

# RUSH RUN PARKLAND NATURE PRESERVE MANAGEMENT PLAN 2023



# RUSH RUN PARKLAND NATURE PRESERVE

## EXECUTIVE SUMMARY

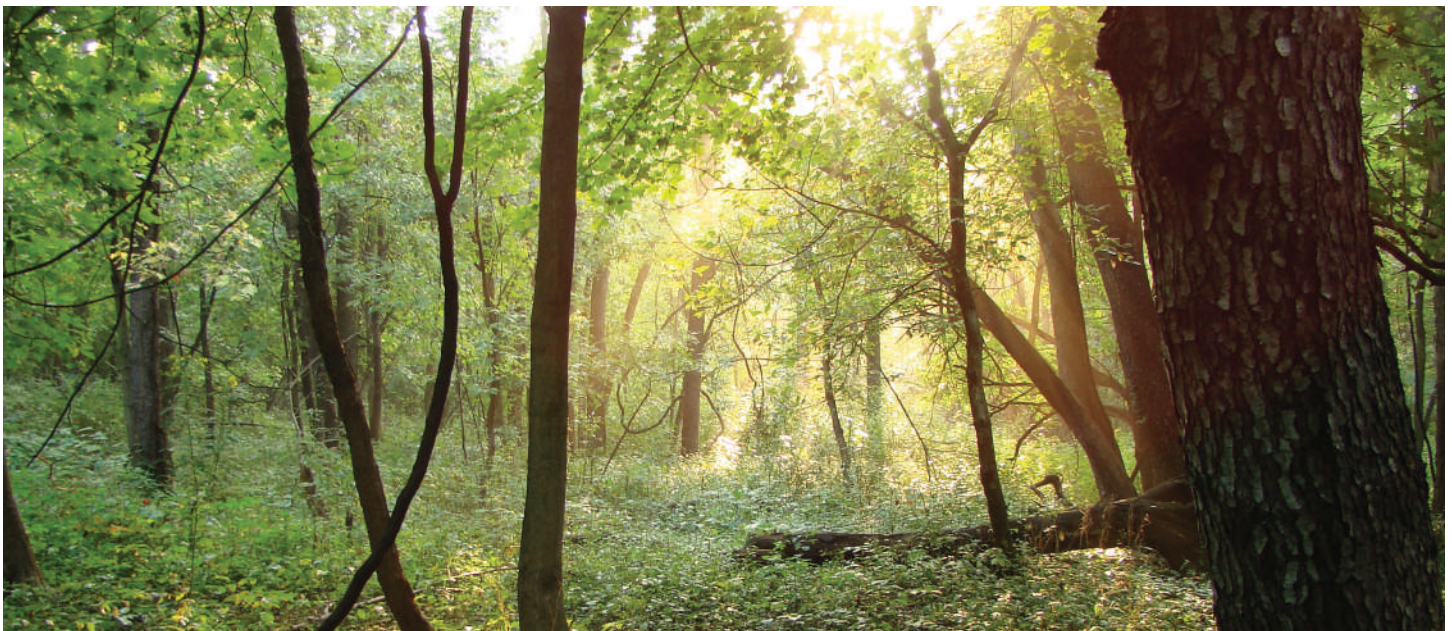
### Columbus Nature Preserves

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.

### Rush Run Parkland Nature Preserve

 370 Broad Meadows Blvd. Columbus, OH 43085

Rush Run Nature Preserve features 39 acres of wooded ravines, wetlands, and streams that join the Olentangy River. Located just south of Antrim Lake within a residential area, the nature preserve retains natural beauty as a mature forest.



## Features and Amenities

### Features

- Terrace overlooking the Olentangy River
- Mature upland forest with large diameter trees
- Forested wetlands with vernal pools, providing amphibian habitat
- Population of eastern redback salamanders

### Amenities

- Trails

## Listed Species

- Indiana bat\*  
(*Myotis sodalists*)
- Northern long-eared bat\*  
(*Myotis septentrionalis*)
- Monarch butterfly^  
(*Danaus plexippus*)
- Snuffbox mussel\*  
(*Epioblasma triquetra*)

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

## Habitat



■ Upland Forest (85%)

■ River (3%)

■ Forested Wetland (12%)

## Recommendations

To maintain, conserve, and restore Rush Run Parkland Nature Preserve:



Keep the nature preserve in its original state, and limit activities to pedestrian trail use only.



Remove invasive burning bush, honeysuckle, and privet. These species have overtaken native plants, and cover almost 6 acres. Removal of burning bush in this area should be performed first, 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.



Stabilize Rush Run banks and consider Rush Run for a future stream restoration. Several studies have been performed on Rush Run due to its heavily incised channel and disconnection with the adjacent floodplain.

## 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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Rush Run Known Species List (2022)

# 1 INTRODUCTION

## 1.1 Columbus Nature Preserves Overview

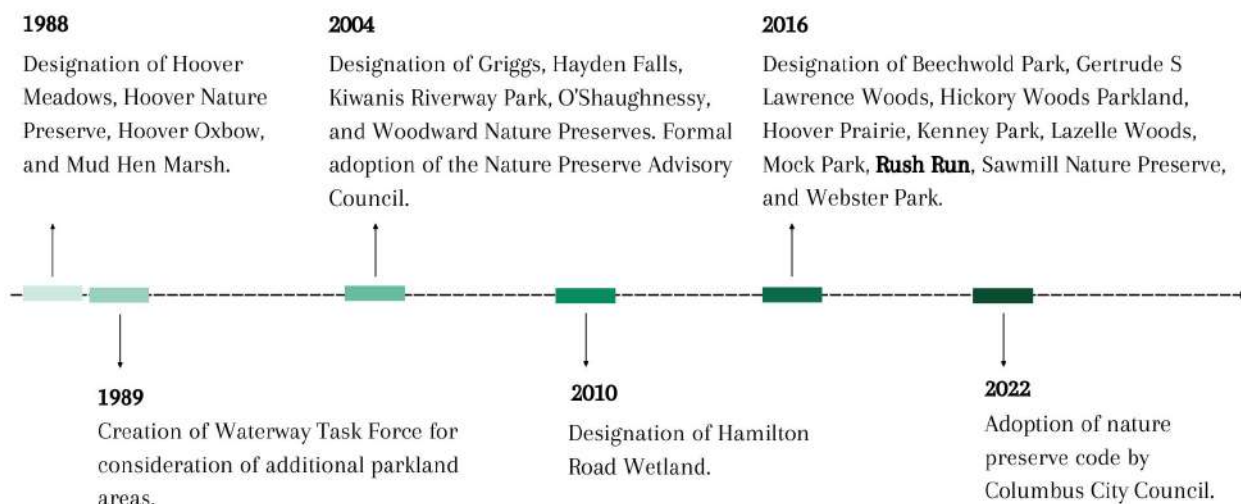
The Columbus Recreation and Parks Department (CRPD) works to preserve the local natural heritage for the Columbus community to enjoy. CRPD recognizes environmentally unique and sensitive areas as designated nature preserves. The Columbus Nature Preserve system is one of a few city nature preserve programs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

