

# SAWMILL & HICKORY WOODS NATURE PRESERVE MANAGEMENT PLAN 2023



SAWMILL - 2642 STARFORD DR, DUBLIN OH 43016  
HICKORY WOODS - 2485 WILLIS RD, DUBLIN OH 43016

# SAWMILL & HICKORY WOODS NATURE PRESERVE

## EXECUTIVE SUMMARY

### Columbus Nature Preserves

The Columbus Recreation and Parks Department has 20 designated nature preserves that encompass over 2,850 acres across Franklin and Delaware County. Nature preserves provide for the conservation, protection, and enhancement of ecologically significant land through research, awareness, and education. The first city nature preserves were adopted in 1988 with additional preserves added in 2004, 2010, and 2016. In 2022, the designation process of nature preserves was added into Columbus City Code.

### Sawmill & Hickory Woods Nature Preserves

 **Sawmill - 2642 Starford Dr. Dublin, OH 43016**  
**Hickory Woods - 2485 Willis Rd. Dublin, OH 43016**

Sawmill & Hickory Woods Nature Preserves feature a wide range of natural habitats, including mature forest, wetlands, and a pond. Located near the intersection of Sawmill Road and Summit View Road, these two Nature Preserves retain the natural beauty and ecological heritage in the heart of densely residential landscape.



## Features and Amenities

### Features

- Mature upland forest, including hickory and beech trees
- Spring wildflowers, such as trillium and spring beauty
- Emergent and forested wetlands in Sawmill Nature Preserve

### Amenities

- Trails

## Listed Species

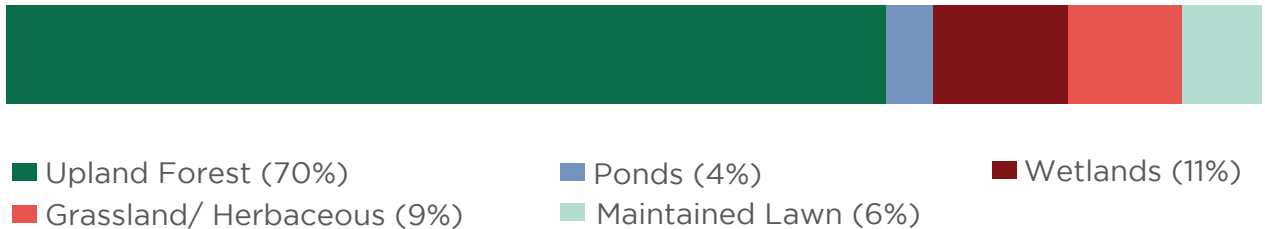
• Indiana bat\*  
(*Myotis sodalists*)

• Northern long-eared bat\*  
(*Myotis septentrionalis*)

• Monarch butterfly^  
(*Danaus plexippus*)

\*Endangered \*\*Threatened \*\*\*Species of Concern ^Candidate Species

## Habitat



## Recommendations

To maintain, conserve, and restore Sawmill & Hickory Woods Nature Preserves:



Keep the Nature Preserve in its original state and limit activities to pedestrian trail use only. Sawmill & Hickory Woods have a wide range of natural habitats for being located in highly urbanized watershed.



Remove invasive callery pear, honeysuckle, and autumn olive. These aggressive species have overtaken native plants, covering over 4-acres. Removal of callery pear should be performed first, and remove other invasive species as resources allow.



Install additional signage. Provide signage about the Nature Preserve and its boundaries, educational signage on park features, and to prohibit feeding wildlife.



Install wood duck boxes. Sawmill & Hickory Woods have good habitat for wood ducks, including several wetlands and a pond. Wood duck boxes could be installed to attract these species.

## ACKNOWLEDGMENTS

This Nature Preserve Management Plan is the culmination of efforts of the Columbus community, individuals, and groups who devoted their time and energy to the future of the City of Columbus nature preserves. We sincerely appreciate everyone who made this plan possible through their enthusiasm, commitment, creative input, and support. A special thank you to the following organizations for their leadership throughout the planning process:

Columbus Recreation & Parks Department

Columbus City Council

Columbus Mayor's Office

Columbus Recreation and Parks Commission

Nature Preserve Advisory Council

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## ATTACHMENTS

Sawmill & Hickory Woods Known Species List (2022)

