

Threats & Dangers



You don't have to travel to the Everglades to view wildlife that occurs among reeds in shallow marshes and wet prairies. The Lake Calumet Wetlands are remnants of a vast marsh system that once covered southeast Chicago and northwest Indiana. Explore this area to discover the wildlife that depends on the Lake Calumet Wetlands.



Maps

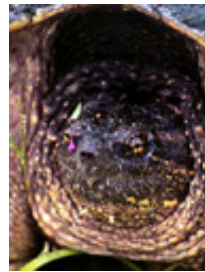


Photo Gallery



Black-Crowned
Night Heron

Important Natural Resources



Map adapted from National Park Service's *Calumet Ecological Park Feasibility Study, 1998*

Data Sources: U.S. Geological Survey, U.S. National Park Service

Dune & Swale

2. Brunswick Center South
3. Clark & Pine Nature Preserve
- 3a. Clark & Pine East
4. Clark & Pine Dune and Swale
5. Clark & Pine general Refractory
6. Clark Junction
7. Clark Junction East
8. Cline Avenue Dune and Swale
9. DuPont Natural Area
10. Explorer Pipeline
11. Gary Enterprise Zone
12. Gary Works
13. Gibson Woods
14. Ivanhoe Dune and Swale
15. Ivanhoe South
16. Miller Woods and Dunes
17. Penn Central
- 18, 19 Tolleston Ridges
20. Tolleston Woods

Wetlands/Bird Areas

21. Big Marsh
22. Deadstick Pond
23. Eggers Woods Forest Preserve
24. George Lake Woods
25. Grand Calumet Lagoons
26. Grand Calumet Tern site
27. Hegewisch Marsh
28. Heron Pond
29. Indian Ridge Marsh North
30. Indian Ridge Marsh South
31. Lake Calumet
32. Hammond Bird Sanctuary
34. Roxanna Marsh
35. Wolf Lake
36. Fay's Point
37. Oxbow Park

Prairies

38. Burnham Prairie
39. Calumet City Prairie
40. Dolton Prairie
41. Lakeshore Prairie
42. Powderhorn Lake Prairie
43. Sand Ridge Nature Preserve
44. Thornton Fractional High School Nature Preserve
45. Wentworth Prairie
46. Wentworth Woods Forest Preserve
47. Van Vlissingen Prairie
48. Coulter Sand Prairie

Important Cultural Resources



Map adapted from National Park Service's *Calumet Ecological Park Feasibility Study, 1998*

Data Sources: U.S. Geological Survey, U.S. National Park Service

Industry

1. International Harvester/Wisconsin Steel
2. South Works, USX
3. Youngstown Sheet & Tube (IL)
4. Youngstown Sheet & Tube (IN)
5. State Line Generating Station
6. Standard (Amoco) Oil Co.
7. Inland Steel
8. American Bridge Works
9. Indiana Steel Works, Gary

Communities/Housing

10. Altgeld Gardens
11. Trumbull Park Homes
12. Whiting
13. Marktown Historic District
14. US Steel Workers Housing Historic District
15. Gary Center Historic District & Gary Land Company Building

Transportation

16. Cal-Sag Channel
17. Vincennes Trace
19. Chicago, South Shore, South Bend Line
20. Thomas J. O'Brien Lock & Controlling Works
21. Bridge (double cantilever)
22. Chanute Hill at Miller Beach

Labor

23. Pullman Historic District
24. Memorial Day Massacre Site & Monument/Republic Steel

Other

25. Indian Boundary Line
26. Foster House and Stable
27. Stony Island
28. IL-IN State Line Marker
29. Wolf Lake at NIKE sites
30. Polish Army's/Veteran's Post No. 40

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The wetlands, prairies and wooded areas that still exist in the Lake Calumet region provide food and shelter for many species of birds throughout the year. Over 200 species of birds occur in the Lake Calumet area, many of which do not nest anywhere else in northeastern Illinois.

The wetlands serve as an invaluable staging area for hundreds of species of birds that need to rest and refuel as they follow a major migratory route along Lake Michigan's shores during spring and fall migrations. The wetlands also provide valuable breeding habitat for many state endangered and threatened species. In fact, the state endangered Black-crowned Night Heron colony at Lake Calumet is the largest rookery for this species in the state and one of the oldest.

