The governor's wife, Anna, whose East Coast family had seafaring ties, named Montauk after a Long Island lighthouse. The sweeping circular drive was lined with bronze statues of Civil War heroes Grant, Sherman, Farragut, and Dodge. William Larrabee resided at Montauk from its construction in 1874 until his death in 1912. One of his daughters lived in the house until her death in 1965 at the age of ninety-seven.

Prior to serving as governor from 1886 to 1890, William Larrabee served in the state Senate from 1867 to 1885. His chief interests were agricultural aid, education, transportation, and prohibition. He was a prosperous miller, farmer, teacher, inventor, and banker. Larrabee was one of Iowa's wealthiest landowners during the late nineteenth century. "Thanks to his visionary spirit and crusading temperament, William Larrabee helped change the face of Iowa politics, making government more responsive to the needs of many people," said Rebecca Christian in the winter 1983 Iowan magazine.

As a preserve, Montauk demonstrates the historic importance of Governor Larrabee, the lifestyle of a wealthy Iowa family in the late 1800s, and the furnishings of Victorian America. The original furniture and belongings are still intact. Montauk is managed by the State Historical Society and is maintained as a charming, lived-in atmosphere. The house is arranged with flowers and personal memorabilia to reflect seasonal changes in decor, customs, and preferences of the Larrabee family. Nine rooms of the mansion are open to the public, including the sitting room, library, music room, dining room, kitchen, and bedrooms. Several other buildings on the grounds have been restored and are open to the public.

The preserve is open from 12 noon to 4 p.m. from Memorial Day through the end of October. Guided tours are available and begin at the front door every quarter hour. Free tours for educational groups may be arranged by appointment.

Other historic sites in the town of Clermont include the railroad depot, Lincoln Park and Statues, David B. Henderson statue, 1912 Clermont Opera House, Clermont Museum, 1937 John Deer tractor, Burkhard Riegel's blacksmith shop, Stone Jail, power plant, 1927 Hart Parr tractor, 1896 Kimball pipe organ (largest in the United States) in the Union Sunday School, Larrabee School, gateway to City Park, bandshell, and Rueben's Toys.

### DIRECTIONS

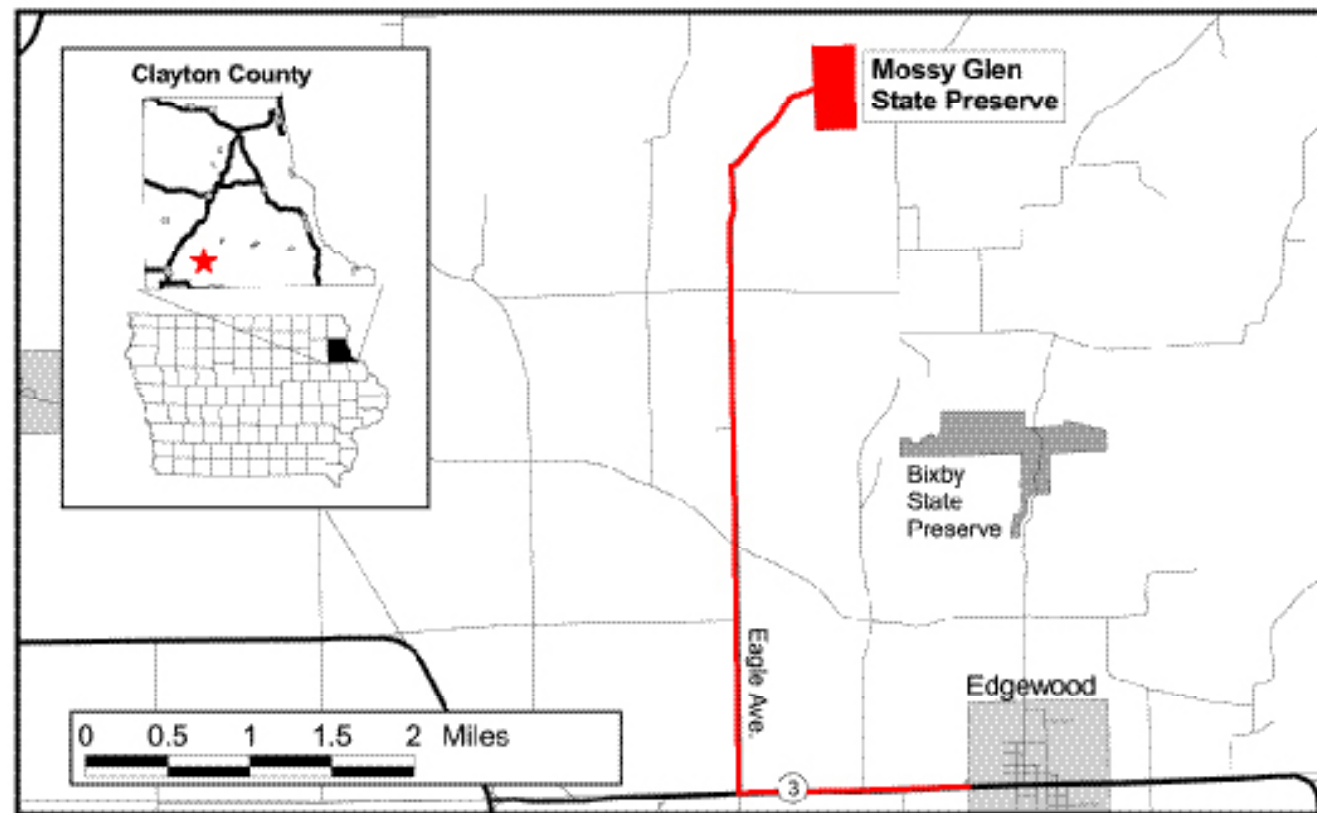
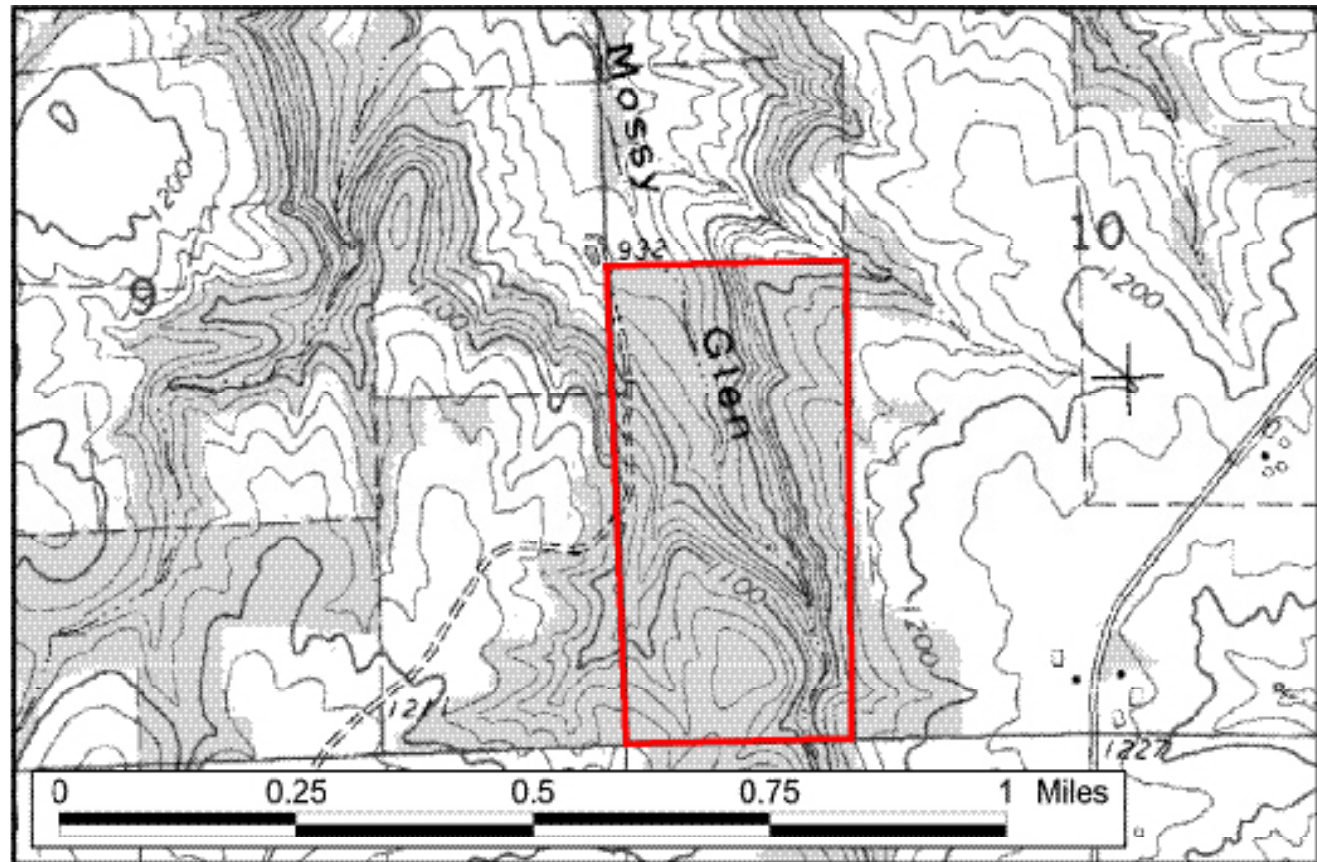
From West Union, take Highway 18 east to Clermont (sign: Montauk—Entrance 1/2 mile) and continue to the preserve entrance north of the highway (sign: Montauk—Iowa Governor Home State Historical Site).

The preserve is open daily from 12 noon to 4 p.m. Memorial Day to October-31.

### AREA MANAGER

State Historical Society of Iowa  
P.O. Box 372  
Clermont, IA 52135  
(563) 423-7173  
[www.iowahistory.org/historic-sites/montauk](http://www.iowahistory.org/historic-sites/montauk)  
[montauk@acegroup.cc](mailto:montauk@acegroup.cc)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Mossy Glen State Preserve

Mossy Glen is an 80-acre preserve featuring a rugged forested area along the Silurian Escarpment. It is located 6 miles northwest of Edgewood and 6.5 miles northeast of Strawberry Point in Clayton County. The area was donated to the Iowa Conservation Commission in 1978 by Mildred Hatch in memory of her father, Charles A. Hesner, and her uncle, Henry Hesner. The area was dedicated in 1979 as a biological and geological state preserve.

The preserve is representative of a prominent line of bluffs across northeastern Iowa known as the Silurian Escarpment. This escarpment consists of massive outcrops of 430-million-year-old dolomite (magnesium-rich limestone) formed in a shallow sea during what geologists term the Silurian period. The Silurian Escarpment forms the southwestern boundary of the Paleozoic Plateau landform region, a broad area of rugged topography in northeast Iowa. Extensive rock outcrops, slumped dolomite blocks, steeply dissected ravines, and "karst" terrain (including sinkholes, springs, and caves) are characteristic of the rugged landscape found along the Silurian Escarpment. Mossy Glen contains several of these distinctive features.

The mature forest in the preserve is dominated by red oak and sugar maple. Ironwood is a common understory species in addition to witch hazel, leatherwood, alternate-leaved dogwood, bladdernut, and Canada yew. Over 300 native vascular plants have been found here. Bloodroot, spring beauty, squirrel corn, and white trout-lily begin blooming in April, followed by wild ginger, false rue anemone, Dutchman's breeches, bishop's cap, blue cohosh, toothwort, wild geranium, jack-in-the-pulpit, nodding trillium, bellwort, and showy orchis. Many ferns also grace the preserve, including ostrich fern, Goldie's fern, smooth cliff-brake, northern lady fern, narrow-leaved spleenwort, creeping fragile fern, spinulose wood fern, sensitive fern, Christmas fern, blunt-lobed woodsia, rattlesnake fern, and interrupted fern. Wood nettle covers the bottomland floor in the summer and can make travel uncomfortable.

About sixty birds have been observed here. Many are neotropical migrants, including cuckoos, flycatchers, warblers, and vireos as well as veery, scarlet tanager, woodthrush, redstart, Louisiana waterthrush, and ovenbird. Several of these birds need large tracts of unbroken forest for successful breeding.

In the early 1900s, Mossy Glen was a popular picnic spot. The road on the west edge of the preserve once extended over a bridge across Mossy Glen Creek, but was abandoned in 1978 after the bridge washed out. Occasional logging, especially of walnut trees on the valley floor, was conducted prior to state ownership.

Hunting is permitted.

Other natural areas along the Silurian Escarpment are Brush Creek Canyon, Bixby, and White Pine Hollow State Preserves, Volga River Recreation Area, and Echo Valley State Park.

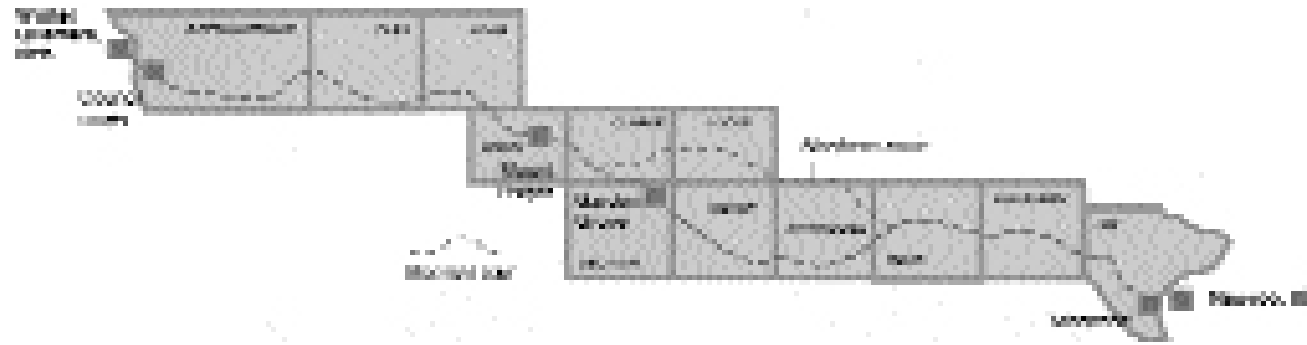
### DIRECTIONS

From Edgewood, take Highway 3 west 1.5 miles to Eagle Avenue. Turn north (right) and go 4.75 miles to the end of the road. Park on the edge of the road at the top of the hill. Do not block the field access to a nearby farm. Walk north along the road into the western portion of the preserve (sign: Mossy Glen State Preserve).

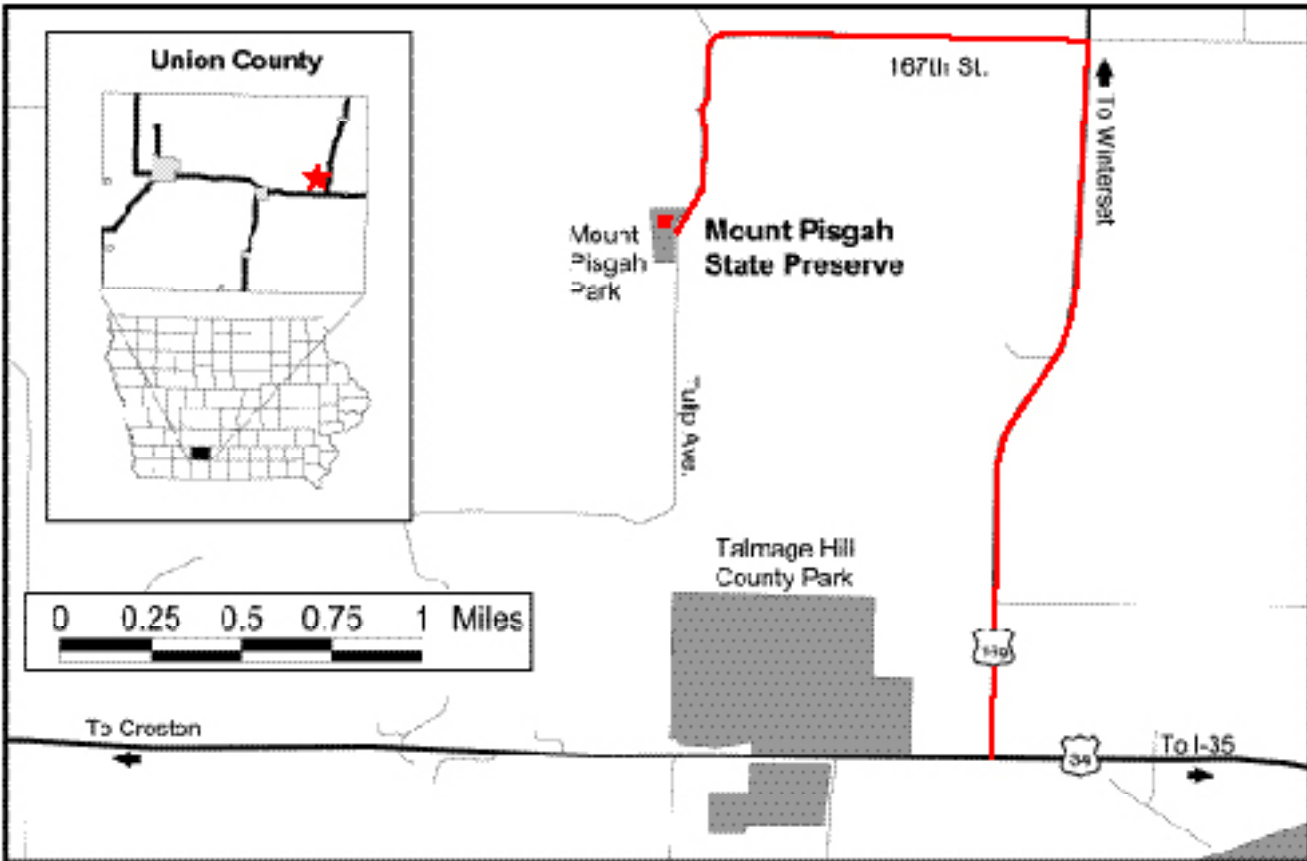
### AREA MANAGER

Iowa Department of  
Natural Resources  
Cedar-Wapsi Wildlife Unit  
217 S. 25th St., Suite C-12  
Fort Dodge, IA 50501  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





Map courtesy of Iowa Mormon Trails Association.



# Mount Pisgah Cemetery State Preserve

Mount Pisgah Cemetery State Preserve is a small portion of a historic cemetery associated with a way station established by the Mormons as they migrated westward across Iowa during the mid-1800s. This 1-acre preserve is located in Mount Pisgah Park, twelve miles east of Creston in Union County. The 300 to 800 wooden markers that once marked the graves scattered on the hillside have long since disappeared but a monument now honors all who died here. Named for a biblical mountain, this area was dedicated as a historical state preserve in 1971.

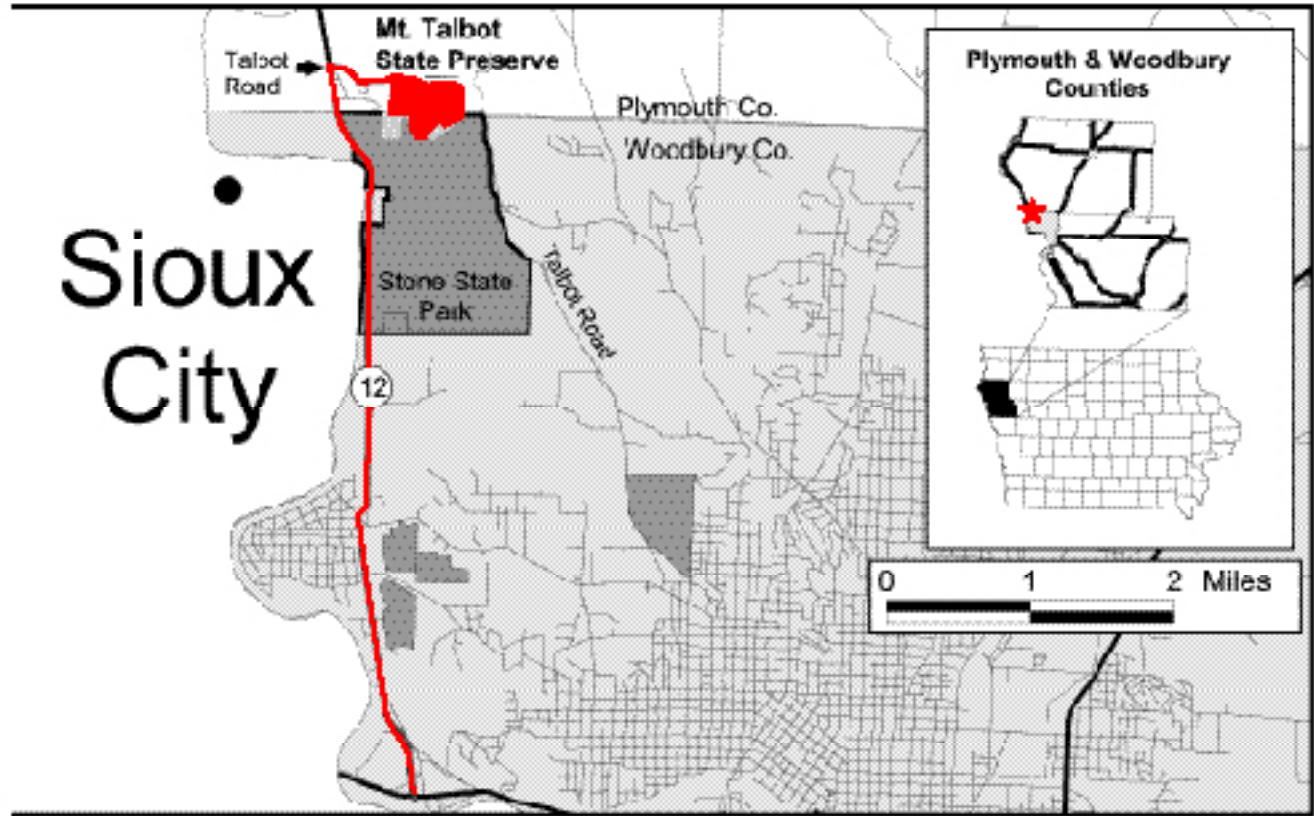
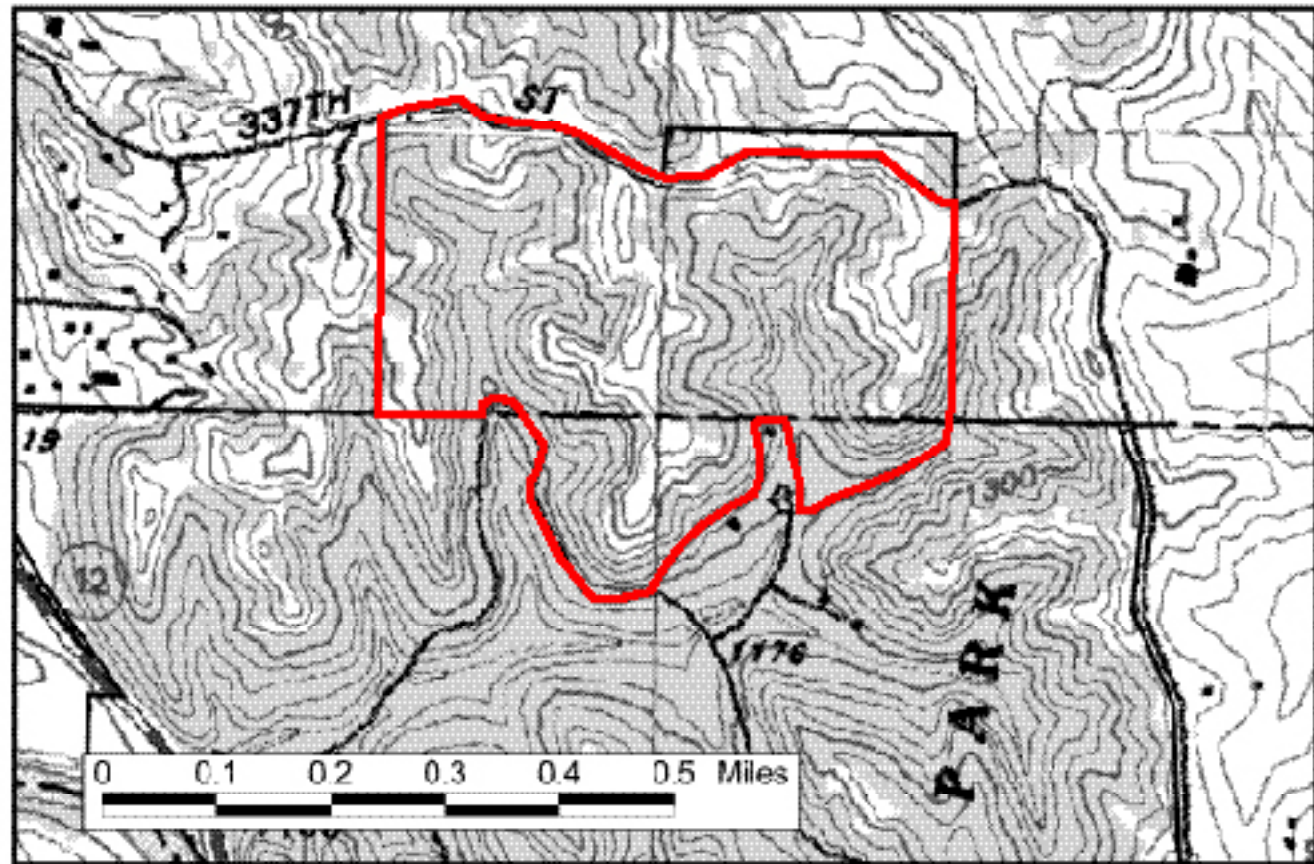
In the mid-1840s, social turmoil forced Mormons to leave Nauvoo, Illinois. On February-5, 1846, a mass exodus began. The travelers battled weather, fatigue, starvation, and disease on their trip across the tallgrass prairie of Iowa en route to Salt Lake City. They were not prepared for the hardships that they encountered on their journey and many died along the way. The springlike weather they first experienced changed quickly as snow fell and temperatures plummeted. The Mormons averaged only three miles per day during the first month as they struggled against the cold and snow. By the end of March, spring rains and thawing replaced the snow and cold, but the prairie became a sea of mud. Many of the horses could not pull the heavy wagons through the mud.

More than 2,000 Mormons pitched their tents at Mount Pisgah in 1846, the first pioneer settlement in Union County. Temporary shelters were dug in the hillsides until log cabins could be built and blacksmith shops constructed to repair the wagons. The settlers found it impossible to break the tough prairie sod, and hundreds of acres of trees were girdled and cleared before crops could be planted. The lack of food and inadequate shelter took its toll on the new settlement, and more than 160 people died during the first six months.

Other historical areas in the vicinity include the Madison County Historical Complex and historic covered bridges.

**DIRECTIONS**  
 From the intersection of Highway 34 and Highway 169 east of Creston, take Highway 169 north 2 miles (watch for sign) to 167th Street. Go west (left) 1.5 miles to Tulip Avenue. Go south (left) 0.5 mile to the preserve on the west side of the road (sign: Mount Pisgah Cemetery State Preserve).

**AREA MANAGER**  
 Union County Conservation Board  
 318 North Pine Street  
 Creston, IA 50801  
 (641) 752-1755  
[www.unioncountyiowa.org/conservation](http://www.unioncountyiowa.org/conservation)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Mount Talbot State Preserve

Mount Talbot State Preserve is a 90-acre area featuring a rugged Loess Hills landscape with forested slopes and prairie-capped ridges. It is located in the northern part of Stone State Park, in Plymouth and Woodbury Counties. In 1885, Daniel Talbot acquired much of the hilly land north of Sioux City. He had an interest in nature, specifically birds. A high grassy ridge of the Talbot farm became locally known as "Mount Talbot." In 1895, Thomas Jefferson Stone acquired the Talbot land, and after his death, his son Edgar developed it into a private park. In 1912, Sioux City bought the area and designated it as "Stone Park," a recreational area for city residents. In 1935, Stone Park was transferred to the Iowa Conservation Commission and became a state park. In the 1980s, a series of biological surveys by The Nature Conservancy and the Iowa Department of Natural Resources identified the Mount Talbot area of Stone State Park as a high-quality prairie. It was dedicated as a biological state preserve in 1989.

The preserve contains about 35 acres of prairie on narrow ridge tops adjoining a large tract of oak woodland in the deep ravines. It supports a rich prairie flora of over seventy-five native plants. The site is very scenic with panoramic views of the Loess Hills landscape. The prairie is characterized by a flora including little bluestem, sideoats grama, big bluestem, Indian grass, leadplant, skeletonweed, pasqueflower, silky aster, and nine-anthered dalea. In the spring, pasqueflower is seen as early as March. Bastard toadflax, lotus-flowered milk-vetch, large-flowered beardtongue, snow-on-the-mountain, and prairie turnip appear later, along with cut-leaf iron plant, yucca, hoary vervain, narrowleaf bluets, white sage, gaura, dotted gayfeather, and toothed evening primrose. By fall, showy goldenrod and aromatic aster are in bloom.

A rich butterfly fauna of forty-two species has also been documented in the preserve. Prairie species include wild indigo duskywing, gorgone skipper, Olympia marble, Leonard's skipper, dusted skipper, Melissa blue, Arogos skipper, Ottoo skipper, Iowa skipper, crossline skipper, tawny emperor, regal fritillary, Pawnee skipper, and Reakirt's blue.

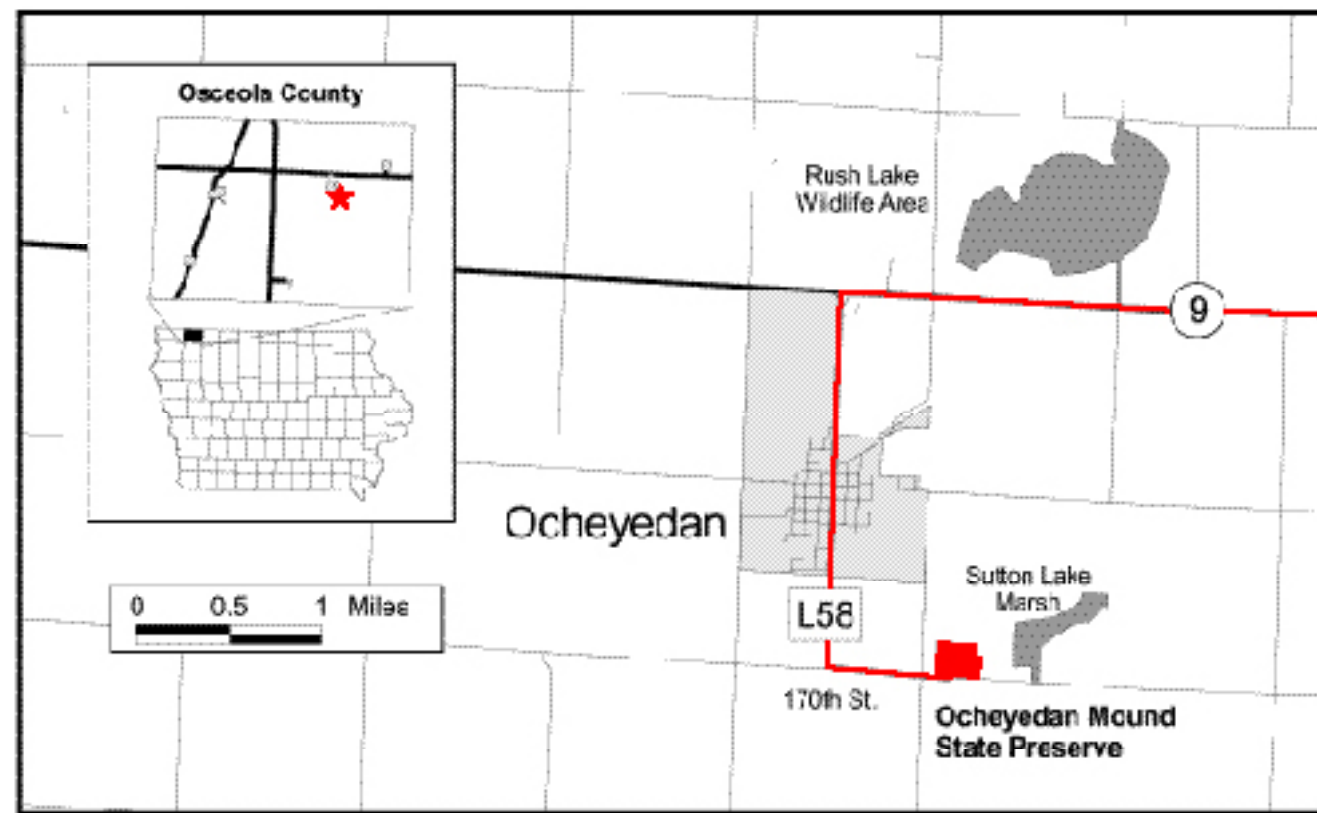
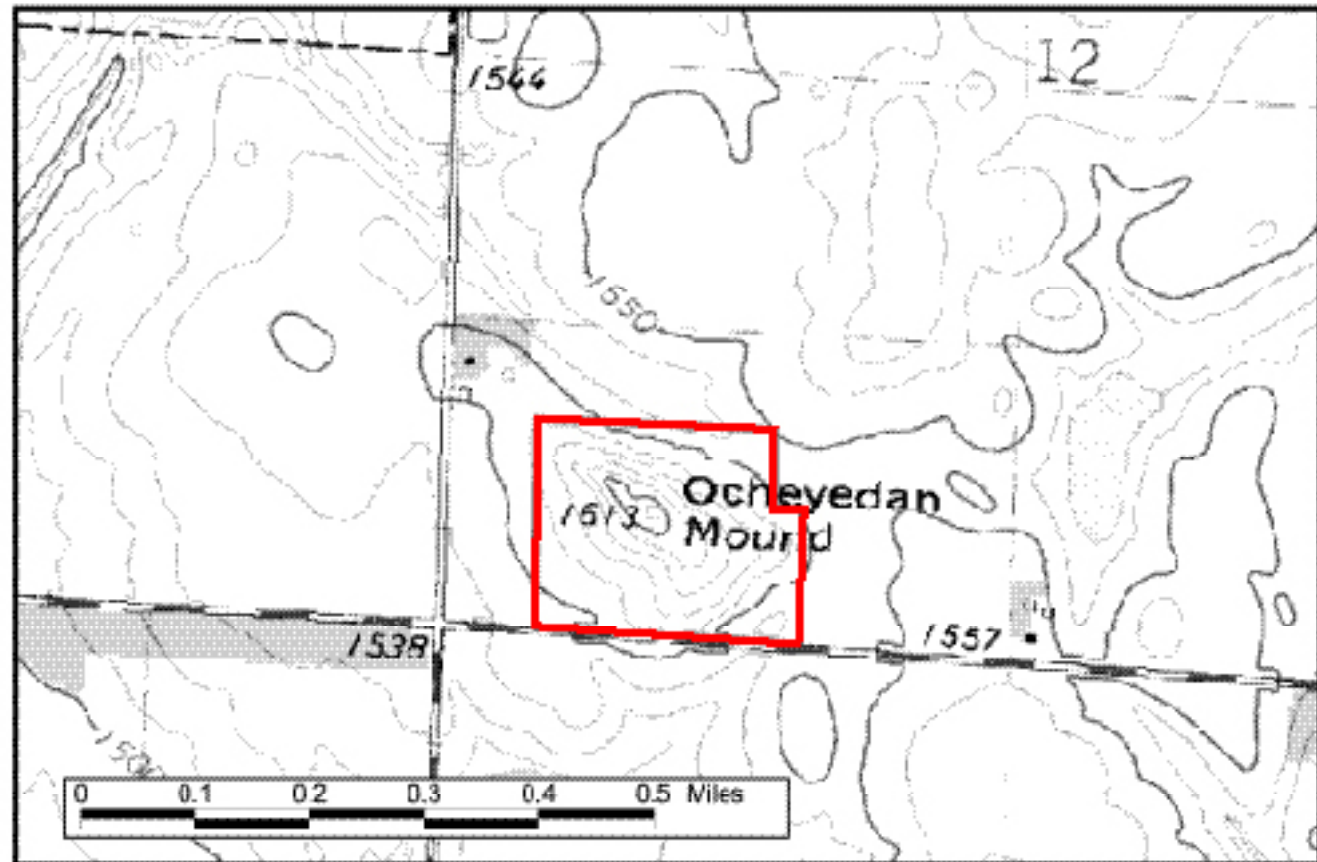
Hunting is not permitted. Other Loess Hills natural areas include Broken Kettle Grasslands and Sylvan Runkel, Five Ridge Prairie, and Turin Loess Hills State Preserves. The Carolyn Benne Nature Trail is found along the southeast border of the preserve.

**DIRECTIONS**  
From the intersection of I-29 and Highway 12 (Exit 151) on the west edge of Sioux City, drive north for 5 miles on Highway 12 through the town of Riverside and past Stone State Park to Talbot Road (about 0.75 mile past the entrance to Stone State Park). Turn east (right) and go 0.75 mile to the preserve on the south side of the road (sign: Mount Talbot State Preserve). Park on the roadside and walk uphill into the preserve.

**AREA MANAGER**  
Iowa Department of Natural Resources  
Stone State Park  
5001 Talbot Road  
Sioux City, IA 51103-1199  
(712) 255-4698  
Stone@dnr.iowa.gov  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)







## Ocheyedan Mound State Preserve

Ocheyedan Mound (pronounced O-cheé-den) is a large glacial hill known as a "kame." The 24-acre preserve containing a portion of this large landform is located one mile south of Ocheyedan in eastern Osceola County. The Shuttleworth family purchased a 160-acre farm containing the mound in 1909. They donated the tract containing the mound to the Iowa Natural Heritage Foundation in 1983. In 1984 the mound was dedicated as a geological state preserve. Ownership was then transferred to the Osceola County Conservation Board.

Located on the western edge of the Des Moines Lobe landform region, Ocheyedan Mound is a kame which was formed during melting of the Wisconsin glacier some 12,000 years ago. It lies on the Bemis end moraine, a region of hilly ground that marks the farthest western advance of the Des Moines Lobe ice sheet into north-central Iowa. Kames are large, jutting masses of sand, gravel, and small boulders that were deposited by glacial meltwater streams pouring off the glacier, heaping dirt and stones to form a mound. Rocks of various sizes and colors are strangely intermingled on this mound, among them porphyry, granite, Sioux quartzite, and limestone. This mound covers nearly 40 acres extending northeast to southwest over about a third of a mile. Its width averages several hundred yards wide, narrowing in places to only a few yards. With its summit 175 feet above the floodplain of the Ocheyedan River and 1,613 feet above sea level, Ocheyedan Mound is one of the highest points in Iowa. "Hawkeye Point," located about four miles northeast of Sibley, is the state's highest elevation at 1,670 feet above sea level.

The Sioux Indians were frequent visitors to the mound. They referred to the mound as "Acheya" or "Akicheya," meaning "the spot where they cry." Pioneer settlers used it as a landmark. Later, it became popular for picnics, winter sliding, toboggan parties, and skiing. The Stopsack family were tenants of the Shuttleworth farm from 1932 until the early 1980s. They owned a black horse named "Old Rich" who was a familiar figure atop the mound for over three decades. Today the mound is maintained as a natural area and is used as an outdoor classroom.

Vegetation on the mound is slowly reverting to native grasses and flowers, including little bluestem, sideoats grama, blue grama, and Junegrass. In spring, hoary puccoon, white camass, and wild strawberry bloom. In summer, a large population of milk vetches, prairie violet, and prairie onion can be seen. Butterfly weed, purple prairie clover, white prairie clover, and black-eyed Susan add to the summer color.

Other state preserves in the vicinity include Silver Lake Fen, Freda Haffner Kettlehole, and Cayler Prairie.

### DIRECTIONS

From the intersection of Highway 9 and Highway 86 on the west side of the town of Spirit Lake, take Highway 9 west about 18 miles to County Road L58 (Truman Avenue) (watch for signs). Turn south (left) and go through the town of Ocheyedan to 170th Street (about 2 miles). Turn east (left) and go 1 mile to the preserve on the north side of the road (sign: Ocheyedan Mound).

From Spirit Lake, take Highway 9 west about 21 miles to County Road L58 (Truman Avenue) (watch for signs). Turn south and go through the town of Ocheyedan to 170th Street (about 2-miles). Turn east and go 1 mile to the preserve on the north side of the road (sign: Ocheyedan Mound).

