# Guide to <br> Prairie Sites Near Grinnell, Iowa <br> Third Edition (2004) 



GRINNELL COLLEGE

## Center for Prairie Studies



This guide is a publication of the Center for Prairie Studies at Grinnell College. The information for the first edition of this guide was compiled by Karie Wiltshire, a 1999 graduate of Grinnell College. The second and third editions include updated information and directions to sites included in the first edition, as well as information about additional sites. Plant illustrations for this edition were provided by Mark Müller.

We want to thank all who contributed to this edition.
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## Our Prairie Heritage

Only a tiny fraction of Iowa's original tallgrass prairie survives today, but interest in prairie conservation, restoration, and reconstruction is growing rapidly. The Center for Prairie Studies at Grinnell College has prepared this brochure to help those wishing to visit prairie sites near Grinnell.

The prairie blooms from May to October. Different species flower at different times, so repeat visits during a growing season will be rewarded with an ever-changing palette of colors. No two prairies will have the same mix of species. Land-use history, soil type, slope, and exposure are among many factors that contribute to the composition of each prairie. Many prairie remnants today are too small to support the full complement of plants, animals, fungi, and bacteria that create a prairie ecosystem. However, these remnants are invaluable for understanding how the fragmented prairie functions in our contemporary landscape and as models for prairie maintenance and reconstruction.


Tallgrass Prairie Region

## Using This Brochure

This brochure describes 51 prairie remnants, restorations and reconstructions within a 50 -mile radius of Grinnell, Iowa. The highest quality sites are marked with a square around their identification number. Begin with the orientation map on pages 8 and 9 of the brochure. Select the map quadrant in which the site(s) you wish to visit are located, then turn to the section of the brochure that describes that quadrant. Accompanying the description of each prairie site are directions for reaching it starting from the intersection of Hwy 6 and Hwy 146 in Grinnell.

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## Abbreviations used in this brochure

CCB - County Conservation Board
DNR - Department of Natural Resources
DOT - Department of Transportation
FWS - US Fish and Wildlife Service
IRVM - Integrated Roadside Vegetation Management
NRCS - Natural Resources Conservation Service
RR r.o.w. - Railroad right-of-way
CR - County Road (may be gravel)

## Prairie Visit Etiquette

When visiting prairies, please do not remove plants, seeds, or other items from these vestiges of Iowa's natural heritage. Remnants, regardless of how small, contain irreplaceable information. Prairie visitors should note that railroad companies own railroad right-of-ways (RR r.o.w.) and often have "No Trespassing" signs posted. Enter RR r.o.w. remnants at your own discretion. A general rule-of-thumb in visiting all natural areas: take only memories and pictures, and leave only footprints. Preserving these beautiful areas requires that we have the pieces of the ecosystem in place.

## Contacts

Information about prairies in this brochure came from various county and state agencies, non-profit organizations, and individuals. Contact information for these prairie managers appears below.

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County Conservation Boards:
    Iowa County 319-655-8465; http://www.netins.net/showcase/iccb/
    Jasper County 641-792-9780; jaspercocons@juno.com
    Keokuk County 641-662-3757
    Mahaska County 641-673-9327; mccb@kdsi.net
    Marion County 641-828-2213
    Marshall County 641-754-6303
    Poweshiek County 641-623-3191; powcocon@netins.net
    Tama County 641-473-3659
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Stephens State Forest, DNR Division of Forests and Prairies641-774-4559; http://www.state.ia.us/forestry/stephens.htm
DNR Wildlife Biologist for Poweshiek, Iowa, Tama, Marshall Counties641-752-5521
DNR Wildlife Biologist for Mahaska, Keokuk Counties 641-682-5552
DNR Wildlife Biologist for Jasper, Marion Counties 641-961-0716
Iowa Valley Resource Conservation \& Development 319-668-8110
Red Rock Reservoir - Army Corp of Engineers 641-828-7519
Tallgrass Prairie Chapter of the National Audubon Society641-236-7309 or 641-236-6600
Neal Smith National Wildlife Refuge, US Fish \& Wildlife Service515-994-3400; http://www.tallgrass.org/

This journey gave me the fulfillment of my dreams of the prairies. In 1855 there was not a tree within three miles of Grinnell. We could see for miles, and all my longings for vast open spaces were satisfied. . . . Another thing I shall remember as long as I live with unalloyed and inexpressible pleasure was the magnificence of the wild flowers that made the prairies for miles in all directions one gorgeous mass of variant beauty. I simply cannot adequately describe it. . . . As one looked over the stretches of the prairies, he must have been made of stone not to have been thrilled by the loveliness of it all. I cannot now name any number of species, but purple and yellow blossoms, wild roses, and sweet williams were conspicuous among them.

> Johanna Harris Haines recalling her arrival in Grinnell 1855

## Prairie Sites in Grinnell

Arbor Lake City Park. City of Grinnell and Imagine Grinnell. South of the dam and trail around the lake, renewed efforts are underway to plant and maintain about five acres of prairie. Two bat houses are located within the prairie opening. From the north parking lot at Arbor Lake, take the trail south along the west edge of the lake past the spillway and over the dam and follow a mowed path south through an opening in the trees.

ASI-Modulex. Prairie home of Rusty the Giraffe. The property consists of 2.5 acres, owned by Tom and Dianne Latimer. The property was acquired in 1992, and the prairie was started the same year the factory was built in 1993. The owners established a good stand of blue stem, switchgrass and Indian grass along with 25 varieties of wild flowers. The prairie has been burned four times and reseeded each time. There has been very little management of this prairie other than the burning. The desire to introduce prairie grass and wildflowers into an industrial environment was decided with environmental, beautification and economic considerations in mind. Located 3 miles south of Hwy 6 on the east side of Hwy 146.

Grinnell College Athletic Field Complex. About three acres of swales were planted along the edge of and as islands within the athletic field complex in 2001. The plantings contain nearly 30 species and can be observed from the loop trail through the complex. The complex is located north of the $T$ intersection of East St and $10^{\text {th }}$ Ave.