# 1 INTRODUCTION

## 1.1 Columbus Nature Preserves Overview

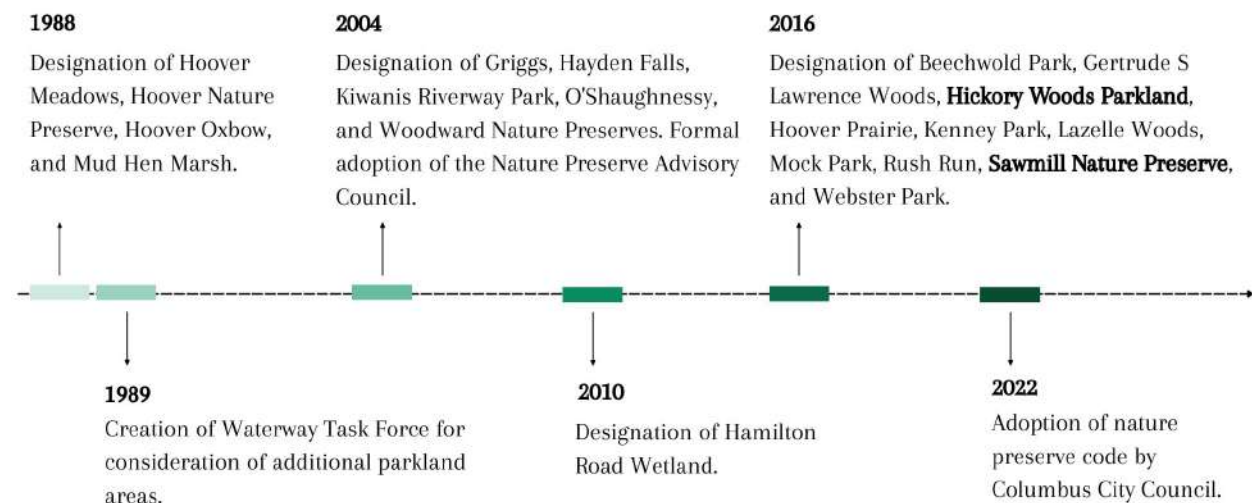
The Columbus Recreation and Parks Department (CRPD) works to preserve the local natural heritage for the Columbus community to enjoy. CRPD recognizes environmentally unique and sensitive areas as designated nature preserves. The Columbus Nature Preserve system is one of a few city nature preserve programs in the state of Ohio.

All Columbus nature preserves are managed by CRPD and advised by the Nature Preserve Advisory Council (NPAC). The NPAC, previously known as the Hoover Nature Preserve Advisory Council, was formally created by City Resolution with the designation of Hoover Nature Preserve, in 1988. In 2004, it was formally renamed by Resolution. The council is composed of nine (9) members. Within the Columbus Nature Preserves, the purposes and objectives of the NPAC are to:

1. Advise and make recommendations to the Executive Director of CRPD concerning the management and wise use of the natural resources.
2. Advocate for the conservation, protection, enhancement, and wise use of the natural resources.
3. Foster the development and application of science-based resource policies and practices and to promote through education and example, and ethic that recognizes the interdependence of people and the environment.

The first city nature preserve was adopted in 1988, for the purpose of protecting and maintaining the drinking water supply at Hoover Reservoir. Additional preserves were designated in 2004, 2010, and 2016. The timeline below lists the year each nature preserve was designated. Note that these properties were acquired years prior to their designation. To date, the system includes over 2,850 protected acres across 20 nature preserves. Of the 20 nature preserves, ten are adjacent to Griggs, Hoover, or O'Shaughnessy Reservoirs and therefore, jointly managed by Columbus Department of Public Utilities (DPU) Division of Water.

### Columbus Nature Preserve Timeline



## 1.2 Management Plan Purpose

This management plan details the site history, amenities, landscape context, habitat types, plant and wildlife species, and recommendations. This plan fulfills Columbus City Code 919.27's requirement for a management plan to provide the framework for management, restoration, and protection of the nature preserve. The intent is to ensure the long-term viability of the nature preserve's natural resources while allowing visitors to experience nature.

## 2 SITE HISTORY AND DESCRIPTION

Sawmill and Hickory Woods Nature Preserves ("Sawmill & Hickory Woods") are two adjacent properties owned and managed by CRPD. Because of their proximity to one another, these nature preserves have been grouped together for purposes of this management plan.

### 2.1 Preserve History

Sawmill Nature Preserve is approximately 17-acres Hickory Woods is approximately 5-acres in size, consisting of Franklin County Parcels 010-283558, 212-001265, 212-001262 and 010-235555, and were designated a Preserve in 2016.