### 2.1 Preserve History

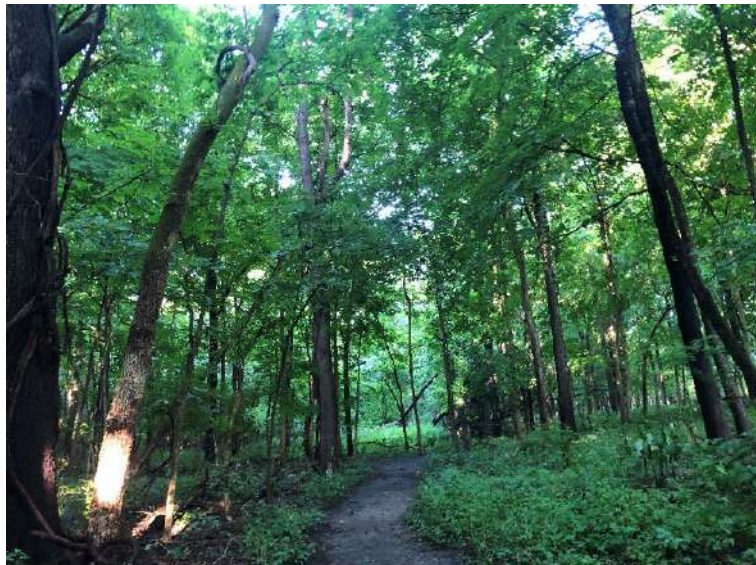
Rush Run Nature Preserve ("Rush Run") is approximately 39-acres in size, consisting of Franklin County Parcel ID #100-003171-00. It was designated a nature preserve in 2016. Rush Run was originally acquired with Federal Open Space funds as a result of the construction of the nearby State Route 315, in 1969. Once named Broadmeadows Park, Rush Run was formally renamed in 1994.

### 2.2 Location Description

Rush Run's address is 370 Broad Meadows Boulevard, Columbus, Ohio 43085. Rush Run is located in the neighborhood of Worthington, east of the Olentangy River and Bike trail, south of Antrim Lake, and west of North High Street.

Rush Run is situated within the residential areas of Township, the City of Columbus, City of Worthington and the Village of Riverlea and adjacent to the Olentangy River and Rush Run Creek bisects the Preserve. Additionally, Rush Run provides some of the wooded green space within the area.

Surrounding land use includes residential housing intermixed with forested areas, that includes the Olentangy River and associated riparian forest. See "Rush Run Nature Preserve" location map.



Established natural trail through upland forest.



370 BROAD MEADOWS BLVD, COLUMBUS OH 43085

## Rush Run Nature Preserve

Preserve Boundary
  Nearby CRPD Properties





### 3 AMENITIES AND NATURAL RESOURCES

#### 3.1 Amenities

There are numerous entries into Rush Run from surrounding neighborhoods and several trails. All trails are natural trails. The trails exist on both sides (north and south) of Rush Run. There is also one bridge over an unnamed tributary within the southern portion of Rush Run. Traversing Rush Run is difficult.



Forested wetland flowing into the Olentangy River.

#### 3.2 Landscape Context

Rush Run contains a stream valley flowing through the center of the Nature Preserve, active floodplain and a linear wetland to the north, and a high terrace to the south. Elevation is generally highest within the southern area and lowest within the northern area, with a relief greater than 30 feet. The FEMA Regulatory Floodway, 100-year floodplain, and 500-year floodplain exist along the Olentangy River and reach into the Rush Run stream valley and a wetland area. These floodplain areas provide habitat for fish and wildlife, recharge groundwater, and improve surface water quality.

The following soils are mapped within Rush Run:

- **Cardington-Urban land complex** with steep slopes is described as very deep, moderately well drained soils composed of debris that accumulate at the bottom of a glacier.
- **Ross silt loam** has minimal slopes and is dominated by loamy alluvium. It is associated with floodplains and is occasionally flooded.
- **Eldean-Urban land complex** with moderate slopes is associated with moraines, kames, and outwash terraces. It includes silty and clayey outwash over sandy and gravelly outwash.
- **Medway silt loam**, dominated by fine loamy alluvium, is associated with floodplains and is occasionally flooded.

##### 3.2.1 Streams

Rush Run is located in the Lower Olentangy Watershed, specifically the Mouth of the Olentangy River Watershed (Ohio Environmental Protection Agency (EPA) Hydrologic Unit (HUC) #050600011103). This watershed is located within a largely urban environment, making Rush Run an important feature for urban wildlife.

The Olentangy River is a major river which flows through Columbus from north at the Delaware Dam to south confluence with the Scioto River. It is designated as a Warmwater Habitat stream aquatic life use where it flows through Rush Run, according to the Ohio EPA. The Olentangy River provides high-quality aquatic habitat for State-listed endangered and threatened aquatic species.



Rush Run, a perennial stream, considered a high-quality warm-water habitat stream.

According to an Environmental Covenant recorded by the Franklin County Auditor dated June 3, 2015, a total of 1,300 feet of Rush Run was restored. This portion of Rush Run and an unnamed tributary stream within the park are protected. According to the Ohio EPA, Rush Run has an aquatic life use of Warmwater Habitat stream.

In 2007, a Primary Headwater Habitat Evaluation (HHEI) assessment was completed for Rush Run by the Friends of the Lower Olentangy Watershed. Rush Run scored an 86 out of 100, indicating the stream is a Class 3 and contains high quality physical habitat. The streambed consisted mainly of cobble and gravel.

The Nature Preserve also contains a perennial unnamed tributary to Rush Run, which flows into Rush Run from the southeast. In total, it is estimated Rush Run contains around 5,000 linear feet of stream. See “Rush Run Streams & Wetlands” map.