The abundance of birds is due partly to the proximity of the Lake Calumet wetlands to the south end of Lake Michigan and the habitat variety the region offers for breeding, migration, foraging and resting. The wetlands provide breeding habitat for herons, egrets, moorhen and rails, as well as a variety of waterfowl, such as Blue-winged Teal, Mallard, and Wood Duck. Lake Calumet and the surface waters that surround it also provide the very specific habitat needed by shorebirds. A large contingent of shorebirds representing at least 39 different species, including the Greater and Lesser Yellowlegs, Dunlin Curlew and Pectoral Sandpipers, and American Avocet, stop in the area during migration, particularly during the fall when water levels are low and the sand bars and mud flats are exposed. Finally, the prairies, open meadows and woodlands provide habitat for such species as song, savannah and vesper sparrows, Great-horned Owl, Red-tailed Hawk, Eastern Bluebird, Eastern Meadowlark, and Gray Catbird.



The region encompasses several types of ecosystems, including some very high quality sites that have never been plowed or filled in, such as the sand prairie in Powderhorn Lake Forest Preserve. This site is one of seven in the region that are listed on the state of Illinois Natural Areas Inventory, and one of the two sites dedicated as a State Nature Preserves, the highest form of preservation in the state of Illinois.

According to "Wetlands Plants of the Calumet Region", compiled by Gerould Wilhelm in 1992: "Altogether, 762 species exist in the region including 52 species of trees, 64 shrubs, 17 vines, 19 ferns, 464 forbs, 62 grasses, and 85 sedges. There are 152 additional species believed to be adventive in the area since settlement. Nearly 60 percent of the native species are classified by the U.S. Fish & Wildlife Service as wetland plants."

						
<u>American Kestrel</u>	<u>Common Moorhen</u>	<u>Canada Goose</u>	<u>Yellow Headed Blackbird</u>	<u>Snowy Owl</u>	<u>Great Egret</u>	<u>Red-Tailed Hawk</u>
						
<u>Redhead Duck</u>	<u>Blue Flag Iris</u>	<u>Turtlehead</u>	<u>Michigan Lily</u>	<u>Grass Pink Orchid</u>	<u>Yellow Water Lily</u>	<u>Kalm's St. Johns Wort</u>
						
<u>Purple Gerardia</u>	<u>Buttonbush</u>	<u>Shaggy Mane Mushrooms</u>	<u>Cardinal Flower</u>	<u>Eastern Prickly Pear Cactus</u>	<u>Club Spur Orchid</u>	<u>Marsh Speedwell</u>
						
<u>Yellow Ladies Slipper</u>	<u>Cream Gentian</u>	<u>Swamp Milkweed</u>	<u>Snapping Turtle</u>	<u>Baby Garter Snake</u>	<u>Blanding's Turtle</u>	<u>Ground Squirrel</u>



Black-Crowned Night Heron:

Beautiful birds on the edge of extinction thrive in the Calumet Wetlands.

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Black-crowned Night-Heron at Ding Darling National Wildlife Refuge in Florida, one of the many places that this bird winters.

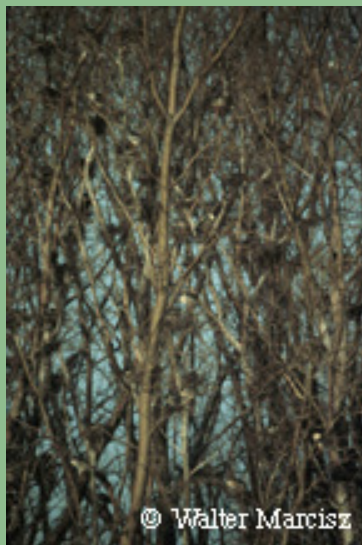
The state-endangered Black-crowned Night Heron depends heavily on wetlands in the Calumet region for its continued survival in the states of Illinois and Indiana. Almost exclusively a colonial nester, there is little doubt that the Calumet nesting colony at this time represents the largest breeding population of this species in the state of Illinois.

Only five other nesting colonies (totalling from 1 - 113 nests each) were located in Illinois in 1996. The species has essentially been extirpated as a breeding species from the state of Indiana since 1980, but small numbers (circa 10 nests) have begun to breed again in northwest Indiana during the last few years.

The following is a brief history of the Calumet colony taken from the "Conceptual Plan for the Lake Calumet Ecological Park: Chicago, Illinois" by



Black-crowned Night-Heron up close at Lake Calumet wetlands.



