



Welcome to the Nantucket Conservation Foundation's Middle Moors holdings.

This unique area represents the largest expanse of undeveloped conservation land on Nantucket. The Foundation owns 32 separate properties in this area, totaling over 3,233 acres of protected open space. This remarkable achievement was made possible by the following generous land donors, who wanted to see the Middle Moors preserved and protected for the benefit of future generations:

- |                                  |                                          |
|----------------------------------|------------------------------------------|
| Abby A. Ayers                    | Margaret Z. Larsen                       |
| H. Jerome Ayers                  | Roy E. Larsen                            |
| Richard A. Beckwith              | The Larsen Fund                          |
| Walter Beinecke Jr.              | Scott Maclain                            |
| Juliet W. Bischoff               | The Maria Mitchell Association           |
| The Conatum Trust                | Mrs. Alfred S. Mills                     |
| Arthur Dean                      | Leeds Mitchell Jr.                       |
| Brenda K. Giegerich              | The Nantucket Ornithological Association |
| Mr. & Mrs. Lester R. Giegerich   | Norwood Farm Trust                       |
| Alicia Heller                    | The Open Land Fund                       |
| Mr. & Mrs. J. Seward Johnson Jr. | Mr. & Mrs. Robert L. Page                |
| Mr. & Mrs. Timothy King          | Mr. & Mrs. Lawrence Richardson Jr.       |
| Louis C. Krauthoff II            | Marsha G. Torkelson                      |
| Tabitha T. Krauthoff             | Mrs. Burr P. Wilson                      |

## Middle Moors Properties Map



Nantucket Conservation Foundation  
Nantucket, Massachusetts

The area immediately surrounding Altar Rock contains some of the best examples of coastal heathland habitat on Nantucket. This association of plants is characterized by low-growing shrubs such as huckleberry and low bush blueberry, interspersed with patches of Pennsylvania sedge, bearberry, reindeer moss, and false heather. During the summer and fall, numerous species of goldenrods, asters, and other wild flowers dot the hillsides. The history of intensive sheep grazing in this area resulted in the removal of taller shrubs and trees, allowing these heathland species to become established without competition for sunlight and nutrients.

### The Pout Ponds



Scattered across the Middle Moors are many small wetland depressions were created during the last glacial era. Large blocks of ice that were left behind after the ice sheet retreated to the north formed hollows in the landscape as they slowly melted. Ponds and bogs formed in such a manner are called kettleholes,

and are characterized by having no inflowing or outflowing streams. Instead, the water level in the depression that forms the kettlehole is influenced by the ground water and the amount of rainfall. The Pout Ponds, located in the western portion of the Middle Moors, are among the largest kettlehole ponds in this area. Their name is a Native American word meaning "foot," and legend has it that they are the depressions caused by the footprints of a giant that later filled with water.

Each of the three ponds hosts distinctive vegetation communities that are influenced by their depth and fluctuating water levels. The northernmost pond, known as the Donut Pond, provides an excellent example of the transformation from pond to bog. The open water is limited

to a donut-shaped moat around its perimeter, while the center contains Sphagnum moss and other characteristic bog plants. The moat is maintained by rainwater running down the adjacent hillside and collecting at the edge of the bog. The middle pond is very shallow and probably does not intersect the water table. Therefore, the vegetation growing along its shoreline is adapted to being seasonally flooded or exposed, depending on the amount of rainfall received. Conversely, the water level of the southernmost pond is deeper and does not fluctuate as dramatically, probably because it is more influenced by the water table than by surface runoff from rainfall.

### The Serengeti

The Partnership for Harrier Habitat Preservation, Inc. (PHHP) has been conducting extensive efforts to restore grassland and heathland habitat on approximately 1,000 acres of



Foundation-owned property and 110 acres owned by the Massachusetts Audubon Society. "The Serengeti," a local nickname for the area between the Milestone Road and the Barnard Valley Road, is a site where annual brushcutting has been taking place since 1998 as part of this restoration work. PHHP is an innovative project that was initiated in 1996 as a cooperative effort between the Nantucket Golf Club, the Massachusetts Audubon Society, and the Foundation to perpetuate breeding and hunting habitat for the northern harrier. Intensive brushcutting and prescribed burning are undertaken annually in an effort to restore and maintain these heathland habitats. It is expected that re-establishment of grasses and other herbaceous plants will take place slowly; therefore, this long-term restoration project is funded by the Nantucket Golf Club for a period of 50 years.



