

III - OLD GROWTH HARDWOOD

This stand of uneven-aged trees is a remnant of a once larger woods reduced in size by housing development. Along the bluffs, American beech, normally a tree of more northerly climate, dominates the area. It is better able to withstand the harsh conditions of this northwesterly exposure than any of our more common native trees. Beech trees create dense shade, enabling an open understory of young beech, birch, and spicebush. The oaks, hickories and birch, which generally occupy the more sheltered portions of this stand, make up the climax woodland community on Long Island's North Shore.

Spring ephemerals (early woodland wildflowers) readily grow in this area of the preserve.



IV - SHORELINE

The rocky beach and prominent cliffs exhibit many interesting marine and geological features. At low tide, numerous tidal pools abound with marine organisms, such as algae, small fishes, crabs, snails and smooth mussels. A tidal-marsh is evident in summer as tall stands of cordgrass (*Spartina alterniflora*) dot the shore, providing cover for other shallow water animals such as ribbed mussel and horseshoe crab. Check for native seaside plants in summer including sea lavender, seaside goldenrod, false heather, and eastern prickly-pear cactus.

70-million-year-old clays are being squeezed from beneath the cliffs by the weight of the overlying sand. This occurs especially after heavy rain causes sections of the cliff to slump. Notice the small terraces at various elevations as you walk down the shoreline trail.

Ironstone concretions ("Indian paint pots"), red mudstone, fossil-bearing sandstone, lignite (immature coal), and iron pyrite ("fool's gold") may be seen in the clay. Glacial deposits from 18-15,000 years ago are the source of the many boulders scattered along the beach. Waves erode the clay and sand, and the boulders slide down to the water's edge.



BUTTERFLY & BIRD-FRIENDLY GARDENS

Be sure to visit our butterfly & bird-friendly gardens located near the front entrance gate. Caterpillars (larval stage of butterflies) have chewing mouth parts for chomping leaves and are quite picky eaters, only eating certain types of plants. These plants are known as "larval or host plants". Adult butterflies have a long straw-like proboscis, adapted to suck up nectar from long-tubed plants or "nectar plants". If you provide larval and nectar plants in your garden you can attract and enjoy adult butterflies while giving them a place to lay their eggs.

Birds, especially songbirds, rely on native plants and trees for food, cover, and nesting. You can encourage birds to visit and nest in your garden by planting certain types of plants and trees they prefer. Birds also love insects, so if you plant insect-attracting plants you will also attract birds! Suggested plant lists are available at the museum.



GIFT SHOP

Our museum's gift shop, funded by the Friends of Garvies Point Museum & Preserve, is full of souvenirs, jewelry, field guides & books, Native American made jewelry & goods, minerals & fossils, educational toys plus much more. Shop is open Tuesday - Saturday, 10am-4pm (same as museum hours), there is no charge to visit the shop. Members receive 10% discount. Membership information is available at the Front Desk and online.

Thank you for your support.

REMEMBER this is a nature preserve. Our mission is to preserve the plants, wildlife and natural phenomena (rocks, clay, fossils) for this and future generations.

There is absolutely NO COLLECTING ON THE PRESERVE.

DOGS are *not permitted* on the preserve at any time. They are not natural to our local environment and may kill native birds and mammals. It is also not safe for your dogs in the chance they may get and bring home ticks.

Thank you for NOT BRINGING DOGS ON THE PRESERVE.

GARVIES POINT MUSEUM & PRESERVE

50 BARRY DRIVE, GLEN COVE NY 11542

www.garviespointmuseum.com

(516) 571-8010

MUSEUM OPEN TUES-SAT 10AM-4PM

\$5/ADULTS; \$3/CHILDREN 5-12 YRS.

