

Kissena Park

The Wild Side



A Guide to its Natural Areas

Kissena Park

Queens, New York

Tennis players volley in the shade of purple sycamore maples more than a century old. Just down the hill, a tangle of willows are mirrored in the dark surface of a freshwater marsh. Minutes away, prairie birds—savannah sparrows, meadowlarks, and bobolinks—flit over the grassy oval rimmed by a steeply banked, asphalt bicycle track.

This is Kissena Park, a surprising array of natural areas scattered among baseball diamonds, bocci courts, and other man-made sports facilities. This brochure will introduce you to the park's natural areas—wetlands, meadows, and forests—as well as a bit of its history.

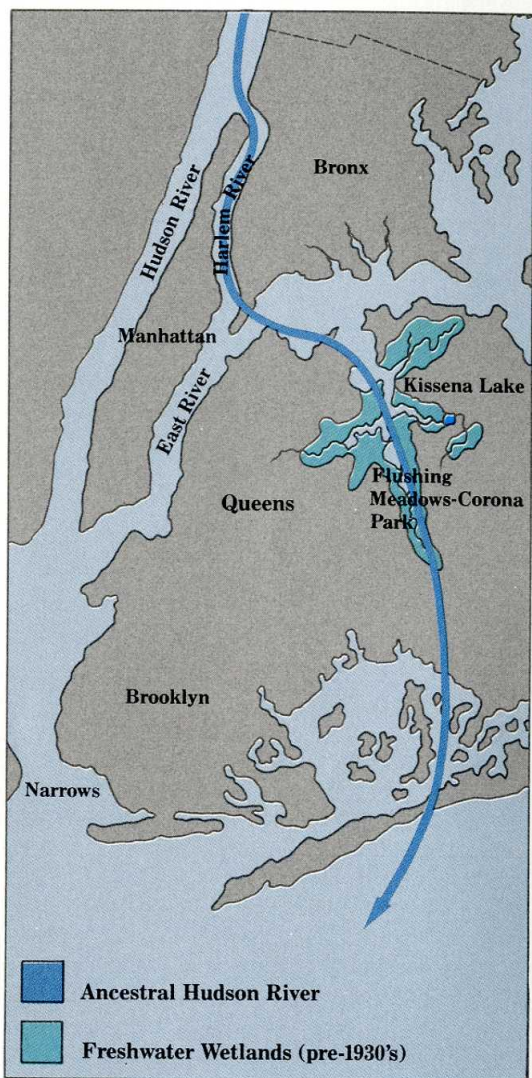
Natural history: The last glacier

Kissena's variety of natural features is a result of thousands of years of natural forces at work. Four times during the last million years, the earth's climate has alternated long periods of cooling and warming. The cooling trends caused huge glaciers—sheets of ice more than a thousand feet thick—to form and to push slowly south. When a warming trend occurred, the glaciers began to melt and recede northward.

Each time a glacier advanced, it scoured tons of rock from the earth, dragging them under its mass or pushing them along its forward edge. It was constantly crushing, grinding, and polishing the rock under its tremendous weight. When it receded, it deposited polished boulders, sand, gravel, and clays in a “terminal moraine”—a high ridge of rocky ground—where the glacier had stopped advancing. Some 20,000 years ago, the last glacier to cover eastern North America left a moraine that crossed Staten Island and extended to the eastern tip of Long Island.

Receding glaciers released torrents of water that cut deep valleys as it roared to the ocean.

*Cover: Golden
carp are an easy
target for the keen-
eyed osprey.*



The Hudson River was shaped and reshaped by such torrents. Around 100,000 years ago, it flowed down the Harlem River channel and through Queens to the ocean (see map). But some 20,000 years ago, the Hudson's path to the sea was blocked by the boulders and gravel of the terminal moraine.

Eventually, however, water flooded over the terminal moraine at a low point between Staten

Island and Brooklyn, carved out the Narrows, and flowed into the Lower Bay. This is the course the Hudson takes today. But its original route is still visible in the lowland freshwater marsh system that bisects Queens County from Flushing Bay almost to Jamaica Bay.

After the glacier receded from Long Island, vegetation developed in stages: tundra, then spruce forest, pine forest, and oak forest. The oak forest—actually a mixed forest dominated by oak, hickory, and American chestnut—had developed about 7,000 years ago. The forests of western Long Island are still of this type, except for the American chestnut, which has been wiped out by blight over the past century.

