About The Preserve

Brookside Preserve is a Nassau County Greenspace property, under the management of the South Shore Audubon Society. It was established through volunteer effort, and new volunteers are always needed. Maintaining the preserve is an ongoing task, involving cleanup days, trail blazing, and management activities designed to make its ecological systems accessible, yet relatively undisturbed.

To learn more about how you can help with the management of Brookside Preserve, contact:

The Brookside Preserve Committee
South Shore Audubon Society
P.O. Box 31
Freeport, NY 11520

Brookside Preserve Committee Chairperson – Betsy Gulotta

NASSAU COUNTY DEPARTMENT
OF RECREATION AND PARKS
Thomas S. Gulotta, County Executive
John B. Kiernan, Commissioner

This project is made possible by a grant from the New York State Office of Parks, Recreation and Historic Preservation, PROJECT AGREEMENT PKS-90-LI-009.

Trail Guide Design and Production – Jenny Krivanek

Cover Illustration – Teresa Stoltz

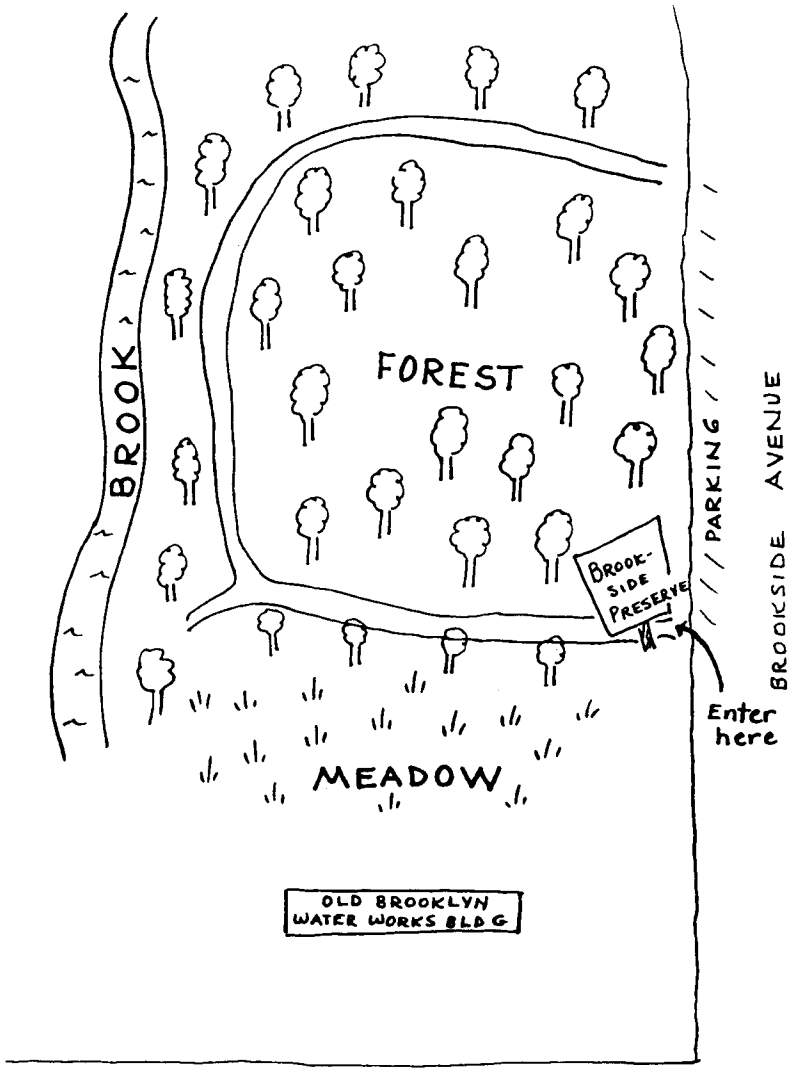
Special thanks to Joan Butkereit, Betsy Gulotta, and Michael Sperling.

DISCOVER A FRESHWATER WETLAND

A SELF-GUIDED TOUR OF THE BROOKSIDE PRESERVE

written and illustrated by
Marion Yavarkovsky

MAP OF THE PRESERVE



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WELCOME!