Additionally, thousands of individuals have contributed to the Foundation's Land Fund since its inception in 1963, making it possible for us to directly purchase additional important parcels in this area.

Several other private conservation groups and public agencies own properties abutting Foundation land in the Middle Moors, including the Massachusetts Audubon Society (382 acres), the Nantucket Islands Land Bank Commission (344 acres), the Nantucket Airport Commission (46 acres), and the Town of Nantucket (6 acres). Thus, the amount of protected open space in this region of the island totals approximately 4,000 acres.

The purpose of this interpretive map is to provide a visual guide for the vast expanse of protected conservation land in this part of the island, as well as to present a brief introduction to the natural history, geology and land use history of our Middle Moors properties. We would like to express our gratitude to the Nantucket Garden Club for their generous grant, which has made this project possible.

### Geologic History

The last glacier to advance upon New England reached its southernmost terminus in this area of the island approximately 15-18,000 years ago. It left behind the boulders, rocks and soil that were pushed ahead of it, which became weathered over time to form the rolling landscape now visible. Some of the larger boulders, called glacial erratics, are still conspicuously scattered across the hillsides. In geologic terms, this area is known as a terminal moraine, and the hills that make up the



### Gibbs Pond & the Milestone Cranberry Bog

For the past 150 years, commercial cranberry growing has been an important element of Nantucket's agricultural heritage. This began in the mid-1860's with the cultivation of the Milestone Cranberry Bog, which has changed owners many times during its long history. In 1968, this bog and over 700 acres of surrounding undeveloped land were purchased by Roy Larsen, Walter Beinecke, Jr., and Arthur Dean. They then donated it to the Nantucket Conservation Foundation with the intent that it be used as an income-producing asset for the Foundation's land acquisition efforts. Milestone Bog, and the nearby Windswept Bog are currently operated by



Middle Moors and most of the northern half of the island are glacially deposited materials. In contrast, the southern portion of Nantucket is an outwash plain, a relatively flat area where meltwaters from the same glacier carried and deposited lighter, sandy soils.



### Vegetation Communities

Sandplain grasslands, coastal heathlands, and scrub oak barrens are the dominant plant communities that occur in the Middle Moors. Sandplain grasslands are open, grassy habitats interspersed with small patches of low shrubs. Heathlands contain many of the same plants, but have fewer grasses and a higher density of shrubs such as huckleberry and bayberry. Scrub oak barrens are dominated by impenetrable thickets of scrub oak and other tall shrubs that have shaded out most of the grasses and herbaceous plants in the understorey.

All of these habitats represent early successional communities that developed as a result of past disturbance. Native Americans were believed to have regularly set fires in these areas to clear the land for agriculture and stimulate the production of native berries. The constant sheep grazing that occurred during the 1800's removed shrubs and trees, allowing grasses and low shrubs to become established without direct competition for sunlight and nutrients. The constant salt-spray and the sandy quality of Nantucket's soils have slowed down the regrowth of shrubs and trees. As a result, this area of the island now supports unusually high concentrations of rare and endangered plants and animals that are uniquely adapted to living in these habitats.

The Foundation. The surrounding upland is maintained as protected open space.

Gibbs Pond, located southeast of Altar Rock, is an example of a particularly large and deep kettlehole pond that is used as an important source of water for the Milestone Cranberry Bog. During the cranberry harvest, which takes place in September and October, the bogs are flooded with water from the pond. A specially constructed machine with a front-mounted paddle wheel gently beats the cranberry vines, dislodging the naturally buoyant berries. The berries are then corralled into a corner of the bog and lifted out, via a conveyor belt, into a large dump truck. The water from Gibbs Pond and the wells scattered around the bog is recycled by being pumped from one section of bog to the next as the harvest season progresses.



### Stump Pond & the Windswept Cranberry Bog

The Windswept Cranberry Bog was constructed in the 1900's and purchased by the Foundation in 1980. This property, which can be accessed from Polpis Road, contains over 241 acres of protected land, including approximately 37 acres of organically-certified cranberry bogs.