### 2.2 Location Description

The Sawmill Nature Preserve address is 2642 Starford Drive, Dublin, Ohio 43016. The address for Hickory Woods is 2485 Willis Road, Dublin, Ohio 43016.

Sawmill & Hickory Woods are located in the neighborhoods of Coppertree and Summit View Forest, north of Far Northwest, east of the Scioto River and Sawmill Road, south of Summit View Road, and west of High Street.

Sawmill & Hickory Woods are situated within single-family residential neighborhoods. Surrounding land use includes residential housing with intermixed forested area. See "Sawmill & Hickory Woods Nature Preserves" location map.



Upland forest with natural, dirt trail.



2642 STARFORD DR, DUBLIN OH 43016  
 2485 WILLIS RD, DUBLIN OH 43016

# Sawmill & Hickory Woods Nature Preserves

 Preserve Boundaries





### 3 AMENITIES AND NATURAL RESOURCES

#### 3.1 Amenities

No parking exists for Hickory Woods. It can be accessed from the western end of Starford Drive. Numerous natural trails exist throughout Hickory Woods.

No parking exists for Sawmill. It can be accessed from the western end of Starford Drive. A few natural trails exist through Sawmill, utilizing fallen logs to mark the edges of the trail. This was completed as part of a neighborhood volunteer project and an Eagle Scout project.

#### 3.2 Landscape Context

Sawmill & Hickory Woods are relatively flat with small depressions and a perennial stream valley.

There is no Federal Emergency Management Agency (FEMA) floodplain within the park.

The following soils are mapped within Sawmill & Hickory Woods:

- **Blount silt loam** has minimal to moderate slopes, composed of somewhat poorly drained soils formed in till.
- **Glynwood clay loam** has moderate slopes, composed of well drained soils in till, formed in a thin layer of loess and the underlying till.

##### 3.2.1 Streams

No streams are present at Hickory Woods. Sawmill has one small ephemeral stream which flows out of an emergent wetland. This stream flows to an off-site pond. Sawmill & Hickory Woods is located at the eastern edge of the Hayden Run-Scioto River Watershed (Ohio EPA Hydrologic Unit (HUC) #050600011204). This watershed includes portions of Hilliard and Dublin and drains to the Scioto River, downstream of the O'Shaughnessy Reservoir.



Ephemeral stream flowing out of an emergent wetland in Sawmill.

See “Sawmill & Hickory Woods Streams & Wetlands” map.

### 3.2.2 Wetlands

No wetlands exist within Hickory Woods. Sawmill includes approximately 0.8-acre of wetland areas, both emergent and forested. The forest within Sawmill is a mesic (wet) forest and several areas contain a dominance of wetland vegetation. The identified wetlands are dominated by swamp white oak (*Quercus bicolor*), small-flowered agrimony (*Agrimonia parviflora*), green ash saplings (*Fraxinus pennsylvanica*), and various *Carex* (sedge) species. The wetlands receive water from surrounding landscape drainage. One wetland within the northern section is connected to an offsite pond and contains sedge species, including fringed sedge (*Carex crinita*) and hop sedge (*Carex lupulina*).



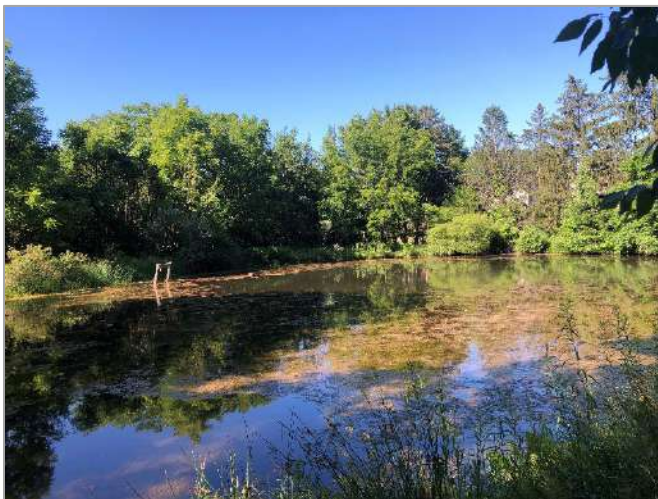
Forested wetland area within the southern portion of Sawmill.