Human history: The first settlers

With the development of the oak forest came the first human inhabitants—American Indians. They hunted the abundant game and caught fish and shellfish in streams, ponds, and the salty waters of Jamaica Bay and Long Island Sound. They lived here for 7,000 years, but only rarely can one find evidence of their past settlement—in buried shell heaps (their trash piles) or rings of fire-reddened stones (their hearths).

In the 17th century, Dutch colonists arrived and displaced the Indians. Soon after, the Dutch were displaced by the English. Settlers of both nationalities—mostly farmers—had hardly more of an impact on the landscape than their predecessors. British settlement indirectly left its mark on Kissena Park, however. In 1727, William Prince, a British colonist, capitalized on his contemporaries' fascination with exotic ornamental plants and established the New World's first commercial nursery in Flushing.

In the mid-1800s, Samuel Bowne Parsons followed his fellow Briton's example and established a nursery overlooking Kissena Lake. The Parsons firm introduced such exotic species as Asian rhododendrons and Japanese maples to this continent. The father of American landscape architecture, Frederick Law Olmsted, used plants from S.B. Parsons & Sons in his construction of Central and Prospect Parks. In 1907, when the city bought the land to form part of this park, it removed all but 14 acres of the nursery stock. This 14-acre plot of mature exotic specimens is now called the Historic Grove.

Meadows

*Cottontails
prefer clover.*

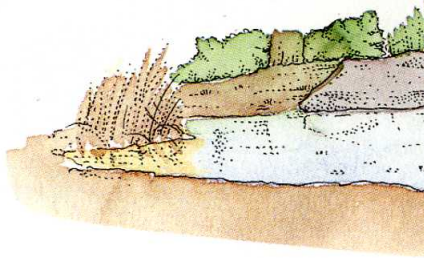


The southern part of the park is an expanse of open land. If you climb one of the many hillocks (formed by soil dredged from the lake) in this area, you can see rounded clumps of sumac and patches of tangled brambles. A few cottonwood trees—their leaves trembling in the wind—stand on a sweeping plain of reedgrass and mugwort, which can form an impenetrable thicket at the height of summer.

If you climb to the upper edge of the bicycle track, you have a panoramic view of the park. On a fall day with clear skies and a crisp northwest wind, you can see an exceptional sampling of the autumn hawk migration: red-tailed, Cooper's and sharp-shinned hawks flying over and along the woods; kestrels, merlins, and peregrine falcons swooping over the meadow; and ospreys soaring above the lake.

One reason that birds of prey—especially owls—often swoop down on the meadow is its most common resident: the meadow vole, a small rodent that looks like a streamlined mouse. You probably won't see this furry torpedo but you may well hear it rustle through the grass. Its sleek shape allows the vole to run through tunnels between the matted vegetation and the ground.

More easily spotted than the vole, but still inconspicuous, are the other numerous inhabitants of the meadow: ring-necked pheasants. They stay low to the ground until you get near them and then bolt from the tall grass with powerful wingbeats and a sharp, horn-like squawk. Their escape is so dramatic that it may take your breath away!



Wetlands

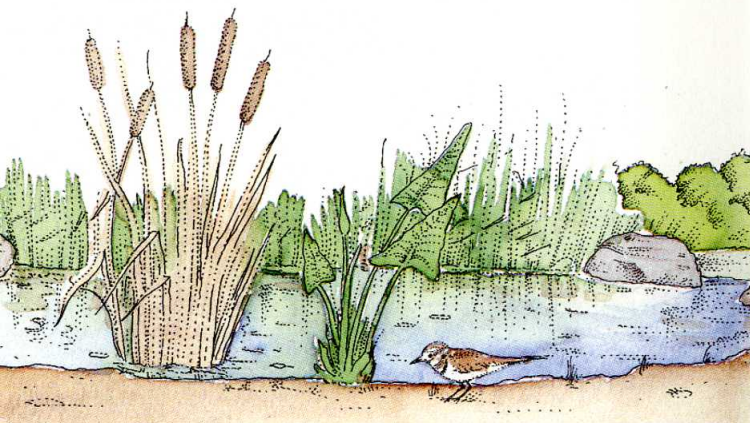
Water is essential to wildlife. But in New York City over the last century, natural sources of fresh water have become scarce. Areas once criss-crossed by creeks and dotted with ponds have been paved and their water diverted into storm sewers. Fresh water, wherever it occurs in the city today, attracts wildlife like a magnet. This is certainly true of Kissena Park's lake and marsh, which are filled with water all year, and its vernal ponds, some mere puddles, which appear only after heavy rains. (Vernal means occurring in spring.)