Hidden in the southern portion of this property is a large wetland system that includes Stump Pond, which was created during the construction of the cranberry bog. Once a red maple swamp, a dike built at the turn of the century



### Habitat Restoration & Management

Early successional communities are largely the products of past human land use practices. Therefore, active management is needed to prevent them from disappearing. Most of the rare plants found in these areas need full sunlight and are easily shaded out by tall shrubs and trees. Management techniques aimed at reducing the cover of woody vegetation enable these plants to survive in areas where they would otherwise be out-competed. Furthermore, the meadow vole, the primary food source of the short-eared owl and northern harrier, preferentially inhabits grassy areas. Due to their dependence on meadow voles as a food source, northern harriers and short-eared owls utilize open habitats for hunting. However, most shrub-dominated habitats such as heathlands and scrub oak barrens are known to provide protected nest sites for northern harriers. These areas also host numerous rare moth species, whose larvae depend on the leaves of scrub oak, huckleberry, and blueberry as a food source. Therefore, habitat management efforts in this area of the island are aimed at maintaining a mosaic of early successional communities to benefit the varied habitat requirements of the many rare species found here.

The Foundation has been and continues to be involved in habitat management efforts aimed at developing methods to prevent the island's grassland, heathland, and scrub oak barren habitats from becoming forested. Prescribed burning,



flooded the area so that it could be used as a water source for the cranberry growing operation. When water is needed, it is released through flumes and travels through a network of ditches to the cranberry bogs, where it irrigates the cranberry vines or floods the bogs. The bogs are flooded at different times of the year to facilitate the harvest of berries in the fall, protect the plants from harsh winter weather, and occasionally to reduce pest populations.

Also located in this area are a number of the island's "hidden forests." These forested wetlands lie in pockets created by the surrounding hills. The tops of the 30 to 40 foot-high trees located in these habitats have been shaped by the strong winds that characterize Nantucket, making them somewhat "hidden" when viewed from a distance. They typically contain tupelo or black gum, sassafras, and swamp red maple trees, along with a number of ferns, wild flowers and mosses that grow in the understorey.

Although the unique plants, animals, and geologic features found in the Middle Moors are relatively abundant here, many of them are rare to this region of the country, and even the world. Under the Foundation's ownership and management, this area will continue to be protected as habitat for rare species, as well as provide opportunities for scientific research, environmental education, and nature-based diversions for the public to learn from and enjoy.

mechanical brush cutting, and sheep grazing are all being used as management techniques to achieve these goals on Nantucket. Within the Middle Moors, vast areas have already been treated with either prescribed fire or brushcutting in an attempt to maintain or restore rarer species habitat.



### Points of Interest

#### Altar Rock

Altar Rock is one of the most dominant features in the Middle Moors. At 100 feet above sea level, it is the fourth highest elevation on the island (the highest is at 111 feet above sea level, located just south of Sankaty Head Light). On a clear day, this hilltop affords wonderful views of Polpis Harbor, Pocomo Head, Coatae, Great Point Light, Sankaty Head Light, Sconset Village, and the surrounding heathlands. The building with the needle-like rooftop immediately to the west of Altar Rock is a navigational aid used by planes making their final approach to Nantucket Memorial Airport, located approximately 2 miles to the southeast.

### How you can help

As the Foundation does not receive any governmental assistance, the success of our efforts depend entirely upon voluntary contributions from conservation-minded individuals who share our concern for the island's natural beauty.

### Please join us!

All contributions to the Nantucket Conservation Foundation are tax deductible. For more information about the Nantucket Conservation Foundation visit us at 118 Cliff Road or contact to us at:

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Nantucket, MA 02554-0013  
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or visit our web site:  
[www.nantucketconservation.org](http://www.nantucketconservation.org)

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The map was produced through a generous grant from the Nantucket Garden Club.



Nantucket Conservation Foundation



# Middle Moors Properties Map

## Please Respect Our Open Lands

- Protect the fragile plants on our dunes, grasslands, and heathlands
- Keep vehicles and bikes on well-established roads
- Leave wildflowers for all to enjoy
- Prevent your dog from disturbing wildlife
- Take litter home
- Respect private property

*Nantucket Is Fragile, Enjoy It, Don't Destroy It*

0 1,300 2,600 5,200 7,800 10,400 Feet

## Roads & Trails

- Foot trail (Pedestrians only)
- Single-Lane Dirt Road (4WD recommended, please stay in the roads)
- Paved Roads
- 20 Foot Contour Lines
- Ponds & Bogs
- Cranberry Bog
- Properties of the Nantucket Conservation Foundation
- Properties Protected by Partner Conservation Organizations
- Federal, State or Local Government-Owned Property
- Private Property (please respect the privacy of our neighbors)
- P Parking