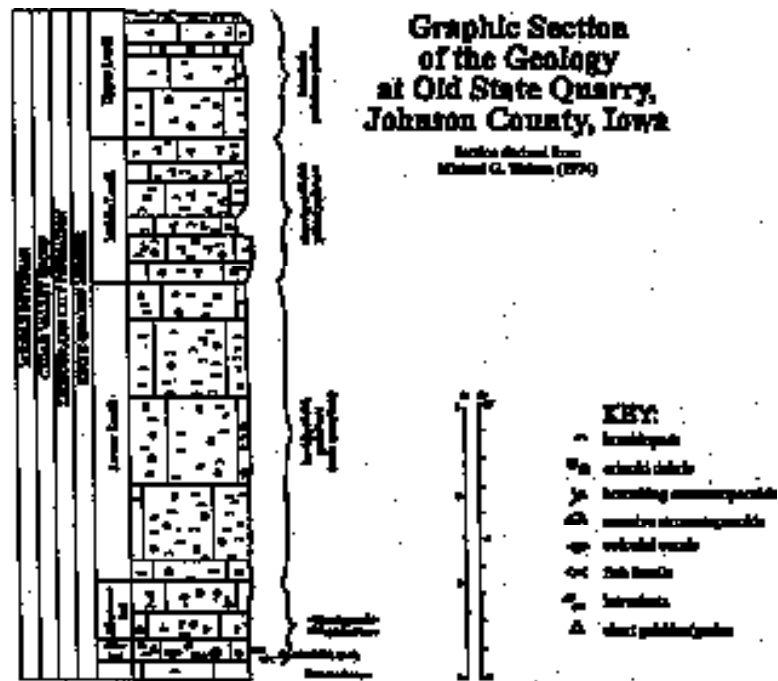
AREA MANAGER  
Osceola County  
Conservation Board  
P.O. Box 118

Ocheyedan, IA 51354  
(712) 758-3709

[www.osceolacountyconservationboard.org](http://www.osceolacountyconservationboard.org)

[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Old State Quarry State Preserve

Old State Quarry is a historic quarry whose limestone was used to construct the old State Capitol building in Iowa City. This 8.5-acre preserve is located seven miles north of Iowa City in northern Johnson County. It was dedicated as a geological and historical state preserve in 1969.

This preserve played an important role in the settlement history and architectural heritage of Iowa. During the late 1830s, a team of quarrymen hand-drilled hundreds of limestone blocks and transported them downstream on rafts for use in the construction of the State Capitol building in Iowa City. The north and west walls of the quarry still bear the century-old drill holes into which steel spikes were driven to break loose the huge blocks. From the 1840s through the 1860s, the quarry supplied building stones and foundation materials for several buildings in the Iowa City area. The beautifully crafted stones for the foundation of the "Old Brick" Church, the wall along the T. Anne Cleary Walkway between Market and Burlington Streets, curbing throughout the "Northside Neighborhood" area, and supports for the old Burlington Street Bridge are several places where stone from this quarry can still be seen. During the 1870s, the quarry also supplied foundation blocks for the new State Capitol building in Des Moines.

The limestone seen here is composed largely of cemented fragments of brachiopods (shellfish) that lived in a shallow tropical sea during the Devonian period (375 million years ago). The fossil remains were concentrated in erosional tidal channels and cut into older sediments beneath them. Fish teeth and plates also are common in lower parts of the channel sequence. The rock is known as the "State Quarry Limestone," and this preserve is the "type-section," or the standard reference locality for this particular rock unit. The geographic extent of the State Quarry Limestone is limited to Johnson County, where it reaches a maximum thickness of about forty feet. A few feet of this limestone may also be seen nearby at the Merrill A. Stainbrook State Preserve near the Mehaffey Bridge, one mile north of the Old State Quarry.

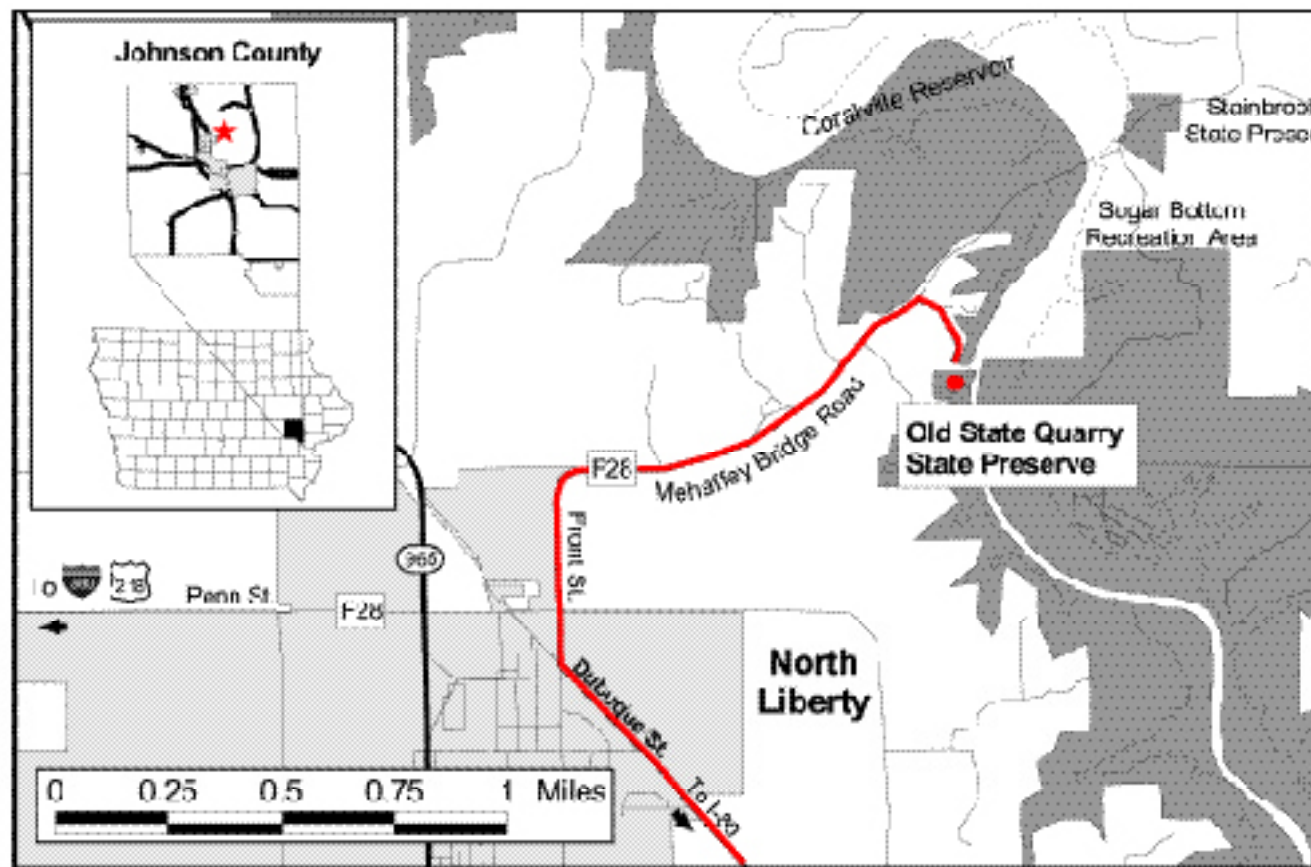
Other historic or geological areas in the vicinity include Merrill A. Stainbrook and Palisades-Dows State Preserves, Lake Macbride and Palisades-Kepler State Parks, and Devonian Fossil Gorge.

### DIRECTIONS

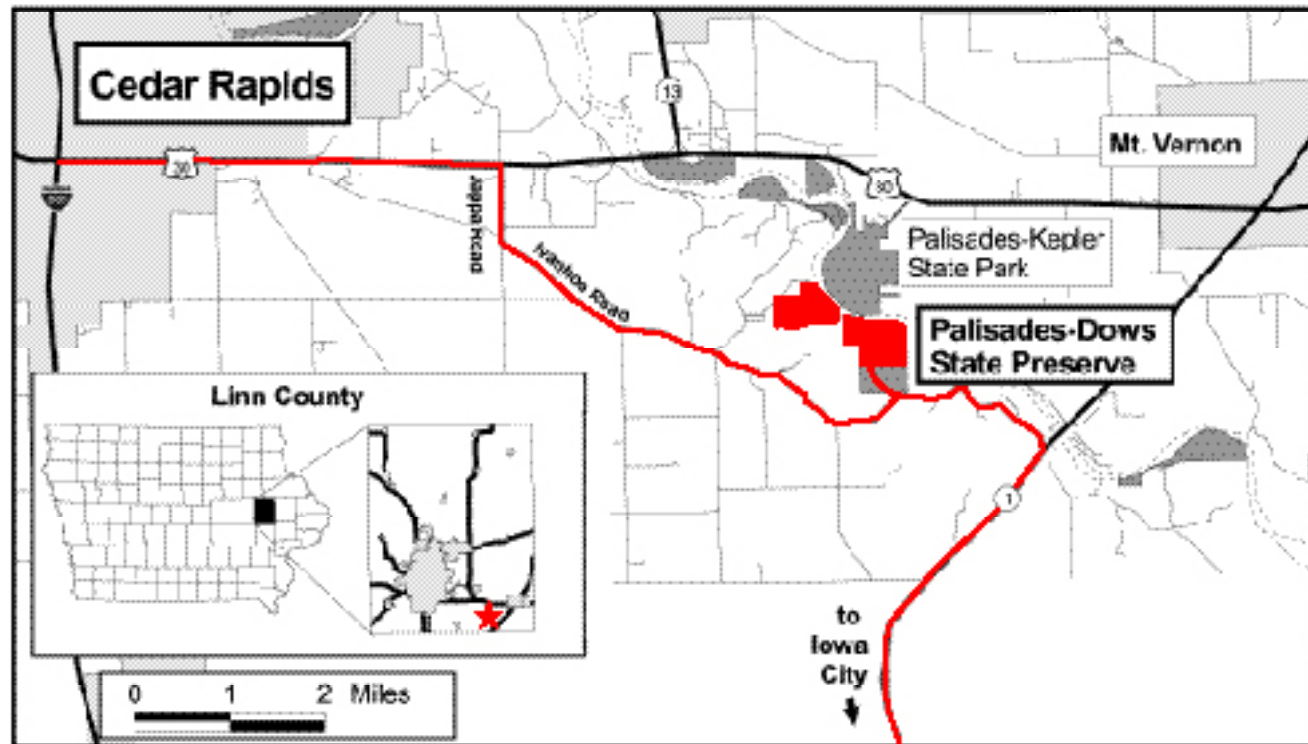
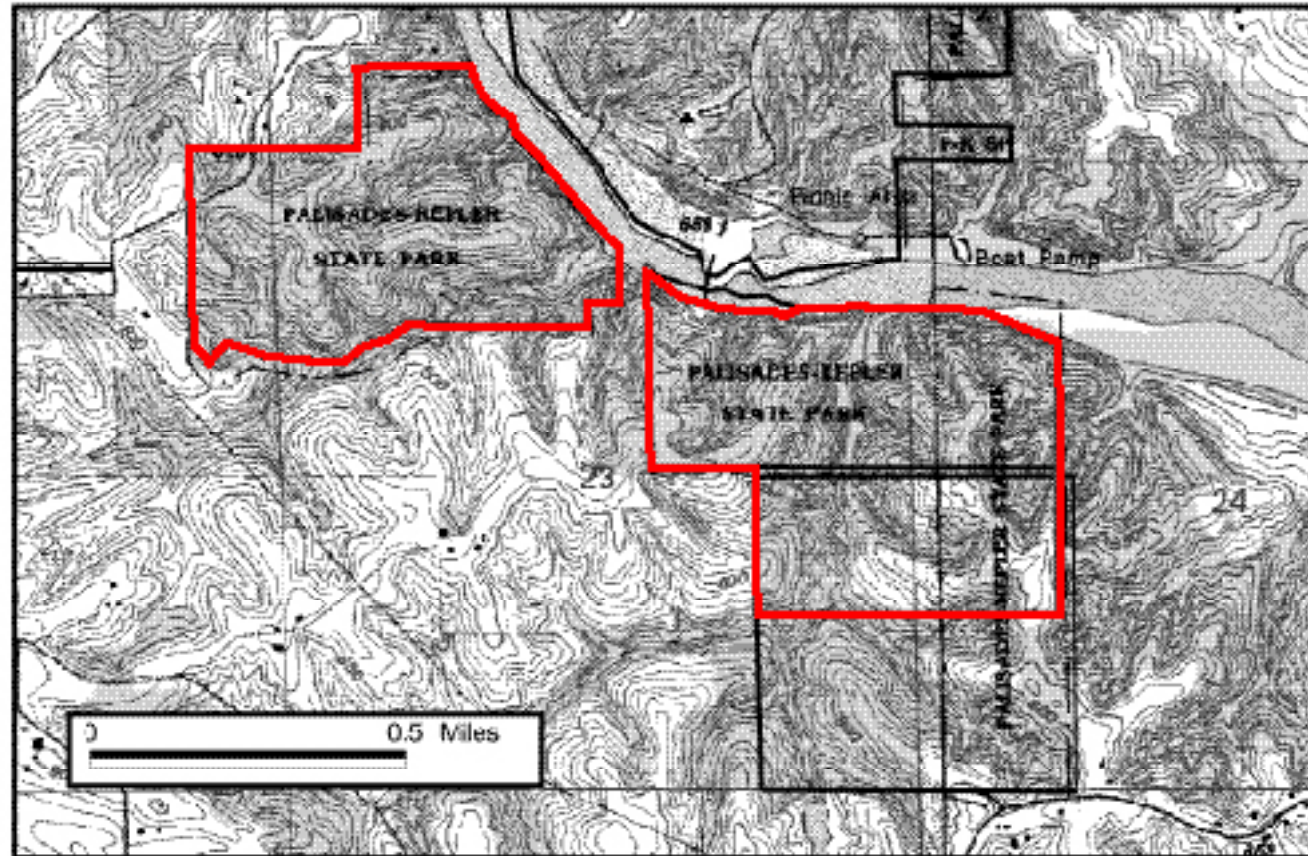
From the intersection of I-80 and Dubuque Street (exit 244) on the north side of Iowa City, take Dubuque Street north about 6 miles into the town of North Liberty. Turn north (right) onto Front Street (County Road F28), go north 0.75 mile, and curve east (right) onto Mehaffey Bridge Road. Follow Mehaffey Bridge Road about 1.5 miles to Rice Ridge Road. Turn south (right) and drive to the end of this private road, keeping to the right. Park on the edge of the road, but do not block driveways. Please respect private property (sign: State Preserve Boundary).

### AREA MANAGER

University of Iowa  
 Recreational Services  
 E216 Field House  
 Iowa City, IA 52242  
 (319) 335-5565  
[www.recserv.uiowa.edu/programs/TTE/index.html](http://www.recserv.uiowa.edu/programs/TTE/index.html)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Palisades-Dows State Preserve



Palisades-Dows State Preserve is a 330-acre, rugged forested area with cliffs (“palisades”) bordering the Cedar River. It is located across the Cedar River from Palisades-Kepler State Park in Linn County. The first tract of land in the preserve was acquired by the Iowa Conservation Commission in 1922. In 1962, Sutherland Dows donated 150 acres just south of the state land to the Linn County Conservation Board. In 1980, 250 acres of state land plus 80 acres of county land were dedicated as a biological and geological state preserve.

Located at the northern edge of the Southern Iowa Drift Plain landform region, Palisades-Dows Preserve takes its name from the sheer cliffs of Silurian dolomite flanking the Cedar River. The topography of the preserve is highly dissected with several deep ravines variously named Blow Out Hollow, Spring Hollow, and Dark Hollow.

Forests in the preserve are dominated by white oak, red oak, shagbark hickory, sugar maple, and basswood. Ironwood, blue beech, and alternate-leaved dogwood are found in the understory. In the spring, hepatica, spring beauty, and hairy blue violet begin blooming as early as March, followed by wild ginger, squirrel corn, toothwort, white trout-lily, showy orchis, nodding trillium, and bellwort. Smooth goldenrod, blue wood aster, and arrow-leaved aster are among the species finishing the year. Walking fern, slender cliff-brake, northern maidenhair, bulblet bladder, and fragile ferns and many species of liverworts and mosses cover the bluffs and rocks.

In 1869, James S. Minott, veteran of the Civil War, found an eight-by-eight-foot cave in Blow Out Hollow where he created a small place to live, later to be known as “Minott’s Cave.” In the late 1890s, Minott bought 160 acres on the north side of the Cedar River and sold small lots for summer cottages. Minott also built a hotel there, which contained a restaurant, general store, and boat livery. His great firsthand knowledge of the plants and animals of the river, cliffs, and forest soon contributed to the Palisades becoming a popular recreation area.

The Palisades were used in prehistoric as well as historical times. Rock shelters in the larger ravines are among the best Woodland period sites in Iowa. In 1941, as two men were working on a cottage near Blow Out Hollow, they rediscovered Minott’s Cave. Further investigation uncovered artifacts used by prehistoric Indians. Dr. Charles Keyes, a well-known archaeologist, began exploring the area and found several other rock shelters in the area of Spring Hollow. Many occupation sites in these rock shelters dating from the Early to Late Woodland periods have been found throughout the preserve.

Among the birds found in the preserve are neotropical migrants such as warblers and vireos. Neotropical migrants found here that need large tracts of unbroken forest for successful breeding include the Acadian flycatcher, scarlet tanager, American redstart, Louisiana waterthrush, ovenbird, Kentucky warbler, wood thrush, and yellow-throated vireo. Other forest birds found here include pileated, red-headed, and red-bellied woodpeckers, Carolina wren, Cooper’s hawk, red- and white-breasted nuthatches, hermit thrush, and evening grosbeak. A great blue heron rookery is present in one of the larger ravines.

Other natural or geological areas in the vicinity include Palisades-Kepler State Park and Merrill A. Stainbrook and Old State Quarry State Preserves.

### DIRECTIONS

From the intersection of I-380 and Highway 30 on the south edge of Cedar Rapids, take Highway 30 east 4.75 miles to Jappa Road (sign: Palisades-Dows Preserve and Observatory). Turn south (right) and go 0.8 mile to Ivanhoe Road. Turn east (left) onto Ivanhoe Road and follow this winding road for about 5 miles to the Palisades Preserve and Observatory.

From the intersection of I-80 and Highway 1 on the north edge of Iowa City, drive north on Highway 1 for about 14 miles (through the town of Solon) to Ivanhoe Road, just before the bridge over the Cedar River (arrow sign: Palisades-Dows Preserve and Observatory). Turn west (left) and go 2 miles to the Palisades Preserve and Observatory.

Park in the observatory parking lot. Walk west past the observatory to the northwest corner of the mowed area to a footpath leading into the woods. Follow the path to northwest along a ridgetop and down the streambed of Dark Hollow, ending at the Cedar River.

### AREA MANAGER

Iowa Department of Natural Resources  
Palisades-Kepler State Park  
700 Kepler Drive  
Mt. Vernon, IA 52314-9645  
(319) 895-6039  
Palisades\_Kepler@dnr.iowa.gov  
www.iowadnr.gov/preserves/  
State\_Preserves@dnr.iowa.gov



## Pecan Grove State Preserve

Pecan Grove State Preserve is a 23-acre remnant of bottomland forest noted for a grove of pecan trees, an uncommon species in Iowa. It is located five miles west of Muscatine in Muscatine County. The property was purchased by the Iowa Conservation Commission in 1973 and dedicated as a biological state preserve in 1978.

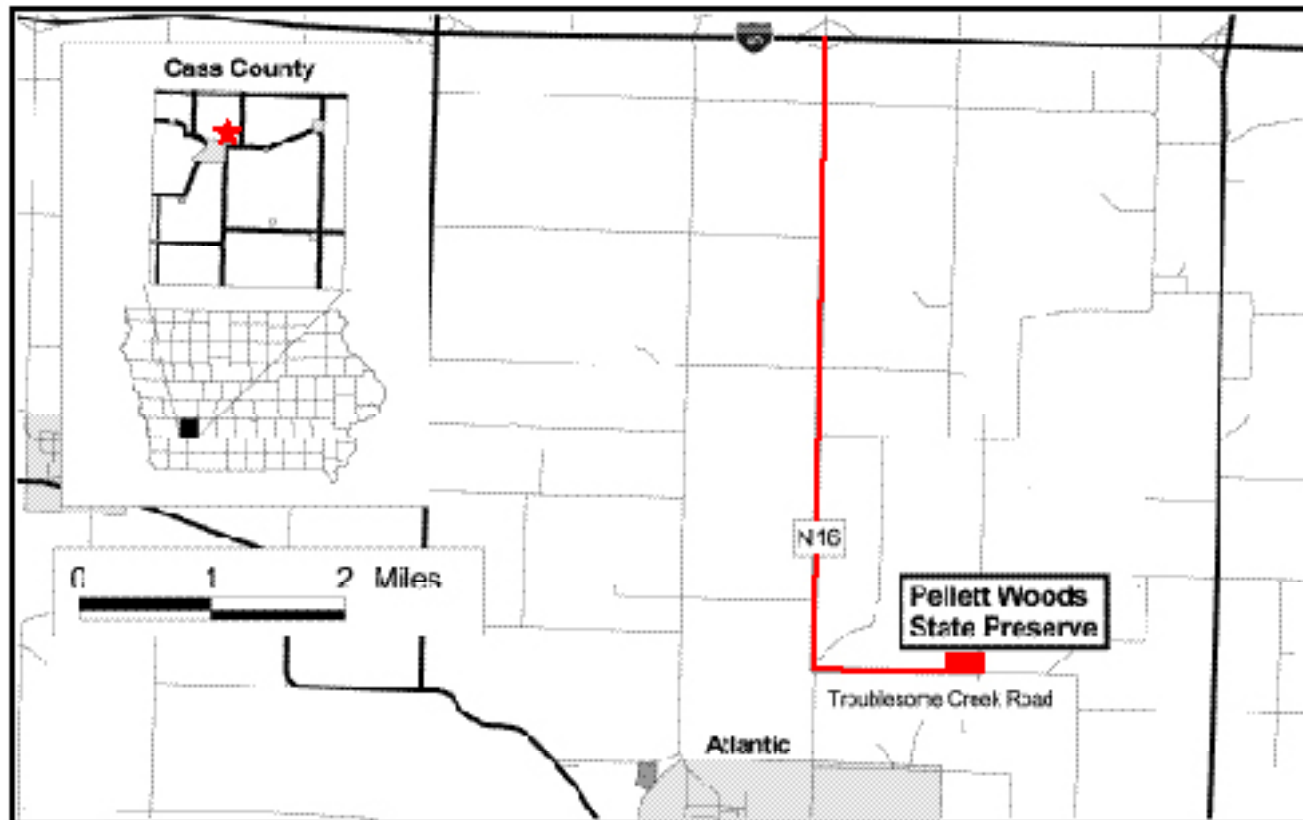
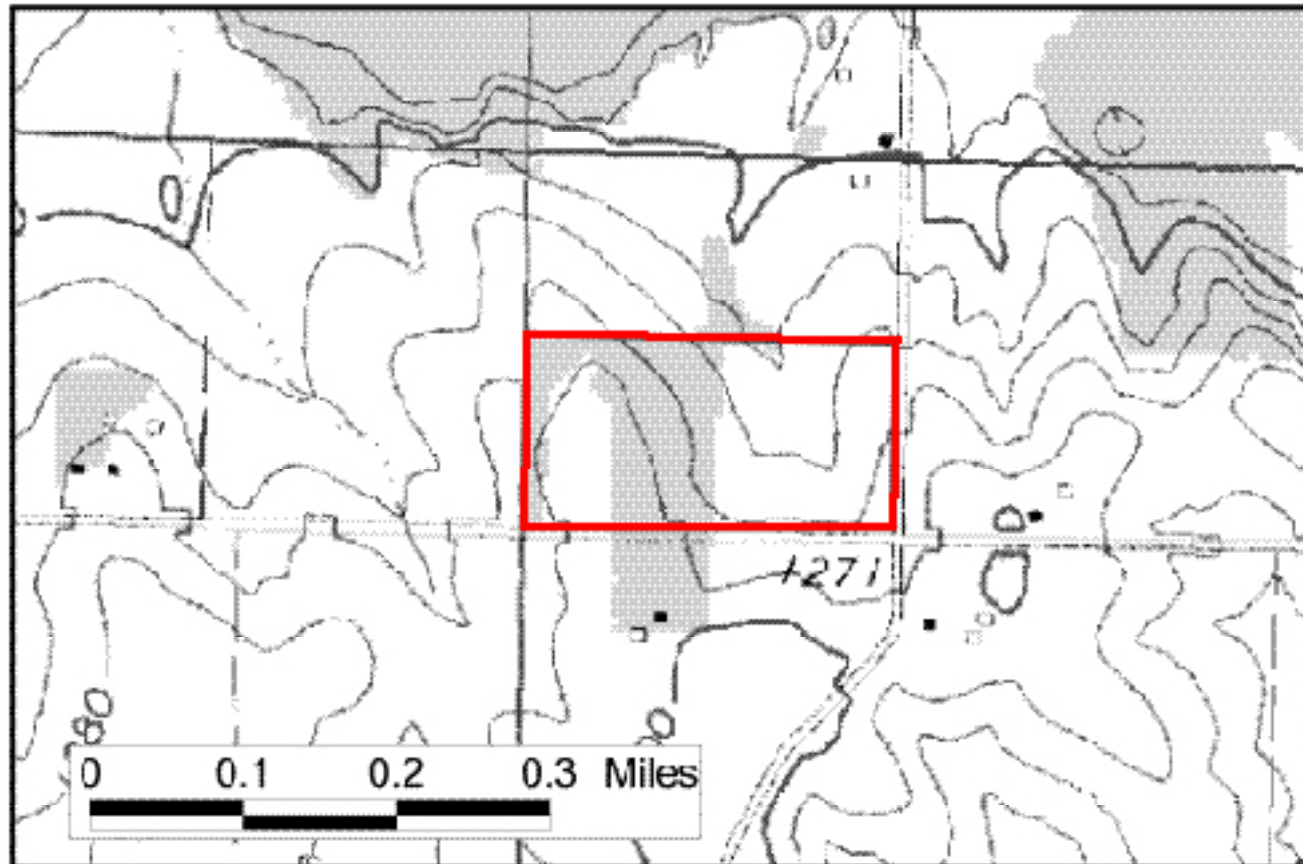
Pecan Grove is located in Muscatine Slough, an ancient channel of the Mississippi River near the northern end of the Mississippi Alluvial Plain landform region. Muscatine Slough was formerly a large area of bottomland forest, but has been extensively cleared, drained, and farmed. The preserve contains a small remnant of bottomland forest with a grove of native pecan trees. Dominant trees of the preserve include box elder, green ash, mulberry, and black walnut.

Other natural areas in the vicinity include Wildcat Den State Park and Red Cedar Wildlife Area and Wiese Slough Wildlife Area.

This preserve is not accessible to the public.

AREA MANAGER  
Iowa Department of  
Natural Resources  
Wapello Wildlife Unit  
260 Mulberry  
Wapello, IA 52653  
(319) 523-8319  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Pellett Woods State Preserve

Frank Chapman Pellett Memorial Woods is a 20-acre preserve located 3.5 miles northeast of Atlantic in Cass County. This woodland and its surrounding fields were set aside as a private wildflower sanctuary in 1907 by Frank Pellett. The woods served as a living laboratory for his nature study for more than forty years and, upon his death in 1951, was passed on to his son Melvin Pellett. In 1978, Melvin and Elizabeth Pellett dedicated the woodland as a biological state preserve named in honor of Melvin's father. Ownership of the preserve was deeded to the Iowa Conservation Commission in 1984 following the death of Melvin Pellett.

Located in the Southern Iowa Drift Plain landform region, the preserve contains an upland woodland of red oak, basswood, hackberry, ash, and walnut with an attractive spring flora. More than 120 plants are known to occur on the preserve. Many introduced species were planted by Frank Pellett, several of which have disappeared over the years. Prairie trillium, hepatica, bloodroot, and spring beauty are seen first as they pop through the dead leaves in the spring. Next come Virginia bluebells, wild ginger, violets, and Dutchman's breeches, followed by American bellflower, white trout-lily, bellwort, and blue cohosh along with mayapple, jack-in-the-pulpit, blue phlox, toothwort, and Solomon's seal. By late May, kidneyleaf buttercup, Virginia waterleaf, carrion flower, false Solomon's seal, and starry Solomon's plume are blooming. Although the preserve is known for its spring flowers, summer species also prosper including moonseed, white snakeroot, lopseed, and woodland sunflower.

Frank Pellett was a renowned horticulturist, author, journalist, conservationist, and the first state apiarist (beekeeper) for Iowa. He published thirteen books and numerous scientific articles. Pellett transplanted many of his prized collections from other parts of the state and country into this small woodland. He feared that with expanding agriculture, these wildflowers would soon become extinct as their habitat disappeared. He took great care of his wildflower garden and allowed no trees to be removed nor any grazing to occur, a practice which has now been in place for over ninety years. Melvin Pellett echoed his father's philosophy when he was once quoted:

To be a wildflower preserve, it has to be kept in the natural state. The fallen logs lay where they fall. It's always been in the natural state and it's our plan to keep it that way. The primary goal is for nature to take its course. These are wildflowers as nature left them.

A footpath runs through the woodland. Many groups, especially local school classes, visit the preserve each spring.

Other public areas in the vicinity include Prairie Rose, Lake Anita, and Cold Springs State Parks.

### DIRECTIONS

From the intersection of I-80 and County Highway N16 (exit 57, to Atlantic), drive south 4.5 miles to Troublesome Creek Road. Turn east (left) and go 1 mile to the preserve on the north side of the road (sign: Frank Chapman Pellett Memorial Woods).

### AREA MANAGER

Cass County Conservation Board  
 Box 371  
 5 West 7th Street  
 Atlantic, IA 50022  
 (712) 243-3542  
[www.atlantic.k12.ia.us/](http://www.atlantic.k12.ia.us/)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Pilot Grove State Preserve

Pilot Grove State Preserve is a 7-acre wooded area that is part of a larger grove that served as a local landmark for early settlers. It is located five miles west of Williamsburg in Iowa County. In 1978, this wooded tract and an adjacent pioneer cemetery were placed on the National Registry of Historical Places. In 1980, the Kelting family donated the grove of trees to the Iowa Conservation Commission with the expressed desire that it be restored as closely as possible to its condition at the time of Iowa's pioneer settlement in the mid-1800s. Later in 1980 the area was dedicated as a historical state preserve.

The gently rolling terrain around the preserve is characteristic of the Southern Iowa Drift Plain landform region. In the mid-1800s, the preserve was part of a larger wooded knoll rising above the surrounding prairie that could be seen for miles around. It served as a local landmark that gave a sense of direction for people traveling to and from Marengo, the county seat. Hence it earned the name "Pilot Grove." West of the preserve is a small pioneer cemetery. In 1870, local settlers designated this area as a memorial to pioneers and war veterans. The historical marker at the entrance to the cemetery reads: "This site, chosen by pioneers as a burial ground, includes a remnant of Pilot Grove, a landmark for early travelers. Earlier burials in the vicinity were removed to this place."

The preserve consists primarily of bur oak woodland. Spring wildflowers include mayapple, columbine, Virginia bluebells, and Solomon's seal. A tiny patch of prairie grasses and wildflowers that includes big bluestem, sideoats grama, Indian grass, and leadplant can be seen on a slope just west of the preserve. This small preserve provides a glimpse of the original vegetation that once was abundant on this knoll.

Other state preserves in the vicinity include Fleming Woods and Indian Fish Trap.

### DIRECTIONS

From I-80 take exit 216. Drive 4 miles south on County Road V66 to 260th Street (watch for sign). Turn west and go 0.75 mile to the preserve on the north side of the road. The preserve is north and east of Pilot Grove Cemetery (sign: Pilot Grove State Preserve).

### AREA MANAGER

Iowa County Conservation Board

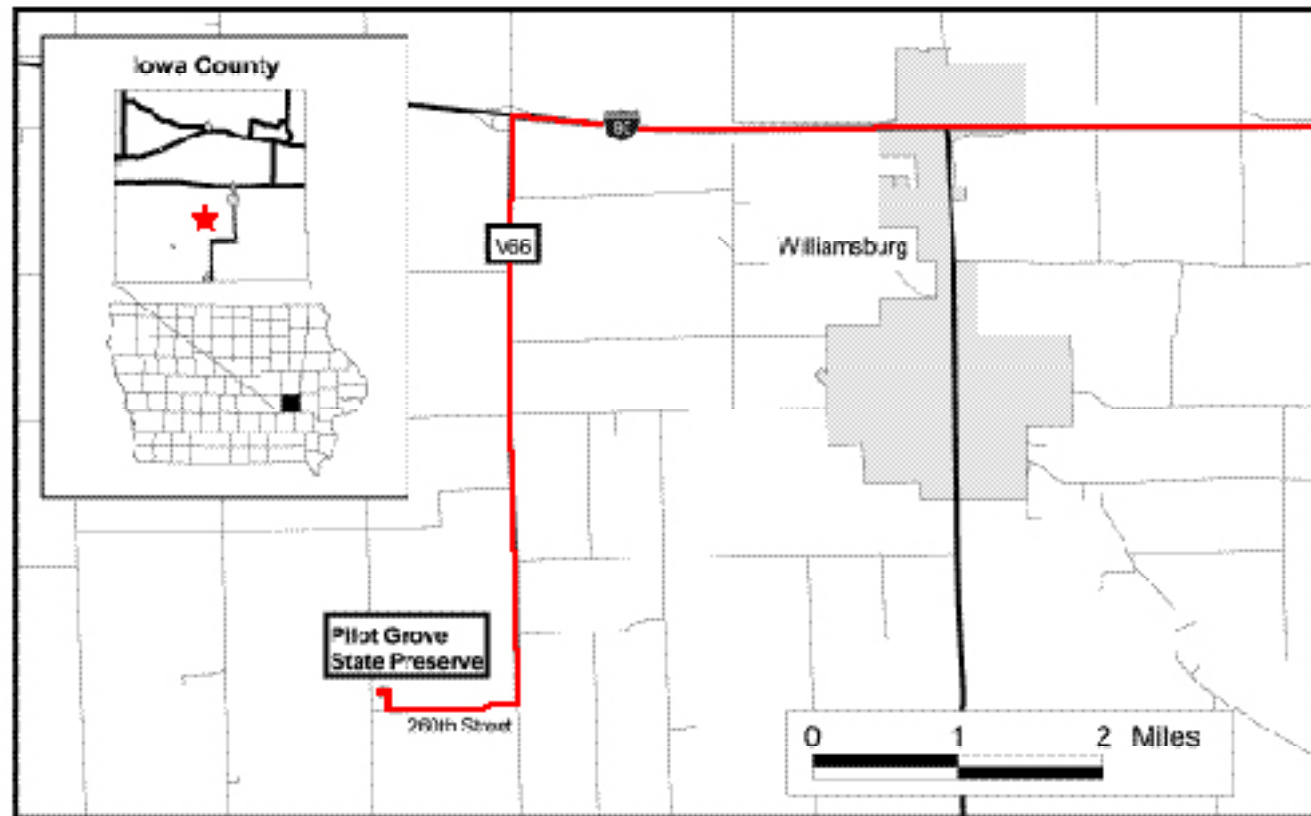
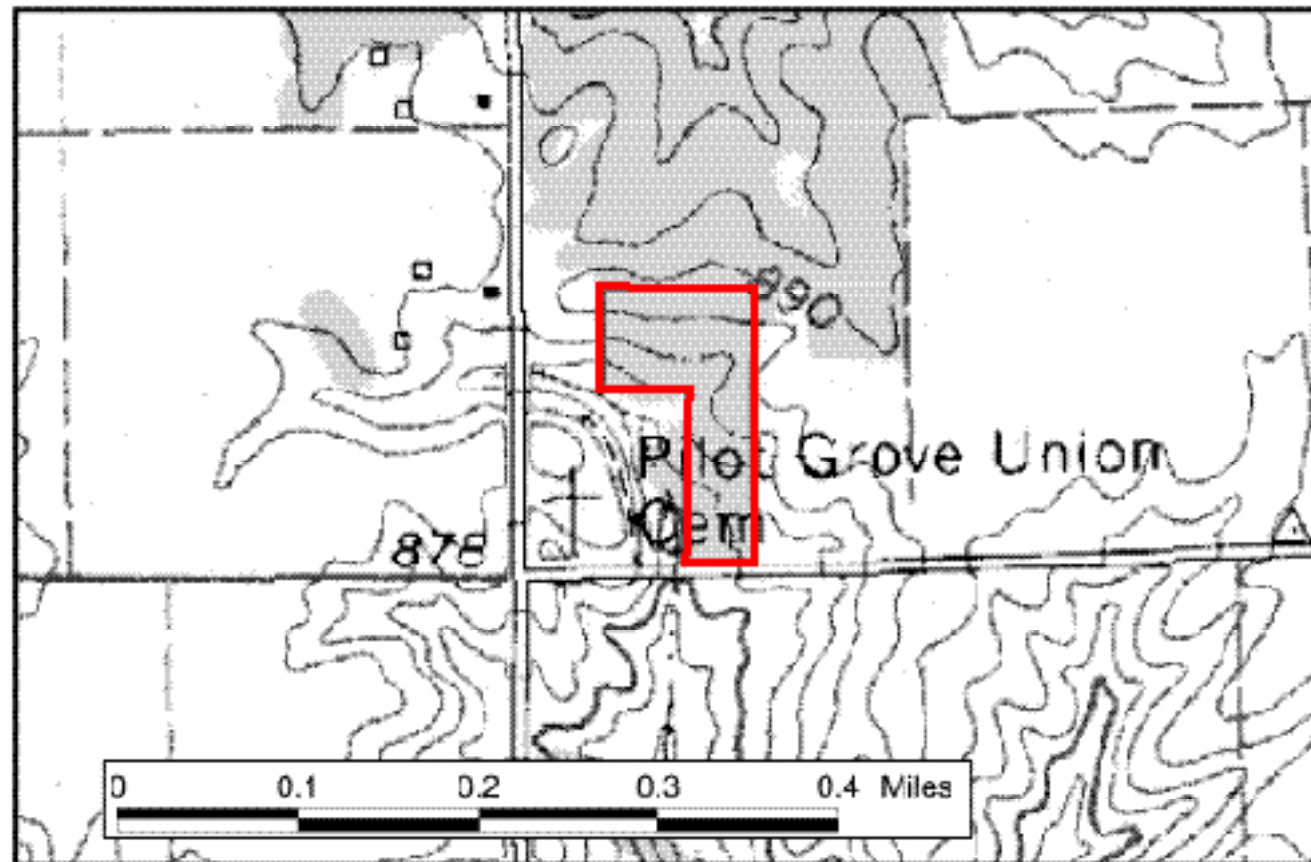
2550 G Avenue  
Ladora, IA 52251

(319) 655-8465

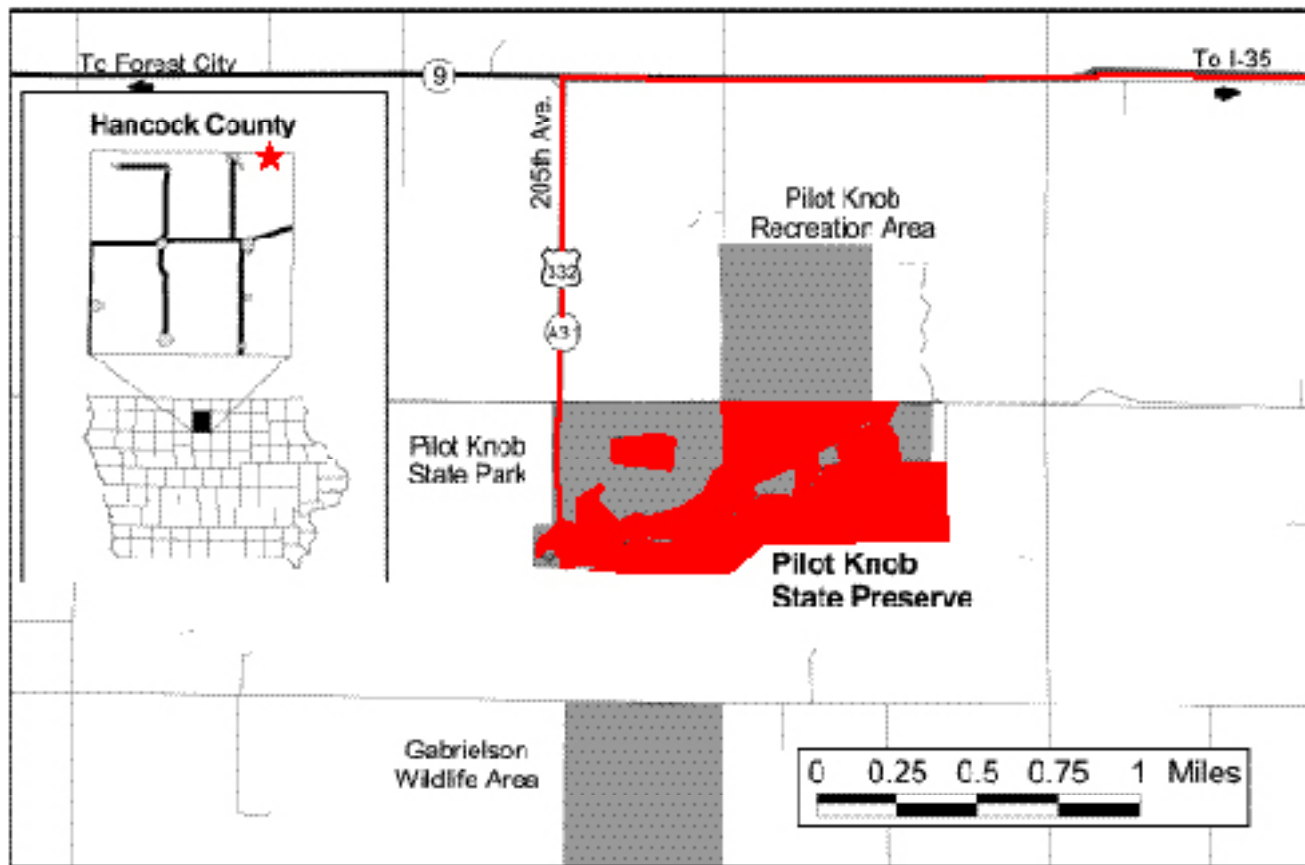
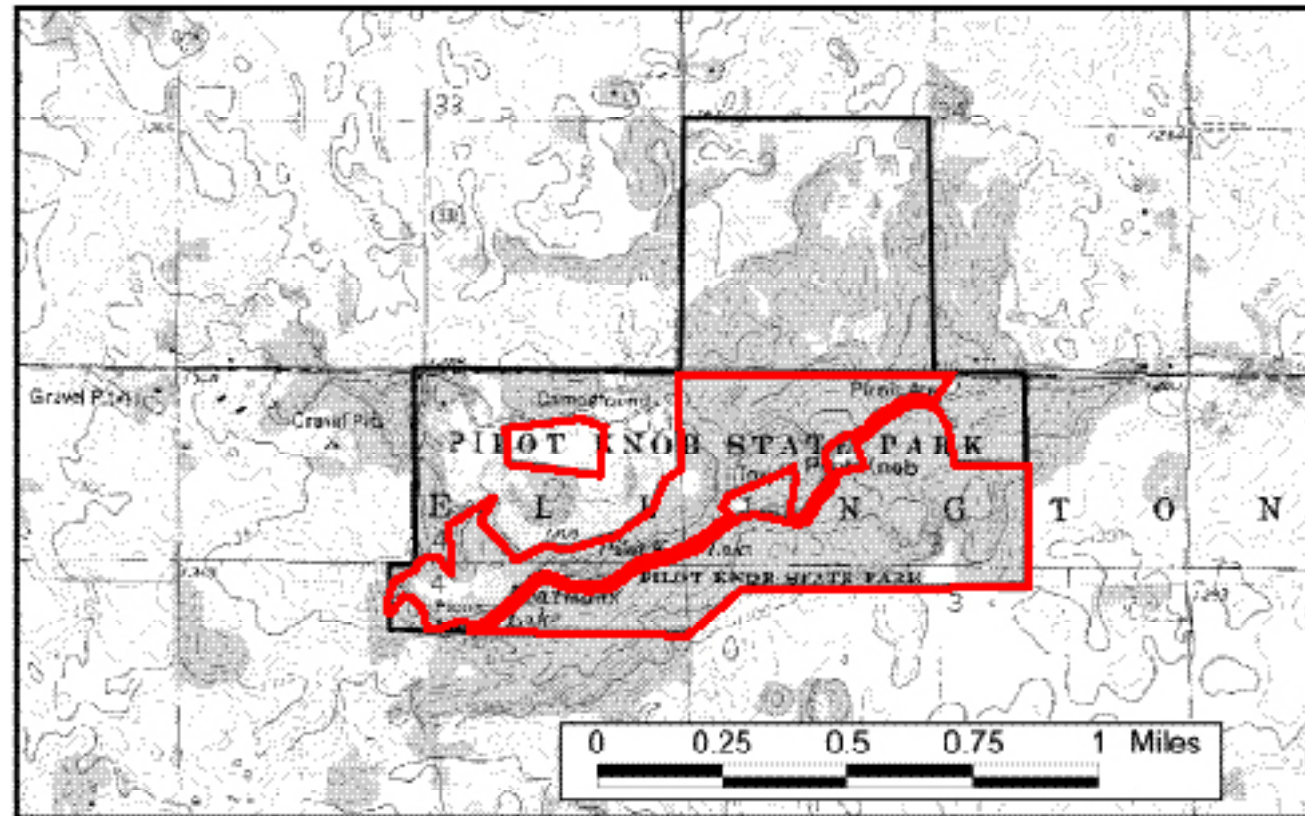
[www.netins.net/showcase/iccb](http://www.netins.net/showcase/iccb)  
[iccbec@netins.net](mailto:iccbec@netins.net)

[www.iowacountyconservation.com](http://www.iowacountyconservation.com)

[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Pilot Knob State Preserve



Pilot Knob State Preserve is a 238-acre area in Pilot Knob State Park, four miles east of Forest City in northeastern Hancock County. It features a “poor fen” and an extensive forest on a prominent hill associated with the Algona and Altamont moraines. In 1921, a group of local citizens purchased land around Pilot Knob and donated it to the state. The Iowa Conservation Commission established this area as a state park in 1924. In 1968, a large portion of the park was dedicated as a biological state preserve.