The "bathtub lake"

Kissena Lake was once part of the sprawling system of wetlands that crossed Queens County north to south from Flushing Bay to Jamaica and extended as far east as Fresh Meadows. In fact, when the city bought the land for Kissena Park in 1907, a public outcry erupted over large sums being spent on "swampland."

The idea that wetlands were worthless and should be filled in to become "useful" was common wisdom in the 19th and early 20th centuries. As a result, nearly all the Queens wetlands were drained and filled during the first half of this century. In 1942, Kissena Lake was transformed into a "bathtub lake" when WPA (Works Progress Administration) workers drained it, built a stone retaining wall around it, and refilled it.

Despite such indignities, the lake remained a productive ecosystem alive with water plants and animals. In fact, it became "too productive," and had to be drained again in 1983. Every



winter, so many blooms of algae had grown, died and sunk to the bottom that the lake was in danger of filling itself in. Before the city drained the lake, the state's Department of Environmental Conservation removed 200 pounds of bass, sunfish, catfish, and eel, and released them in the lake once dredging was completed.

Today, Kissena Lake is still home to snapping turtles the size of small pizzas and such water birds as ducks, herons, egrets, and gallinules.

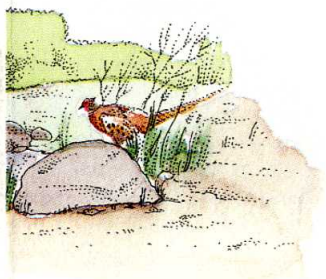
Freshwater marsh

Between the southwest shore of the lake and the bed of the old Creedmoor branch of the Long Island Railroad is an extensive freshwater marsh about the size of the lake. Standing water, low-hanging tree limbs, and dense patches of briars make visiting this area rigorous exercise, but once here you may see the elusive Virginia rail run for cover in the dense reedgrass or a sharp-shinned hawk chase a starling through the black tupelos.

Vernal ponds

A reminder of Kissena's marshy past are the small vernal ponds that appear in low areas of the park after heavy rains in spring—and sometimes in fall and winter, too. In summer they are not easy to spot, but if you look closely, you may see something that looks like a mud puddle or notice a grouping of plants—cattails, horned rushes, assorted sedges—that indicates unusually moist soil.

In spring, however, you'll have little trouble identifying vernal ponds. After the onset of spring showers, small depressions quickly fill with muddy, clay-colored water that soon turns green with algae. Migrating shorebirds—spotted and solitary sandpipers, killdeer, and snipe—often drink at these little oases or poke around their edges for worms. The largest ponds are big enough to attract a mallard duck or two who take to the water and paddle around or a green heron who will squat on a partially submerged log.



Shorebirds, like the killdeer, are attracted to Kissena's wetlands. Pheasants frequent its meadows.



Long-eared owls seek refuge in evergreens on the Memorial Knoll.

Old and rare: A native American forest

The roughly horseshoe-shaped slope on three sides of the Historic Grove supports a mature native forest, the kind of upland forest that once covered much of Brooklyn and Queens along the terminal moraine. It is a mix of black and red oak, bitternut hickory, beech, and tulip trees forming a canopy over smaller trees and shrubs such as witch hazel, sassafras, and arrowwood. (Exotic plants growing here—wisteria, English ivy—evidently seeded themselves from the Historic Grove.) This three-acre forest has probably survived because the slope it covers would have made poor farmland, or pasture.

In this forest, but south of the Nature Center, stands another group of native trees—pin oak, black tupelo, black birch, red maple, and white ash—characteristic of the wetter, lowland forests that grew at the base of the moraine.

Although this three-acre forest is too small to support a variety of breeding songbirds, it does offer many opportunities to observe them in spring and fall as they fly through on their migration north or south. From the path along the crest of the slope, you have a fine view of such upper-canopy feeders as blackburnian warblers and Cape May warblers. Strolling along the lower path, you can see such ground-feeding birds as veeries, oven birds, and towhees as well as lower-canopy feeders, including black-throated blue warblers.

