THE CITY OF COLUMBUS RECREATION AND PARKS

STONE

# MOCK PARK NATURE PRESERVE MANAGEMENT PLAN

## 2023

2520 MOCK RD, COLUMBUS OH 43219

# MOCK PARK 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.

### Mock Park Nature Preserve

**2520 Mock Rd. Columbus, OH 43219**

Mock Park Nature Preserve features 82 acres of wooded ravines, floodplain, and streams overlooking Alum Creek. With an upland hardwood forest dominated by oak and hickory species, Mock Park provides habitat for a wide range of wildlife, including endangered bat populations.

## Features and Amenities

### Features

- Mature upland forest, dominated by oak and hickory
- High bluffs overlooking Alum Creek
- Over 11,000 linear feet of streams, including high-quality streams
- Large number of grassland bird species

### Amenities

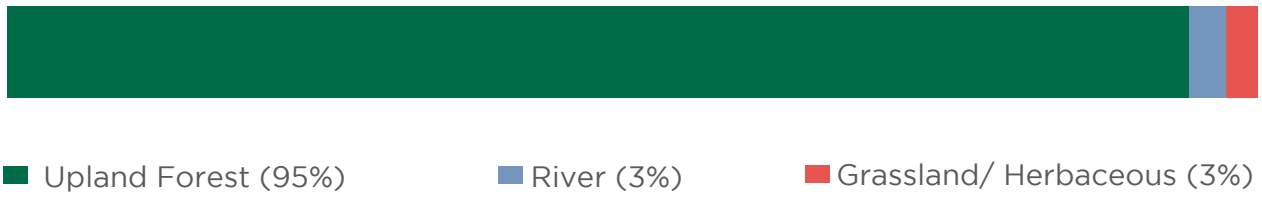
- Trails

## Listed Species

- Indiana bat* *(Myotis sodalist)*
- Northern long-eared bat* *(Myotis septentrionalis)*
- Monarch butterfly^ *(Danaus plexippus)*

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

## Habitat




### Recommendations

To maintain, conserve, and restore Mock Park Nature Preserve:

Keep the Nature Preserve in its original state and limit activities to pedestrian trail use only. Mock has a mature forest containing high quality, free-flowing streams in an urbanized watershed.

Remove invasive honeysuckle, privet, and multi-flora rose, and other invasive plants. Multi-flora rose is the most widespread invasive species within Mock Park. This aggressive species has overtaken native plants, and is present throughout the entire nature preserve. Removal of multi-flora rose should be performed first, and remove other invasive plant 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.

Stabilize and restore streams through riparian re-establishment. The main perennial headwater stream corridor contains little to no woody species. An ephemeral stream located along the eastern boundary also lacks a riparian corridor and appears to have been channelized. Restoration practices would improve downstream water quality.

# 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

Prepared By:

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# 1 INTRODUCTION

## 1.1 Columbus Nature Preserves Overview

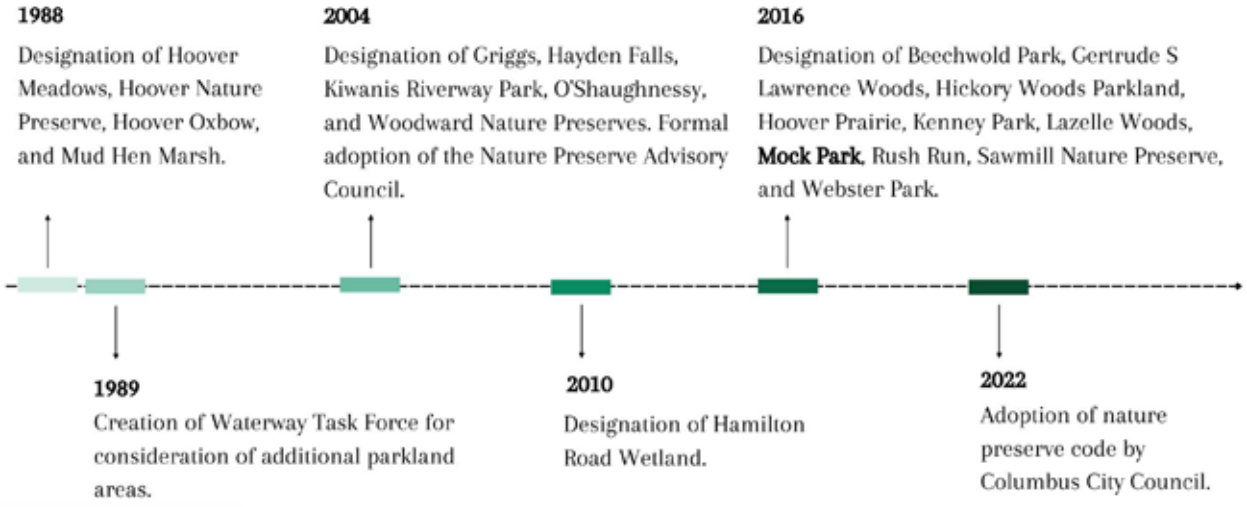
The Columbus Recreation and Parks Department (CRPD) works to preserve the local natural heritage for the Columbus community to enjoy. CRPD recognizes environmentally unique and sensitive areas as designated nature preserves. The Columbus Nature Preserve system is one of a few city nature preserve programs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

Mock Park Nature Preserve is approximately 82.8-acres of the total 102.47-acres of Mock Park, Franklin County Parcel ID #010-129754-00. The park was acquired in 1959, with additional acreage being acquired in 1961 and 1963. The parkland adjacent to the nature preserve includes the Willis Athletic Complex, playground, sports courts, and sports fields. This management plan will focus on the nature preserve portion of Mock Park hereafter. Mock Park was designated as a nature preserve in 2016.