Located in the Des Moines Lobe landform region, Pilot Knob is a classic glacial kame. These distinct features are large, steep-sided, often conical hills composed of sand, gravel, and small boulders. This material was carried by a meltwater stream that poured off the edge of a stagnant ice front or into a large hole in the disintegrating ice. Bowl-shaped depressions (“kettles”) in the landscape result from melting of partially buried blocks of glacial ice. The Winnebago River was a drainage outlet during melting of the Algona ice front between 13,500 and 12,000 years ago. The Pilot Knob Member of the Wisconsinian-age Dows Formation is named for this site.

Over 420 plants have been found throughout the preserve in several plant communities. Most of the preserve consists of dry upland forest dominated by bur oak and northern pin oak. A small grove of white oak also occurs in the southeastern portion of the preserve. Mesic forests on some north-facing slopes are dominated by red oak and basswood. Ironwood, hazelnut, ash, and elm are common in the understory. Snow trillium, bloodroot, hepatica, and rue anemone can be seen as early as March, joined later by downy yellow violet, woodland sedge, wild ginger, Dutchman’s breeches, bellwort, showy orchis, wild geranium, nodding trillium, blue cohosh, wood anemone, ladies’ tobacco, jack-in-the-pulpit, and white trout-lily. Summer flowers include wild leek, wild sarsaparilla, white avens, and purple joe-pye-weed. By fall, zigzag goldenrod, smooth goldenrod, blue wood aster, and Ontario aster are blooming. Many ferns are found in the forest throughout the year.

Dead Man’s Lake is located in a 15-acre depression in the southwestern corner of the preserve. The east half of the lake is mostly open water surrounded by a narrow fringe of wetland vegetation composed largely of cattails, bulrushes, and willows, but the western half is a floating mat. More properly termed a “poor fen,” this boggy habitat is comprised of nearly a continuous mat of Sphagnum moss. Several rare plants in Iowa occur only here, including sundew and cordroot sedge. Other rare species in the bog include bog willow and slender cottongrass.

The marshes that are scattered throughout the preserve in the poorly drained depressions are dominated by sedges, bulrushes, and spikerushes. Other plants commonly found along these marsh edges include horsetail, arrowhead, smartweed, marsh muhly, rice cutgrass, and prairie cordgrass. Ferns include marsh fern, sensitive fern, and crested fern. Many plants bloom through the seasons beginning with spring cress and extending progressively through the summer with blue flag iris, giant bur reed, swamp loosestrife, monkey flower, marsh bellflower, swamp milkweed, northern bugleweed, and bulblet water hemlock. Great lobelia and nodding bur marigold fill out the fall season.

Pilot Knob State Park is listed on the National Register of Historic Places for its significant Civilian Conservation Corps facilities.

Hunting is not permitted.

Other natural areas in the vicinity include Gabrielson Wildlife Area and Hoffman Prairie State Preserve.

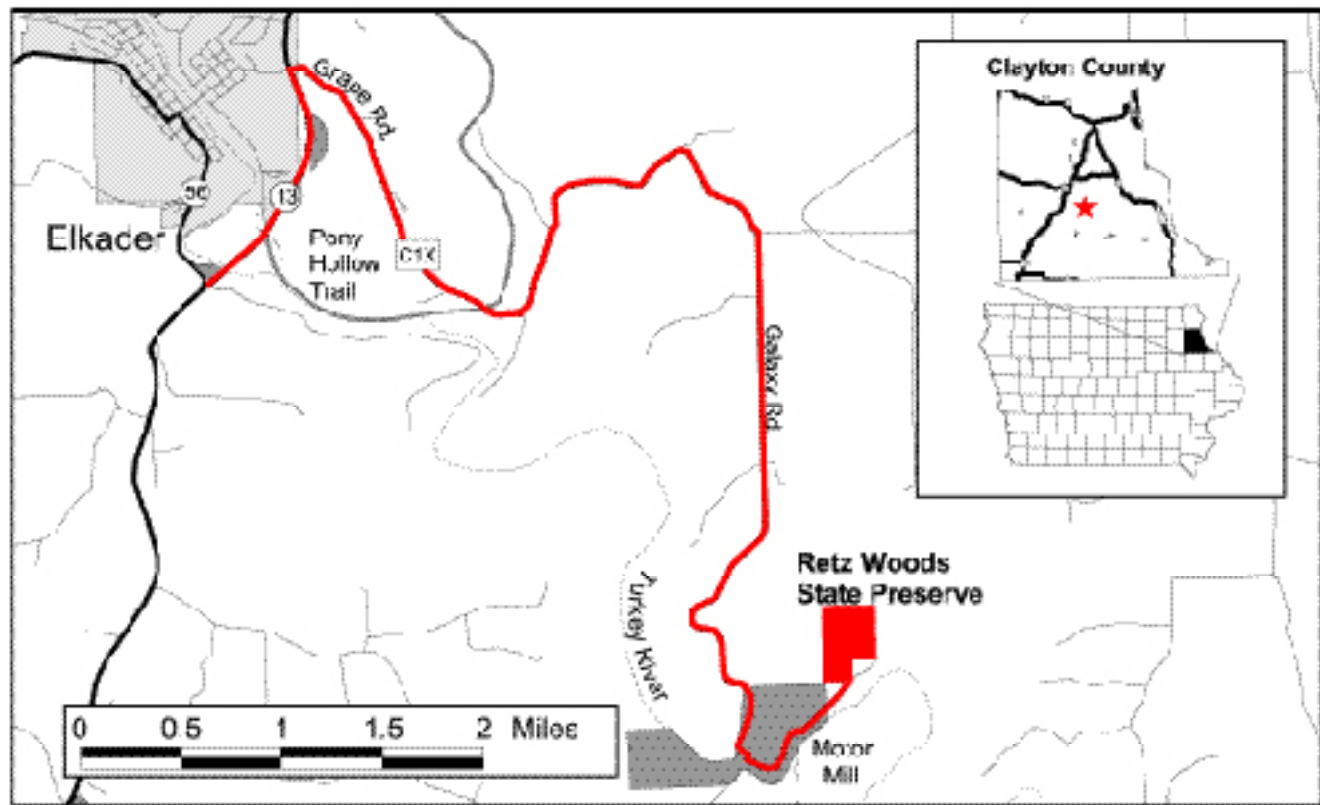
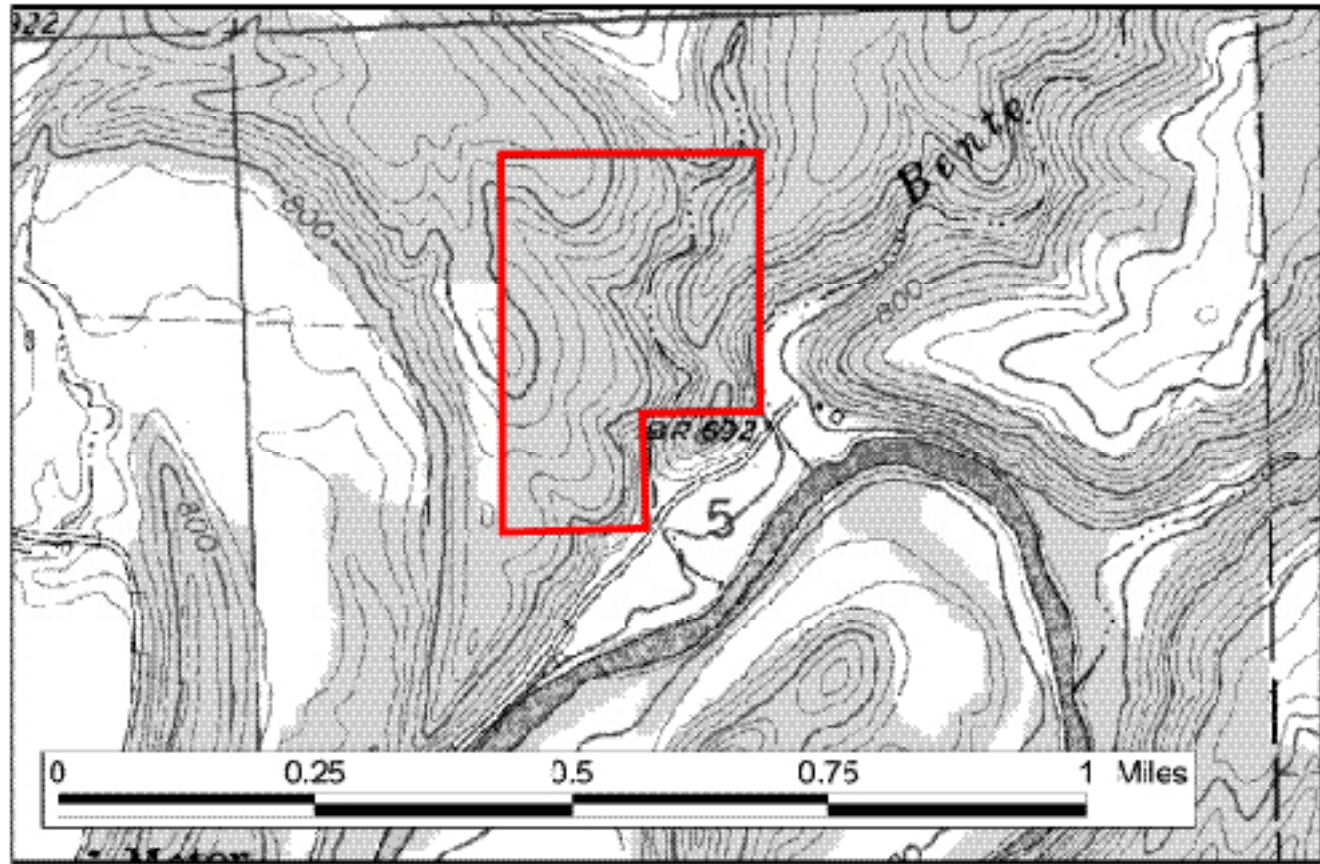
### DIRECTIONS

From the intersection of I-35 and Highway 18 on the east side of the town of Clear Lake, drive north on I-35 for 9 miles to Highway 9 (exit 203). Turn west (left) and go 12 miles on Highway 9 to 205th Avenue. Turn south (left) and follow this road 1 mile into Pilot Knob State Park (sign: Pilot Knob State Park). Continue south on the winding park road for an additional 0.75 mile to the Dead Man’s Lake picnic area, which is in the west end of the preserve.

### AREA MANAGER

Iowa Department of  
Natural Resources  
Pilot Knob State Park  
2148 340th Street  
Forest City, IA 50436  
(641) 581-4835  
Pilot\_Knob@dnr.iowa.gov  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Retz Woods State Preserve

Lyle Retz Memorial Woods is a 49-acre preserve featuring a rugged forested area in the Paleozoic Plateau landform region. It is located 4.5 miles southeast of Elkader in Clayton County. The area was purchased in 1965 from the Kopp family by the Iowa chapter of The Nature Conservancy. The area was dedicated as a biological and geological state preserve in 1980 and named in memory of Lyle Retz, a key member in pursuing the purchase of the property.

One of his sons wrote, "A piece of native timber, regarded as worthless by some, yet priceless by dad, unspoiled, left as God made it, is a living memorial more grand, more meaningful than any granite or marble stone could be. This has been a great tribute."

The preserve displays the dissected terrain typical of the Paleozoic Plateau in northeast Iowa. A deep ravine cuts through the eastern portion of the preserve. Picturesque limestone ridges and chimneys located along the eastern edge of the preserve belong to 450-million-year-old sedimentary rock of Ordovician age. Massive blocks of limestone slumped from nearby rock outcrops are covered with lush expanses of walking ferns, mosses, liverworts, and lichens.

The highly dissected nature of the land results in a great diversity of plant habitats, with over 130 vascular plant species plus many species of bryophytes (mosses and liverworts) and lichens. Dr. R. W. Poulter of Iowa Wesleyan College has described Retz Woods as "truly a botanist's paradise." White oak predominates level uplands in the western portion of the preserve with red oak and sugar maple becoming dominant in the canyonlike central and eastern portions. The understory contains sugar maple, red elm, white ash, blue beech, ironwood, gooseberry, Virginia creeper, wild grape, and carrion flower. Canada yew is common on bluffs along the eastern edge of the preserve. Wild lily-of-the-valley, jack-in-the-pulpit, nodding trillium, hepatica, showy orchis, Solomon's seal, rattlesnake fern, maidenhair fern, northern lady fern, and sensitive fern are among the many woodland ferns and wildflowers found in the preserve. It is an important habitat for birds such as scarlet tanagers, pileated woodpeckers, and ruffed grouse.

Hunting is not permitted.

Other natural or geological areas in the vicinity include Brush Creek Canyon, Mossy Glen, Bixby, and White Pine Hollow State Preserves, and Backbone State Park.

### DIRECTIONS

From the intersection of Highway 13 and Highway 56 on the south side of Elkader, take Highway 13 north for 1.25 miles to Grape Road. Turn east (right) and follow this winding road 3.5 miles to Galaxy Road. Turn south (right) and go 3 miles to the Motor Mill at the intersection of Galaxy Road and Grain Road. Turn left onto Grain Road and go for 0.75 mile to the preserve on the north (left) side of the road (sign: Retz Memorial Woods). Park on the roadside.

### AREA MANAGER

The Nature Conservancy  
303 Locust St., Suite 402  
Des Moines, IA 50309  
(515) 244-5044  
[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Roberts Creek State Preserve

Roberts Creek State Preserve is a 13.5-acre area featuring a steep, wooded, north-facing slope with a large population of northern wild monkshood, a federally threatened plant species found mainly on algific talus slopes. It is located in Clayton County. The land was purchased in 1987 and dedicated in 1990 as a biological and geological state preserve.

The steep, forested slope of this preserve is characteristic of the Paleozoic Plateau landform region. Outcrops of Ordovician-age limestone (450 million years old), sinkholes, and seeps or springs also can be found throughout the preserve. Such "karst" features are characteristic of terrain underlain by shallow, fractured limestone.

The forest community in this preserve is dominated by a mixture of sugar maple, basswood, and red oak. Steeper algific (cold-air) habitats also contain paper and yellow birch. Ninebark, downy serviceberry, alternate-leaved dogwood, bush honeysuckle, elderberry, blue beech, and ironwood are found in the understory. Bloodroot, spring beauty, and snow trillium are commonly found blooming in spring, beginning in March. By April, wild ginger, Dutchman's breeches, and downy yellow violet can be seen flowering along with bellwort, jack-in-the-pulpit, white trout-lily, Solomon's seal, showy orchis, blue cohosh, nodding trillium, swamp buttercup, and columbine. Green dragon, Canada mayflower, Jacob's ladder, and yellow lady's slipper begin blooming in May. By June and July, wild sarsaparilla, shinleaf, harebell, Indian pipe, and purple joe-pye-weed are scattered among the fern such as maidenhair fern, slender rockbrake, smooth cliff-brake, walking fern, northern lady fern, dissected grapefern, rattlesnake fern, and interrupted fern. Fall coralroot orchid and arrow-leaved aster join the floral display in August.

Other natural or geological areas in the vicinity include Pikes Peak State Park, and White Pine Hollow, Retz Woods, Bixby, and Mossy Glen State Preserves.

This preserve is not accessible to the public.

AREA MANAGER  
Iowa Department of  
Natural Resources  
Upper Iowa Wildlife Unit  
2296 Oil Well Road  
Decorah, IA 52101  
(563) 382-4895  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Rock Creek Island State Preserve

Rock Creek Island is a 30-acre wooded island in the Cedar River in Cedar County. It is located 0.5 mile upstream from the town of Rochester and has been owned by the state of Iowa since Iowa became a state in 1849. The island was dedicated as a geological state preserve in 1983. There are only a few large, relatively stable islands on interior streams in Iowa. The mouth of Rock Creek drains into the Cedar River just to the east of the preserve, hence the name.

This island is more than a half-mile long and 500 feet wide, and demonstrates long-term alluvial dynamics. The upstream end of the island, its oldest and highest part (ten to fifteen feet above normal river level), gradually erodes while new material is continually added to the younger, lower end (three to five feet above normal river level).

Silver maple and hackberry are the dominant tree species over most of the island, accompanied by sycamore, bitternut hickory, walnut, and a variety of other trees.

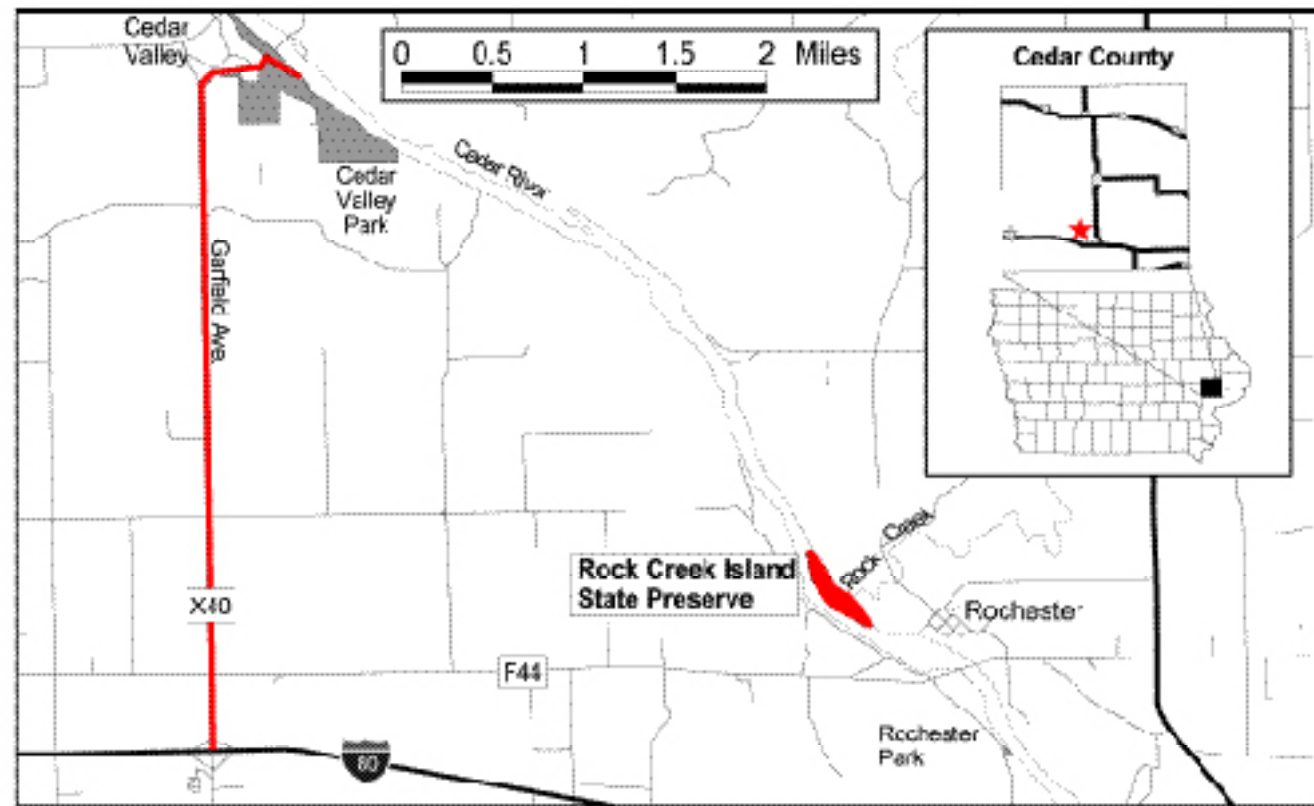
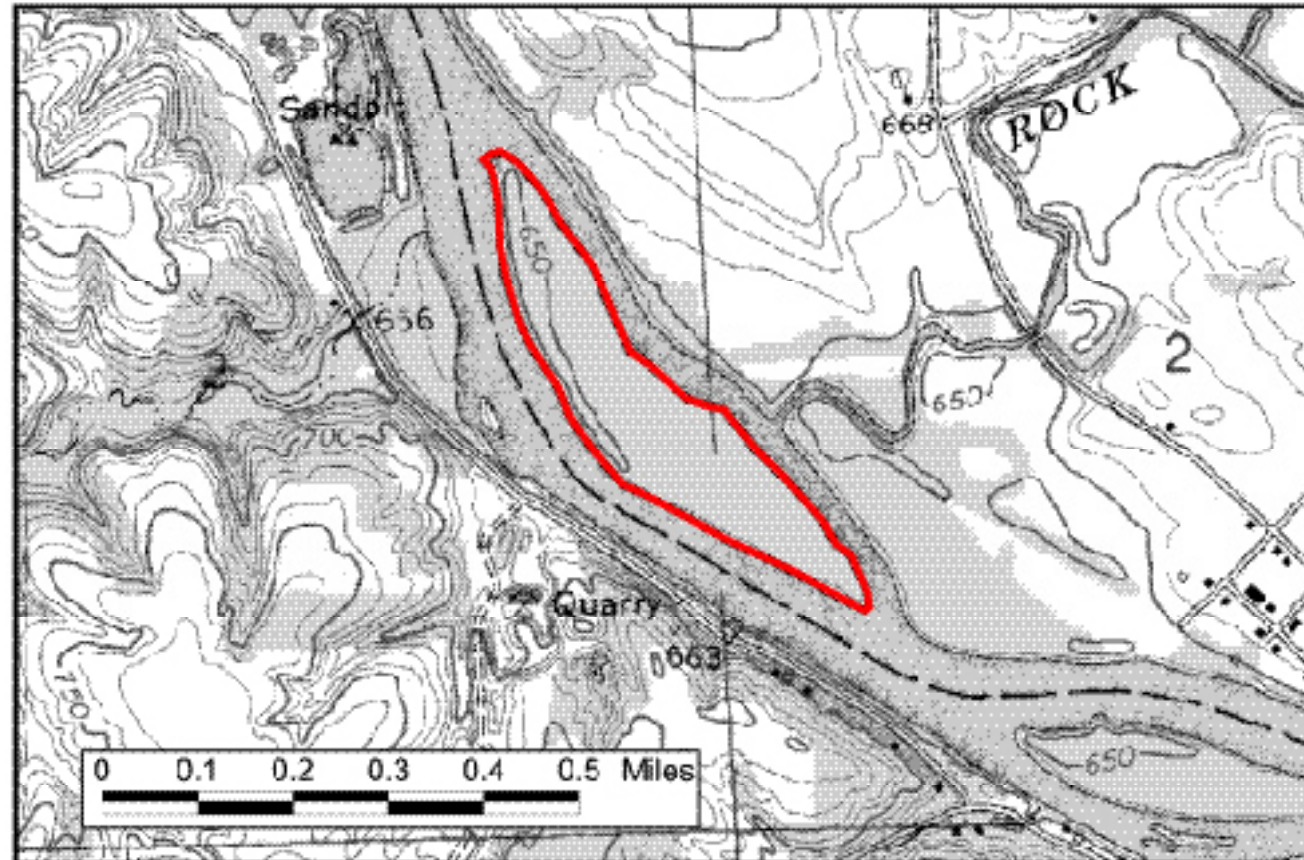
### DIRECTIONS

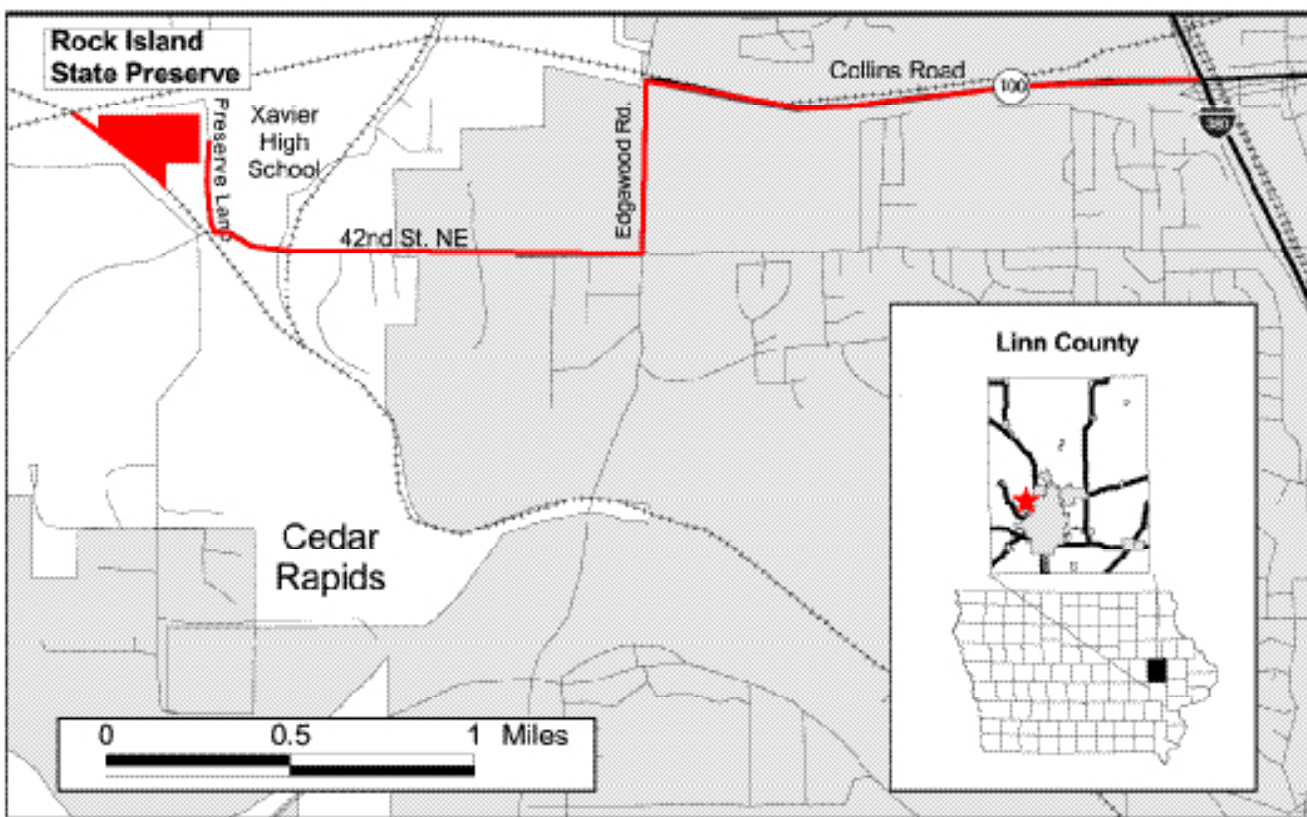
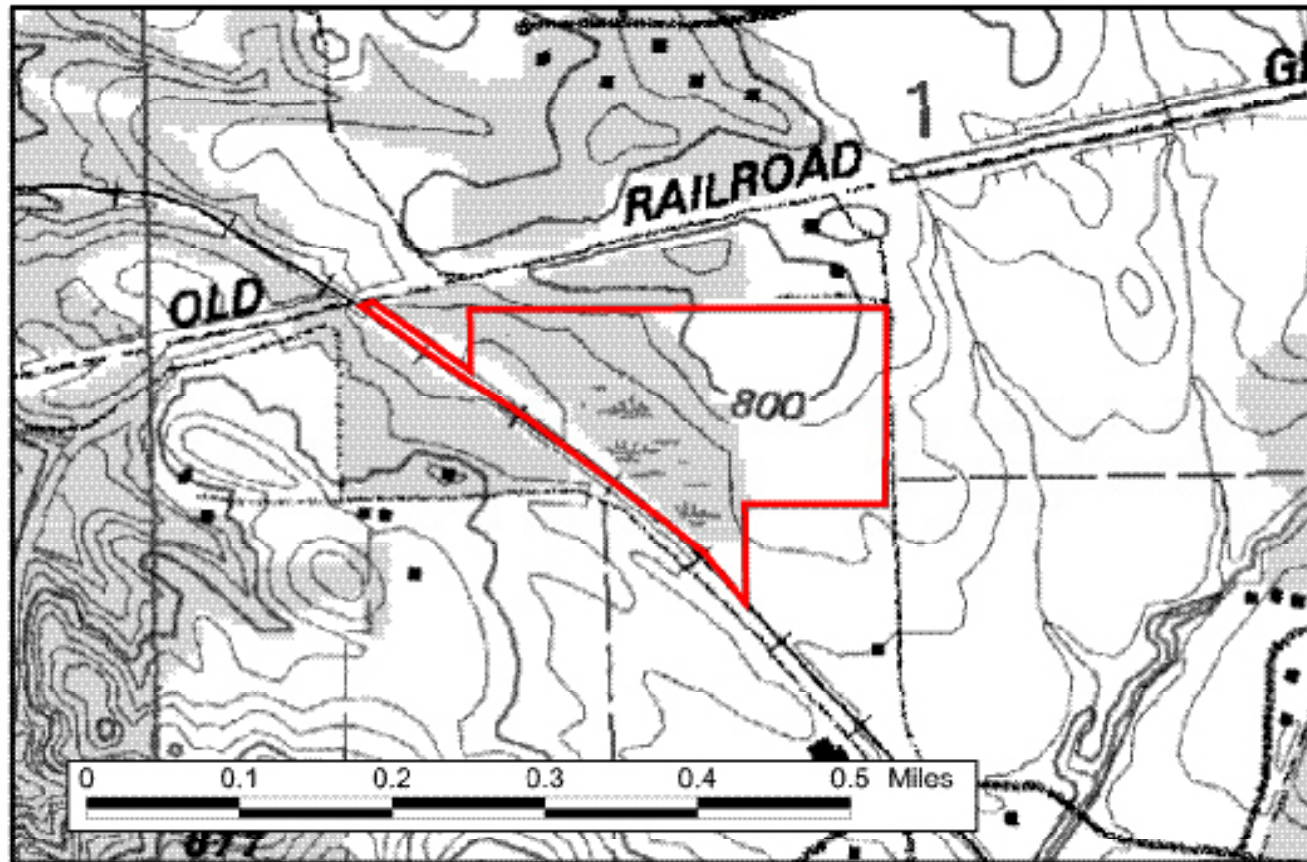
The preserve is an island in the Cedar River. It is not accessible by land.

From the intersection of I-80 and Highway 1 on the north side of Iowa City, go east on I-80 for 13 miles to County Road X40 (exit 259). Turn north (left) on County Road X40 (Garfield Avenue) and go 4 miles to Cedar Valley Park in the town of Cedar Valley. From the boat ramp there, you may float 5 miles downstream to the preserve, an island in the Cedar River. Downstream from the preserve about 1 mile, there is a boat ramp at Rochester Park near County Road F44, south of the town of Rochester.

### CONTACT

Iowa Department of  
Natural Resources  
Odessa Wildlife Unit  
260 Mulberry  
Wapello, IA 52653  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Rock Island State Preserve

Rock Island State Preserve is a 17-acre area featuring a sand prairie and an associated wetland and woodland. It is located in the northwest part of the city of Cedar Rapids in Linn County. The tract was given to the Linn County Conservation Board by the Rock Island Railroad Company in 1962 and was dedicated as a biological state preserve in 1978.

Located in the Iowan Surface landform region, the preserve stands conspicuously above the nearby Cedar River, whose valley was the source of sand blown onto adjacent uplands to form undulating sand dunes.

Vegetation in the preserve consists of upland dry sand prairie and a wooded area with upland, lowland, and wet habitats. A total of over 130 plants have been found in the preserve in various habitats. The prairie hosts a beautiful array of flowering forbs throughout the year starting with fringed puccoon in the spring. Hog peanut and lousewort can also be seen in the spring, followed later by Indian paintbrush, sand milkweed, butterfly weed, pale purple coneflower, gray-headed coneflower, black-eyed Susan, showy tick-trefoil, New Jersey tea, and common mountain mint in the summer. Fall flowers include gerardia, rough blazing star, grassleaf goldenrod, and white sage. The sandy prairie is also home for the hognose snake.

Portions of the floodplain in the woodland were once used as a source of fill by the railroad, creating a series of pools. Today, this habitat supports several uncommon wetland plant species and Sphagnum moss. The lowland forest is dominated by river birch, but dark green bulrush, American manna grass, rice cut-grass, cattail, Michigan lily, duck potato, soft rush, woolly bulrush, water plantain, sensitive fern, and swamp horsetail are also found here. Among the sixty species of butterflies noted at the preserve are byssus skipper, checkered white, gorgone checkerspot, northern broken dash, painted lady, wild indigo duskywing, Acadian hairstreak, and fiery skipper.

Other natural areas in the vicinity include Palisades-Dows, Behrens Ponds and Woodland, and Hanging Bog State Preserves, and Palisades-Kepler State Park.

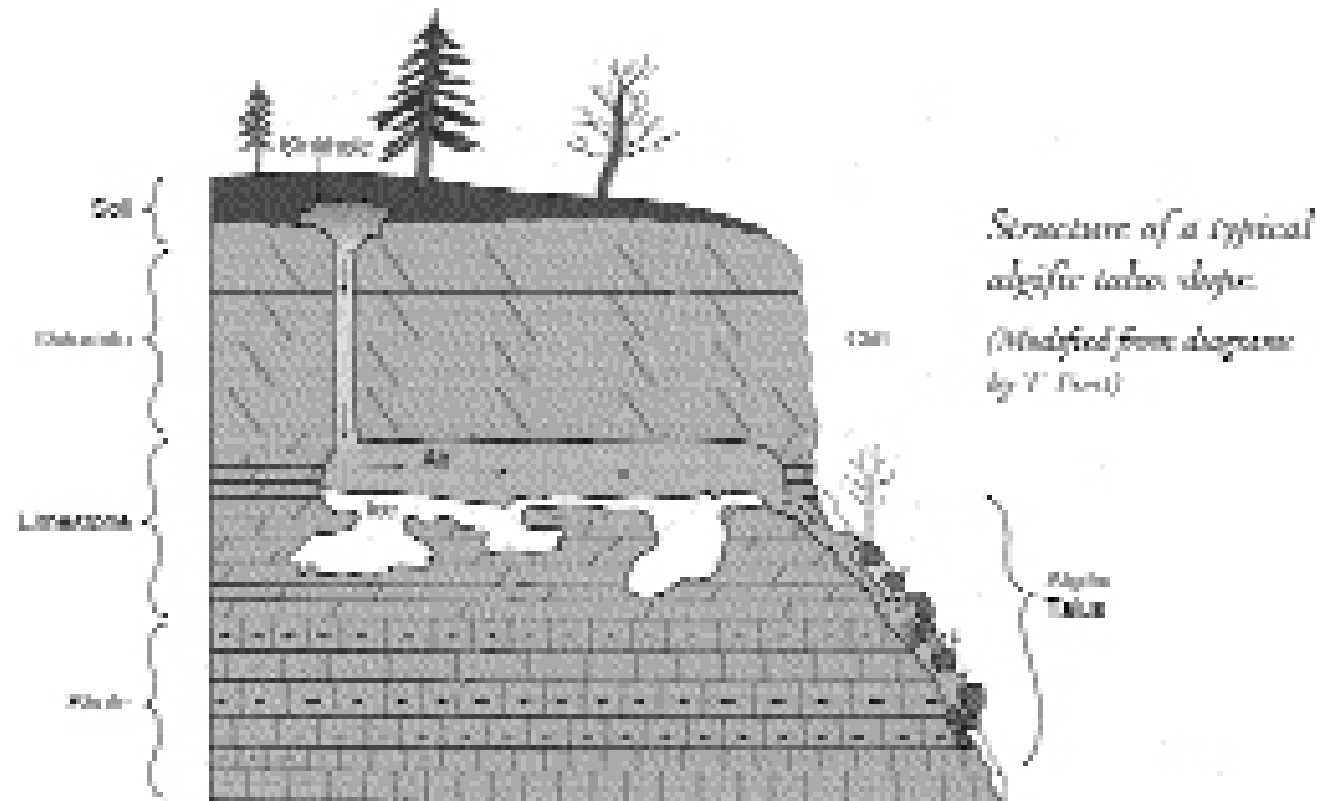
### DIRECTIONS

From the intersection of I-380 and Highway 100 (Collins Road) on the north side of Cedar Rapids, take Collins Road west 1.5 miles to intersection with Edgewood Road. Turn south (left) onto Edgewood Road and drive 0.5 mile to intersection with 42nd Street NE. Turn west (right) onto 42nd Street and drive 1 mile to intersection with Preserve Lane (just past Xavier High School). Turn north (right) onto Preserve Lane and go 0.25-mile to the preserve on the west side of the high school athletic field.

