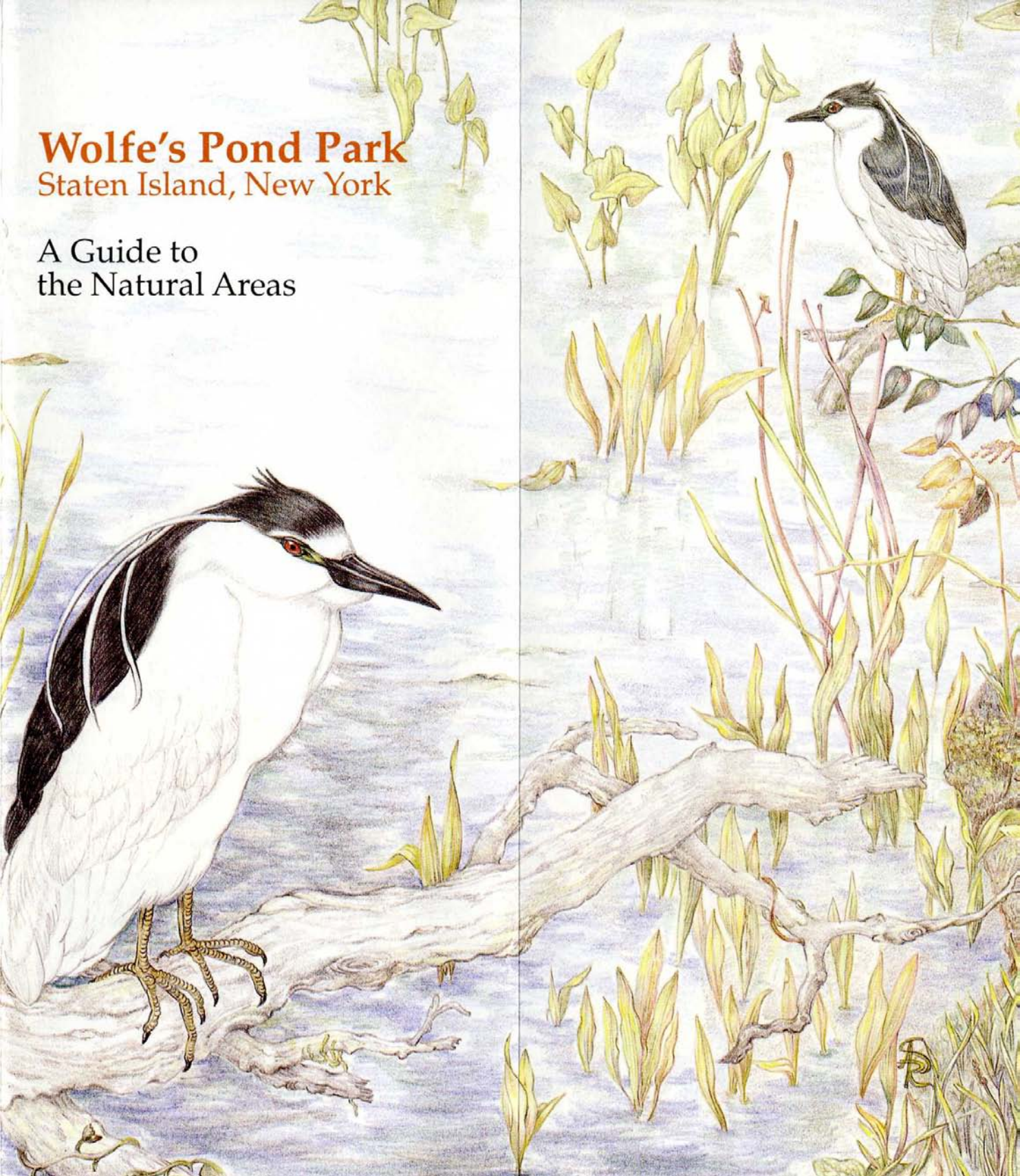


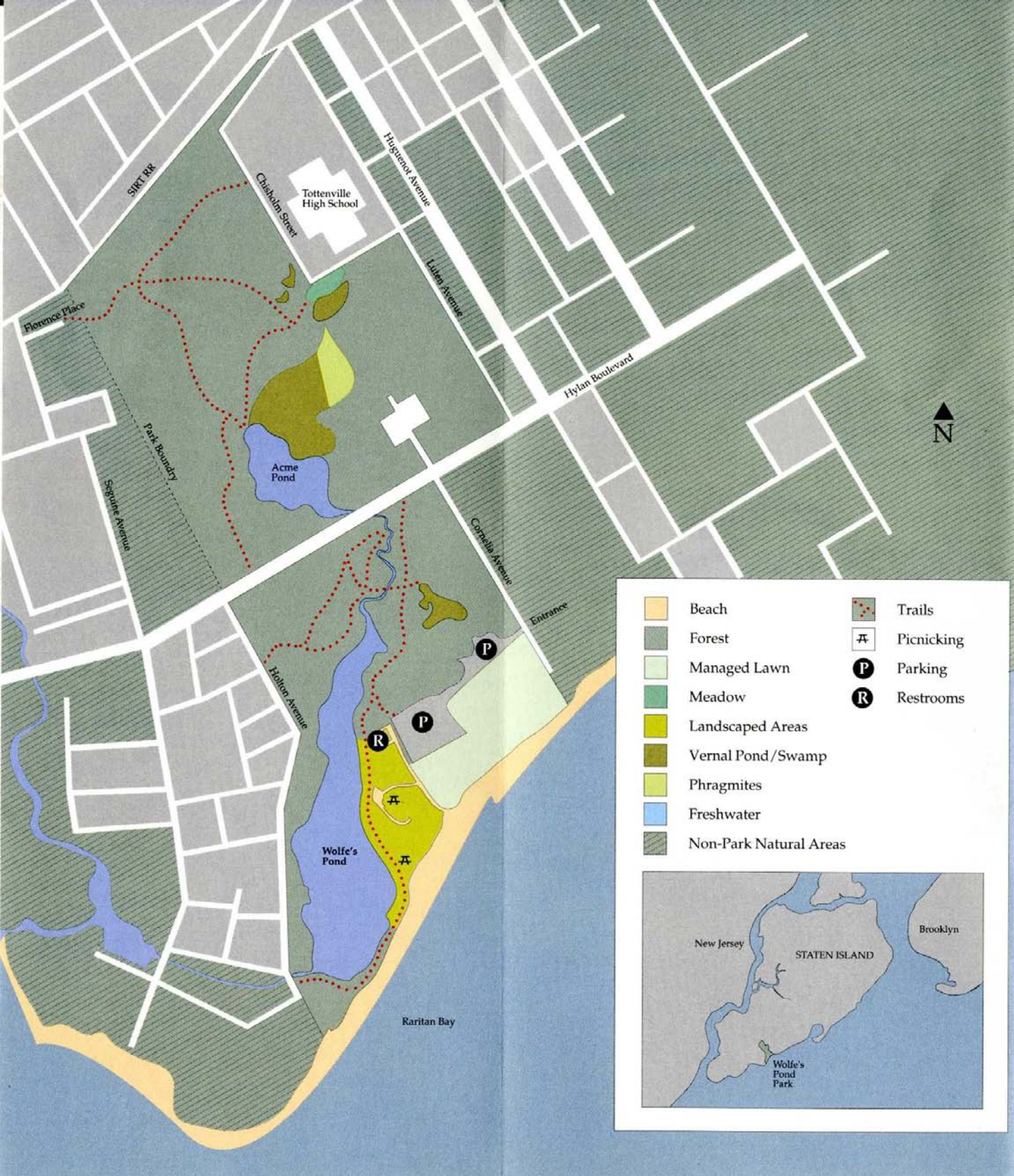
# Wolfe's Pond Park














Staten Island, New York

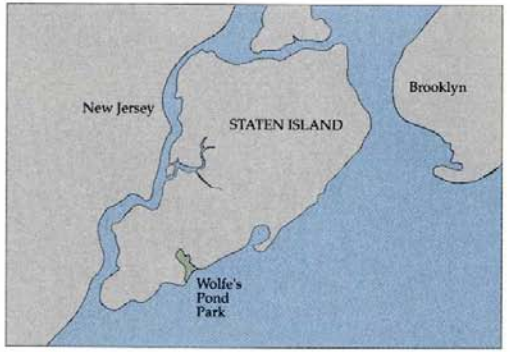
A Guide to  
the Natural Areas







- |   |                        |   |            |
|---|------------------------|---|------------|
|    | Beach                  |    | Trails     |
|    | Forest                 |    | Picnicking |
|    | Managed Lawn           |    | Parking    |
|  | Meadow                 |  | Restrooms  |
|  | Landscaped Areas       |   |            |
|  | Vernal Pond/Swamp      |   |            |
|  | Phragmites             |   |            |
|  | Freshwater             |   |            |
|  | Non-Park Natural Areas |   |            |



# Wolfe's Pond Park

## Staten Island, New York

Staten Island is New York City's green backyard. Parks stand out in the paved sections of the City, but here blend seamlessly into their suburban surroundings. Nearly half of the island's 5,690 acres of parkland are natural marshes, woodlands, and meadows. The beauty and ecological importance of Staten Island parklands may be some of the City's best kept secrets. Wolfe's Pond Park on the Island's south shore is one of its lesser-known treasures.

