Rock Creek State Park

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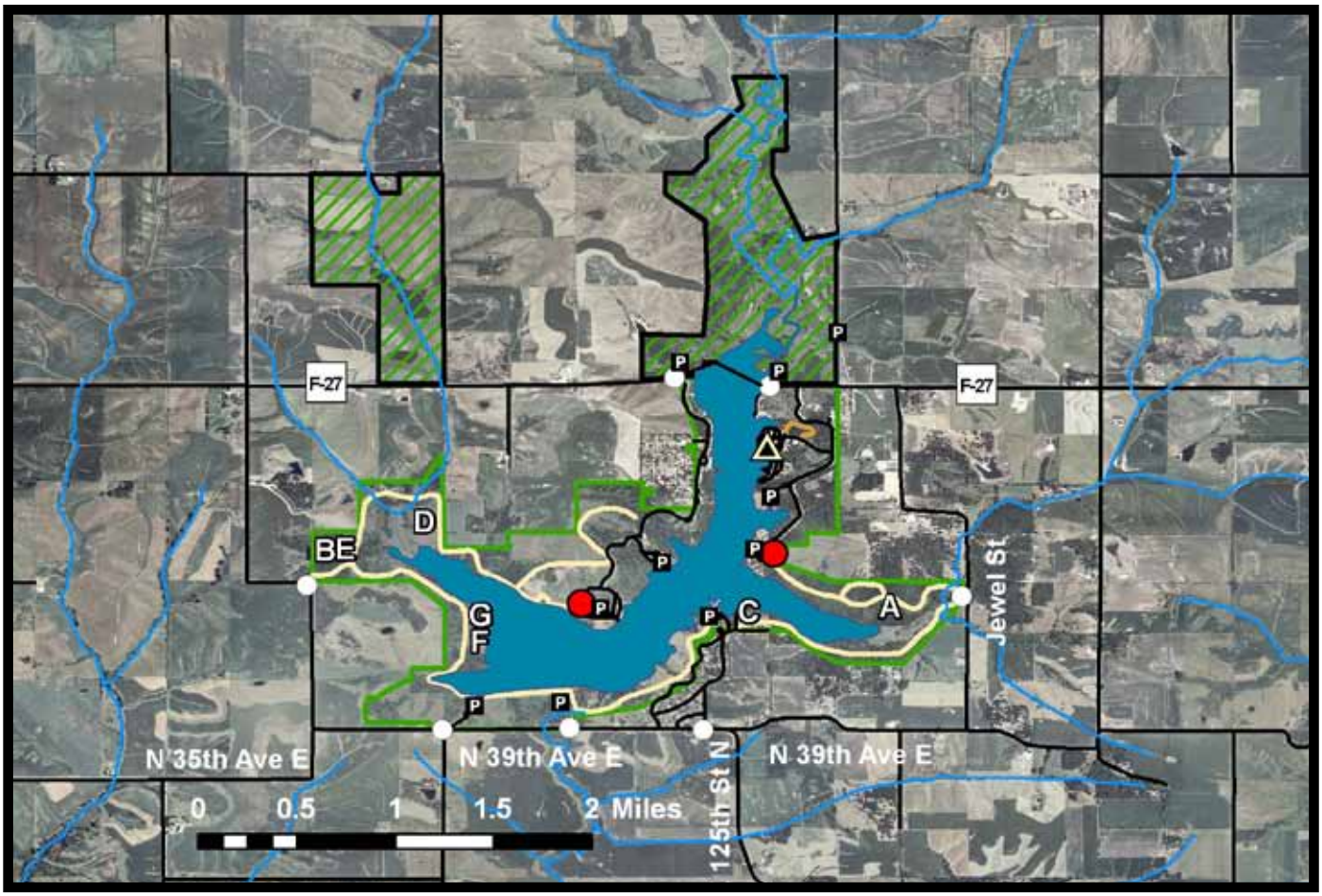
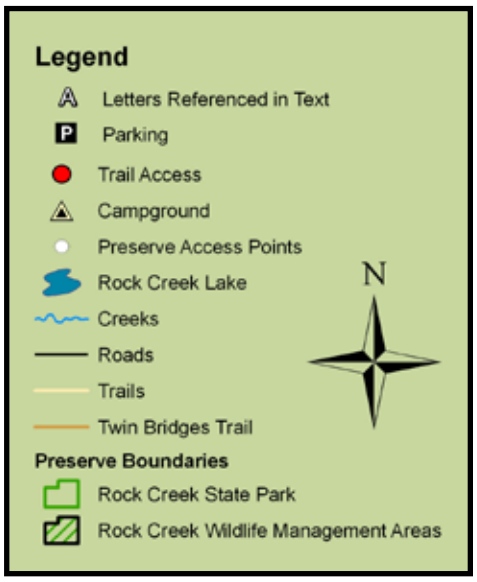


Rock Creek State Park, located five miles west of Grinnell, consists of a large man-made lake and a surrounding fringe of land.