### 2.2 Location Description

Mock Park's address is 2520 Mock Road, Columbus, OH 43219. Mock Park is located in the eastern portion of Columbus, within the neighborhood of Bridgeview, north of Mock Road, east of Dawnlight Avenue, south of Agler Road, and west of Alum Creek and the Alum Creek Multi-Use Trail.

Surrounding land use includes urban residential housing with intermixed forested area along streams. See "Mock Park Nature Preserve" location map.

Upland area with steep bluff overlooking Alum Creek.


2520 MOCK RD, COLUMBUS OH 43219

# Mock Park Nature Preserve

Preserve Boundary

Nearby CRPD Properties

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# 3 AMENITIES AND ATTRIBUTES

## 3.1 Amenities

No constructed amenities exist within Mock Park Nature Preserve boundary, except an approximate 350-foot mowed trail and a shared parking lot with the adjacent parkland. The mowed trail ends at a steep slope adjacent to a perennial stream.

## 3.2 Landscape Context

Mock Park contains varying topography, including rolling hills, stream valleys, and steep bluffs abutting Alum Creek. Drainage flows to the east into Alum Creek and to the south, into unnamed tributaries to Alum Creek.

The Federal Emergency Management Agency (FEMA) Regulatory Floodway and 500-year floodplain exists within the Preserve along Alum Creek. Federal Emergency Management Agency (FEMA) 100-year floodplain and 500-year floodplain also exists along the eastern portion of a perennial unnamed tributary to Alum Creek. These floodplain areas provide habitat for fish and wildlife, recharge groundwater, and improve surface water quality.

Perennial unnamed tributary to Alum Creek containing cobble and gravel.

The following soils are mapped within Mock Park:

- **Alexandria silt loam,** with slopes varying from flat to steep, is described as deep, well drained soils composed of materials deposited by glaciers.
- **Bennington silt loam** is described as somewhat poorly drained soils formed in loamy till of medium lime content in relatively flat areas.
- **Cardington silt loam** with moderate slopes is described as very deep, moderately well drained soils composed of debris that accumulate at the bottom of a glacier.
- **Eldean-Urban land complex** has well drained soils on flat topography consisting of sandy and gravelly material from outwash materials.
- **Genesee silt loam** consists of well drained soils formed in generally flat floodplains.
- **Shoals silt loam** is somewhat poorly drained soil formed on relatively flat floodplain areas.

### 3.2.1 Streams

Mock Park is located in the Bliss Run-Alum Creek Watershed (Ohio EPA Hydrologic Unit (HUC) #050600011602). This watershed is located within a largely urban environment, making Mock Park an important feature for urban wildlife.

Mock Park also contains a perennial stream which is an unnamed tributary to Alum Creek. It is ranked as an Ohio EPA Headwater Habitat Evaluation Index Class, the highest quality headwater stream based on physical habitat. This stream contains good quality physical habitat, with a mixture of coarse substrates, including cobble and gravel, little siltation, and deep pools. Upstream of Mock, this stream is buried and the flow is conveyed through a culvert, so this open, free-flowing perennial stream is a unique feature of Mock.

A deep, linear pool within the unnamed tributary to Alum Creek.

Mock includes two main stream valleys: Alum Creek in the northeast portion and a perennial unnamed tributary to Alum Creek flowing from the west to east. Several additional streams flow into these two main stream valleys. In total, it is estimated the nature preserve contains 25 streams and over 11,000 linear feet of stream.

See "Mock Park Streams & Wetlands" map.