You are about to enter an exciting place — a nature preserve. Here you will find living things that are left to do what they do — naturally. Many people have come together to protect and preserve these 20 acres of land because they are important in many ways.

This is a **freshwater wetland.** Here the ground acts like a sponge and absorbs water. This helps prevent flooding and adds filtered fresh water to the water supply.

Do you know where your drinking water comes from?

The water you drink comes from deep below the ground. When it rains, the raindrops sink into the ground. As they sink, the ground filters and cleans the water. Later this groundwater is pumped up from deep wells and piped into our homes.

The Brookside Preserve is a place where plants and animals live. It is their neighborhood, their community. They live here because these surroundings, or **habitats,** provide them with all of the things they need to stay alive.

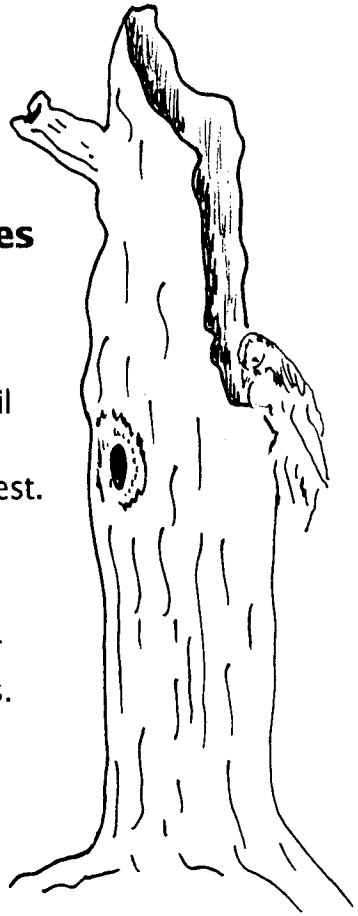
Please remember this as you walk along the paths. Try not to disturb the neighborhood!

THE FOREST

Now let's begin our tour (see map). As you stand at the entrance to the Preserve, look up at the forest.

What do you see?

There are many tall trees. Some of these trees are dead.



Do you know why the trees are not cut down when they die?

Dead trees add nutrients to the soil when they fall and decay. This is important for the health of the forest. See if you can spot any decaying trees in the Preserve.

Dead trees also provide homes for birds, insects, and small mammals. Some animals like to live in holes, or **cavities,** in the tree trunks.

Let's see how many tree cavities you can find today!

Now walk into the forest. What changes do you notice?

Have you noticed that it is cool and dark? The tall trees form a cover, or **canopy,** over us. This has a remarkable effect on the forest climate in the late spring and summer. During these seasons, the leaves of the canopy soak up much of the sunlight, so only a small amount reaches the floor of the forest. The canopy also slows down wind and rain and cools the forest. On a cloudy day this cooling effect may not be as noticeable.

The forest is always changing. During early spring and fall, the canopy does not have most of its leaves. This allows light to enter the lower parts of the forest. During these seasons you will see many beautiful flowers in the forest.

As you walk further along the path, notice that the forest is in layers.

How many layers can you find?

At the top there is the **canopy,** which is made up of the tallest and, usually, the oldest trees.

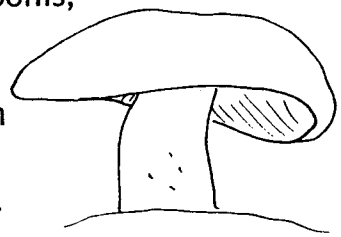
Below the canopy is the **understory,** which is made up of young trees and trees which normally do not grow very high.

Next there is a **shrub layer.** This is made up of bushy plants which have woody stems. In some places this layer is so thick it makes it difficult to walk.

At your feet is another layer — the **herb layer.** Here you find low-growing plants with soft stems.

Can you identify any plants here?

You may see mosses, ferns, mushrooms, and many types of wildflowers.



The last layer is actually underneath your feet. This is the **forest floor** and it is carpeted with fallen leaves.

We have found five layers in our forest. Can you name them?

Now let's walk a little deeper into the forest.

Have you seen or heard any animal life in the forest?

List all of the animals (insects, frogs, birds, or mammals) you can identify on the last page of this booklet.

Each layer of the forest is the home of different animals. Some animals live their entire lives in one layer, while other animals travel from layer to layer.

