

Ellanor C. Lawrence Park

Interpretive Plan

FY 2014 - 2018





Ellanor C. Lawrence Park

Interpretive Plan – Revised Spring 2013

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I INTRODUCTION:

A. Park Description and Location

Ellanor C. Lawrence Park (ECLP) is a 650 acre site between Chantilly and Centreville in western Fairfax County and trisected by Walney Road and Route 28 in the Sully Supervisory District. The park is currently managed by the Resource Management Division of the Fairfax County Park Authority. In addition to its own master plan, the park is master planned as a site within the Sully Regional Master Plan. The park contains the following facilities: Walney house and grounds circa 1780's, 1800's era out-buildings, Walney pond, picnic pavilion, Cabell's Mill circa 1785, Middlegate house complex including caretaker's rental apartment, a modern single family residence, multiple home site ruins, trails, and a ball field complex with a playground.

B. Park Purpose and Mission

The purpose of Ellanor C. Lawrence Park is the foundation for this interpretive planning document, and is outlined in this mission statement:

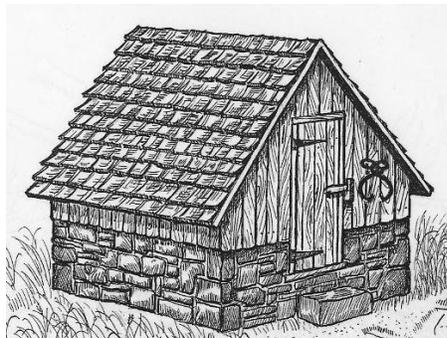
To preserve, conserve, and interpret the natural, cultural, and recreational resources of Ellanor C. Lawrence Park; which enriches communities in western Fairfax County.

This purpose supports the Park Authority vision statement:

The Fairfax County Park Authority strives to inspire and sustain a passion for parks and leisure experiences that enhances our community's quality of life.

C. Purpose of the Plan

The purpose of this plan is to guide present and future site staff in developing key interpretive messages for personal and non-personal interpretive media. These interpretive messages given through programs, exhibits, waysides, publications, and electronic media will promote the stewardship of Ellanor C. Lawrence Park. The plan will also guide the smooth integration of the following park sections: a Senior Interpreter position attached to Cub Run Recreation Center, RMD Interpretive and Volunteer Services, Historic Properties Rental Services, Cultural Resource Management and Protection Section, Natural Resource Management and Protection Section, and Active Recreation managed by Area 5 Management and Park Operations Division. This plan integrates the Park Authority and Resource Management Division strategic plans, the Natural and Cultural Resource Management Plans, and the Sully Woodlands Regional Master Plan. It also takes into account the Bull Run Planning District Plan. The plan will be reviewed and updated after a period of five years unless issues require it sooner.



II. INTERPRETIVE GOALS, THEMES, AND OBJECTIVES:

A. Goals

Interpretive goals for Ellanor C. Lawrence Park are met through a range of tools including programs, exhibits, waysides, publications, electronic media, and personal interactions with visitors. The goals are based on the unique resources present and include the needs of the patron groups interacting with these resources. The interface of the resource and its' users creates opportunities for the interpretive themes to be used by site staff to connect visitors in a memorable and personally meaningful way to reach the goals listed below.

A goal specific to this interpretive plan period will be to provide a foundation for the re-master planning of the park within the next few years. The original master plan was completed in August of 1978 and was last updated in June of 1991. The park now falls under the Sully Woodlands Regional Master Plan completed in 2006. An updated site master plan will need to dovetail with this regional master plan. Due to heavy thru traffic on Walney Road, closure of this road as specified in the original master plan has never been carried out. Other park features specified in the original master plan will not be developed due to current resource stewardship concerns, as well as development considerations guided by residential growth surrounding the park property.

Interpretive Goals:

1. To promote stewardship of cultural and natural resources at Ellanor C. Lawrence Park within, Sully Supervisor District, Fairfax County, and the region as a whole.
2. To preserve and interpret Walney house and grounds, Cabell's Mill, the Middlegate complex, and all other park historic cultural features.
3. To conserve and interpret the park's diverse communities of native animals and plants.
4. To highlight the park's unique natural landscape and the changes caused by the last 270+ years of human activity.
5. Promote and expand community connectedness through park activities by connecting patrons, volunteers, partnership groups, advocacy groups, and other decision makers and stakeholders to the park's resources and interpreting their role in enriching the community.

B. Themes and Sub Themes

Ellanor C. Lawrence Park has a variety of historic structures and cultural history features set within a rich and diverse natural area, surrounded by heavily development. The park is surrounded by suburban residential and business development and is bordered and trisected by major highway systems. Despite being surrounded by development, the park is connected to other parks within the district through stream valley corridors.

The site has had human activity for at least 9,000 years. Evidence of intensive human use starts with the presence of the earliest permanent dwellings we know of that date from the early 1740's. Most of the structures built on the site were single family dwellings. Other buildings, most made of stone, were used for light industry, namely milling and dairy farming. This mix of dwelling features provides a unique opportunity to interpret the growth and expansion of western Fairfax County from both a residential and commercial view point.

Themes and sub-themes were developed by staff to address the site's unique qualities within this county and region. Special attention was given to matching the site's cultural and natural resources with universal concepts that relate to the site's varied user groups. The following topics are not a complete listing of ones that apply to the site, but are the themes and sub-themes that staff decided would be the key concepts to interpret during this plan period.

1. Theme: Stewardship of natural resources preserves our natural assets and benefits everyone's community.

Current park users have a much different relationship to the park's natural resources than the past residents that lived and worked on the property. The concept of stewardship of natural resources is a difficult one for many of our current visitors to understand. The park is managed from the view point that parks belong to all, so individuals should only enjoy it in a non-consumptive way, to preserve the resource for the next visitor. However, some visitors have a different point of view that perceives resources that belong to all, as meaning they can be used and consumed for their personal purposes. Many new residents to the county hold to this second point of view of what public common ownership of natural resources means. The conflicts arising from these differing points of view allow for many interpretive opportunities. The management of these resources also creates multiple interpretive connections.

Sub-themes:

- * Our relationship with natural resources has changed over time.
- * We manage our habitats to benefit people and wildlife.
- * Change is continuous in our relationship with natural resources and conflict is always part of this process.
- * Clean plentiful water is essential for survival at all levels of life.
- * The preservation of healthy forests benefits communities of animals, plants, and people beyond their canopy.
- * Our forests keep us healthy in multiple ways.
- * The health of Walney Creek and Pond are dependent on our actions beyond their banks.
- * Open spaces are actually filled with a number of competing communities.

2. Theme: Ellanor & David Lawrence took actions to allow you to enjoy this unique place they were passionate about.

The availability of multiple clear water sources has made the park land attractive for use by humans and animals over a long period of time. These head waters provide an essential resource for life at all levels. These conditions supported productive land that has been used by numerous residents over time. The last private owner, Ellanor C. Lawrence, felt a strong connection to the unique natural and cultural resources of this land and felt it should be available to everyone so they could share in the joy it gave her. She had a strong interest in gardens and landscape improvements. Her desire to improve and steward the site's resources is a mission the Park Authority continues.

Sub-themes:

- * Ellanor C. Lawrence's passion for this place compelled her to preserve it for you.
- * Healthy streams and forests are a responsibility the Lawrence's knew we all share in common.
- * Our public lands require investment to maintain their value.
- * Ellanor's appreciation for the beauty of nature is an ideal we carry on.
- * David and Ellanor Lawrence gave us this land to preserve its unique resources.

- * Ellanor Lawrence’s gift preserves resources that are critical to human health and well-being.

3. Theme: The Machens left us a unique record of their lives on this land.

Western Fairfax County has a rich history of family farming and light industry. The property that is now Ellanor C. Lawrence Park is an excellent example of this type of land use, having been used by multiple family farming operations. The landscape bears multiple indications of this use. The park’s main era of significance for family farming is the mid to late 1800’s, when the Machen family (1843-1913) made a number of alterations and improvements to the property. The Civil War impacted the Machen’s emotionally and left permanent evidence on their property.

Sub-themes:

- * The Machens used scientific methods to improve the health of the soil.
- * The Machens’ economic success depended upon the work of free and enslaved people.
- * The Machen family cooperated to discover the best techniques to secure success for their farm.
- * The tragedies that struck the Machen family should make us wonder if we would have the strength to carry on.
- * The Civil War temporarily divided the Machen family and imposed hardships that threatened their safety and wealth.

4. Theme: Working with this land gave people a chance to define their own American Dream.

The park land was used by American Indians prior to European immigrant use for home sites and to support hunting parties traveling through the area. Since the early 1700’s the land has been worked by new immigrants to the area, enslaved peoples, indentured servants, and hired hands who allowed the families that owned and/or leased the land to work toward success. Cabell’s Mill provided commerce in the community through grain and sumac grinding. Multiple home sites are related to this light industrial site. Multiple families owned and worked the mill over its operational time period. Tobacco production and culture was, and is, very important within Virginia. It was a very important cash crop from the Brown ownership period through the Machens. Family farms produced livestock of various types, kept bees, and produced a number of grain, vegetable, and fruit crops.

Sub-themes:

- * Living on the Brown family homestead was full of daily challenges.
- * The park’s stone structures show the craftsmanship of its earlier residents.
- * Our connection to this land is different than it was for its past residents.
- * American Indians used this land, but left us few traces.
- * Big Rocky Run’s steadily flowing waters have connected a variety of people to this landscape.
- * Well maintained soils produce crops that contribute to our healthy lives.

C. Objectives

Measurable objectives will be created for each theme to insure that the interpretive messages are being delivered and are generating the desired results. These objectives will be met through a number of tasks outlined in a two-year action plan sheet. These tasks will be chosen to reach the desired result from the learning experience. They will also take into account the expectations staff have for a change in audience behavior and perception of the themes. The two-year action plan sheet(s) are attached in section VI.

III. PARK RESOURCES:

A. **Recreational**

Ellanor C. Lawrence Park contains active and passive recreational features. The majority of the active recreational features are clustered in the western section of the park with direct access to Route 28 via a traffic light intersection.

Recreational features include:

- Ball Field Complex – Fields include: three grass rectangular, one lighted artificial turf rectangular, and three diamonds of which two are lighted. The complex contains paved parking for 271 cars.
- Playground with two structures.
- Public leaf and woodchip mulch bins.
- Two basketball courts.
- Exercise station course.
- Four open play areas.
- Picnic Pavilion – 26' diameter with capacity for 30.
- Outdoor Amphitheater – with 16' x 20' electrified stage with bench seating for 75.
- Trails – Over 4.9 miles with 14 bridges and 21 benches. (Mixed surface types.)
- Pond – 1.3 acres with two 20'x12' platforms and a 95' boardwalk.

B. **Natural**

Ellanor C. Lawrence is in the transition zone between the coastal plain to the east and the mountains to the west. This dynamic zone and the variety of habitats located within the park attract and support a diversity of animals and plants. Located along the rim of the Triassic Basin which stretches to the foot hills of the Bull Ridge Range, the site is an ideal spot to view migrating birds. The topography of the site has been altered by direct and indirect human activity over the last 270 years. Ground water is a prominent feature of the park with seeps and springs throughout the property.