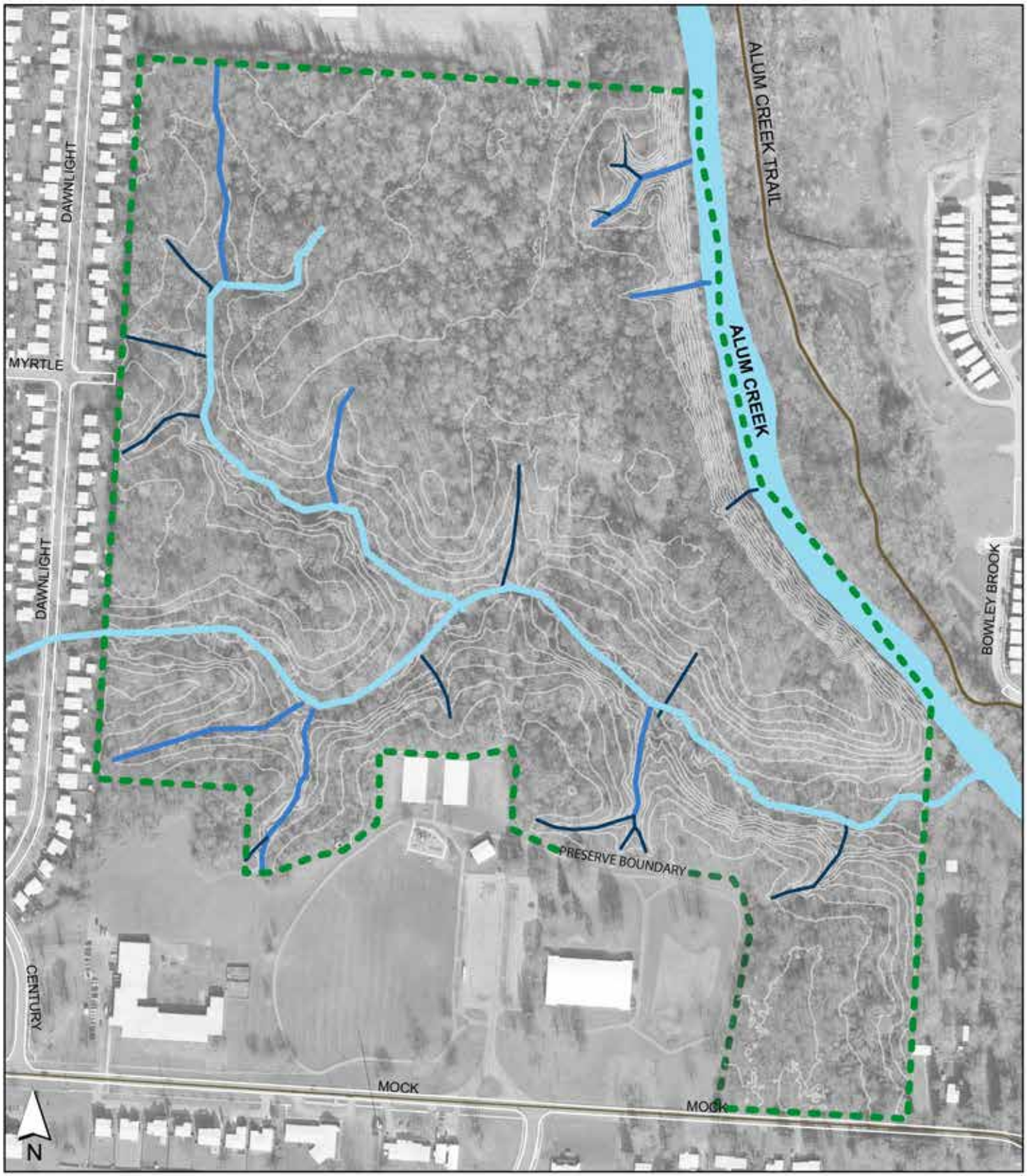
### 3.2.2 Wetlands

Mock includes no large or easily identifiable wetlands. Several small (<0.1-acre) wetlands abutting headwater streams exist within portions of the nature preserve. These smaller wetlands are mostly dominated by spicebush (*Lindera benzoin*), American elm (*Ulmus americana)*, and fowl manna grass (*Glyceria striata*).

Small potential wetland area.

Using the Ohio EPA Ohio Rapid Assessment Method, the wetland is considered higher quality with a preliminary Ohio EPA wetland Category of 2. These wetlands have good habitat and intact hydrology that are desired to be protected.

These small wetlands receive water from adjacent streams and filter the streams and other drainage that flows through the wetlands, prior to entering Alum Creek. See "Mock Park Streams & Wetlands" map.




# Mock Park Streams

0 250 500 Feet

Perennial Stream

Intermittent Stream

Ephemeral Stream

5' Contours

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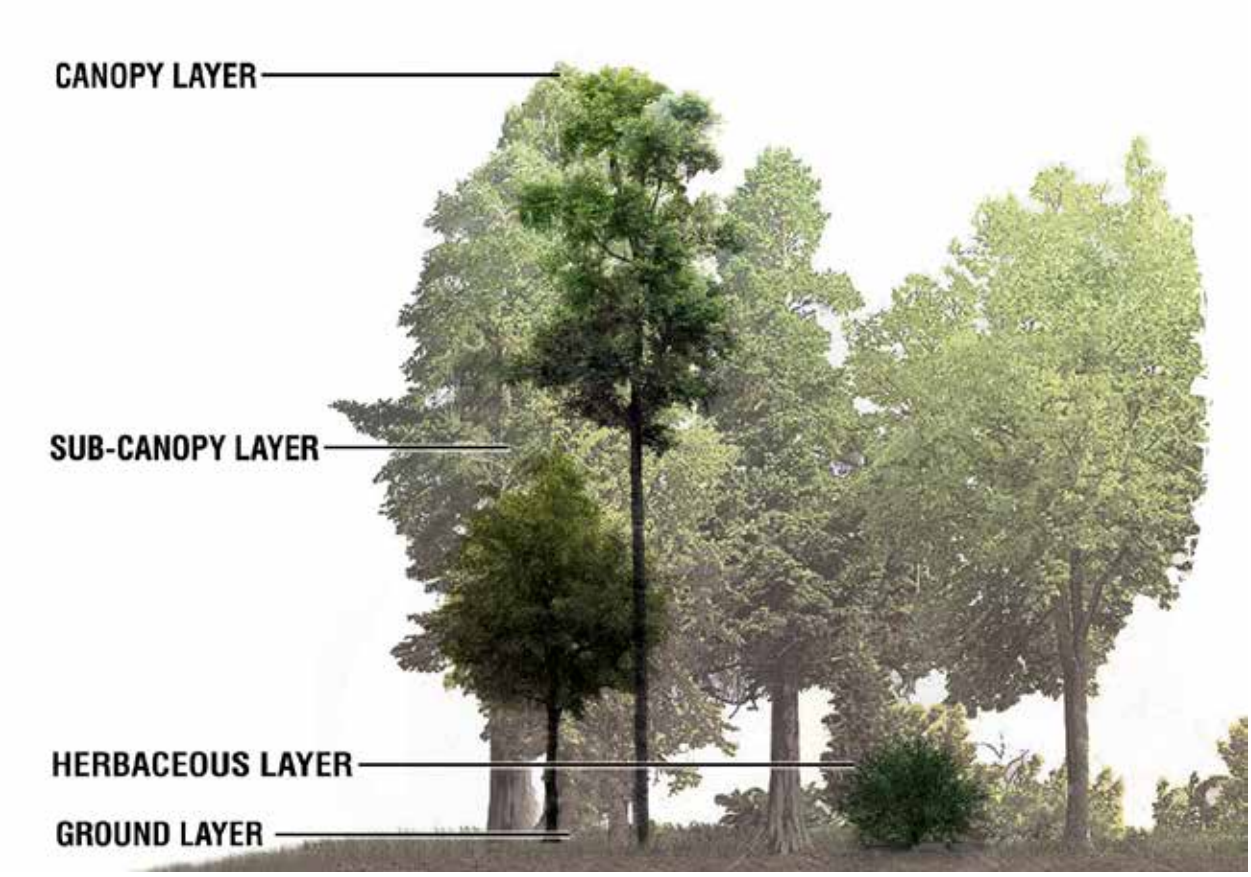
## 3.3 Vegetation and Habitat