Tiger Pride Prairie. Grinnell Middle School. This 4.3-acre prairie, located in the southeast corner of the school grounds, was started in 1980 and replanted in 1993. It provides wildlife habitat, educational opportunities, and contains a diversity of native grasses and forbs including monarda, gray-headed coneflower, cup plant, rattlesnake master, spiderwort, and white wild indigo. The prairie is burned periodically. From Hwy 6 go south on East St 10 blocks to Garfield Ave. Turn left and park next to the ball fields to walk back in to the prairie.

The next day was a wedding-day- the marriage morning of the plow and the sod. It marked the beginning of the subdual of that wonderful wild prairie of Vandemark Township and the Vandemark farm. No more fruitful espousal ever took place than that--when the polished steel of my new breaking plow was embraced by the black soil with its lovely fell of greenery. Up to that fateful moment, the prairie of the farm and of the township had been virgin sod; but now it bowed its neck to the yoke of wedlock. Nothing like it takes place any more; for the sod of the meadows and pastures is quite a different thing from the untouched skin of the original earth. Breaking prairie was the most beautiful, the most epochal, the most hopeful, and as I look back at it, in one way the most pathetic thing man ever did, for in it, one of the loveliest things ever created began to come to its predestined end.

## Herbert Quick, Vandemark's Folly (1922)

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## Northwest

## Roadmap to

Arney Bend Wildlife Area
Marietta Sand Prairie Preserve
Clear Creek
4 Grimes Farm
Wehrman Prairie Preserve Green Castle Recreation
7 Mariposa Recreation Area
A.C. Morris Preserve Rock Creek State Park Union Grove State Park Chichaqua Bottoms Greenbelt Engeldiner Marsh
13 N. 99th Ave N. Roadside
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## Southwest

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40 Wilcox Wildlife Area
41 Red Rock Reservoir
42 Neal Smith
43 Kish-Ke-Kosh State
44 Newton Prairie
45 CERA
46 Reichelt Unit
47 Sugar Creek
48 Jacob Krumm
49 Turner Station RR r.o.w.
50 Yellow Banks Park
51 Carpenter Wildlife Area

## Local Prairies



## Northwest



## Northwest

1Arney Bend Wildlife Area. Marshall CCB. 203 acres. Located three miles northwest of Albion, this area was purchased to preserve wildlife habitat adjacent to the Iowa River and several prairie remnants are accessible by hiking trails. Take Hwy 146 north to Hwy 30. Take Hwy 30 west to 330/S-75. Take 330/S-75 north. Upon merging with $160^{\text {th }}$ St ( 0.5 mile north of Albion), go west (left). Follow 160th St to Lafayette Ave. Go north (right) on Lafayette about 1 mile. Arney Bend is on the west (left) side of Lafayette Ave.

2Marietta Sand Prairie Preserve. Marshall CCB. 17 acres. This preserve is located on an upland deposit of windblown sand. It has been designated as a state preserve because of its high quality. Plant communities range from dry, upland prairie to wet prairie. Prairie species include sand reedgrass, sand lovegrass, big and little bluestem. Sedges, sensitive ferns, and bottle gentians dominate open wet areas. Nearby Minerva Creek and the broad valley of the Iowa River to the northeast were sources of the sand that was deposited there during the dry post-glacial intervals of 4,000 and 6,000 years ago. Take Hwy 146 north to Hwy 30 west. After passing Marshalltown, take 330/S75 north (right) to intersection with E29. Take E29 west (left) 2 miles. Then take gravel road S70, marked as Knapp Road, north 1.25 miles to the preserve on the east (right) side of road.

3Clear Creek. Jasper CCB. 140 acres. This forest and wildlife management area about five miles west of Baxter contains ten acres of reconstructed prairie, mostly native grasses. A parking area provides a good view of the prairie. Take Hwy 6 west to Newton, turn north (right) on Hwy 14 to Hwy F17/223 West. Follow Hwy F17/ 223 past Baxter about 4.5 miles to W. $100^{\text {hh }}$ St N. Take this gravel road south, crossing Clear Creek, about 0.5 mile to a parking area on the right (west).

4Grimes Farm. Marshall CCB. 160 acres. This conservation area two miles west of Marshalltown is being donated to the Iowa Natural Heritage Foundation. Partly a nature preserve, partly a farm, partly an education center, and partly a recreation area, Grimes farm is an unusual public space that combines a working agricultural operation with the natural environment to show how, through effective conservation techniques, agriculture can work in harmony with the various ecosystems that make up the local landscape. As an outdoor classroom, Grimes Farm offers hiking trails with access to forests, restored wetlands, planted prairie, and soil conserving no-till crop fields. Interpretive programs are scheduled periodically throughout the year. Take Hwy 146 north to Hwy 30. Turn west (left) on Hwy 30. Take Hwy 30 past Marshalltown for approximately 2 miles to exit 182, which is Highland Acres Road. Go north (right) on it for approximately 1 mile to 233 St. Go west (left) 0.5 mile to Grimes Farm on the north (right) side of the road.

5Wehrman Prairie Preserve. Marshall CCB. One acre. Located five miles west of Laurel, Wehrman has a remnant that contains many prairie grasses and forbs. Take Hwy 146 north to Gilman. Go west (left) on E67. The blacktop ends 3 miles past Laurel, but continue on gravel E67 (which jogs south for 0.5 mile) and go west two miles farther. The prairie is on the northeast corner of the intersection.

6Green Castle Recreation Area. Marshall CCB. 116 acres. Located just one mile south of Ferguson, Green Castle contains multiple prairie reconstructions on the northern half of the area. The most diverse planting is located past the Hand-Cover Shelter off the west (left) fork in the entrance road. Take Hwy 146 north to E63. Take E63 west (left) to Ferguson. Turn (left) south on Underwood Ave for about 1 mile to Green Castle Rd. Turn east (left) to the recreation area entrance.

