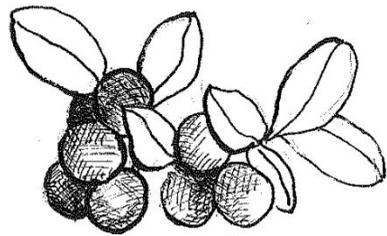


#18 **Bearberry**, *Arctostaphylos uva-ursi*: This unique plant is a shrub that grows along the ground. You will notice some woody stems nearby that are some of the branches of these very old plants. Also called hog cranberry or mealy plum, the red fruit ripens in autumn and while dry and tasteless to humans it was formerly a favorite food of the large flocks of American golden plovers, *Pluvialis dominica*, found on Nantucket in the fall and the extinct Eskimo curlew, *Numenius borealis*. Tiny pink flowers bloom in April or May and these are the primary nectar source for the earliest butterfly that emerges-the brown elfin, *Callophrys augustinus*.



Bearberry, *Arctostaphylos uva-ursi*

#19 **Nantucket Shadbush**, *Amelanchier nantucketensis*: In front of this post is a large stand of a low-growing, inconspicuous shrub called Nantucket shadbush. When it blooms in late April or early May it is the first plant to do so in its habitat making it stand out for only a couple of weeks in the year. It is a slender, gray-barked shrub, also called Juneberry because of its early ripening fruit which is a favorite of the local gray catbirds, *Dumetella carolinensis*, and others.

#20 **Black Huckleberry**, *Gaylussacia baccata*: This plant and other hardy species, play a part in the early stages of succession that help transform exposed subsoil and sand to woodland. This extremely hardy plant can grow in impoverished and exposed soils spreading by rhizomes often forming dense and dominant stands where it is seemingly the only plant. Its small purplish fruit is prized for its flavor by humans and wildlife.

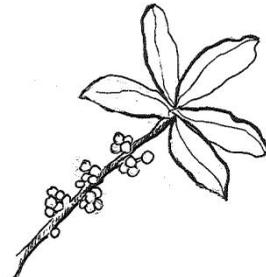
#21 **Wild Black Cherry**, *Prunus serotina*: This is a test to see if you recognize a lone tree separated from the grove back on the trail. They can go it alone

as well as form a stand or grove. This plant is important to a huge variety of insects and the vertebrates that eat them.

#22 **Scrub Oak**, *Quercus ilicifolia*: This plant is an incredibly tough survivor. It is a shrubby tree that is more knarly scrub than mighty oak. Yet it is perhaps mightier than the familiar mainland species as it is able to survive in habitats where little else can. A deep tap root resists tearing up by storms and helps the plant regenerate after fire. When battered by wind and salt spray, its growth is mostly sideways.

#23 **Vernal Pool**: The low spot beyond the post has standing water for part of the year and supports a breeding colony of small tree frogs called spring peepers, *Pseudacris crucifer*. It has served as a nesting area for a protected species, the northern harrier, *Circus cyaneus*, which is why we offer no access.

#24 **Bayberry**, *Myrica pensylvanica*: This is a stand of mostly bayberry which has very dark green waxy covered leaves. The leaves are fragrant when crushed. It has hard waxy berries and often grows in dense thickets in interior dunes and sandplain grasslands. Although referred to colloquially as "berries", botanists call the fruit a "drupe." The fruits which are comprised of a seed coated in a waxy coating are an important fatty food source for tree swallows, *Tachycineta bicolor*, and yellow-rumped warblers, *Setophaga coronata*, formerly called myrtle warblers after the wax myrtle berries they ate, bayberry's former name.



Bayberry, *Myrica pensylvanica*

#25 **Highbush Blueberry**, *Vaccinium corymbosum*: The bush to your left as you face the marker is the bush in question. This hardy plant often grows in moist border thickets although it can be found in dry

uplands where the soil is mildly acidic. The bushes grow tall and dense, keeping much of the fruit out of reach of all except birds and people. Generations of Nantucketer's have been known to keep secret the locations of their prized blueberry bushes!

#26 **Japanese Black Pine**, *Pinus thunbergii*: These pines, as their name implies, are native to Japan. Able to grow in very harsh conditions in impoverished sandy soils and extremely salt tolerant, this fast growing species was imported by nurseries into the U.S. and has been very popular with landscapers from New Jersey to Maine along the coastline. Like many non-native plants it has few insects which feed on it and is considered invasive on Nantucket. While it does provide cover, it does not provide insect food for nesting birds. The pines have a short lifespan and die-off at 25 to 30 years of age.

Line drawings courtesy of Sharon Hussey.

