

## **ANGLE FLY PRESERVE**



### NATURE WALK GUIDE

View this on your smartphone or print it out to use on the trail!

NOTE: If using your smartphone, cell service is limited. Be sure to download before you arrive.

#### www.Somerslandtrust.org

EAGLE SCOUT PROJECT: Matthew Buck, Troop 173 - Yorktown

#### **OVERVIEW**

Fully completed in the summer of 2017, the Angle Fly Preserve Nature Walk and Scavenger Hunt seeks to provide a fun and interactive experience for all visitors to Angle Fly. The goal is to cater especially to families and children, while making their experience in nature more fulfilling and educational. The Nature Walk consists of eleven brown signs along the Yellow Trail Loop marked as observation points, which provide broad information about everything from types of trees, plants, animals, to habitats. Following the eleven observation points, hikers are encouraged to complete the remainder of the loop and participate in the scavenger hunt. A list of items that can be found is provided both in this document, and on a sign at the start of the trail. Please be sure to stay on the trail at all times!

#### TRAIL ETIQUETTE

These rules are meant both for the safety and enjoyment of both you and other visitors.

Full park policies can be found on the Somers Land Trust web site.

- Please stay on marked trails at all times, and do not leave them for any reason.
- Leave No Trace! Leave everything how you found it (or in better condition) from when you arrived. Carry out any litter that you may have, and please pick up litter if you see it.
- Any type of vandalism or destruction of property is strictly prohibited, and violators will be prosecuted. The property is under video surveillance.
- Please use provided restrooms located at the Main Parking Area and across from the Reynold's House.
- All visitors engaged in fishing or hunting must have valid permits and adhere to all
  of the guidelines outlined on the fishing and hunting page of
  www.somerslandtrust.org.
- Please be respectful of wildlife. Do not attempt to feed or come into contact with an animal.
- Enjoy your time in nature!

#### **OBSERVATION POINT 1: FALLEN CEDAR TREES**



Cedar trees decay or decompose more slowly than other trees, because of chemicals produced naturally in the tree's wood.

Many trees are naturally resistant to decomposition, including old-growth bald cypress, catalpa, black cherry, chestnut, junipers, honey locust, white oak, and of course, cedar. So, what makes these trees so resistant to decay? Over a tree's lifespan, it faces a constant battle with multiple elements, including interactions with soil, water, and organisms which could make a tree decay. To defend themselves against this, some trees such as cedar trees have evolved to where they have complex chemical compounds known as extractives that fight against decay.

## OBSERVATION POINT 2: COPPICED TREES (HAVING MULTIPLE TRUNKS)



These trees grow irregularly, having two trunks. Sometimes this is a natural mutation, while in some instances, it is caused by previous logging of the land.

Coppicing, more specifically, is a method of woodland management, or tree-cutting that has been used since pre-historic times. When a tree is cut down, or coppiced, more trunks or branches will grow around the main trunk, which will increase the amount of wood that can be used from that tree in the future. Often times, trees that already have multiple trunks are also known as a coppiced tree. With Angle Fly's history as farmland in the early 20<sup>th</sup> century, it would make sense for many trees today to have these characteristics.

#### **OBSERVATION POINT 3: OAK TREES**





Oak trees are some of the tallest and longest living trees in North America, with an average lifespan that ranges from 250-500 years. Most oak trees, when mature, reach heights between 75-100 feet. Because of the size of oak trees, they need lots of water to stay healthy; an average oak tree can absorb 50 gallons of water a day.

Oak trees produce acorns once they reach an age between 20 and 50 years. While many know acorns to be "oak tree seeds" only one in 10,000 acorns will produce an actual oak tree.

#### **OBSERVATION POINT 4: UPROOTED TREE**



This uprooted tree always seems to catch the eyes of hikers. While it may look like this tree fell in a storm recently, it has actually been here for a number of years. In fact, it can take the average tree anywhere from 20-30 years to decompose. Many different organisms also use dead trees as homes.

While the root system on this tree may seem large, the remaining uprooted portion is only a fraction of the underground root system while this tree was still alive. While it is a common belief that a tree's roots grow deep into the soil, in reality most of a tree's roots go no deeper than two feet underground. Instead, the roots spread out far around the tree.