7Mariposa Recreation Area. Jasper CCB. 151 acres. Located northeast of Newton, this area has about five acres of reconstructed prairie containing many native grasses and forbs. To get to the prairie, follow the paved entrance road around the one-way loop to the parking lot by the tent camping area. A $3 / 4$-mile trail leads to the prairie and a lookout platform. An interpretive guide is available at the trail head to describe marked locations. Visit this site in the spring and fall to hear and observe neotropical migrant birds. The park also offers drinking water, restrooms, picnicking and fishing in Wolfe Lake. Take Hwy 6 west to Hwy 224. Turn north (right) past Kellogg about 3 miles to $F 27 / N$. $59^{\text {th }}$ Ave $E$. Follow the brown signs for 4 miles to Mariposa.

8A.C. Morris Preserve. Jasper CCB. 20 acres. Located seven miles northeast of Newton, this tract of remnant prairie was donated to Jasper County in 1977 by A.C. "Burt" Morris. The prairie has puccoon, leadplant, milkweed, thimbleweed, and blazing star among other species. Follow directions to Mariposa Recreation Area, Site \#8. A.C. Morris Preserve is located 0.25 mile south of the entrance road to Mariposa Recreation Area.

9Rock Creek State Park. Iowa DNR. The park is located five miles northeast of Kellogg and eight miles west of Grinnell. The fringe of land around the lake contains 160-200 acres of remnant prairie, primarily along either side of the northwest arm.
(1) North side. From just west of the causeway on F27, take the park blacktop road to its end (note some prairie patches along the road). Park in the beach parking area. Walk west on the marked hiking trail, going through open areas (including some small prairie remnants) and woods. In about a mile, where the trail turns sharply north, there is a large open area of prairie to the west (left) of the trail, approximately 30 acres. The site has over 50 prairie species. There are additional small prairie patches along the trail as it continues around the end of the lake, including one just before the junction of the south side trail that has a thick stand of rough blazing star.
(2) South side. Park at the dam overlook parking area. Follow the trail down the hill north toward the lake, noting prairie to the left of the trail. At the lake, turn left and go approximately a mile around the bay until you come to an opening to the lake on your right (the second one, not the first). Walk off the trail towards the lake through the mix of prairie and brush. As you near the lake, the brush diminishes and the prairie dominates. Here too there are over 50 prairie species, including large stands of pale purple coneflower, white wild indigo, and rattlesnake master. Just to the north of this area, through a weedy draw is another opening with prairie, including a spectacular stand of prairie blazing star.

To reach the dam overlook parking lot from Grinnell, go west on Hwy 6 for 6.7 miles to 125th St, the blacktop leading to the Rock Creek home sites. Turn north (right), and go 1.9 miles to the stop sign. Turn west (left), go approximately 1 mile (the road becomes gravel), across Rock Creek, and up to top of hill. Turn right into overlook parking lot.

10Union Grove State Park. Iowa DNR. 172 acres. Located three miles northwest of Garwin, the north end of the park has reconstructed prairie managed by frequent burns since 1987. Follow the blacktop in the park to the north end. Park along the road to walk in to adjacent prairies. Take Hwy 146 north to Hwy 30. Take Hwy 30 east (right) to T47. Take T47 north (left), and follow signs to the park.

11Chichaqua Bottoms Greenbelt. Polk CCB, 6,433 acres. Jasper CCB, 1,800 acres. This greenbelt stretches nearly 10 miles along the South Skunk River. It contains an exceptionally diverse habitat, including dry sand prairie and wet prairie remnants, marshes, sedge meadows, fens, white oak savannas, and bottomland forest. The area's natural features include old river oxbows and backwater channels. Near the Sand Hill Prairie parking area there are 200 acres of reconstructed prairie and 10 acres of remnant sand prairie. The Polk CCB is striving to restore the greenbelt to pre-settlement conditions. Visit the ranger station for a detailed map of this area, other parking areas, and more information about specific habitats and restoration progress. Go west on I-80 to the Mitchellville exit 149. Go north (right) about 6.5 miles on S27 to NE $118^{\text {th }}$ Ave. Turn left (west) on $118^{\text {th }}$ to the Sand Hill Prairie parking area on the south side of the road. To get to the ranger station, where you can also rent canoes and find hiking trail maps, go west (left) from the Sand Hill Prairie parking area to NE 104 ${ }^{\text {th }}$ St. Turn north (right) on $104^{\text {th }}$ St for 2 miles to NE $134^{\text {th }}$ Ave. Go west (left) for 3 miles to NE $80^{\text {th }}$ St. Turn south (left) and follow for 1.5 miles to the station.
*Bluff Creek Unit. Polk CCB. 160 acres. This area, within Chichaqua Bottom Greenbelt, contains a spring-fed creek, sandy, upland areas and woodlands. In addition, a terraced series of wetlands were recently created to provide additional waterfowl habitat. Hike further into the area to observe restoration efforts along old creek oxbows and remnant sedge meadows. This is an ideal area for bird watching, including shorebirds, swallows, waterfowl, and grassland songbirds. The parking area is located 0.25 mile west and 0.25 mile north of the Sand Hill Prairie parking area. See directions above.

12Engeldinger Marsh. Polk CCB. 81 acres. This geological and ecological museum contains rare prairie pothole and sedge meadow communities. A year-long survey revealed 314 plant species, 19 mammal species, 15 reptile and amphibian species, and 82 bird species. Take I-80 west to the Mitchellville exit 149. Go north (right) about 6.5 miles on S27 to NE $118^{\text {th }}$ Ave Turn right (east) on $118^{\text {th }}$ to the entrance parking area on the south (right) side of the road.