There are several access points to the lake and to the park trails. (Locations in the description that follows are keyed to the park map above.)

North side access. The most commonly used entrances are on the north side of the park on either side of the north arm of the lake. To reach these from Grinnell, go west out of town on 11th Avenue, which becomes County Road F-27. After two miles, F-27 jogs briefly north (joined with Highway T-38) and then turns west again. Go three miles west, at which point you will see the causeway over the tip of the lake. One entrance road is on the left just before the bridge and the other entrance road is just across the bridge on the left.

South side access. To enter the south side of the park, go west out of Grinnell on Highway 6 about six miles (passing Oakland Acres) to a blacktop road going north (East 125th Street North). Follow it about two miles to a "T" intersection and turn west onto North 39th Avenue East. In about one-third of a mile, you will see Juniper Avenue on the right. Follow it through the residential area until almost the end (about one mile). On the left, a short entrance road leads to a parking area and the lake. Or instead of turning down Juniper Avenue, continue west on North 39th Avenue East, which becomes gravel just west of the subdivision. After about a quarter mile, just beyond a small bridge over Rock Creek, turn right into a small parking area.



At the end of the lot is a spur trail leading to the dam and the main park trail. About a quarter mile further west on North 39th Avenue East at the top of the hill, a short entrance road on the right leads to a parking area overlooking the lake and dam. An eroded spur trail goes down from here to the main park loop trail.

The park developments—campground, picnic areas, boat launches—are primarily located along the roads on the east and west sides of the north arm of the lake. Park information claims 14 miles of trail. However, the trails around the east and west arms of the lake provide the best hikes, with less development. These trails can be accessed at the ends of the two park roads (red symbols) and from the dam and dam overlook parking area. They can also be accessed from gravel roads at the east and west tips of the park. The trails are "multi-use," which in this case means that horses, bikes (not motorized), and snowmobiles are permitted. For the most part, the trails go through unmanaged woodland with occasional open areas, including some native prairie remnants. The portion of the park north of F-27 and the causeway is a "wildlife management area," in which hunting is allowed.

History

In 1947, a group of citizens, primarily from Newton, convinced the Iowa Legislature to appropriate funds for construction of a lake in Jasper County north of Highway 6. Acquisition of the needed land, which was cropland and pasture, began in 1950 and required some use of eminent domain proceedings. The park was dedicated Aug. 24, 1952, with a lake of 602 surface acres. Subsequent small land additions brought the total park area to 1,697 acres. In 2003, a 254-acre parcel about a mile northwest of the park was acquired for wildlife habitat and sediment filtration. It is administered as a wildlife management area.

Historic and recent aerial photographs are included at the end of the description for this preserve. The aerials serve as a visual confirmation of the changes in the vegetation over time that are referred to in the text.

Aquatic

The lake is the park's centerpiece—and its big problem. Water quality is poor, and sediment is reducing its depth and surface area. According to DNR information, in 1952 the original lake had a surface area of 602 acres and a maximum depth of 24 feet. In 2004, the statistics were 491 surface acres and 18 feet maximum depth. In recent years, high nutrient levels have resulted in algal blooms, and high bacterial counts have occasionally required swimming to be banned.

The source of the problem is the watershed. The streams flowing into Rock Creek Lake drain a very large area: 26,698 acres. To maintain good water quality in an artificial lake, the

Rock Creek Lake

recommended ratio of watershed to lake area is no more than 20 to 1. The ratio for Rock Creek Lake is more than 54 to 1. The second part of the problem is the intensive agricultural activities in the watershed, especially row cropping. Erosion carries 25,000 tons of soil into the lake every year, and attached to these sediments are nutrients, especially phosphorus, which degrade the water quality.

