# LONG POND **NATURE TRAIL**



# CLIMAX FOREST

BLACK OAK WHITE OAK AMERICAN BEECH AMERICAN HOLLY

# MIXED FOREST

PITCH PINE WHITE PINE WHITE OAK BLACK OAK AMERICAN BEECH AMERICAN HOLLY

RED CEDAR

PITCH PINE WHITE PINE

PINE FOREST OVERGROWN FIELDS ROSES SHRUB5 YOUNG TREES

FIELDS GRASSES ANNUAL FLOWERS

## LONG POND NATURE TRAIL

#### 1. Introduction

Welcome to Long Pond Conservation Area and its Nature Trail. There are 30 stops along the trail, each marked by a numbered marker. It takes about one hour to cover leisurely the distance of just over one mile. Follow the map, and please stay on the trails, for your safety. Help the Town to protect this Conservation Land. Take only photographs and leave only footprints. Now follow the lane ahead of you.

#### 2. Change

Change is no stranger to Barnstable. This Conservation Land was once an estate and farm. You can still see the old hay field to your north (right). You will notice many changes as you continue along this trail. Animals such as woodchucks, field mice, and rabbits like the open fields. Birds such as bobwhites, meadowlarks, and redwinged blackbirds also can be found here.

#### 3. Community Garden

The Community Garden that occupies the old field to the south (left) continues agricultural uses once common here. Today it provides a valuable form of recreation for our citizens. Please help protect the Garden by staying on the path.



#### 4. Yew Hedge

On the left side of this old lane the former owners planted yew to form a hedge. Yew is not native here. Today, however, it is a common landscape shrub. You will see it again along this trail. Why was it planted here?

#### 5. Forest Edge

This is a good habitat in which to see many animals and birds because they like the forest for protection and the field for gathering food. Some of the same animals found in the field use the forest for cover. White-tailed deer and owls come out of the forest at dusk to feed. Why is the edge habitat so full of animals and birds?

#### 6. Forest Succession

Look at the forest here. You will see that now pitch pines dominate; however, small black oaks are growing under the pines. This changing forest will eventually be dominated by the oaks. We call this forest succession. As the forest changes, so do the animals and birds. Red squirrels like pine forests and gray squirrels like oaks. Birds also change: red-breasted nuthatches live in the pine forest, but the more common white-breasted nuthatches prefer broad leaf trees and will soon take over. How does food influence these changes?

# 7. Exotic Plants

Exotic, or non-native, plants are found along this trail. They were planted or introduced by the former owners. This is still a common practice. Here they are represented by larch and rhododendron, which are found naturally in northern bogs. Can you find other exotics?

#### 8. Holly

Notice the American holly with its green leaves. It is a native tree common to Cape Cod. It is evergreen and there are male and female trees. In the fall and winter, the female trees produce red berries. Birds such as mocking birds, catbirds, and cedar waxwings all feed on the berries, which are poisonous to humans.

#### 9. Poison Ivy

Poison ivy is one of the few native plants found here that is harmful to us. Its oil causes painful, spreading skin rashes. Avoid touching any part of the plant. Learn to recognize its leaves of three. It grows as a ground plant or a vine. In winter, it can be identified by its bare stalks and its hairy vines. It is spread widely by birds such as cardinals, goldfinches, and flickers, who feed on the white berries.



#### 10. Observation Deck

From this platform you are looking out on Long Pond, one of the many kettle hole ponds left behind by the continental glaciers 10,000 years ago. The clear water supports fish such as yellow perch, sunfish, and small-mouthed bass. Preserved open space like this Conservation Land helps keep the water quality high. Observe the rule of "pack it in, pack it out" and you will help us to protect this valuable water resource.

#### 11. Pines

Returning back past stations 8 and 9, take the first trail to the right. Shortly you will pass through a pine stand. Look for the two common species of pine native to Cape Cod. All pines have bundles of needles, unlike other conifers. The white pine has 5 needles to a bundle and the pitch pine has 3. Both pines are intermediate species in forest succession. Bearing right, follow the trail to the open field.



#### 12. Wild Rose

Many plants prefer sandy soil, and wild rose is one. Here you will find these short, robust plants with simple white or pink blossoms growing in full sunlight. In the late summer and fall they produce red fruits, or rose hips, which are high in Vitamin C. This and other species of wild rose growing here provide food for many birds and animals. Follow the path to the right, downhill.

# 13. Overgrown Field

The nature trail skirts an old field that has become overgrown. Here you can see succession in its earlier stages. Notice that the low vegetation is very thick. There is intense competition for moisture and sunlight. Many changes will occur before this becomes a "climax" forest. Pioneer species, such as red cedar and black locust, are found here. Exotics such as the Russian olive flourish as pioneer species in this location. What do you think this old field will look like in 100 years? Bear right to follow the trail.