Commonly observed native tree species include sugar maple (*Acer saccharum*), bitternut hickory (*Carya cordiformis*), and white oak (*Quercus alba*) within the upland forest habitat.




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

The native herbaceous layer is dominated by mayapple (*Podophyllum peltatum*), wild grape vine (*Vitis riparia*), wild garlic (*Allium vineale*), and hog nut (*Amphicarpaea bracteate*).

See "Mock Park Habitat Types & Invasive Species" map that illustrates the general vegetation coverage within Mock. Reported past management practices include mowing, prescribed burning, tree girdling, removal of invasive species, and herbicide treatment. The following habitat types were identified:

1. Upland Forest
2. River
3. Grassland/Herbaceous

The "Mock Park Known Species List (2022)" is included as an attachment.

### 3.3.1 Upland Forest

Mock consists of 78-acres of upland forest, which includes portions of mature forest. This forest serves as an important riparian area, a forested area surrounding streams, for the numerous headwater streams and Alum Creek. It 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 that Mock provides.

**Upland Forest**

**Upland Forest**

**Upland Forest** (with stream valley)

**Typical upland forest.**

### 3.3.2 River

Mock Park includes over 11,000 linear feet of stream, including two main stream valleys: Alum Creek in the northeast portion and a perennial unnamed tributary to Alum Creek flowing from the west to east. These streams contain good physical habitat and are able to flow freely and flood the surrounding landscape when needed. A majority of streams surrounding Mock Park are culverted. Riparian habitats along rivers are of particular importance for plant and wildlife habitat, and are often used by birds, mammals, and amphibians.

River

Steep stream valleys with an ephemeral stream flowing into Alum Creek.

### 3.3.3 Wetland

Mock Park includes several small (<0.1-acre) wetlands that surround headwater streams (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.

### 3.3.4 Grassland/Herbaceous

Mock Park includes approximately 2.1-acres of grassland/herbaceous vegetation, consisting of Canada goldenrod (*Solidago canadensis*), wild garlic (*Allium canadense*), and a mixture of grasses. Seeding of native prairie plants has occurred in grassland areas.

Grassland/Herbaceous (with stream)

Grassland/ Herbaceous

### 3.3.5 Invasive Vegetation

Dominant invasive species include three shrubs: privet (*Ligustrum* spp.), honeysuckle (*Lonicera* spp.), and multi-flora rose (*Rosa multi-flora*). Honeysuckle is most dense within the southwestern portion of Mock. Privet is most dense in the northern central portion and west central portion of Mock. Multi-flora rose is present throughout a majority of the nature preserve. Based on the extent of coverage of multi-flora rose, and due to its aggressive spread

which forms thickets and outcompetes native shrubs and herbaceous plants, removal of this invasive species is a priority.

See "Mock Park Habitat Types & Invasive Species" map.

## 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). Mock Park 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.

### Plants

No USFWS federally listed plant species or ODNR state listed plant species ranges or records are known to exist within Mock Park.

The following records or ranges for wildlife were identified within Mock Park:

### 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 Mock provides suitable habitat for the bats.

The large, mature trees found in Mock Park can provide habitat for endangered bat species.

### 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 Mock provide suitable food sources for monarch butterflies.


# Mock Park Habitat Types & Invasive Species

**Habitat Types:**

- Grassland/Herbaceous (2.14 acres)
- Upland Forest (78.2 acres)
- River (2.46 acres)

**Invasive Species:**

- Privet (9.73 acres)
- Honeysuckle (3.88 acres)
- Multi-Flora Rose (82.8 acres)

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## 3.5 Wildlife

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

Freshwater mussels, which are protected in the state of Ohio, are documented in Alum Creek.