In recent years the Rock Creek Watershed Project has attempted to reduce these harmful inflows. Project staff have studied the watershed to identify areas that are contributing the most damaging runoff, and have worked with farmers to modify practices. In addition, retention ponds have been constructed, and land purchases and conservation easements are also being used. On the 2003 purchase northwest of the park, a 23-acre lake has been constructed to filter the drainage from 1,414 acres before it then runs into Rock Creek Lake.[1]

The headwaters of the lake, the portion north of F-27, became marshy over time, with vegetation including cattails and reed canary grass. Sedimentation has greatly reduced the water area.

Woodland

Aerial photos from 1940 show only small clumps of trees on the land within the present park boundaries. Now, however, woody species dominate large areas, especially around the east and west arms. But as a 1997 ecosystem management plan acknowledges, "In general, the park's woodlands are not of high quality." It continues:

> Much of the forested area consists of tracts of former crop and pasture land, now dominated by species such as elm, box elder, honey locust, black locust, and walnut. Shrub species mostly include gray dogwood and Tartarian honeysuckle. Both are very invasive species that can take

1 Information in this section is from two articles published in the Iowa DNR magazine *Iowa Conservationist*: Jessie Rolph, "GIS Mapping: Creating Solutions for Rock Creek Lake," September–October, 2004, 20–25, and Robert Steele, "Rock Creek State Park," May–June, 2004, 54–57.

over the understory, thus suppressing more desirable trees and flowers. These species typically occur on lands which had been subject to intensive row cropping and pasturing and on which no subsequent efforts have been made to control the process of selection.[2]

Other invasive woody species found in the park woodlands include multiflora rose, wild plum, silver maple, mulberry, blackberry, and prickly ash. Small pockets of more desirable species are present, such as a small stand of mature white oaks north of the east lake arm (**A**) and a stand of nice black walnuts at the extreme northwest tip of the park (**B**).

The 1997 ecosystem management plan for the park promises that active management of the woodlands will begin, focusing first on the higher quality timbers. However, little or perhaps none has occurred, due to limited state funding for natural resource management on state-owned lands.

The short, interpretive Twin Bridges Trail begins just east of the campground registration kiosk. It passes through typical park woodland and a restored prairie area.

The best spring woodland wildflowers in the park are found in an area on the south side of the lake just east of the home sites. (**C**. Note: Even though some homeowners have established lawns down to the lakeshore, park property extends back from the lake 300 feet, and trail routes that connect across these lawns are open to the public.) In a small oak savanna just beyond the last mowed area, a rich palette of spring ephemerals greets the hiker, starting with snow trillium in late March or early April and then followed by spring beauty, toothwort, Virginia bluebell, Dutchman's breeches, dogtooth violet, Jacob's ladder, swamp buttercup, blue phlox, and Mayapple.

blue phlox

Prairie

Around the western arm of the lake, there are several areas where significant numbers of prairie species have survived and re-established after park protection removed agricultural uses, probably pasturing. Unfortunately, all these areas are now severely threatened by invading woody species. The largest remnant is an approximately 10-acre area at the northwest tip of the western arm (**D**). More than 45 prairie forbs and grasses have been identified here, including compass plant, downy gentian, flowering spurge, green milkweed, hoary puccoon, and rough blazing star.

To reach this remnant, take the trail west from the beach parking lot for about a mile. Where the trail leaves the trees and takes a sharp turn to the right (north), the prairie is to the left.

If you continue along the trail around the northwest tip of the lake, you will see scattered patches of prairie species. A short

swamp buttercup

green milkweed

golden alexanders

2 *Rock Creek State Park Ecosystem Management Plan 1997*. Iowa Department of Natural Resources, 12.

slender ladies'-tresses

purple prairie clover

creamy gentian

distance after the trail turns back south, an area on the west side of the trail (**E**) features more than 25 prairie species, including rough blazing star, pale purple coneflower, nodding ladies'-tresses, and butterfly milkweed.

The other two significant prairie remnants are best accessed from the dam overlook parking lot. Near the west end of the parking lot, find the spur trail that goes down to the lake. There follow the main trail west (left) around a lake cove and then north for about three-quarters of a mile until it leaves the trees and a large, mostly open area is on your right. The best prairie (**F**) is reached by continuing down the trail approximately 100 yards, until it is about to descend into brush and trees. Here, go off the trail to the right toward the lake. This area contains more than 50 prairie species, including white wild indigo, rattlesnake master, pale purple coneflower, compass plant, creamy gentian, golden alexanders, and blue-eyed grass.