#### 14. Observation Deck

This is the second platform along the nature trail. It is closer to the Pond. From here you can step to the edge of the Pond. This is a good location for recreation such as fishing, and bird watching. Many ducks frequent our ponds in the fall and winter. Also watch for osprey, crows, and kingfishers. Look along the shore for animal tracks such as raccoon, muskrat, and red fox.



#### 15. Climax Forest

Look around at the many big hardwood trees, like black cherry, black oak, and American holly. These species of large trees are what we would call a climax forest or mature forest. There is little change in this kind of habitat. There are fewer animals and birds present. Gray squirrels and birds like great horned owls, downy woodpeckers, and chickadees can be seen. Retrace your steps about 70 feet and turn right on the trail.

#### 16. Man vs. Nature

This mature yew hedge was planted in a row many years ago. Although it is an exotic, it flourishes here. We continually experiment with nature, to the exclusion of native species. We should be careful not to introduce detrimental species such as the gypsy moth without careful research. Does this yew hedge have a detrimental effect on native species?

#### 17. Stewartia

This unusual tree is a native of the orient. It can be found in the gardens of the Summer Palace in Beijing, China, for example. At first glance, the bark is similar to our native sycamore. The leaves are quite different, and its simple white blossoms make it a very exotic ornamental. We might wonder why someone would plant it here. Now, follow the nature trail to the right; you will join this section of trail again later.



#### **18. Vernal Pond**

In the spring a pond is formed here due to the high water table and rainfall. This is a temporary pond, but it provides a habitat for frogs, toads, and salamanders to breed and lay their eggs. This vernal pond is like many others in the Town that are being protected. The trail continues steeply uphill.

#### 19. Geology

This hill is made up of sand and gravel deposited during the last ice age. Continental ice sheets covered what is now Cape Cod. As the glaciers receded, they left behind stones plucked from the mountains to the north. This pile of sand and gravel was washed into a stream under the large chunk of ice that formed Long Pond. This ridge is called an esker. It takes many years for soil to form on such an esker. As you see, the American holly thrives on this well drained hillside.

# 20. Decaying Log

When a tree falls it begins a long process of returning to the soil the elements from which new trees sprout. This cycle provides many things along the way. Fungi, a type of plant, begin to grow. Insect larvae live on the fungi, and small salamanders feed on the insects. Eventually new trees sprout. This life cycle is a very important part of our environment. How do we benefit from it? Continue around the hill (esker).

# 21. Blow Down

Hurricane "Bob" caused a big blow down on top of this hill in 1991. You can still see the twisted and snapped trees, attesting to the awesome force of the wind. When the trees toppled, a hole was opened up in the mature or climax forest. More sunlight reached the ground and new growth sprang up from the decaying trees. Forest succession is frequently reborn this way.



# 22. Sunlight

On this south facing slope, the early spring sunlight streaming through the budding forest warms the ground. Many of the early wildflowers spring into bloom, taking advantage of the sunlight. Enjoy the spring wildflowers, but please leave them for others to enjoy, too.

#### 23. Changing Habitat

Again we see a marked change from mature forest to pioneer species. Notice the temperature change from shade to sunlight. The humidity also rises as you walk along the path next to the overgrown field. How do these changes affect insects, salamanders, and birds? Turn right to follow the trail.

## 24. Evergreens

The overgrown field is filled with evergreens. Here there are two species with "needles" - pitch pine and red cedar. Remember, pines have packages of needles; cedar does not. Both are seeking sunlight and moisture. Which will win out?



# 25. Soil

Plants need soil to grow. What makes up soil? It is sand and gravel mixed with dead plants and live animals, such as earthworms. Poor soils are low in nutrients, favoring some species. Here poor soils support red cedars, black locust and black cherry. Can you find an exotic that tolerates poor soil?

# 26. Weeds

What are weeds? It is said that a weed is a beautiful plant in the wrong place. The Russian olive, whose leaves are graygreen, is considered by most people as a weed, because it grows in poor soil and crowds out other species. It was introduced in this country where it flourishes. Who decided which plants are weeds and which are not? Turn right at the next junction.

## 27. Wolf Tree

This large white pine is what some call a wolf tree because of its wild branching. Many of these trees grew this way because their growing top was injured. This is frequently caused by lightning striking the tree. It happens most often to trees that stand alone, perhaps along a fence or on a hill. This added sunlight causes them to branch. What do you think caused this tree to "wolf"?



## 28. Old Lane

This old lane or way was part of the estate and farm. It was probably built for wagons and built by hand. We are always building new roads that change our natural environment. This lane is easy on the environment.

#### 29. Pet Cemetery

Just off the lane at this point is a pet cemetery. The former owner must have really loved his pets. You might wonder what they looked like. Notice another exotic plant here - the English ivy often used in old world cemeteries.

#### **30. Changing Environment**

You have returned to the entrance road. You have learned about many changes in our environment. The old Long Pond Farm is still changing. Old fields are growing up and forests are changing. The native plants, animals, and birds are flourishing. This environment is healthy and should stay healthy with your help. The Conservation Commission invites you to return and spend more time relaxing at the Long Pond Conservation Area.

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