Natural features include:

- Animals – Species lists are contained in the appendixes.
- Plants – Species lists are contained in the appendixes.
- Forest Cover – While Fairfax County is full of rich natural resources, these areas are quickly being compromised by urban and suburban development. According to The State of Chesapeake Forests, a research document compiled by the U.S. Forest Service in conjunction with The Conservation Fund, Fairfax County lost 26% of its forest cover from 1986 to 1999. Loss of forest cover has continued throughout the county between 1999 and today. This makes the forest resources protected within the park that much more valuable to the surrounding community. The park's forest cover has many 'middle-aged' stages of succession, which indicates that most of the park's former fields were abandoned in phases during the period 1900-1935. Sections of *Juniperus virginiana* and *Pinus virginiana* are evidence of more recent successional change in former fields and open space. Maturing stands of oak, hickory and beech are located in the north and east sections of the property.
- Middlegate Meadows – The large meadow is located behind the Middlegate complex and Cabell's Mill and bordered by Big Rocky Run. There is a smaller meadow and rain garden in front of the Middlegate complex east and up-slope of the gravel parking lot. The meadows are maintained through mechanical mowing and prescribed burns. The

meadows contain a bluebird box trail and mowed walking paths. Non-native plants are controlled through manual removal and herbicides.

- Pond - Constructed in the 1950's, it was dredged and expanded during the period 1993-95. A boardwalk and two fishing platforms were installed at that time. The reconstruction included a landscape plan and installed plantings. A few tree swallow boxes are maintained here. A maintenance project was completed in July of 2012 to dredge the northern end of the pond surrounding the board walk. The project installed stone weirs to slow runoff discharge into the pond to settle out sediment in a more focused way for future clean out.
- Walney Spring and Creek – This spring provides water for the dairy complex at Walney. Due to its steady flow and clean source, Walney Creek has continually received an acceptable rating (around 8) when monitored by Northern Virginia Soil & Water Conservation District.
- Big Rocky Run – This medium sized stream runs through the southern edge of the property from an east to west direction before joining Cub Run and then Bull Run. It was in good shape when monitored by the Va. Master Naturalist Program in 2009, but is at a lower quality level than Walney Creek. It was given a biological monitoring rating of very poor in 1999 according to the 2007 Annual Report on Fairfax County's Streams prepared by the Fx. Co. Dept. of Public Works and Environmental Services. They have not published any more recent data for a spot within the park. The section between Braddock Road and Route 28 is part of a stream restoration starting in 2010.
- Roundlick Run – This small spring and run-off fed, seasonally variable water course, begins just east of Walney Road fed by a storm water retention pond for The Preserve at Wynmar housing development. It runs through the northern edge of the park from east to west crossing the gas pipe line right-of-way being additionally feed by surface runoff and small natural seeps. It flows under Route 28 and continues west out of the park where it empties into Cub Run.
- Vernal Pools – A number of natural pools exist in the park near springs and where surface runoff collects on the property. A vernal pool was constructed in a spring fed runoff channel along the north loop trail in 2008.
- Transcontinental Gas Pipeline Easement – This easement transects the park, east to west, along the northern edge. It is mowed at least once annually, which maintains it as warm season grassland habitat. A bluebird trail is maintained along the easement edge. The easement has one spring providing water that runs across its surface before forming a small creek that travels west under Route 28. Due to soil compaction, the water persists on the surface of the gas line and forms a number of active vernal pools each spring within the easement right of way and along its southern edge. A fire road is maintained by regular mowing along the full length of the easement's southern edge to join the fire road through the woods along Route 28 to Popular Tree Road.

C. Cultural

Ellanor C. Lawrence Park (County # 054-2P02) contains numerous cultural history sites. Multiple era sites are collected together within the boundaries of the park. Three state registered sites have revealed prehistoric artifacts. State site # 44FX-0537 yielded a quartz bifurcate spear point and debitage dated to more than 8,500 years old. This establishes a firm date for human "occupation" of the park land between Paleo-Indian and Archaic Indian cultures. The first documented occupation of non-native peoples was about 1742 by Thomas Brown, a tenant farmer of European decent living on a portion of the property.

The “Environmental Assessment of the Conceptual Master Plan of Ellanor C. Lawrence Park” prepared in 1977, listed 30 potential archaeological sites. Since that assessment new sites have been identified. A basic archaeological survey of Walney was conducted by a Chantilly High School class in 1976. The only site archaeologically studied completely is the Thomas Brown family farm site. That study, conducted by Dewberry & Davis and The College of William & Mary Center for Archaeological Research, was conducted in April, 1997 as part of the I-66 / Route 28 interchange improvements project. {State Project: 0066-029-F22, PE-101 }

Cultural features include:

- Walney House and Grounds. House built circa 1780 by Coleman Brown. Remodeled in 1875 by James Machen after a frame house, located 10 yards from the southeast corner of Walney, burned on December 30, 1874. The Ellanor C. Lawrence renovation took place in 1948, and was done by architect Clarendon Peterson and stone mason William Crouch. This included adding a wing to the north end, garden walls, and building a stone garage. The house was reconstructed by the Park Authority in 1981/82. This reconstruction left the exterior stone work intact but gutted all the interior wood work and roof. The exterior stone work was repaired in May 1993 by Southern Maryland Restoration, Inc. Small masonry repairs were done by FCPA maintenance staff over the years. These repairs are gray in color and of different texture due to the use of Portland cement. Mortar repairs were conducted on the east and south walls, and chimney in August 2012 by Lanham Construction. They applied a sealer to their repaired mortar work. An archaeological survey was completed January 29, 1981 by Fairfax County Archaeologist Edward Chatelain. Archaeological work was done in October of 2012 on the lawn to the north and east of the house for the installation of an underground propane tank and fuel line entering the building’s north side. These test pit surveys were conducted by Chris Sperling of FCPA. A ground penetrating radar scan survey was conducted on the lawn and grounds to the southeast of the house on June 12, 2012 by Below the Turf, LLC. The area surveyed included the front lawn extending to the woods behind the reconstructed demonstration smokehouse. Features found included the course of the original wagon road approach to the house. Walney was placed on the Daughters of the American Revolution list of historic buildings in 2007 and a plaque was installed on a rock at the southeast corner. {44FX-0350} (054-2 #H-4) Property Id. 44-4-001-3. [DHR_A_NUM 029-0155]
- Dairy Foundation. Circa 1845. A “*cheese factory*” lower room addition was built in 1881 by James Machen. A spring house was added circa late 1940’s by Ellanor C. Lawrence. [In 1880 James Machen was producing 3,000 pounds of butter per year.] A Historic Structures Report was completed February 15, 2012 by Shaffer, Wilson, Sarver & Gray, PC. SWS&G also produced drawings to provide guidance for preservation of the site. (054-2 #H-26) {44FX-0543}
- Reconstructed Smokehouse. This was built on the location of and with most of the materials from an 1800’s era hipped-roof log cabin that was moved to this location from the rear of Walney in 1948 during the house renovations (Source: Fx. Co. Historic Landmarks Survey 8/24/1970). A hand drawn map by James Brooks of these features shows a line and arrow drawn from, “*a root cellar that was also located behind Walney on the south side beside the summer kitchen*”, on the hill at the 1948 two car garage location, to the current smoke house position. Even though the structure was being used as a “*root cellar*” in the 1940s, the location on site and the construction match other smoke house photos in the Centreville area from the Machen era. The 1993 reconstruction created a new stone foundation and replaced the roof, but only replaced a few select wall logs. Their difference in milling and age can be seen. Photos of the

reconstruction process clearly show the replacement log locations, which were milled by hand from park trees. During reconstruction a 2"x8" board (now in site collection) was recovered from the structure's door frame. This board had a dedication date carved into it that reads, "Bob Crane 6-21-43" The Machen family papers contain a July 1843 letter from Lewis Machen that states, "...I have already purchased, and used 20,000 shingles, and shall order 5,000 more, for the covering of Barn, Dwelling House, Kitchen, Corn House, Smoke House, and passage way..." (054-2 #H-6) {44FX-0393}

- Icehouse ruins. Built in 1854. The walls are intact below ground level but covered in debris on three sides. Archaeological investigation was done by Fairfax County Archaeological Services, run by Edward Chatelaine, in 1981 & 1982. [REDACTED] This study found the floor of the feature to be 11 feet deep below the grade their dig started at and the floor was wood timber showing signs of fire. Over the last half of the 20th century the western wall was badly overgrown by the roots of a large mature oak tree which tore out the wall when it overturned on January 25, 2010. (054-2 #H-27) {44FX-0392}
- Dry Pond for ice making. Found along Walney Creek, it was built in 1854. The Walney Creek trail passes through this feature. Documented in 1977 as a trapezoidal shape with approximate dimensions of 148' x 60' x 40' x 107'. Donegan's Tree Service & Creative Landscaping, Inc. was hired to remove large trees from the pan and walls of this feature on December 15, 2011. (054-2 #H-14)
- Collapsed Stone Barn, spring, and building foundations. Circa mid. 1800's. A circa 1935 photograph of the barn exists in the FCPA collection. It also appears intact and in good roof condition in a 1949 aerial photo. A 1968 photograph by Wm. Edmund Barrett shows the barn partially collapsed. Oral history says that Ellanor C. Lawrence had the rest of the barn collapsed for safety reasons. Trees were removed from the barn and spring foundation area in 2010 by FCPA Forestry Crew. (054-2 #H-20, 21, 22) {44FX-3459}
- Walney Outbuilding Foundations. Circa late 1700's or early 1800's. Preliminary archaeological surveying of the stone foundations by FCPA staff have revealed a uniformed size to multiple adjoining rooms that are similar to slave era dwellings. Surface archaeological finds point toward a later history of use as farm buildings and sheds. {44FX-0536} (054-2 #H-7)
- Cabell's Mill. Circa 1785 or earlier. The deed to Mount Gilead property in Centreville in 1785 includes the statement "on the road to William Carr Lane's mill." Additionally in 1746, Willoughby Newton applied for and received permission to dam water onto his neighbor's property on the parcel that now contains Cabell's Mill for the purpose of building a mill dam and a grist mill. Between the existence of the mill in 1785 and the application to dam water in 1746, the exact construction date of this structure is unknown at this time. Grist, sumac, and saw milling operations continued under various owners and operators. The mill was later gutted and transformed into a space for guests, meetings, and events by Dorothy Radford circa early 1900's. It was converted to a guest house in 1944 by Ellanor C. Lawrence. The mill was reconstructed by the Park Authority in 1980/81. Southern Maryland Restoration, Inc. was hired in 1993/94 to repair stone walls, walk ways, and patio. ATLO Services was hired in September 1995 to construct two stone wall retaining systems and a sign foundation. Accubid Concrete was contracted by FCPA Facility Operations Division during the summer of 2012 to completely reset the stones on the front porch, walkway, steps, and back patio. Property Id. 54-2-001-2. [DHR_A_NUM 029-0005]
- Bulk heading for mill race. This mortared stone wall is located on Big Rocky Run Stream above and below the mill complex. Circa 1746-1785. The head race traveled to

the mill's overshot wheel from the east through what are now the lawn, driveway, and garage locations. (054-2 #H-7, 8, 9, 11, 30)