A fourth prairie remnant is nearby, but challenging to reach. At a point about 25 yards from the lake on the left side of the prairie just described above, face the lake and look to the left. At the bottom of the short slope is an opening in the brush and a faint deer/people trail that leads into a low area of trees. Follow it, pushing aside branches of shrubs and dodging the multiflora rose. After about 20 yards, bear right and continue for another 25 yards. You will emerge into a small open area that goes down to the lake. This "Hidden Prairie" (**G**) is especially worth finding in late July or early August when the substantial stand of prairie blazing star is in bloom. Among the more than 40 prairie species here are purple prairie clover, prairie cinquefoil, slender ladies'-tresses, downy gentian, butterfly milkweed, and rattlesnake master.

gray dogwood

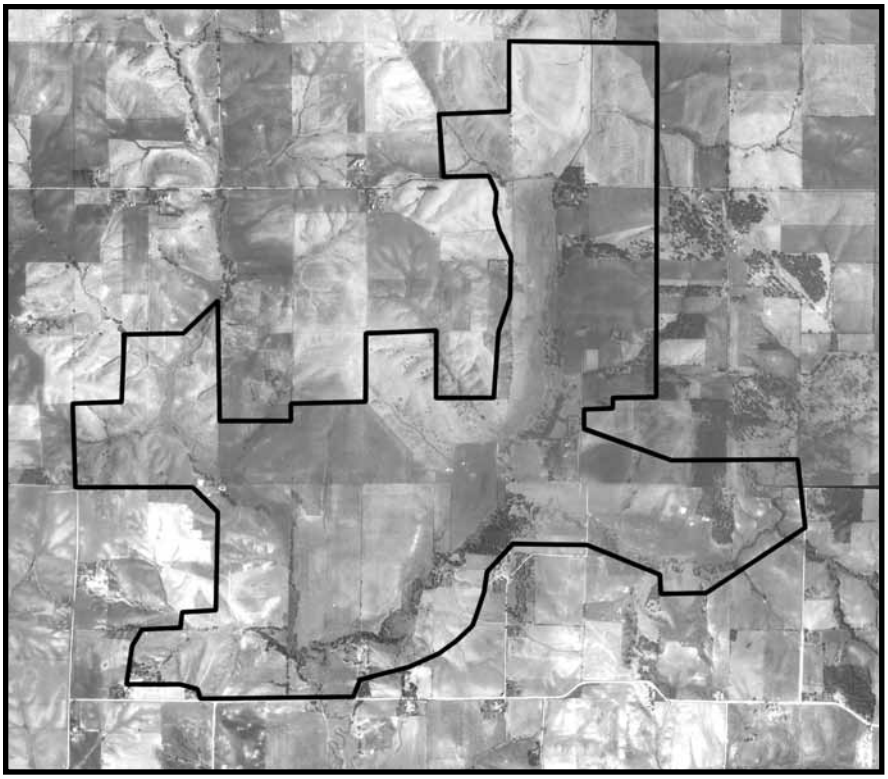
The staff of the park has done some prairie management in recent years. Several areas have been burned and trees and brush cut. Volunteers, including Grinnell College students, have participated in the annual Prairie Rescue Day in April around the date of Earth Day, cutting woody species. However, the threat to the remnants is still severe. The primary culprit is gray dogwood, a native shrub that forms dense stands through suckering and usually resprouts after being top-killed by fire. Cutting and then treating the stump with herbicide combined with regular burning has proved effective for keeping infestations within control. However, this is very labor intensive.