The land that now comprises the park, and the plants and animals it supports, have been shaped and influenced by human activities for thousands of years. Today, its 312 acres are a haven for wildlife fleeing the development that has come to the island's south shore. Even though Wolfe's Pond Park is protected, its natural systems are still affected by human endeavors.

Long time area residents have a deep appreciation for the park; they say "These woods are as good as any upstate, you wouldn't know you were in the City". If this fragile ecosystem is to be preserved, more people need to learn about the natural resources of the park—its woods and dunes, its waters and wildlife.

*Cover:*

*The black-crowned night heron is a summer resident of Wolfe's Pond Park. It is a cosmopolitan species, found on every continent except Australia and Antarctica.*



# The Beach

The beach at Wolfe's Pond Park was formed nearly 20,000 years ago during the last part of the ice age. When the Wisconsin ice sheet advanced southward, it transported vast quantities of clays, sands, and gravels. A ridge, called the terminal moraine, marks the southernmost advance of the glacier which covered most of New York, and characterizes much of the geology of southern Staten Island. When the ice sheet melted, clays, sands and cobbles were washed from the moraine, and came to rest on the shore. A narrow band of cobble beach, a feature more commonly found in New England, was formed here between the present-day high and low tide marks.

*The beach at Wolfe's Pond Park is a beachcomber's paradise. Spotted sandpipers, kildeer and ruddy turnstones find a wide array of food items, while humans hunt for shells, driftwood and chance oddities.*



Today, the beach, the dunes inland, and the clay bluffs are home to a diverse collection of plants and animals.

Looking southwest toward the horizon from the beach you can see Sandy Hook and the far shore of Raritan Bay. The rich natural resources of Raritan Bay have always attracted people to Staten Island's south shore. Archeological evidence from various sites in the area shows that Native Americans harvested the marine resources here as early as 6,000 years ago. These people, the ancestors of the Algonquian Lenape, settled on bluffs overlooking the bay, near sources of fresh water, and collected shellfish and fin fish, hunted deer and turkey, and cultivated squash and corn. Wolfe's Pond, like Lemon Creek and Ward's Point to the southeast, was one of the places where the Lenape camped while they hunted, and gathered shellfish.