Using the Ohio EPA Ohio Rapid Assessment Method, these wetlands are considered higher quality having good habitat and hydrology qualities. These wetlands are desired to be protected, with a preliminary Ohio EPA wetland category of 2.

See “Sawmill & Hickory Woods Streams & Wetlands” map.

### 3.2.3 Ponds

Sawmill includes an approximate 0.28-acre pond with wetland fringe. Numerous sunfish (*Lepomis* spp) and northern green frogs (*Lithobates clamitans melanota*) were observed within the pond.



Sawmill pond with wetland fringe, which has the potential for wood duck habitat.



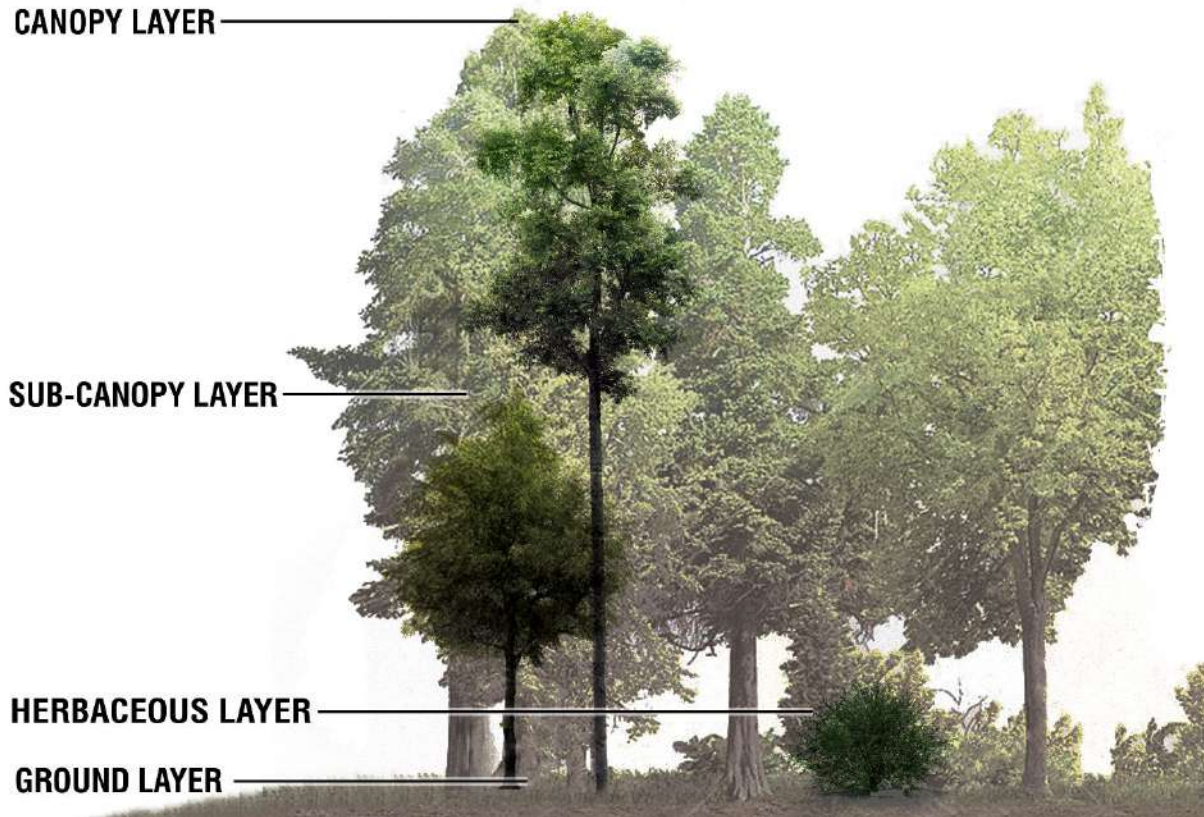
# Sawmill & Hickory Woods Streams & Wetlands

— Perennial Streams   
 — Ephemeral Streams   
  Wetlands   
    5' Contours



### 3.3 Vegetation and Habitat

Commonly observed native tree species include shagbark hickory (*Carya ovata*) and American beech (*Fagus grandifolia*).



Commonly observed native sub-canopy species includes spicebush (*Lindera benzoin*) and pawpaw (*Asimina triloba*).

The native herbaceous layer is dominated by Virginia creeper (*Parthenocissus quinquefolia*), poison ivy (*Toxicodendron radicans*), and jack-in-the-pulpit (*Arisaema triphyllum*).