The mission of The Linda Loring Nature Foundation is to improve the understanding and appreciation of Nantucket's fragile flora, fauna, and wildlife by providing education, information, and support to children, educators, researchers, organizations, and individuals. We are dedicated to being stewards of the Foundation's property on Eel Point Road and to fostering learning that promotes environmental awareness, imparts knowledge of the ecological relationships of the local environment, and engages residents and visitors to Nantucket to respect, preserve, and conserve the diversity of habitats surrounding us.

This property is a wildlife sanctuary. The trails are for walking and the quiet enjoyment of nature. Please stay on the trails to avoid harming fragile plants. *Take only pictures, leave only footprints.*

Linda Loring Nature Foundation
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Visitors' Trail Guide

The Linda Loring Nature Foundation is an 86-acre preserve for conservation, education and research. The gently sloping, mile-long loop trail crosses a magnificent coastal sandplain ecosystem with populations of animals, birds and rare plants. Enjoy!

#1 **Nest Boxes**: For cavity nesting species the availability of a suitable nesting site is critical. On tree and cavity challenged Nantucket it is a severe limiting factor. Build them and they will come. By providing nest boxes on the LLNF Property it allows native cavity nesting species, particularly tree swallows, *Tachycineta bicolor*, and a few Black-capped Chickadees, *Poecile atricapillus*, to nest. They feed their young insects. They add a lot of activity to the Foundation Property from April thru mid-July.

#2 **Sweet Pepperbush**, *Clethra alnifolia*: This wetland loving plant is abundant on both sides of the trail at this spot. This shrub dominates many wetland area soil types on the LLNF property. When it flowers, usually in mid-July, the smell is heavenly and the white flowers brighten the landscape with massive numbers of flowers on each plant. Attractive to many insects and butterflies this native plant is not only sweet to ones sense of smell but to the eyes as well.

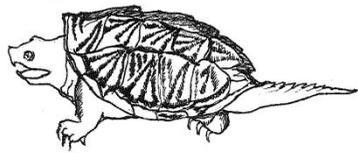
#3 **Tick Research**: As you look down into the depression to the west you notice a green, plastic, device called a 4-poster. This is one of 4 of these units nearby, part of an ongoing study to control deer ticks, *Ixodes scapularis*. It is a white-tailed deer, *Odocoileus virginianus*, feeder. The deer stick their heads down into a bowl and they contact one or more of the posts that have a 9 inch paint roller treated with the insecticide permethrin. It is applied to the heads and necks of the deer and kills all the ticks living on the deer. Results of the study and the effectiveness of the 4-posters are ongoing.

#4 **Osprey**, *Pandion haliaetus*: These highly migratory raptors are always a thrill to watch. Their nest pole is an iconic symbol of the LLNF. Their only food is fish

that they capture live in spectacular plunge-dives. This site has been the most successful at raising chicks on Nantucket for the past 15 years. Most years, but not always, the adults will successfully fledge 3 young. Both the adults and young migrate to Amazonian South America departing in early September. The adult birds reappear at the nest pole sometime in late March for another breeding season.

#5 North Head of Long Pond: Looking to the southeast you are gazing at the North Head of Long Pond, a brackish body of water with a slight tidal flow, connected to the rest of Long Pond by a culvert under the Madaket Road. It is the best pond on Nantucket for observing many species of wintering waterfowl. During the summer months black-crowned night herons, *Nycticorax nycticorax*, great egrets, *Ardea alba*, and snowy egrets, *Egretta thula*, are frequent shoreline visitors while mute swans, *Cygnus olor*, Canada geese, *Branta canadensis*, black ducks, *Anas rubripes*, and mallards, *Anas platyrhynchos*, are dabbling about the pond.

#6 Nantucket Landfill: Beyond the pond, if not foggy, you can see what remains of Nantucket's long-used landfill. Currently all waste is recycled or sent off-island but this remnant of a by-gone day still affects us. When it rains the run-off drains into Long Pond and then Hither Creek to Madaket Harbor diminishing the water quality. The Town is addressing this by working to remove "Mount Trashmore". If you visit here 10 years hence it is hoped that this view will be gone.



Snapping turtle, *Chelydra serpentina*

#7 Turtle Nesting: This hill is prime real estate for turtles inhabiting the North Head of Long Pond and nearby ditches to lay their eggs on. With a south facing slant and the proximity to water it is a favorite of snapping turtles, *Chelydra serpentina*, to dig a nest and deposit their eggs each year from mid-May

through early July. A smaller number of painted turtles, *Chrysemys picta*, and rarely spotted turtles, *Clemmys guttata*, are seen on the trails. Look for sandy areas devoid of vegetation. If you are really lucky you might see the baby turtles emerge from mid to late summer.