Black-crowned Night-Heron Rookery on 122nd Street

James E. Landing (August, 1986, p. 35):

"Through most of the 20th century for which records are available the heron rookery was located along the Calumet River just north of the confluence with the Grand Calumet. The construction of O'Brien Lock and Dam so degraded the area that they relocated in the Big Marsh in a small stand of cottonwoods in the central portion. Drainage of the Big Marsh illegally by Waste Management in the fall of 1981 resulted in the complete drying of the site through the summer of 1982. But even prior to this, high water levels covered the nesting site in 1981 and the birds could not be located. In the spring of 1982, they were rediscovered in a cottonwood grove just west of the O'Brien Lock and Dam, where they concentrated in 1983 and 1984. In 1985, with the return of normal water levels in the Big Marsh most of the birds returned. A Corps of Engineers study in 1985 revealed 492 nests in the Big Marsh and 139 at Whitford's Pond. In 1986 only 417 nests were found: all in the Big Marsh, none at Whitford. This was a decrease of 34% occasioned by higher water levels and less vegetative surface through muskrat activity. The continued presence of the colony at Lake Calumet depends on the maintenance of a stable site with proper water controls."

Black-crowned Night Herons are most active at dawn and dusk, but they also forage in the dead of night (hence "Night-Heron") and occasionally during the day, although much of the daytime hours are usually spent loafing. While they nest in wetlands in the immediate vicinity of Lake Calumet, they routinely fly as far as 20 miles to obtain food and regularly forage in wetlands along the Grand & Little Calumet Rivers in NW Indiana, and as far west as the Palos area in SW Cook County. Thus, it is important that all of these wetlands be preserved to assure the Night Herons continued survival.

Black-crowned Night Herons eat fish, frogs, tadpoles, crayfish, snakes, mice, and young birds, and thus are relatively high on the food chain. Like other fish-eating birds (cormorants, herons, egrets) and predatory birds (Bald Eagle, Osprey,



Peregrine Falcon), Night-Herons have probably benefitted from the ban on DDT use in 1972. DDT accumulates in the body tissues of fish eating and predatory birds, causing eggshell thinning. Black-crowned Night-Herons, however, do not seem to have "bounced back" in as big a way as some of these other species have in recent years, so perhaps other mechanisms are at work. Black-crowns are fairly small herons, and perhaps they are routinely "pushed out" of communal nesting colonies by the larger and more aggressive species of herons and cormorants.

Black-crowned Night Herons often begin nesting around mid-April, and generally all young have fledged by about the end of July. Then begins a period of "post-breeding dispersal," where young and old birds alike disperse across the midwest to exploit wetlands in other areas for food before heading south for the winter. Many of these birds leave the Calumet area at this time. Black-crowned Night Herons are sensitive to disturbance and should not be approached too closely when nesting. Besides the destruction of foraging and nesting habitat, the Illinois Endangered Species Protection Board lists harrassment and encroachment by humans a major threat to the survival of this species. A good rule of thumb is to remain at least a city block away and observe the birds with binoculars or a spotting scope."

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Biological Invasions

Aggressive non-native plants quickly choke out native plants and, in turn, drive out animals that rely on the native plants for everything from food to reproduction. The primary invader in the Calumet area is the purple loosestrife.

Often called the "purple plague" it is native to Europe and Asia. Purple loosestrife showed up in Canada about 50 years ago and quickly spread to the U.S. Its vivid purple flowers plague much of Illinois' wetland areas, where it displaces marsh grasses, rushes, cattails, reeds and orchids, and forms an impenetrable hedge. The yellow-headed blackbird, an endangered native species, needs the stiff stems of native plants to support its nest. When the plants disappear, so does the bird.



*Purple Loosestrife -
Beautiful but poison to
our native wetlands.*

Destructive Development

In recent years, high quality natural areas have been compromised by inappropriate activities on public lands in the region. For example, part of the northwest corner of Lake Calumet, estimated to be in excess of 10 acres, was filled in by the Illinois International Port District to create a golf course. In 1996, a gas company completely destroyed a large tract of high quality prairie in order to inspect a gas pipe line that runs underground. Local volunteers had been restoring Powderhorn Prairie for over 10 years.

Pollution

Contamination from abandoned industrial sites, hazardous waste dumps and landfills continues to be a threat to the surrounding natural areas. Pollution from these sites runs off into the surface waters of Lake Calumet and its surrounding rivers and wetlands. Contaminated groundwater is linked to surface waters used by wildlife. It is very likely that the entire aquatic system is linked to Lake Michigan, a drinking water source for millions of people.

Any effort to conserve biodiversity and quality habitat in the region must acknowledge threats from past and present contamination from industrial and waste disposal activities. Abandoned sites must be cleaned up and the affects on the Lake from pollution must be identified and dealt with.



Shores of Lake Calumet bulldozed for development.



A legacy of pollution from decades of heavy industry.