See “Sawmill & Hickory Woods Habitat Types & Invasive Species” map that illustrates the general vegetation coverage within Sawmill & Hickory Woods. The following habitat types were identified:

1. Upland Forest
2. Ponds
3. Emergent Wetland
4. Forested Wetland
5. Grassland/Herbaceous
6. Maintained Lawn

The “Sawmill & Hickory Woods Known Species List (2022)” is included as an attachment.






# Sawmill & Hickory Woods Habitat Types & Invasive Species

## Habitat Types:

 Forested Wetland (0.76-acre)	 Maintained Lawn (0.47-acre)	 Upland Forest (20.3)
 Grassland/Herbaceous (0.67-acre)	 Pond (0.28-acre)	 Emergent Wetland (0.05-acre)

## Invasive Species:

 Autumn Olive (0.27-acre)	 Honeysuckle (6.99 acres)
 Callery Pear (1.74 acres)	



### 3.3.1 Upland Forest

Sawmill & Hickory Woods contain contiguous upland forest, which includes portions of mature forest. Hickory Woods includes 5.2-acres of upland forest. Sawmill has 15-acres of upland forest. This forest serves as an important resource and is habitat for a number of species. Bats utilize forests during the summer to roost.



Upland Forest



Mature tree within the upland forest at Hickory Nature Preserve.

### 3.3.2 Ponds

Sawmill includes an approximate 0.28-acre pond with wetland fringe (see section 3.2.3 for details).



Pond

### 3.3.3 Wetland

Sawmill includes numerous wetlands (see section 3.2.2 for details). Wetlands filter water and improve downstream water quality. They reduce flooding and store carbon. Wetlands also serve as wildlife habitat.



Emergent Wetland



Forested Wetland

### 3.3.4 Grassland/Herbaceous

Approximately 0.67-acre of grassland/herbaceous vegetation is present in Sawmill, consisting of timothy (*Phleum pratense*), Canada goldenrod (*Solidago canadensis*), common milkweed (*Asclepias syriaca*), and a mixture of grasses.



Maintained Lawn



Large white trillium found at Hickory Woods.

### 3.3.5 Maintained Lawn

Approximately 0.47-acre of mowed area is present in Sawmill.



Maintained Lawn

### 3.3.6 Invasive Vegetation

Hickory Woods contains a strong dominance of honeysuckle (*Lonicera* spp), especially around the boundaries of the Nature Preserve adjacent to residential development.

Sawmill contains a dominance of honeysuckle (*Lonicera* spp), callery pear (*Pyrus calleryana*), and autumn olive (*Elaeagnus umbellate*) in select areas. The entire southern upland forest portion of Sawmill contains mostly callery pear trees.



See “Sawmill & Hickory Woods Habitat Types & Invasive Species” map.

Other invasive species present in smaller numbers include:

- multiflora rose (*Rosa multiflora*)
- privet (*Ligustrum* spp.)



Thick stands of invasive callery pear trees.

### 3.4 Listed/Protected Plant and Wildlife Species

Plant and wildlife species data below were requested from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) data and the Ohio Department of Natural Resources (ODNR) Natural Heritage Data (NHD). Sawmill & Hickory Woods are within the potential habitat ranges of the following endangered, threatened, or species of concern plants and/ or wildlife. Therefore, these species may be found within the Nature Preserve.

#### Plants

No USFWS federally listed plant species or ODNR state listed plant species ranges or records are known to exist within Sawmill & Hickory Woods:

The following records or ranges for wildlife were identified within Sawmill & Hickory Woods:

#### Mammals

The Federally endangered Indiana bat (*Myotis sodalist*) and northern long-eared bat (*Myotis septentrionalis*) are found in Ohio. These bats face extinction due to the range-wide impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent.

These species hibernate, therefore are not typically found in trees in the winter. However, when not in hibernation, they use the trees within forests for foraging, roosting, and raising their young in the summer, and often return to the same forests. The mature forest in Sawmill & Hickory Woods provides suitable habitat for the bats.

#### Insects

The monarch butterfly (*Danaus plexippus*) is a candidate for being considered Federally Threatened or Endangered (due to the significant decline in their numbers). Monarchs seek milkweed plants for food and laying eggs as part of their annual migration from as far north as

Canada down to central Mexico. Wildflowers present in Sawmill & Hickory Woods provide suitable food sources for monarch butterflies.