The natural riches of the Bay later attracted European colonists. A thriving oyster industry sprang up as they established settlements throughout Staten Island.



By the 1800s the area was famous for its oysters, which were sold to large markets in New York City, and as far away as Europe. The industry supported most of the people who lived on the Island's south shore. By the turn of the century, however, the fishery was condemned because the pollution of Raritan Bay waters caused outbreaks of yellow fever. Water quality was somewhat improved by 1929 when the city acquired the land around Wolfe's Pond for use as a park, but today the shellfish is still not safe to eat.



*The clubtail basks in the early morning sun on swamp rose mallow, a member of the Hibiscus family. The dragonfly must warm up its wing muscles before it can begin to hunt for its favorite prey-mosquitoes. This dietary preference has earned the dragonfly the nick-name "mosquito hawk".*

The best time to explore the beach is in the spring or early summer before the green sea lettuce grows thick and covers the cobbled shoreline. Other types of seaweed are also present: brown bladder wrack, so called because of the air-filled bladders in its stem, and Agarda's red weed, a delicate, bright red algae. One bird that depends on seaweeds is the brant, a small goose with a black head and a white tail. Migrating brant stop in Raritan Bay waters to rest and feed before continuing north to their breeding grounds. Flocks of brant riding the surf and foraging along the water's edge are a common sight in spring.

When the cobble beach is exposed during low tide one can find a variety of invertebrates which live in the *intertidal zone*, the area of beach between the low tide and the high tide marks. Carefully turn over a rock, and watch out for the spit of a soft shell clam as it retracts its siphon. Since the clam's shell is delicate and does not close completely, it must dig down into the sand to escape danger. Other invertebrates you may see beneath the cobbles include sand worms, ribbon worms, and scuds. Scuds are related to shrimp, and provide food for fish and birds. Clusters of white rock barnacles cling to the stones, and small blue mussels and young jellyfish may also be attached. Make sure you replace the rock as you found it so that the organisms living there can resume their activities undisturbed.

Common periwinkles, which inhabit small dark spiral shells, and hermit crabs, which occupy these shells after they are empty, can be seen in pools between the rocks. Mud snails are numerous, and at low tide you can hear them moving in a snail stampede across the damp stones. Blue crabs scuttle around in shallow pools.

On the sandy part of the beach, the shells of oysters, once the most economically important animal in the bay, and several types of clams, can be found. The Quahog clam was also important to Native Americans, and later to Staten Island fishermen. Native people dried and stored Quahogs, using the shells to make wampum beads. The small blue stain on the inside of the Quahog shell was the source of blue wampum beads, which they considered more valuable than white beads. The beads were woven into belts that were first used in ceremonies and later as money in exchanges with European traders. Another species that is fairly common here is the razor clam, named for its resemblance to an old-fashioned straight razor. Pink slipper shells and ribbed mussels also decorate the beach.



Further inland, along the dunes, a diverse community of plants grows. Plants help a beach remain stable: their root systems anchor sand and soil to protect the dunes from wind and erosion. While exploring the dunes, try not to damage the vegetation. Even light foot traffic can destroy these fragile communities.

The most common plant along the seaward side of the dunes is beach grass. Salt tolerant plants like sea rocket which have rubbery leaves, saltwort, and seaside goldenrod also appear. Evening primrose, another tall, yellow-flowered plant that tolerates salty conditions, blooms in July and August.

On the landward side of the dunes, stands of dwarf sumac and salt-pruned white poplar appear. Salt spray borne on ocean winds often stunts the growth of trees that are near the beach. Although the dune protects some plants from the effects of salty winds, taller plants are rarely spared. The bushy poplars here may be quite old, but have been unable to reach their full height as they would in an inland forest. Salt-pruned oaks also grow among the dense tangle of Japanese knotweed, Asiatic bittersweet, Virginia creeper, and poison ivy.