### AREA MANAGER

Linn County Conservation Board  
 1890 County Home Road  
 Marion, IA 52302  
 (319) 892-6450  
[www.mycountyparks.com/county/linn](http://www.mycountyparks.com/county/linn)  
[conservation@linncounty.org](mailto:conservation@linncounty.org)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Roggman Boreal Slopes State Preserve

Charles and Anna Roggman Boreal Slopes is a 20-acre preserve located in Clayton County featuring a forested hillside with algal talus slopes, which are unusual habitats created by seepage of cold air from underground fissures. Owned by the Roggman family since 1920, this area was given to The Nature Conservancy in 1980 by Arnold and Laverne Roggman and Bernadine Fieta in honor of their parents. It was dedicated as a biological state preserve in 1982.

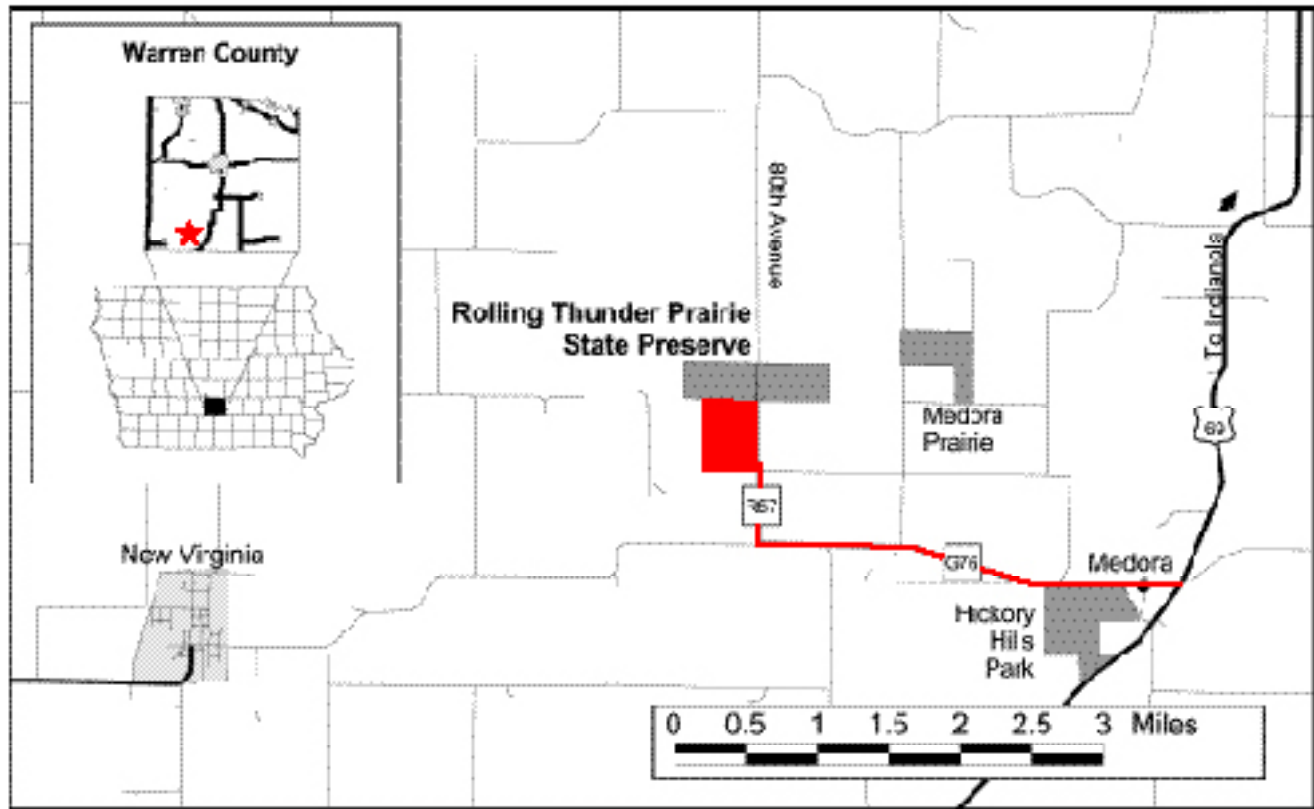
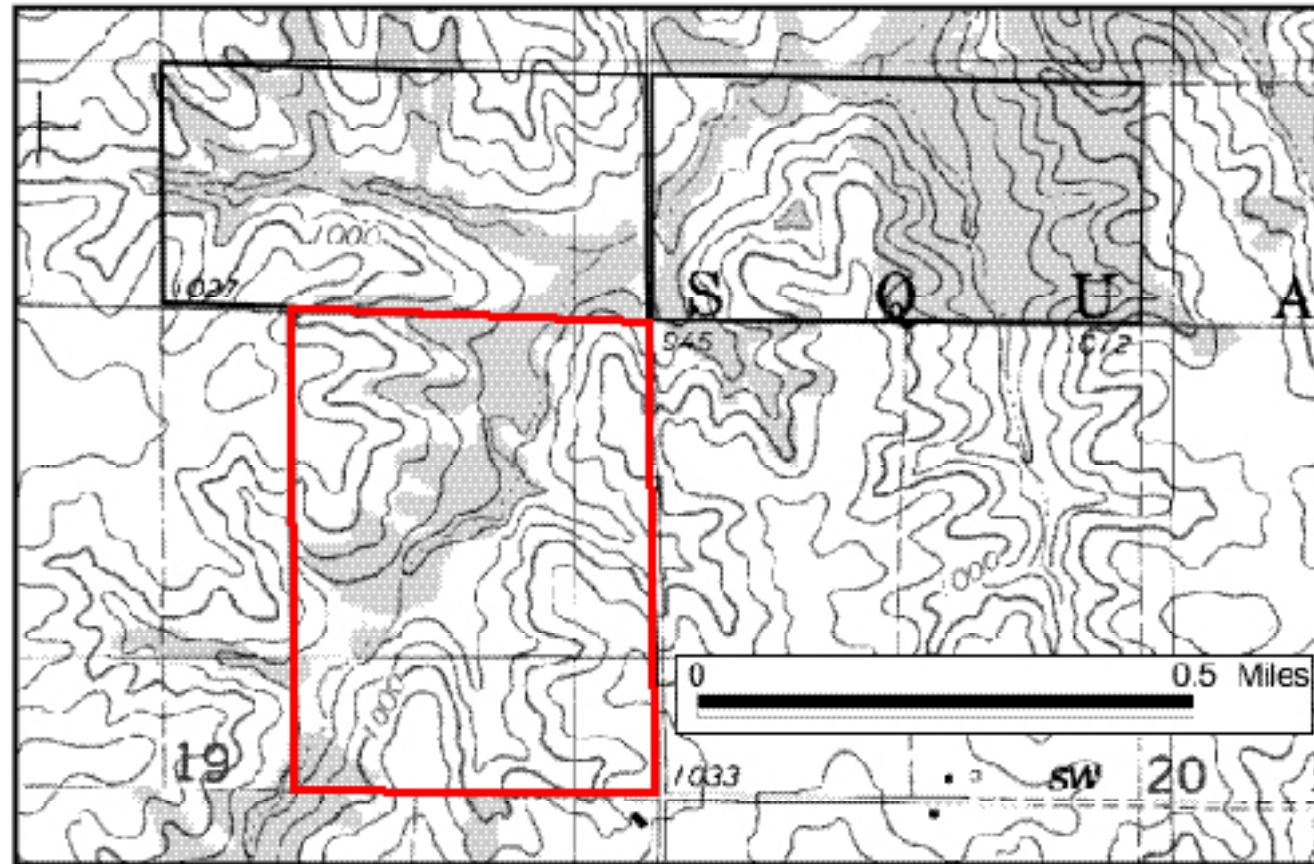
Located in the Paleozoic Plateau, this preserve is underlain by Ordovician (450 million years old) dolomite belonging to the Galena Group, with bedrock bluffs over 100 feet high. Nearly 170 species of plants have been found in the preserve. The steep, north-facing slopes are dominated by sugar maple, basswood, and red oak. Yellow birch is found on the algalic habitats. Blue beech, bladdernut, and leatherwood are frequently encountered in the understory, along with alder-leaved buckthorn, red-berried elder, beaked hazel, highbush cranberry, and beaked willow. Canada yew forms dense thickets on rock outcrops. Mosses thickly carpet large areas of the algalic slopes. Maidenhair fern, Goldie's wood fern, spinulose wood fern, squirrel corn, bishop's cap, wild leek, bloodroot, hepatica, showy orchis, Indian pipe, and wild ginger also occur in the preserve.

Other state preserves in the vicinity include Bixby, Mossy Glen, and Merritt Forest.

There is no public access to this preserve.

AREA MANAGER  
 The Nature Conservancy  
 303 Locust St., Suite 402  
 Des Moines, IA 50309  
 (515) 244-5044  
[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Rolling Thunder Prairie State Preserve

Rolling Thunder Prairie is a 123-acre preserve featuring a gently rolling prairie landscape. It is located four miles east of New Virginia and ten miles southwest of Indianola in Warren County. The area was purchased in 1980 by the Warren County Conservation Board and was dedicated as a biological state preserve during the first "Prairie Heritage Week" in 1983.

Located in the Southern Iowa Drift Plain landform region, this rolling prairie is dissected by several wooded ravines. The prairie plant community displays a progressive change of flowering species during the year. In the spring, hoary puccoon, golden alexanders, prairie phlox, bird's-foot violet, violet wood sorrel, blue-eyed grass, indigo bush, yellow stargrass, wild indigo, and false gromwell are among the first to appear. By June, the early bloomers are joined by prairie cinquefoil, leadplant, prairie coreopsis, pale purple coneflower, pale spiked lobelia, spiderwort, purple prairie clover, rattlesnake master, butterfly weed, prairie rose, and wild petunia. Thimbleweed, compass plant, prairie blazing star, ironweed, and wild bergamot appear in July. In the fall, heath aster, New England aster, fall aster, Jerusalem artichoke, showy goldenrod, Canada goldenrod, and downy gentian are scattered around the hills.

Song sparrow, bobolink, grasshopper sparrow, western meadowlark, vesper sparrow, and yellow warbler are birds frequently found here, along with an occasional upland sandpiper and northern harrier. Butterflies include the dusted skipper, regal fritillary, coral hairstreak, great spangled fritillary, common wood nymph, wild indigo duskywing, and black dash.

Hunting is permitted.

Other natural areas in the vicinity include Lake Ahquabi State Park and Berry Woods and Woodland Mounds State Preserves.

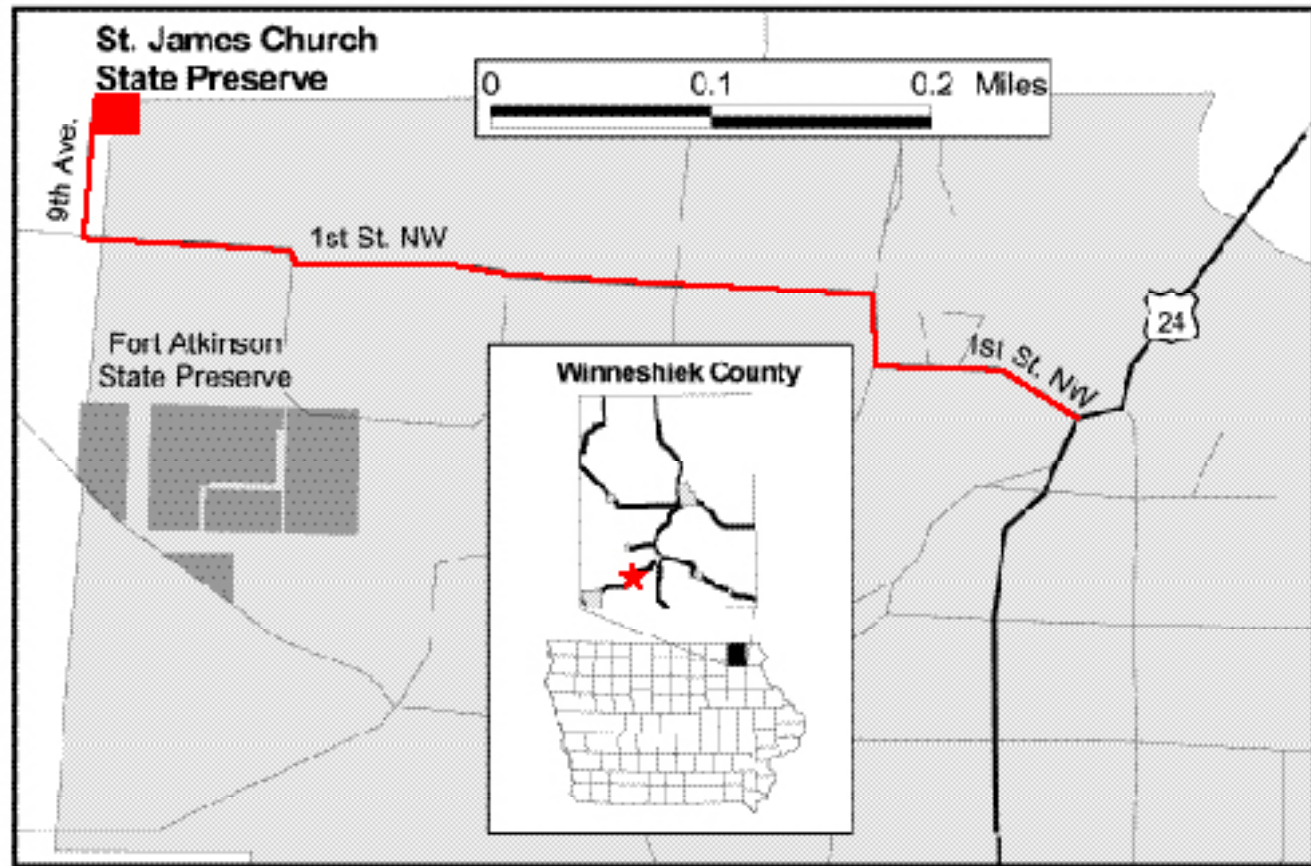
### DIRECTIONS

From the intersection of Highway 65/69 and Highway 92 in Indianola, take Highway 69 south for 12 miles to County Road G76 (sign: Rolling Thunder Prairie, Warren County Conservation Board). Turn west (right) and go 3 miles to County Road R57 (80th Avenue). Turn north (right) and go 0.75 mile north to the preserve on the west side of the road (sign: Rolling Thunder Prairie State Preserve).

AREA MANAGER  
Warren County  
Conservation Board  
1555 118th Avenue  
Indianola, IA 50125  
(515) 961-6169

[www.warrenccb.org](http://www.warrenccb.org)  
[wccb@warrenccb.org](mailto:wccb@warrenccb.org)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Saint James Lutheran Church State Preserve

Located immediately north of the Fort Atkinson State Preserve, the Saint James Lutheran Church State Preserve contains the remnants of a historic church constructed between 1840 and 1866. Originally constructed by the First Congregational Church Society of Fort Atkinson, it was sold to the German Evangelical Lutheran Saint James Church Society in 1871. It served as a place for worship as well as the center of the German immigrant community until 1894, when it was abandoned. Today, the 1-acre site contains the roofless, limestone walls of the original church and a small cemetery with burials dating to 1874. It was acquired by the Iowa Conservation Commission in 1970 and dedicated as a historical state preserve.

Other historic preserves in the state include Fort Atkinson, Montauk, Mount Pisgah Cemetery, and Old State Quarry.

### DIRECTIONS

From Decorah, drive south on Highway 52 for 9 miles to Calmar. Turn west (right) onto Highway 24 and go 5 miles to the town of Fort Atkinson. From Highway 24 (1st Street) in the town of Fort Atkinson, turn west (right) onto 1st Street NW and go to 9th Avenue (watch for Historic Site signs). Turn north (right) and go 0.5 block to the preserve (sign: Saint James Lutheran Church).

### AREA MANAGER

Iowa Department of  
Natural Resources  
Volga River Recreation Area  
10225 Ivy Road  
Fayette, IA 52142  
(563) 425-4161  
Volga\_River@dnr.iowa.gov  
www.iowadnr.gov/preserves/  
State\_Preserves@dnr.iowa.gov



## Savage Woods State Preserve

David Savage Memorial Woods is a 12-acre preserve featuring a small upland forest. It is located ten miles southwest of Mount Pleasant in western Henry County. The woodland had been owned by the Savage family since 1904. In 1966, it was given to the Iowa chapter of The Nature Conservancy by Alice Savage in memory of David Savage, a botanist. It was dedicated as a biological state preserve in 1980.

Located in the Southern Iowa Drift Plain landform region, this preserve is part of a landscape of rolling hills with branching rivers and streams. Topography within the preserve includes an upland ridge intermittent streambed. This upland forest is dominated by white oak, red oak, and shagbark hickory with ironwood, black cherry, and red elm present in the understory. Sugar maple is prominent in the overstory on lower slopes and along the streambed.

Over 100 species of plants have been found in this preserve. As early as March, spring beauty, hepatica, and bloodroot can be found on the forest floor, followed by Dutchman's breeches, jack-in-the-pulpit, wild geranium, mayapple, blue phlox, Solomon's seal, and kidneyleaf buttercup. Spring is also a good time to see the flowering of redbud trees. By May, anise root, carrion flower, false Solomon's seal, Virginia waterleaf, and wood sorrel are in flower. They can be seen among the fronds of blunt-lobed woodsia, ebony spleenwort, and rattlesnake ferns. White avens, slender mountain mint, great blue lobelia, spotted jewelweed, and lopseed begin blooming in early summer. In the fall, American bellflower, blue wood aster, and elm-leaved goldenrod can be found in the woodland.

Many of the common woodland birds may be found here, including yellow-billed and black-billed cuckoos, red-headed, hairy, and downy woodpeckers, great crested flycatcher, eastern wood pewee, rose-breasted grosbeak, red-eyed, warbling, and solitary vireos, black-and-white and yellow-throated warblers, white-breasted nuthatch, tufted titmouse, black-capped chickadee, wood thrush, and veery.

Hunting is not permitted.

Other state preserves in the vicinity include Woodthrush Woods, Lamson Woods, and Starr's Cave.

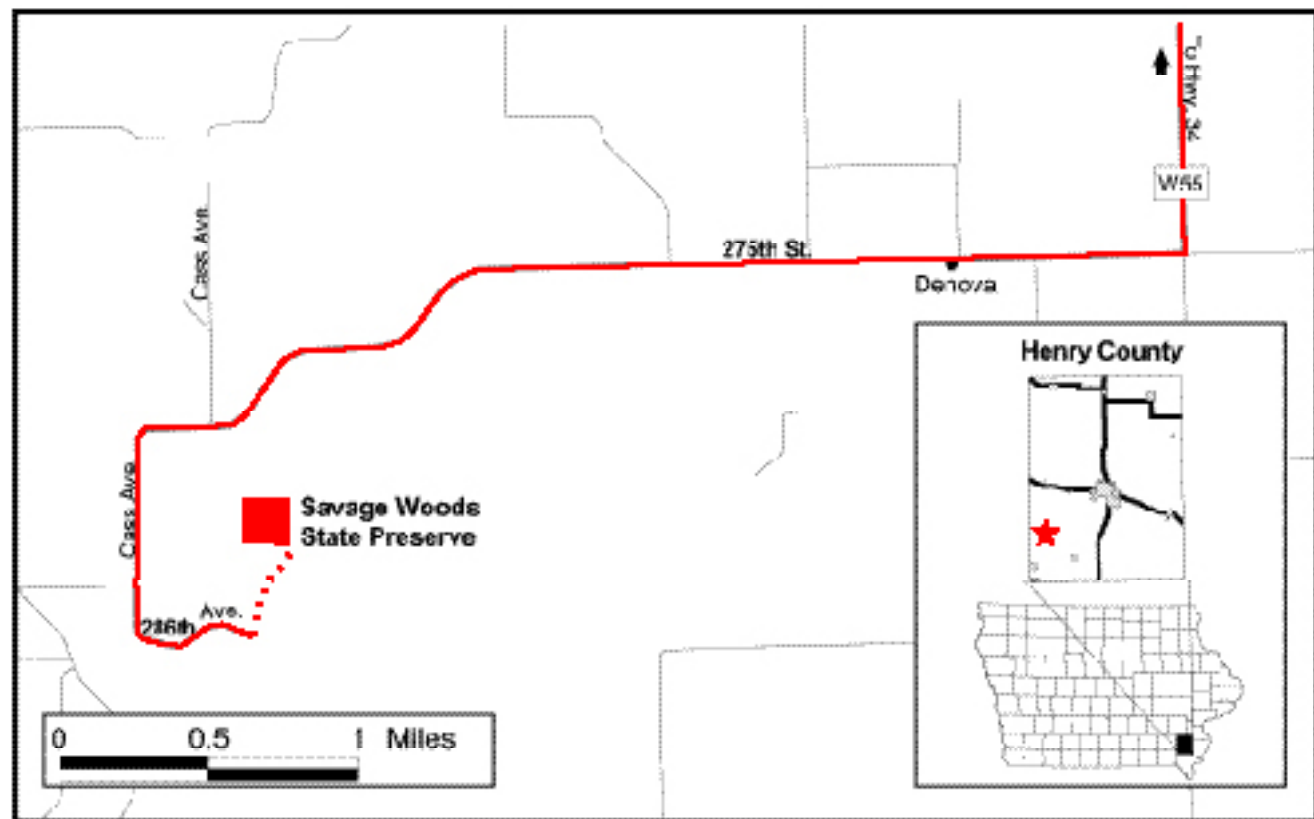
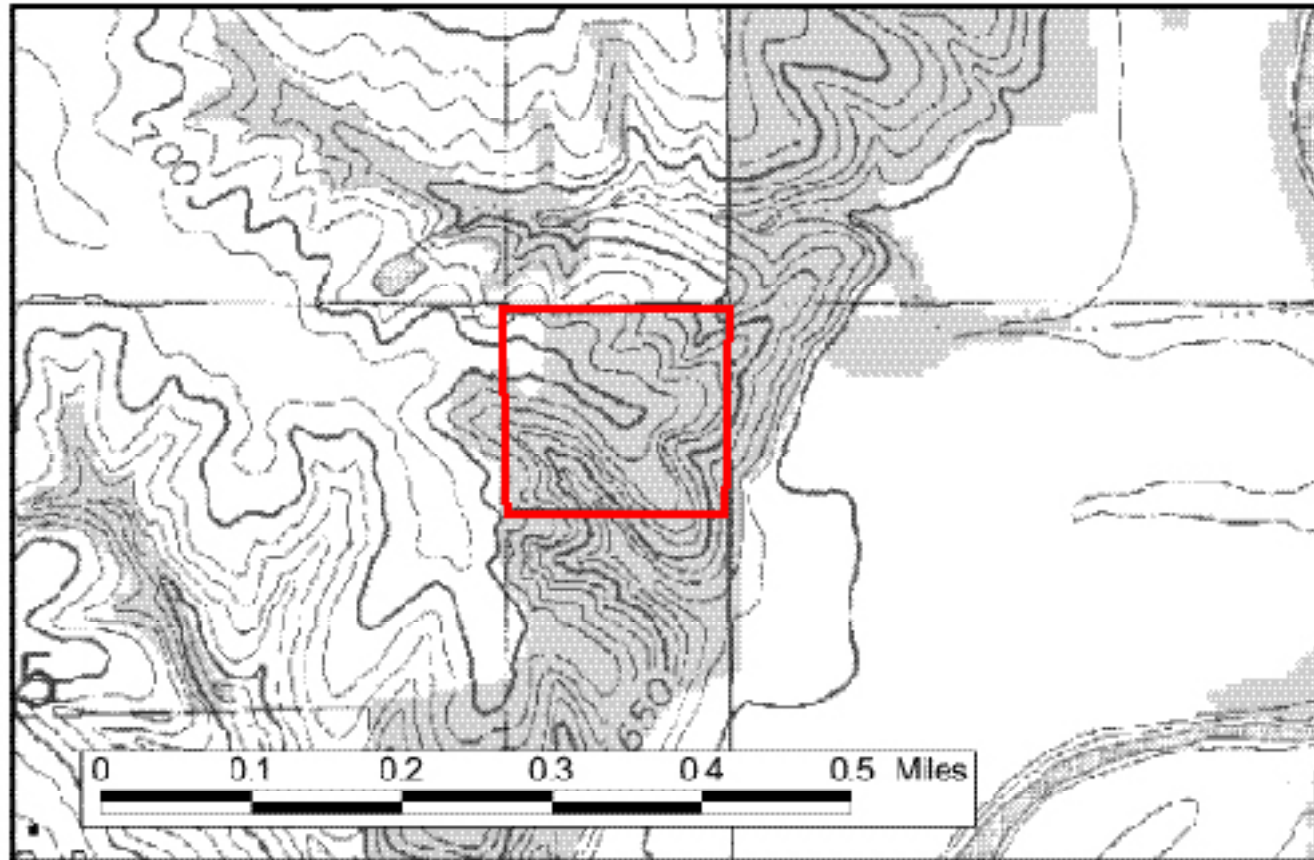
### DIRECTIONS

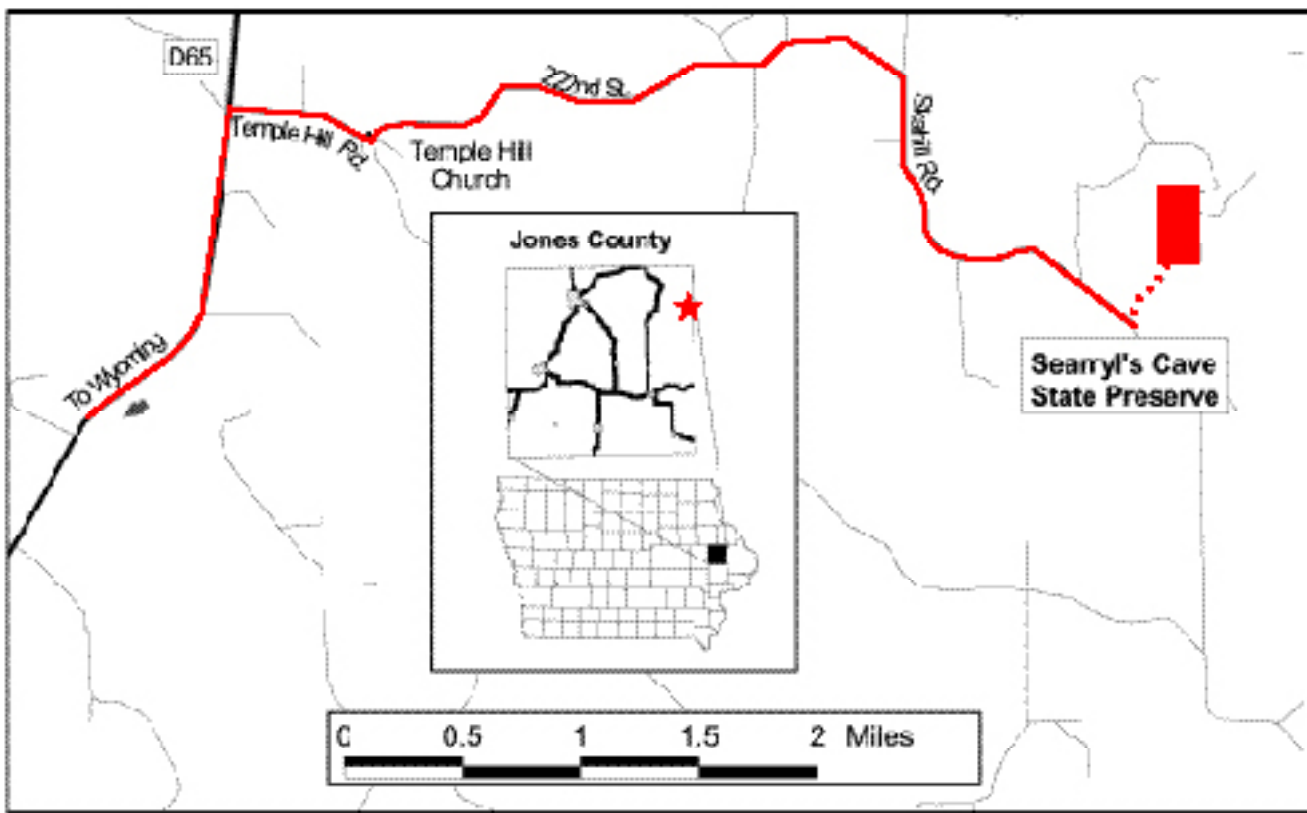
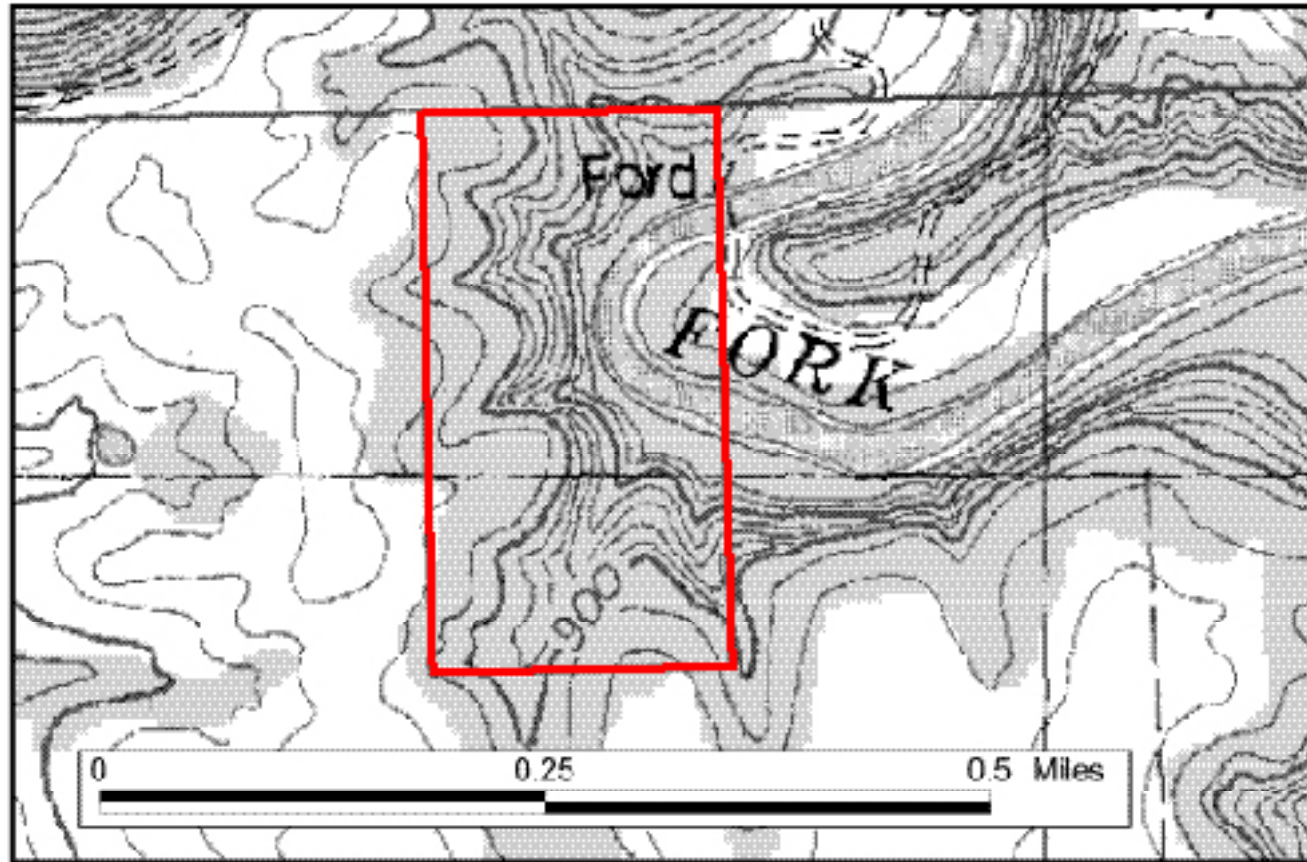
From the intersection of Highway 34 and Highway 218 in Mount Pleasant, take Highway 34 west 3.5 miles to County Road W55. Turn south (left) and go 4 miles to 275th Street. Turn west (right) and follow 275th Street on a winding route for 4.5 miles. At the intersection of 275th Street with 286th Avenue, continue south (straight) on 286th Avenue. Follow this curving dead-end road about 0.5 mile to the Mills farmstead and park across the road from the front of a stone house.

From the stone house, walk north along the east side of the fenceline between the house and the barn, then continue northeasterly for 0.25 mile to the southeast corner of the preserve (sign: Savage Memorial Woods).

### AREA MANAGER

The Nature Conservancy  
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[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Searry's Cave State Preserve

Searry's Cave State Preserve is a 43-acre area featuring a natural cave formed by groundwater movement through limestone bedrock. It is located ten miles southeast of Cascade and twenty miles northwest of Maquoketa in Jones County. The area was purchased by the Iowa Department of Natural Resources in 1991 and dedicated as a biological and geological state preserve in 1992. It was named after the original homesteader.

The cave is an important overwintering roost for several species of bats. Entry is prohibited between October-15 and April-1 to protect hibernating bats.

Located in the eastern part of the Southern Iowa Drift Plain, Searry's Cave is an excellent example of a feature developed in a "karst topography" (a landscape with many sinkholes, springs, and caves). Through time, groundwater seeping along fractures in the lime-rich rock slowly dissolved openings that enlarged into chambers and passageways. This cave, located approximately thirty to forty feet above the Maquoketa River, is 565 feet in length and was formed in the Silurian-age (430 million years old) Hopkinton Dolomite. Lining the walls inside the cave are areas of actively forming flowstone, young stalactites called "soda straws," and clear pools of calcium-rich water in the cave floor. Large or intricate growths of flowstone and soda straw may be thousands of years old. Do not disturb these fragile features. Thick mudbank deposits partially cover the cave's floor. Caution is urged as footing can be very hazardous and slippery. The cave reportedly holds the largest wintering bat population of any Iowa cave. Little brown bat, eastern pipistrelle, big brown bat, and the rare northern long-eared bat are known to use the cave and the wooded areas.

The woodlands surrounding the cave are dominated by white oak, red oak, white ash, and ironwood on the high uplands whereas sugar maple, basswood, and blue beech are more common on steep slopes in ravines. Canada yew caps the rock outcrops. Missouri gooseberry, alternate-leaved dogwood, and blackberry are common shrubs in the understory. The floodplains below the bluffs and across the river are dominated by ash, black walnut, box elder, and silver maple. Wildflowers found here include hepatica, bloodroot, spring beauty, and rue anemone in early spring, followed by wild ginger, Dutchman's breeches, bishop's cap, downy yellow violet, Solomon's seal, nodding trillium, bellwort, showy orchis, jack-in-the-pulpit, trout-lily, wild geranium, and red baneberry in April and May. By June and July, appendaged waterleaf, wild lily-of-the-valley, Jacob's ladder, and purple joe-pye-weed are blooming. Leafcup, white snakeroot, zigzag goldenrod, and arrow-leaved aster can be seen blooming in the fall months among the fronds of lady fern, rattlesnake fern, interrupted fern, and maidenhair fern. Fragile fern, rock cress, harebell, and smooth cliff-brake fern can be found on the bluffs.

Other natural or geological areas in the vicinity include Indian Bluffs and Pictured Rocks Wildlife Areas and Maquoketa Caves State Park.

### DIRECTIONS

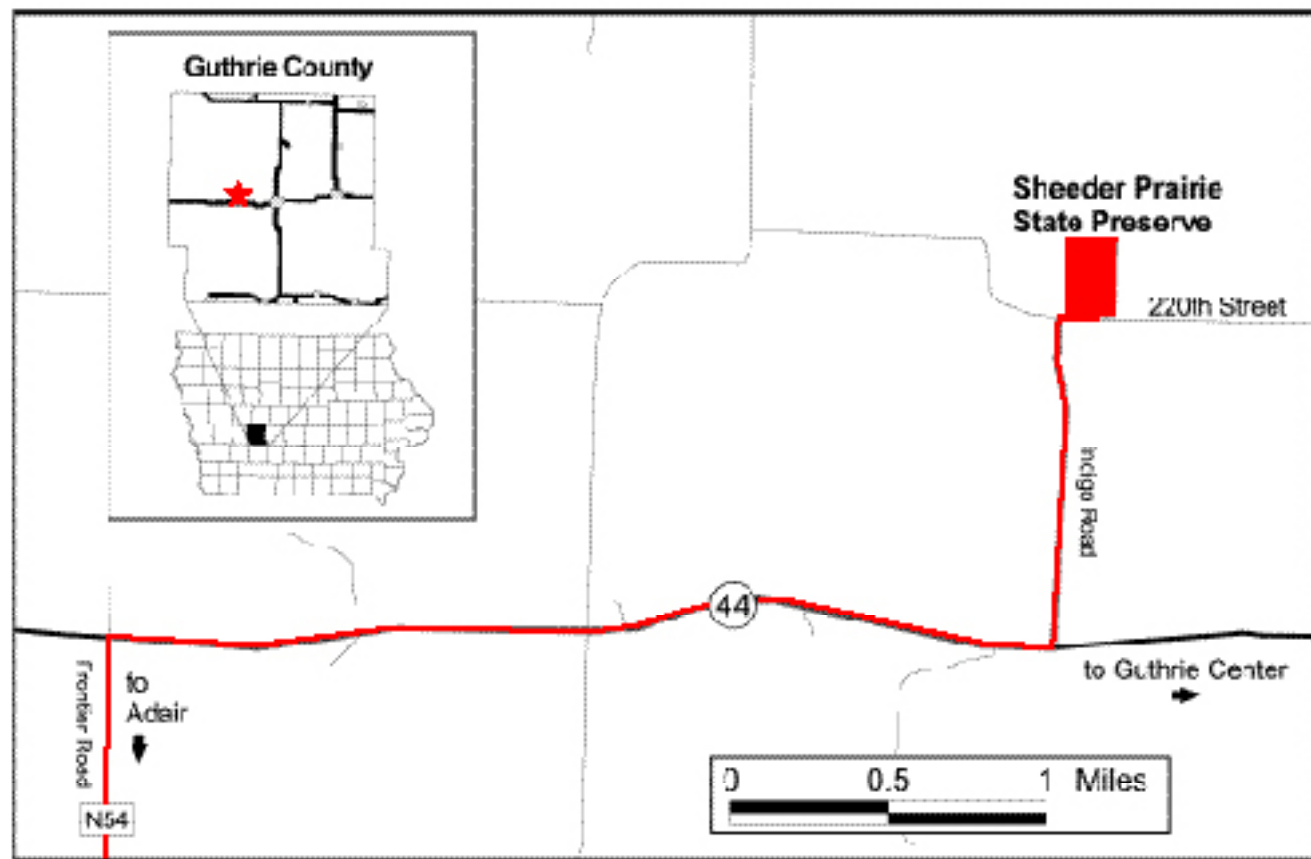
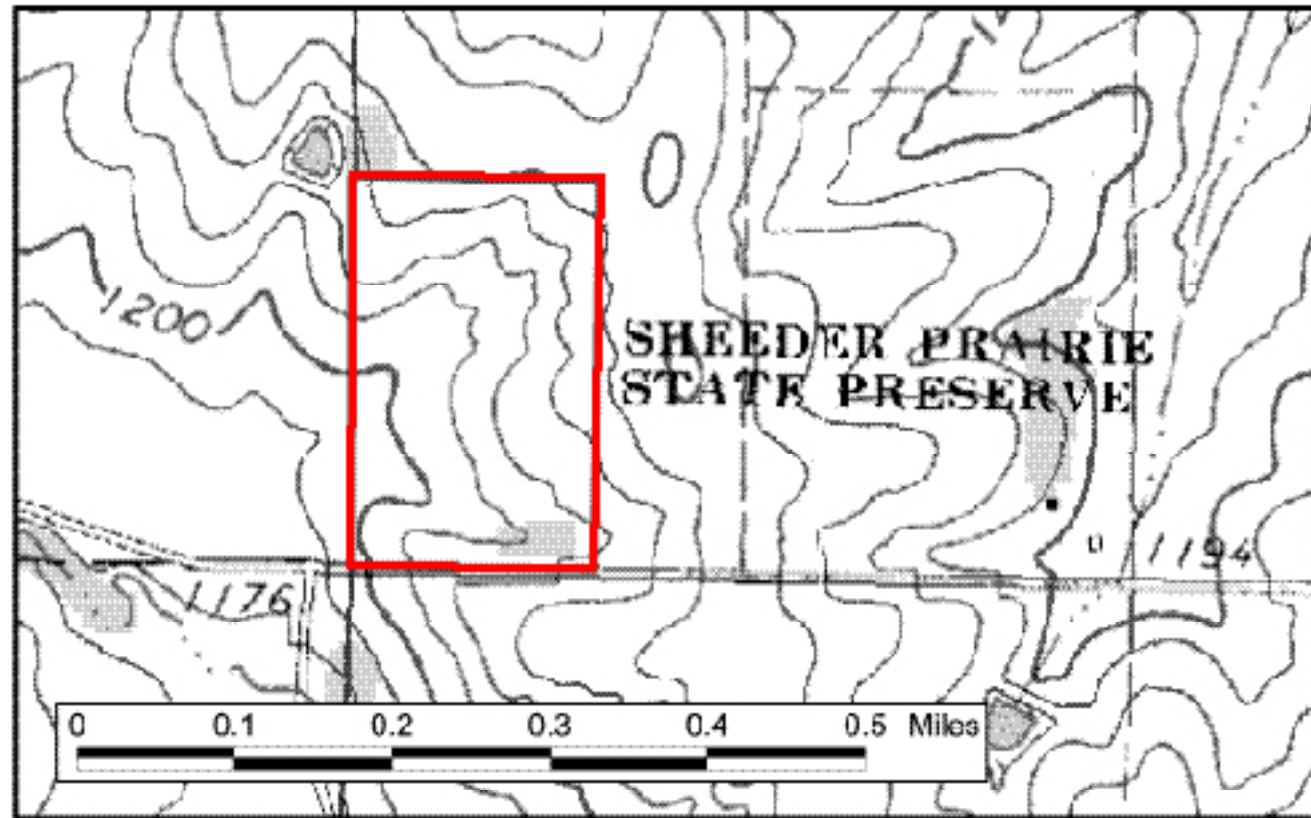
From the intersection of Highway 64 and Highway 61 on the west side of Maquoketa, take Highway 64 west for 14 miles to the town of Wyoming. Turn north (right) onto D65 and go 11 miles to Temple Hill Road. Turn east (right) and go 0.6 miles to the Temple Hill church. Turn north (left) onto 222nd Street and follow it for 1.75 miles to Skahill Road. Veer east (right) onto Skahill Road and follow this winding road for 2.5 miles to the parking lot on the north side of the road (sign: Searryl State Preserve). Walk northeastward along the marked path for 0.25 mile to the south edge of the preserve.