13N. 99 $^{\text {th }}$ Ave N. Roadside Remnant. Hickory Grove Twp in Jasper County. This remnant, covering about $1 / 3$ mile along the south side of the road, contains native grasses, thimbleweed, tick trefoil, rattlesnake master, rough blazing star, great blue lobelia, Virginia mountain mint, sweet brown-eyed Susan, compass plant, cup plant, stiff goldenrod, and others. Take Hwy 146 north to F17/Newburg Rd. Go west (left) for 7 miles to E. $116^{\text {th }}$ St N. Go north (right) 1 mile to $N$. $99^{\text {th }}$ Ave E. The remnant is in the next mile west (left) on $99^{\text {th }}$ Ave, mostly after the creek crossing.

14County Line Roadside Remnant. Grant Twp in Poweshiek County. Excellent remnant vegetation exists along both sides of the Poweshiek/Jasper County line road northwest of Grinnell. A mix of prairie, savanna, and woodland species can be observed including thimbleweed, wild columbine, heart-leaved woodland aster, tall bellflower, American bittersweet, cinnamon willow herb, creamy gentian, sneezeweed, Jerusalem artichoke, great blue lobelia, fragrant sumac, starry campion, elm-leaved goldenrod, tall dropseed, and other native prairie grasses. In Grinnell take $11^{\text {th }}$ Ave west (left) from Hwy 146 for 2 miles to E. $156^{\text {th }}$ St. Go north (right) 0.5 mile to the south end of the remnant roadside.


## Northeast



## Northeast

15Otter Creek Lake Park. Tama CCB. 227 acres. This park located six miles northeast of Toledo features a two- acre prairie remnant. The remnant is located near the northwest parking area along the lake and between points 3 and 4 on the circular trail system. Take Hwy 6 east to Hwy 63 north. Take Hwy 63 north (left) through Tama and Toledo to E43. Turn east (right) on E43 for 3.5 miles to $N$ Ave. Go north (left) 1.5 miles on N. Ave to the park entrance.

16Iowa River Corridor Project. In the wake of the Flood of 1993, the Natural Resources Conservation Service (NRCS), US Fish and Wildlife Service (FWS) and Iowa Department of Natural Resources (DNR) initiated a floodplain management project called the Iowa River Corridor Project (IRCP). The IRCP, which encompasses 50,000 acres of land along the 45 miles between Tama and the Amana Colonies, gives area landowners and farmers an alternative to traditional flood recovery efforts and row crop land use. Nearly 100 Corridor landowners have enrolled almost 13,000 acres along the Iowa River in the Wetland Reserve Program (WRP). Fifty-three landowners have sold more than 7,775 acres of wetland easements to the FWS Service (FWS). When added to an additional 4,500 acres on non-easement floodplain purchased by the FWS, the 12,000+ acres make the Corridor one of the largest FWS owned areas in Iowa. This land is primarily managed by the Iowa DNR, in cooperation with the FWS and NRCS. Private and Public Wetland restoration projects, cost-shared through the Wetland Reserve Program, include over 70 wetland structures and over 3,000 acres of native prairie restoration on the upland part of the Corridor floodplain. The Iowa River Corridor can be accessed by going north of Marengo to F-15; or west of Marengo on Highway 212; or to the west of Hwy 21 along E66 between Belle Plaine and the intersection with Hwy 30. Locating the prairie areas may require short hikes from numerous parking lot areas. Corridor signs, Federal ownership and DNR management signs are prominent.

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7Ladora RR r.o.w. In northwest Iowa County near Ladora the Iowa Interstate Railroad track parallels Hwy 6. From Ladora east to Marengo there is a rather diverse, though variable quality, prairie remnant in the highway and railroad rights-of-way on the north side of the road.

18345 ${ }^{\text {th }}$ Ave Roadside Remnant. Chester Twp, Poweshiek County. Leadplant, prairie coreopsis, showy tick trefoil, pale purple coneflower, boneset, rough blazing star, prairie phlox, wild roses, and native grasses can be found growing along this minimum maintenance road. Go east on Hwy 6 to Penrose Ave in Grinnell. Take Penrose north (left) 3 miles to $350^{\text {th }}$ Ave Go east (right) 1 mile to $50^{\text {th }}$ St. Take $50^{\text {th }}$ St north (left) 0.5 mile to $345^{\text {th }}$ Ave. Be aware of road conditions.


Host plant for
regal fritillary
butterflies

Viola pedatifida
Prairie Violet

## 1846 General Land Office Survey Map Parcel of Poweshiek County



## Southeast



## Southeast

19Lake Iowa Park. Iowa CCB. 593 acres. The park, located five miles north of Millersburg, has prairie remnants with ladies' tresses and other orchids on the east side park and west of the campground area. A park naturalist noted that since management began 15 years ago, new species appear every year. Take I-80 to exit 211. Take V52 south 1.5 miles to CR46. Take CR46 1 mile west to CR48 then south 2.2 miles.

20Indiangrass Hills. A private prairie restoration/ reconstruction site in southwest Iowa County near Millersburg. Indiangrass Hills is owned by Judy Felder, Mary Brown, and W. and B. Buss, and managed by Richard "Sandy" Rhodes II. Visitors are welcome, but asked not to block access to the barn or farm. The property boundary is marked with yellow signs with "Hunting by Written Permission Only." On this 640-acre site there are about 40 acres of never-ploughed, mostly upland prairie and 40 acres of naturally regenerating upland prairie. These remnants are scattered in small patches throughout the site. All were heavily grazed until 1997. Periodic burning since the spring of 1997 has slowed the encroachment of woody vegetation in the patches. The owners have identified over 315 native plant species, including 200 prairie species. Henslow's Sparrows, on the Iowa DNR's list of threatened birds, were seen in 1999. Indiangrass Hills is located in sections 20 and 21 of Pilot Township (T79N, R11W), with headquarters at 2549 I Avenue. Please call 319-351-7159 and leave a message to let them know when you will be visiting, but feel free to look around even if they are not on site. Go south on Hwy 146 to I-80. Go east to the Ladora-Millersburg exit, \#211. Turn right (south) on H Ave toward Millersburg. Continue south on H Ave for 5.0 miles to 265th St. Take a left on 265th St to I Avenue. Turn north (left) and continue for 1.1 miles to the gray pole barn on the left side of the road. Park on the property off of the road to keep driveway and barn access clear.