Excessive erosion is present along Rush Run adjacent to Walnut Grove Cemetery. In several areas, Rush Run is heavily incised and unable to flood the adjacent floodplains appropriately, leading to increased erosion.



A shallow depth section of the Olentangy River.

### 3.2.2 Wetlands

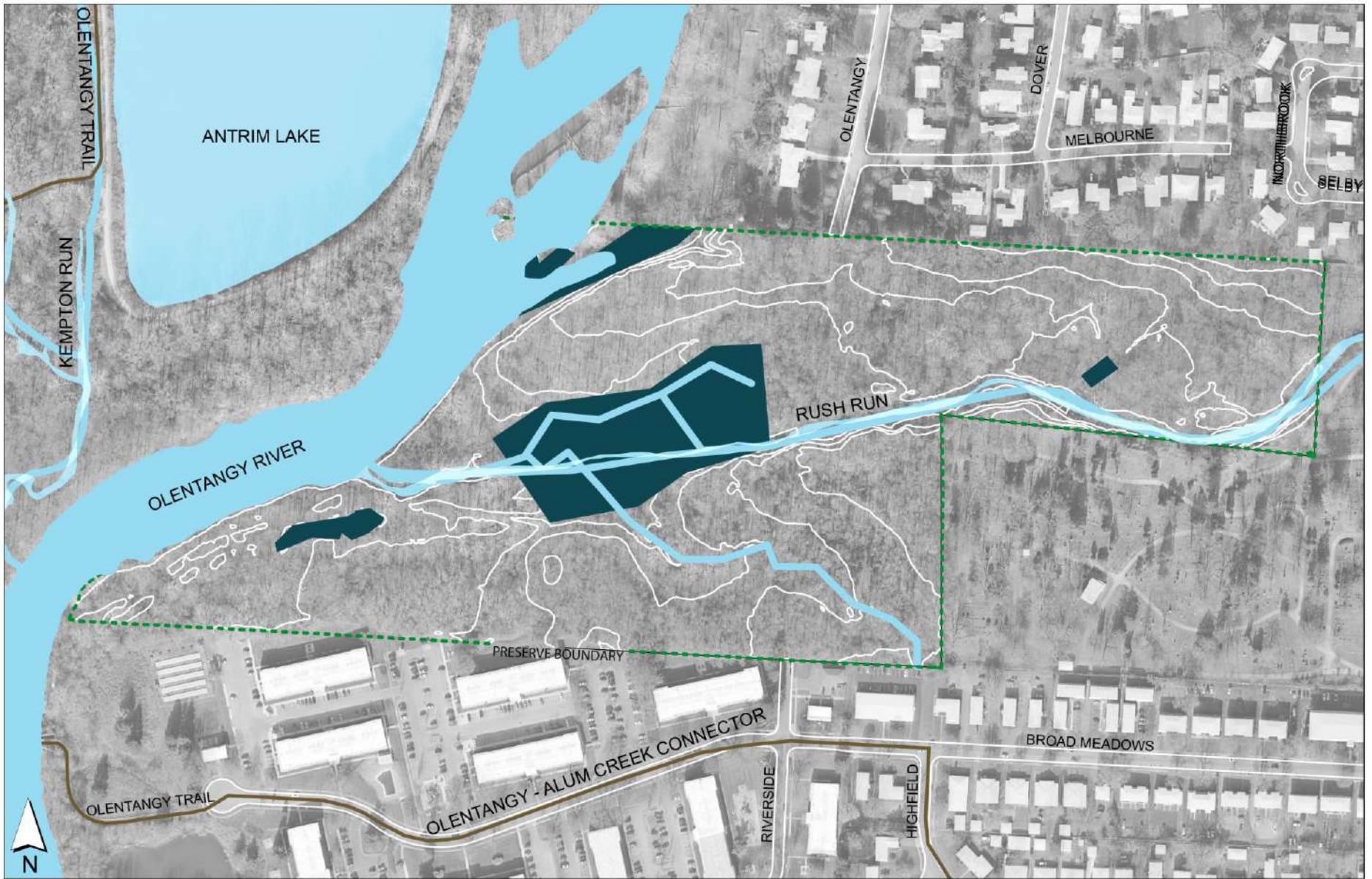
Rush Run includes about 4.6-acres of forested wetlands, several of which include vernal pools for breeding amphibians. The vernal pool wetlands are dominated by box elder (*Acer negundo*), cottonwood (*Populus deltoides*), and sycamore saplings (*Platanus occidentalis*). The vernal pools along the Olentangy River are dominated by sycamore, silver maple (*Acer saccharinum*), water willow (*Justicia americana*), and lizard tail (*Saururus cernuus*).



Riverine wetland along the Olentangy River.

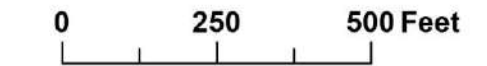
The wetlands contain good habitat and hydrology qualities and received a preliminary wetland score of Category 2 using the Ohio EPA Ohio Rapid Assessment Method.

The wetland receives water from Rush Run, the Olentangy River, and drainage from the surrounding landscape. Several wetlands contain depressions that serve as vernal pools for breeding amphibians in the spring. In addition, these wetlands filter Rush Run, the Olentangy River, and other drainage that flows through the wetlands. See “Rush Run Streams & Wetlands” map.