Many species of birds depend on the beach for food and nesting sites. The most common birds are gulls. The laughing gull, a small black-headed gull, and the herring gull, a medium-sized gray gull often congregate in mixed flocks. The killdeer, a sandpiper sporting black and white stripes on breast and wings, nests among the dunes and forages along the water. Spotted sandpipers and black-bellied plovers feed at the water's edge.

Common and least terns are occasional visitors to the bay. Both species were once more plentiful in our region, but beachfront development has reduced their nesting sites. The least tern is now on the Federal Endangered Species list, and the common tern is classified as Threatened. Both species are predominantly white with black caps,

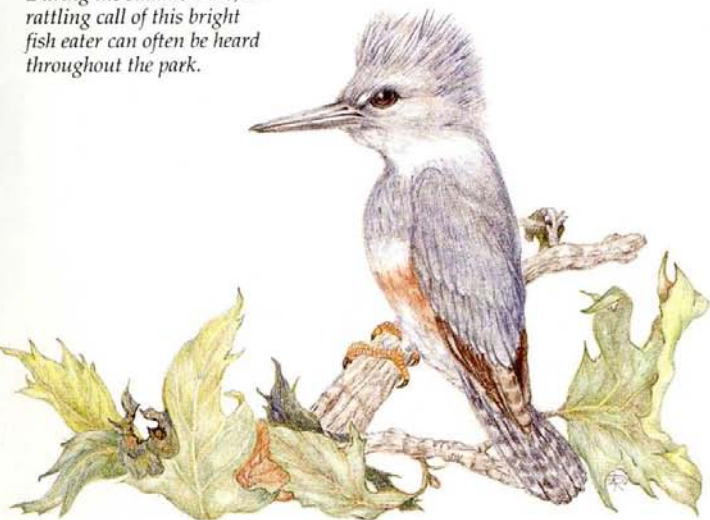


grey wings, and forked tails. Aerobic fliers, once referred to as "sea swallows", they can be seen hovering and diving for small fish in the Bay and resting on the sand or on the rock jetty.

## Wolfe's Pond

Wolfe's Pond is unusual; it is a freshwater pond located just yards from the sea. It was once a tidal inlet that supported very different plants and animals than it does now. Over time the action of wind and waves pushed sand and clay into the mouth of the inlet, damming it and forming a pond. The outflow from Acme Pond, and the gradual accumulation of rain and overland runoff, transformed Wolfe's Pond from a brackish body of water to a freshwater pond.

*The kingfisher builds its nest in burrows along embankments. During the summertime, the rattling call of this bright fish eater can often be heard throughout the park.*



The pond became important to local oystermen who used its fresh water to wash their hauls of shellfish. Besides cleaning debris from the oysters, the fresh water reduced their salt content and improved their flavor. The oystermen periodically repaired the natural barrier between sea and pond when it was washed away by heavy storms.

Later, when the pond was acquired by the Parks Department, a permanent dam was constructed to protect it from damaging storms.

When the City acquired Wolfe's Pond Park in 1929, it had been a popular spot for many years for visitors from Manhattan, Brooklyn, and New Jersey. People set up summer bungalows along its shores. At one point there were more than 90 summer homes around the pond. A political scandal involving the Staten Island Parks Commissioner and local residents erupted in 1933. Some area residents complained that access to the beach and the pond was blocked by the bungalow dwellers, who were allegedly "friends" of the Commissioner. After a lengthy court battle the bungalows were razed, and the park was open to all. The area was landscaped with plantings of London plane tree, pin and willow oaks, and honey locust.

Today the pond is the focus of much of the recreational activity in the park. You may notice that large areas around the pond shore are devoid of vegetation where the earth has been compacted by constant foot traffic. During heavy rains the soil in these compacted areas is washed into the pond where it inhibits the growth of some aquatic plants. Yet despite the rapidity of the siltation, Wolfe's pond is still remarkably healthy and resilient.