### **3.5 Wildlife**

With its wide range of habitat types, Sawmill & Hickory Woods supports healthy and diverse populations of mammals, birds, reptiles, amphibians, and fish. A species list of wildlife documented in Sawmill & Hickory Woods is attached.

## **4 RECOMMENDATIONS**

In 2022, Columbus City Code was amended by enacting Section 919.27 - Nature Preserve Code, to designate portions of parks as nature preserves for the benefit of present and future residents of the City of Columbus. The purpose of the Nature Preserve Code is to identify, protect, and manage Nature Preserves. The management of Nature Preserves includes ensuring it is maintained in its existing, near-natural, or restored state. In order to continue to benefit the residents of Columbus and follow Nature Preserve Code, the following actions are recommended.

### **4.1 Protection**

#### **4.1.1 Maintain Pristine, Native Habitat**

Sawmill & Hickory Woods Nature Preserve contain a wide range of habitat types. These resources are embedded within an extensive residential development. Continued protection of the natural resources within Sawmill & Hickory Woods is vital, to ensure these resources remain for future generations. Visitor impacts should be limited to pedestrian trail use only. It is recommended that park users have a “leave no trace” mentality when visiting Sawmill & Hickory Woods.

It is important to understand the natural resources within Sawmill & Hickory Woods in order to prioritize management activities. One consideration would be to update the listing of observed species of flora and fauna within Sawmill & Hickory Woods once every five years. This update should include a thorough survey of species through multiple seasonal field visits. Documenting the specific location of sensitive species and habitat in GIS could be used to protect the most rare or sensitive resources.

#### **4.1.2 Plant Management**

All native plants are to be left alone in their original state. If trees naturally fall, they are to remain where they land to provide habitat for wildlife. If trees are designated as a severe risk, trees should be cut to the remainder of a 20-to-30-foot stump of standing dead habitat.

#### **4.1.3 Invasive Species Removal**

Invasive plant species, including honeysuckle, callery pear, and autumn olive are dominant in areas of Sawmill & Hickory Woods. In addition, privet and multi-flora rose are present. Although eradication of invasive species is desirable to preserve the native biological diversity, extensive time and effort, as well as costs, are involved with this goal. Callery pear and

honeysuckle each cover approximately 2-acres. Priority should be assigned to removing callery pear first, to limit the spread of this species into the southern portion of Sawmill. Callery pear trees grow fast and are early bloomers, crowding out native species, and shading out native spring wildflowers. Native herbaceous plants should be planted in areas where heavily dominated invasive species areas have been cleared. Any application of pesticide should follow the standards described in the CRPD Integrated Pest Management Policy Statement.

Removal efforts may be accomplished by the continued organization of volunteer events partnering with organizations, such as the Boy Scouts, who have conducted removal of invasive species, litter pick-ups, and trail work. CRPD could also involve the neighborhood in the management of the Nature Preserve by helping to establish a volunteer “Friends of Sawmill Wetlands & Hickory Woods” group. By involving the residents surrounding the Sawmill & Hickory Woods Nature Preserve in protecting the habitat, community members could develop a stronger awareness and sense of responsibility to take care of the Nature Preserve.

## **4.2 Conservation**

### **4.2.1 Visitor Management**

To provide a safe and enjoyable visitor experience while protecting Sawmill & Hickory Woods’ natural resources, CRPD will use strategies to achieve resource protection. These practices may include visitors having minimal impact on the natural area by respecting plant and wildlife, disposing of waste properly, and being considerate of others.

### **4.2.2 Community Involvement**

Engage neighbors and community members around Sawmill & Hickory Woods through volunteer event signs posted in Sawmill & Hickory Woods and posted on social media. Events may include education on encroachment, invasive species removal, litter pick-up events, plantings, and others.

### **4.2.3 Deer Management**

A consistent deer population is present within Sawmill & Hickory Woods. It is advised that the deer population be monitored. If guidance is provided by USFWS or ODNR, deer control practices may be put in place. In addition, adjacent resident education may be required to ensure no deer feeding or other methods of attraction are occurring.