- The entire length of Big Rocky Run, from the mill's head race area along the perimeter of the meadow to just before the mill, on the left hand side of the downstream run, has stacked stone from the area that was used to control erosion along the bank.
- Middlegate House. This includes the addition to the original miller's house circa 1780's or before. An expansion adding the current apartment space, breezeway, and garage, including stone from local mill site ruins, was done by the Lawrences circa late 1930's. The rock wall along the driveway near the garden shed has an anonymous grave stone mortared into it. The broken gravestone was, "found in the fields in 1944 under a stone fence and pieced together and mounted in the garden wall above the Middlegate house along the driveway." (Source: Fx. Co. Historic Landmarks Survey 8/24/1970). Willie Crouch, the stone mason who put it there, claims the stone was found on the property under a fence and that there is no carving on the reverse (Source: 1985 Interpretive Plan). The visible front inscription is from the bible, Jeremiah 48, and says; "All ye that are about him, bemoan him; and all ye that know his name, say, how is the strong staff broken, the beautiful rod!" Stonework was done in 1993 along with the mill's work to repair lawn walls and other stone features around the complex. [DHR_A_NUM 029-0177]
- Stacked Stone Walls. There is approximately 4,500 linear feet within the park. The largest continuous section is along the east border of the park next to the Windmar Development. A large section also exists along the northern edge of Hackley's Road which is the Park Authority Director's residential driveway (5201 Walney Road). A wall section is also located just north of Big Rocky Run at Route 28 / Sully Road. A section of stacked stone wall of ~ 250' exists south of Big Rocky Run just west of Route 28. Some sections of these walls have been altered by human and natural causes. A section along the eastern edge of the park near the pipe stem off Henry Pond Road has sustained extensive damage from a resident opening the wall and park staff restacking stone to close the gap multiple times. (054-2 #H- 3, 16)
- Old Road Beds. A number of old roads through the park include: home site driveways, the original Braddock Road course, the original Walney Road / Chantilly Road course, Hackley's Road, and farm service roads. Hackley's Road traverses the park [REDACTED] It connected Braddock Road with Chantilly. The section of the original Walney / Chantilly Road course that exists [REDACTED]
- Bridge Abutment. Located on Walney Creek trail directly below the icehouse. Other abutments and historic farm road structures in the park include (054-2 #H-24, 26).
- The Long Site. This is a small non-diagnostic American Indian site with lithic scatter. [REDACTED] Found on September 11, 2009 by Aimee Wells of FCPA Cultural Resources Management and Protection Section. {44FX-3457} (044-4P17)
- Thomas Brown Home Site. Circa 1742. It is located [REDACTED] It was owned from 1777 to 1810 by James Hardage and Mary Lane. This site was archaeologically studied in the fall of 1993 by William & Mary Center for Archaeological Research under contract for VDOT. {44FX-1965} (054-2) [VDHR File #91-1823-S]
- Brooks Home Site. Also referred to in agency records as the Hackley's House Property. Circa late 1800's to 1980's. Foundation depressions are located [REDACTED]

- Near this location to the east southeast is a large trash midden [REDACTED]. Surface stone in this area also show signs of being drilled and quarried for building stone. The original house referred to as the Hackley's house was torn down in the 1980's when the current Director's house was built by the original owners, the Frey family. This demolished house was said to sit just to the north in front of the current modern house according to Mr. Frey. A site in this area is marked by FCPA CRMPS as 'Big Rocky Forest' with numbers {44FX3457} (Co. #044-4P17)
- A feature that looks like a constructed dry pond with dam exists [REDACTED]. Age of this feature is unknown, but pre-dates the current structure's construction, and is most likely tied to the older frame house that was just to the north of the existing 20th century home. Further inspection by FCPA CRMPS and site staff in February of 2012 have determined that it is not a dam but the bed of a farm road leading from the home sites on the western lawn of the house back down to Big Rocky Run. This road could then date to the era of the home site platforms along Hackley's Road or the Brooks home sites which extend back into the late 1700's.
 - Home sites and out buildings on Hackley's Road. Located near [REDACTED]. The features to the north of the road were studied summer of 1982 by Jack Hiller, Fx. County Public Schools. The southern side of the road [REDACTED]. This area also contains [REDACTED]. A period road bed approaches the site from [REDACTED]. {44FX-0297 / 0298} (054-2 #H-1, 2, 3, 13, 15, 18, 19)
 - Building platform site along Hackley's Road. Located just [REDACTED]. The Hackley's Road bed is very evident here traveling [REDACTED].
 - House ruins. Located on [REDACTED] circa 1825 according to archeology work. But "Documentation received from Anne Beresford shows structure constructed circa 1818." (Source: Fx. Co. Historic Landmarks Survey 8/24/1970). Debbie Robison of SWS&G, PC believes this to be the site of George Britton's Stone House. Britton purchased two acres of land from Coleman Brown in 1817 to build a house. This site also has [REDACTED] {44FX-0296} (054-2 #H-12)
 - Home site ruins near location of Brown site in southeastern corner of the park. [REDACTED]. The structure was demolished by the Park Authority after taking ownership of the park land. Photos of the house are in FCPA historic collections and were taken from 1966-68, when Janis Dana Ball lived there. She says the Lawrences referred to the house as "Newgate." The site dates back to the 1800's and may have been a home owned in 1938 by Robert Dye. {Dye ownership in 1938 identified by Mildred DeBell in May 17, 2007 article in *Centreview* paper.} {44FX1018} (054-2 #A)
 - Cemeteries. One cemetery is noted on the original survey plot for the site completed February 17, 1970. The location is [REDACTED]. Machen family members originally interred in this location were moved to the cemetery at St. John's Episcopal Church in Centreville, Va. Records from the church in the 1994 cemeteries report to the Fairfax County Board of Supervisors

show that at least two Machen family infants may still be here, however a headstone at St. John's cemetery suggests the two infants are interred there. There may be earlier site inhabitant graves from the Brown ownership period that are interred near this location or another unknown site. We also have a map from former resident James Brooks with the possible location of "slave graves" on the property. The area he noted is [REDACTED]. Some east facing depressions are present in this area. A third cemetery is noted [REDACTED] according to FCPA Cultural Resource Management and Protection Section maps of the park site. It is designated "Brown-Lewis-Machen Cemetery". A broken gravestone found in the fields in 1944 under a stone fence was pieced together and mounted in the garden wall above the Middlegate house along the driveway (Source: Fx. Co. Historic Landmarks Survey 8/24/1970). The mason (William Crouch) placing the marker in the wall said that nothing is marked on the back side. None of these cemetery locations has been archeologically investigated. The 2012 ground penetrating radar survey of the Walney house east southeast lawn did not find definitive evidence of these cemeteries. None of these cemetery sites is currently being preserved, protected, or interpreted to the public.

- Civil War Era Fortifications. Circa 1861-3. (054-2 #H-6 describes them as, "four parallel mounds over 100 feet long overlooking [REDACTED].") This fort location appears on the winter 1861 - 62 Confederate map of the Centreville Fortifications located in FCPA historic collections.
- Civil War Era Campsite. Circa 1861-5. Documented through a survey report dated September of 1985. It was a Union site with troops from New York and Connecticut according to Lewis Leigh Jr. quoted in the report. The site was heavily disturbed by relic-hunters according to the survey report. In 2007, a citizen reported that during the 1970's, Boy Scout Troops used this area for camping, which may have contributed to the disturbance of the area noted in 1985. {44FX0962} (054-2 #H-10)
- Civil War Era Campsite. Circa 1861-4 based on relic hunter reports. Surveyed by Mike Johnson, Fairfax County Archaeologist in February of 1991. Johnson reports the site shows disturbance from relic hunting and plow use. FCPA CRMPS staff designate this site as 'Michigan Civil War Camp'. {44FX1019} (054-2 #H-11)
- Multiple Un-mortared Stone Springs. Circa 1800's or before. (054-2 #H-2,17)
- Multiple Earthen Craters. Two major clusters exist in the park. One is along the north loop trail in the vicinity of the vernal pool constructed in 2008 and the other is located north of Braddock Road and to the east of Big Rocky Run. These features have been thought to possibly be Civil War era Sibley tent pits. These two locations put them in close proximity to the Civil War fort site in the south section of the park and the Walney Home site. However, the ones in the southwest corner of the park do not show up in the 1937 aerial photographs. Some are very regular in size and seem very sharp in shape which suggests that they might not be very old. However some FCPA CRPS archeologists say they do seem consistent with the appearance of rifle pits at other locations in the county. Further study and documentation of their presence is needed. (054-2 #H-25)
- Prehistoric Sites along Big Rocky Run. Surveyed by Mike Johnson of Fairfax County Archaeological Survey on February 20, 1981. {44FX0396, 1556} (054-2 #1) (Co. #054-2P01, 2P04)
- Prehistoric Site. Big Rocky Run Fish Weir. {44FX2039} (Co. #0542P05)
- Prehistoric Site. Surveyed by Clifton Huston of William and Mary Center for Archaeological Research on June 23, 1992. {Part of 44FX1965}

- Other sites designated with Virginia Department of Historic Resources Site Designation numbers include: [44FX0537] (054-2P02) (054-2 #H-8) Survey paperwork done by Edward Chatelain, Fx. Co., on April 16, 1982.; [44FX0585] in the [REDACTED]; [44FX0343] which is located [REDACTED].]

D. Site

The historic buildings in the park also contain the park offices, work areas, visitor center, and the historic collections office and storage for the Park Authority. These modern high-use activities pose a unique set of management issues related to how these building are maintained and interpreted.

Site features include:

- Walney House – Contains park offices, and visitor center.
- Resource Management Division Historic Collections Office and Storage located in Walney House.
- Middlegate Complex – Which includes: park office space, caretaker’s residence, garage workshop, equipment yard, garden shed, birds of prey cages, small amphitheater, and fire ring for program use.
- Park Authority Director’s Residence – Single family home circa 1980’s. Home site contains separate garage workshop with electricity, plumbing and heating.
- Three Gravel Parking Lots – Spaces for 50, 40, and 70 cars. The lot next to the pond is partially on VDOT right-of-way.
- Approximately 5,400 Linear Feet of Wire Fences – Extant from past farm use, most of it is in disrepair. Sections along Walney Road are maintained by site staff as wildlife barriers to avoid road collisions.
- European honey bee hives. Maintained by paid and volunteer staff for interpretive purposes.
- Garden Shed built in 1995. This structure’s appearance is consistent with other site buildings and is used in current maintenance of interpretive gardens and grounds.
- Vegetable & herb gardens, fruit trees, grape arbor, and field crop plot.

IV. PARK VISITORS:

A. Profile

Ellanor C. Lawrence Park is located in a region which, in many ways, does not reflect national averages. Fairfax County, in general, is more affluent, more ethnically diverse, better educated, and more mobile than most communities. Of the 391,000 households in Fairfax County in 2011, 72% are defined as a “family.” However, the traditional “nuclear family” only represents 29% of households. Six percent of households are headed by single parents, the majority of which are single mothers. The average family size in the Sully District is 3.35 people. The majority of the remaining 28% of households are people living alone. “Lisa Neidert, a researcher with the Population Studies Center at the University of Michigan, said young people finishing college and starting careers are less likely to live with roommates than they were two decades ago, and people who divorce are less likely to remarry.” (Wash Post 10/28/09)

It is difficult to characterize the “typical” household in Fairfax County. Less than a third of households would be considered the traditional “nuclear family.” Portions of the population living alone or in multi-generational households are growing faster. Programs and services should be tailored to meet the needs of these groups. Parks also serve an important role in community-building and can help foster feelings of “connectedness.” According to the Outdoor Foundation, almost 60% of those who participate in outdoor activities do so, in part, to be with family and friends. These trends will shape the type and style of interpretive methods that the site will employ to meet our objective of connecting visitors to the park’s resources.