### AREA MANAGER

Iowa Department of  
Natural Resources  
Wapsipinicon State Park  
R.R. 2  
Anamosa, IA 52205  
(319) 462-2761  
Wapsipinicon@dnr.iowa.gov  
www.iowadnr.gov/preserves/  
State\_Preserves@dnr.iowa.gov







## Sheeder Prairie State Preserve

Sheeder Prairie is a 25-acre tallgrass prairie. It is located five miles west of Guthrie Center in Guthrie County. The property was purchased in 1961 by the Iowa Conservation Commission from Oscar and Clara Sheeder, the son and daughter-in-law of the original homesteader. It was dedicated as a biological state preserve in 1968.

This preserve lies within the Southern Iowa Drift Plain, a landform region of gently rolling terrain. Over 200 plant species are found in this preserve, including thirty grasses. The prairie hilltops and slopes contain big bluestem, little bluestem, porcupine grass, and prairie dropseed along with leadplant, rosinweed, prairie willow, and redroot. Prairie phlox, golden alexanders, flowering spurge, rattlesnake master, purple coneflower, and gray-headed coneflower are also common. The wooded ravines are dominated by box elder, wild plum, and black willow.

In the spring, prairie false dandelion, bird's-foot violet, prairie violet, lousewort, and hoary puccoon are among the first plants to begin blooming. By May, ground plum, indigo bush, blue-eyed grass, prairie ragwort, tall green milkweed, prairie larkspur, and yellow stargrass join the display. Prairie loosestrife, butterfly weed, purple prairie clover, compass plant, ironweed, wild bergamot, rough blazing star, and prairie blazing star can be found in June and July. Nodding ladies'-tresses, white sage, silky aster, sky-blue aster, showy goldenrod, Canada goldenrod, smooth goldenrod, and downy gentian bloom during the fall months.

A total of sixty-nine species of birds can be found here, with twenty-five nesting on a regular basis. Nearly three-fourths of the nesting species are woodland species. Two grassland species, the bobolink and grasshopper sparrow, nest sporadically. Several preferring the woodland edge habitat found here include gray catbird, eastern kingbird, brown thrasher, rose-breasted grosbeak, red-headed woodpecker, downy woodpecker, black-capped chickadee, Baltimore oriole, northern cardinal, house wren, and American goldfinch.

The Conservation Education Center, located at Springbrook State Park north of Guthrie Center, sponsors workshops and interpretive events that often include field trips to Sheeder Prairie.

Hunting is permitted.

Another natural area in the vicinity is Springbrook State Park.

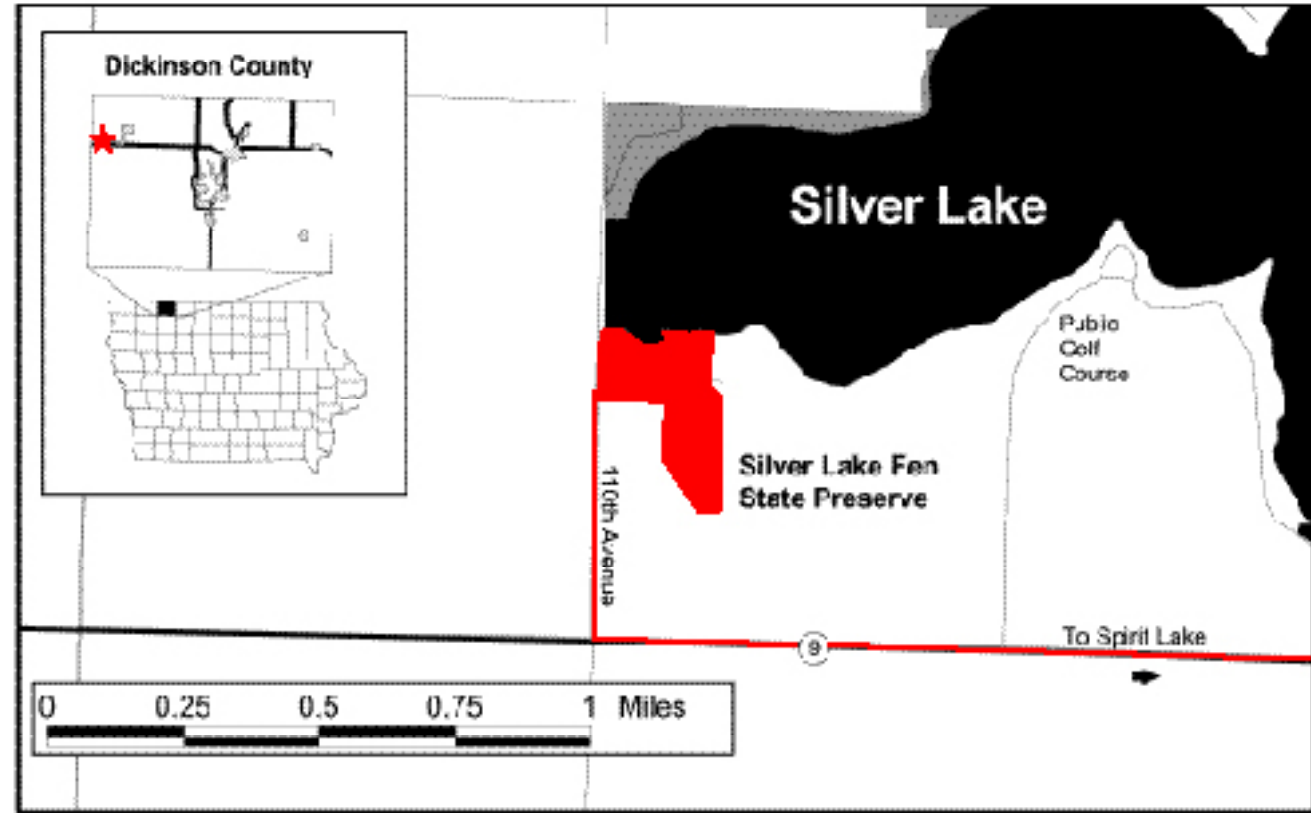
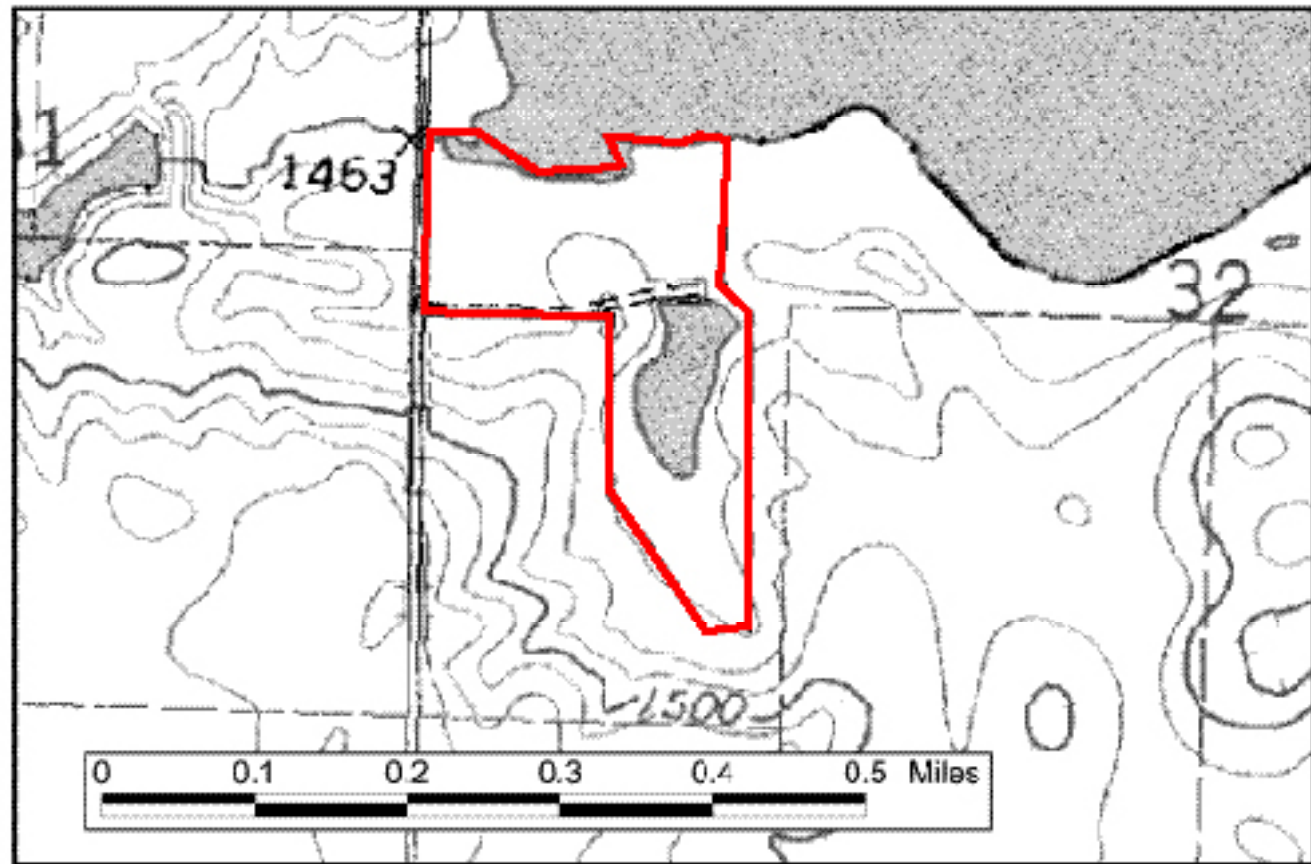
### DIRECTIONS

From the intersection of I-80 and County Road N54 (exit 76, by Adair), drive north on N54 (Frontier Road) for 11 miles to a T-intersection with Highway 44. Turn east (right) and go 3 miles to Indigo Road (sign: Sheeder Prairie State Preserve 1 mile). Turn north (left) and go 1 mile to 220th Street (T-intersection— watch for sign). Turn east (right) and go 0.1 mile to a small parking area on the north side of the road (sign: Sheeder Prairie Preserve).

### AREA MANAGER

Iowa Department of  
Natural Resources  
Saylorville Wildlife Unit  
1436 255th St.  
Boone, IA 50036  
(515) 432-2823  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Silver Lake Fen State Preserve

Silver Lake Fen is a 10-acre preserve containing a series of unusual spring-fed, boggy, hillside wetlands known as “fens.” It is located on the southwestern shore of Silver Lake in Dickinson County in the “Lakes District” of northwest Iowa, 3 miles southwest of Lake Park and 15.5 miles west of Spirit Lake. The area was purchased by the Iowa Conservation Commission in the early 1940s. Water from some of the springs was collected in a pond created for the rearing of fish. Recognition of the unique natural features of the site resulted in its dedication in 1972 as a biological and geological state preserve.

Silver Lake is a glacial lake within the Des Moines Lobe, a landform region of north-central Iowa that was last covered by ice 12,000 to 14,000 years ago. Silver Lake Fen occupies a north-facing slope on the shore of Silver Lake. The lake and the fen are clustered among knobby hills characteristic of the Bemis end moraine of the Des Moines Lobe glacier. Three fens are found at Silver Lake. The large fen on the northwest part of the preserve is the one most often visited owing to its easy accessibility. Portions of the other two fens in the eastern part of the preserve extend slightly into adjacent private land that is leased by The Nature Conservancy. The largest fen, about 1.2 acres in size, is developed on a mound of decomposed peat approximately fifteen feet deep. Hydrologically, the fens are saturated by constant flow of cold, highly calcareous, upwelling groundwater. The fen is underlain in many areas by deposits of “tufa,” a porous calcium deposit resulting from oxidation of the calcium-rich groundwater.

The saturated, peaty, and calcareous habitat of the fens supports a unique flora, as well as rare algae and zooplankton. Over 100 plant species can be found in the preserve, including some of the most rare in Iowa. Plant communities occur in three distinct zones on the fen. The “discharge areas” (elevated knobs where upwelling groundwater rises to the surface) are dominated by tall Phragmites reed and saw-tooth sunflower. The gentle slopes surrounding the discharge areas contain numerous small, shallow pools of water called “flarks” bounded by narrow ridges of peat called “strings.” The vegetation in this area, known as the “sedge mat zone,” is very short and is dominated by grasslike plants including beaked rush, common arrow-grass, slender arrow-grass, and marsh muhly grass. Colorful forbs found in this zone include grass-of-Parnassus, brook lobelia, and lesser fringed gentian. The flarks contain aquatic algae and lesser bladderwort. Forming an outer ring on the lower edges of the fens is the “border zone,” an area of tall vegetation dominated by bulrushes, sedges, and cattails.

Other preserves in the vicinity include Cayler Prairie, Freda Haffner Kettlehole, and Ocheyedan Mound.

### DIRECTIONS

From the intersection of Highway 9 and Highway 86 on the west side of the town of Spirit Lake, take Highway 9 west for 9 miles to 110th Street. Turn north (right) and go 0.5 mile to the preserve entrance. Turn east (right) and follow the lane to the parking area (sign: Silver Lake Fen State Preserve).

### AREA MANAGER

Iowa Department of Natural Resources  
Great Lakes Wildlife Unit  
2408 17th Street  
Spirit Lake, IA 51360  
(712) 336-3524  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)



## Silvers-Smith Woods State Preserve

Preserve 67 on map, page xii

Silvers-Smith Woods State Preserve is a 20-acre woodland located two miles north of Adel in Dallas County. It was given to The Nature Conservancy in 1976 by Richard and Betty Smith and Cleece and Renee Silvers. The woodland was dedicated as a biological state preserve in 1980.

Situated along the North Raccoon River, the preserve contains upland and floodplain forest. The uplands surrounding the preserve are part of the Bemis end moraine of the Des Moines Lobe landform region, Iowa's most recently glaciated landscape (12,000 to 14,000 years ago). Steep slopes in the preserve are dominated by black maple, basswood, and red oak. The slope community blends into upland ridge tops that are dominated by white oak, red oak, and shagbark hickory. Ironwood is abundant in the understory, with some serviceberry on the ridges and slopes. The floodplain is dominated by black walnut with cottonwood, silver maple, American and red elm, hackberry, box elder, honey locust, and bitternut hickory. Willows dominate the floodplain on the south side of the river.

Over 180 species of plants are found here. Spring beauty, hairy blue violet, Dutchman's breeches, woodland sedge, and downy yellow violet occur throughout the forest, beginning to bloom in April. Toothwort and white trout-lily are commonly found in the floodplain throughout the spring as well. By May, blooms of Virginia waterleaf cover the bottomland floor, and Solomon's seal is found on the steeper slope. Summer-blooming flowers include purple joe-pye-weed, starry campion, and orange touch-me-not. In the fall, elm-leaved goldenrod, American bellflower, zigzag goldenrod, and blue wood aster grace the upland ridge tops and slopes. The woodland wildflowers are mingled with rattlesnake fern, northern maidenhair fern, fragile fern, and blunt-lobed woodsia.

Hunting is not permitted.

### directions

Access to preserve is across private land.

### area manager

The Nature Conservancy  
303 Locust St., Suite 402  
Des Moines, IA 50309  
(515) 244-5044  
[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)

## Slinde Mounds State Preserve

Slinde Mounds is a 32-acre preserve containing a group of ancient Indian mounds and a hill prairie along the Upper Iowa River. It is located six miles northwest of Waukon in Allamakee County. First discovered in 1934 on the Slinde family property by archaeologist Ellison Orr, the site was purchased by the Iowa Conservation Commission in 1979 and dedicated that year as an archaeological and biological state preserve. In 1989, the preserve was listed on the National Register of Historic Places.

Located in the Paleozoic Plateau landform region, the preserve is situated on a high terrace and adjoining hillside that overlooks a tight horseshoe bend of the Upper Iowa River. The meander loops around a prominent rock outcropping of Ordovician-age Prairie du Chien dolomite (450 million years old) that marks the level of an ancient floodplain. When the river later eroded more deeply to its present level (about 70 feet lower), this remnant was left behind.

The preserve contains three prehistoric sites dating from a.d. 300 to 1250 during the periods of Middle and Late Woodland Indian cultures. The eighteen conical burial mounds and two habitation sites in this preserve are representative of the prehistoric culture found in the Quad-State Region of the Upper Mississippi River valley. Earthen mounds such as the ones found at the preserve were primarily constructed for burial of the dead, as well as for the performance of ritual offerings and ceremonies. Conical-shaped mounds were built by basket loads of soil placed on the ground. On occasion, additional burials were later added to a mound, increasing its size.

The preserve is covered by native prairie and forest vegetation. The dry hill prairie is dominated by little bluestem and sideoats grama with a variety of prairie wildflowers. As early as March, pasqueflower can be found blooming, followed later by bastard toadflax, hoary puccoon, pussytoes, and prairie violet. By June, indigo bush, blue-eyed grass, leadplant, prairie coreopsis, and prairie rose are blooming, later joined by compass plant and silky aster. The mature forest area is dominated by white oak, bur oak, and shagbark hickory. In the spring, spring beauty is an early bloomer and can be seen as early as March. By mid-April, Dutchman's breeches, wild ginger, downy yellow violet, jack-in-the-pulpit, wild geranium, alum root, swamp buttercup, and violet wood sorrel are flowering and will last through mid May or early June. By the summer months small-flowered buttercup, Virginia waterleaf, false Solomon's seal, leafcup, and jewelweed appear and can be found among the leaves of northern maidenhair fern, smooth cliff-brake fern, northern lady fern, spinulose wood fern, and interrupted fern.

Hunting is permitted.

Burial mounds are protected by law.

Other state preserves in Iowa with archaeological mounds include Catfish Creek, Fish Farm Mounds, Little Maquoketa River Mounds, Malchow Mounds, Toolesboro Mounds, Turkey River Mounds, and Woodland Mounds.

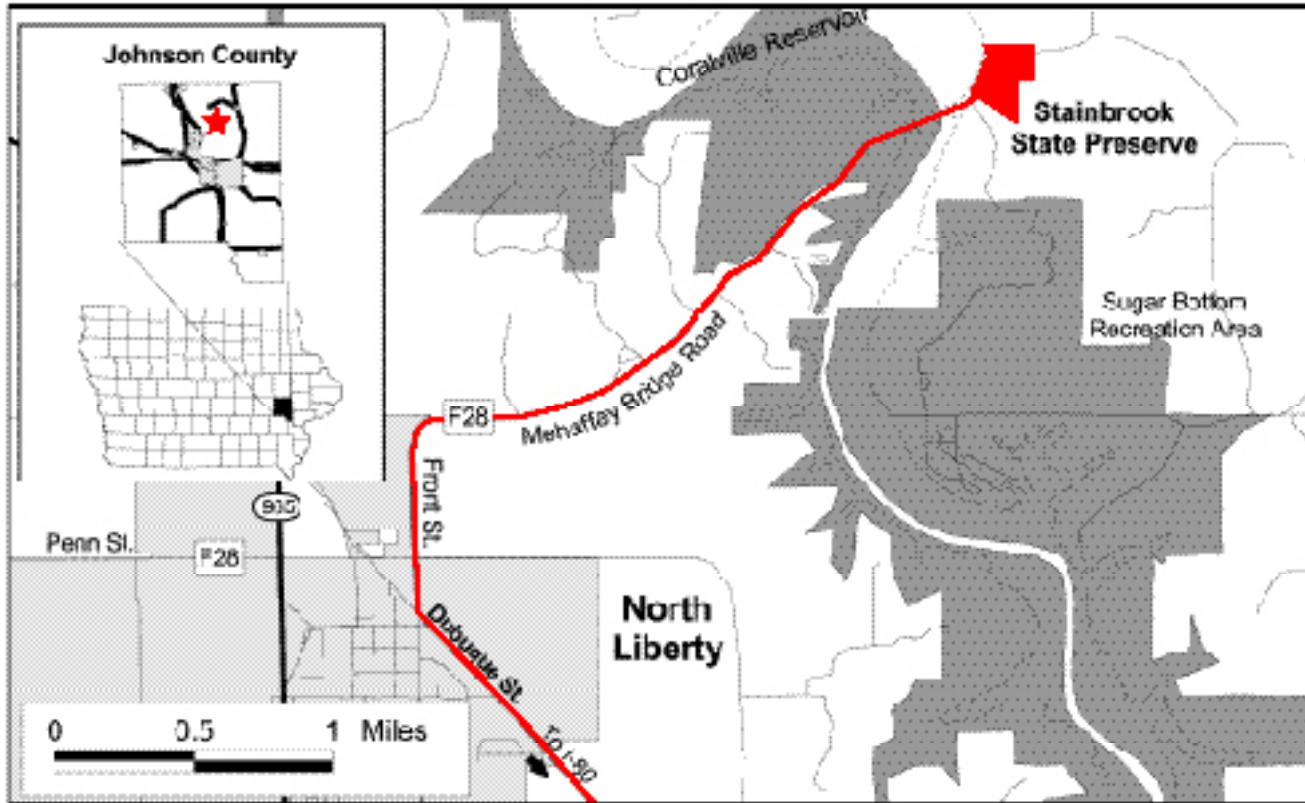
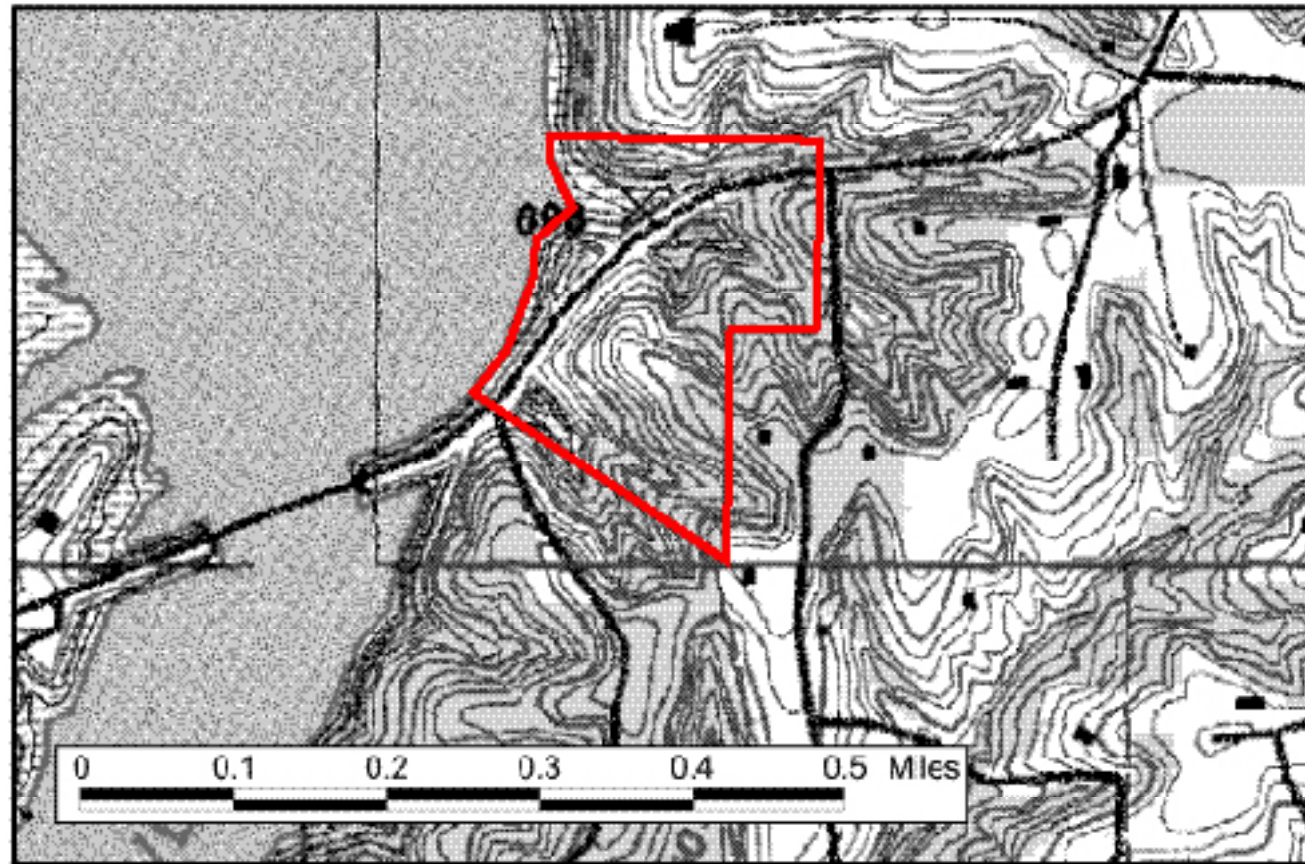
### DIRECTIONS

Access to this preserve is across private land.

### AREA MANAGER

Iowa Department of  
Natural Resources  
Upper Iowa Wildlife Unit  
2296 Oil Well Road  
Decorah, IA 52101  
(563) 382-4895  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Merrill A. Stainbrook State Preserve

The 32.5-acre Merrill A. Stainbrook State Preserve features a unique combination of rich fossiliferous limestone and a rare display of glacial grooves. It is located seven miles north of Iowa City on the east side of Mehaffey Bridge, which crosses the Coralville Reservoir in northern Johnson County. The property was acquired by the U.S. Army Corps of Engineers as part of the Coralville Reservoir project. The fossiliferous rock was revealed during construction of the bridge in the 1960s. The area was dedicated as a geological state preserve in 1969 in memory of Merrill A. Stainbrook (1897–1956), a scholar, teacher, and geologist who devoted much of his career to studying the fossils of the Cedar Valley limestones.

The limestone exposed here belongs to the Devonian-age (375 million years old) Cedar Valley Group. It includes about ten feet of the Rapid Member and nearly twelve feet of the overlying Coralville Formation. The Rapid Member contains large, well-preserved brachiopods (shellfish), and the Coralville Member contains well-preserved colonial corals, some several feet in diameter. About three feet of State Quarry Limestone is also present above the Cedar Valley Group. Forty feet of the State Quarry Limestone may also be seen at the nearby Old State Quarry State Preserve. Over 500,000 years ago, the surface of the State Quarry Limestone here was beveled and grooved by Pre-Illinoian glaciers. The grooves were formed parallel to the direction of the ice movement from northwest to southeast.

Numerous school groups from the area and the University of Iowa geology classes visit the site several times a year.

Other geological areas in the vicinity include Old State Quarry and Palisades-Dows State Preserves, Palisades-Kepler State Park, and the Devonian Fossil Gorge.

### DIRECTIONS

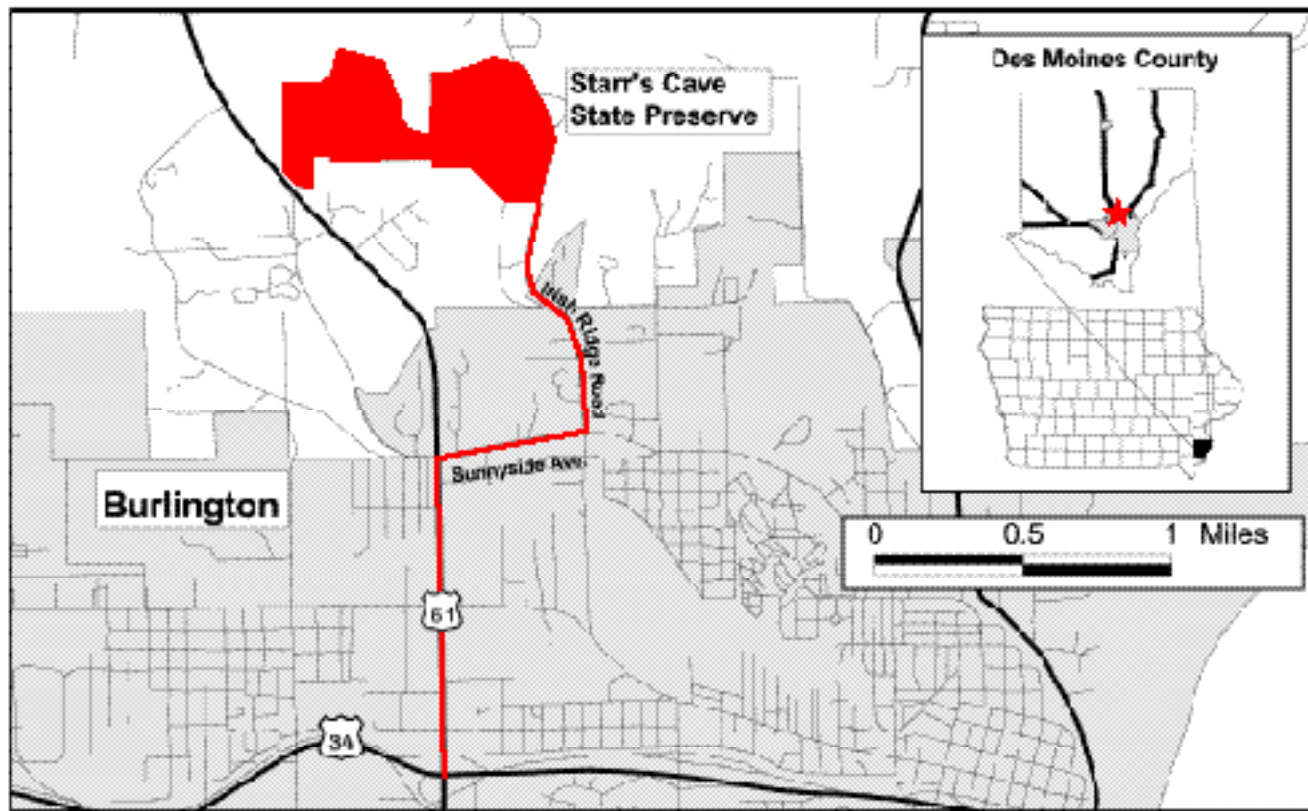
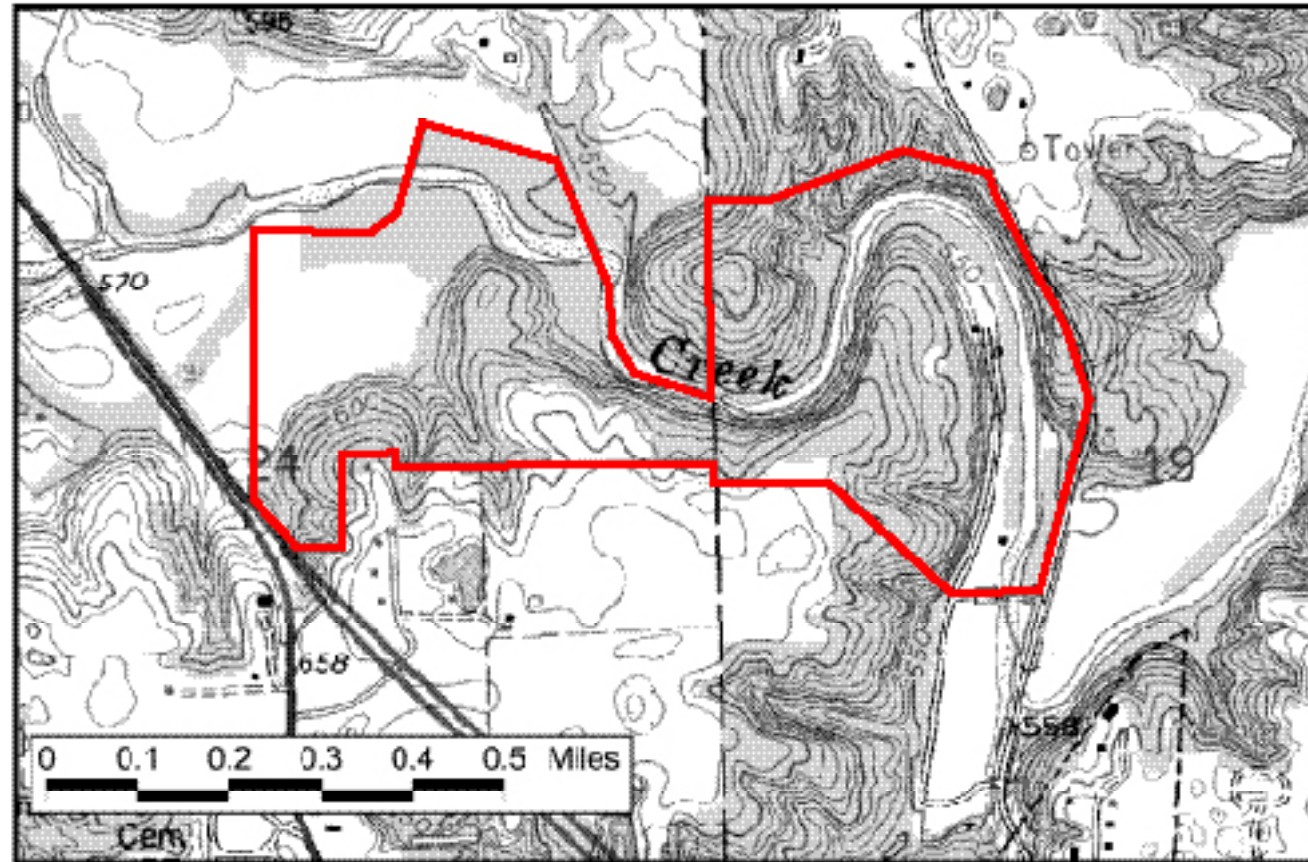
From the intersection of I-80 and Dubuque Street (exit 244) on the north side of Iowa City, take Dubuque Street north about 6 miles into the town of North Liberty. Turn north (right) onto Front Street (County Road F28), go north 0.75 mile, and curve east (right) onto Mehaffey Bridge Road. Follow Mehaffey Bridge Road about 2.5 miles to the preserve just past the Mehaffey Bridge over Coralville Reservoir. Park on the shoulder and walk over a footbridge on the southeast (right) side. A path leads to an interpretive sign and the rock surface containing the glacial grooves.

### AREA MANAGER

University of Iowa  
 Recreational Services  
 E216 Field House  
 Iowa City, IA 52242  
 (319) 335-5565  
[www.recserv.uiowa.edu/programs/TTE/index.html](http://www.recserv.uiowa.edu/programs/TTE/index.html)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Starr's Cave State Preserve



Starr's Cave State Preserve is a 184-acre area containing a rugged, semiforested landscape and a large cave. It is located along the precipitous valley of Flint Creek on the northern edge of Burlington in Des Moines County, southeastern Iowa. As early as 1924, local citizens expressed interest in preserving the scenic beauty of the area as a state park. In 1974, the Iowa Conservation Commission purchased the first tract from the Dunn family, who had owned the property since the early 1900s. The area was dedicated as a geological state preserve in 1978, with a later addition in 1992.

The topography of the preserve is typical of the Southern Iowa Drift Plain landform region. The picturesque bluffs display strata containing the geological "type-section" of the Starrs Cave Formation. It was named after its former landowner, William Starr, a German immigrant who settled in the area in the early 1860s. The three-foot-thick, light gray limestone is identified by its small, white, rounded grains (oolites) and abundant fossils, particularly brachiopods, horn corals, and segments of crinoid stems formed in a shallow sea that covered much of the Midwest during the Mississippian period (350 million years ago). It occurs between other fossiliferous Mississippian and Devonian formations (375 million years old).

Starr's Cave is named for the long, narrow cavern within the bluff along the north side of the Flint Creek valley. The cave is the largest of several caves that are found within the preserve. This cave, plus the sinkholes and springs elsewhere in the vicinity of Burlington, are characteristic features of "karst topography." Crinoids are well displayed on the walls and ceiling of the 750-foot-long cave.

Long before European settlement, Sac and Meskwaki (Fox) Indians used flint from the 100-foot-tall bluffs bordering Flint Creek to fashion arrowheads, spearpoints, and other tools. Five prehistoric open-air habitation sites, two rock shelters, and three conical mounds have been found in the preserve.

Biologically, the preserve contains a variety of habitats, including forest, prairie openings, old fields, and limestone cliffs. On the rolling uplands, forests of white, red, bur, and black oaks, and mockernut hickory are prominent. Dry wooded ridges and limestone bluffs have thin soil on which blue ash, chinkapin oak, and eastern red cedar grow. North-facing slopes contain mostly sugar maple and basswood along with red oak and buckeye. Flood-tolerant species such as silver maple, river birch, and green ash can be found in the bottomland forests along Flint Creek.

The woodlands are rich in spring wildflowers including hepatica, Virginia bluebells, toothwort, and wild geranium. By May, false Solomon's seal, Virginia waterleaf, and Jacob's ladder add their color. Leafcup and woodland sunflower begin blooming in June followed by starry campion, yellow false foxglove, and zigzag goldenrod in July. Fall coralroot orchid is one of the last of the wildflowers to be found in the woodland. Several small, prairielike areas are found along the limestone ridges. Limestone outcrops provide habitat for mosses and columbine.

The Starr's Cave Nature Center and picnic areas are located in a 24-acre section that has been designated as a park in the eastern portion of the preserve. The nature center building, a big red barn, was first built around the turn of the century. It was renovated in 1960 as the Sycamore Inn, a local hot spot. Since 1982, it has served as a nature center for Des Moines County Conservation Board. The Starr's Cave Nature Center is open weekdays from 9 a.m. to 3 p.m. and Sundays from 1 to 4 p.m.

