A team of dedicated volunteers are aiding in the restoration of prairies and marshes at Green River State Wildlife Area.

Pride of the Prairie

(Photo by Deb Carey.)

Story By Kathy Andrews

Few people in Illinois can match Hazel Reuter's experience.

Early spring mornings in the late 1930s would be cause enough for the Reuter family to quietly assemble on the front porch of their Lee County home. Prairie-chickens were gathering on the rise in front of the house, and the family sat listening to the 'who-OOM-oom' call of the courting males.

"A few years ago I had a chance to sit in a blind in Wisconsin during prairie-chicken mating season," Reuter recalled. "Even after walking through the blackness of the early morning, on unfamiliar ground, those booming birds brought back fond memories of my childhood."

When Reuter's grandfather immigrated from Germany in 1867, buying 40 acres that the family still owns, the rich prairies of Illinois supported 10 to14 million prairie-chickens. By 1933, prairie-chicken numbers had plummeted to an estimated 25,000 and the hunting season was closed. A scant seven years later, prairie-chickens existed only in small areas along the Green and Kankakee rivers and on a small tract in southeastern Illinois, and the drive was on to develop publicly owned refuges.

"It was an exciting time for all of the families in the area when the state started acquiring land for the prairie-chickens," octogenarian Reuter said of the land she has lived next to her entire life. "We all were anxious to see what would happen as the area was transformed into a refuge."

Hazel Reuter fondly recalls sitting on the porch of her Lee County childhood home listening to the eerie mating calls of prairie-chickens.

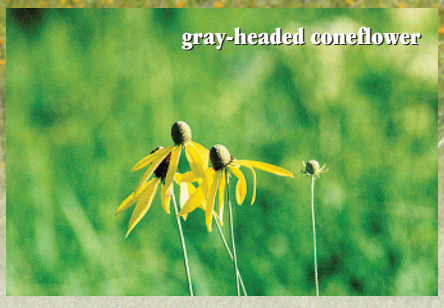
The landscape Reuter was familiar with as a child consisted of a mosaic of small farms where herds of cattle grazed the native grasses. Swampy slough areas—remnants of the Great Winnebago Swamp that once covered nearly one-half million acres in northern Illinois—dotted the land. On the swamp (more accurately described as a marsh), early settlers found trumpeter swans and sandhill cranes. And, during migration, the skies darkened by millions of waterfowl, attracting sportsmen from Chicago to hunt the bountiful resource.

Today, restoring prairies and marshes to Green River State Wildlife Area—purchased by the state in 1940 with the assistance of funding from the Federal Aid in Wildlife Restoration Act—is a continuing process involving both site

(Photo by Adele Hodde.)

At least 150 species of birds have been documented to occur at Green River State Wildlife Area—from common swallows to rare prairie and wetland species.

(Background photo by Adele Hodde.)



(Photos by Hazel Reuter.)

Green River State Wildlife Area's diverse habitats support nearly 500 species of plants.

staff and a team of dedicated volunteers.

"We are very grateful for the volunteers working to help return this site to pre-settlement conditions," said Scott Loomis, the late site superintendent of the 2,565-acre area. "Depending on the season, we may have retired couples out monitoring the nearly 200 bluebird houses scattered around the site, or a 10-year-old joining a group of adults to cut down exotic shrubs. Or, like Hazel Reuter did for nearly 15 years, volunteers may be standing in the prairie collecting forb and grass seeds that will be sown on newly cleared land, extending the site's grassland habitat.

Reuter's life-long interest in the site is a cause carried now by her niece Debra Carey, past president and member of the Lee County Natural Areas Guardians.

"We know how to restore this tremendous site, but money is tight," Carey explained of the motivation behind the group founded in the 1970s and recipient of a Department of Natural Resources Volunteer of the Year award in 2002. "It is hard to sway people with hard facts on a cold piece of paper, but once someone watches a northern harrier drop to the ground and catch a vole, or stands mesmerized by the mating flight of woodcocks, the love of nature is instilled and they care what happens to an area."