21Yen-Ruo-Gis Park. Keokuk CCB. 76 acres. This prairie remnant dominated by little bluestem is located 2.5 miles north of Sigourney. Take Hwy 6 east to Hwy 21. Turn south (right) onto Hwy 21 to Hwy 92. Turn east (left) on Hwy 92 to Sigourney. Take the gravel road that runs north from the intersection of Hwys 92 and 149 out of Sigourney for 2.5 miles to the park.

2Belva-Deer Recreation Area. Keokuk CCB. 1240 acres. This park, located five miles northeast of Sigourney, has a 35acre prairie reconstruction with 30 local ecotype forbs and grasses. In 1999 the park seeded an additional 430 acres. Take Hwy 6 east to Hwy 21 south (right). Take Hwy 21 south to Hwy 92. Take Hwy 92 east (left) through Sigourney to Hwy 149 and turn north (left) for 2 miles. Go right on G32 for 2 miles to the park entrance.

23Eddyville Area Prairies. IDOT. The Eddyville prairies are a patchwork of sand prairies (dunes) and wetlands that support unique natural plant communities, including some of Iowa's rarest plants and animals. The plant list for the dunes and wetlands, an area of about two square miles, is presently over 600 species. It includes the state endangered pale green orchid and several special concern species: northern adder's tongue fern, buttonweed, soft rush, broomsedge grass, and Great Plains ladies' tress orchid. Mahaska and Wapello Counties have begun management in some areas. Go south on Hwy 146 to Hwy 63 at New Sharon, then take Hwy 63 south through Oskaloosa to Eddyville. Visit two distinct areas near Eddyville, as described below.
*Eddyville Dunes on 182 ${ }^{\text {nd }}$ St. IDOT and Wapello County. This 200acre natural area provides homes for the Ornate box turtle (a statethreatened species), the state endangered Blanding's turtle, rare snakes, the six-lined racerunner, and numerous other reptiles, amphibians, mammals and nesting birds. The area also supports a diverse native flora, including prickly pear cactus, puccoons, sedges, a rare liverwort, and the state-endangered pale-green orchid. Please note the private property lines on the east side of this area and north to the east side of the pond. From Eddyville, take G77 (Berdan St) east past the high school, and continue east to the first gravel road south. Follow the gravel road south to the first gravel road to the right (182nd St). Turn right. Turn into a small parking area on the north side of the road before it dead ends at top of dune. Explore both north and south of here.
*Eddyville Dunes Teno property. IDOT and Mahaska County. This area consists of disturbed sand prairie and a natural wetland. Look for southern bog lemmings, six-lined racerunners, ornate box turtles, state record dragonflies, and prickly pear cacti. On Hwy 63 turn east on Berdan St (G77) and go up the hill. Turn north (left), past theEddyville cemetery. Park and walk up sandy lane on the north side of cemetery.

24Russell Wildlife Area. Mahaska CCB. This 220-acre tract five miles south of New Sharon provides an excellent example of disturbed land that has been allowed to revert back to prairie. Part of the area was once a limestone quarry and crushing operation. Now 25 acres of restorations and remnants are accessible by foot. Take Hwy 6 east to 63, go south 35 miles, through New Sharon, to G7T, a gravel road. Go east (left) on G7T for 1 mile to Russell Wildlife Area on the south (right) side of the road.

146 joins $H w y$White Oak Conservation Area. Mahaska CCB. This 141-acre area three miles south of Rose Hill has several prairie restoration sites and trails. Take Hwy 146 south to New Sharon where Hwy 146 joins Hwy 63. Continue south from New Sharon for 5 miles on Hwy 63 to G29. Go east (left) 6 miles to V13. Go south (right) on V13 about 6 miles to Rose Hill and continue on V13 south for 3 miles to White Oak on the west (right).

26South Skunk River Wetland Complex. Mahaska CCB and DNR. The Maskunky Marsh, Rose Hill Marsh, and Hayesville Bend are publicly managed portions of the South Skunk River. See the following descriptions and directions to specific areas in the complex. Take Hwy 6 east to Hwy 63, go south on Hwy 63 to Montezuma. In Montezuma, take V13 south to Barnes City. Continue south on V13 from Barnes City to the following locations:
*Maskunky Marsh. Mahaska CCB. This 92-acre area is mainly wetland with native grasses planted along the edges. From V13, take Hwy 92 west (right) for 5 miles to the wetland on the south (left) side.
*Rose Hill Marsh. Mahaska CCB. This 140 -acre area has upland timber, limestone bluff outcrops, wetlands, and prairie plantings. Continue south on V13 through Rose Hill City. Rose Hill Marsh is about 1 mile past town on the west (right) side of V13.
*Hayesville Bend. DNR. Hayesville Bend is a remnant area with southeast Iowa ecotype prairie plantings. From V13 take Hwy 92 east. In Delta, take Hwy 21 south (right). The remnant is in the Hayesville Bend of the South Skunk River.

27Hawthorne Wildlife Area. DNR. 1,742 acres. This area located just south of Barnes City has a picturesque lake, high quality prairie remnants on its eastern side, with both cream and white wild indigo, lead plant, showy tick trefoil, Culver's root, and large stands of purple prairie clover among many others. The Mahaska CCB began managing parts of the remnants in the early 1970s. A DNR wildlife inventory in 1999 recorded 130 species. Take Hwy 6 to Hwy 63 south (right). Follow Hwy 63 south through Montezuma for 5 miles to V13 (also signed as Urbana Ave). Go south on V13 for 1 mile to $130^{\text {th }}$ St, a gravel road going east (left). Follow it for 1.4 miles to Victoria Ave. Go north (left) on Victoria Ave 0.9 mile to the boat landing parking lot. Walk north up the hill on Victoria about 0.25 mile to the crest of the hill, where there is a cabled and signed service entrance to the west (left) side. (Alternatively, drive to this point and park along the road.) From here walk west toward the lake. The best prairie is several hundred yards in on the ridges sloping toward the lake.