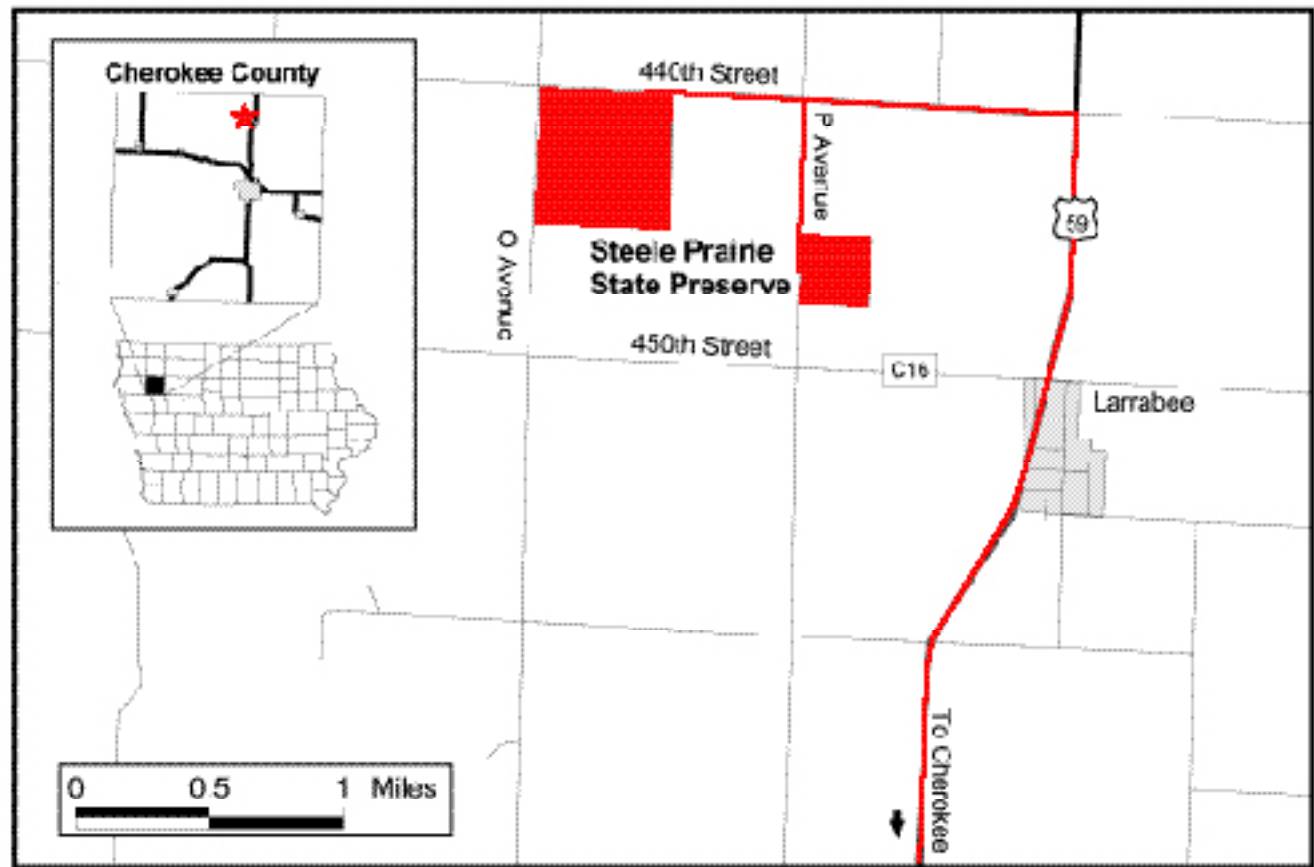
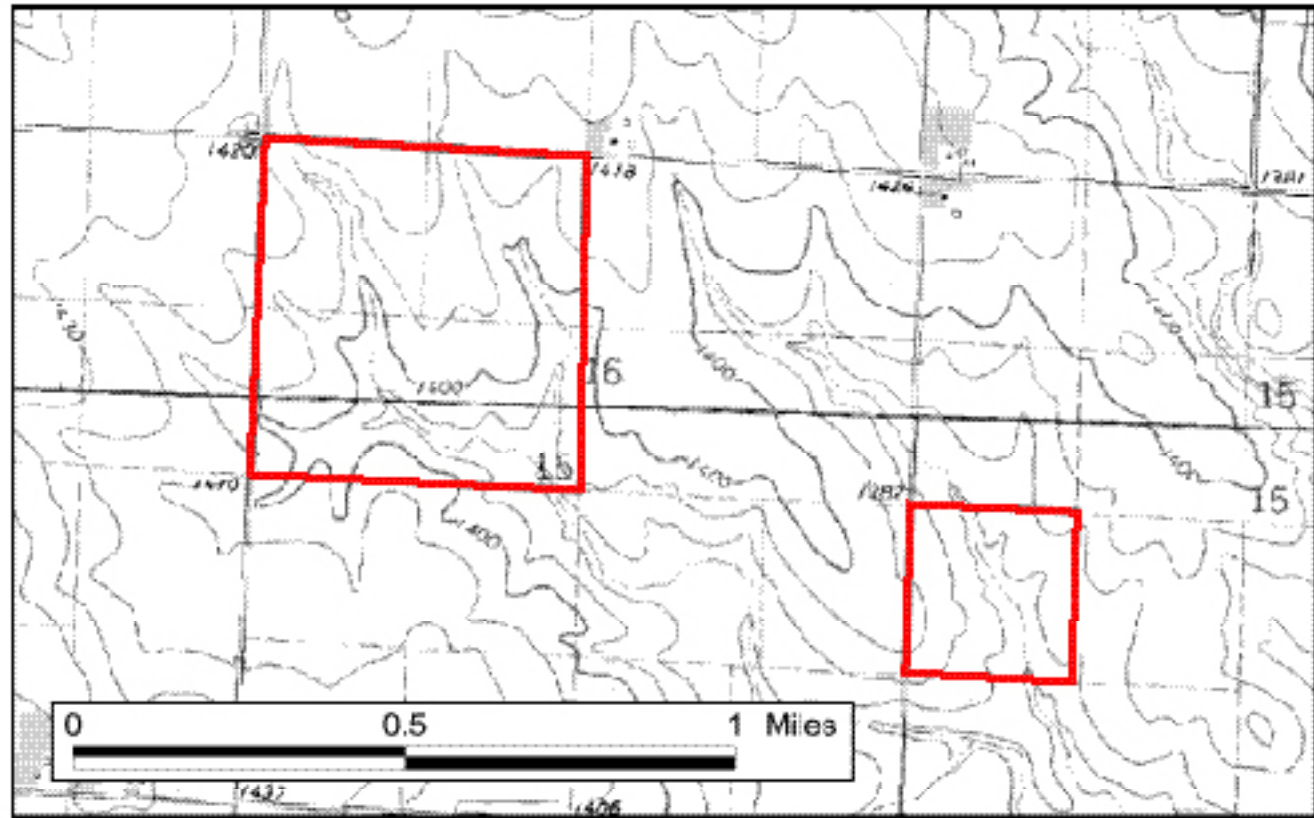
### DIRECTIONS

From the intersection of Highway 34 and Highway 61 in Burlington, take Highway 61 north for 1 mile to Sunnyside Avenue (watch for sign). Turn east (right) and go 0.5 mile to Irish Ridge Road (watch for sign). Turn north (left) and go 0.75 mile to Starr's Cave Road, the preserve entrance on the west side of the road (sign: Starr's Cave State Preserve).

### AREA MANAGER

Des Moines County  
Conservation Board  
Starr's Cave Nature Center  
11627 Starr's Cave Road  
Burlington, IA 52601  
(319) 753-5808  
[www.dmconconservation.com/  
starrscave@co.des-moines.ia.us](http://www.dmconconservation.com/starrscave@co.des-moines.ia.us)  
[www.iowadnr.gov/preserves/  
State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Steele Prairie State Preserve

T. H. Steele Prairie is a 200-acre native tallgrass prairie, consisting of a 160-acre tract and a separate 40-acre tract. It is located 10.5 miles north of Cherokee in northern Cherokee County. This is one of the largest prairies remaining in Iowa outside of Loess Hills. Dr. Ada Hayden initially visited this prairie (which she termed "Cherokee No. 2") in 1945 and recommended that it be protected. The prairie had been used as a hayfield by the Steele family since 1880. The Nature Conservancy and the Iowa Department of Natural Resources jointly purchased the site from the Steele family in 1986. It was dedicated in 1987 as a biological and geological state preserve during "Prairie Heritage Week."

The preserve's terrain is characteristic of the gently rolling topography of the Northwest Iowa Plains, which was last glaciated 20,000 to 30,000 years ago during an early phase of Wisconsinan-age glaciation. Most of the vegetation in the preserve is comprised of mesic prairie on uplands, with smaller areas of wet prairie communities along drainageways. The mesic uplands are dominated by big bluestem, prairie dropseed, and porcupine grass with myriad colorful wildflowers. The lower wet swales are dominated by sedges, blue-joint grass, and prairie cordgrass. By May, hoary puccoon, prairie violet, bastard toadflax, golden alexanders, and violet wood sorrel can be found blooming and are joined by blue-eyed grass, prairie larkspur, and leadplant in June. By July, the early spring flowers have faded and are replaced by pale purple coneflower, butterfly weed, rattlesnake master, New Jersey tea, gray-headed coneflower, black-eyed Susan, and silvery scurf-pea. By August, compass plant and prairie blazing star are blooming. Fall brings sneezeweed, stiff goldenrod, smooth blue aster, and downy gentian.

The preserve is dotted with ant mounds and animal burrows and provides habitat for many species of birds, mammals, and butterflies, including upland sandpiper, sedge wren, and common yellowthroat. Western harvest mouse, meadow jumping mouse, masked shrew, short-tailed shrew, and least weasel also find refuge among the prairie plants at this preserve. Of the twenty-four butterfly species, Arogos skipper, wild indigo duskywing, Melissa blue, crossline skipper, checkered white, great spangled, and regal fritillary typically can be found in the drier prairie whereas black dash, mulberry wing, long dash, eyed brown, black swallowtail, tiger swallowtail, eastern-tailed blue, and silver-spotted skipper typically are found in the wetter portions of the preserve.

Hunting is permitted.

Other natural areas in the vicinity include Waterman Prairie Wildlife Area and Nestor Stiles Prairie State Preserve.

### DIRECTIONS

From the intersection of Highway 3 and Highway 59 on the north side of Cherokee, take Highway 59 north for 6 miles to its intersection with County Road C16 (450th Street) by the small town of Larrabee. Continue north on Highway 59 for 1 mile to 440th Street (sign: Steele Prairie State Preserve). Turn west (left) and go 1.75 miles to the parking spot for the north unit of the preserve (sign: Steele Prairie State Preserve). To get to the south unit from here, go back east 0.75 mile on 440th Street to "P" Avenue, turn south (right), and go 0.5 mile to the preserve on the east side of the road (sign: Steele Prairie State Preserve).

### AREA MANAGER

Cherokee County  
Conservation Board  
629 River Road  
Cherokee, IA 51012  
(712) 225-6709  
[www.cherokeecountyparks.com](http://www.cherokeecountyparks.com)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Nestor Stiles Prairie State Preserve

Nestor Stiles Prairie State Preserve is a 9.5-acre area featuring a small tallgrass prairie. It is located seven miles southeast of Cherokee and thirteen miles northwest of Storm Lake in eastern Cherokee County. The prairie was given to the Iowa Conservation Commission in 1981 by Marguerite S. Whiting in honor of her father, Nestor Stiles, a banker and a conservationist who protected several natural areas throughout the county. The prairie was dedicated as a biological state preserve, also in 1981.

The level to gently rolling topography of the area is typical of the Northwest Iowa Plains landform region, which was last glaciated 20,000 to 30,000 years ago. The prairie, located on a knoll in the southwest corner of the preserve, contains many prairie species, including big bluestem, porcupine grass, prairie dropseed, compass plant, white false indigo, and New Jersey tea. The lowland area along a stream is dominated by Jerusalem artichoke and willows.

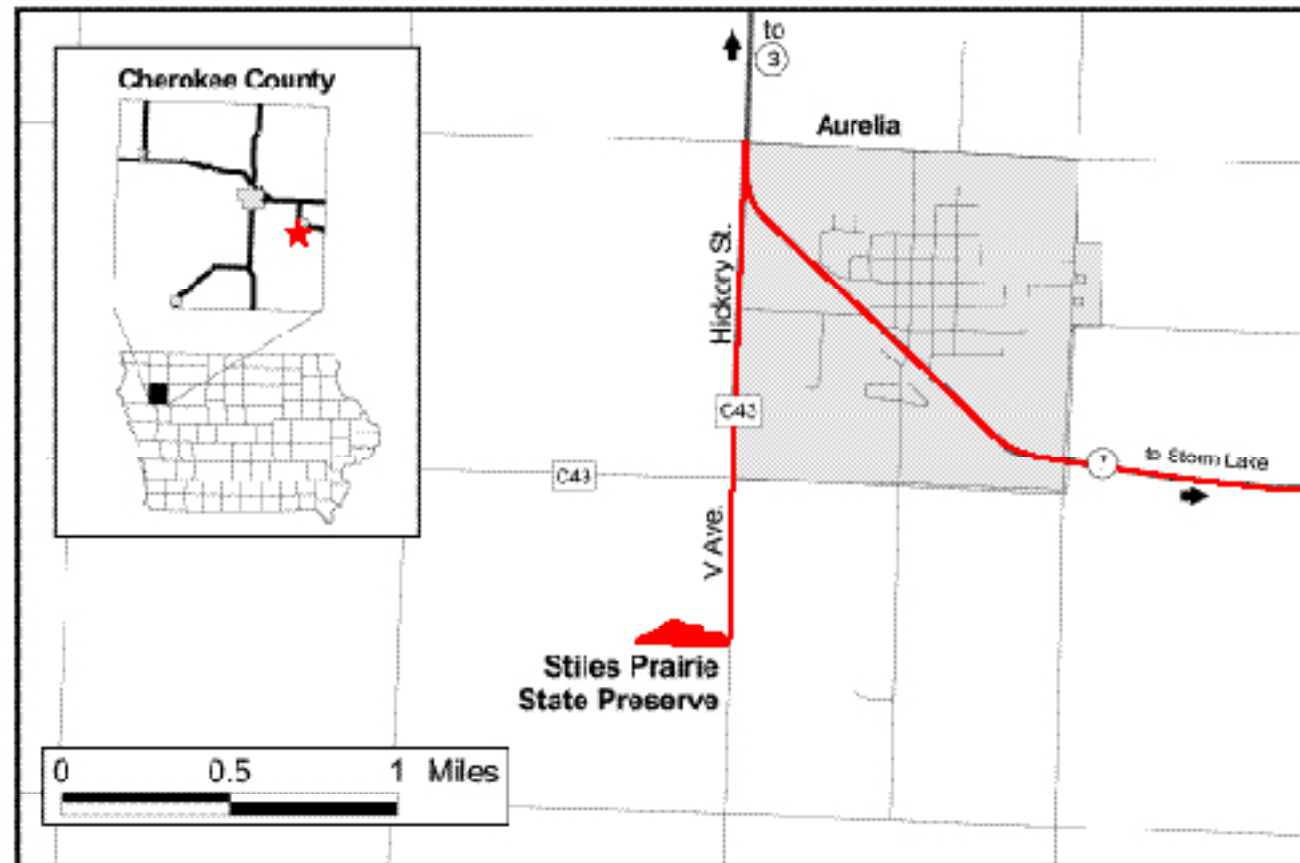
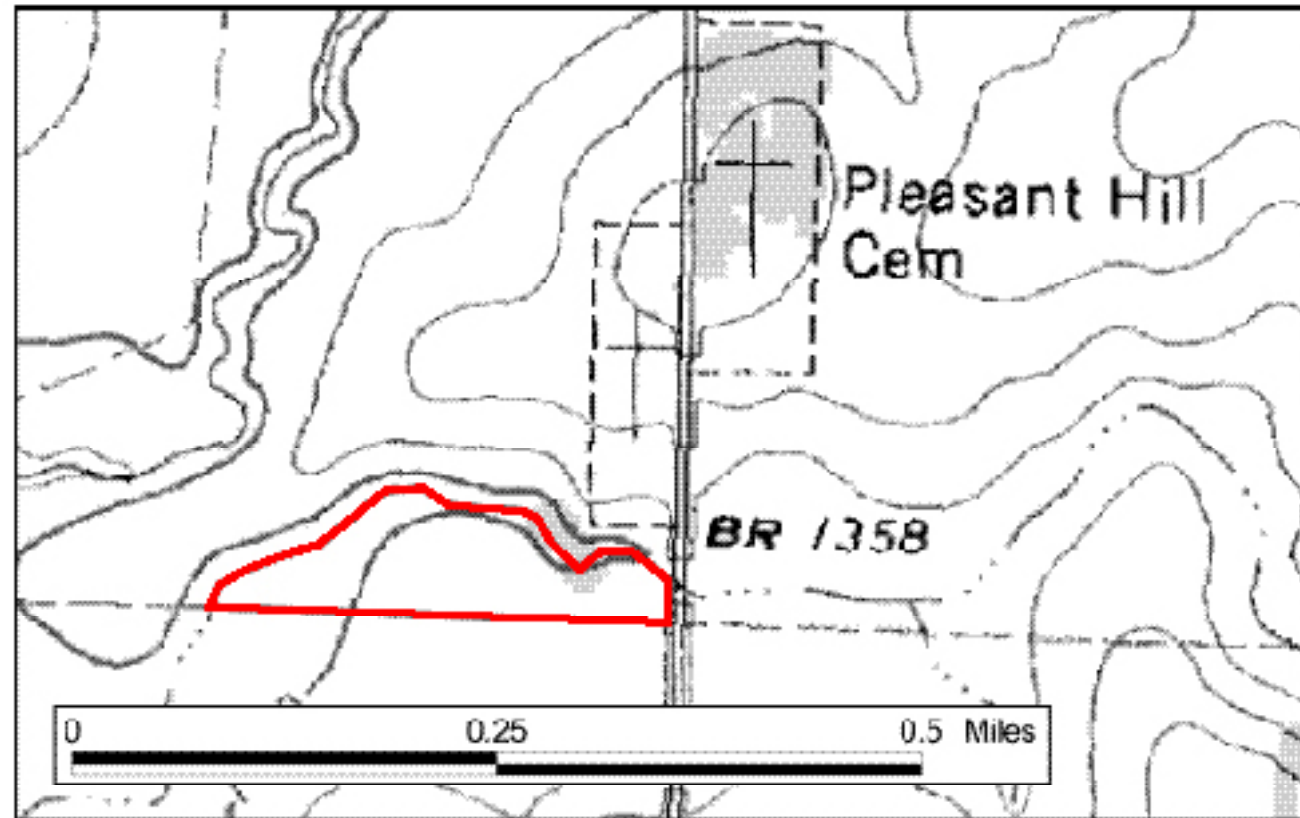
Other natural areas in the vicinity include Steele Prairie State Preserve, Waterman Prairie Wildlife Area, and Wanata State Park.

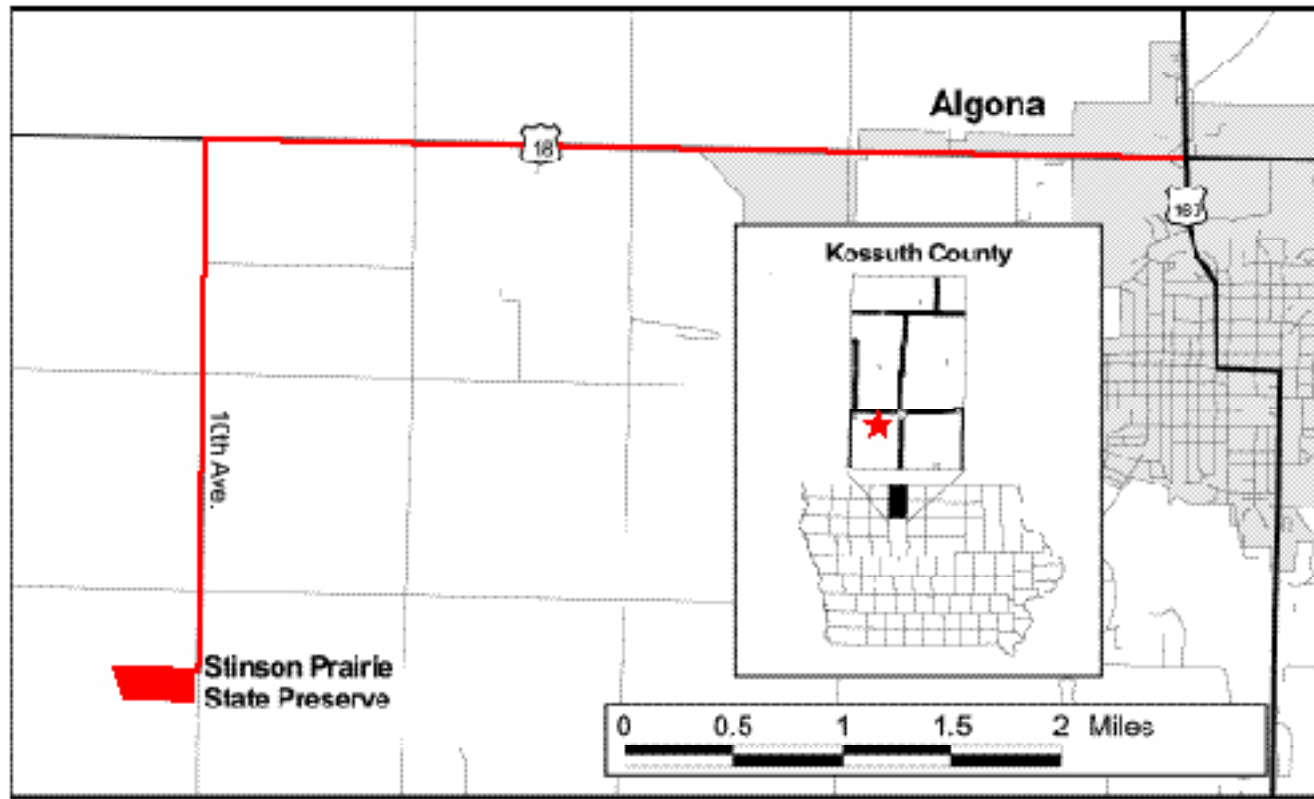
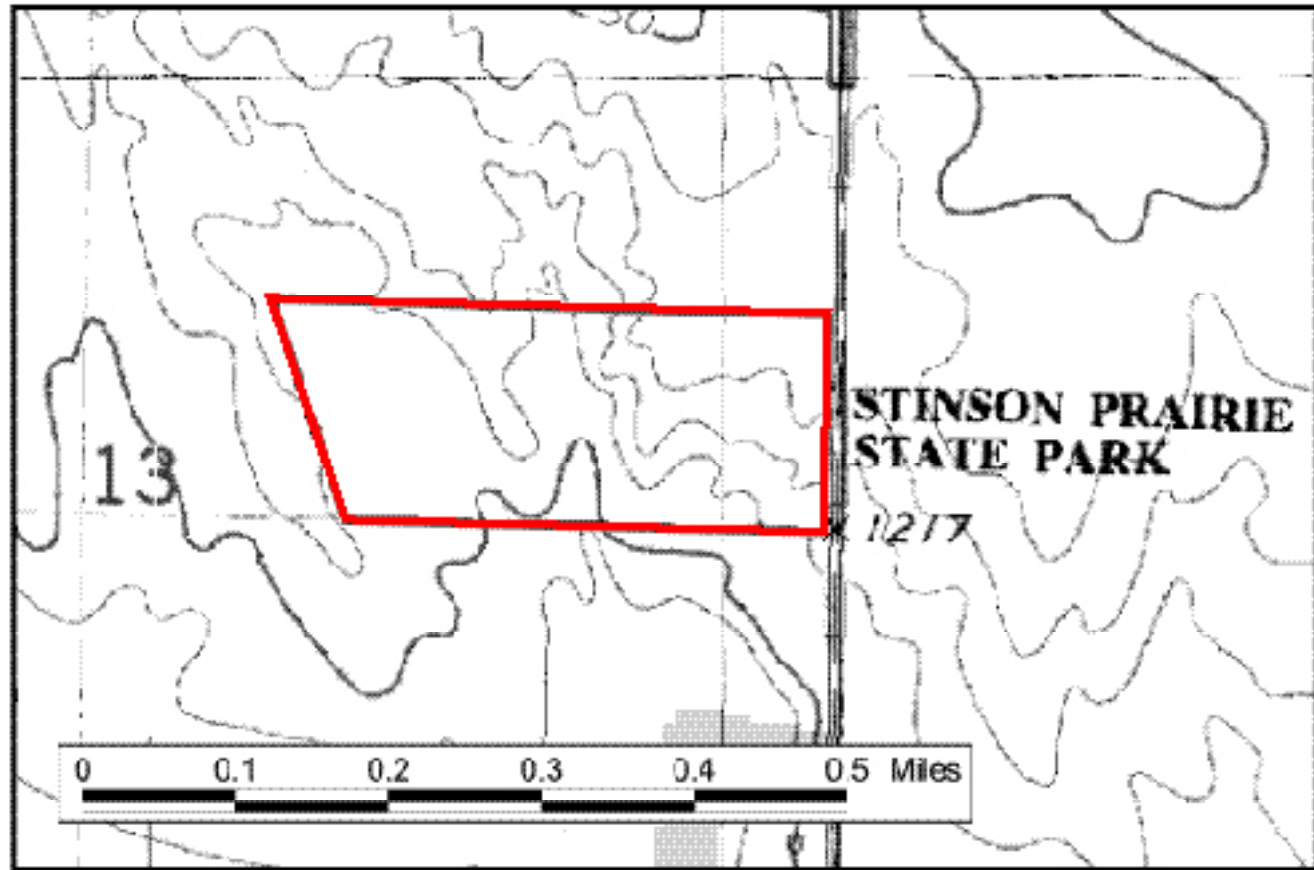
### DIRECTIONS

From the intersection of Highway 71 and Highway 7 east of the town of Storm Lake, take Highway 7 west (through Storm Lake) for 8 miles to Aurelia. On the west side of Aurelia, turn south (sharply left) onto County Road C43 (Hickory Street, which becomes "V" Avenue outside of town) and go 1 mile to the preserve on the west side of the road (sign: Nestor Stiles).

AREA MANAGER  
Cherokee County  
Conservation Board  
629 River Road  
Cherokee, IA 51012  
(712) 225-6709

[www.cherokeecountyparks.com](http://www.cherokeecountyparks.com)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





### Stinson Prairie State Preserve

Stinson Prairie is a 32-acre prairie located five miles west of Algona in Kossuth County. It was purchased in 1969 by the Kossuth County Conservation Board from Minnie and Emma Stinson, whose family had used the prairie as a hayfield since 1881. It was dedicated in 1971 as a biological state preserve.

The preserve is located on the edge of the Algona moraine, marking the last advance and retreat of glacial ice in Iowa about 12,500 years ago. The glacial erratics (boulders) at this preserve are characteristic of igneous and metamorphic rocks that are native to the northern United States and Canada. The prairie potholes (marshes), sedge meadows, gentle moist slopes, and dry ridge tops are characteristic of the diverse habitats that occur over short distances in hummocky, morainal landscapes. The preserve overlooks a level outwash plain to the south, where meltwater drained away from the ice front.

Prairie habitats in the preserve range from dry to wet over short distances, supporting a total of nearly 200 plant species. The dry prairie occurs on the well-drained upper slopes and ridge tops of the hills. Porcupine grass, little bluestem, sideoats grama, leadplant, pale purple coneflower, prairie sunflower, and rough blazing star are the most abundant here. The mesic prairie community blends with the dry prairie community and is found mostly on the lower well-drained slopes of the hills. It is characterized by Indian grass, big bluestem, switchgrass, sawtooth sunflower, common mountain mint, showy tick-trefoil, and New Jersey tea. In the drainageways between the hills and around the pothole, the sedge meadow community is defined by dense stands of sedge, prairie cordgrass, and Canada anemone. The wet depressions or potholes in the western portion of the preserve also contain smartweeds and bulrushes.

In the spring, pasqueflower, alumroot, and yellow stargrass are the first to appear on the dry ridges. Blue-eyed grass, pussytoes, violet wood sorrel, golden alexanders, heart-leaved golden alexanders, and prairie violet can be found on the slopes among the Junegrass. By summer, bastard toadflax, prairie turnip, white false indigo, prairie coreopsis, butterfly weed, round-headed bush clover, silvery scurf-pea, prairie larkspur, and rattlesnake master emerge on the dry soil interspersed among the rosette panic grass. Showy tick-trefoil, silvery scurf-pea, prairie rose, gray-headed coneflower, wild bergamot, toothed evening primrose, wood lily, oval-leaved milkweed, purple prairie clover, round-headed bush clover, prairie blazing star, and compass plant bloom on the slopes during the summer months. Prairie Indian plantain, blue flag iris, Michigan lily, winged loosestrife, and swamp milkweed are found in the sedge meadows. By fall, white sage, heath aster, silky aster, smooth aster, and downy gentian are blooming.

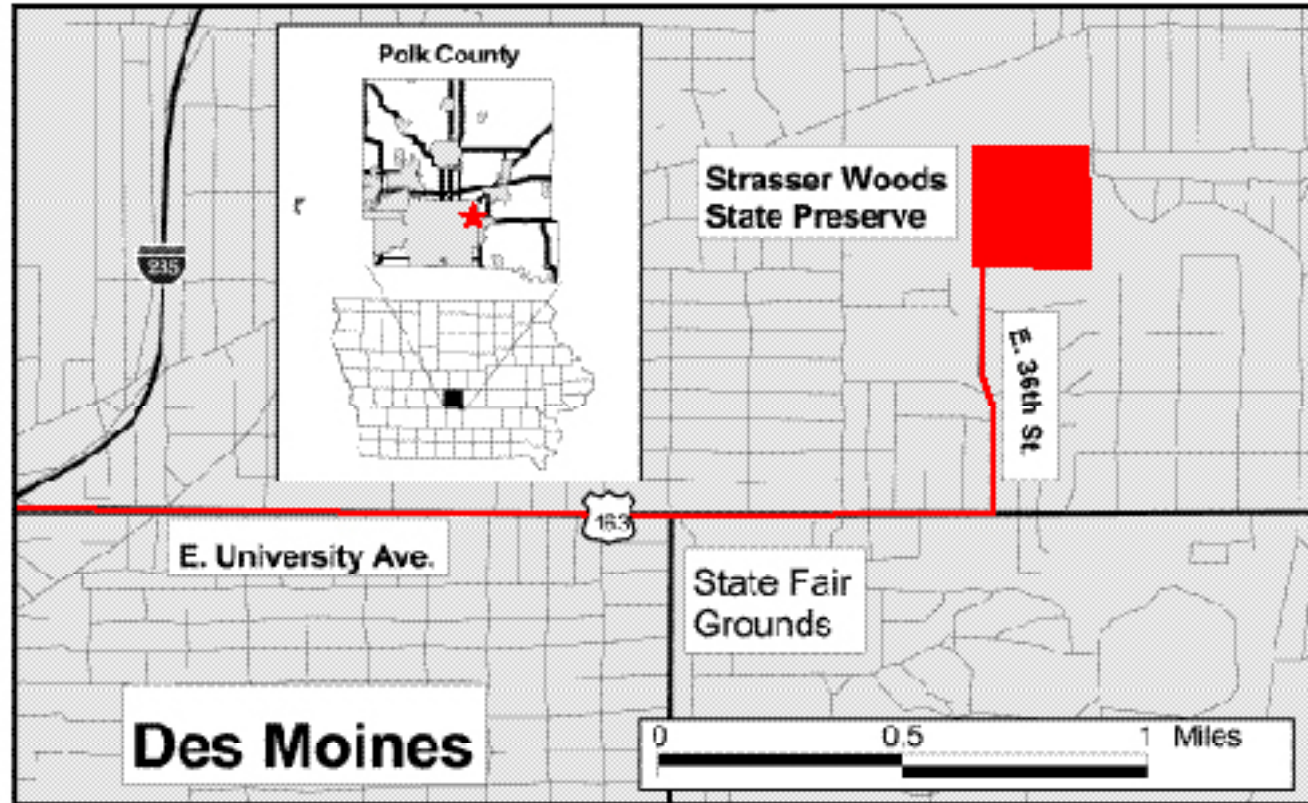
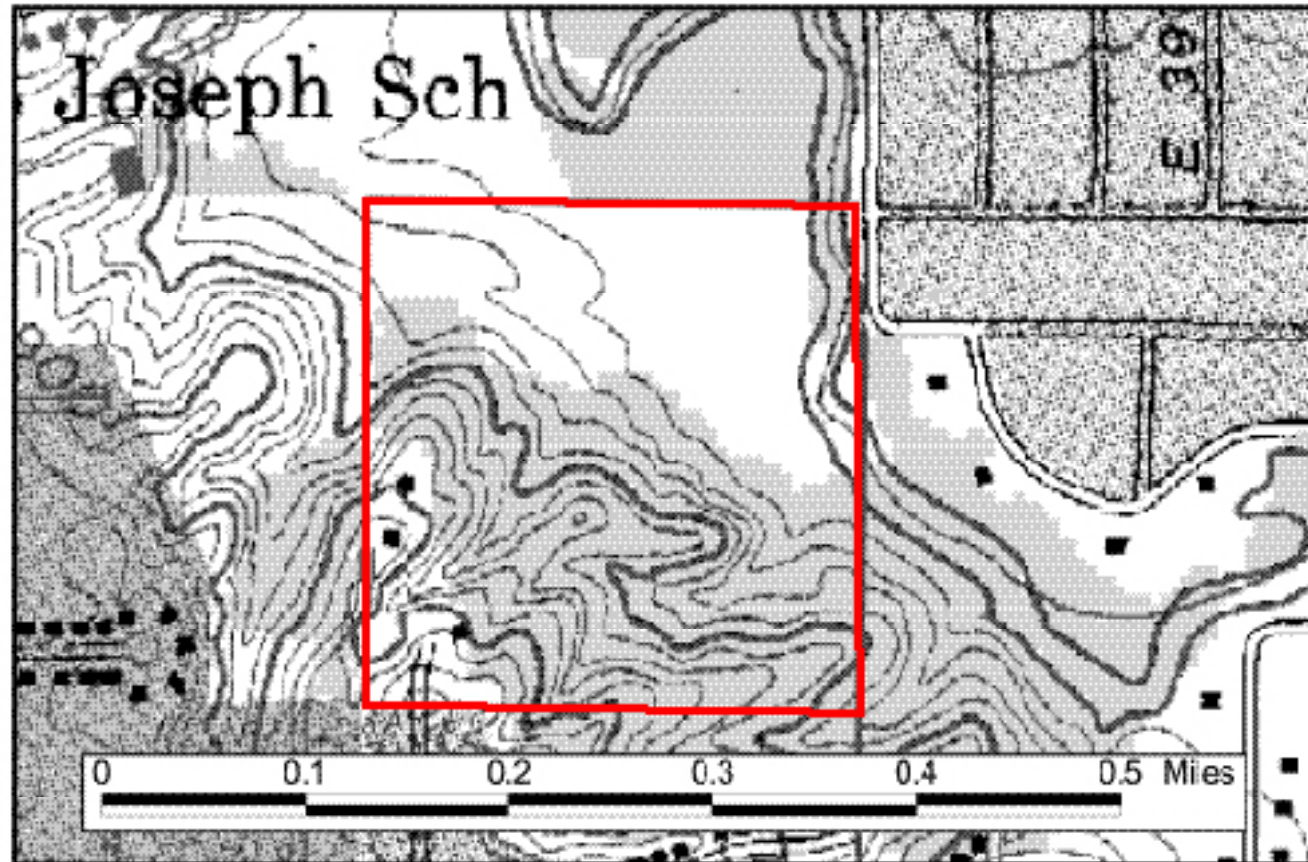
Birds found on the preserve include bobolink, grasshopper sparrow, upland sandpiper, and meadowlarks. Butterfly species found here include the Poweshiek skipperling on the dry prairie and the dion skipper in the wet prairie.

Other public areas in the vicinity include Ambrose A. Call State Park and Union Slough National Wildlife Refuge.

**DIRECTIONS**  
 From the intersection of Highway 169 and Highway 18 in Algona, take Highway 18 west for 4.5 miles to 10th Avenue. Turn south (left) and go 2.5 miles to the preserve on the west side of the road (sign: Stinson Prairie State Preserve—Kossuth County Conservation Board).

**AREA MANAGER**  
 Kossuth County Conservation Board  
 1010 250th St.  
 Algona, IA 50511  
 (515) 295-2138  
 kccb@awemail.com  
[www.co.kossuth.ia.us/conservation/conservation.htm](http://www.co.kossuth.ia.us/conservation/conservation.htm)  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Strasser Woods State Preserve

Strasser Woods State Preserve contains a 40-acre tract of forest within the city limits of Des Moines. Joseph and Elizabeth Strasser, who had owned the property since 1965, donated the woodland to the Iowa Natural Heritage Foundation in 1981. The area was transferred to the Iowa Department of Natural Resources in 1982 and dedicated as a biological state preserve.

Located along the southern margin of the Des Moines Lobe landform region, the preserve contains an upland forest and an old field in a bottomland. The upland woodlands are dominated by basswood, with some bitternut hickory, red oak, American elm, and buckeye. The understory includes shrubs such as hazelnut, hawthorn, honeysuckle, common elder, and coralberry. The grassy old field in the bottomland is partially filled with Kentucky coffee tree, box elder, American elm, silver maple, and cottonwood. The upland forest area features a good display of spring wildflowers. Bloodroot, swamp buttercup, rue anemone, and hairy blue violet begin blooming as early as March, followed by downy yellow violet, spring beauty, wild ginger, Dutchman's breeches, white trout-lily, Solomon's seal, bellwort, mayapple, blue cohosh, woodland phlox, toothwort, jack-in-the-pulpit, and wild geranium. In the summer you can find wild leek, wild yam, woodland sunflower, purple joe-pye-weed, starry campion, and zigzag goldenrod blooming. By August, blue wood aster and elm-leaved goldenrod can be seen among the northern maidenhair fern, rattlesnake fern, and creeping fragile ferns that cover the forest floor.

The Four Mile Creek Greenway (featuring a bicycle trail) runs along the creek through the bottomland. Several hiking trails also run through the upland portions of the preserve.

Other natural areas in the vicinity include Brown's Woods, Walnut Woods State Park, Chichaqua Bottoms Greenbelt, Yellowbanks Park, Margo Frankel State Park, and Engeldinger Marsh.

### DIRECTIONS

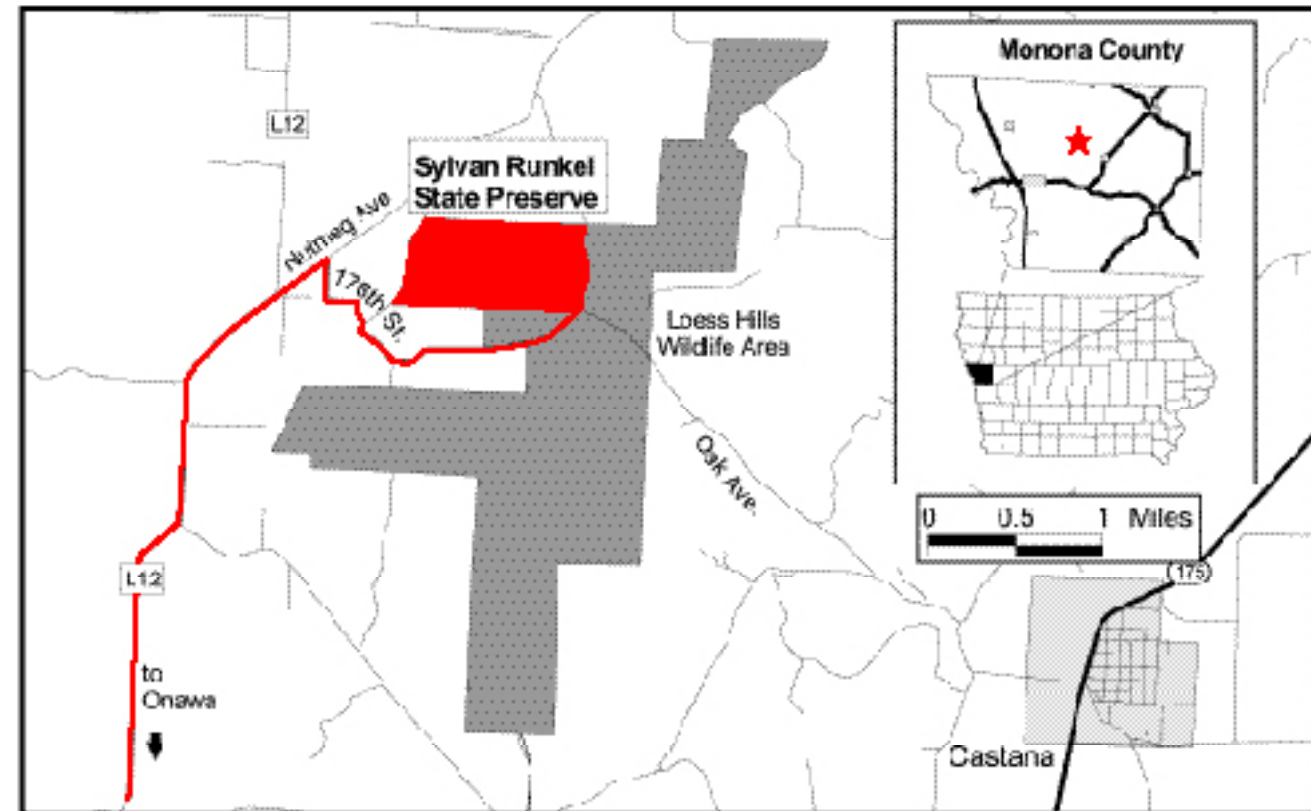
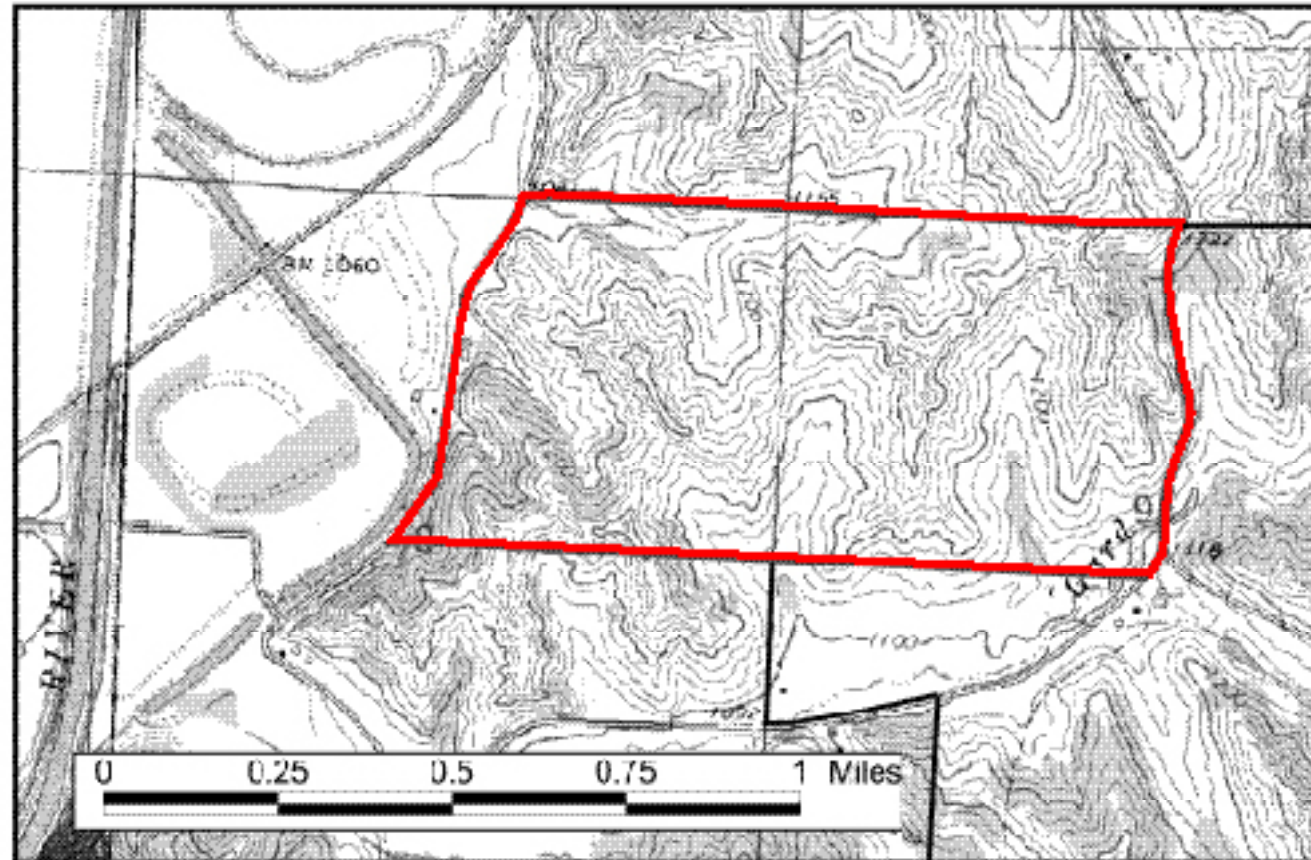
From the intersection of I-235 and East University Avenue (Highway 163) in the east side of Des Moines, go east on University Avenue for 2 miles to East 36th Street. Turn north (left) and go 3 blocks through a residential area to the parking area at the end of the street (sign: Strasser Woods State Preserve).