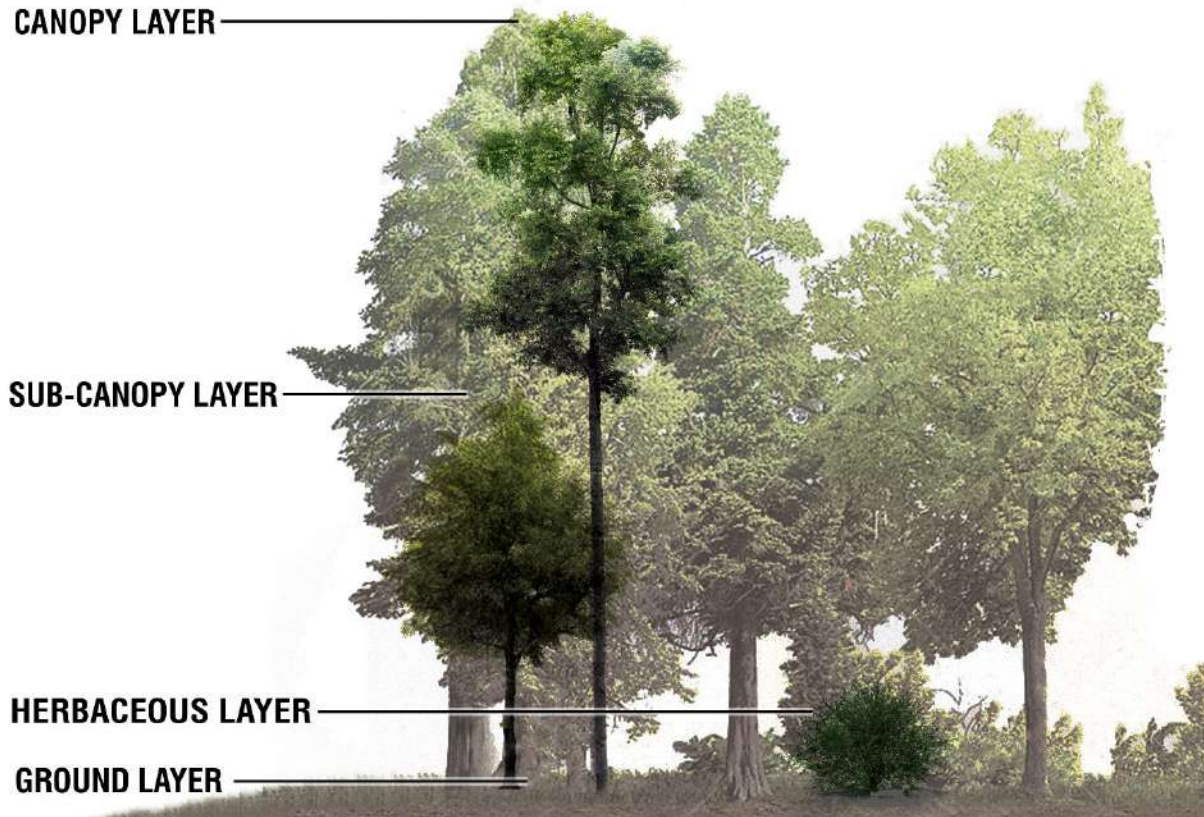
# Rush Run Streams & Wetlands

- Perennial Streams
- Wetlands
- 5' Contours



### 3.3 Vegetation and Habitat

Commonly observed native tree species include sugar maple (*Acer saccharum*), box elder, sycamore, and black walnut (*Juglans nigra*).



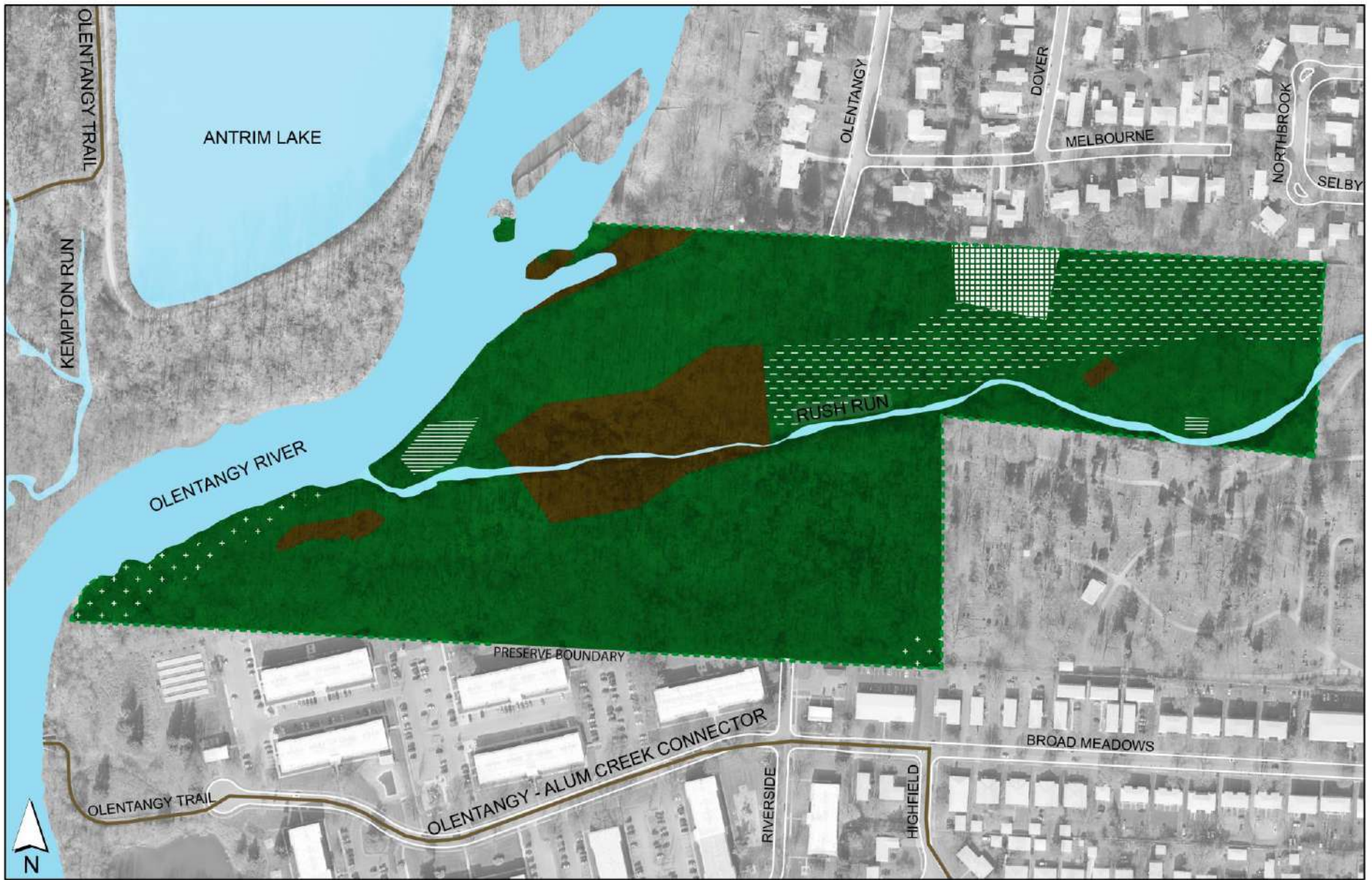
Commonly observed native sub-canopy species include buckeye (*Aesculus glabra*) and pawpaw (*Asimina triloba*).