Nestboxes have been installed in grassland areas. Bird species include:

- American redstart (*Setophaga ruticilla*)
- Baltimore oriole (*Icterus galbula*)
- downy woodpecker (*Picoides pubescens*)
- red-eyed vireo (*Vireo olivaceus*)
- veery (*Catharus fuscescens*)
- wood thrush (*Hylocichla mustelina*)
- yellow warbler (*Setophaga petechia*)
- yellow-billed cuckoo (*Coccyzus americanus*)

Other reported species include:

- eastern box turtle (*Terrapene carolina carolina*)

White-tailed deer fawn peaking behind a fallen tree trunk.

# 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

Mock Park Nature Preserve contains contiguous upland forest, which includes portions of mature forest. This forest serves as important riparian area for the numerous headwater streams and Alum Creek. It also supports habitat for a number of species.

Mock includes several streams, including two main stream valleys, Alum Creek in the northeast portion, and a perennial unnamed tributary to Alum Creek flowing from the west to east. These streams mostly contain good physical habitat and are able to flow freely and flood the surrounding landscape when needed. A majority of streams surrounding Mock Park are culverted.

Continued protection of the natural resources within Mock is vital, to ensure these resources remain for future generations. It is recommended that park users have a “leave no trace” mentality when visiting Mock Park.

It is important to understand the natural resources within Mock in order to prioritize management activities. One consideration would be to update the listing of observed species of flora and fauna within Mock 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, privet, and multi-flora rose, are prevalent throughout a majority of Mock. 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 Mock is pursued, the first priority should be the removal of multi-flora rose. This is due to the extensive coverage throughout Mock and the aggressive nature of multi-flora rose. Native herbaceous plants 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 Mock 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 invasives are removed.

## 4.2 Conservation

### 4.2.1 Visitor Management

To provide a safe and enjoyable visitor experience while protecting Mock Park'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

Engage neighbors and community members around Mock through volunteer event signs posted in Mock and posted on social media. Continue to engage with Friends of Alum Creek and Tributaries (FACT). 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 Mock Park. 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 Trails

One mowed trail currently exists within Mock. The trail stops once it reaches an unnamed tributary to Alum Creek. It is recommended this trail be expanded over the unnamed tributary to Alum Creek. A bridge could be constructed over the stream to allow wildlife observation while at the same time protecting the banks from being degraded. This would also provide visitors easier access to the north side of Mock. Such bridges should be installed in locations where observers would have minimal impact on wildlife.

In addition, trails may be able to be expanded through forested areas. No trees or significant native vegetation should be removed to install trails. Trail surface could consist of native soils and/or added native mulch.

### 4.3.2 Signage

One identifying sign exists for Mock.


Install signs identifying Mock Park as a Nature Preserve, along with a summary of the Nature Preserve regulations at the main access points at the mowed trail and Myrtle Avenue. Due to the unique setting of Mock Park being surrounded by residential development, additional signage could be considered in an effort to clearly demarcate the Mock Park Nature Preserve boundaries. Educational signage may also be installed regarding the streams, and upland forest habitat as well as to control litter. Additional signage is recommended to aid in preventing encroachment along the western and northern boundaries.

### 4.3.3 Stream Restoration

Two areas of potential stream restoration were identified. The main perennial headwater stream valley which flows into Alum Creek contains a portion along the existing mowed trail that contains little to no woody species within the riparian area. An ephemeral stream flowing west to east along the western boundary of Mock Park shows signs of being channelized and straightened. Both of these stream reaches are heavily incised and eroding. Restoration practices could be applied to each stream reach in order to restore the streams and improve downstream water quality.

# ATTACHMENTS

| Mock Park Known Species List (2022) | |
|---|---|
| **Plants** | |
| Scientific Name | Common Name |
| *Acer negundo* | Box Elder |
| *Acer nigrum* | Black maple |
| *Acer rubrum* | Red Maple |
| *Acer saccharinum* | Silver Maple |
| *Acer saccharum* | Sugar Maple |
| *Achillea millefolium* | Common Yarrow |
| *Actaea alba* | Baneberry |
| *Aesculus glabra* | Ohio Buckeye |
| *Agrimonia parviflora* | Swamp Agrimony |
| *Agrimonia pubescens* | Soft Agrimony |
| *Agrimonia rostellata* | Woodland Agrimony |
| *Agrostis gigantea* | Black Bent |
| *Agrostis hyemalis* | Winter Bentrgrass |
| *Agrostis perennans* | Upland Bentgrass |
| *Ailanthus altissima* | Tree of Heaven |
| *Alliaria petiolata* | Garlic Mustard |
| *Allium canadense* | Wild Garlic |
| *Allium tricoccum* | Ramp |
| *Allium vineale* | Wild Garlic |
| *Ambrosia artemisiifolia* | Common Ragweed |
| *Amphicarpaea bracteate* | Hog Nut |
| *Anemone virginiana* | Tall Thimbleweed |
| *Apocynum cannabinum* | Dogbane |
| *Arabis laevigata* | Smooth Rockcress |
| *Aristida oligantha* | Prairie Threeawn |
| *Artemisia annua* | Wormwood |
| *Asarum canadense* | Canada Wild Ginger |
| *Asimina triloba* | Pawpaw |
| *Asplenium platyneuron* | Ebony Spleenwort |
| *Aster lanceolatus* | Panicled Aster |
| *Aster lateriflorus* | Calico Aster |
| *Aster novae-angliae* | New England Aster |
| *Aster pilosus* | Hairy White Oldfield Aster |
| *Aster puniceus* | Purplestem Aster |
| *Aster sagittifolius* | Arrow-leaved Aster |
| *Aster shortii* | Short's Aster |
| *Berberis thunbergii* | Japanese Barberry |
| *Bidens frondosa* | Beggarticks |