With habitats ranging from prairies and sedge meadows to marshes, sand ponds and sand savannas, a rich assemblage of plants and animals has been documented at Green River SWA.

Botanists have recorded nearly 500 plants species, ranging from typical prairie grasses such as big bluestem, little bluestem and June grass, and black oaks on the sand savannas. The site supports a number of unique plants: Broomrape, a root-parasitic prairie herb and Illinois threatened species; daisy-leaf grape fern, a colonizing species of successional sand forests and Illinois endangered species; and, tubercled orchid, a species of floodplain forests and swamps and Illinois threatened species.

At least 150 species of birds have been observed at Green River SWA, including many species considered conservation priority species due to the decline of suitable habitat. Among the grassland/savanna birds are bobolink, grasshopper sparrow, Henslow's sparrow (IT), dickcissel, sedge wren, orchard oriole, short-eared owl (IE), upland sandpiper (IE), and red-headed woodpecker. Unique species found at times in the emergent and open-water marsh areas are common moorhen, yellow-headed blackbird, pied-billed grebe, king rail and least bittern, all Illinois endangered or threatened species.

Characteristic reptiles at the site include the western hognose snake, ornate box turtle and six-lined racerun-

Scott Loomis served in his position as Green River's site superintendent until his death on Feb. 21, 2008. Most of Loomis' nearly 27 years with the agency was at Green River, and his work and dedication to the site will be greatly missed but not forgotten.

(Photo by Kathy Andrews.)

Green River is popular with archery deer hunters. The site offers other hunting opportunities, including upland game, turkey and squirrel.

ner, all typical of sand prairies, and Blanding's turtle, a species of wetland communities.

Also residing at Green River SWA are 23 species of mammals, including white-tailed deer, rabbit and badger.

(Photos by Deb Carey.)

(Photo by Adele Hodde.)

Field work on insects has documented the site as one of Illinois' top five sites for prairie-dependent insects.

Wildlife-watching and photography are but two of the uses for the wide-open spaces of Green River SWA. All but a 50-acre restricted area around the site residence is open for hunting rabbit, quail, dove, squirrel, crow, fox, raccoon, coyote, turkey, opossum, skunk and deer. A portion of the site is available for upland hunting through the free DNR Upland Game Hunting program. The site also hosts youth firearm deer and spring turkey hunts.

Specific hunting information is available from the Web site or by calling the site headquarters. A check station is located on the main entrance road, and all hunters are required to check in and out, reporting any game taken.

Visitors interested in an overnight at Green River SWA will find a small Class C campground (no showers or electricity; $8/night). Both grassy and gravel areas accommodate everything from tents to motor homes, with one paved parking pad providing accessible access. A sanitary dump station also is available.

Land management practices at Green River include planting agricultural crops for wildlife, such as milo and sunflowers.

"Probably the busiest month in the campground is October when archery deer hunters arrive," Loomis said. "Over the years, the site has become popular as a convenient location with a nice deer population."

A 10-mile equestrian trail traverses the flat to gently rolling landscape, and is open for public use from April 15 to Oct. 31. The head of the equestrian trail is a large, gravel parking area off the entrance road and near the campground. Directional signs make for easy navigation along the mown, 15-foot paths.

Scores of volunteers have aided DNR staff in restoring and maintaining Green River's prairies and marshes.

(Photo by Hazel Reuter.)

Hikers and birders will find a considerable trail network winding through and skirting prairies, woodlands and numerous wetland communities. Trails take off from most of the 15 parking lots, providing opportunities for a wide range of viewing experiences.

Sixty years ago, area landowners had high hopes that the sandy prairies of Lee County would become a haven for wildlife. The dream of creating a refuge for the now-endangered prairie-chicken was smashed when the last of the Green River SWA population disappeared by 1959. But today, working hand-in-hand, park personnel, research biologists and volunteers have developed a broader understanding of what it takes to create—and maintain—such unique habitats.

What Hazel Reuter and her family experienced is a thing of the past. Yet Green River State Wildlife Area provides a glimpse of historic Illinois few experience today.