What kinds of animals live in the canopy?

You may see squirrels high in the trees. You might also see large mounds of dead leaves tucked between branches in the canopy. These are squirrel nests.

Insect-eating birds and large birds like crows, hawks, and owls also find safety in this layer.

Can you find any animals in the understory and shrub layer?

List any you see.

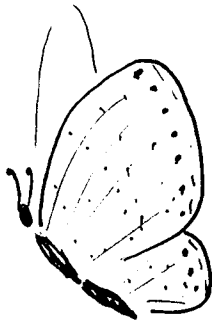
Which animals live in the herb layer and on the forest floor?

The herb layer and forest floor are the richest in life forms. Here there are many kinds of insects, mice, raccoons, worms, snails, snakes, and even many organisms too small to see.

THE MEADOW

Let's walk toward the meadow (see map).

How is the meadow environment different from the forest?



Notice that the ground is higher here. This higher land was formed in 1890 during the construction of the Brooklyn Water Works Building which you see in front of you. Now nature has reclaimed the land.

Since there are few trees, plants which live in open sunlight fill the field. You find many wildflowers and grasses. These are **pioneer plants** because they are the first to appear in bare soil. These plants usually die during the winter, but leave their seeds to grow the following year.

Do you know what will happen to this field in about 100 years if nobody disturbs it?

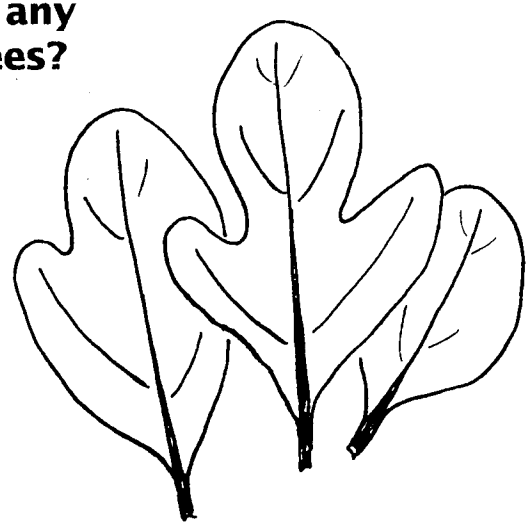
As time goes by, one type of plant will be replaced, or **succeeded,** by another. Eventually this field of flowers and grasses will be replaced by shrubs. Then small pioneer trees will appear, and finally large trees will grow. In about 100 years, this meadow will be a forest if left undisturbed. Nature is always changing.

Near the edge of the forest, where the meadow begins, you may find that succession has already started.

Can you find any small trees growing here?

These are called pioneer trees. One type of pioneer is the sassafras tree. Each tree has three types of leaves, which look like one-, two-, or three-fingered mittens. Their roots are used to make tea.

Can you find any sassafras trees?



THE BROOK

Now let's go to the brook.

What do you notice about the ground as you get closer to the water?

The earth becomes spongy and moist. It is here that the water under the ground is very close to the surface. This is why **Brookside Preserve** is called a freshwater wetland. The plants in this area grow with their roots below the water. You may see footprints in the mud.

Draw any footprints you find on the last page and see if you can identify them.

Look at the water.

Which way is the water flowing?

It is flowing from underground springs in the north to the ocean in the south.

Do you know why it flows in this direction?

Water flows downhill. Now you know where the land is higher and where it is lower.

Look up and down the stream.

Does the stream follow a straight path?

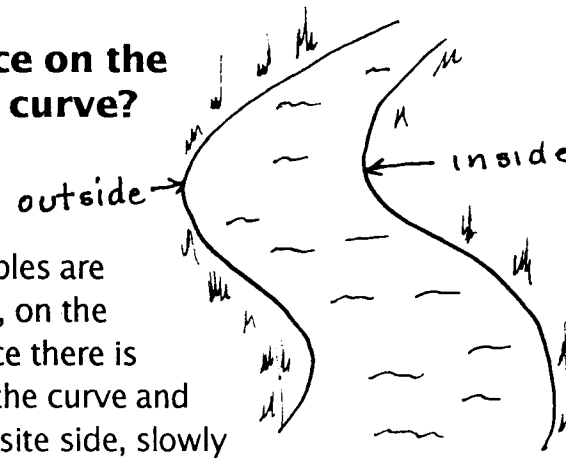
This is called a **meandering** stream because its path bends back and forth. It does this in order to go around big things like trees and rocks.