The herbaceous layer is dominated by wood nettle (*Laportea canadensis*) and white avens (*Geum canadense*).

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

1. Upland Forest
2. River
3. Forested Wetland

The “Rush Run Known Species List (2022)” is included as an attachment.



## Rush Run Habitat Types & Invasive Species

### Habitat Types:

 Forested Wetland (4.63 acres)	 Upland Forest (33.0 acres)
 River (1.34 acres)	

### Invasive Species:

 Burning Bush (0.72-acre)	 Winter Creeper (0.32-acre)
 Honeysuckle (1.17 acres)	 Honeysuckle and Privet (4.98 acres)



THE CITY OF  
**COLUMBUS**  
RECREATION AND PARKS

### 3.3.1 Upland Forest

Rush Run consists of 33-acres of upland forest, which includes portions of mature forest dominated by large diameter trees. In 1996, an Ohio State University professor, conducted a preliminary inventory of the botanical and ecological resources and opportunities within Rush Run. From his findings, the professor stated, “The species composition and structure of these forested areas are consistent with what was thought to comprise early-to-mid successional forest patches at the time of the earliest European settlement.”

This forest serves as an important riparian area for the numerous headwater streams and Olentangy River and is habitat for a number of plant and animal species, including potential habitat for protected bat species. Bats utilize forests during the summer to roost and often prefer to forage along riparian stream corridors like those in Rush Run.



Upland Forest



Upland Forest



Upland Forest



Dense thicket of burning bush.

### 3.3.2 River

Rush Run includes 1.3-acres of the Olentangy River. Habitats along rivers, known as riparian habitats, are of particular importance for plant and wildlife habitat, and are often used by birds, mammals, and amphibians.



River



Perennial unnamed tributary which flows into Rush Run.

### 3.3.3 Forested Wetland

Rush Run contains numerous forested wetlands (see section 3.2.2 for details). These wetlands contain depressions which serve as vernal pools for breeding amphibians in the spring.

Wetlands filter water and improve downstream water quality. They reduce flooding and store carbon. Wetlands also serve as wildlife habitat.



Forested Wetland (adjacent to river)



Forested Wetland

### 3.3.4 Invasive Vegetation

Rush Run is dominated by native species, and areas of Rush Run appear to have had invasive species removed. At the northeastern corner of Rush Run, a 5.7-acre area is dominated by three invasive shrub species: burning bush (*Euonymus alata*), honeysuckle (*Lonicera* spp), and privet (*Ligustrum* spp). Honeysuckle is also present in a small section of the southeastern corner of Rush Run and along the Olentangy River at the southwestern corner. Two small sections of the invasive groundcover and vine wintercreeper (*Euonymus fortunei*) are present.



Based on the extent of coverage, the 5.7-acre area containing burning bush, honeysuckle, and privet is recommended as the first priority for invasive species removal. These three species quickly become established and crowd out native species from the sub-canopy. The resulting dense thicket prevents a native herbaceous layer from growing.

See “Rush Run Habitat Types & Invasive Species” map for an illustration of invasive species locations.

### 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). Rush Run is 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.



Deep vernal pool, forested wetland.

#### Plants

No USFWS federally listed plant species or ODNR state listed plant species ranges or records are known to exist within Rush Run. However, past references indicate the state potentially threatened nodding rattlesnake root can be found at Rush Run.

The following records or ranges for wildlife were identified within Rush Run:

#### 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



Yellow jewelweed (*Impatiens pallida*), present along Rush Run.

their young in the summer, and often return to the same forests. The mature forest in Rush Run 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 Rush Run provide suitable food sources for monarch butterflies.

### Freshwater Mussels

Numerous state listed records for freshwater mussel species are present within the Olentangy River, which is located within Rush Run. All species of freshwater mussels are protected in Ohio. Freshwater mussels have experienced population loss because of poor water quality and development. The following freshwater mussels are recorded within Rush Run:

- **snuffbox** (*Epioblasma triquetra*) – State and Federally Endangered. The snuffbox is generally triangular-shaped, and has a yellow, green or brown shell interrupted with green rays, blotches or chevron-shaped lines.



Northern water snake within Rush Run.

## 3.5 Wildlife

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

Freshwater mussels, which are protected in the state of Ohio, are documented in the Olentangy River.

Eastern redback salamanders are present within the upland forest. Salamander populations are unique within city limits, as they require relatively undisturbed forests and can be sensitive to pollution and other anthropogenic impacts.

## 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

Rush Run Nature Preserve contains a mature forest with approximately 5,000 feet of free-flowing streams, some of which host freshwater mussels. Additional attributes include forested wetlands, providing vernal pools for amphibian breeding. Continued protection of the natural resources within Rush Run 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 Rush Run.



Eastern redback salamander within upland forest.

It is important to understand the breadth of natural resources within Rush Run and the uniqueness/rarity of these resources, in order to prioritize management activities. One consideration would be to update the listing of observed species of flora and fauna within Rush Run once every five years. This update should include a review of the botany, birds, amphibians, and fish within Rush Run. 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 burning bush, honeysuckle, privet, and wintercreeper are dominant in areas of Rush Run. 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.

If addressing the invasive species at Rush Run is pursued, the northeastern corner of the preserve, which includes burning bush, honeysuckle, and privet, should be the first priority. This is due to the large extent of this area and the aggressive nature of these species. Native

herbaceous shrubs, such as pawpaw and buckeye, should be planted in areas where heavily dominated invasive species areas have been cleared.

Removal efforts may be accomplished by the continued organization of volunteer events through Rush Run partners. The application of pesticide should follow the standards described in the CRPD Integrated Pest Management Policy Statement. In some cases, planting of native species may be required once invasive plants are removed.

## 4.2 Conservation

### 4.2.1 Visitor Management

To provide a safe and enjoyable visitor experience while protecting Rush Run's 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

The Friends of Rush Run was organized around 1995 to promote restoration of the park and stream, advance public education about natural areas, and to continue cleanup efforts. CRPD should continue to partner with volunteers pertaining to invasive plant removals in Rush Run.

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

## 4.3 Enhancement

### 4.3.1 Signage

Install signs identifying Rush Run as a Nature Preserve, along with a summary of the Nature Preserve regulations, at the main access points along Olentangy Boulevard and Riverside Drive. Additional signage along the preserve boundaries is recommended to aid in limiting encroachments. Educational signage may also be installed, regarding some of the unique natural resources.