Contact Information

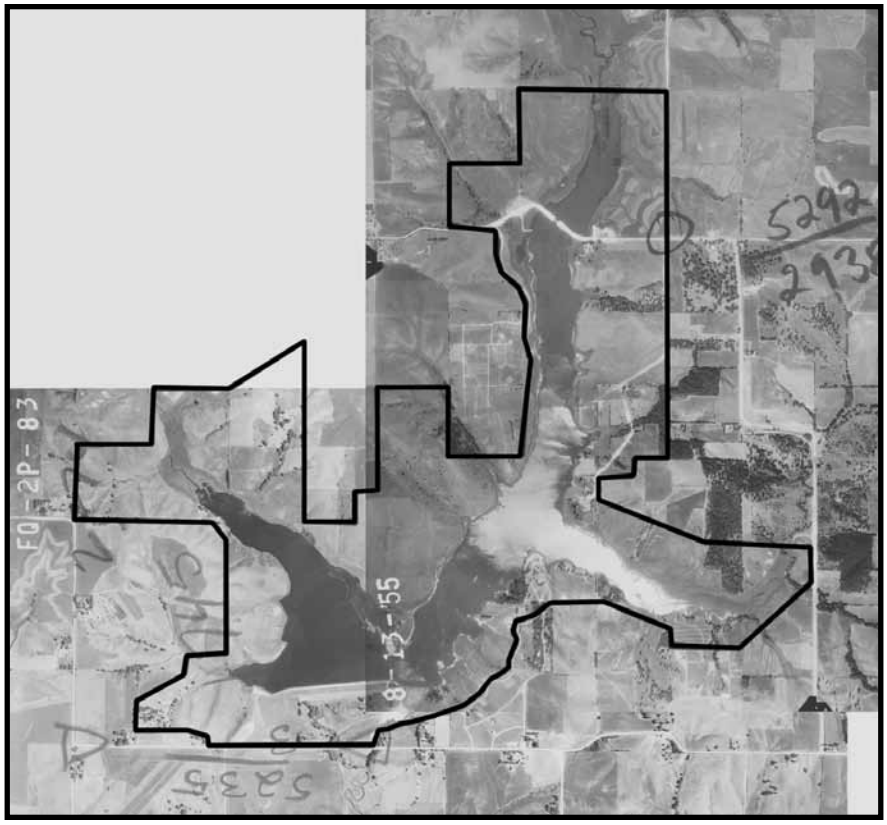
Rock Creek State Park headquarters is located on the road along the east side of the north arm of the lake. The Rock Creek Park Manager can be reached at 641-236-3722, by email at Rock_Creek@dnr.iowa.gov, or by mail at Rock Creek State Park, 5627 Rock Creek East, Kellogg, IA 50135.

Aerial Photographs of Rock Creek State Park

Please note that the preserve boundaries indicated on these aerial photographs are approximate. When visiting this preserve, please note signage and respect preserve and private property lines.