PRESERVE OPEN 7 DAYS, 8:30AM—DUSK

PARKING & PRESERVE FREE



NASSAU COUNTY
DEPARTMENT
OF PARKS,
RECREATION &
MUSEUMS



County Executive, Laura Curran • Commissioner, Eileen Krieb

TRAIL MAP to NATURE PRESERVE at GARVIES POINT MUSEUM

BRIEF HISTORY OF MUSEUM & PRESERVE

As early as 2500 B.C. (over 4500 years ago) Matinecock Indians occupied a sheltered campsite on the south side of the property, adjacent to what was then a marsh. This was a small seasonal site of primarily hunters and gatherers of wild plants and shellfish. This area was included in the tract of land purchased in 1668 by Joseph Carpenter of Warwick, Rhode Island. It became part of the Garvie family estate when Dr. Thomas Garvie, a physician and founder of this prominent Long Island family, emigrated here from Scotland in 1803. To preserve the unique collection of natural geological features of the property from development, the land was acquired by Nassau County in 1963. The Museum, which opened on July 4, 1967 specializes in New York State & Long Island geology and Native American culture & archaeology with an interactive "woodland village" with activities depicting Native American life-ways. Today the Preserve consists of 62 acres of glacial moraine covered by forests, thickets, a meadow and two ponds, with a rocky shoreline along the east side of Hempstead Harbor.

INTRODUCTION • The preserve supports woodland communities of differing ages and composition. Their development is related to prior land use that included cattle grazing, hay harvesting, and timber cutting for lumber, firewood and fence stock.

In the early 1900's most of the preserve and surrounding land was meadow and pasture. As less open land was needed for cattle and agriculture, the area reverted to a natural wooded state, resulting in forest communities of varying ages.

In addition to the fields, there were three small stands of timber and isolated trees along fencerows. The spreading form and larger size of the open-grown fencerow trees are still evident today. Remnants of the old timber stands in the preserve indicate they were mature, possibly climax (self-perpetuating) communities with oaks, chestnut, tulip tree, beech and black birch as the dominant trees.

I - MEADOW • The plants of this meadow community illustrate "old-field" succession. Succession is the predictable replacement of one plant community by another with each community preparing or modifying the site for the next. Eventually, a self-perpetuating assemblage of plants becomes established; the climax community. The climax community can be "re-started" due to trees blown down by storms, lightning strikes, or clearing. The meadow environment is currently maintained by seasonal mowing.

Old field succession began here in 1966 when Kentucky bluegrass was planted. The center and southwest edge of the meadow illustrate the first stage with grasses and herbs such as goldenrod, dandelion, mugwort, ragweed, sheep sorrel, and wild lettuce outcompeting the bluegrass for light, nutrients, and growing space. This community of plants provide abundant food and cover for wildlife. The sparrows, robins, cardinals, rabbits, mice, foxes and other birds and mammals attracted by the diversity of food help bring about the next successional stage.

I - MEADOW cont'd

In the second stage, blackberries, wineberries, dewberries and occasional small trees like black cherry, black locust, and sassafras begin to grow among the herbs and grasses. Many originate from seeds transported in animal droppings. These new plants develop rapidly in full sunlight, shading out the shorter herbs and grasses. Eventually, the small trees grow above the berry bushes and shade these sun-loving plants causing them to die back. This can be seen at the south end of the meadow where small sassafras trees have formed a closed canopy to begin the next stage of succession - the pioneer woodland.

II - PIONEER WOODLAND

This area supports a young, uneven-aged stand of mixed hardwoods. The over story (tallest trees) consists of oaks, hickories, black cherry, black locust, tulip tree, sassafras, sycamore, ailanthus, maples, black walnut, beech and black birch. The understory contains black cherry, sassafras, dogwood, hickories, Aralia, oaks, red maple and spicebush.

A large area of the preserve has a dense understory of brambles, greenbrier, and nonnative multiflora rose. Rabbits, red fox, squirrels, raccoons, mice, and deer, along with cardinals, orioles, catbirds, sparrows, flycatchers, warblers, jays, tanagers and a host of other migrant and resident birds find food, shelter and protected nesting sites within this woodland. Some areas, where large over story trees have fallen due to wind throw or age, create openings in the canopy which enable sun-loving plants and trees, native and non-native to quickly develop.