Size: The total population of Fairfax County in 2011 according to the Fairfax County Department of Neighborhood and Community Services was 1,096,798 people. The Sully District’s population in 2011 was 128,149 people. The population in this district is expected to grow by 15% by 2030, which is approximately the same as Fairfax County’s overall projected growth rate. The county population is estimated to be 1.27 million in 2030 with the population of Virginia to grow by 18% to 9.65 million in 2030.

Also of note is that more than 14% of Fairfax County residents have moved to the home they are currently living in within the past year – and over half of that percentage from somewhere outside the county. Available employment opportunities, many of which are in local and federal government agencies, the military, and higher education, require advanced degrees, and degree holders are a more mobile segment of the population; able to move where jobs are located.

The potential customer base will continue to grow with a significant minority being new to the area. Outreach and marketing efforts will be important to reach these potential new users.

Ethnicity: The Washington DC area is also one of the most diverse areas of the country. A Penn State study ranked it fourth overall and the most diverse on the East Coast. In census data, Virginia residents describing themselves as more than one race increased at a rate more than twice the national average. Demographers estimate that Hispanic and Asian populations within the commonwealth will both grow by over 85% by 2030.

The Centreville area is home to the largest Asian population of any community in Fairfax County with nearly 10% of the county’s total Asian population. The Hispanic community also represents a significant portion of Centreville residents at 13% of the county’s total population. Only 63% of the county population speaks English only at home. This means that 37% of children below school age (5 yrs.) are not fluent enough with the English language to be significant users of interpretive

programming as traditionally delivered. A significant number of those who speak a language other than English speak Spanish (37%) followed by those who speak an Asian or Pacific Islander language. Forty percent of speakers of another language consider themselves to “not speak English very well.”

Demographers at the University of Virginia in 2008, found that 30% of Fairfax residents were foreign born. The customer base will continue to diversify culturally with a significant portion for which English may not be a comfortable language to use. Park Authority satisfaction surveys show that Asian residents participate in Park Authority programs as a percentage of total users about on par with their percentage of the overall population, but have a satisfaction rate lower than that of the average park user. Some of this may be related to cultural differences in how parks are used, which must be addressed through interpretive programs including outreach. Hispanic residents are underrepresented as a Park Authority program user group compared to the total population makeup. Working with community groups will be an important way to reach populations who are not strong speakers of the English language.

Age: The median age of a county resident has been increasing, with recent census reports putting it at 37.3 years old. Sully District’s median age is slightly younger at 35.8 years. About 28% of Sully District residents are under 18 years of age with about 16% between the ages of 5 and 14.

A growing portion of households are home to someone over 65, which represents 20% of all households county-wide and about 13% within the Sully District. By 2030, it is anticipated that 18.9% of the county’s total population will be 65 or older. The expected rate of growth between 2005 and 2020 for residents age 70+ is 58 percent according to county government estimates. According to analysis of Pew Research and census data by SIR Research, there has been an increase in the number of multi-generational households in the commonwealth to 33% since 1980.

The potential customer base is aging. Programs and services should be designed with the “boomer” in mind. Many within this age have disposable income. It should also be noted that a significant minority are financially responsible for grandchildren. Additionally, chronic health problems within this population are increasing. Parks have the opportunity to position themselves as contributing to wellness. Research by the Older Dominion Partnership shows that the majority of older residents in the commonwealth participate in community educational and recreational opportunities, and consider access to these services an important driver of community satisfaction.

Programs should also be developed with a multi-generational audience in mind.

Income: Fairfax County is consistently ranked as one of the wealthiest counties in the country. The most recent Census Bureau data ranks it as second with a median household income of \$105,000. Over half of the county’s households make \$100,000 or more; 32% make over \$150,000. However, the cost of living index is also high. According to the Fairfax County Economic Development Authority, the region’s cost of living index is 40% higher than average while the index for housing costs is twice the average for similarly sized areas.

Although the region’s economy is comparatively strong, some portions of the population were still dramatically impacted by the economic downturn in 2007. This has resulted in a rise in local poverty rates, though the region’s average of 8.3% is still well below the national rate of 15%. It is important to note that within this group, almost 20% of female householder families fell below the poverty line. Ten percent of children under 18 fell below the poverty line while only 5.5% of those

65 and older did. In a recent Brookings Institute study of census data, Centreville and Chantilly were found to be two of the DC suburbs with the greatest recent poverty increases.

Additionally, some national studies show that up to 74% of Americans say they're "spending less" and are "more frugal" in light of the economic situation.

The park's customer base is wealthier than average and should be able to support fee-based programs. It is important to note, however, wealth is not distributed equally within the county. A sizeable minority of children and female-headed households live below the poverty line. Also, with the new trend of "frugality," value is an important consideration for consumers, though Park Authority satisfaction surveys show that it is not the primary driver of program loyalty.

Education: According to the US Census Bureau's 2010 data, six of the ten most highly educated jurisdictions in the country are in the Washington metropolitan area. Fairfax County is ranked fourth with over 59% of residents holding a bachelor's degree or higher. Nationally, 28.5% of citizens hold a bachelor's degree or higher. This concentration may be attributable, in part, because the region's economy is comparatively stronger than other parts of the country based on the makeup of its job market. Fifty-six percent of the county's working population is employed in some type of management, business, science, or art occupation.

In general, the customer base is better educated than the average American consumer. The types of jobs this base holds are in the "creative" fields. The Washington area has more than 45% of the work force in creative fields compared to 3.9% nationally. This type of consumer values and expects change and new services. Programs and services will need to be developed with these values in mind.

B. Use

Ellanor C. Lawrence Park's 650 acres can accommodate the interests and needs of a range of visitors. The park has unique mix of habitats and geographic features that make it well suited for bird and wildlife watching as well as several miles of trails inside the park, which connect to a larger trail system. According to research by the Outdoor Foundation, 2011 had the highest national participation rate in outdoor activities of the past five years with almost half of the population over the age of 6 participating in some kind of outdoor activity. The top five most popular outdoor activities by the frequency of the activity include jogging, bird or wildlife watching, fishing and hiking. The 2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation found that 96% of wildlife observers do so at some point within a mile of their home with 17% of this group doing so at a public park.

Nationally the same survey also found that almost a third of wildlife observers also do so more than a mile away from their home. In 2010, Arlington and Fairfax Counties combined produced over a quarter of total tourist dollars for the state. Fairfax County was the second highest grossing county.

Reflecting national trends, park attendance (measured by traffic counters), walk-in attendance and program attendance have been steadily increasing. Combined visitorship using gate counters between FY11 and FY12 shows an 18% increase. Total combined visitorship between FY12 and FY10 shows a 73% increase in general park use. Walk-in attendance increased 4% between FY11 and FY12. There are no attendance numbers for the ball fields, playground or pond. Large increases in traffic counter attendance seem to indicate passive resources are being used more

heavily, which has the potential for facility and trail maintenance concerns as well as possible degradation of resources and user conflicts. This also creates the challenge of communicating the park mission and stewardship messages to those who are not coming to the park to use the visitor services.

The two year period of FY11-12 saw a 74% increase in program attendance over the FY09-10 period. This increase is notable because many free programs have been eliminated since FY08 which shows a willingness to pay for programs.

Examples of Current Users:

- **Daily**
 - ▣ Walkers/Hikers
 - ▣ Runners
 - ▣ Dog Walkers
 - ▣ Picnic & Lunching Users
 - ▣ Playground Users
 - ▣ Walk-on Field Users
 - ▣ Pick-up Sports Games in Open Play Areas
 - ▣ Sports Leagues
 - ▣ Visitor Center Exhibits
 - ▣ Walney Grounds Tours
 - ▣ Self-guide Packets
 - ▣ Self-guided Walks
 - ▣ Bird Watchers
 - ▣ Orienteering
 - ▣ Geocachers
 - ▣ Photographers
 - ▣ Fishing

- **Programs & Classes**
 - ▣ Natural & Cultural History Programs (all ages)
 - ▣ Evening Programs: Hikes and Campfires
 - ▣ Van Excursions
 - ▣ Bus Tours
 - ▣ Summer & School Break Camps
 - ▣ Large Scale Programs, usually seasonal topics (e.g. Groundhog's Day, Holidays at Walney)
 - ▣ Contracted Programs

- **Special Events and Rentals**
 - ▣ Arts in the Parks Summer Concert Series
 - ▣ Walney Garden Guild Art Show & Sale
 - ▣ Birthday Party Rentals
 - ▣ Cabell's Mill Rentals
 - ▣ Picnic Pavilion Rentals
 - ▣ Amphitheater Rentals
 - ▣ Sports Tournaments
 - ▣ Classroom Rentals
 - ▣ Park Use Permit Holders

- **School Groups**
 - ▣ Field Trips
 - ▣ Outdoor Labs & Field Projects
 - ▣ Homeschool Programs
 - ▣ Career Transition Services Partnerships (Chantilly H.S.)

- **Scouts**
 - ▣ Meetings / Ceremonies
 - ▣ Service Projects
 - ▣ Badge Programs
 - ▣ Participate in Site Tours & Programs
 - ▣ Self-Guided Packets

- **Service Projects**
 - ▣ Corporate Group Workdays
 - ▣ Watershed Cleanups
 - ▣ Chantilly High School Employment and Transition Programs
 - ▣ Volksmarch Trail Users
 - ▣ Invasive Management Area Sites
 - ▣ Court Referred Volunteers
 - ▣ Scouts
 - ▣ School Groups and Student Civic Hours

- **Outreach**
 - ▣ Programs at Unstaffed Parks (e.g. Sully Woodland Properties, Historic Centreville Park, Cub Run Stream Valley)
 - ▣ School Classrooms & Assemblies
 - ▣ Fairfax County School-Aged Child Care Programs
 - ▣ Civic Groups (e.g. Senior Centers, Churches)
 - ▣ Special Interest Groups (e.g. Sierra Club, Animal Control Agencies)
 - ▣ Commercial Groups (e.g. R.E.I. Inc., Restaurants)

- **Web Services**
 - ▣ ‘Ask a Naturalist’ Interactive Feature on Park Web Page
 - ▣ Critter of the Season Feature on Park Web Page
 - ▣ Agency Website; with Text of Park General Information and History
 - ▣ Maps & Handouts to Download
 - ▣ Interactive Games
 - ▣ PowerPoint Slide Shows
 - ▣ Podcasts
 - ▣ Blogs

C. Access

Vehicles: The majority of visitors to the park arrive by private automobiles. The entrance to the Walney Visitor Center is located off Walney Road. The access to Walney Road from Route 28 was restricted to only north-bound traffic in 2007. Patrons traveling south-bound on Route 28 must exit at the Westfields Boulevard overpass east, in order to make a right turn on Walney Road and continue to the park. Route 28 is a major highway off Route 66 and is the connector between

Route 66 and Dulles Airport. Continued work to improve and maintain traffic flow on Route 28 may change the way visitors are able to access the park within the next several years.

Parking lots are located at Walney Visitor Center, the Middlegate/Cabell's Mill complex, and at Walney pond.