1930s



1955

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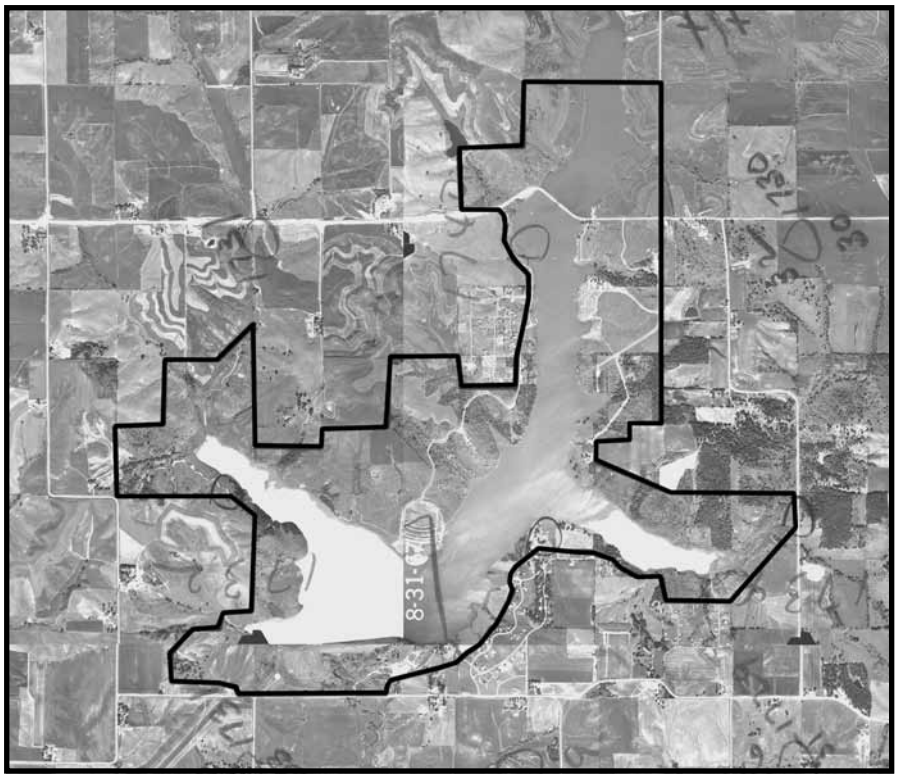
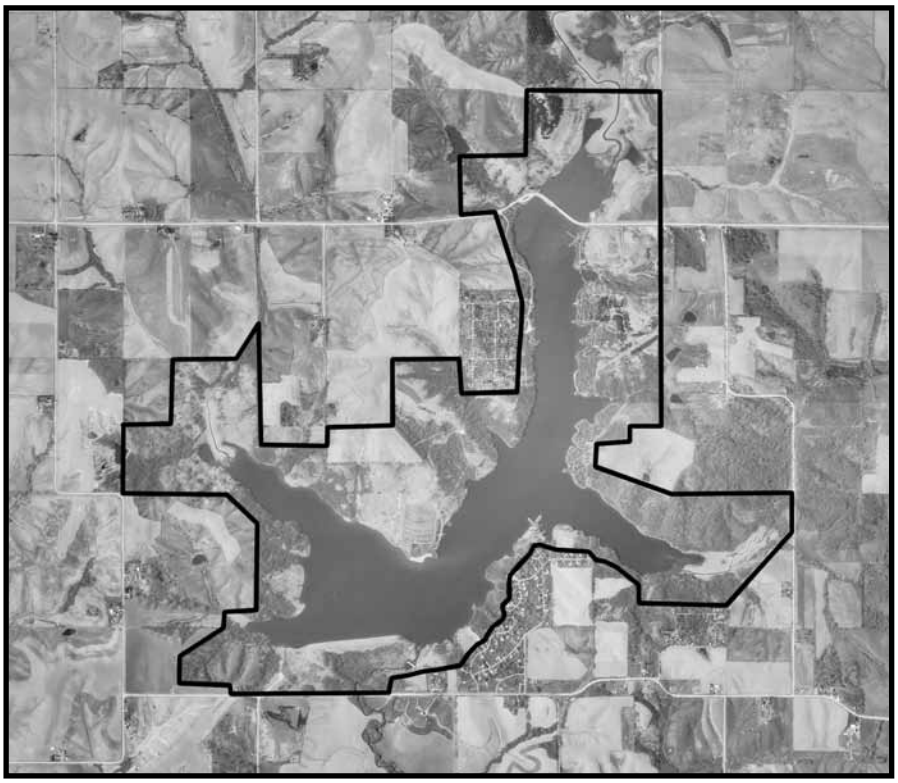
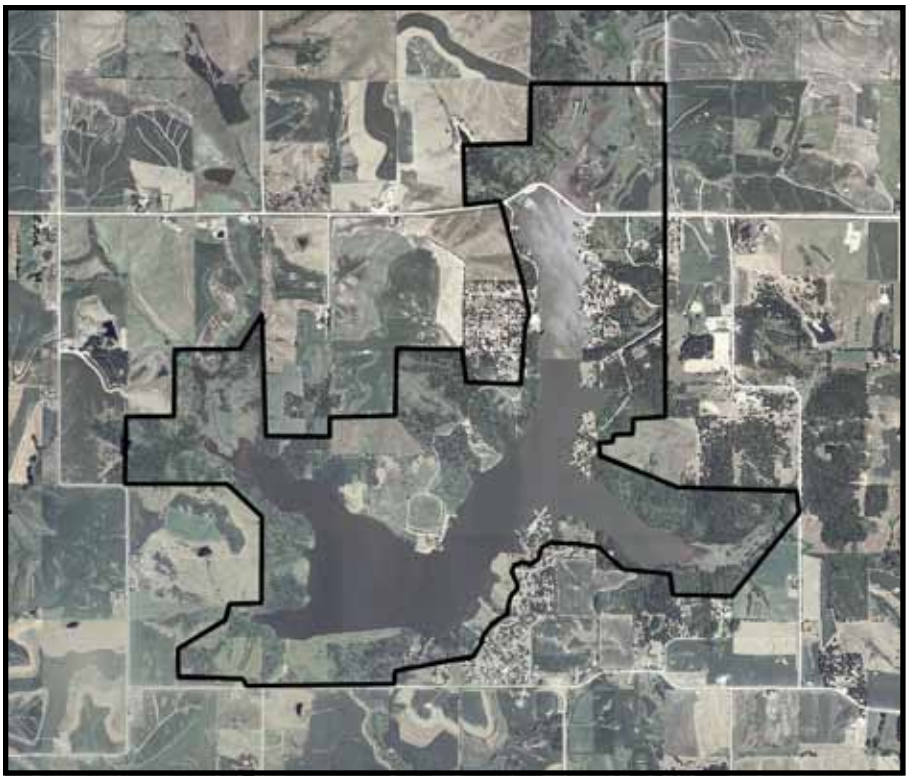


1967



1994

Aerial Photographs of Rock Creek State Park



2007