SPRING-FED and VERNAL PONDS

On the north side of the preserve, a small pond is fed by underground springs that flow downhill into the harbor. This pond is teeming with bull frogs, green frogs, and duck weed. On the south side there is a larger "vernal" pond. Springtime is when the pond is most full from snowmelt and rain and therefore with the most animal activity. It's fed only by precipitation, so during dry summers you may find it empty! This pond attracts many migratory and resident birds, water birds, turtles, frogs, raccoon and fox.



ROCKY BEACH

A rocky shore teems with life in contrast to relatively lifeless sandy beaches. Exposed or submerged, rocks provide attachment areas for algae and invertebrates, which furnish food for such bottom dwellers as shrimps and crabs. These in turn feed fish and larger sea forms.

GEOLOGICAL PAST

70 million year old Cretaceous sands and clays form most of the height of the shorefront cliffs. Unsorted glacial moraine, ranging in size from clay to huge boulders, is found as a surface deposit over the entire preserve, except on the beach. Since de-glaciation about 15,000 years ago the land has been constantly re-sculptured by the never ending processes of erosion and deposition.

MEADOW

Grassy, sun-filled meadows with their rich component of seeds and insects, are attractive feeding grounds for sparrows, flickers, swallows and meadow mice. The border of trees serves as a wildlife cover. Flycatchers dart out of it after insects, and rabbits scurry back into it for protection.

NATURE PRESERVE at GARVIES POINT MUSEUM

Eight named trails, almost five miles of cleared paths, give direct access to points of interest in this 62-acre nature preserve.

Variied environments: woodlands, cliffs, meadow, shoreline, fresh and salt water— Each with its own plant and animal community— create an unusual variety of life for so limited an area.

SCALE

— = 200 feet



LEGEND

- TRAIL
- FOOT PATH
- SELF-GUIDED
- RIDGE
- MEADOW
- WOODS
- SAND
- SIGHT TRAIL
- RESTROOMS
- BIRD & BUTTERFLY HABITAT GARDENS
- PICNIC AREA
- SCENIC OVERLOOK

FRESH WATER

Two ponds can be found on our preserve. Earth was dammed up around a natural spring on the north side, which leads into a small stream and empties into the Harbor. On the south side, a natural depression collects rain water and snow melt. Dragonflies skim the surface in search of prey. The quiet visitor may surprise ducks on the water and seasonal birds in the trees. The fresh water attracts raccoons, chipmunks, rabbits, turtles and frogs.