| Mock Park Known Species List (2022) | |
|---|---|
| **Plants** | |
| Scientific Name | Common Name |
| *Botrychium dissectum* | Cutleaf Grape Fern |
| *Botrychium virginianum* | Rattlesnake Fern |
| *Brachyelytrum erectum* | Southern long-awned Wood Grass |
| *Bromus pubescens* | Hairy Woodland Brome |
| *Camassia scilloides* | Wild Hyacinth |
| *Campanula americana* | Tall Bellflower |
| *Cardamine concatenata* | Cutleaf Toothwort |
| *Carex aggregata* | Glomerate Sedge |
| *Carex albicans* | Whitetinge Sedge |
| *Carex albursina* | White Bear Sedge |
| *Carex annectens* | Yellowfruit Sedge |
| *Carex blanda* | Common Woodland Sedge |
| *Carex cephalophora* | Oval-leaf Sedge |
| *Carex debilis* | White Edge Sedge |
| *Carex digitalis* | Slender Woodland Sedge |
| *Carex hirsutella* | Hairy-Leaved Sedge |
| *Carex jamesii* | James' Sedge |
| *Carex pensylvanica* | Pennsylvania Sedge |
| *Carex rosea* | Rosy Sedge |
| *Carex stipata* | Prickly Sedge |
| *Carex vulpinoidea* | Common Fox Sedge |
| *Carpinus caroliniana* | American Hornbeam |
| *Carya cordiformis* | Bitternut Hickory |
| *Carya ovata* | Shagbark Hickory |
| *Celastrus scandens* | American Bittersweet |
| *Celtis occidentalis* | Common Hackberry |
| *Chaerophyllum procumbens* | Spreading Chervil |
| *Chrysanthemum leucanthemum* | Oxeye Daisy |
| *Cichorium intybus* | Chicory |
| *Cinna arundinacea* | Wood Reed Grass |
| *Circaea lutetiana* | Broad-leaved Enchanter's Nightshade |
| *Cirsium arvense* | Canada Thistle |
| *Cirsium discolor* | Field Thistle |
| *Cirsium vulgare* | Bull Thistle |
| *Claytonia virginica* | Spring Beauty |
| *Conyza canadensis* | Canadian Fleabane |
| *Cornus alternifolia* | Pagoda Dogwood |
| *Cornus florida* | Flowering Dogwood |

| Mock Park Known Species List (2022) | |
|---|---|
| **Plants** | |
| Scientific Name | Common Name |
| *Crataegus sp.* | Hawthorn |
| *Cryptotaenia canadensis* | Honewort |
| *Cystopteris protrusa* | Lowland Fragile Fern |
| *Danthonia spicata* | Poverty Oatgrass |
| *Desmodium glutinosum* | Pointedleaf Ticktrefoil |
| *Desmodium nudiflorum* | Stemless Tick Trefoil |
| *Desmodium paniculatum* | Panicled-leaf Ticktrefoil |
| *Diarrhena americana* | American Beak Grass |
| *Dicentra cucullaria* | Dutchman's Breeches |
| *Eleagnus umbellata* | Autumn Olive |
| *Elymus patula* | Hystrix Patula |
| *Elymus villosus* | Hairy Wild Rye |
| *Elymus virginicus* | Virginia Wild Rye |
| *Equisetum arvense* | Common Horsetail |
| *Erigeron philadelphicus* | Philadelphia Fleabane |
| *Erythronium americanum* | Yellow Trout Lily |
| *Euonymus alatus* | Burning Bush |
| *Euonymus atropurpureus* | Eastern Wahoo |
| *Euonymus fortunei* | Wintercreeper Euonymus |
| *Euonymus obovatus* | Running Strawberry Bush |
| *Eupatorium altissimum* | Tall Boneset |
| *Eupatorium rugosum* | Fall Poison |
| *Euthamia graminifolia* | Grass-leaved Goldenrod |
| *Fagus grandifolia* | American Beech |
| *Festuca arundinacea* | Tall Fescue |
| *Festuca subverticillata* | Nodding Fescue |
| *Floerkia proserpinacoides* | False Mermaidweed |
| *Fraxinus americanus* | White Ash |
| *Fraxinus pennsylvanica* | Green Ash |
| *Fraxinus quadrangulata* | Blue Ash |
| *Galium aparine* | Catchweed Bedstraw |
| *Galium circaezans* | Licorice Bedstraw |
| *Galium concinnum* | Shining Bedstraw |
| *Galium pilosum* | Hairy Bedstraw |
| *Galium triflorum* | Fragrant Bedstraw |
| *Geranium maculatum* | Wild Cranesbill |
| *Geum canadense* | White Avens |
| *Geum vernum* | Spring Avens |