Public Transportation: No bus routes pass directly by the visitor center. The closest Metro bus route (12S) requires a rider to walk from a stop near the intersection of Poplar Tree Road and Walney Road along the Walney Road Trail through the park to the visitor center, which is a distance of .6 miles. Two Fairfax Connector bus routes (605 and 632) can be taken to stops within 2-3 miles of the park, which then requires walking along public streets to reach a trailhead and additional walking to reach the Visitor Center. Stops along both lines include Poplar Tree Park and Ride at Stringfellow Road and Fair Lakes Parkway, Chantilly Regional Library on Stringfellow Road and the intersection of Walney and Eagle Chase Roads. Route 632 provides only weekday service.

A Metro Rail station is scheduled to open to passengers in the median of the Dulles Airport Access Road just east of Route 28 by 2016. This station will be along the route extending the orange line out to the airport. We can assume that metro bus routes will connect to this rail station, but the distance to the park will probably not make Metro Rail an attractive way for people to access the park.

Pedestrians / Cyclists: There are no sidewalks or trails along Walney Road or Route 28 to provide access to the park. Pedestrian access is through neighborhood sidewalks that lead to multiple trailheads that allow the public to walk along natural surface trails to Walney Visitor Center and to the ball field complex. There is a bluestone and gravel trail along Walney Road that provides access for cyclists to the visitor center via the intersection of Walney Road and Poplar Tree Road. Walney Road is not safe for walking or cycling. The Park Authority is currently discussing the addition of a trail parallel to Walney Road on its western edge connecting the pond with the Walney Road trail near the visitor center. There is a possibility during this plan period to add trails within the south-western section of the park to connect the sidewalk along Braddock Road with the ballfield complex.

Web: Fairfax County is consistently ranked above average for home internet access, which allows the park an opportunity to interpret resources to a larger audience. Ellanor C. Lawrence Park has a page as part of the Park Authority's website. Along with information about park amenities and programs, the page includes an interactive "Ask a Naturalist" feature. Questions submitted through this link come to the Senior Interpreter who emails a response or directs as appropriate. The ability to access information about the park through the internet is another opportunity for staff to effectively interpret the park's resources.

V. INTERPRETIVE SERVICES DEVELOPMENT:

A. **Personal**

Personal interpretation is achieved through a wide variety of interpreter led programs. A listing of the types of programs follows. The site uses full and part-time paid staff, contractors, instructor class positions, and volunteers to deliver these programs.

General Programming

- Kid's Korner (3-5 yrs.)
- Junior Naturalists (7-11 yrs.)
- Venturers (11-14 yrs.)
- Spring Break Camp (6-11 yrs.)
- Winter Break Camp (6-11 yrs.)
- Summer Camps – half-day (3-5 yrs.)
- Summer Camps – full day (6-11 yrs.)
- Birthday Parties (3-12 yrs.)
- Hikes, wagon rides, talks, activities, and campfires (all ages)
- Citizen Science Surveys & Projects (age 13 and up)
- Van Excursions and Bus Tours (age 12 and up)
- Self-guided Walks-Nature Totes for Tots and General Backpack (age 3 and up)
- Roving Weekend Naturalist at Pond (volunteer position)

Scout Programs

- Brownie Try-its
- Tiger & Cub Scout Ranks
- Junior Girl Scouts
- Webelos
- Boy Scout Merit Badges
- Eagle Scout Projects
- Girl Scout Gold, Silver, and Bronze Award Projects

School Programs

- Preschool Field Trips
- Elementary Field Trips
- Homeschool Field Trips
- Middle School Field Trips
- High School Science Lab Trips
- College Field Work
- Student Projects

Outreach

- Other Parks within Park Authority and Neighboring Jurisdiction's
- School Programs
- Business and Corporate Groups
- Civic Groups
- Libraries

Special Events

- Arts-in-the-Parks
- Mini-Festivals and Large Seasonal Programs
- Centreville Day
- Chantilly Day

B. Non-personal

Exhibits

A number of different exhibit types are used to interpret the site which includes: static information panels; historic object collections; a changeable thematic display case; a children's exploration area with touch table; live native animal displays; honeybee hives; herb, kitchen and butterfly gardens; fruit trees and vines; and a demonstration field for agricultural crops. Future exhibit development may include: improvements to the "Investigation Playce" science discovery area and an LED screen display panel related to the site's cultural history.

Waysides

Wayside panels are located at cultural and natural resource features on site. The majority of the waysides are located on the Walney House grounds, at the pond, and along Big Rocky Run trail. Plans within the first two years of this plan call for adding additional panels to Walney grounds to more fully interpret the site. Four informational kiosks used for interpretive outreach and program promotion are located at Walney, Middlegate, the pond, and the Big Rocky Run trailhead. A bulletin board at the Walney Visitor Center is also used for temporary interpretive and informational displays. Additional waysides are planned to enhance interpretation of the Forestry Management Pilot Program.

Publications

Formal site publications include a highway rack card with basic park information, "A Walk Through Time," "Homes and Habitats" and a "Checklist of Birds." The site also produces a quarterly volunteer newsletter, quarterly emailed events calendar, and an every other month calendar of events. Staff will need to edit and rewrite as necessary parts of "A Walk Through Time" and "Homes and Habitat" prior to reprinting. Staff may also develop an alternative means for sharing the information currently included in the two brochures such as podcasting.

Electronic Media

Web content will be used to expand and enhance site interpretation. Site staff works with designated agency personnel to update content. Site staff will work with the webmaster to ensure content is accurate and update photos as needed. During this plan period site staff will be researching the use of podcasting and other forms of audio media to enhance site interpretation.

Sales Shop

The site has a small resale operation at the front desk to enhance the visitor experience. By providing items for sale related to subjects and themes presented at the park, patrons

have the opportunity to take home souvenirs as memory triggers of their visit. Staff members choose items of good quality to ensure the purchase is not a negative experience. The types of items chosen and price points are selected to encourage purchase. A periodic sales analysis is completed to evaluate whether items will continue to be offered. New items are continually being researched to add to the inventory.

Page holder for action plan sheet(s)

VII. APPENDIXES:

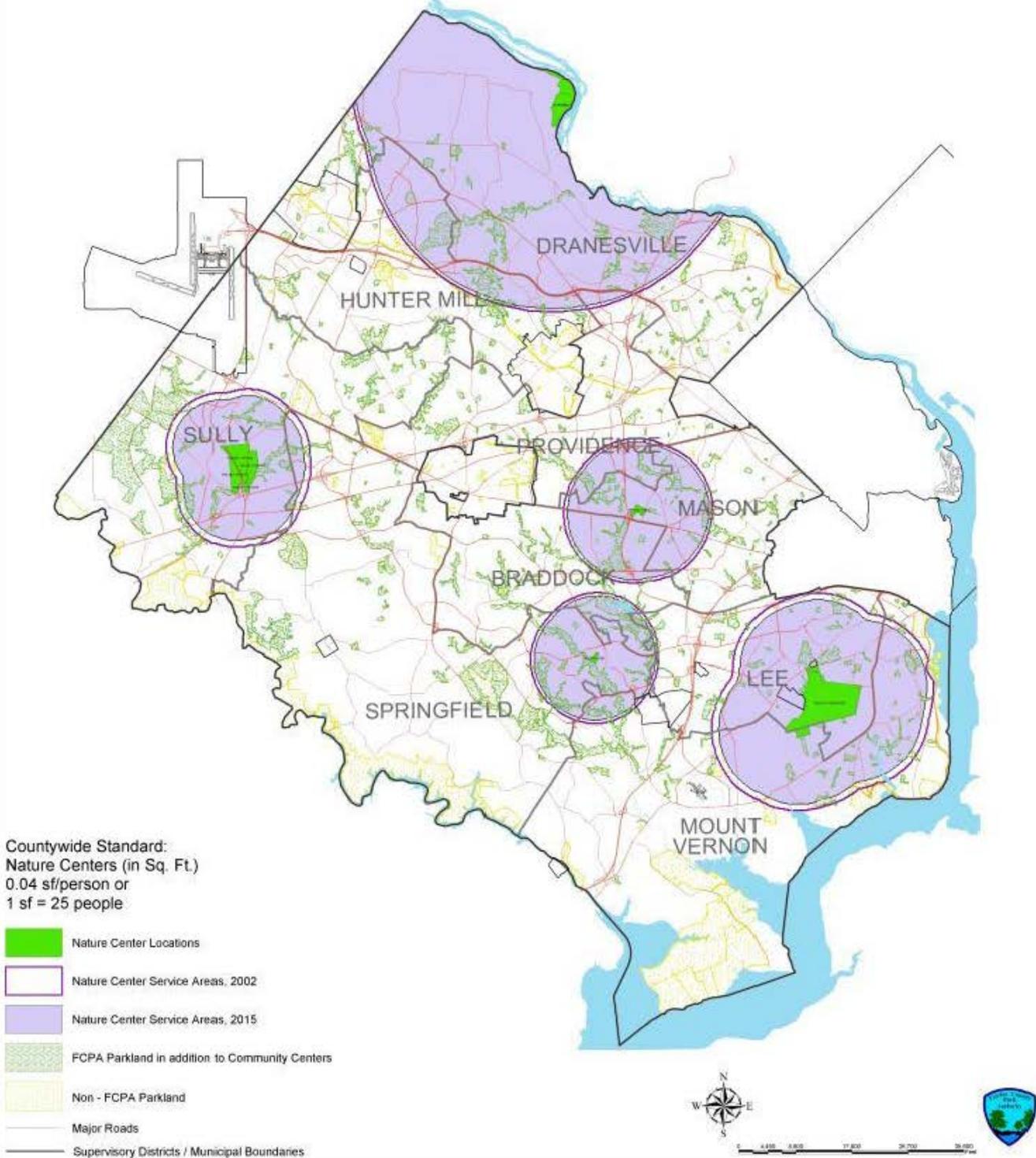
Appendix I, i. Walney Features Map

Appendix I, ii. Site Trails Map

Appendix I, iii. Park Aerial Photo (Taken in 2007)