#### 4.3.2 Stream Restoration

Rush Run is heavily incised and unable to flood the adjacent floodplains appropriately, which leads to increased erosion. A “Stormwater Runoff Reduction in the Rush Run Watershed” dated 2018 suggested incorporating green infrastructure (e.g. bioswales) to promote infiltration and reduce storm water flow into Rush Run. In 2020 the “Rush Run Soil-Bioengineered Stream Restoration” report, suggests the use of log-type retaining walls and fascines (bundles of sticks), as well as adjusting the channel geometry. Both these documents were sponsored by the Friends of the Lower Olentangy Watershed (FLOW), which is a non-profit organization in Columbus that partnered with Ohio State University Capstone students for these studies.



Incised banks and steep erosion along Rush Run.

# **ATTACHMENTS**

<b>Rush Run Known Species List (2022)</b>	
<b>Plants</b>	
Scientific Name	Common Name
<i>Acalypha rhomboidea</i>	Rhomboid Mercury
<i>Acalypha virginica</i>	Virginia Threeseed Mercury or Virginia Copperleaf
<i>Acer negundo</i>	Boxelder Maple
<i>Acer nigrum</i>	Black Maple
<i>Acer saccharinum</i>	Silver Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Actaea alba</i>	White Baneberry
<i>Aesculus glabra</i>	Ohio Buckeye
<i>Agrimonia pubescens</i>	Downy Agrimony
<i>Agrostis hyemalis</i>	Winter Bentgrass
<i>Alisma subcordatum</i>	American Water Plantain
<i>Alliaria petiolata</i>	Garlic Mustard
<i>Allium tricoccum</i>	Ramp
<i>Amaranthus tuberculatus</i>	Roughfruit Amaranth
<i>Ambrosia trifida</i>	Giant Ragweed
<i>Ammannia robusta</i>	Grand Redstem
<i>Anemone virginiana</i>	Tall Thimbleweed
<i>Anemonella thalictroides</i>	Rue Anemone
<i>Apocynum cannabinum</i>	Indian Hemp
<i>Arctium minus</i>	lesser Burdock
<i>Asarum canadense</i>	Canadian Wild Ginger
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Asimina triloba</i>	American Papaw
<i>Aster cordifolius</i>	Blue wood-aster
<i>Aster lanceolatus</i>	Panicled Aster
<i>Aster lateriflorus</i>	Calico Aster
<i>Aster racemosus</i>	Small White American-aster
<i>Aster sagittifolius</i>	Arrow-leaved Aster
<i>Aster shortii</i>	Broadleaf Goldenrod
<i>Barbarea vulgaris</i>	Yellow Rocket
<i>Berberis thunbergii</i>	Japanese Barberry
<i>Bidens cernua</i>	Nodding Beggarticks
<i>Bidens frondosa</i>	Devil's Beggar-ticks
<i>Bidens vulgata</i>	Tall Beggarticks
<i>Boehmeria cylindrica</i>	Small-spiked False Nettle
<i>Camassia scilloides</i>	Wild Hyacinth
<i>Cardamine bulbosa</i>	Cut-leaf Toothwort

<b>Rush Run Known Species List (2022)</b>	
<b>Plants</b>	
Scientific Name	Common Name
<i>Cardamine hirsuta</i>	Hairy Bittercress
<i>Carex amphibola</i>	Creek Sedge
<i>Carex emoryi</i>	Emory's Sedge
<i>Carex grayii</i>	Gray Sedge
<i>Carex jamesii</i>	James's Sedge
<i>Carex laxiflora</i>	Broad loose-flowered Sage
<i>Carex stipata</i>	Awl Fruited Sedge
<i>Carpinus caroliniana</i>	Ironwood
<i>Carya cordiformis</i>	Bitternut Hickory
<i>Carya glabra</i>	Sweet Pignut Hickory
<i>Carya ovata</i>	Shagbark Hickory
<i>Catalpa ovata</i>	Yellow Catalpa
<i>Celtis occidentalis</i>	Common Hackberry
<i>Chenopodium album</i>	Lambsquarters
<i>Cinna arundinacea</i>	Sweet Woodreed
<i>Circaea lutetiana</i>	Broad-leaved Enchanter's Nightshade
<i>Conium maculatum</i>	Posion Hemlock
<i>Crataegus crusgalli</i>	Cockspur Thorn
<i>Crataegus sp.</i>	Hawthorne
<i>Cryptotaenia canadensis</i>	Canadian Honewort
<i>Cuscuta gronovii</i>	Swamp Dodder
<i>Cyperus bipartitus</i>	Slender Flatsedge
<i>Cyperus erythrorhizos</i>	Red-root Flatsedge
<i>Cyperus ferruginescens</i>	Engelmann's Flatsedge
<i>Cyperus squarrosus</i>	Bearded Flatsedge
<i>Cyperus strigosus</i>	Straw-colored Flatsedge
<i>Digitaria sanguinalis</i>	Hairy Crabgrass
<i>Echinochloa muricata</i>	Rough Barnyard Grass
<i>Echinochloa walteri</i>	Walter's Barnyard Grass
<i>Echinocystis lobata</i>	Wild Cucumber
<i>Eclipta alba</i>	False Daisy
<i>Eleocharis erythropoda</i>	Bald Spikerush
<i>Eleocharis obtusa</i>	Blunt Spikerush
<i>Elymus riparius</i>	Riverbank Wild Rye
<i>Elymus virginicus</i>	Virginia Wild Rye
<i>Eragrostis frankii</i>	Sandbar Lovegrass
<i>Eragrostis hypnoides</i>	Creeping Lovegrass
<i>Eragrostis spectabilis</i>	Purple Lovegrass