### AREA MANAGER

Iowa Department of Natural Resources  
 Saylorville Wildlife Unit  
 1327 SE Marshall  
 Boone, IA 50036  
 (515) 432-2235  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Sylvan Runkel State Preserve



Sylvan Runkel State Preserve is a 330-acre preserve containing an outstanding example of Iowa's Loess Hills landscape, with extensive native prairie covering steep hills. The tracts comprising the preserve were acquired by the Iowa Conservation Commission in 1973 and 1980 as part of the 3,000-acre Loess Hills Wildlife Area. In 1985, the Loess Hills Wildlife Area (including the preserve area) became part of a 10,420-acre National Natural Landmark. In 1996, the preserve was established for its biological and geological significance, and named in memory of Sylvan Runkel.

Sylvan Runkel was a forester, naturalist, and educator in many conservation efforts throughout Iowa until his death in 1995. He was a popular field trip leader at the Loess Hills Prairie Seminar, an annual event sponsored by the Western Hills Area Education Agency that draws hundreds of teachers, students, and naturalists to the area now named in his honor.

The preserve lies along the western edge of the Loess Hills landform region, overlooking the broad Missouri River valley, which was a major route for silt-laden, glacial meltwater flows some 14,000 to 30,000 years ago. Thick (up to 150 feet) deposits of silt blown by winds from the floodplain formed what is now the Loess Hills. The crested hills, long narrow summits, branching spurs, and steep slopes of this landscape were later developed by partial erosion of the deep loess deposits.

The preserve supports a variety of prairie, forest, and brush vegetation. A total of over 200 plant species can be found. The main feature of the preserve is a prominent ridge with over 100 acres of high-quality native prairie. Extensive communities of dry prairie species occur here. In spring, pasqueflower is the first to be found blooming on the prairie, with prairie violet and bastard toadflax soon following. In May, the tiny prairie moonwort fern appears along with prairie dandelion and blue-eyed grass. Butterfly weed, prairie sandreed, downy painted cup, purple coneflower, purple prairie clover, dotted gayfeather, rough blazing star, and prairie ragwort bloom during the summer. Several species typical of the Great Plains, including yucca, Lambert's locoweed, and cut-leaf iron plant, cannot be found in Iowa outside of the Loess Hills. By fall, pink gerardia, sky-blue aster, aromatic aster, and showy goldenrod can be found blooming.

Over 100 species of birds have been observed throughout the area. Yellow-billed and black-billed cuckoos, whip-poor-will, great crested flycatcher, western kingbird, gray catbird, yellow-throated vireo, yellow warbler, scarlet tanager, indigo bunting, and orchard and Baltimore orioles use the woodlands and brushy areas. Twenty-seven species of mammals and fifteen reptiles have been found in the overall wildlife area, including the meadow jumping mouse, badger, blue racer, six-lined racerunner, and Plains spadefoot toad. Of the fifty-six species of butterflies found in the general area, six rare butterflies can be found in this preserve, including the dusted skipper, Leonard's skipper, Ottoe skipper, regal fritillary, mottled duskywing, and Hickory hairstreak.

The preserve has access points northwest and southeast. Hunting is permitted.

Other natural areas in the Loess Hills include Waubonsie State Park, Turin Loess Hills State Preserve, Loess Hills Wildlife Area, Preparation Canyon State Park, Stone State Park, Mount Talbot State Preserve, Five Ridge Prairie State Preserve, and Loess Hills State Forest.

### DIRECTIONS

From Sioux City, drive south on I-29 to Highway 175 (exit 112) at Onawa. Turn east (left) on Highway 175 and go 3 miles (through Onawa) to the intersection with County Road L12. Turn north (left) and go 7 miles to Nutmeg Avenue. Turn east (right), crossing the Little Sioux River, to 178th Street (just across the bridge). Turn south (right) and follow this winding road approximately 2 miles to its intersection with Oak Avenue. Parking lots are available on the south (right) side of 178th Street on both sides of Oak Avenue. A footpath into the preserve is located on the north side of the road just east of the intersection (sign: Sylvan Runkel State Preserve).

### AREA MANAGER

Iowa Department of Natural Resources  
Missouri River Wildlife Unit  
PO Bos 118  
Onawa, IA 51040  
(712) 423-2426  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)



## Toolesboro Mounds State Preserve

Toolesboro Mounds State Preserve is a 3-acre preserve featuring a cluster of ancient Indian mounds. It is located just north of the town of Toolesboro in Louisa County. Archaeological studies of the mounds were conducted as early as the 1840s, and again in the 1870s and 1880s. In the 1930s, the Iowa Archaeological Survey and the State Historical Society urged the state to protect the mounds. In 1963, the Mosier family deeded the two southernmost mounds to the State Historical Society. The mound group was designated as a National Historic Landmark in 1966. The site is also listed on the National Register of Historic Places. In 1971, the State Historical Society opened the Toolesboro Visitors Center. Acquisition of the northern portion, which contained five more mounds, was completed in 1976. The site was dedicated as an archaeological state preserve in 1981.

These ancient Indian mounds overlook the Mississippi River valley near the mouth of the Iowa River in the Southern Iowa Drift Plain landform region. The preserve includes a total of seven conical mounds (that average about six to eight feet tall and forty to eighty feet in diameter), the Visitors Center and Museum, and a small reconstructed prairie. The mounds comprise one of Iowa's principal "Hopewell" cultural sites. The Hopewell culture was a prehistoric mound-building group that established villages near rivers and streams during the Middle Woodland period, about 200 b.c. to a.d. 400. They are known for their mound-building activity and art, especially stone effigy pipes depicting frogs, rabbits, birds, and other animals.

The Hopewell people traded extensively, with items coming from as far away as the Appalachian Mountains, the Atlantic coast, Lake Superior, the Gulf of Mexico, and the Rocky Mountains. They also cultivated crops, hunted, fished, and gathered food from wild plants. The mounds were constructed for ceremonial rituals as well as burials. Similar mounds are found from the Missouri River to New York, and south to Florida. Human remains were placed in log tombs, often accompanied by pottery, effigy pipes, copper axes, mica ornaments, pearl beads, and bone and stone tools and weapons. The tomb was then covered with earth and the log structure was burned around the remains. A larger mound of earth was then piled over the whole area.

The Visitors Center contains displays and photographs of the Hopewell culture and is open each summer; the site itself is open year-round.

Burial mounds are protected by law.

Other archaeological sites containing Indian mounds areas in the state include Catfish Creek, Fish Farm Mounds, Little Maquoketa Mounds, Malchow Mounds, Slinde Mounds, and Turkey River Mounds State Preserves and Effigy Mounds National Monument.

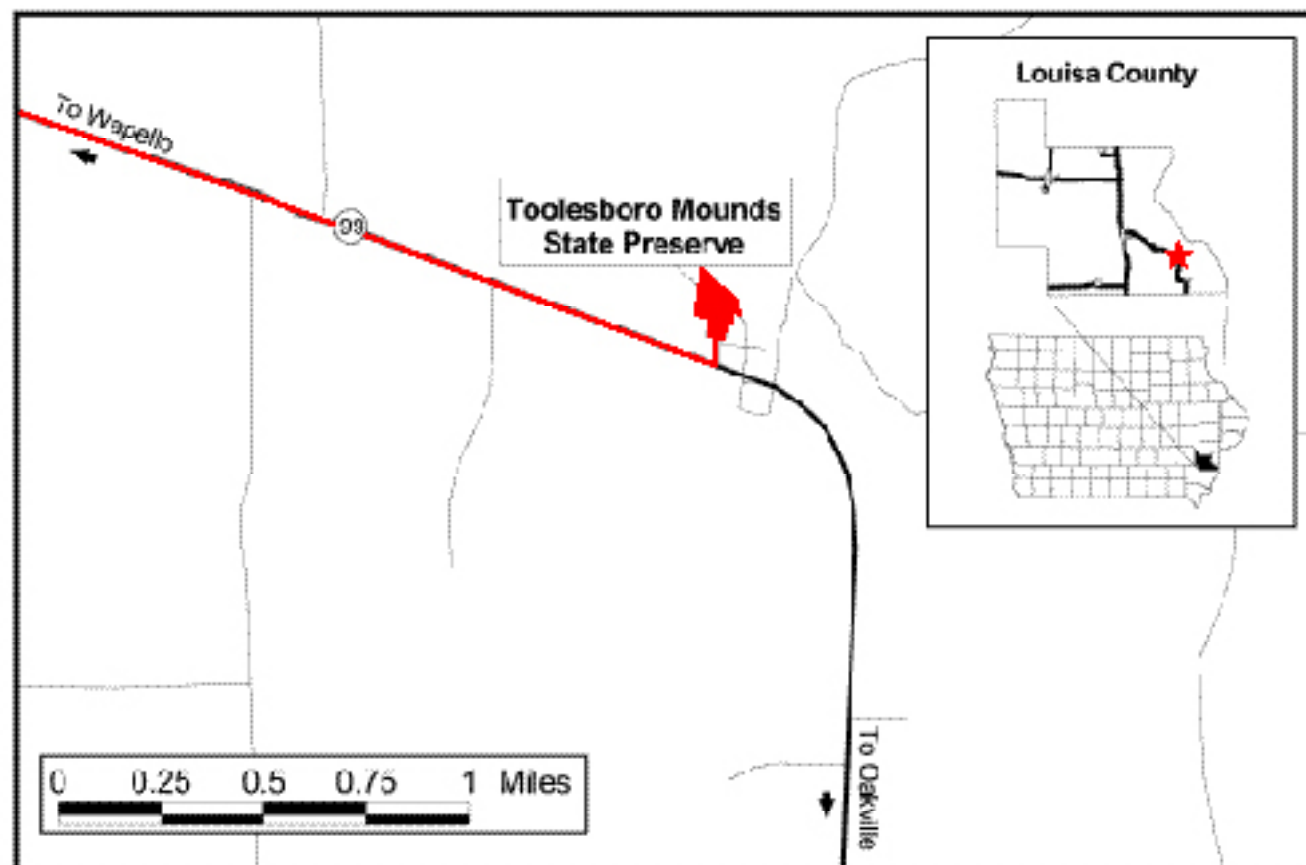
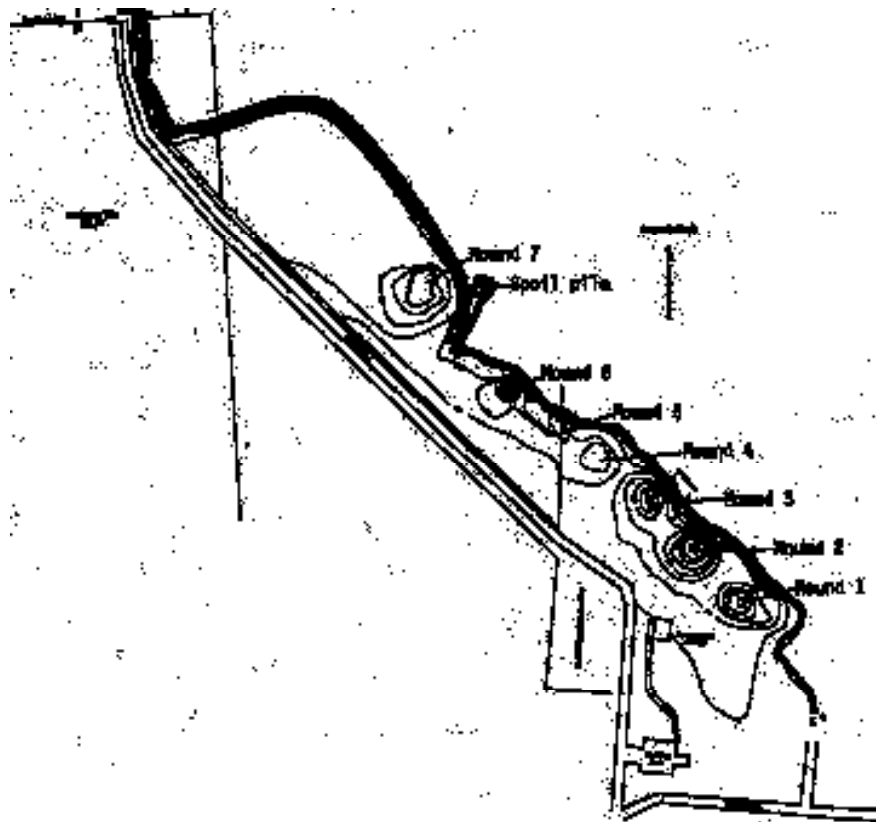
### DIRECTIONS

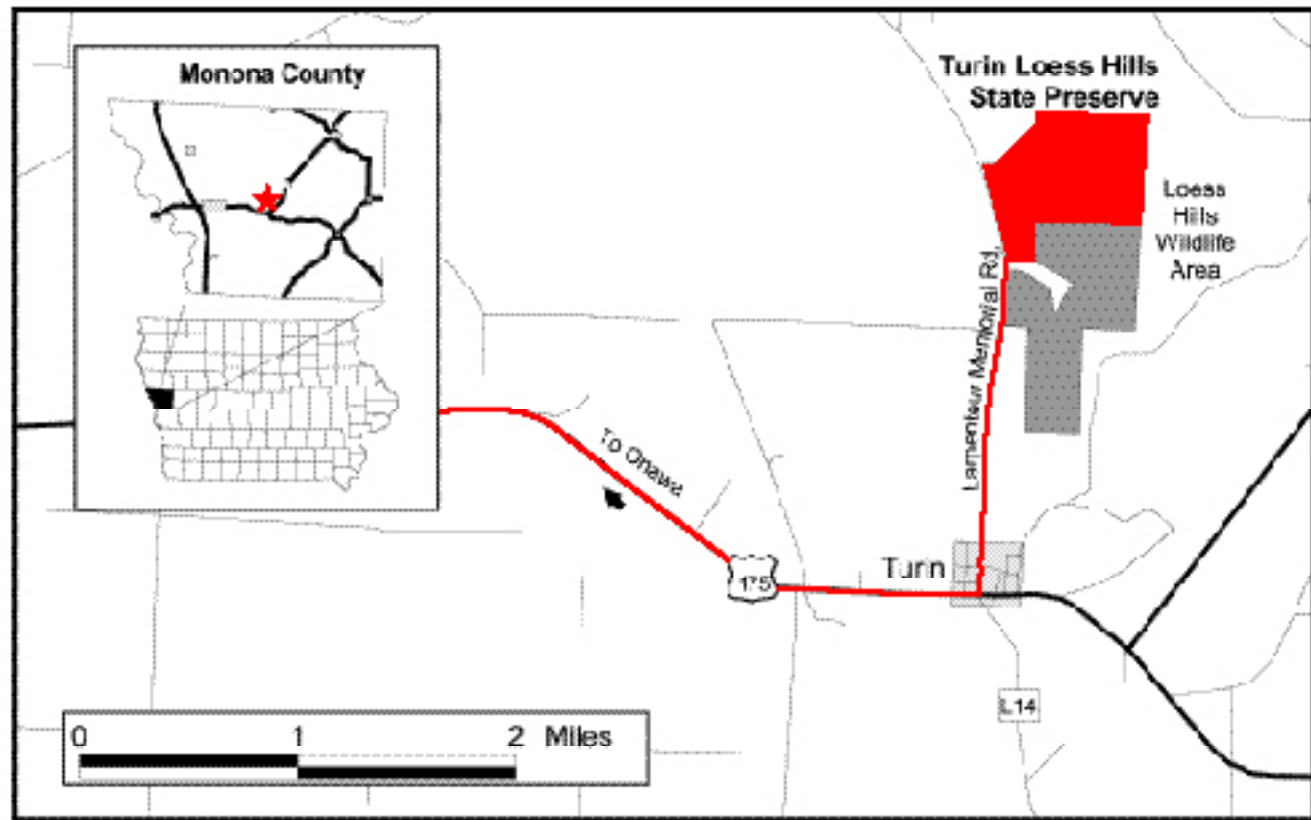
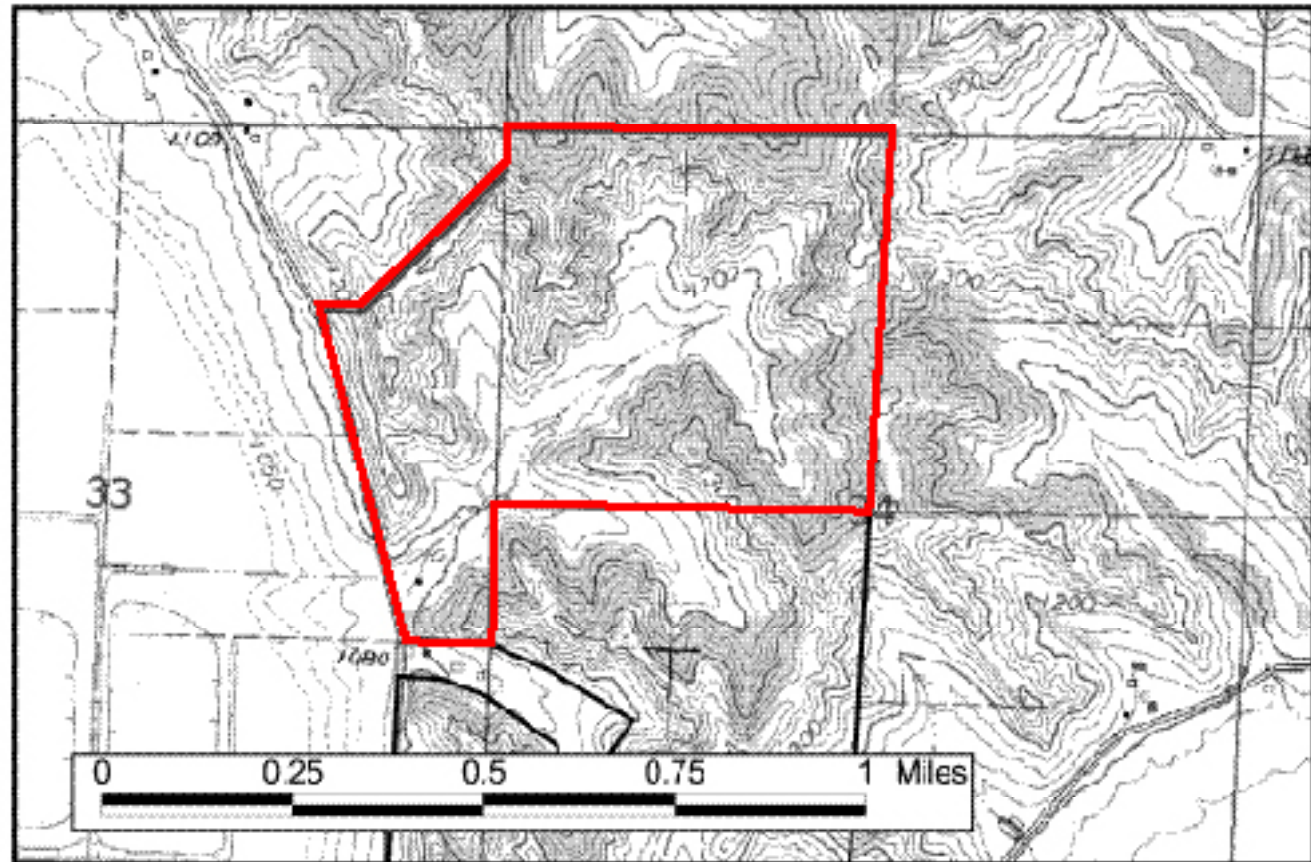
From Muscatine, drive south on Highway 61 to Wapello. In Wapello, turn east (right) onto Highway 99 and go 8 miles to Toolesboro. On the west side of town, turn north (left) onto Toolesboro Road and go one-half block to the preserve entrance (sign: Toolesboro Indian Mounds—State Historical Society of Iowa).

Hours: Open noon to 4 p.m. daily from Memorial Day weekend to Labor Day weekend. Free admission.

### AREA MANAGER

Louisa County Conservation Board  
 P.O. Box 261  
 609 James L. Hodges Avenue  
 Wapello, IA 52653  
 (319) 523-8381  
[www.lccb.org](http://www.lccb.org)  
[lccb@lccb.org](mailto:lccb@lccb.org)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Turin Loess Hills State Preserve

Turin Loess Hills State Preserve is a 220-acre area featuring a rugged Loess Hills landscape with an abrupt west-facing ridge. It is located in the southern unit of the 3,000-acre Loess Hills Wildlife Area, 2 miles north of Turin and 7.5 miles east of Onawa in Monona County. The Iowa Conservation Commission purchased the area in 1974. In 1978, the area was dedicated as a biological and geological state preserve and became part of a National Natural Landmark in 1986.

Located on the western edge of the Loess Hills landform region, the preserve overlooks the broad Missouri River valley, which was the source of the silt now forming the hills. Characterized by a series of steep ridges with narrow crests and very steep side slopes, it is an excellent example of the unique "peak and saddle" topography of the 60- to 150-foot-thick loess deposits that developed 14,000 to 30,000 years ago from wind-blown silt. Within the preserve, the one- to three-yard-wide ridges and numerous side spurs are covered with native prairie vegetation. Numerous ravines are forested primarily with bur oak and eastern red cedar trees.

The steep, west-facing slope above the flat Missouri River floodplain is typically hot and dry. Vegetation on this slope is dominated by little bluestem and Indian grass. The lack of fire in the decades prior to state ownership allowed large areas of smooth sumac, rough-leaved dogwood, and eastern red cedar to invade and become established. A management program of controlled burning and brush cutting has been instituted to help reverse the invasion. The northeast-facing slopes are more mesic with much Indian grass and big bluestem.

Of the more than 700 species of plants found throughout the Loess Hills, over 200 vascular plant species plus several bryophytes occur at this preserve. Many of the plants are typical of the Great Plains and exist nowhere else in Iowa outside of the Loess Hills. Examples are yucca, skeletonweed, cut-leaf iron plant, sand lily, nine-anthered dalea, and Lambert's crazyweed. In the spring, prairie dandelion, violet wood sorrel, and prairie violet are common occurrences. Prairie moonwort can also be found at this preserve in the spring. Summer brings a diverse array of forbs including green milkweed, silvery scurf-pea, thimbleweed, and downy painted cup. By fall, the golden hues of the prairie grasses and Missouri and showy goldenrods are accentuated by the purple hues of silky aster, fall aster, smooth aster, and silvery white sage.

The mixture of prairie and woodland in this preserve maintains a variety of birds and other animals. Common mammals include prairie vole, short-tailed shrew, red fox, and badger. Indigo bunting, yellow-billed cuckoo, orchard oriole, and rufous-sided towhee nest in the woodlands, whereas western meadowlark and lark sparrow nest in the prairie areas. Amphibians and reptiles in the prairie areas include the Great Plains toad, Woodhouse's toad, six-lined racerunner, prairie kingsnake, Plains garter snake, and lined snake. Amphibians and reptiles found in the woodland areas include the smallmouth salamander, gray treefrog, ringneck snake, and redbelly snake.

Hunting is permitted.

Other natural areas in the Loess Hills include Waubonsie State Park, Sylvan Runkel State Preserve, Loess Hills Wildlife Area, Preparation Canyon State Park, Stone State Park, Mount Talbot State Preserve, Five Ridge Prairie State Preserve, and the Loess Hills State Forest.

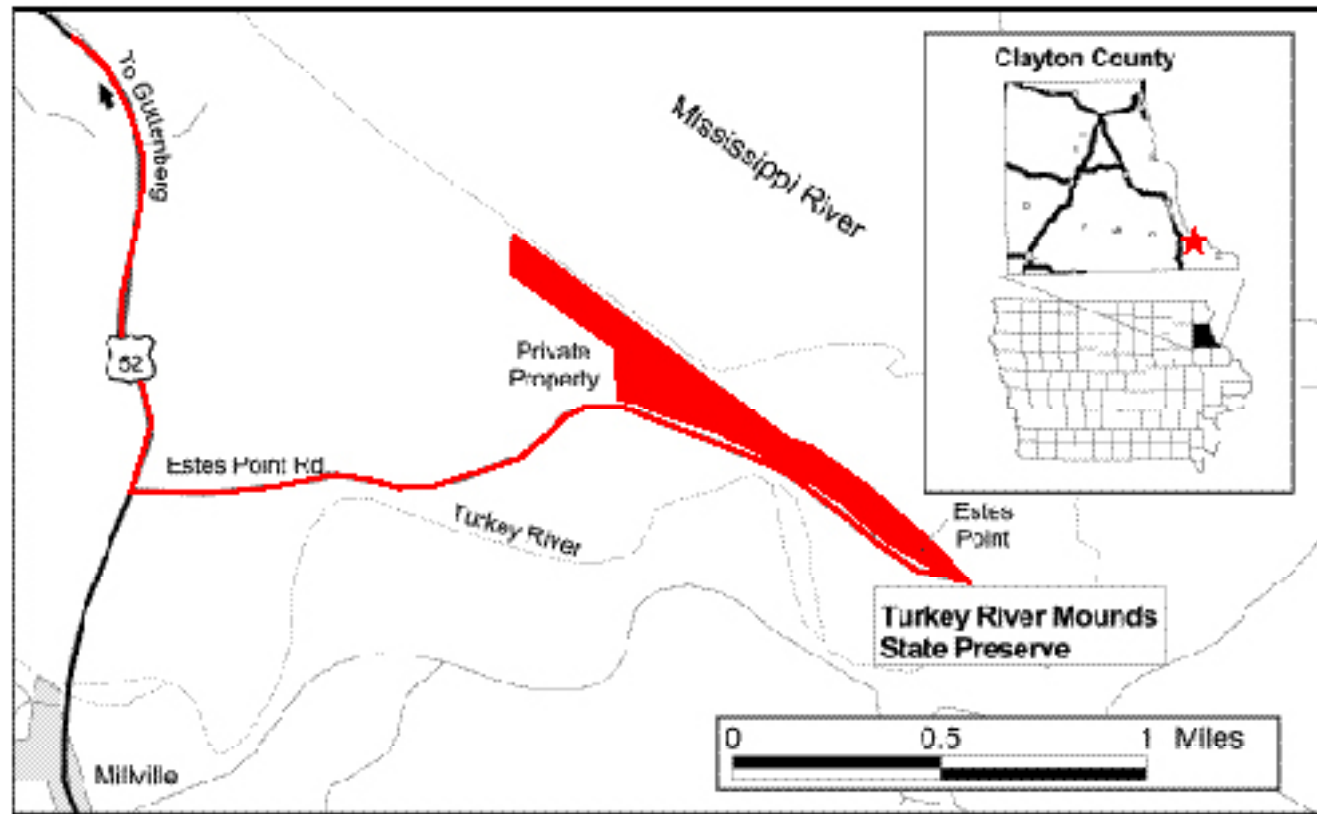
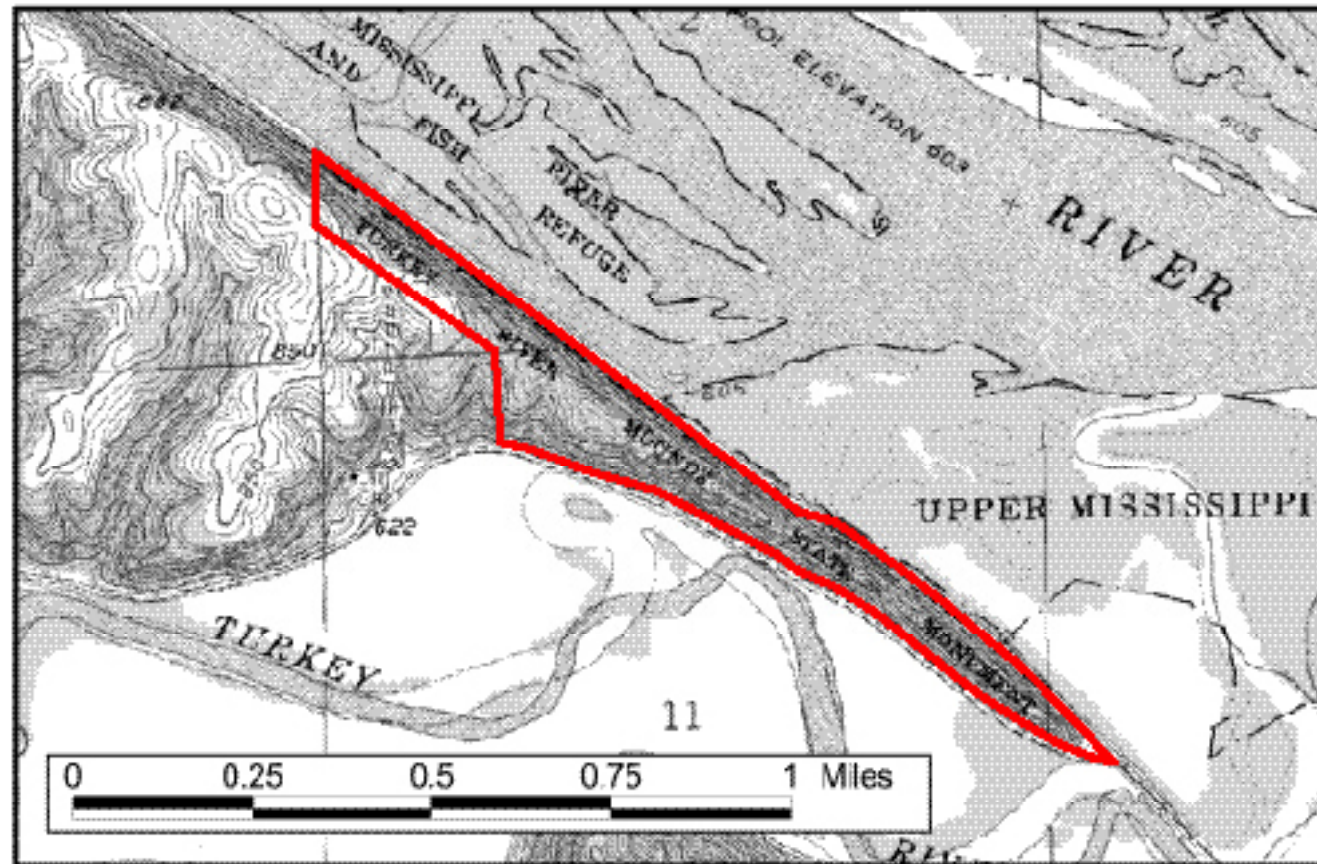
### DIRECTIONS

From Sioux City, drive south on I-29 to Highway 175 (exit 112) at Onawa. Turn east (left) on Highway 175 and go 9 miles to Larpenteur Memorial Road in Turin. Turn north (left) and go 1.5 miles to the parking lot for the preserve on east side of the road (sign: Turin Loess Hills State Preserve).

### AREA MANAGER

Iowa Department of Natural Resources  
 Missouri River Wildlife Unit  
 PO Box 118  
 Onawa, IA 51040  
 (712) 423-2426  
[www.iowadnr.gov/preserves/State\\_Preserves@dnr.iowa.gov](http://www.iowadnr.gov/preserves/State_Preserves@dnr.iowa.gov)





## Turkey River Mounds State Preserve

Turkey River Mounds State Preserve is a 62-acre area containing a large complex of ancient Indian mounds on a spectacular narrow ridge overlooking the confluence of the Turkey River and the Mississippi River. It is located 4.5 miles southeast of Guttenberg in Clayton County. The first exploratory survey of the mounds was conducted in 1885. The site was revisited by famous Iowa archaeologist Ellison Orr in the early 1930s. The property was purchased by Dubuque citizens in 1934 and given to the Iowa Conservation Commission in 1940. Later archaeological surveys were conducted in 1964 and 1973. The area was dedicated as an archaeological, geological, and biological state preserve in 1968. It was also placed on the National Register of Historic Places in 1990.

Located in the Paleozoic Plateau landform region, the preserve is situated on a narrow ridge with precipitous bluffs rising 250 feet above the Mississippi floodplain. The bluffs are composed of resistant Galena Group dolomite of Ordovician age (450 million years old) that has weathered into picturesque pinnacles. The summit of the ridge consists of forty-three conical, linear, compound, and effigy mounds, thirty-eight of which are in the preserve. The mounds vary in size and are between 1.3 feet and 6 feet high. The conical mounds vary from 20 feet to over 100 feet in diameter, and the linear mounds range from 80 to 175 feet in length. The single effigy mound is in the shape of a panther and is 98 feet long and 40 feet wide. The mounds were built throughout the Woodland period between 500 b.c. and a.d. 900 and served as burial sites and ceremonial places. They are believed to have been constructed by basket loads of soil placed either on the ground or on a specially prepared surface. On occasion, additional burials were later added to a mound, increasing the size of the earthen feature. Excavated material indicates that these people traded, directly or indirectly, with people as far away as North Dakota, Ohio, and the Gulf coast. The site is important for studies of early Upper Mississippi valley burial groups as well as the Archaic to Woodland transition.

Several interesting plant communities can be found on the ridge, cliffs, and steep lower slopes of the preserve. The ridge is semiforested with white oak, red oak, aspen, paper birch, and eastern red cedar. In openings near the cliff edges, prairie plants such as hoary puccoon, little bluestem, pale-spiked lobelia, rough blazing star, and gray-headed coneflower may be found. Slender lip fern and smooth cliff-brake fern plus orange and brown lichens cover much of the dolomite outcrops. Forests developed on the steep slopes beneath the sheer bluffs contain a variety of plants. The dry south-facing slope is dominated by white oak and shagbark, along with basswood, chinkapin oak, and eastern red cedar. The mesic north-facing slopes are dominated by sugar maple and basswood. Wildflowers and ferns found here include Dutchman's breeches, nodding trillium, bishop's cap, jeweled shooting star, wild ginger, bulblet bladder fern, and walking fern.

Burial mounds are protected by law.

An American flag was erected at the southeast end of the ridge in 1972 by the American Veterans Post 15 in Guttenberg.

Other archaeological sites in Iowa include Effigy Mounds National Monument and Slinde Mounds, Fish Farm Mounds, Toolesboro Mounds, Malchow Mounds, Little Maquoketa River Mounds, and Wittrock Indian Village State Preserves.

### DIRECTIONS

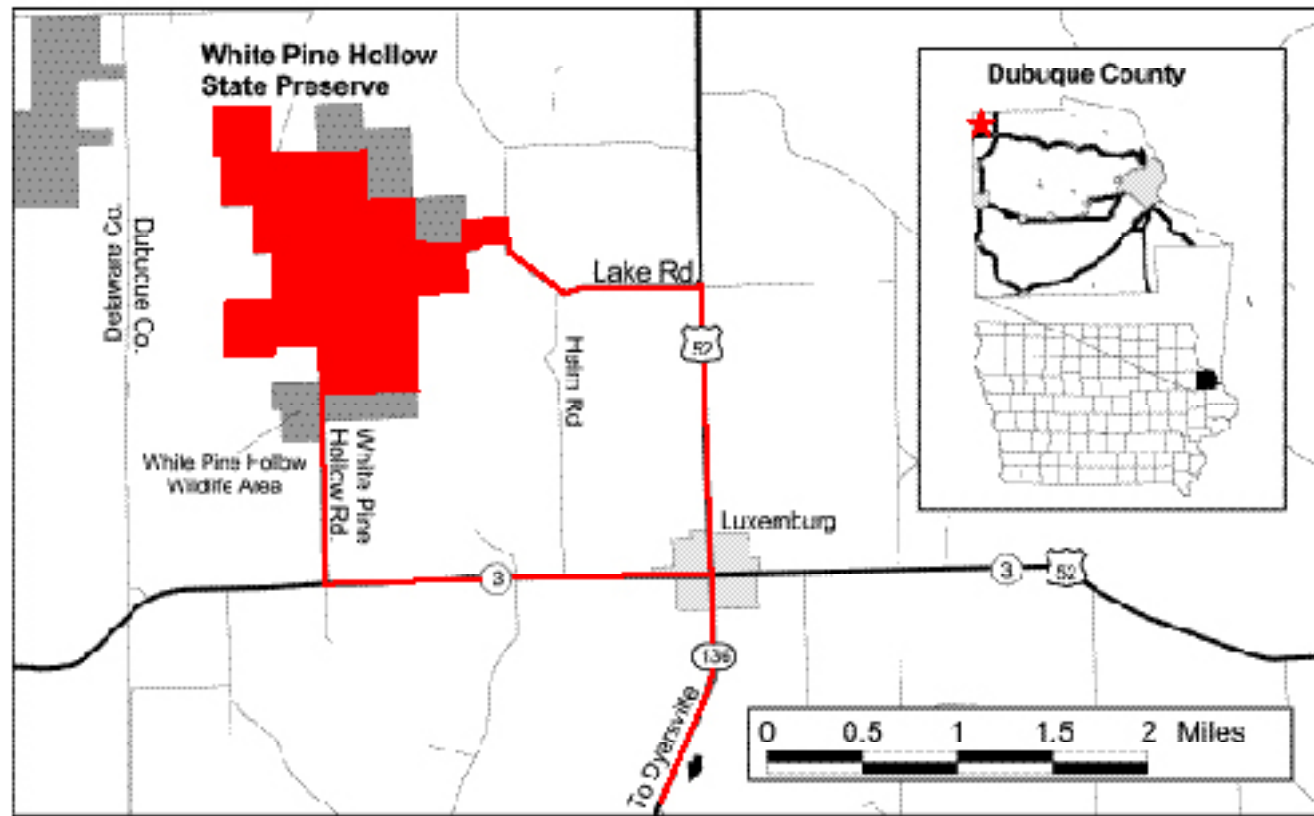
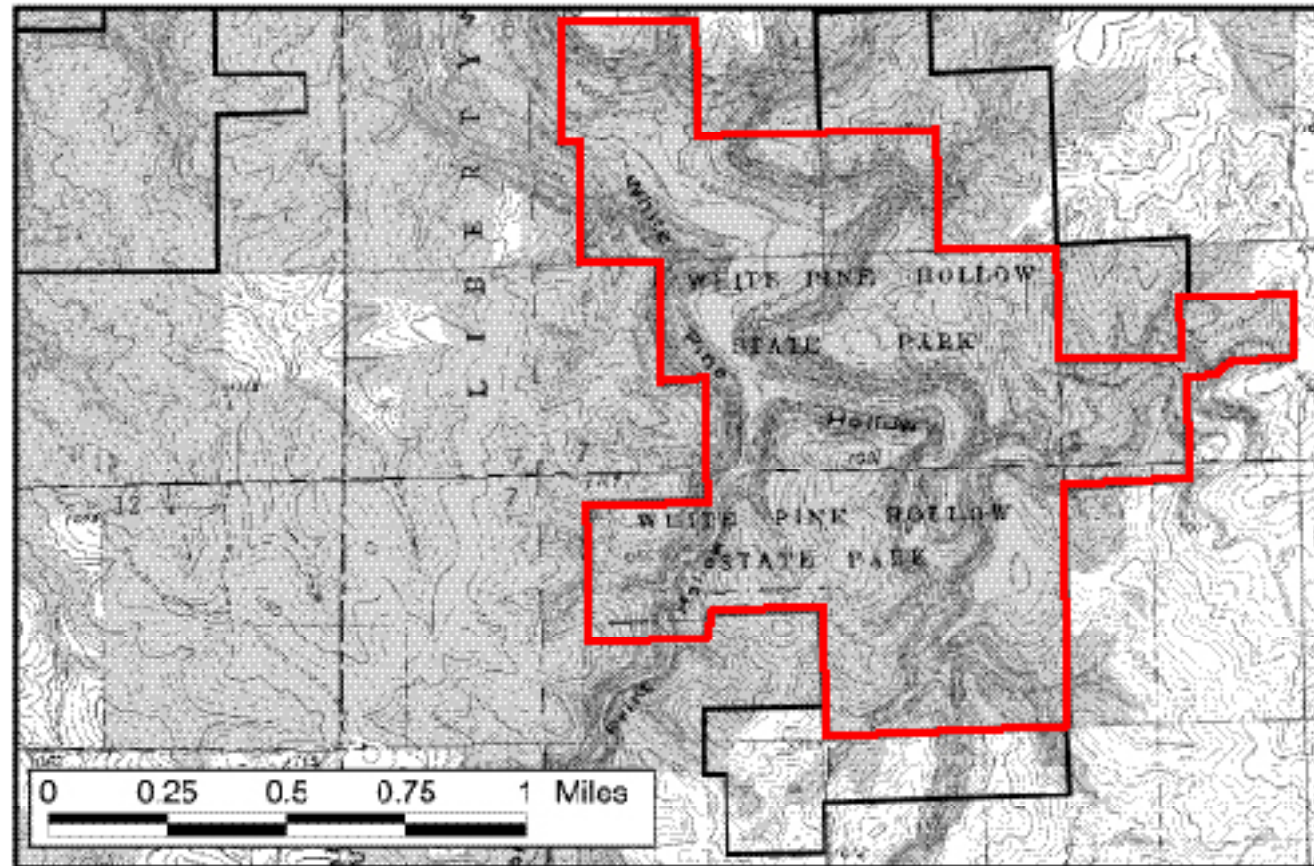
From Guttenberg, take Highway 52 south 5.5 miles to Estes Point Road. Turn east (left) and go 2 miles to the parking lot for the preserve (sign: Turkey River Mounds State Preserve).