28Lincoln Wildlife Area. Poweshiek CCB. This 36-acre area, located north of Deep River, has 15 acres of planted prairie consisting mostly of native grasses. Take a mowed trail around the prairie to observe a modest diversity of forbs including rosinweed, asters, white wild indigo, and black-eyed Susans. Take I-80 east from Grinnell for 14 miles to Hwy 21. Turn south (right) on Hwy 21 for 4 miles to a parking area on the right.

29Millgrove Access Wildlife Area. Poweshiek CCB. 430 acres. Millgrove consists of timber, marsh, and 15 acres of planted and remnant prairie. Additional timber, marsh, and upland sites are accessible by trails. One of the few unchannelized stretches of the North Skunk River runs through this area. To get to the prairie, follow the path from the parking area across the bridge and then continue along the old road to the southwest corner of the property. Take Hwy 146 south through Searsboro, continuing east and then south for 4 more miles. Millgrove Access is located 1 mile west (right) of Hwy 146 and River Street, and is well marked with signs.

30Fox Forest Wildlife Area. Poweshiek CCB. Fox Forest, located just west of Montezuma, contains over 530 acres of wildlife habitat including timber, marsh and upland areas. Ten to twelve acres of remnant and planted prairies can be found just south of the parking lot on F57. About three miles of mowed hiking trails are available. Native grasses, round-headed bush clover, white wild indigo, bee balm, tall coreopsis, ironweed, horse gentian, tick trefoil, and rough blazing stars are among the prairie species to observe from the trails. Take Hwy 146 south past Searsboro to F57. Go east (left) for about 6 miles to a parking area on the south side of F57.

31Diamond Lake. Poweshiek CCB. 545 acres. This park, located a half of mile west of Montezuma, has prairie plantings throughout consisting primarily of grasses. At the west edge of the lake near the boat ramp is a managed remnant. Take Hwy 146 south past Searsboro to F57. Go east (left) for approximately 6 miles to main park entrance by the Foster Center on the north (left) side of F57.

3

3Malcom RR r.o.w. This unmanaged remnant near Malcom contains sky blue aster, prairie dropseed, and abundant purple prairie clover. Please do not trespass onto adjacent properties. Take Hwy 6 east to Hwy 63 south. Take Hwy 63 south (right) to Malcom. Before the railroad tracks in Malcom, go west (right) on $2^{\text {nd }}$ St. Continue straight to 110th St. Road name changes to Diagonal St, and signs indicate a minimum maintenance level, Level B series. Follow Diagonal St for about 0.5 mile over the crest. Remnant is on both sides of the road and on the far side of the tracks.

## Roadside remnants reported by the IRVM:

33Thornburg RR r.o.w. Take Hwy 6 east to Hwy 21 south (right). Take Hwy 21 south to Keokuk County. Go west (right) at intersection with Hwy 22. Remnant is in the next 0.5 mile on the north (right). Go south (right) on T65 past the Union Mills County Park. The cemetery is located on the left side of the road.


Webster RR r.o.w. Take Hwy 6 east to Hwy 21 south (right). Take Hwy 21 south to Keokuk County. Take Hwy 22 east (left) towards Thornburg and continue on through to Webster. Remnant is located on the $R R$ r.o.w. north of town.

3632 ${ }^{\text {nd }}$ St. RR r.o.w. Washington Twp, Poweshiek County. New England aster, bastard toadflax, creamy gentian, rattlesnake master, round-headed bushclover, rough blazing star, hoary puccoon, compass plant, cup plant, stiff goldenrod, prairie cordgrass, and other native prairie grasses grow on either side of the road parallel to the RR tracks. Take Hwy 146 south past I-80 to F46/440 Ave. Go east (left) 0.25 mile to $32^{\text {nd }}$ St and turn north (left). Remnant vegetation can be found on both sides of the road over the next two miles.

2$430^{\text {th }}$ Ave Roadside Remnant. Lincoln Twp, Poweshiek County. Leadplant, round-headed bushclover, rough blazing star, monarda, gray-headed coneflower, wild rose, stiff goldenrod, and native prairie grasses are among the species found along this roadside. Take Hwy 6 east 19 miles to Hwy 21. Go south (right) 5 miles to $430^{\text {th }}$ Ave. Turn west (right) on to $430^{\text {h }}$. The remnant is located in the first mile.

38Victor RR r.o.w. This unmanaged remnant along Old Hwy 6 contains over 20 native prairie species, including leadplant, bastard toadflax, showy tick trefoil, rattlesnake master, prairie blazing star, hoary puccoon, glaucus white lettuce, compass plant, blue flag iris, and spiderwort. Take Hwy 6 east 21 miles to where V30 goes south. Go south (right) a mile to the railroad crossing. The best remnant vegetation is located in the first mile east of the crossing along F29/ Old Hwy 6.

## Tops and Roots of Dominant Grasses Common to Mixed Prairie



Weaver, J.E. 1968 Prairie Plants and their Environment. Lincoln, NE: University of Nebraska Press.

## Southwest



## Southwest

39Cedar Bluffs Natural Area.Mahaska CCB. This unique 225 -acre area, designated as a state preserve, contains a wide variety of deciduous trees, woodland forbs, ferns, and prairie plantings, made accessible by a loop trail. Towering sandstone bluffs can be found along Cedar Creek, which forms the north boundary of the property. Take Hwy 146 south to the junction with Hwy 63 in New Sharon. Continue on Hwy 63 through downtown Oskaloosa to T39. Go west (right) out of Oskaloosa and through the nearby small town of Beacon. Continue on T39 (also signed Indian Way) approximately 5 miles to the Des Moines River. A few hundred yards after crossing the bridge, turn west (right) on the first gravel road. Go 1 mile and then turn north (right). This road goes north for 0.5 mile and then west. Follow it for approximately 5 miles to a sign on the north (right) side of the road marking the preserve and a parking area.