Try to get close to one of the bends.

Does the water move faster on the outside or inside of the curve?

Notice the water moves faster on the outside part of the bend in the stream. Because of this, the outside part of the curve is wearing away, or eroding. You may notice exposed soil or roots sticking out of the ground there.

What do you notice on the inside part of the curve?



Notice that the water is moving more slowly here and sand and pebbles are being left, or deposited, on the inside of the curve. Since there is erosion on one side of the curve and deposition on the opposite side, slowly this stream will change its path. It will bend even more than it does now.

Take a good look at the water in the stream.

On the last page, list any living things you observe in the water. Do you see any fish?

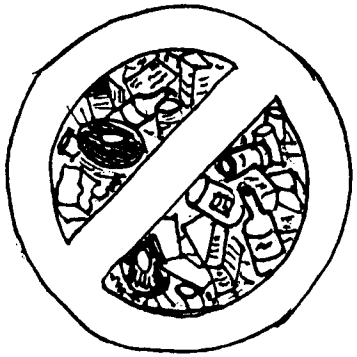
There is very little animal life in these waters. The brook is often affected by what happens upstream. Because of pollution, life in the stream has been harmed.

This pollution comes from many sources. For instance, when it rains, water from nearby streets runs off into the stream and carries dirt and pollutants from cars. Poisonous chemicals from lawns along the stream also get washed into the water. Many people are not aware that throwing things like leaves, plastic and cans into the water can make the water unfit for living things.

Many years ago this was a trout stream filled with living things.

Do you think it would be possible to clean up this stream so that living things could return?

Yes, it's possible! With education, laws, hard work and caring, people like you can make a difference.



As you continue to walk through the preserve, notice the beautiful sights and sounds of nature. Also notice other things.

What things have you encountered in the preserve that do not belong here?

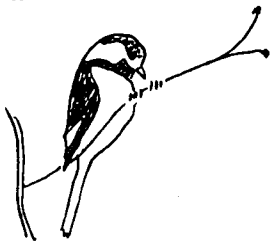
You may have observed that people have dumped trash here. Even piles of grass clippings or leaves dumped here are not good for the forest. Although a dedicated group of people tries to keep this area clean, new materials are dumped here constantly.

On the last page, list some of the items you have seen today which you know do not belong here.

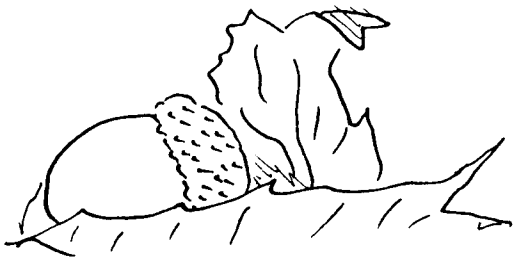
You may even notice some plants here like ivy and azaleas that grow in your own yard. These are plants that people dumped here — they took root and started to grow. They are not **native** to this area. They are **alien** plants because man, not nature, put them here. These alien plants may actually force out the native plants.

A nature preserve is designed to "preserve" the natural, native environment. As you leave the Brookside Preserve, look back at the forest. This forest has been here for hundreds of years. The Indians may have roamed here among these very same trees. We hope that future generations may also have the opportunity to walk through this freshwater wetland area and see how Long Island looked before all the houses, roads, and shopping centers covered the land.

We hope you have enjoyed your walk here today. It is our wish that you have become more aware of the wonders of nature and how fragile it is.



Tell your friends and family about the Brookside Preserve — a quiet and exciting place.



Name of Group _____ Date _____

Animals Seen In The Forest

Living Things Seen In The Water

Drawings Of Animal Tracks

Pollutants

COMMENTS — Please let us know your reactions and comments on the Preserve and this booklet.

It would be very helpful to the South Shore Audubon Society to have one completed copy of this last page from your group. Please send a copy to: Brookside Preserve Committee, South Shore Audubon Society, P.O. Box 31, Freeport, New York 11520. **Thank you.**