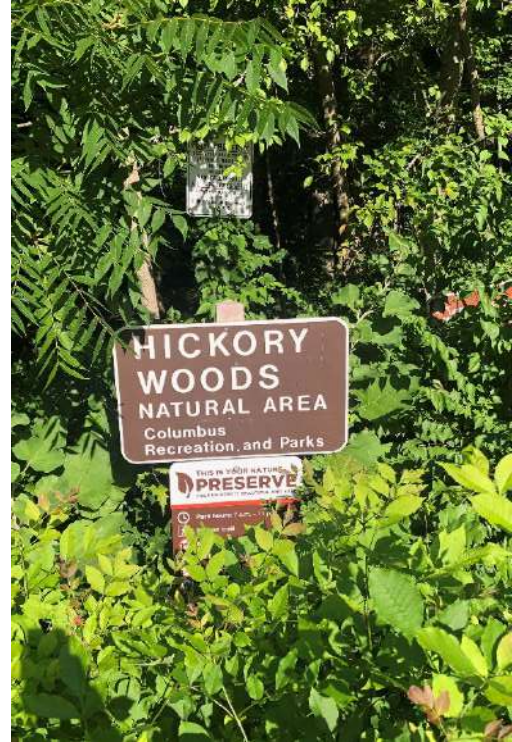
## 4.3 Enhancement

### 4.3.1 Signage

Install signs identifying Sawmill & Hickory Woods as a Nature Preserve at all access points, along with a summary of the Nature Preserve regulations. This should include a Nature Preserve sign at Sawmill at the entrance at Starford Drive. Additional signage along the preserve boundaries is recommended to aid in limiting encroachments.

### 4.3.2 Wood Duck Box

Sawmill wetlands and pond have the potential to be a nesting habitat for wood ducks (*Aix sponsa*). A wood duck box could be installed to enhance the habitat for wood ducks.



Example of a sign at Hickory Woods.  
Additional signage is recommended.

# **ATTACHMENTS**

<b>Sawmill-Hickory Known Species List (2022)</b>	
<b>Plants</b>	
Scientific Name	Common Name
<i>Acer rubrum</i>	Red Maple
<i>Agrimonia parviflora</i>	Swamp Agrimony
<i>Arisaema triphyllum</i>	Jack-in-the-Pulpit
<i>Asclepias syriaca</i>	Common Milkweed
<i>Asimina triloba</i>	American Papaw
<i>Carex crinita</i>	Fringed Sedge
<i>Carex lupulina</i>	Hop Sedge
<i>Carya ovata</i>	Shagbark Hickory
<i>Claytonia virginica</i>	Virginia Springbeauty
<i>Elaeagnus umbellata</i>	Autumn Olive
<i>Fagus grandifolia</i>	American Beech
<i>Fraxinus pennsylvanica</i>	Green Ash
<i>Impatiens capensis</i>	Common Jewelweed
<i>Ligustrum vulgare</i>	Wild Privet
<i>Lindera benzoin</i>	Northern Spicebush
<i>Lonicera maackii</i>	Amur Honeysuckle
<i>Parthenocissus quinquefolia</i>	Virginia Creeper
<i>Phleum pratense</i>	Timothy
<i>Pyrus calleryana</i>	Callery Pear
<i>Quercus bicolor</i>	Swamp White Oak
<i>Quercus rubra</i>	Northern Red Oak
<i>Rosa multiflora</i>	Multiflora Rose
<i>Solidago canadensis</i>	Canada Goldenrod
<i>Toxicodendron radicans</i>	Poison Ivy
<i>Trillium grandiflorum</i>	Great White Trillium

<b>Sawmill-Hickory Known Species List (2022)</b>	
<b>Birds</b>	
Scientific Name	Common Name
<i>Melanerpes carolinus</i>	Red-bellied Woodpecker
<i>Poecile carolinensis</i>	Carolina Chickadee

<b>Sawmill-Hickory Known Species List (2022)</b>	
<b>Fish</b>	
Scientific Name	Common Name
<i>Lepomis macrochirus</i>	Bluegill

<b>Sawmill-Hickory Known Species List (2022)</b>	
<b>Mammals</b>	
Scientific Name	Common Name
<i>Didelphis virginiana</i>	Virginia Opossum
<i>Odocoileus virginianus</i>	White-tailed Deer
<i>Procyon lotor</i>	Raccoon
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel
<i>Sciurus niger</i>	Fox Squirrel

<b>Sawmill-Hickory Known Species List (2022)</b>	
<b>Amphibians</b>	
Scientific Name	Common Name
<i>Ambystoma texanum</i>	Small-mouthed Salamander
<i>Rana clamitans melanota</i>	Northern Green Frog
<i>Rana palustris</i>	Pickerel Frog