

More than 100 years ago, a massive inland marsh spanned the Illinois-Indiana border. Much of the Grand Kankakee Marsh is gone, but all is not lost.



# Kankakee Sands

(Photo by Carol Freeman, www.carolfreemanphotography.com)

Story By Cara C. Byington • Photos By The Nature Conservancy

**I**t's hard to believe now, but until the beginning of the 20th century, the Kankakee River fed one of the largest inland marshes in North America. By some accounts, the Grand Kankakee Marsh supported an estimated 400,000 to 1 million acres of swamps, savannas, prairies and forests.



It took engineers more than 30 years, but by 1918, after the river was finally ditched and straightened on the Indiana side, the marsh itself finally ceased to exist. On the Illinois side, the river still retains its curves—called meanders—and from the air, it looks like a slithering snake moving across the land in graceful twists. When the river reaches the Indiana border, it looks like the snake got caught in a long, straight tube.

The contrast is marked and, at first glance, it can be tempting to read the reports of the draining of the Grand Kankakee Marsh as only another cautionary tale of destruction and loss. But, fortunately, the story doesn't end there. Like

all good conservation stories, this one carries the hope for a brighter future.

While the marsh is gone forever, remnant landscapes still survive with high potential for restoration and conservation. Today, nearly 90 years after the last waters drained away from the marsh, the Illinois and Indiana Departments of Natural Resources are working with partners, including The Nature Conservancy,

**Dawn breaks over an oak savanna at Kankakee Sands. The great spangled fritillary (left) is a butterfly of meadows, prairies and the edges of forests.**



**Some of the Midwest's finest examples of prairie and sand savanna habitats are found an hour southeast of Chicago.**

the Illinois Nature Preserves Commission and Friends of the Kankakee, to preserve the surviving prairies and savannas of Kankakee Sands. The lands here, particularly the sand prairies in Indiana and the prairies and oak savannas in Illinois, remain some of the most outstanding opportunities for landscape conservation in the Midwest.

In this place, an hour southeast of Chicago on the border between Illinois and Indiana, a presettlement landscape known to the Potawatomis still exists among the most modern farming practices in the world. Portions of the Pembroke Savannas and the Kankakee River were recognized by the Illinois Natural Areas Inventory in 1978 as natural areas

of statewide significance. The Nature Conservancy considers the Pembroke Savannas one of the most important conservation areas in the state and the U. S. Fish and Wildlife Service considers the Pembroke Savannas to be the largest concentration of high-quality sand savannas surviving in the Midwest.

"Some of the largest and finest sand savannas in Illinois are in the Pembroke area," said Don McFall, Natural Areas Acquisition program manager with the DNR Office of Realty and Environmental Planning. "The variety of wildlife they support, including endangered species, is remarkable. DNR is using the Natural Areas Acquisition Fund to buy some of these savannas to set aside as state natural areas."

**Scientists, photographers and wildlife watchers appreciate the area's unusual, sandy-soiled habitats and range of flora and fauna.**

To help preserve the Pembroke Savannas and other important natural areas at Kankakee Sands, DNR, The Nature Conservancy and their partners in both Illinois and Indiana, currently own more than 23,000 acres of protected areas within the Kankakee Sands region. Together, the partners are working to enlarge, connect and restore these protected areas to help ensure the long-term survival of an outstanding variety of plants and animals.

Because of its unusual sandy soils, the Kankakee Sands area supports a range of species that are not usually seen in other parts of the state, including ornate box turtles and the plains pocket gopher, which are more commonly found west of the Mississippi River. In fact, ornate box turtles were once thought to be quite common here, but a recent survey on DNR and Conservancy land revealed that ornate box turtles were not as common as scientists had thought.

In fact, these small turtles with their distinctive yellow markings are apparently no longer common at all. After three years of looking, scientists from the Illinois Natural History Survey found exactly two turtles.

"Something is limiting ornate box turtles at Kankakee Sands," noted Chris Phillips, a herpetologist with the survey. "But at this point we don't know what and that could be worrisome for other savanna species here."



Scientists speculate that the population may have suffered from any number of problems, including over-collection by people seeking to use or sell ornate box turtles as pets. Like the ornate box turtles, the savanna's other special residents could be at risk without ongoing preservation efforts.

The plains pocket gopher is seldom seen, but their mounds are impossible to miss, especially after a fire burns through a savanna. Pocket gophers are constantly moving vegetation and soil nutrients with their burrowing and digging. Because of their important role in the cycling of organic matter and nutrients, and their creation of small-scale but widely distributed surface disturbances in these sandy soils, the plains pocket gopher is considered a keystone species in the Kankakee Sands Ecosystem.

Red-headed woodpeckers are another savanna species that once existed in large numbers across a wide range. Unfortunately, largely due to habitat loss, the population of these birds has declined by 80 percent in the Midwest over the last 40 years. But the prospects for red-headed woodpeckers at Kankakee Sands are happier than those of the ornate box turtles.

**The Kankakee Sands macrosite contains more than 23,000 protected acres spanning the Illinois-Indiana border.**

**Rough Blazing Star**



**The diversity of habitats within the macrosite provides the opportunity to easily view a variety of plants and animals.**

Today, scientists estimate that about 300 breeding pairs of red-headed woodpeckers live in the savannas of Kankakee Sands. In high-quality savannas such as the DNR's Hooper Branch Savanna and the Conservancy's Mskoda Land and Water Reserve and Pembroke Savanna Nature Preserve, red-headed woodpeckers are conspicuously numerous during breeding season and experience reproductive success at a rate that suggests good prospects for long-term survival of the species. A key factor for their breeding success in the savannas is the large number of black oak trees that have been

**Red-headed Woodpecker**



(Photo by Carol Freeman, www.carolfreemanphotography.com.)

damaged by fires making them a smorgasbord for insect larvae and perfect for cavity-nesting birds such as the woodpeckers to peck out their nesting cavities. The quality of the winter habitat also is key to the survival of the red-headed woodpecker and the black oak savannas and pin oak flatwoods provide a profusion of acorns to sustain them through the winter and spring months.



Cara C. Byington is a senior conservation writer with The Nature Conservancy.

## Cross-border conservation

The story of Kankakee Sands is one of enduring hope and outstanding opportunity. The Grand Kankakee Marsh is gone but not all is lost. DNR and its partners work in a project area that encompasses a landscape in Illinois and Indiana. Nature knows no political boundaries and the scale of the project is important because the relatively large size enables species to survive over the long term. By working together to enlarge and connect the surviving prairies and savannas in the Kankakee Sands, it will offer us a lasting connection with the landscapes of our past.