### AREA MANAGER

Iowa Department of Natural Resources  
Pikes Peak State Park  
15316 Great River Road  
McGregor, IA 52157-8558  
(563) 873-2341  
Pikes\_Peak@dnr.iowa.gov  
www.iowadnr.gov/preserves/  
State\_Preserves@dnr.iowa.gov



## White Pine Hollow State Preserve



White Pine Hollow is a 712-acre preserve featuring a rugged landscape with groves of white pine trees. Formerly known as “Pine Creek Hollow” and “Pine Hollow,” it is two miles northwest of Luxemburg in northwest Dubuque County. Interest began in the early 1920s for Pine Creek Hollow to become an “unimproved” state park. In 1932, the Dubuque High School Nature Club began construction of a cabin to serve as a nature school headquarters, and it was dedicated to Ross Harris, founder of the Pine Hollow movement. The Dubuque County Conservation Society contributed funds toward the purchase of the area, leading to the acquisition of the first 80 acres in 1934 by the Iowa Conservation Commission as a state forest. The area was dedicated as a biological and geological state preserve in 1968 and as a National Natural Landmark in 1972.

Located along the western edge of the Paleozoic Plateau landform region, the deeply dissected, bedrock-dominated topography of this preserve lies on the prominent Silurian Escarpment. This line of steep rock bluffs marks the eroded edge of hard, resistant Silurian-age dolomite. Terrain is typical of the Silurian Escarpment, with numerous large rock outcrops, slump blocks, cliffs, sinkholes, caves, algific talus slopes, springs, and steep-walled valleys. The deep valley of Pine Hollow Creek and three extensive branches cut through the preserve. The “hogsback,” a nearly isolated narrow upland ridge formed by the meandering creek, can be found in the southeastern portion of the preserve. A “rock city” of separated massive slump blocks occurs just north of the hogsback. Precipitous bluffs occur throughout the preserve. The preserve’s highest point, at 1,140 feet, is about 320 feet above its lowest elevation.

A wide diversity of habitats in the preserve—including bluffs, upland forests, bottomland forests, pine groves, and algific talus slopes—supports a large variety of plant and animal life. Over 500 species of vascular plants and over 100 species of bryophytes have been reported in the preserve. White oak and red oak predominate in the forests on dry, rolling uplands. Sugar maple and basswood prevail on steep, mesic slopes. The floodplain valleys are composed of box elder, silver maple, cottonwood, green ash, hackberry, and black cherry, along with willows in wetter areas. Cliff faces host smooth cliff-brake fern, rock sandwort, cliff goldenrod, bulblet bladder fern, walking fern, and slender rockbrake fern. Some plants are limited to algific talus slopes, continuously bathed with cold moist air seeping from bedrock fissures. The rare Iowa Pleistocene, Midwest Pleistocene, bluff vertigo, Iowa Pleistocene vertigo, and frigid ambersnail snails have been found on these algific slopes.

Beginning as early as March, hepatica, bloodroot, and Dutchman’s breeches can be seen in abundance on many of the slopes, followed by spring beauty, squirrel corn, bishop’s cap, bellwort, white trout-lily, and swamp buttercup. By May and June, Virginia waterleaf and wild lily-of-the-valley can be seen blooming in the uplands. By summer, virgin’s bower and hairy wood mint are blooming among the many fern species found here. Fall flowering species include purple joe-pye-weed, fall coralroot orchid, Indian pipe, arrow-leaved aster, and zigzag and elm-leaved goldenrods. About ninety species of birds summer here, and six species of bats have been found in the preserve.

Hunting is permitted.

Other natural areas along the Silurian Escarpment include Brush Creek Canyon, Bixby, and Mossy Glen State Preserves, Backbone and Echo Valley State Parks, and Ram Hollow and Hoffman Wildlife Areas.

### DIRECTIONS

From the intersection of Highway 20 and Highway 136 at Dyersville, drive north (through Dyersville and New Vienna) on Highway 136 for 8 miles to Luxemburg. From the intersection of Highway 136 with Highway 52 and Highway 3 in Luxemburg, there are two approaches to the preserve:

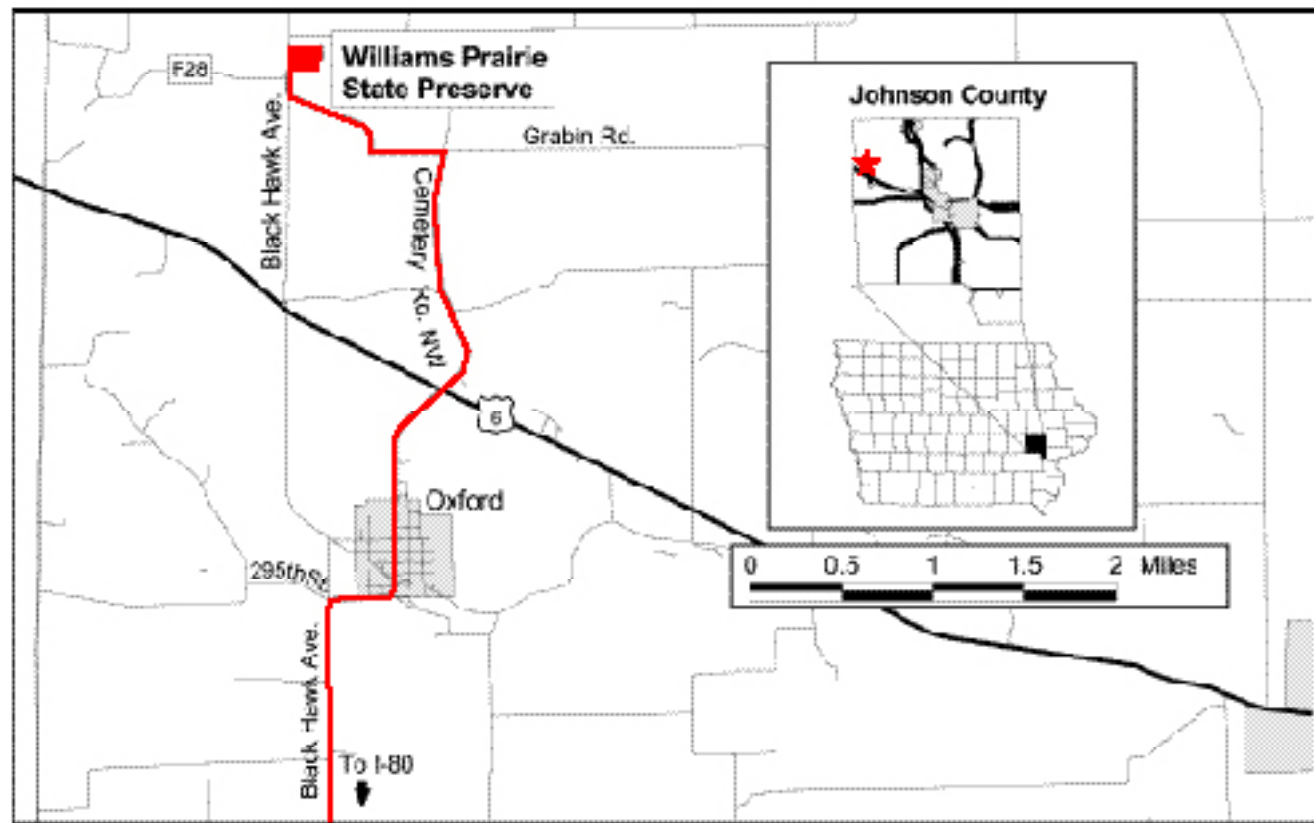
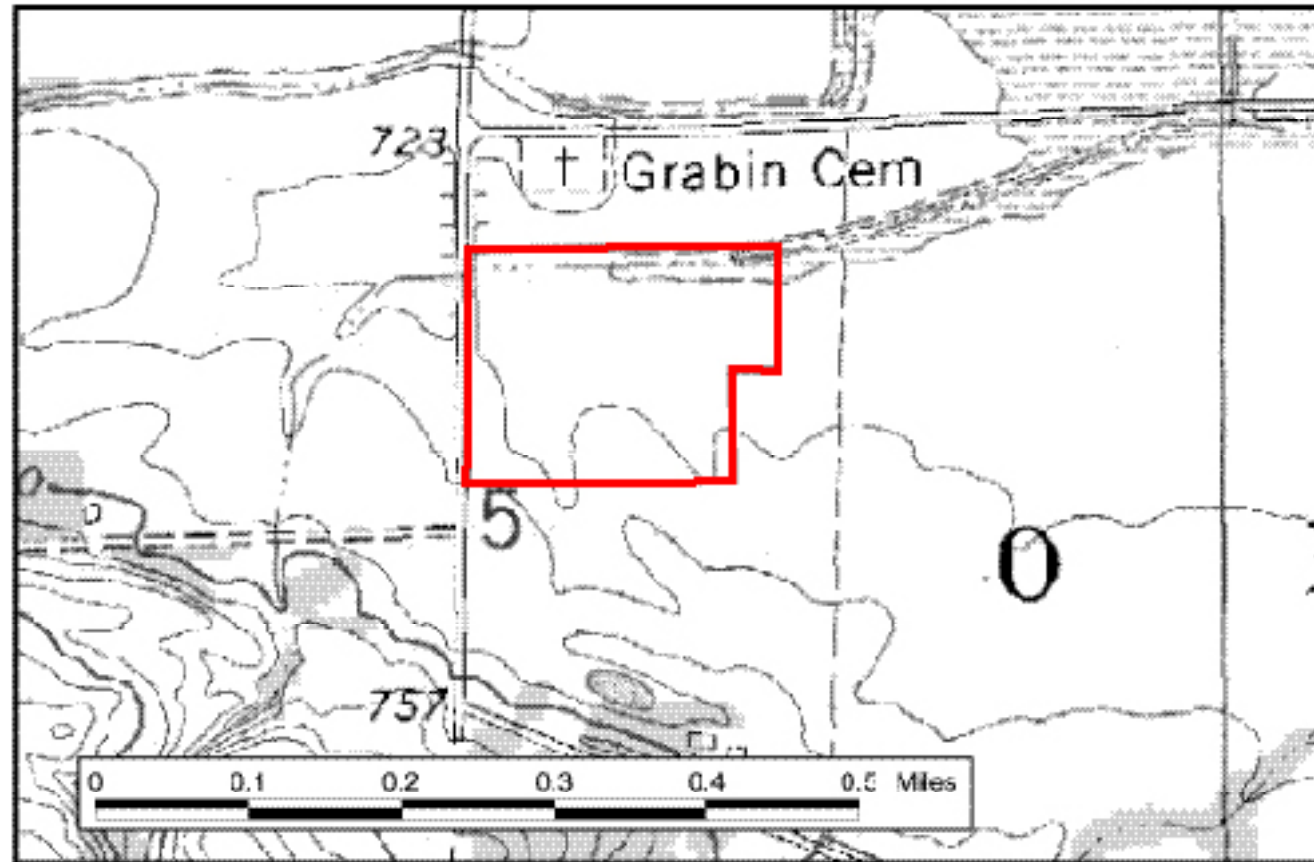
To east entrance: Take Highway 52 north (straight) for 1.5 miles to Lake Road. Turn west (left) and go 0.75 mile to an intersection with Heim Road. Veer northwest (right) onto Heim Road and continue on this curving road 0.5 mile to a parking lot by the preserve entrance on the west (left) side of the road (sign: White Pine Hollow Preserve).

To south entrance: Take Highway 3 west (left) for 2 miles to White Pine Hollow Road. Turn north (right) and go 1.25 miles to the end of the road (sign: White Pine Hollow Preserve).

### AREA MANAGER

Iowa Department of Natural Resources  
 Yellow River Forest  
 729 State Forest Road  
 Harpers Ferry, IA 52146  
 (563) 586-2254  
[www.state.ia.us/forestry](http://www.state.ia.us/forestry)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Williams Prairie State Preserve

Williams Prairie State Preserve is a 30-acre area featuring a wet prairie. It is located 2.5 miles north of Oxford and 15 miles northwest of Iowa City in western Johnson County. In the early 1900s, John Williams bought the area and used it as a hayfield. Botanists from the University of Iowa discovered the area about 1960 and have used it as an outdoor classroom since that time. It was deeded to The Nature Conservancy in 1973 and was dedicated as a biological state preserve in 1976.

Located along the edge of the Iowan Surface landform region, the preserve is situated within the broad valley of the Iowa River. Most of the preserve consists of shallow lowland that remains wet through the spring and into midsummer. A wet prairie, dominated by dense stands of sedges and bluejoint grass, is located here. Some dry knolls are located in the eastern and southern portions of the site, dominated by big bluestem and Kentucky bluegrass. Over 300 species of vascular plants have been reported in the preserve, including twelve species of sedges and about forty species of grasses. Eight bryophytes (mosses and liverworts) are also found here. In the spring, hoary puccoon, prairie phlox, yellow stargrass, spring cress, golden alexanders, shooting star, marsh marigold, and swamp buttercup can be seen in bloom, followed by swamp milkweed, butterfly weed, Michigan lily, marsh vetchling, wild indigo, indigo bush, leadplant, blue flag iris, marsh bellflower, and prairie blazing star in the summer. Rare plants found here include Virginia bunch-flower and northern adder's tongue fern. Fall brings swamp lousewort, sneezeweed, panicked aster, nodding bur marigold, New England aster, flat-topped aster, Canada goldenrod, grassleaf goldenrod, and bottle gentian.

Many nesting birds can be found here, including sedge wren, bobolink, grasshopper sparrow, eastern meadowlark, yellow-throated warbler, and song sparrow.

Botany and zoology classes from the University of Iowa, Cornell College, and local high schools use this preserve for an outdoor classroom. Hunting is not permitted.

Other natural areas in the vicinity include Rock Island, Palisades-Dows, and Hanging Bog State Preserves and Palisades-Kepler State Park.

### DIRECTIONS

From the intersection of I-80 and I-380 on the northwest side of Iowa City, take I-80 west for 9 miles to County Road W38 (exit 230). Turn north (right) onto W38 (Black Hawk Avenue) and drive 2.5 miles into the town of Oxford. On the south edge of Oxford, turn east (right) onto Hawkeye Road (295th Street) and follow it 0.5 mile to Augusta Avenue. Turn north (left) and follow Augusta Avenue (which becomes Highway 109) through town for 1.25 miles to Highway 6. Cross Highway 6 and continue north (straight) on W38 1.5 miles to Grabin Road. Turn west (left) on Grabin Road and go 1 mile to Black Hawk Avenue NW. Turn north (right) and go 0.25 mile to the preserve on the east side of the road (sign: Williams Prairie). Access is through a gate on the southwest corner of the preserve.

### AREA MANAGER

The Nature Conservancy  
 303 Locust St., Suite 402  
 Des Moines, IA 50309  
 (515) 244-5044  
[www.tnc.org/iowa](http://www.tnc.org/iowa)  
[iowa@tnc.org](mailto:iowa@tnc.org)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)



## Wittrock Indian Village State Preserve

Wittrock Indian Village State Preserve is a 6-acre area featuring the buried remains of an ancient, fortified village occupied by Indians of the Mill Creek culture between the years 1200 and 1300. It is located on a low terrace of Waterman Creek, a tributary of the Little Sioux River, in O'Brien County. The property area was deeded to the Iowa Conservation Commission in 1937 by the Wittrock family, who plowed around the site for their farm fields, and left the site intact. The site was dedicated as a National Historic Landmark in 1965 and as an archaeological state preserve in 1968.

A plaque and interpretive sign with the following quotation are located on the eastern edge of the preserve:

The ancient Mill Creek Indians built this village and lived here for about 300 years. They made their living hunting bison and cultivating corn, beans and squash. Living was dangerous here in those days and the villagers found it necessary to build substantial fortifications to protect themselves from other Indians.

Posts have been set along sections of the north and south stockade. The original stockade completely surrounded the village. Posts were set to make a solid stockade wall. Inside the wall the villagers built 20 (uniformly sized) rectangular earth lodges 20 by 30 ft. in size and set two ft. deep in the ground. Each lodge had a central fireplace and storage pits and was entered by way of an (south-facing) entrance tunnel (10 to 15 feet long). Excavation in 1965 by the State Archaeologist first disclosed the existence of the stockade and house type.

Major collections from the site are currently curated at the University of Wisconsin's Department of Anthropology in Madison and at the Office of the State Archaeologist in Iowa City. Some material is also curated at the Sanford Museum in Cherokee.

Gabions (erosion control structures) were built in 1994 on Waterman Creek to protect the western edge of the preserve from streambank erosion.

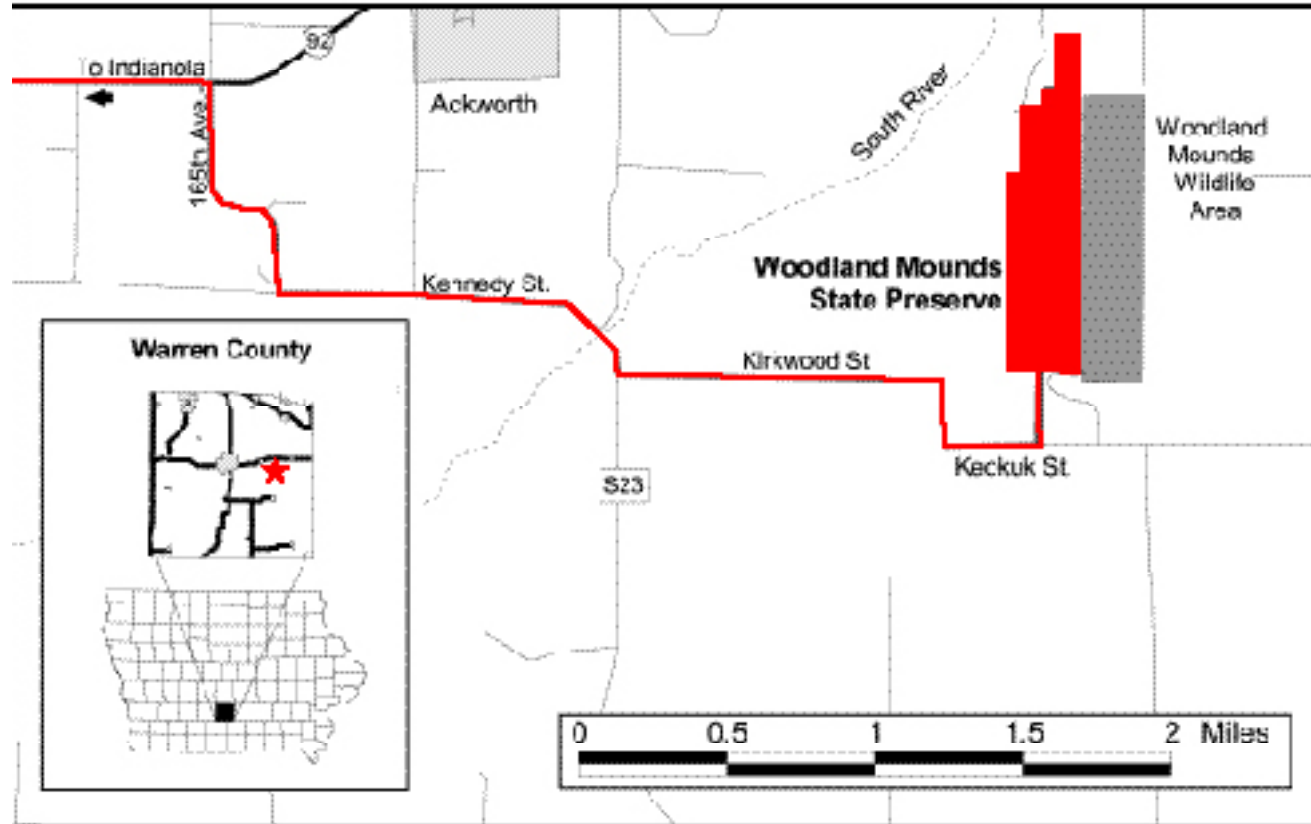
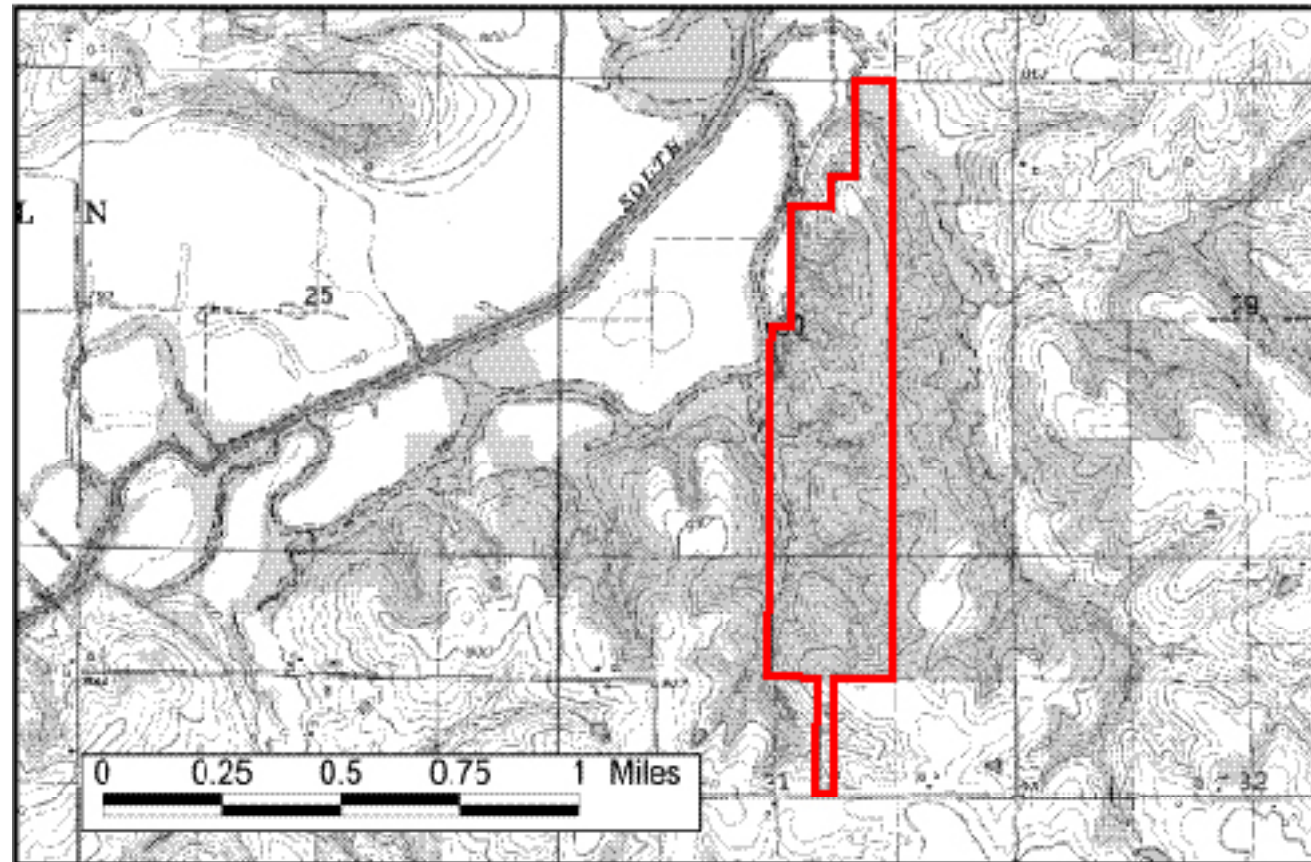
Other archaeological sites in Iowa include Catfish Creek, Gitchie Manitou, Hartley Fort, Indian Bluffs, Little Maquoketa River Mounds, Malchow Mounds, Slinde Mounds, Toolesboro Mounds, Turkey River Mounds, and Woodland Mounds State Preserves and Effigy Mounds National Monument.

Access to preserve is across private land. Permission must be obtained to cross private property.

AREA MANAGER  
Iowa Department of  
Natural Resources  
Great Lakes Wildlife Unit  
2408 17th St.  
Spirit Lake, IA 51360  
(712) 336-3524  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)







## Woodland Mounds State Preserve

Woodland Mounds State Preserve is a 185-acre area featuring a group of five conical burial mounds dating from the years a.d. 400 to 1100. It is located 7.5 miles east of Indianola in Warren County. In 1981, the Warren County Conservation Board purchased the woodland from the Gilbert family, who had owned the property since the late 1800s. In 1983, the property was dedicated as an archaeological preserve and named after the Woodland Indian culture that built the mounds.

A group of five conical burial mounds, dating from a.d. 400 to 1100, is located on a broad ridge in the northern part of the preserve, and is probably from the Late Woodland Indian culture. This culture is widespread throughout the eastern United States and is more common in the eastern portion of Iowa. Woodland Indians were generally semisedentary hunters, gatherers, and farmers. Mound building was part of their culture. Earthen mounds were often placed on the highest point of a ridge above a village site or camp. The organized mound-building process brought people together from the surrounding area and may have involved a variety of ceremonial activities around the burial of their dead. Burial mounds are protected by law.

The preserve is located within the Southern Iowa Drift Plain, Iowa's largest landform region. This region is underlain by glacial deposits that are older than 500,000 years old. The glacial pebbly clays are mantled with deposits of wind-blown silt (loess), generally between 30,000 and 14,000 years old. The steep, timbered hills of the area are situated along a long, prominent ridge above a former meander channel of the South River. Remnants of an old quarry that was used by local farmers for rock for house and barn foundations is present in the northern end of the preserve.

The preserve is predominantly forested with white oak, red oak, shagbark hickory, and basswood, with ironwood and buckeye occurring in the understory. In the spring, many wildflowers can be seen, including bloodroot, Virginia bluebells, spring beauty, wild ginger, Dutchman's breeches, and false rue anemone. By May, the early spring wildflowers are joined by blue phlox, mayapple, Solomon's seal, white trout-lily, jack-in-the-pulpit, Virginia waterleaf, and false Solomon's seal. Elm-leaved goldenrod adds a touch of yellow to the landscape in the fall. The woodland includes many species of ferns as well, including rattlesnake fern, creeping fragile fern, and spinulose wood fern.

A hiking trail through the preserve takes one along the ridge top through Gilbert's Grove and to the Indian mounds and the northern portion of the preserve. As part of the Warren County Conservation Board's Environmental Education program, many schoolchildren visit the area to learn about the special natural and cultural features offered here. Hunting is permitted.

Other natural areas in the vicinity include Lake Ahquabi State Park and Berry Woods and Rolling Thunder Prairie State Preserves.

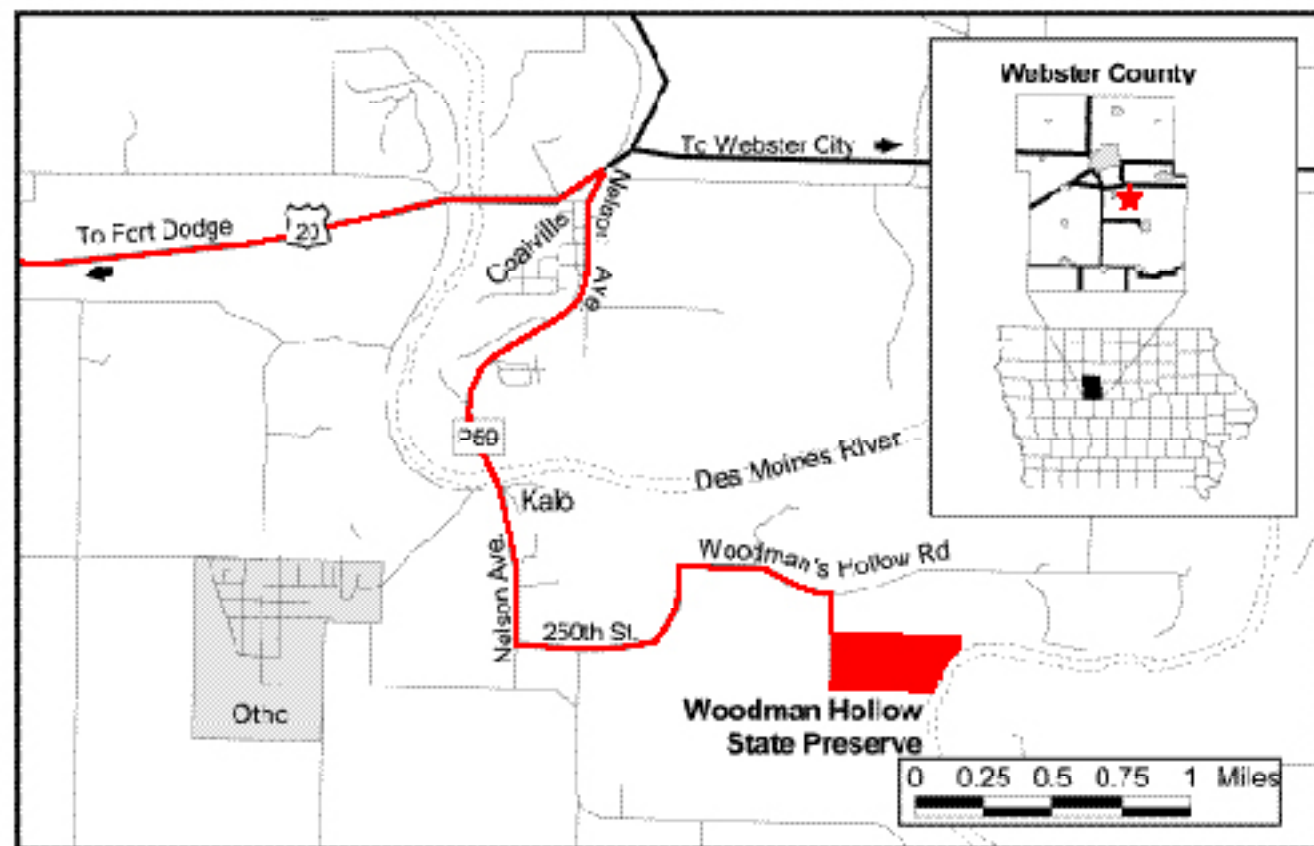
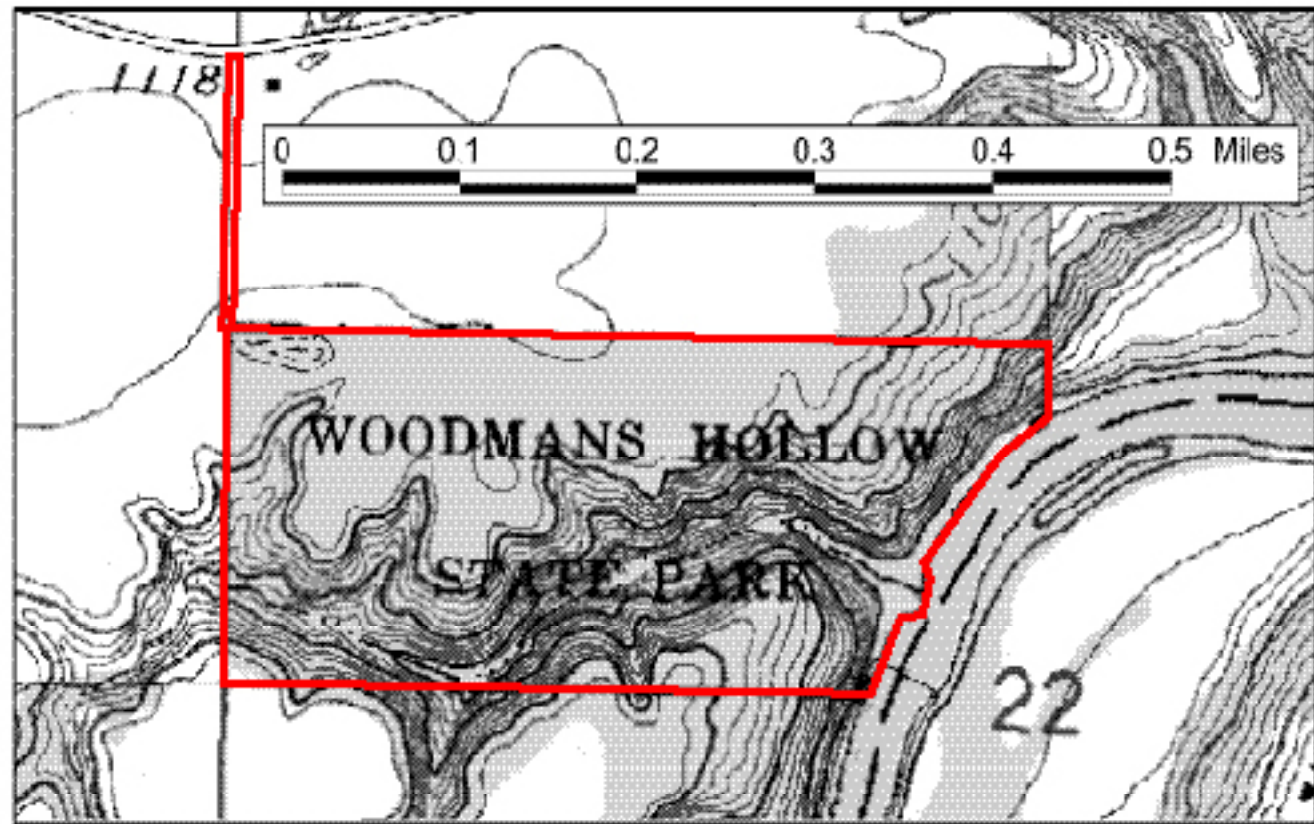
### DIRECTIONS

From the intersection of Highway 65/69 and Highway 92 in Indianola, take Highway 92 east for 3.5 miles to S23 (165th Avenue). Turn south (right) and go 1 mile on this winding road to Kennedy Street. Turn east (left) and go 1.5 miles to Kirkwood Street. Turn east (left) and go 1.75 miles to the preserve entrance on the north side of Keokuk Street (sign: Woodland Mounds State Preserve). A parking lot is located at the end of the 0.25-mile-long entrance lane.

### AREA MANAGER

Warren County  
Conservation Board  
1555 118th Avenue  
Indianola, IA 50125  
(515) 961-6169  
[www.warrenccb.org](http://www.warrenccb.org)  
[wccb@warrenccb.org](mailto:wccb@warrenccb.org)  
[www.iowadnr.gov/preserves/](http://www.iowadnr.gov/preserves/)  
[State\\_Preserves@dnr.iowa.gov](mailto:State_Preserves@dnr.iowa.gov)





## Woodman Hollow State Preserve

Woodman Hollow State Preserve is a 63.5-acre area featuring a deep forested ravine. Formerly known as “Woodman’s Hollow,” this preserve is located 6.5 miles southeast of Fort Dodge in Webster County. In 1927, the Board of Conservation purchased the property from the Woodman family as a “preserve.” It became a popular picnic area during the 1930s and 1940s. It was formally dedicated as a biological, geological, and archaeological state preserve in 1970.

Located in the Des Moines Lobe landform region, the preserve contains a deep forested ravine along the Des Moines River, surrounded generally by a level landscape. The ravine was created by a short tributary of the Des Moines River that has cut through 12,000- to 14,000-year-old glacial deposits and become incised in the underlying sandstone bedrock. The resulting canyon is flanked by rugged, layered sandstone cliffs along the stream valley. This sandstone originated in an ancient river channel that once flowed through this part of Iowa during the Pennsylvanian period of geologic time, 300 million years ago. Today the stream meanders through the deep canyon of the preserve and joins the Des Moines River, which forms its eastern boundary. The stream is fed by a spring near the western boundary, which forms a twelve-foot waterfall during wet periods and heavy rainfall.

Two prehistoric rock shelters found here include evidence of Woodland Indian occupation (over 750 years ago), as well as possibly Archaic Indian (over 2,800 years ago) use. A historical concrete bridge foundation, located in the valley, and two small latrine structures, in the northwest corner of the preserve, were originally built by the Civilian Conservation Corps (CCC).

The gently sloping uplands, plus abrupt north- and south-facing slopes of the preserve, provide diverse habitats for over 500 species of plants, including thirteen ferns and 142 mosses, liverworts, and hornworts. The most abundant canopy trees are white oak and red oak on the drier uplands, with basswood and black maple prevailing on mesic, north-facing slopes. As early as March, snow trillium can be found blooming, followed by bloodroot, hepatica, and hairy blue violet, early meadow rue, wild ginger, downy yellow violet, bishop’s cap, bellwort, and white trout-lily. In June, bracted orchid, American bellflower, wild sarsaparilla, and Indian pipe begin to bloom. By fall, fall coralroot orchid and Ontario aster are seen along with spotted jewelweed. The steep slopes and valley floor support one of the most varied fern and fern ally floras in the state, including shining clubmoss, Goldie’s wood fern, slender rockbrake fern, interrupted fern, and ostrich fern.

Several small prairie openings occur on the north rim of the canyon. Big and little bluestem dominate these prairies, along with redroot and leadplant. Golden alexanders, pussytoes, prairie phlox, prairie violet, hoary puccoon, blue-eyed grass, and golden ragwort can be seen in April and May, along with a few thimbleweed, pale purple coneflower, prairie coreopsis, spiderwort, white prairie clover, gray-headed coneflower, and few-flowered scurf-pea in June. By July and August, thimbleweed, round-headed bush clover, showy tick-trefoil, field goldenrod, and silky aster may be seen.

Other natural areas in the vicinity include Dolliver State Park and Brushy Creek and Liska-Stanek State Preserves.

### DIRECTIONS

From the intersection of Highway 20 and Highway 169 on the southwest side of Fort Dodge, drive east on Highway 20 for 3 miles to County Road P59 (Nelson Avenue). Turn south (right) and drive for 2 miles (through Coalville and Kalo) to 250th Street. Turn east (left) and follow this winding road (which becomes Woodman’s Hollow Road) for 1.5 miles to the preserve entrance on the south side of the road (sign: Woodman Hollow Preserve).

### AREA MANAGER

Iowa Department of Natural Resources  
 Dolliver State Park  
 2757 Dolliver Park Avenue  
 Lehigh, IA 50557-7563  
 (515) 359-2539  
 Dolliver@dnr.iowa.gov  
 www.iowadnr.gov/preserves/  
 State\_Preserves@dnr.iowa.gov



## Woodthrush Woods State Preserve

Woodthrush Woods State Preserve is a 25-acre forest. It is located seven miles east of Fairfield in Jefferson County. The hilly, wooded area was originally owned by naturalist Hiram Heaton. He loved nature, studied birds for his own enjoyment, and led others in the study and appreciation of birds. In 1922, upon his death, the property was willed to the town of Fairfield as a park for nature study, and in turn deeded to the Hiram Heaton Park Association. In 1928, it was given to the State Board of Conservation to be used as a state forest preserve. In 1962, the preserve was deeded back to Fairfield and was used for conservation study by the school district. In 1975, the woodland was dedicated as a biological state preserve.

The preserve is a mixture of upland and bottomland forest. Trees occupying the canopy include white oak, red oak, shagbark hickory, walnut, hackberry, and associated shrubs. In April, spring beauty, Dutchman's breeches, prairie trillium, wild geranium, blue cohosh, white trout-lily, blue phlox, Jacob's ladder, common blue and downy yellow violets begin blooming. Anise root can be found blooming later in the spring among the fronds of creeping fragile fern, maidenhair fern, sensitive fern, and grape fern.

Another natural area in the vicinity is Lamson Woods State Preserve.

### DIRECTIONS

From the intersection of Highway 34 and Highway 1 in Fairfield, take Highway 34 east for 8 miles to County Road W40 (Tamarack Avenue). Turn south (right) and go 1 mile to 255th Street, which curves to the east. Park on the shoulder of 255th Street slightly past its intersection with Teak Avenue. The preserve is on the north (left) side of the road.

### AREA MANAGER

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