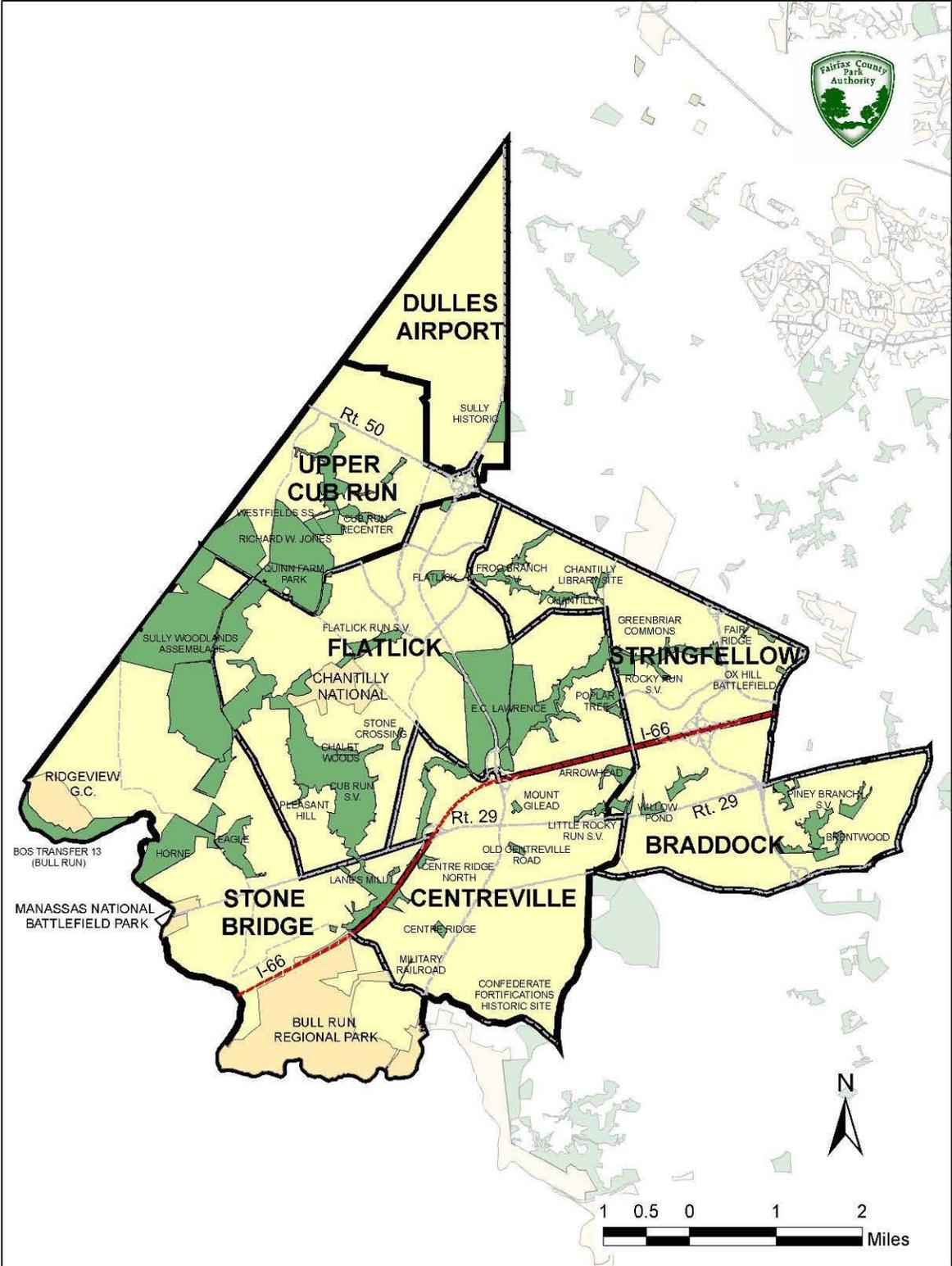


Nature Centers Standard - based Service Areas



Appendix I, v. Site Master Plan Map

Appendix I, vi. Park & Recreation Lands in the Bull Run Planning District



Appendix II. – Bird Species List

Bird Species at Ellanor C. Lawrence Park

Seasons

Sp	Spring	March- - May
S	Summer	June - August
F	Fall	September - November
W	Winter	December - February

Description of Codes

c	common	likely to be seen or heard in suitable habitat
u	uncommon	present, but not often seen
o	occasional	present infrequently during a season
r	rare	may be present but not every year

* - species has nested in park

	S _p	S	F	W
Grebes				
Pied-billed Grebe	-	-	o	o
Herons				
Great Blue Heron	o	o	o	-
Green Heron	u	u	-	-
Waterfowl				
American Black Duck	r	-	-	-
Mallard	o	o	o	-
Wood Duck	o	-	-	-
Canada Goose*	c	c	c	c
Tundra Swan	r	-	r	-
Birds of Prey				
Black Vulture	o	o	o	o
Turkey Vulture	c	c	c	c
Osprey	o	-	o	-
Bald Eagle	r	r	r	r
Cooper's Hawk	u	u	u	u
Sharp-shinned Hawk	o	o	o	o
Broad-winged Hawk	o	o	o	-
Red-shouldered Hawk*	u	u	u	u
Red-tailed Hawk	u	u	u	u
American Kestrel	o	o	o	o
Quail - Turkey				
Northern Bobwhite	r	-	-	-
Wild Turkey*	u	u	u	u

Plovers - Sandpipers				
Killdeer	r	r	-	-
Common Snipe	r	-	-	-
Solitary Sandpiper	r	-	-	-
Spotted Sandpiper	o	-	-	-
American Woodcock	r	-	r	-
Yellow-billed Cuckoo*	r	r	-	-
Pigeons - Doves				
Mourning Dove*	c	c	c	c
Rock Pigeon	o	o	o	o
Gulls				
Ring-Billed Gull	-	-	-	o
Cuckoos				
Yellow-billed Cuckoo*	r	r	-	-
Owls				
Barred Owl*	u	u	u	u
Great Horned Owl*	u	u	u	u
Long-eared Owl	r	-	r	-
Saw-whet Owl	-	-	-	r
Nighthawks				
Common Nighthawk	o	o	-	-
Swifts - Hummingbirds				
Chimney Swift	c	c	-	-
Ruby-throated Hummingbird*	c	c	-	-
Kingfishers				
Belted Kingfisher	u	u	u	-
Woodpeckers				
Downy Woodpecker*	c	c	c	c
Hairy Woodpecker*	u	u	u	u
Northern Flicker*	c	c	c	c
Pileated Woodpecker*	u	u	u	u
Red-bellied Woodpecker*	c	c	c	c
Yellow-bellied Sapsucker	u	-	u	-
Flycatchers				
Eastern Kingbird*	c	c	-	-
Eastern Phoebe*	c	c	-	-

Eastern Wood-Pewee*	C	C	C	-
Great Crested Flycatcher*	C	C	C	-
Acadian Flycatcher*	U	U	-	-
Vireos				
Red-eyed Vireo*	C	C	C	-
Solitary Vireo	U	-	U	-
White-eyed Vireo	U	U	U	-
Yellow-throated Vireo	U	U	U	-
Jays – Crows				
Blue Jay*	C	C	C	C
Fish Crow*	C	C	C	C
American Crow*	C	C	C	C
Common Raven	O	r	r	O
Swallows				
Barn Swallow	O	O	O	-
Northern Rough-winged Swallow	U		U	-
Tree Swallow*	O	O	O	-
Chickadees - Titmice				
Carolina Chickadee*	C	C	C	C
Tufted Titmouse*	C	C	C	C
Creepers - Nuthatches				
Brown Creeper	U	U	U	U
Red-breasted Nuthatch	O	-	O	O
White-breasted Nuthatch*	C	C	C	C
Wrens				
Carolina Wren*	C	C	C	C
House Wren*	C	C	C	r
Winter Wren	-	-	-	r
Kinglets - Gnatcatchers				
Golden-crowned Kinglet	C	-	C	-
Ruby-crowned Kinglet	C	-	C	-
Blue-gray Gnatcatcher*	C	C	C	C
Thrushes				
American Robin*	C	C	C	U
Eastern Bluebird*	C	C	U	U
Gray-cheeked Thrush	r	-	r	-
Bicknell's Thrush	r	-	r	-
Hermit Thrush	O	-	O	U
Swainson's Thrush	O	-	O	-
Veery	O	-	O	-
Wood Thrush*	C	C	C	-

Gray Catbird*	C	C	C	-
Northern Mockingbird*	C	C	C	C
Brown Thrasher	O	-	O	-
Waxwings				
Cedar Waxwing	O	O	O	O
Starlings				
European Starling*	C	C	C	C
Wood-Warblers				
American Redstart*	C	C	C	-
Bay-breasted Warbler	r	-	r	-
Black-and-white Warbler	O	O	O	-
Blackburnian Warbler	O	-	O	-
Blackpoll Warbler	C	-	U	-
Black-throated Blue Warbler	C	-	C	-
Black-throated Green Warbler	C	-	C	-
Blue-winged Warbler	O	-	O	-
Canada Warbler	O	-	O	-
Cape May Warbler	O	-	O	-
Chestnut-sided Warbler	O	-	O	-
Common Yellowthroat*	C	C	C	-
Hooded Warbler	O	O	O	-
Kentucky Warbler	O	O	O	-
Magnolia Warbler	C	-	C	-
Nashville Warbler	C	-	C	-
Northern Parula*	C	C	C	-
Ovenbird*	O	O	O	-
Palm Warbler	U	-	U	-
Pine Warbler*	C	C	C	O
Prairie Warbler*	U	-	U	-
Tennessee Warbler	O	-	O	-
Worm-eating Warbler	O	-	O	-
Yellow-rumped Warbler	C	-	C	C
Louisiana Waterthrush*	C	C	C	-
Northern Waterthrush*	O	-	O	-
Tanagers				
Scarlet Tanager*	C	C	C	-
Grosbeaks - Buntings - Sparrows				
Blue Grosbeak*	O	O	O	-
Rose-breasted Grosbeak	C	-	C	-
Northern Cardinal*	C	C	C	C
Indigo Bunting*	C	C	C	-
Chipping Sparrow*	C	C	C	-
Dark-eyed Junco	C	-	C	U
Eastern Towhee*	C	C	C	O
Field Sparrow*	U	O	U	-
Fox Sparrow	r	-	r	-
Song Sparrow*	C	C	C	O
Swamp Sparrow	O	-	O	-

White-crowned Sparrow	r	-	r	-
White-throated Sparrow	c	-	c	c
Blackbirds - Orioles				
Baltimore Oriole*	c	c	c	-
Orchard Oriole*	c	c	c	-
Brown-headed Cowbird*	c	c	c	o
Common Grackle*	c	c	c	-
Red-winged Blackbird*	c	c	c	o
Rusty Blackbird	o	-	o	-
Finches				
American Goldfinch*	c	c	c	c
Evening Grosbeak	-	-	-	r
House Finch*	c	c	c	c
Purple Finch	o	-	o	-
Pine Siskin	-	-	-	r
Weavers				
House Sparrow*	u	u	u	u
Accidental (recorded only once at ECLP)				
Virginia Rail				
Mississippi Kite				

Species are listed in accordance with the 7th American Ornithological Union Checklist (1998). Abundance indices and nesting status are based on park staff observation records.

Appendix III. – Flowering Plant Species List

Flowering Plant Species

The following list was compiled over several years from observations by park staff and local amateur botanists. It represents most of the non-woody and woody flowering plants found in the park.