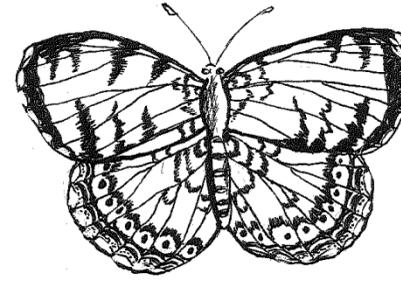
#8 Geologic Formations of Nantucket and Long Pond: Nantucket was formed by the furthest reach of the Laurentide Ice Sheet during the Wisconsin Glaciation and shaped by the subsequent rise in sea level. The low ridge across the northern section of the island was deposited as a glacial moraine during a period of glacial standstill, a period during which material continued to arrive and was deposited as the glacier melted at a stationary front. The southern part of the island is an outwash plain, sloping away from the arc of the moraine and shaped at its margins by the sorting actions and transport of longshore drift. Nantucket became an island when rising sea levels re-flooded Nantucket Sound about 5,000–6,000 years ago.

#9 Wild Black Cherry Grove, *Prunus serotina*: Black cherries play an important role in the ecology of Nantucket. These hardy trees are found all over the island and they are one of the few trees able to withstand the ferocious winter winds on the sandplain. They host many species of insects and are a favorite food plant of tent caterpillars which in turn attracts caterpillar-eating cuckoos. Their fruit, leaves and bark are very useful to many kinds of native wildlife.

#10 Sandplain Grassland: This view to the west is a look at a globally rare habitat, Sandplain grasslands. The landscape is dominated by little bluestem, *Schizachyrium scoparium*, and Pennsylvania sedge, *Carex pensylvanica*, interspersed with annual and perennial flowers and plants. Bushy rockrose, *Crocanthemum dumosum*, sandplain blue-eyed grass, *Sisyrinchium fuscatum*, and New England blazing star, *Liatris scariosa*, are some of the native wildflowers that are state-listed as "species of special concern". Rare to uncommon "off-island", these beautiful wildflowers are found in relative abundance on Nantucket.

#11 Butterflies: The sandplain grasslands and coastal shrublands provide ideal habitat for more than 20 species of butterflies from April through November on the LLNF property. The brown elfin,

Callophrys augustinus, is the first butterfly to emerge in the spring while the Leonard's skipper, *Hesperia leonardus*, is the last to emerge in the fall. Other species like the pearl crescent, *Phyciodes tharos*, and the American copper, *Lycaena phlaeas*, are multi-brooded and occur periodically throughout the warmer months.



Pearl crescent, *Phyciodes tharos*

#12 High View Point: If the weather is clear there is much to see from this vantage point. To the southwest you can see the tip of Smith's Point and Esther's Island; to the north is Nantucket Sound; to the northwest is Muskeget Island and Martha's Vineyard; to the northeast you can see the beach at Coatue and vessels departing Nantucket Harbor.



Northern harrier, *Circus cyaneus*

#13 Northern Harrier, *Circus cyaneus*: These raptors require large expanses of open country for hunting and nesting. Nantucket has the highest known density of this species anywhere in the world. The island supports anywhere from 35 to 56 nesting pairs and the LLNF property usually has from 4 to 6 nesting on or around it. This is a great spot to see these rodent hunting specialists as they hunt the grasslands.

#14 White-tailed Deer, *Odocoileus virginianus*: The paths and trails you can see all over the LLNF property, especially from this vantage are the work of white-tailed deer. They choose the path of least resistance to move between feeding and bedding down areas creating well-worn trails often devoid of vegetation. It is sometimes hard to determine where the trail goes because the deer trails are so prominent.

#15 Beach Plum, *Prunus maritima*: These hardy plants grow best where they have some protection from wind and salt spray but can tolerate harsh conditions. An important food plant for many insects the fruit is also eagerly sought by humans. The flowers are usually white but can be pink or even orange when they flower in mid to late May. The deep purple fruits ripen in August and September.

#16 American Kestrel, *Falco sparverius*: This nest box is suitable for the smallest of North American falcons. They formerly bred on Nantucket but have not in over a decade. This species has declined over much of Eastern North America and the reasons are poorly understood. Nantucket's habitat is perfect for this species. There are 4 boxes designed specifically for them and installed on the LLNF property. For several years we have managed to attract a couple of males in April migration but unable to attract a female they depart in anywhere from a week to 2 weeks.

#17 Reindeer Lichens, *Cladonia rangiferina*: These amazing lichens are part algae, part fungus, living together symbiotically. The gray-green clumps grow on bare sand or very inhospitable soils where they are the only thing able to withstand the impoverished soil conditions combined with other stressors. They are able to withstand severe drought and desert-like conditions as well as severe cold, high winds and salt spray.



Eastern tiger swallowtail, *Papilio glaucus*