"There aren't many places left in the state where you can stand at night and not see a light," Carey commented of the property so far from the reaches of urban light pollution that it is valued by a Chicago astronomy club. "If you want to see wonderfully dark, star-filled skies, come to Green River."

(Photo by Debra Carey.)

Debra Carey attributes the mating flight of the American woodcock as one of the wonders of nature that motivates volunteers.

At a glance

Address: Green River State Wildlife Area, 375 Game Road, Harmon, IL 61042.
Telephone: (815) 379-2324.
Web site: www.dnr.state.il.us/lands/landmgt/parks/r1green.htm.
Directions: Travel 13 miles south on Illinois Route 26 from Dixon to Maytown Road. Turn west and proceed 3 miles to the site.
In the area: The 160-acre **Maytown Pheasant Habitat Area** is approximately 13 miles south of Dixon on Illinois Route 26. Turn east on Maytown Road and go 3 miles to Carter Road, turning south and proceeding 0.75 miles to the site entrance. Archery deer, pheasant, quail, rabbit and Hungarian partridge hunting is permitted (see the Green River SWA Web site for details).

Located in extreme southwest Lee County, the 316-acre **Sand Prairie Habitat Area** is 4.5 miles north and 1 mile west of Walnut on the Whiteside County line. For information about hunting dove, pheasant, quail and rabbit on the site, see the Green River SWA Web site.

Visitors to the 15-acre **Foley Sand Prairie Nature Preserve** will find dry mesic and dry sand prairies representative of the Green River Lowland Section of the Grand Prairie Division. Plants found there include June grass, little bluestem, big bluestem, switch grass, pale purple coneflower, purple prairie clover, Culver's root, rough blazing-star and rosin weed. To access the site, take Illinois Route 88 south from Rock Falls for 9 miles to Tampico Road. Turn east and go 3 miles to County Line Road. Turn north and proceed 1 mile.

General Geology of Green River State Wildlife Area

The Green River State Wildlife Area, located along the Green River in southwestern Lee County, is near the southern edge of the Green River Lowland, a geologically interesting part of Illinois. The Green River Lowland overlies the Princeton Bedrock Valley. Although this bedrock valley was the course of the ancestral Mississippi River before it was shifted to the west by advancing ice sheets, the valley has been filled with more than 300 feet of Quaternary deposits and is not very evident in today's landscape.

The deposits occur in three main intervals beneath the Green River State Wildlife Area. The deepest interval lies directly on the bedrock and consists of 50 to 100 feet of outwash sand and gravel. Overlying the sand and gravel is 25 to 50 feet of thinly bedded lacustrine silt and clay that also contains some very thin beds of very fine sand. The shallowest interval extends to the land surface and includes about 50 feet of outwash sand and gravel. This sand and gravel was deposited by meltwater flowing from the ice sheet that built the Bloomington Morainic System (between about 22,500 and 19,000 years ago) in southeastern Lee County.

Sand dunes, which are prominent in the landscape, were formed by the wind redepositing sand from the floodplain into the dunes seen today. The focus of an Illinois State Geological Survey project is on the sedimentology and the age of the dunes. Absolute dating has revealed that the dune field formed 17,000 to 18,000 years ago. Dune sand also was mobile 2,700 years ago, possibly due to a severe drought. The direction of crossbeds in the dunes is consistent with the current, prevailing northwestly wind, and suggests that the wind direction has not changed significantly since dune construction.

The saturated sand and gravel found within the Green River Lowland comprise a source of groundwater that supplies the extensive irrigation seen in the lowland. The deepest sand and gravel forms the Princeton Bedrock Valley aquifer, a confined aquifer that is 50 to 100 feet thick. The saturated sand and gravel found near the land surface comprises the Tampico aquifer. This unconfined aquifer is about 50 feet thick. The two aquifers are separated by the 25 to 50 feet of fine- grained sediments that is the confining layer for the Princeton Bedrock Valley aquifer.

—prepared by Xiaodong Miao and David Larson, Illinois State Geological Survey