Latin Name	Common Name	Vegetation Type	Habitat Type in ECLP
Anagallis fistulosum	scarlet pimpernel	Aquatic Forb	Streams & wet meadows
Hydrilla verticillata	hydrilla	Aquatic Forb	Pond
Iris pseudacorus	yellow iris	Aquatic Forb	Pond
Iris versicolor	larger blue flag	Aquatic Forb	Pond
Lemna spp. Spirodela spp.	duckweed	Aquatic Forb	Dairy
Myriophyllum spicatum	Eurasian watermilfoil	Aquatic Forb	Pond
Nasturtium officinale	watercress	Aquatic Forb	Dairy, Walney Creek
Pontederia cordata	prickelweed	Aquatic Forb	Pond
Ranunculus pusillus	crowfoot or buttercup	Aquatic Forb	Vernal pools
Andropogon scoparius	little bluestem	Grass	Meadow
Andropogon virginicus	broom sedge	Grass	Meadow, fields
Dactylis glomeratus	orchard grass	Grass	Meadow, fields
Elymus canadensis	Canada wild rye	Grass	Moist wooded bottomland
Elymus virginicus	Virginia wild rye	Grass	Moist wooded bottomland
Festuca elatior	tall fescue	Grass	Lawns, fields, meadow
Festuca rubra	red fescue	Grass	Lawns
Microstegium viminium	Japanese stilt grass	Grass	Invasive plants of woods and field edges
Panicum clandestinum	deer tongue	Grass	Fields, meadow, woods
Panicum virgatum	switch grass	Grass	Meadow
Sorghastrum nutans	Indian grass	Grass	Meadow
Tridens flavus (or Triodia flava?)	purpletop	Grass	Meadow, fields
Tripsacum dactyloides	eastern gama grass	Grass	Meadow
Typha augustifolia	Narrow-leaved cattail	Grass	Pond
Typha latifolia	common cattail	Grass	Pond, wet ditches
Juncus effusus	common reed	Reed	Moist or wet meadow or field
Scirpus validus	giant bullrush	Sedge	Pond
Berberis thunbergii	Japanese barberry	Shrub	Woods, fields
Cephalanthus occidentalis	button bush	Shrub	Pond
Cornus stolonifera	red-osier dogwood	Shrub	pond
Corylus americana	american hazelnut	Shrub	meadow
Crataegus spp.	hawthorne	Shrub	meadow
Elaeagnus umbellata	autumn olive	Shrub	meadow and cedar thicket on North Loop
Euonymus americanus	American strawberry bush	Shrub	deciduous woods and thickets
Hamamelis virginiana	witch hazel	Shrub	Big Rocky Run and ravines upslope of BRR
Lindera benzoin	spicebush	Shrub	moist wooded slopes
Rhododendron nudiflorum	pink azalea	Shrub	Moist to dry woods
Rhus copallina	winged sumac	Shrub	Meadow, fields, field edges
Rhus typhina	staghorn sumac	Shrub	Meadow, fields, field edges
Rosa carolina	carolina rose	Shrub	Banks, fields, road edges
Rosa multiflora	multiflora rose	Shrub	Ubiquitous
Rosa virginiana	pasture rose	Shrub	Fields, banks
Sambucus canadensis	common elderberry	Shrub	Pond
Staphylea trifolia	American bladdernut	Shrub	Bottomland forest
Symphoricarpos orbiculatus	Coralberry	Shrub	Alkaline soil forest
Vaccinium angustifolium	low-bush blueberry	Shrub	Moist to dry woods
Vaccinium corymbosum	high-bush blueberry	Shrub	Moist woods, stream banks
Vaccinium stamineum	deerberry	Shrub	Moist to dry woods
Viburnum dentatum	southern arrowwood	Shrub	Moist woods
Viburnum prunifolium	smooth blackhaw	Shrub	Wet to dry woods, under story
Achillea millefolium	yarrow	Terrestrial Forb	Meadow, fields, field and road edges
Agrimonia parviflora	small flowered agrimony	Terrestrial Forb	Woods, field edges
Ajuga reptans	bugle	Terrestrial Forb	Moist to dry woods and fields, lawns

<i>Alliaria officinalis</i>	garlic mustard	Terrestrial Forb	Moist bottomland
<i>Allium vineale</i>	field garlic	Terrestrial Forb	Fields, meadow
<i>Ambrosia artemisiifolia</i>	common ragweed	Terrestrial Forb	Fields, disturbed areas, road edges
<i>Ambrosia trifida</i>	great ragweed	Terrestrial Forb	Fields, disturbed areas, road edges
<i>Amphicarpa bracteata</i>	hog peanut	Terrestrial Forb	Moist bottomland
<i>Anemone quinquefolia</i>	wood anemone	Terrestrial Forb	Moist woods
<i>Anemonella thalictroides</i>	rue anemone	Terrestrial Forb	Moist woods
<i>Antennaria neglecta</i>	field pussytoes	Terrestrial Forb	Meadow
<i>Antennaria plantaginifolia</i>	plantain leaved pussytoes	Terrestrial Forb	Meadow, field, dry woods, poor soils
<i>Anthemis cotula</i>	mayweed	Terrestrial Forb	Disturbed soil, road edges, fields
<i>Aquilegia canadensis</i>	wild columbine	Terrestrial Forb	Moist woods
<i>Arenaria serpyllifolia</i>	thyme-leaved sandwort	Terrestrial Forb	Dry disturbed areas
<i>Arisanema Atrorulens</i>	jack-in-the-pulpet	Terrestrial Forb	Moist to semi-dry woods
<i>Artemisia vulgaris</i>	common mugwort	Terrestrial Forb	Disturbed soils, road edges
<i>Asarum canadense</i>	wild ginger	Terrestrial Forb	Moist woods
<i>Asclepias incarnata</i>	swamp milkweed	Terrestrial Forb	Moist meadows & fields
<i>Asclepias purpurascens</i>	purple milkweed	Terrestrial Forb	Meadow, field
<i>Asclepias syriaca</i>	common milkweed	Terrestrial Forb	Meadow, fields, road edges
<i>Asclepias tuberosa</i>	butterflyweed	Terrestrial Forb	Sunny banks, fields
<i>Asclepias viridiflora</i>	green milkweed	Terrestrial Forb	
<i>Ascyrum hypericoides</i>	St. Andrew's cross	Terrestrial Forb	Poor soils in Meadow and field edges
<i>Aster laevis</i>	smooth blue aster	Terrestrial Forb	Dry fields, woods
<i>Aster patens</i>	late purple aster	Terrestrial Forb	Dry fields, woods
<i>Aster pilosus</i>	heath aster	Terrestrial Forb	Meadow, field, disturbed areas, road edges
<i>Aster vimineus</i>	small white aster	Terrestrial Forb	Field, disturbed areas, road edges
<i>Barbarea verna</i>	early winter cress	Terrestrial Forb	Field, disturbed areas, road edges
<i>Barbarea vulgaris</i>	common winter cress	Terrestrial Forb	Field, disturbed areas, road edges
<i>Bidens frondosa</i>	beggar ticks	Terrestrial Forb	Field edges
<i>Bidens polylepis</i>	tickseed sunflower	Terrestrial Forb	Moist fields, disturbed areas, road edges
<i>Boehmeria cylindrica</i>	false nettle	Terrestrial Forb	Moist bottomland
<i>Cardamine bulbosa</i>	spring cress	Terrestrial Forb	Moist bottomland
<i>Cardamine pennsylvanica</i>	Pennsylvania bittercress	Terrestrial Forb	Lawns, fields, disturbed areas
<i>Cassia fasciculata</i>	partidge pea	Terrestrial Forb	Meadow, field, road edges
<i>Cassia marilandica</i>	Maryland senna	Terrestrial Forb	Road edges, thickets
<i>Centaurea maculosa</i>	spotted knapweed	Terrestrial Forb	Disturbed areas, road edges
<i>Cerastium vulgatum</i>	mouse-ear chickweed	Terrestrial Forb	Fields, lawns
<i>Chelone glabra</i>	turtlehead	Terrestrial Forb	Stream banks
<i>Chondrilla juncea</i>	skeleton weed	Terrestrial Forb	
<i>Chrysanthemum leucanthemum</i>	ox-eye daisy	Terrestrial Forb	Meadow, fields, road edges
<i>Cichorium intybus</i>	chicory	Terrestrial Forb	Meadow, fields, road edges
<i>Circaea quadrisulcata</i>	enchanter's nightshade	Terrestrial Forb	Moist woods
<i>Cirsium discolor</i>	field thistle	Terrestrial Forb	Fields, field edges, disturbed areas, road edges
<i>Cirsium vulgare</i>	bull thistle	Terrestrial Forb	Fields, field edges, disturbed areas, road edges
<i>Claytonia virginica</i>	spring- beauty	Terrestrial Forb	Woods
<i>Commelina communis</i>	Asiatic dayflower	Terrestrial Forb	Moist fields and field edges
<i>Coreopsis lanceolata</i>	tickseed	Terrestrial Forb	Fields
<i>Coreopsis verticillata</i>	whorled coreopsis	Terrestrial Forb	Dry fields
<i>Coronilla varia</i>	crown vetch	Terrestrial Forb	Meadow, fields, disturbed areas and road edges
<i>Corydalis flavula</i>	yellow cordalis	Terrestrial Forb	Moist woods
<i>Crotalaria sagittalis</i>	rattlebox	Terrestrial Forb	Wet meadow
<i>Cryptotaenia canadensis</i>	honestwort	Terrestrial Forb	Stream banks
<i>Daucus carota</i>	Queen Anne's lace	Terrestrial Forb	Disturbed areas, fields
<i>Dentaria heterophyllia</i>	slender toothwort	Terrestrial Forb	Moist woods
<i>Dentaria laciniata</i>	cut-leaved toothwort	Terrestrial Forb	Moist woods
<i>Desmodium ciliare</i>	small leaved tick trefoil	Terrestrial Forb	Meadows, fields
<i>Desmodium cuspidatum</i>	large-bracted tick-trefoil	Terrestrial Forb	Meadows
<i>Desmodium nudiflorum</i>	naked-flowered tick-trefoil	Terrestrial Forb	Meadow, fields
<i>Desmodium paniculatum</i>	panicked tick trefoil	Terrestrial Forb	Meadows
<i>Dianthus armeria</i>	Deptford pink	Terrestrial Forb	Meadow, fields, field edges, lawns

