

Nature Trail

SCAVENGER HUNT



Chimney Swift Tower

___ Found it!



Sheep Laurel

___ Found it!



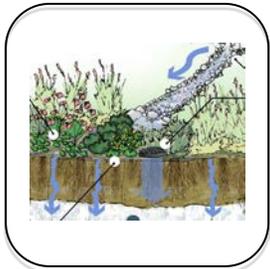
Purple Martin Houses

___ Found it!



Inkberry Holly

___ Found it!



Rain Garden

___ Found it!



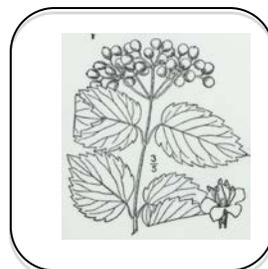
Sweet Pepperbush

___ Found it!



**Snake Hibernaculum
(artificial)**

___ Found it!



Arrowwood

___ Found it!



Red Chokeberry

___ Found it!



Vernal Pool

___ Found it!

Nature Trail Scavenger Hunt

Chimney Swift Tower

Chaetura Pelagica

Historically chimney swifts nested in caves, hollow trees, and on cliffs. With urbanization, most swifts now utilize chimneys, airshafts, and man-made structures that resemble their natural choices. During the non-breeding season, hundreds or thousands might roost together in a single shaft, but when nesting only one pair occupies each location.

Changing chimney designs and newer structures without chimneys have greatly reduced nesting options for chimney swifts. In the past 50 years, their numbers have dropped by 65%. They are insectivores (their primary diet is insects).

Purple Martins

Progne Subis

Originally, purple martins nested in woodpecker holes and other tree cavities. Native Americans discovered that martins would nest in hollowed gourds. European colonies continued this tradition by providing gourds and wooden houses for nesting pairs.

Beyond the pleasure people have derived from these winged acrobats, it is theorized they also served a dual purpose. The birds' propensity to announce intruders has long provided a type of early warning system. By the end of the 20th century, eastern purple martins made what is called a *behavioral tradition shift* and today are nearly entirely reliant on human-supplied housing. They are insectivores.

Rain Garden

During a rain event, stormwater rushes across hard surfaces such as roads, sidewalks, buildings, and rooftops, finding its way directly into waterways and storm drains. Stormwater can transport pollutants such as road salts, motor oil, grass clippings, fertilizers, pesticides, animal waste, litter, and sediments into rivers and streams, causing further pollution.

A rain garden is a shallow depression planted with native flora. When located near a runoff source like a downspout or driveway, it can capture and mitigate these negative effects.

Nature Trail Scavenger Hunt

Woodland Snake Hibernation

Snake Hibernaculum (artificial)

Some people avoid snakes because they don't understand them. That just may be a snake's most effective defense. Unjustified fears often cause people to kill them. But serpents are an important part of our ecosystem.

Snakes, like other reptiles and amphibians, are cold-blooded and rely on ambient temperature for body warmth. In the winter they hibernate, dropping their metabolic rate to conserve energy. Snakes will overwinter below the frost line in abandoned mammal dens, old tree roots, and in stump holes. They must find a den before temperatures drop, or else risk freezing. As development and human activity expand into former habitats, prime breeding and nesting areas disappear.

Some local snake species: Northern Scarlet Snake, Eastern Garter Snake, Rough Green Snake, Northern Water Snake, Black Rat Snake, Northern Pine Snake. Here in the Maurice River watershed, all 18 species of snakes are NON-venomous.

Red Chokeberry

Aronia Arbutifolia

The fruit is quite acrid and not taken by birds until late in the winter when other food supplies have been exhausted.

Sheep Laurel

Kalmia Angustifolia

One of two common laurels, the other being mountain laurel (*Kalmia Latifolia*), which is restricted to high elevations.

- Small pink (rarely white) flowers
- Lateral (not terminal) clusters
- All *Kalmia* are poisonous

Inkberry Holly

Ilex Glabra

Readily distinguished by its shrub habitat, leaves lacking spiny margins, and black fruit, from the more familiar American holly (*Ilex Opaca*) that is used in Christmas tree decorations and is the basis for Millville's nickname of "The Holly City." Their white flower blooms in June.

Nature Trail Scavenger Hunt

Sweet Pepperbush

Clethra Alnifolia

One of the most common shrubs in Pine Barren swamps. Another name for the plant is poor man's soap because it contains a large amount of saponin, which can create foam when in agitated water. This is the primary cause of the foam piles that sometimes occur at the base of the Union Lake Dam.

- Leaves are sharply-toothed towards the apex
- Erect racemes of small white flowers
- Blooms have strong, sweet odor

Arrowwood

Viburnum Dentatum

One of several species of *Viburnum* in South Jersey. Straight stems used by Native Americans to make arrows.

- Unlobed leaves
- Leaf veins largely unbranched
- Small white flowers in large flat-topped clusters
- Blue-black, fleshy fruit

Vernal Pools

Depressions in the ground that can hold water for at least two consecutive months, generally from winter to spring, are called vernal pools. These pools are generally dry in the summer and fall. As a result, they do not support fish populations that eat amphibian eggs and larvae.

With the onset of spring rains, frogs, toads, and salamanders emerge from their winter dens. In the cloak of darkness, they migrate for breeding to vernal pools filled with winter melts and early season rains.

Species known as obligate vernal pool breeders have evolved to use this fish-free habitat to successfully breed. Some of New Jersey's amphibians can breed in both vernal pools and in waters that host fish. These species are facultative vernal pool breeders.

These pools also support unique plant species adapted to the water cycles of wet and dry. They are a threatened ecosystem, and New Jersey is seeking to map and thereby protect them.