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O'Brien Lock Marsh

Past & Future

*What would the world be once
bereft
Of wet and of wildness? Let
them be left,
Let them be left, wildness and
wet;
Long live the weeds and the
wilderness yet.
(from *Inversnaid*, Gerard
Manley Hopkins)*



The Past

Long before Chicago was settled, shallow marshes and wet prairies filled the landscape behind the dunes, ridges and beaches at the south end of Lake Michigan. Known for their abundant wildlife, the Calumet marshes were the heart of one vast wet prairie system spanning roughly 22,500 acres in Illinois.

One proposed origin of the name Calumet comes from the Native American term for peace pipe, "Callimich" which was adopted and modified by English settlers.

In northwest Indiana, a similar marsh system existed that most likely equalled the size of the marsh area in Illinois. Indiana also adopted the word "Calumet" for its complex of marshes off the southwest corner of Lake Michigan.

The advent of the industrial age forever changed this once-verdant region. First railroads traversed the marshes, enabling heavy industry to move in. Residential developments soon sprang up to house the influx of workers. As communities throughout the southern Lake Michigan region expanded with industrial growth, so did the regional garbage industry. The low-lying areas in the Calumet region were readily sacrificed, transformed to dumping grounds for industrial and municipal waste. Hyde Lake was filled in and reduced from 520 acres to 120 acres in the 1890's. Marshes at Eggers Woods Forest Preserve and Powderhorn Lake Forest Preserve were once connected to Wolf Lake but are now miles apart. Of the 22,000 acres of wetland that used to meander across Lake Calumet,

only 500 remain.

In 1893, the commander of the Army Corps of Engineers indicated that, "keeping the Grand Calumet River channel clear was a fruitless exercise because it "filled up rapidly by slaughterhouse refuse and filth from manufacturing establishments and solid matter from the sewage poured into the dead stream. North Chicago Rolling Mill located at mouth of Calumet River deposited so much slag and dredge that the area around it grew at four acres per year.

In 1925, the City of Chicago authorized a project to turn Lake Calumet into an industrial harbor. The bill's sponsor, Alderman Guy Guernsey, referred to Lake Calumet as "nothing more than a breeding place for mosquitoes and mud turtles." Twelve hundred acres of land were to be filled by the City so a railroad company could expand its rail line. This segregated the lake from adjacent marshes.

The Metropolitan Sanitary District attempted to process domestic and industrial waste, meeting strong resistance from companies. The Army Corp of Engineers sued three companies in 1954 for their failure to stop dumping. Just one of these three companies had discharged 4.9 million gallons of untreated waste on a daily basis. While the Corps won the suit, a 1965 analysis found that at least two of the defendants were among eight polluters dumping 376 million gallons of liquid water per day into the Calulmet Region. The analysis also found that, "the Grand Calumet River was incapable of even maintaining populations of sludge worms

(Tubifex) animals whose toleration of low oxygen enables them to survive when literally every other living thing is gone." While industries halted discharge, in 1996, "there were places along the Grand Calumet River so saturated with chemicals that a person's weight could cause an oily substance to ooze from the bank to form a sheen on the water surface."

It was not until the late 1970's that a systematic effort to improve the environmental conditions of Lake Calumet began. Later, in 1985, Jim Landing prepared a "Conceptual Plan for Lake Calumet Ecological Park: Chicago, Illinois" and in 1996, Congressman Jerry Weller urged the National Park Service to undertake a detailed study on including the Calumet region in the national park system. A proposal evolved to create a bi-state Calumet National Heritage Area.

Recent history also negatively impacted Lake Calumet. As steel mills began closing during the 1980's, waste disposal companies wanted to fill in most of the lake to provide land for private developers. The Illinois International Port District legally filled marshland for a golf course, and wetland west of Eggers Woods were illegally destroyed by developers. 9,400 acres of wetland and neighborhoods were almost lost as the Calumet area was proposed as a site for a new airport in the early 1990's. Most recently, Lake Calumet almost became a home for 1,000 motor-boats that would have adversely affected the ecosystem of the area. Lake Calumet cannot continue to dodge these bullets that seek to damage its open space, and endanger its native species.

Throughout its history, numerous attempts have been made to carve out a future for Lake Calumet. In 1909, Daniel Burnham spoke of the large swamps of Lake Calumet being developed into "fine parks." He enjoyed the intermingling of industry and nature. "It is proposed to create a driveway around Lake Calumet, and to reclaim the low lands south of the lake without essentially changing their present topography; also to plant a belt of woods surrounding this lake park set in one of the greatest manufacturing districts in the world, and to construct roadways to form connections with different park reservations and at the same time to become highways to the city." In 1946, the City of Chicago envisioned a deep narrow channel and docks in Lake Calumet. In the 1980's, the site was proposed for the World's Fair.