40Wilcox Wildlife Area. Marion CCB. This 590-acre county conservation board area located nine miles southeast of Knoxville features prairie reestablished on a former coal mine site. Take Hwy 146 south to junction with Hwy 63 in New Sharon and continue south to the intersection with Hwy 92. Go west (right) on Hwy 92 to T17. Go south (left) on T17 approximately 3 miles to the entrance.

41Red Rock Reservoir. U.S. Army Corp of Engineers. Around the perimeter of the 52,000 -acre reservoir area is approximately 70 acres of prairie remnants and 300 acres of prairie reconstructions. Take Hwy 146 south to I-80. Go west on I-80 to Hwy 14. Take Hwy 14 south (left) to Monroe. In Monroe, take Hwy 163 southeast (left). Follow Hwy 163 to the Red Rock Reservoir. Remnants can be found in the following locations:(1) After driving through Otley, turn south (right) on 180th Ave. Travel 1 mile on 180th Ave; two prairie remnants are located on the left through a pine wooded area. (2) Remnant on the west side of the reservoir: Take Hwy 14 south to Monroe, continuing on Hwy 14 for 4 miles. Take Dubuque Drive west (right); the remnant is located 0.5 mile west on Dubuque Drive on the right side of the road.

42Neal Smith National Wildlife Refuge. U.S. Fish and Wildlife Service. With the support and encouragement of former Congressman Neal Smith, Congress authorized the FWS in September 1990 to purchase 8,654 acres for the purpose of reconstructing a tallgrass prairie ecosystem to the fullest possible extent. To date, about 5,000 of the 8,654 acres have been acquired making Neal Smith NWR one of the largest prairie reconstruction projects in the United States. The refuge has surfaced trails and a driving tour; both provide good opportunities to see bison, elk, deer, and other wildlife of both tallgrass prairie and oak savanna ecosystems. The Prairie Learning Center, located in the center of the refuge, has excellent exhibits for all ages and an active research program. Go west on I-80 past Newton to Colfax exit. Go south (left) on Hwy 117 and follow it through Colfax to Prairie City. Follow the signs for the refuge through Prairie City and over the Hwy 163 Interchange to the refuge entrance on the west (right) side of the road. Follow signs within the refuge to the Prairie Learning Center.

43Kish-Ke-Kosh State Preserve. Jasper CCB. 16 acres. This preserve located 0.5 mile southeast of Reasnor contains a remnant sand prairie that mantles an unusual upland projection into the South Skunk River valley. The sand was blown out of the river valley about 4,000 years ago. In the dedication on November 16, 1981, the tract was named the Kish-Ke-Kosh Prairie in honor of a village chief of the Meskwaki who frequented the area in the mid-1880s. Big and little bluestem, Indian grass, and prairie dropseed dominate the prairie, with various forbs, including a sand puccoon, marbleseed, prairie larkspur, and vast blooms of rough blazing star, with a few stalks of white-flowered rough blazing star. Take Hwy 6 west for 11 miles to 224/T22. Take this south 10 miles to F62 and go west (right) to the town of Reasnor. Take $S 74$ south in Reasnor. At far south edge of town, take gravel road east (left). Follow it to sign marking prairie on right (south) side of road.

44Newton Prairie. City of Newton. 30 acres. This is a park maintained with mowed trails through diverse prairie and young forest along a tributary to Elk Creek. Over 30 prairie species are present, including leadplant, prairie and rough blazing stars, rough cinquefoil, grass-leaved goldenrod, and prairie three-awn. Take I-80 west to the Beltine Drive exit \#168 for Newton. Go north (right) for about 1.5 miles to S. $13^{\text {th }}$ Ave W. Turn west (left) and look for a designated parking area on the south side of the road.

45Conard Environmental Research Area (CERA). Grinnell College. 365 acres. CERA contains 65 acres of oak/hickory and bottomland forest, 150 acres of woodland/savanna, and about 150 acres of reconstructed prairie. About 25 acres of prairie along the main entrance road have been supplemented with native forbs since 1990 and contain over 100 species. Note the signs indicating the most abundant species, and planting and prescribed burn histories. The fifty acres south of the entrance road are being restored to oak savanna. A research lab is located at the end of the south (right) fork of the main entrance road into CERA. Take Hwy 6 west approximately 10 miles to Hwy 224. Turn south on 224; immediately before reaching I-80, turn east (left) on the first gravel road (S. $12^{\text {th }}$ Ave E.), and follow for about 1.5 miles to the entrance marked by a sign on the right (south) side of the road.

46Reichelt Unit of Stephens Forest State Preserve. DNR Division of Forests and Prairies. 444 acres. Sherman Reichelt, who operated a fish hatchery on the farm for many years, willed his land to the state of Iowa with the provision that $80 \%$ be reforested and the entire tract serve as a wildlife preserve. In addition to the reforested areas, there is an unmanaged bur oak grove in the southeast corner and an approximately 40 -acre high quality prairie remnant that is now being actively managed with burning and cutting of brush and trees. In the remnant there are over 100 prairie species, including large stands of lead plant, downy gentian, rattlesnake master, prairie coreopsis, and prairie violet. The preserve is located on the south side of Hwy 6 midway between Oakland Acres and the Kellogg intersection with Hwy 224 (approximately 2 miles from each). A wide entrance driveway (unmarked) leads to a parking lot. To access the prairie remnant, walk west across the driveway and through a gate and then up the embankment to the right into the prairie.