<b>Rush Run Known Species List (2022)</b>	
<b>Plants</b>	
Scientific Name	Common Name
<i>Erechtites hieracifolia</i>	Pilewort
<i>Erythronium Americanum</i>	Yellow Trout-lily
<i>Euonymus alatus</i>	Winged Burning-bush
<i>Euonymus atropurpureus</i>	Eastern Wahoo
<i>Euonymus fortunei</i>	Fortune's Spindle
<i>Euonymus obovatus</i>	Running Strawberry Bush
<i>Eupatorium maculatum</i>	Spotted Joe-pye Weed
<i>Eupatorium perfoliatum</i>	Common Boneset
<i>Eupatorium rugosum</i>	White Snakeroot
<i>Fagus grandifolia</i>	American Beech
<i>Fraxinus americana</i>	White Ash
<i>Fraxinus pennsylvanica</i>	Green Ash
<i>Fraxinus quadrangulata</i>	Blue Ash
<i>Galium spp.</i>	Bedstraw
<i>Geranium maculatum</i>	Cranesbill
<i>Geum canadense</i>	White Avens
<i>Geum virginianum</i>	Cream Avens
<i>Glechoma hederacea</i>	Ground Ivy
<i>Gleditsia triacanthos</i>	Honey Locust
<i>Glyceria striata</i>	Fowl Manna Grass
<i>Hackelia virginiana</i>	Virginia Stickseed
<i>Helenium autumnale</i>	Sneezeweed
<i>Hemerocallis fulva</i>	Day Lily
<i>Hesperis matronalis</i>	Dame's Rocket
<i>Hydrangea arborescens</i>	Smooth Hydrangea
<i>Hydrophyllum appendiculatum</i>	Appendaged Waterleaf
<i>Hydrophyllum canadense</i>	Bluntleaf Waterleaf
<i>Hydrophyllum virginianum</i>	Virginia Waterleaf
<i>Hypericum punctatum</i>	Spotted St. John's-wort
<i>Impatiens capensis</i>	Spotted Touch-me-not
<i>Impatiens pallida</i>	Pale Touch-me-not
<i>Iris pseudacorus</i>	Pale-yellow Iris
<i>Juglans nigra</i>	Black Walnut
<i>Juncus tenuis</i>	Path Rush
<i>Justicia americana</i>	American Water-willow
<i>Lactuca canadensis</i>	Wild Lettuce
<i>Laportea canadensis</i>	Canadian Wood Nettle
<i>Leersia oryzoides</i>	Rice Cutgrass

<b>Rush Run Known Species List (2022)</b>	
<b>Plants</b>	
Scientific Name	Common Name
<i>Leersia virginica</i>	White Grass
<i>Lemna minor</i>	Common Duckweed
<i>Ligustrum vulgare</i>	Common Privet
<i>Lindera benzoin</i>	Northern Spicebush
<i>Lindernia dubia</i>	False Pimpernel
<i>Lobelia siphilitica</i>	Blue Lobelia
<i>Lonicera canadensis</i>	American Fly Honeysuckle
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Lonicera maackii</i>	Amur Honeysuckle
<i>Lonicera tatarica</i>	Tatarian Honeysuckle
<i>Ludwigia palustris</i>	Water Purslane
<i>Lycopus americanus</i>	American Water Horehound
<i>Lycopus rubellus</i>	Stalked water-horehound
<i>Lycopus virginicus</i>	Virginia Bugleweed
<i>Lysimachia ciliata</i>	Fringed Loosestrife
<i>Lysimachia nummularia</i>	Creeping Jenny
<i>Lythrum salicaria</i>	Purple Loosestrife
<i>Maclura pomifera</i>	Osage Orange
<i>Menispermum canadense</i>	Canada Moonseed
<i>Mimulus alatus</i>	Winged Monkey Flower
<i>Mimulus ringens</i>	Allegheny Monkey Flower
<i>Muhlenbergia schreberi</i>	Nimblewill
<i>Muhlenbergia sylvatica</i>	Woodland Muhly
<i>Ornithogalum umbellatum</i>	Star-of-Bethlehem
<i>Ostrya virginiana</i>	Hop Hornbeam
<i>Oxalis stricta</i>	Yellow Wood Sorrel
<i>Panicum dichotomiflorum</i>	Fall Panic Grass
<i>Panicum latifolium</i>	Broad-leaved Panic Grass
<i>Panicum rigidulum</i>	Switchgrass
<i>Parthenocissus quinquefolia</i>	Virginia Creeper
<i>Phalaris arundinacea</i>	Reed Canary Grass
<i>Phlox paniculata</i>	Garden Phlox
<i>Phyla lanceolata</i>	Lance-leaf Fog Fruit
<i>Physalis longifolia</i>	Long-leaf Ground Cherry
<i>Phytolacca americana</i>	American Pokeweed
<i>Pilea fontana</i>	Black-fruited Clearweed
<i>Pilea pumila</i>	Dwarf Clearweed
<i>Plantago rugelii</i>	Rugel's Plantain

<b>Rush Run Known Species List (2022)</b>	
<b>Plants</b>	
Scientific Name	Common Name
<i>Platanus occidentalis</i>	American Sycamore
<i>Podophilum peltatum</i>	Mayapple
<i>Polygonatum biflorum</i>	Smooth Solomon's Seal
<i>Polygonum aviculare</i>	Common Knotgrass
<i>Polygonum cespitosum</i>	Tufted Knotweed
<i>Polygonum hydropiper</i>	Marsh Waterpepper
<i>Polygonum lapathifolium</i>	Nodding Smartweed
<i>Polygonum pensylvanicum</i>	Pennsylvania Smartweed
<i>Polygonum persicaria</i>	Lady's-thumb
<i>Polygonum punctatum</i>	Dotted Smartweed
<i>Polymnia canadensis</i>	Leafcup
<i>Polystichum acrostichoides</i>	Christmas Fern
<i>Populus deltoides</i>	Plains Cottonwood
<i>Prenanthes crepidinea</i>	Nodding Rattlesnake-root
<i>Prunus serotina</i>	Black Cherry
<i>Ptelea trifoliata</i>	Common Hoptree
<i>Pyrus malis</i>	Apple
<i>Quercus alba</i>	White Oak
<i>Quercus macrocarpa</i>	Bur Oak
<i>Quercus palustris</i>	Pin Oak
<i>Quercus rubra</i>	Red Oak
<i>Ranunculus hispidus</i>	Hispid Buttercup
<i>Ranunculus sceleratus</i>	Cursed Crowfoot
<i>Ribes cynosbati</i>	Prickly Gooseberry
<i>Rorippa palustris</i>	Bog Yellow-cress
<i>Rorippa sylvestris</i>	Creeping Yellow-cress
<i>Rosa multiflora</i>	Multiflora Rose
<i>Rubus occidentalis</i>	Black Raspberry
<i>Rubus pensylvanicus</i>	Pennsylvania Blackberry
<i>Rudbeckia laciniata</i>	Cut-leaf Coneflower
<i>Salix exigua</i>	Sandbar Willow
<i>Salix nigra</i>	Black Willow
<i>Samolus floribundus</i>	Brookweed
<i>Sanguinaria canadensis</i>	Bloodroot
<i>Sanicula canadensis</i>	Canadian Black Snakeroot
<i>Sanicula gregaria</i>	Clustered Black Snakeroot
<i>Sanicula marilandica</i>	Maryland Black Snakeroot
<i>Sanicula trifoliata</i>	Beaked Snakeroot