Along the vegetated sections of the pond grow heavy tangles of Asiatic bittersweet, Japanese honeysuckle, and poison ivy, all plants that are quick to colonize disturbed areas. These plants, along with sweet pepperbush, highbush blueberry, serviceberry and wineberry, provide food and cover for many birds. In the spring, common yellowthroats, redstarts, and other warblers forage in the thickets at the pond edge and in the surrounding forest.



*The cedar waxwing may be difficult to spot in the park during the summer, however they are a fairly common sight in fruit bearing trees during the winter and spring. At these times they may congregate in large flocks. Berries comprise about 90% of the waxwing's diet.*



Wood ducks and mallards feed and nest among aquatic plants such as arrow arum, swamp rose mallow, and buttonbush. Red-winged blackbirds are conspicuous members of the pond community. Black-crowned night herons and spectacular great blue herons roost and hunt for fish and frogs along the pond edge. As many as six night herons can be seen roosting on a hot summer day in the large oaks that grow at the north end of the pond. Another pond-edge hunter is the belted kingfisher, a bold blue and white bird that dives for its prey from the tree limbs above.

## **Ravine**

As you head north along the trail by Wolfe's Pond you enter a steep ravine. The ravine was carved in the sandy soils by the stream that connects Acme Pond and Wolfe's Pond. The trees here are the oldest in the park. They were spared the axe because they grow on land too steep to farm. The more level ground on either side of the ravine was fields and pasture until the turn of the century. One of the larger farms was owned by Joel Wolfe, whose pond retained his name after he sold it in 1857.

Young red maples, sweetgum, and several old tulip trees grow along the banks of the stream. These species are resistant to flooding, and so can survive the periods in the spring when the water level in the ravine is high. Flood-resistant vines like catbrier are also present. Farther upland, hayscented fern and arrowwood grow in the shade of young white and red oaks.

*Indian pipes can be found in damp areas on the north side of the park. These plants, which contain no chlorophyll, obtain their nourishment through a symbiotic relationship with fungi.*



American beeches thrive on the steepest part of the slope. These trees prefer moist, cool areas, and so are often found growing along streams. Beeches have smooth, light gray trunks, which are often marred by graffiti. Like all other living things, trees are susceptible to disease. Carving the bark of a living tree is like cutting open its skin; it allows infections to take hold and can weaken and kill otherwise healthy trees.

The trail that crosses the stream and heads upslope continues past some venerable white and black oaks. These trees are the parents and grandparents of the younger oaks in the ravine



forest. These ancestor trees have wide spreading crowns because they grew in open meadows that gave them room to spread. The younger trees have fewer spreading branches. Since they have been growing in more crowded conditions, they have spent their energy growing straight up toward the sunlight.

From the upper trail you can look down on the canopy of young trees and the understory of arrowwood and spicebush in the ravine below. This is a great spot for birdwatching. Wood thrushes, red-eyed vireos, blue jays, and chickadees are just a few of the many species present. During the spring migration you may catch a glimpse of a cedar waxwing or a scarlet tanager.

## North Forest

Across Hylan Boulevard lies the northern half of the park which contains another freshwater pond, Acme Pond, and some of the most impressive woodland in any of New York City's parks.

Unfortunately, aside from a few fishermen, equestrians, and birdwatchers, this area is used mainly by dirtbikers and as a site for dumping cars. These activities damage parkland, contributing to erosion, pollution, fires, and the destruction of plants and animals.

Much of the forested area surrounding Acme Pond was farmland until the 1850s. The trees here, mostly sweetgum in the lower, more swampy sections, and white oak and hickory in the uplands, are younger than those in the ravine. They provide a good example of an even-aged forest. These trees all sprouted at about the same time, after the pastures were abandoned.