Desmanthus illinoensis Prairie mimosa

47Sugar Creek Audubon Nature Sanctuary. Tallgrass Prairie Chapter of the National Audubon Society. 49 acres. This preserve, located five miles west of Grinnell just off Hwy 6, was formerly a Camp Fire Girls camp acquired by the Tallgrass Prairie Chapter in 1997. The preserve has a nature education center, woodland trails, and small prairie remnants and reconstructions. Remnants on the west side of the property, now being rescued from hawthorns, have about 40 native prairie species. One small remnant is at the end of the Northwest Loop Trail. A larger one is accessed by the trail that goes west around the north end of the parking lot. Go about four miles west on Hwy 6, continuing past the junction of T-38, and up the hill. Near the top of the hill, a highway sign indicates a side road to the left. It is $N$. $28^{\text {th }}$ Ave East, marked by a "Dead End" sign. Turn on this road; go east on $28^{\text {th }}$ Ave for a quarter of a mile. At the T intersection turn left (north) and go about 150 yards. Where the road turns east again, continue north on the driveway that goes to the sanctuary entrance, about 50 yards.

48Jacob Krumm Nature Preserve. Jasper CCB. 450 acres. Krumm is located about six miles southwest of Grinnell and has two access points. The western portion of the preserve contains a pond, woodland, and high quality prairie emnant. A trail goes over the dam, through an oak-hickory woods, and over three bridges. Two hundred yards past the last bridge is the most diverse remnant of mesic prairie between the trail and railroad tracks. The eastern portion of the preserve includes a large picnic area by the entrance and parking area, woodland, degraded remnant and a large reconstructed prairie. Take Hwy 146 south to $410^{\text {th }}$ Ave (just north of the Super 8 Motel). Turn west (right) on $410^{\text {th }}$, go for approximately 3 miles to the east access, then another half of a mile to the west access.

49Turner Station RR r.o.w. Remnant. A long, narrow unmanaged prairie remnant marked by Indian grass, dropseed, big bluestem, switchgrass, leadplant, rough blazing star, and butterfly milkweed among others. Used by Grinnell College as a primary botanical collection site since the early 1900s. Over 200 species can still be found. Take Hwy 6 west to T-38. Take T-38 south (left) to railroad crossing. Turn right on gravel road immediately after tracks, Justice Avenue. Turner Station is along the $R R$ r.o.w. starting at the corner of the intersection and west along the tracks.

50Yellow Banks Park. Polk CCB. 517 acres. Yellow Banks is located on bluffs overlooking the Des Moines River valley. The bluffs are 20-40 feet of loess and support pockets of prairie remnants. Visit the park headquarters for a detailed map of the area or call 515-266-1563 for directions to hilltop prairies, prairie reconstructions, savanna restorations, and Native American cultural sites. Note that the area has limited accessibility during the winter due to steep terrain. Take I-80 west from Grinnell about 40 miles to Hwy 65. Go south on Hwy 65 through Pleasant Hill to the exit for Vandalia Rd. Take Vandalia east (left) 3-4 miles to SE 68h St. Go south and enter the park on the right.

51Carpenter Wildlife Area. Jasper CCB. 120 acres. This area has restored prairie and wetlands. It is often wet during the growing season so boots are recommended to walk to where the prairies are located. Take I-80 west from Grinnell to the Kellogg/Sully exit 173. Go south (left) about 7 miles to F62. Go west (right) on F62 to junction with Hwy T14 S. Go south just over a mile through Galesburg to Shawnee Ave. Go south (right) on Shawnee about 1.25 miles to $S 112^{\text {th }}$ Ave E and turn west (right). The entrance to Carpenter will be on the north (right) side of the road. The area is marked with NRCS wetland reserve signs.


Opuntia compressa
Eastern prickly pear

Should not we do more than incorporate these natural gardens into literature and legend? Preservation of a few acres in each county could be accomplished without encroaching upon economic products and secure to the present and to the coming generations a heritage from which no individuals are justified in depriving them. Such reservation of prairie if made near the larger schools would be useful for study. Wherever located they would be available to the auto traveler. Other areas which do not conflict with private estates are the railroad rights of way. Railroads spend thousands of dollars in making beautiful parks at their stations, but what park planting can equal a mile or two of flaming Turk's cap lily which frequents the damp native prairie in July, or the white beds of nodding anemones, the red and white sweet william, the purple patches of gauzy spiderwort, the gorgeous butterfly weed, the glowing goldenrod, and the banks of stately, radiant sunflower. All these plants are carefully cultivated by florists in parts of the country where they are not native. Why not preserve now at a small cost what can not be replaced at any cost?

Ada Hayden, "Conservation of Prairie," Iowa Parks: Conservation of Iowa Historic, Scenic and Scientific Areas (1919)
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## Recommended Field Guides

*An Illustrated Guide to Iowa Prairie Plants. Paul Christianson and Mark Muller. U of Iowa Press. 1999. ISBN 0-87745-661-5
*Prairie in Your Pocket: A Guide to Plants of the Tallgrass Prairie. Mark Muller. U of Iowa Press. 2000. ISBN 0-87745-683-6
*Prairie Plants of the Midwest. Russell R. Kurt. Stipes Publishing; 10-12 Chester Street; Champaign, IL 61820. 630-858-2800.
*Prairie Propagation Handbook. Wehr Nature Center; 9701 W. College Ave.; Franklin, WI 53132. 414-425-8550.
*Tallgrass Prairie Wildflowers. (A Nature Conservancy Book) Text by Doug Ladd. Photos by Frank Oberle. Falcon Press Books. 1995.
ISBN 1-56044-299-9
*The Roadside Almanac. Integrated Roadside Vegetation Management Program (IRVM).

Wildflowers of the Tallgrass Prairie: The Upper Midwest. Sylvan T. Runkel and Dean M. Roosa. Ames: Iowa State University Press. 1989. ISBN 0-8138-1979-2

* indicates these publications are available at the Grinnell College Bookstore.

Iowa Prairie Network is a grassroots organization of over 800 members dedicated to increasing awareness of and preservation of Iowa's tallgrass prairie heritage.

> Iowa Prairie Network
> 1308 106th Ave.
> Knoxville, IA 50138

Visit IPN's website to obtain contact information for local IPN chapters: http://www.iowaprairienetwork.org

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