| Mock Park Known Species List (2022) | |
|---|---|
| **Plants** | |
| Scientific Name | Common Name |
| *Geum virginianum* | Cream Avens |
| *Gleditsia triacanthos* | Honey Locust |
| *Glyceria striata* | Fowl Mannagrass |
| *Hackelia virginiana* | Beggar's Lice |
| *Hemerocallis fulva* | Tawny Daylily |
| *Hepatica acutiloba* | Liverleaf Liverwort |
| *Hydrophyllum canadense* | Bluntleaf Waterleaf |
| *Hydrophyllum macrophyllum* | Hairy Waterleaf |
| *Hypericum perforatum* | St. John's Wort |
| *Hypericum punctatum* | Spotted St. John's-wort |
| *Impatiens capensis* | Common Jewelweed |
| *Ipomoea pandurata* | Wild Potato Vine |
| *Jeffersonia diphylla* | Twinleaf |
| *Juglans nigra* | Black Walnut |
| *Juncus dudleyi* | Dudley's Rush |
| *Juncus tenuis* | Slender Rush |
| *Juncus torreyi* | Torrey's Rush |
| *Juniperus virginiana* | Eastern Red Cedar |
| *Justicia americana* | American Water Willow |
| *Leersia virginica* | Whitegrass |
| *Lindera benzoin* | Spicebush |
| *Ligustrum vulgare* | Common Privet |
| *Liparis lilifolia* | Mauve Sleekwort |
| *Liriodendron tulipifera* | Yellow Poplar |
| *Lobelia inflata* | Indian Tobacco |
| *Lobelia siphilitica* | Blue Cardinal Flower |
| *Lonicera japonica* | Great Blue Lobelia |
| *Lonicera maackii* | Amur Honeysuckle |
| *Lonicera morrowii* | Morrow's Honeysuckle |
| *Lonicera tatarica* | Tatarian Honeysuckle |
| *Lysimachia nummularia* | Moneywort |
| *Menispermum canadense* | Common Moonseed |
| *Mimulus alatus* | Winged Monkey Flower |
| *Monotropa uniflora* | Indian Pipe |
| *Morus rubra* | Red Mulberry |
| *Muhlenbergia schreberi* | Nimblewill |
| *Osmorhiza claytonii* | Clayton's Sweetroot |
| *Osmorhiza longistylis* | Sweet Cicely |

| Mock Park Known Species List (2022) | |
|---|---|
| **Plants** | |
| Scientific Name | Common Name |
| *Ostrya virginiana* | Eastern Hop-hornbeam |
| *Oxalis stricta* | Common Yellow Wood Sorrel |
| *Panicum implicatum* | Panic Grass |
| *Panicum latifolium* | Broad-leaved Panic Grass |
| *Parthenocissus quinquefolia* | Virginia Creeper |
| *Parthenocissus vitacea* | Hiedra Creeper |
| *Penstemon digitalis* | Foxglove Beardtongue |
| *Phlox divaricata* | Woodland Phlox |
| *Phryma leptostachya* | American Lopseed |
| *Phytolacca americana* | Pokeweed |
| *Pilea pumila* | Clearweed |
| *Platanus occidentalis* | American Sycamore |
| *Poa alsodes* | Grove Blue Grass |
| *Poa compressa* | Canada Bluegrass |
| *Podophilum peltatum* | Mayapple |
| *Polygonatum biflorum* | Smooth Solomon's-seal |
| *Polygonum persicaria* | Spotted Ladysthumb |
| *Polygonum punctatum* | Dotted Smartweed |
| *Populus deltoides* | Eastern Cottonwood |
| *Potentilla canadensis* | Dwarf Cinquefoil |
| *Prenanthes altissima* | Tall Rattelsnakeroot |
| *Prunella vulgaris* | Common Self-heal |
| *Prunus serotina* | Black Cherry |
| *Prunus virginiana* | Chokecherry |
| *Quercus alba* | White Oak |
| *Quercus bicolor* | Swamp White Oak |
| *Quercus muhlenbergii* | Chinquapin Oak |
| *Quercus palustris* | Pin Oak |
| *Quercus rubra* | Red Oak |
| *Ranunculus abortivus* | Littleleaf Buttercup |
| *Rhamnus cathartica* | European Buckthorn |
| *Robinia pseudoacacia* | Black Locust |
| *Rosa carolina* | Carolina Rose |
| *Rosa multiflora* | Multiflora Rose |
| *Rosa setigera* | Climbing Prairie Rose |
| *Rubus allegheniensis* | Allegheny Blackberry |
| *Rubus occidentalis* | Bblack Raspberry |
| *Rudbeckia hirta* | Black-eyed Susan |