#### **OBSERVATION POINT 5: BEECH BARK DISEASE**



Notice the bumps on the bark of the tree? This is a result of a beech bark disease which causes significant mortality in American beech trees. The disease is caused by the bark being attacked and altered by the beech scale, which is a small insect.

The beech scale insect, Cryptococcus Fagisuga, is invasive to North America and is host-specific, feeding exclusively on beech trees. It can be observed on the trunk and limbs of the tree as woolly, white tufts that will later develop into broad strips. As their colonies form on the tree, the formation of crevices on the bark is caused. Fungus can also enter into the tree through the holes caused by the beech scales, which further leads to the mutation and mortality of trees.

#### **OBSERVATION POINT 6: INVASIVE SPECIES**



Look in front of you, then look behind you. Notice a difference in the types of plants at ground level? In the section of woods behind you, there is a cluster of invasive species, including Barberry Bush, which is the most predominant type of invasive species in this area. Invasive plants cause harm to native plants, and they can spread quickly if not controlled properly.

Invasive species are primarily spread by human activities, although usually unintentionally. Activities such as clearing forests or cutting down healthy trees could lead to or speed up the spread of invasive species. These invasive plants can change the conditions of an ecosystem, including changing soil chemistry, which could lead to the mortality of other natural species.

#### **OBSERVATION POINT 7: FOREST RECOVERY**



Portions of Angle Fly Preserve were once logged to be used as farmland dating back as early as the late 1700s. The land eventually would return back to nature, as the forests slowly grew back. Deciduous forests go through different stages of development. Here, and throughout the preserve, you can see evidence of the forest's past, including fallen evergreen trees, which eventually gave in to deciduous trees.

When forests are disturbed, whether naturally or by humans, they often times do not return to their original state. For example, some evergreen sections of forest at Angle Fly are now deciduous.

#### **OBSERVATION POINT 8: CHRISTMAS FERN**



Polystichum acrostichoides (Christmas fern) is a native plant to the Eastern United States. Typically, they grow in shaded, moist, and well-drained soil. While the leaves may brown slightly during winter, this plant is considered to be an evergreen.

#### **OBSERVATION POINT 9: ANIMAL INDENTATIONS ON TREES**



While exploring the preserve, you may have noticed different indentations on some trees. Deer and woodpeckers are the biggest culprits. A deer rub is caused when a male deer rubs its antlers against the base of a tree. This occurs mainly in the fall, when deer try to rub the velvet off their antlers. Typically Woodpeckers peck vertical holes in trees to search for food.

It's also common belief that bucks rub secretions from their forehead glands onto tree trunks as a form of communication within the herd, however researchers do not yet know the value of this type of communication.

#### **OBSERVATION POINT 10: SKUNK CABBAGE**



Skunk cabbage is one of the first perennial plants to bloom in the spring, first with flowers, and followed by green leaves that curve outward. This plant is most commonly found near streams or wetlands. With its actual species name being Symplocarpus foetidus, the plant receives the name skunk cabbage because of the unpleasant odor it sometimes emits.

#### **OBSERVATION POINT 11: ANGLE FLY BROOK**



The Angle Fly Brook, the namesake for the preserve, is the last remaining natural brook-trout spawning stream in Westchester County. Fly fishing has occurred on the brook since the nineteenth century, and it remains popular to this day.

#### **TEST YOUR NATURE KNOWLEDGE!**

# AFTER THE FINAL OBSERVATION POINT, TEST YOUR KNOWLEDGE ON THE REMAINDER OF THE YELLOW TRAIL BY FINDING THE FOLLOWING ITEMS:

- Try to find a fish in the brook next to sign eleven (11).
- Four (4) separate Christmas fern plants
- Two (2) clusters of skunk cabbage
- Two (2) oak trees
- Two (2) fallen cedar trees
- Two (2) examples of an invasive species
- One (1) coppiced (two-trunk) tree
- One (1) beech tree with a bark disease
- Two (2) animal markings on trees
- One (1) uprooted tree

YOU CAN USE THE NATURE WALK GUIDE AS HELP!
PLEASE STAY ON THE TRAIL AT ALL TIMES!