WOODLANDS

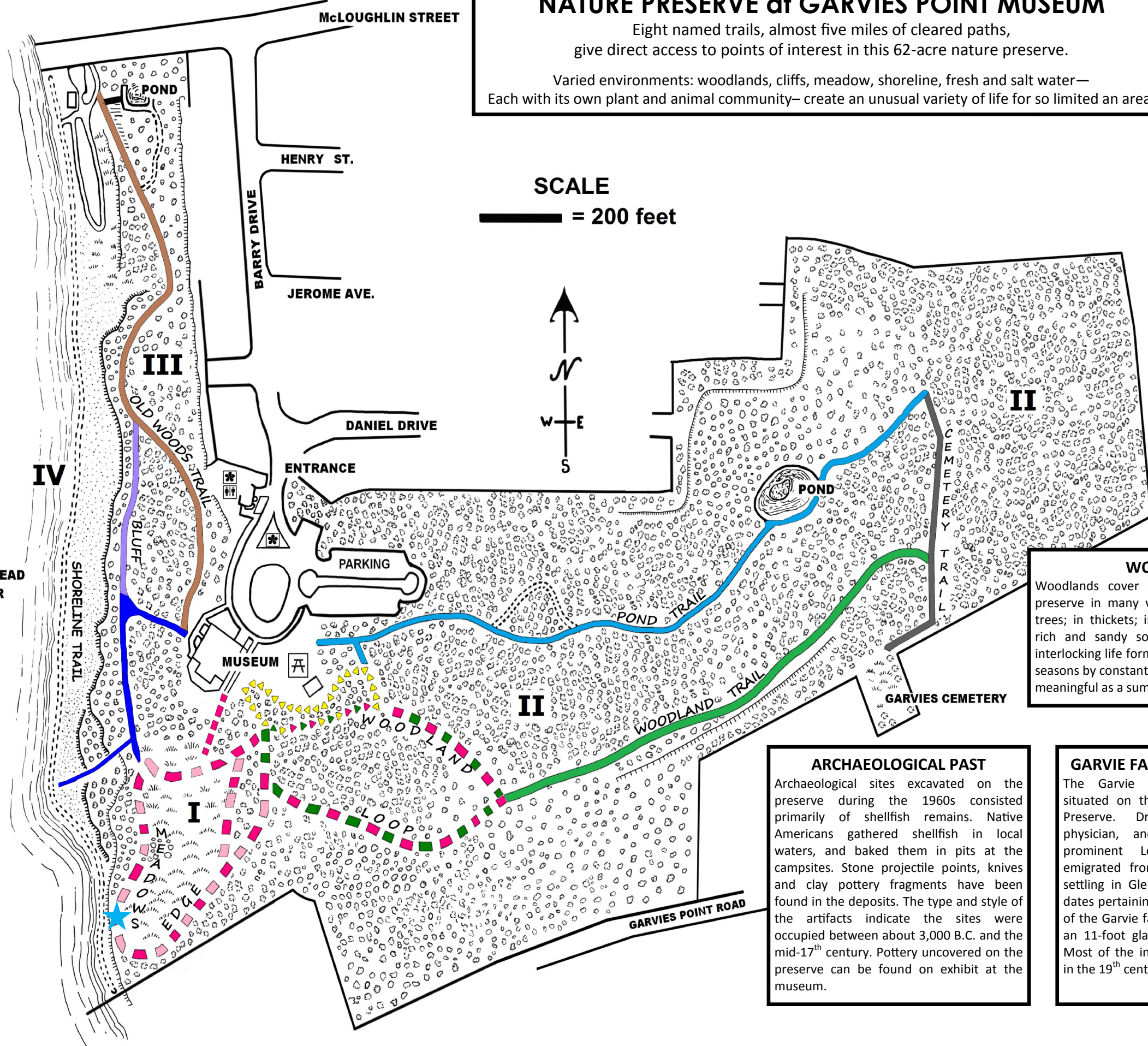
Woodlands cover the glacial moraine of our preserve in many ways- by a heavy canopy of trees; in thickets; in open glades; and on both rich and sandy soils. Each area has its own interlocking life forms. The woods respond to the seasons by constant change. A walk in winter is as meaningful as a summer stroll.

ARCHAEOLOGICAL PAST

Archaeological sites excavated on the preserve during the 1960s consisted primarily of shellfish remains. Native Americans gathered shellfish in local waters, and baked them in pits at the campsites. Stone projectile points, knives and clay pottery fragments have been found in the deposits. The type and style of the artifacts indicate the sites were occupied between about 3,000 B.C. and the mid-17th century. Pottery uncovered on the preserve can be found on exhibit at the museum.

GARVIE FAMILY CEMETERY

The Garvie family cemetery is situated on the south side of the Preserve. Dr. Thomas Garvie, a physician, and founder of this prominent Long Island family, emigrated from Scotland in 1803, settling in Glen Cove. Names and dates pertaining to several members of the Garvie family are inscribed on an 11-foot glacial erratic (boulder). Most of the interments were made in the 19th century.



HEMPSTEAD HARBOR

GARVIES CEMETERY

GARVIES POINT ROAD