| Mock Park Known Species List (2022) | |
|---|---|
| **Plants** | |
| Scientific Name | Common Name |
| *Rudbeckia triloba* | Brown-eyed Susan |
| *Salix exigua* | Sandbar Willow |
| *Salix nigra* | Black Willow |
| *Sanguinaria canadensis* | Bloodroot |
| *Sanicula canadensis* | Canadian Blacksnakeroot |
| *Sanicula gregaria* | Clustered Black Snakeroot |
| *Sanicula marilandica* | Maryland Black Snakeroot |
| *Sassafras albidum* | Sassafras |
| *Scirpus atrovirens* | Common Bulrush |
| *Scirpus pendulus* | Rufous Bulrush |
| *Sedum ternatum* | Woodland Stonecrop |
| *Senecio aureus* | Golden Ragwort |
| *Senecio obovatus* | Roundleaf Ragwort |
| *Silene virginica* | Fire Pink |
| *Smilacina racemosa* | False Spikenard |
| *Smilax hispida* | Bristly Greenbrier |
| *Solidago caesia* | Wreath Goldenrod |
| *Solidago canadensis* | Canadian Goldenrod |
| *Solidago flexicaulis* | Broadleaf Goldenrod |
| *Solidago gigantea* | Giant Goldenrod |
| *Solidago juncea* | Early Goldenrod |
| *Solidago nemoralis* | Common Goldenrod |
| *Staphylea trifolia* | American Bladdernut |
| *Thalictrum dioicum* | Early Meadow-rue |
| *Tilia americana* | American Basswood |
| *Tovara virginiana* | Jumpseed |
| *Toxicodendron radicans* | Common Poison Ivy |
| *Tridens flavus* | Grease Grass |
| *Trillium grandiflorum* | Great White Trillium |
| *Triosteum aurantiacum* | Orange-Fruited Horse Gentian |
| *Typha latifolia* | Broadleaf Cattail |
| *Ulmus americana* | American Elm |
| *Ulmus rubra* | Slippery Elm |
| *Uvularia grandiflora* | Largeflower Bellwort |
| *Valeriana pauciflora* | The Largeflower Valerian |
| *Valerianella umbilicata* | Navel Cornsalad |
| *Verbesina alternifolia* | Wingstem |
| *Vernonia gigantea* | Giant Ironweed |

| Mock Park Known Species List (2022) | |
|---|---|
| **Plants** | |
| Scientific Name | Common Name |
| *Veronica officinalis* | Common Gypsyweed |
| *Viburnum dentatum* | Arrowwood Viburnum |
| *Viburnum opulus* | European Cranberry Bush |
| *Viburnum prunifolium* | Black Haw |
| *Viola sororia* | Woolly Blue Violet |
| *Viola striata* | Striped Cream Violet |
| *Vitis aestivalis* | Summer Grape |
| *Vitis riparia* | Riverbank Grape |
| *Zanthoxylum americanum* | Prickly Ash |

| Mock Park Known Species List (2022) | |
|---|---|
| **Mammals** | |
| Scientific Name | Common Name |
| *Odocoileus virginianus* | White-tailed Deer |

| Mock Park Known Species (2022) | |
|---|---|
| **Reptiles** | |
| Scientific Name | Common Name |
| *Terrapene carolina carolina* | Eastern Box Turtle |

| Mock Park Known Species List (2022) | |
|---|---|
| **Birds** | |
| Scientific Name | Common Name |
| *Agelaius phoeniceus* | Red-winged Blackbird |
| *Baeolophus bicolor* | Tufted Titmouse |
| *Bombycilla cedrorum* | Cedar Waxwing |
| *Branta canadensis* | Canada Goose |
| *Buteo jamaicensis* | Red-tailed Hawk |
| *Cardinalis cardinalis* | Northern Cardinal |
| *Catharus fuscescens* | Veery |
| *Chaetura pelagica* | Chimney Swift |
| *Coccyzus americanus* | Yellow-billed Cuckoo |
| *Colaptes auratus* | Northern Flicker |
| *Contopus virens* | Eastern Wood-Pewee |
| *Corvus brachyrhynchos* | American Crow |
| *Cyanocitta cristata* | Blue Jay |
| *Dryocopus pileatus* | Pileated Woodpecker |
| *Dumetella carolinensis* | Gray Catbird |
| *Empidonax virescens* | Acadian Flycatcher |
| *Geothlypis formosa* | Kentucky Warbler |
| *Geothlypis trichas* | Common Yellowthroat |
| *Hirundo rustica* | Barn Swallow |
| *Hylocichla mustelina* | Wood Thrush |
| *Icterus galbula* | Baltimore Oriole |
| *Leuconotopicus villosus* | Hairy Woodpecker |
| *Melanerpes carolinus* | Red-bellied Woodpecker |
| *Melospiza melodia* | Song Sparrow |
| *Molothrus ater* | Brown-headed Cowbird |
| *Passerina cyanea* | Indigo Bunting |
| *Picoides pubescens* | Downy Woodpecker |
| *Pipilo erythrophthalmus* | Eastern Towhee |
| *Piranga olivacea* | Scarlet Tanager |
| *Poecile carolinensis* | Carolina Chickadee |
| *Polioptila caerulea* | Blue-gray Gnatcatcher |
| *Quiscalus quiscula* | Common Grackle |
| *Setophaga petechia* | Yellow Warbler |
| *Setophaga ruticilla* | American Redstart |
| *Sitta carolinensis* | White-breasted Nuthatch |
| *Spinus tristis* | American Goldfinch |
| *Spizella pusilla* | Field Sparrow |
| *Thryothorus ludovicianus* | Carolina Wren |

| Mock Park Known Species List (2022) | |
|---|---|
| **Birds** | |
| Scientific Name | Common Name |
| *Turdus migratorius* | American Robin |
| *Vireo gilvus* | Warbling Vireo |
| *Vireo olivaceus* | Red-eyed Vireo |