As you walk around the forest you may notice the remains of old sidewalks built during the 1920s when much of south Richmond was mapped in anticipation of new housing developments. The Depression brought these plans to an abrupt

halt, but the sidewalks and the odd fire hydrant remain. These sidewalks help to retain water in some of the vernal ponds that dot the northern forest. As summer progresses, many of these wet spots dry out. However, some may retain a few inches of standing water throughout the year. Sweetgum, black tupelo, red maple, and pin oaks prefer these damp areas, and patches of cinnamon, royal, netted chain, and sensitive fern cluster around the edges of the mini-ponds. Some of these areas are covered with aquatic plants like swamp loosestrife, which turns brilliant red in the fall.

Some trees do not do well in standing water and eventually die. However, these drowned trees provide feeding and nesting sites for downy woodpeckers and flickers. The decaying trees are home to many insect larvae, which are a favorite food of woodpeckers. Green-backed herons, with their distinctive orange legs, are frequent visitors to these damp forest spots, and can be seen resting in the leafless trees.

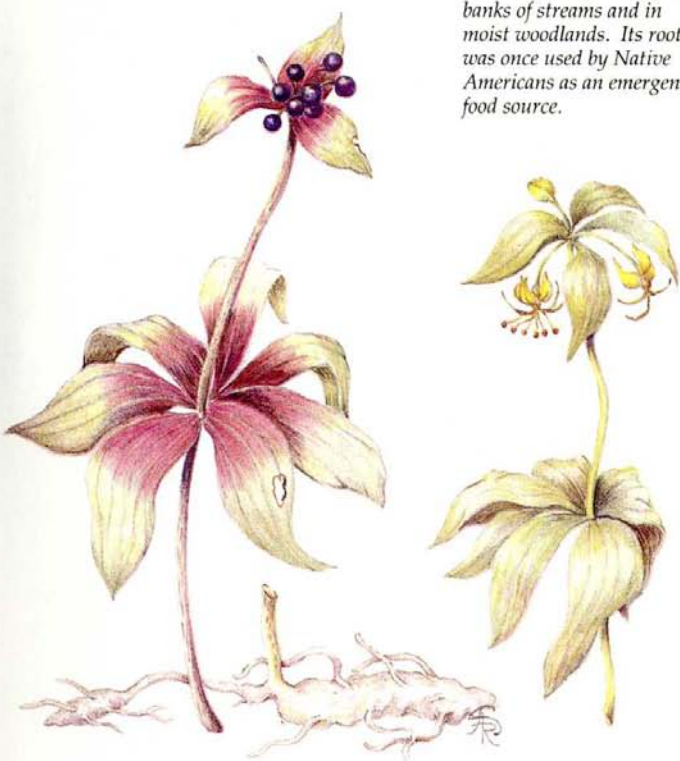
The drier sections of the forest are dominated by groves of white oak and hickory. The shiny, deep green leaves of wild lily-of-the-valley carpet the forest floor, along with patches of sarsaparilla intermingled with sassafras and spicebush. A colorful array of wild mushrooms springs up after summer rains. Garter snakes bask in sunny patches. The forest understory at Wolfe's Pond Park is among the most healthy and intact of any forest in the City. This diverse understory provides food and nesting sites for birds and animals including chipmunks, eastern grey squirrels, wood thrushes, brown thrashers, and American toads.



## Acme Pond

Acme Pond supports many of the same species as Wolfe's Pond, but it is different in several ways. It was probably formed much earlier during the last part of the Ice Age. When the Wisconsin ice sheet retreated large chunks of ice were left behind. When the chunks melted, they left permanent depressions called kettle holes. Some of these depressions remained filled with water, creating ponds such as Acme Pond.

*Indian cucumber is an unusual plant found by the banks of streams and in moist woodlands. Its root was once used by Native Americans as an emergency food source.*



The edges of Acme Pond are less disturbed than Wolfe's Pond. They have been protected from excessive foot traffic by the tangled growth of invasive species like catbrier and multiflora rose, and by the swampy conditions. Here you will

find pungent skunk cabbage, tussock sedge, and stands of cinnamon fern. Although this environment is not necessarily appealing to the average human, it is a haven for wildlife. Opossums and raccoons roam the woods and forage around the edges of the pond. Rufous-sided towhees and brown thrashers call, as bright red cardinals flash through the treetops.