The Sierra Club has been actively involved in promoting conservation and cleanup in this region since the mid-1980's, when a solid waste landfill was proposed in a high quality natural area known as Big Marsh. After a successful campaign to save Big Marsh from destruction, the Club helped lead the conservation community's efforts against the proposed Lake Calumet Airport, which would have destroyed or degraded thousands of acres of wetlands and other natural areas in the region.

for more information on the history of the Lake Calumet area, read:
"Rustbelt Hell or Redevelopment Heaven? Lake Calumet: Land of Contrasts
by Betsy Mendelsohn

"A Natural History of the Chicago Region"
by Joel Greenberg



The Present

The scenery in the Calumet region is filled with opposing images of environmental neglect and survival. The natural remnants of the once vast marsh system are scattered among the remains of an industrial age which forever changed the region.

The abandoned industrial sites, contaminated areas and garbage dumps serve as reminders that industrial progress doesn't come free. In contrast, the abundant wildlife (see [photo gallery](#)), including vibrant wildflowers and rare and endangered bird species, are indicators of nature's capacity to endure.

The current pattern of ownership of these critical lands is a complex maze of public and private uses; including public parklands, industrial holdings, contaminated areas, infrastructure use and waste disposal. Industry and wildlife exist side by side. Great Egrets can often be found wading in the Big Marsh which lies adjacent to the Acme Steel Coke Plant on Torrence Avenue.

In a landscape crowded with human development, the remaining natural areas in the Lake Calumet region serve as invaluable open space to absorb and filter water and provide habitat for hundreds of species of animals and plants. These wetlands, wooded areas and prairies remain a critical stopover for migrating birds and offer perhaps the greatest concentration of threatened and endangered species in Illinois. The Lake Calumet wetlands are host to the Midwest's largest breeding colony of Illinois endangered Black-

crowned Night Herons.

One lasting positive impact of the debate over the proposed airport has been a dramatically increased awareness among the local community of the quality and quantity of natural areas in the region. The airport controversy alerted many to the valuable natural areas contained within the Lake Calumet region in addition to its aging or abandoned industrial and waste disposal sites. As a result, local conservationists, the Sierra Club, and others formed the Calumet Ecological Park Association (CEPA) to promote the conservation of the region's natural areas.

In 2001, Governor George Ryan and Chicago Mayor Richard Daley held a press conference at the Harborside International Golf Course on the northern shores of Lake Calumet. There, they announced the new Calumet Initiative aimed at restoring and enhancing open space while revitalizing the economic opportunities of the area. We are at a turning point. Today, the Lake Calumet Land Use Plan has the possibility of creating a new future for the region; to rewrite the history of dumping, pollution, and dying wetlands. The plan will attempt to bring about the economic prosperity that accompanied the region with its tormented past. The opening of the St. Lawrence Seaway and the establishment of the Illinois International Port District in the 1950's brought along with it hopes for continuity, growth, and prosperity. However, this boom never transpired. Alternative methods of transportation led the Port of Chicago to rank 28th in shipping traffic of all U.S. ports. While Lake Calumet has



over 60% of the land available for industrial use in Chicago, it has less than 20% of the demand. This plan, in coordination with government assistance, can revitalize not only the wetlands, but the local economy as well.

The Future

Nature's ability to withstand injury and neglect relies on a complex maze of ecological relationships. These relationships are fragile. We must do what we can to maintain those that still exist and ensure that wildlife can continue to thrive in the region.

Protecting and restoring all of the Lake Calumet wetlands will provide a critical ecological link between other vital natural areas including the Indiana Dunes National Lakeshore to the east and the Illinois and Michigan National Heritage Corridor to the west.

While work on a National Heritage Area has slowed recently, the desire to link all of these vital natural areas, along with celebrating the region's cultural, historical and industrial characteristics continues strongly through a host of smaller projects.

Possible landfill expansions, pollution and neglect continues to threaten the ecological health of the region (see Threats and Dangers). Comprehensive protection of the Lake Calumet wetlands ensures that critical wildlife habitat will remain in an area stressed by pollution and fragmentation. Protecting these critical natural areas indefinitely will offer people the opportunity to reconnect with nature for generations to come (see Plans



and activities).

Ecological preservation can boost economic development. The state of the natural areas and the revitalization of the area's economy are both directly linked to the quality of life in the region. The natural areas are islands of green in a highly industrial area and their fate is indeed intertwined with the urban property surrounding them. Existing contamination and future land use decisions have a significant impact on the character and quality of adjacent natural areas. The Sierra Club will support the future use of these sites as compatible with industry to stimulate the economy in the region.

We need your help.

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