New and changing: A forest under 50

Much of the forest in the southeast corner of the park was meadow or shrubland less than 50 years ago. The lanky trees with their sparse crowns—black cherry, sassafras, and black locust—seem to twist upward, reaching for the sun. All three species are pioneer trees. They are sun-loving and so are among the first to colonize meadows or shrublands and begin turning them into forests. Eventually, the Norway maples, red maples, pin oaks, and black willows also growing here will overgrow the pioneer trees, shade them out, and form a mature forest.

Many of the older black cherries and black locusts in this forest have hollows, where a limb has fallen off or a woodpecker has pierced the protective bark and a fungus has then rotted out a cavity. These cavities are often the dens of white-footed mice and grey squirrels, and the soft ground here provides burrows for other rodents as well.

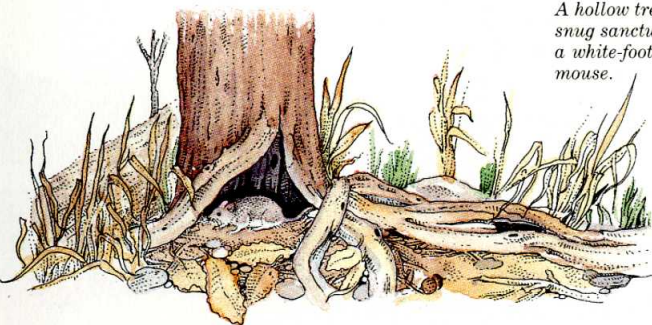
Since rodents are the red-tailed hawk's favorite food, it is no surprise that this regal raptor—one of the handsomest birds in our area—frequents this part of the park, especially in winter. If you visit in autumn or winter, in fact, you may see the red-tailed hawk in an exciting aerial ballet as a flock of raucous crows chase him from one end of the park to the other.

The Memorial Knoll

This stand of evergreens, planted in 1921 and dedicated to World War I dead, includes Japanese black, Austrian, Scotch, and white pines, Douglas and Alpine firs, and Norway spruce. It is sometimes used as a winter retreat by great-horned and long-eared owls. In winter, when most trees are bare, tree-roosting birds use evergreens as hiding places or snug windbreaks. Owls, who hunt by night and sleep by day, choose evergreens as their daytime roosts to hide from the mobs of smaller birds, especially crows and jays, that often chase them during daylight hours.

Many insects also spend the winter literally under cover in evergreens. The loose, scaly bark of some evergreens keeps many insects safe from cold—but not from predators. Such insect-eating birds as white- or red-breasted nuthatches and brown creepers walk up and down the evergreens, spiraling around the trunks, inserting their slender bills behind a shingle of bark and emerging with a plump and tender grub.

A hollow tree is a snug sanctuary for a white-footed mouse.





Transportation

Subway IRT #7 train to Main St., Flushing; then take one of the buses listed below.

Bus The Q65 to 164th St. and Underhill Ave. or the Q25/34 or Q17 to Kissena Blvd. and Rose Ave.

Car Long Island Expressway to Kissena Blvd.; north on Kissena to Rose Ave.; take a right and the park is on the right.



Note: When visiting the park's natural areas, wear comfortable walking shoes or boots. Mosquitos may be a nuisance in summer so wear long sleeves and long pants and/or bring insect repellent.

Kissena Park Queens, New York

Visitor Services and Information

The Kissena Park Nature Center

Pick up a brochure here and take a self-guided tour of the park or the woodland nature trail. You can join the Urban Park Rangers on a Sunday walking tour, which focuses on the natural events of each season. The tour leaves from the Center at 1 p.m. Rangers also conduct walks and school programs throughout the year. For more information, call (718) 353-1047 or visit the Center Tuesday through Sunday, 10 a.m. to 4 p.m.; 10 a.m. to 7 p.m. June–August.

Recreational Activities

Kissena Park offers tennis, handball, basketball, softball, bocci, ice skating, bicycle racing, and fishing. Permits are required for tennis and softball.

Queens Borough Office	(718) 520-5900
Permit Office	(718) 520-5932
Urban Park Rangers,	
Flushing Meadows-Corona Park	(718) 699-4204
Kissena Park Nature Center	(718) 353-1047
Kissena Park Boathouse	(718) 520-5359
Queens Botanical Gardens	(718) 886-3800

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