Toward the north end of the pond one can see cattails, and the common reed grass, *Phragmites*. *Phragmites* usually colonizes disturbed areas, and it often out-competes native species, reducing the diversity of wetland habitats. Much of the disturbance stems from the construction of culverts and drainage ditches which divert water from roads, parking lots, and houses into Acme Pond. Even though *Phragmites* is viewed by some as an invasive weed, species like muskrats, actually prefer it to other types of plants. Since the park's two ponds are connected by a stream, runoff water and construction affect the health and water quality of both ponds. In spite of this pressure, a variety of reptiles and amphibians, which are very sensitive to changes in water quality, can be found. Brightly colored painted turtles sun themselves on logs in both ponds, and snapping turtles that are as large as manhole covers bask in the sun at Acme Pond. Red-backed salamanders hide under logs along its moist edges. Early morning anglers, besides catching large mouth bass and several types of carp, may see the muskrats, and even raccoons, foraging along the banks of the pond.

Wolfe's Pond Park contains a rich variety of plant and animal life. The opportunity to explore such a diversity of habitats is rare in such a densely populated area as New York City. Green havens for wildlife and for people are precious, and care should be taken that they are preserved for future generations.

## Transportation

- ***From Manhattan:***

Take the Staten Island Ferry to St. George.

By Train:

From the ferry terminal, take Staten Island Rapid Transit to Prince's Bay (Seguine Avenue). Walk south on Seguine; an entrance to the northern side of the park is on the right at the end of Florence Place. To reach the southern end of the park, walk south on Seguine to Hylan Boulevard. Turn left on Hylan, and walk to Cornelia Avenue. Turn right on Cornelia; the park entrance is on the right. The walk from the train station to the south entrance of the park is about two miles.

By Bus:

From St. George take the S78 (Amboy Rd./Main St.) bus to Luten Avenue and Hylan Boulevard. Walk one block west to Cornelia Avenue. Turn left on Cornelia; the park entrance is on the right.

By Car:

From St. George take Victory Boulevard south to Slossen Avenue. Turn left onto Slossen; after two traffic lights turn right to the Route 278 entrance, Staten Island Expressway South. Take the Expressway to Route 440. Follow the signs for the Outerbridge Crossing/New Jersey. Exit Route 440 at Exit 1, Arthur Kill Road. This is the last exit before the bridge. Turn right at the stop sign at the end of the exit ramp. Take the first right, Tyrellan Avenue, to cross over the highway. Turn right onto Page Avenue. Follow Page Avenue to Hylan Boulevard. Turn right onto Hylan and follow the road to Cornelia Ave. Turn right; the park entrance is on the right.

- ***From Brooklyn:***

By Car:

From the Verrazano Narrows Bridge take Route 278, Staten Island Expressway south. Follow signs to the Outerbridge Crossing. Follow the directions above from Exit 1.

- ***From New Jersey:***

By Car:

From the Outerbridge Crossing. After the toll booth exit onto Page Ave. Follow the directions above from Page Ave.



## Note:

- When visiting the park, be sure to wear comfortable shoes. In the summer insects can be bothersome, so wear insect repellent, or long sleeves and pants.
- Please put any trash in the proper containers, and if you see any trash that's not yours please pick it up too.
- Remember to travel with a companion when visiting any park, as safety should always be a consideration.
- Enjoy your visit to Wolfe's Pond Park!

## Visitor Services and Information

Urban Park Rangers Rangers conduct a variety of year-round walks and programs for nature lovers of all ages.

For a schedule of events, call (718) 667-6042.

- Staten Island Parks Headquarters (Stonehenge)  
(718) 390-8000
- Wolfe's Pond Park  
(718) 984 8266
- Parks Enforcement Patrol  
(718) 667-7477
- Recreation  
(718) 816-6172

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