<b>Rush Run Known Species List (2022)</b>	
<b>Plants</b>	
Scientific Name	Common Name
<i>Saururus cernuus</i>	Lizard's Tail
<i>Scrophularia marilandica</i>	Maryland Figwort
<i>Scutellaria lateriflora</i>	Mad-dog Skullcap
<i>Sedum ternatum</i>	Woodland Stonecrop
<i>Senecio obovatus</i>	Roundleaf Ragwort
<i>Setaria faberi</i>	Giant Foxtail
<i>Setaria viridis</i>	Green Foxtail
<i>Smilacina racemosa</i>	False Solomon's-seal
<i>Smilax hispida</i>	Bristly Greenbrier
<i>Smilax rotundifolia</i>	Roundleaf Greenbrier
<i>Solanum nigrum</i>	Black Nightshade
<i>Solidago caesia</i>	Blue-stemmed Goldenrod
<i>Solidago canadensis</i>	Canada Goldenrod
<i>Solidago flexicaulis</i>	Zigzag Goldenrod
<i>Solidago gigantea</i>	Giant Goldenrod
<i>Staphylea trifolia</i>	American Bladdernut
<i>Symphoricarpos alba</i>	Common Snowberry
<i>Symphoricarpos orbiculatus</i>	Coralberry
<i>Symplocarpos foetidus</i>	Eastern Skunk Cabbage
<i>Teucrium canadense</i>	American Germander
<i>Thalictrum dioicum</i>	Early Meadow-rue
<i>Thalictrum rochebrunianum</i>	Meadow Rue
<i>Thaspium barbinode</i>	Hairy-Joint Meadow-Parsnip
<i>Tilia americana</i>	Basswood
<i>Tovara virginiana</i>	Virginia Knotweed
<i>Toxicodendron radicans</i>	Poison Ivy
<i>Ulmus americana</i>	American Elm
<i>Ulmus rubra</i>	Slippery Elm
<i>Urtica procera</i>	Stinging Nettle
<i>Uvularia grandiflora</i>	Large-flowered Bellwort
<i>Verbena urticifolia</i>	White Vervain
<i>Verbesina alternifolia</i>	Wingstem
<i>Vernonia gigantea</i>	Giant Ironweed
<i>Viburnum dentatum</i>	Northern Arrowwood
<i>Viburnum prunifolium</i>	Blackhaw

<b>Rush Run Known Species List (2022)</b>	
<b>Plants</b>	
Scientific Name	Common Name
<i>Viburnum seiboldii</i>	Siebold's Viburnum
<i>Viola sororia</i>	Missouri Violet
<i>Viola striata</i>	Striped Creamy Violet
<i>Vitis aestivalis</i>	Summer Grape
<i>Vitis riparia</i>	Riverbank Grape
<i>Xanthium strumarium</i>	Rough Cocklebur

<b>Rush Run Known Species List (2022)</b>	
<b>Mammals</b>	
Scientific Name	Common Name
<i>Odocoileus virginianus</i>	White-tailed Deer
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel
<i>Sciurus niger</i>	Fox Squirrel
<i>Sylvilagus floridanus</i>	Eastern Cottontail
<i>Tamias striatus</i>	Chipmunk

<b>Rush Run Known Species List (2022)</b>	
<b>Fish</b>	
Scientific Name	Common Name
<i>Etheostoma camurum</i>	Bluebreast Darter

<b>Rush Run Known Species List (2022)</b>	
<b>Amphibians</b>	
Scientific Name	Common Name
<i>Plethodon cinereus</i>	Red-backed Salamander

<b>Rush Run Known Species List (2022)</b>	
<b>Mussels</b>	
Scientific Name	Common Name
<i>Epioblasma triquetra</i>	Snuffbox

<b>Rush Run Known Species List (2022)</b>	
<b>Birds</b>	
Scientific Name	Common Name
<i>Agelaius phoeniceus</i>	Red-winged Blackbird
<i>Anas platyrhynchos</i>	Mallard
<i>Branta canadensis</i>	Canada Goose
<i>Bucephala clangula</i>	Common Goldeneye
<i>Cardinalis cardinalis</i>	Northern Cardinal
<i>Cathartes aura</i>	Turkey Vulture
<i>Catharus minimus</i>	Gray-cheeked Thrush
<i>Colaptes auratus</i>	Northern Flicker
<i>Coragyps atratus</i>	Black Vulture
<i>Corthylio calendula</i>	Ruby-crowned Kinglet
<i>Corvus brachyrhynchos</i>	American Crow
<i>Cyanocitta cristata</i>	Blue Jay
<i>Dryobates pubescens</i>	Downy Woodpecker
<i>Haemorhous mexicanus</i>	House Finch
<i>Haemorhous purpureus</i>	Purple Finch
<i>Icterus spurius</i>	Orchard Oriole
<i>Junco hyemalis</i>	Dark-eyed Junco
<i>Leiothlypis peregrina</i>	Tennessee Warbler
<i>Leiothlypis ruficapilla</i>	Nashville Warbler
<i>Megaceryle alcyon</i>	Belted Kingfisher
<i>Melospiza melodia</i>	Song Sparrow
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow
<i>Poecile carolinensis</i>	Carolina Chickadee
<i>Regulus satrapa</i>	Golden-crowned Kinglet
<i>Riparia riparia</i>	Bank Swallow
<i>Setophaga coronata</i>	Yellow-rumped Warbler
<i>Setophaga palmarum</i>	Palm Warbler
<i>Sitta carolinensis</i>	White-breasted Nuthatch
<i>Spinus tristis</i>	American Goldfinch
<i>Stelgidopteryx serripennis</i>	Northern Rough-winged Swallow
<i>Strix varia</i>	Barred Owl
<i>Sturnus vulgaris</i>	European Starling
<i>Tachycineta bicolor</i>	Tree Swallow
<i>Thryothorus ludovicianus</i>	Carolina Wren
<i>Turdus migratorius</i>	American Robin
<i>Zenaida macroura</i>	Mourning Dove