<i>Dicentra cucullaria</i>	Dutchman's Breeches	Terrestrial Forb	Moist bottomland
<i>Diodia teres</i>	buttonweed	Terrestrial Forb	Meadows
<i>Dioscorea quaternata</i>	wild yam	Terrestrial Forb	Moist to dry woods
<i>Dodecatheon meadia</i>	shooting star	Terrestrial Forb	Woods, fields
<i>Duchesnea indica</i>	Indian strawberry	Terrestrial Forb	Lawns, fields, field edges
<i>Elephantopus carolinianus</i>	elephant's foot	Terrestrial Forb	Fields
<i>Erechtites hieracifolia</i>	pilewort	Terrestrial Forb	Moist woods
<i>Erigeron canadensis</i>	horseweed	Terrestrial Forb	Field edges, woods
<i>Erigeron philadelphicus</i>	common fleabane	Terrestrial Forb	Field edges, woods
<i>Erigeron pulchellus</i>	robin's plantain	Terrestrial Forb	Woods, fields
<i>Erigeron strigosus</i>	daisy fleabane	Terrestrial Forb	Meadow, fields
<i>Erythronium americanum</i>	trout lily	Terrestrial Forb	Moist woods and bottomlands
<i>Eupatorium coelestinum</i>	mistflower	Terrestrial Forb	Meadow, fields
<i>Eupatorium fistulosum</i>	joe-pie-weed	Terrestrial Forb	Moist bottomland
<i>Eupatorium hyssopifolium</i>	hyssop-leaved boneset	Terrestrial Forb	Meadow, fields
<i>Eupatorium perfoliatum</i>	boneset	Terrestrial Forb	Moist fields
<i>Euphorbia corollata</i>	flowering spurge	Terrestrial Forb	Meadows
<i>Euphorbia cyparissias</i>	cypress spurge	Terrestrial Forb	Field edge
<i>Fragaria virginiana</i>	wild strawberry	Terrestrial Forb	Moist woods
<i>Galium aparine</i>	cleavers	Terrestrial Forb	Woods
<i>Galium asprellum</i>	rough bedstraw	Terrestrial Forb	Woods
<i>Galium circaezans</i>	wild licorice	Terrestrial Forb	Woods
<i>Geranium carolinianum</i>	Carolina cranesbill	Terrestrial Forb	Disturbed soils, field edges, parking lots
<i>Geranium maculatum</i>	wild geranium	Terrestrial Forb	Moist soils, wet field or woods
<i>Geranium mobile</i>	dove's foot cranesbill	Terrestrial Forb	Lawns, parking lots
<i>Geum canadense</i>	white avens	Terrestrial Forb	Woods
<i>Geum virginianum</i>	rough avens	Terrestrial Forb	Woods
<i>Glechoma hederacea</i>	ground ivy	Terrestrial Forb	Ubiquitous
<i>Gnaphalium obtusifolium</i>	sweet everlasting	Terrestrial Forb	Meadow, fields, sunny banks
<i>Gnaphalium purpureum</i>	low cudweed	Terrestrial Forb	Sunny banks
<i>Hackelia virginiana</i>	Virginia stickseed	Terrestrial Forb	Ubiquitous
<i>Hedeoma pulegioides</i>	American pennyroyal	Terrestrial Forb	Fields
<i>Helianthus decapetalus</i>	thin-leaved sunflower	Terrestrial Forb	Moist woods
<i>Hesperis matronalis</i>	dame's rocket	Terrestrial Forb	Field and road edges
<i>Heuchera americana</i>	alumroot	Terrestrial Forb	Moist woods
<i>Hieracium gronovii</i>	hairy hawkweed	Terrestrial Forb	Meadow
<i>Hieracium pratense</i>	field hawkweed	Terrestrial Forb	Meadow
<i>Hieracium venosum</i>	rattlesnake weed	Terrestrial Forb	Moist to dry woods
<i>Houstonia caerulea</i>	bluets	Terrestrial Forb	Fields, lawns, woods
<i>Houstonia purpurea</i>	large houstonia	Terrestrial Forb	Moist woods
<i>Hypericum mutilum</i>	dwarf St. Johnswort	Terrestrial Forb	Moist fields
<i>Hypericum perforatum</i>	common St. Johnswort	Terrestrial Forb	Meadow, fields, road edges
<i>Hypericum punctatum</i>	spotted St. Johnswort	Terrestrial Forb	Meadow, fields, road edges
<i>Hypericum spathulatum</i>	shrubby St. Johnswort	Terrestrial Forb	Meadow
<i>Hypoxis hirsuta</i>	yellow stargrass	Terrestrial Forb	Moist woods
<i>Impatiens capensis</i>	jewelweed	Terrestrial Forb	Streams, moist bottomland
<i>Iovara virginiana</i>	Virginia knotweed	Terrestrial Forb	Moist to wet woods
<i>Iris verna</i>	dwarf iris	Terrestrial Forb	Field edge
<i>Lactuca canadensis</i>	wild lettuce	Terrestrial Forb	Stream banks, fields
<i>Lactuca sp.</i>	tall blue lettuce	Terrestrial Forb	Stream banks, fields
<i>Lamium amplexicaule</i>	henbit	Terrestrial Forb	Meadow, field
<i>Lamium purpureum</i>	purple dead nettle	Terrestrial Forb	Lawns, parking lots, field, field & road edges, disturbed areas
<i>Lathyrus latifolius</i>	everlasting pea	Terrestrial Forb	Road edges
<i>Lepidium campestre</i>	field peppergrass	Terrestrial Forb	Lawns, fields
<i>Lepidium virginicum</i>	wild peppergrass	Terrestrial Forb	Lawns, disturbed soils
<i>Lespedeza cuneata</i>	Chinese bush clover	Terrestrial Forb	Meadow & UOSA easement
<i>Lespedeza procubens</i>	trailing bush clover	Terrestrial Forb	Meadow, fields
<i>Lespedeza virginica</i>	slender bush clover	Terrestrial Forb	Dry slopes in fields, meadow
<i>Liatris aspera</i>	rough blazing star	Terrestrial Forb	Fields

<i>Linum usitatissimum</i>	flax	Terrestrial Forb	Disturbed areas, fields
<i>Lithospermum arvense</i>	corn gromwell	Terrestrial Forb	Woods, field edges
<i>Lobelia cardinalis</i>	cardinal flower	Terrestrial Forb	Moist woods and fields; stream edges
<i>Lobelia inflata</i>	Indian tobacco	Terrestrial Forb	Moist woods and fields
<i>Lobelia puerula</i>	downy lobelia	Terrestrial Forb	Moist woods and fields
<i>Lobelia siphilitica</i>	great lobelia	Terrestrial Forb	Moist woods and fields
<i>Lotus corniculatus</i>	birdsfoot trefoil	Terrestrial Forb	Fields; disturbed soil
<i>Ludwigia alternifolia</i>	seedbox	Terrestrial Forb	Wet meadow
<i>Lycopus virginicus</i>	Virginia bugleweed	Terrestrial Forb	Moist areas
<i>Lysimachia ciliata</i>	fringed loostrife	Terrestrial Forb	Moist meadows
<i>Lysimachia quadrifolia</i>	whorled loostrife	Terrestrial Forb	Moist meadows
<i>Malva neglecta</i>	common mallow	Terrestrial Forb	Lawns, fields
<i>Mazus reptans</i>	mazus	Terrestrial Forb	Fields
<i>Medicago sativa</i>	alfalfa	Terrestrial Forb	Fields; disturbed soil
<i>Melilatus alba</i>	white sweet clover	Terrestrial Forb	Road edges, disturbed areas, fields
<i>Melilatus officinalis</i>	yellow sweet clover	Terrestrial Forb	Road edges, disturbed areas, fields
<i>Mentha piperita</i>	peppermint	Terrestrial Forb	Fields
<i>Mentha spicata</i>	spearmint	Terrestrial Forb	Spearmint
<i>Mertensia virginica</i>	Virginia bluebells	Terrestrial Forb	Moist bottomland
<i>Mimulus alatus</i>	sharpwinged monkey flower	Terrestrial Forb	Stream edges, wet meadow
<i>Mimulus ringers</i>	square-stemmed monkey flower	Terrestrial Forb	Stream edges, wet meadow
<i>Monarda fistulosa</i>	wild bergamot	Terrestrial Forb	Moist meadow
<i>Monotropa uniflora</i>	Indian pipe	Terrestrial Forb	Dry woods
<i>Myosotis verna</i>	spring forget-me-not	Terrestrial Forb	Woods, field edges
<i>Nymphaea odorata</i>	fragrant water-lily	Terrestrial Forb	Pond
<i>Penstemon digitalis</i>	foxglove beardtongue	Terrestrial Forb	Moist meadows
<i>Oenothera fruticosa</i>	sundrops	Terrestrial Forb	Fields, road edges
<i>Orchis spectabilis</i>	showy orchis	Terrestrial Forb	Moist woods
<i>Ornithogalum umbellatum</i>	star of bethlehem	Terrestrial Forb	Lawns, field edges
<i>Osmorhiza claytoni</i>	sweet cicely	Terrestrial Forb	Moist woods
<i>Oxalis stricta</i>	yellow wood sorrel	Terrestrial Forb	Lawns, disturbed soil
<i>Oxalis vioacea</i>	violet wood sorrel	Terrestrial Forb	Woods
<i>Panentilla canadensis</i>	dwarf cinquefoil	Terrestrial Forb	Fields, woods, poor soil
<i>Penstemon hirsutus</i>	hairy beardtongue	Terrestrial Forb	Moist meadow
<i>Perilla frutescens</i>	pericled	Terrestrial Forb	Ubiquitous
<i>Phlox divaricata</i>	blue phlox	Terrestrial Forb	Moist woods and field edges
<i>Phlox subulata</i>	moss phlox	Terrestrial Forb	Dry mature woods
<i>Phryma leptostachya</i>	lopseed	Terrestrial Forb	Moist woods
<i>Phytolacca americana</i>	pokeweed	Terrestrial Forb	Ubiquitous
<i>Pilea pumila</i>	clearweed	Terrestrial Forb	Moist woods
<i>Plantago lanceolata</i>	English plantain	Terrestrial Forb	Lawns, disturbed soils
<i>Plantago major</i>	common plantain	Terrestrial Forb	Lawns, disturbed soils
<i>Podophyllum peltatum</i>	may-apple	Terrestrial Forb	Moist woods or field edges
<i>Polygonatum pubescens</i>	hairy solomon's seal	Terrestrial Forb	Woods
<i>Polygonum hydropiper</i>	water pepper	Terrestrial Forb	Pond
<i>Polygonum pericaria</i>	lady's- thumb	Terrestrial Forb	Fields, lawns, disturbed soil
<i>Potentilla recta</i>	roughfruited cinquefoil	Terrestrial Forb	Fields, disturbed soils
<i>Prunella vulgaris</i>	heal all	Terrestrial Forb	Lawns, fields
<i>Pycnanthemum tenuifolium</i>	narrow-leaved mountain mint	Terrestrial Forb	Meadow
<i>Ranunculus scleratus</i>	cursed crowfoot	Terrestrial Forb	Stream edges, moist bottomland
<i>Ranunculus abortivus</i>	small-flowered buttercup	Terrestrial Forb	Woods, field edges
<i>Ranunculus bulbosus</i>	bulbous buttercup	Terrestrial Forb	Ubiquitous
<i>Ranunculus fascicularis</i>	early buttercup	Terrestrial Forb	Moist woods
<i>Rubus sp.</i>	blackberries	Terrestrial Forb	Ubiquitous
<i>Rudbeckia hirta</i>	black-eyed susan	Terrestrial Forb	Fields, road edges
<i>Ruellia carolinensis</i>	hairy ruellia	Terrestrial Forb	Woods, clearings
<i>Ruellia humilis</i>	wild petunia	Terrestrial Forb	Woods, clearings
<i>Rumex crispus</i>	curled dock	Terrestrial Forb	Fields, disturbed areas
<i>Rumex obtusifolius</i>	broad dock	Terrestrial Forb	Fields, disturbed areas

<i>Sagittaria latifolia</i>	broad-leaved arrowhead	Terrestrial Forb	Pond
<i>Salvia lyrata</i>	lyre leaved sage	Terrestrial Forb	Moist bottomland
<i>Sanguinaria canadensis</i>	bloodroot	Terrestrial Forb	Moist slopes and bottomland
<i>Satureja vulgaris</i>	wild basil	Terrestrial Forb	Field edges
<i>Saxifraga pennsylvanica</i>	swamp saxifrage	Terrestrial Forb	Moist woods
<i>Saxifraga virginensis</i>	early saxifrage	Terrestrial Forb	Dry woods
<i>Scrophularia lanceolata</i>	figwort	Terrestrial Forb	Field edges
<i>Scrophularia marilandica</i>	Maryland figwort	Terrestrial Forb	Field edges
<i>Scutellaria nervosa</i>	veined skullcap	Terrestrial Forb	Fields
<i>Scutellaria incana</i>	downy skullcap	Terrestrial Forb	Fields
<i>Scutellaria integifolia</i>	hyssop skullcap	Terrestrial Forb	Fields
<i>Sedum ternatum</i>	wild stonecrop	Terrestrial Forb	Stream edges
<i>Senecio pauperculus</i>	balsum ragwort	Terrestrial Forb	Meadows, fields
<i>Silene stellata</i>	starry campion	Terrestrial Forb	Woods
<i>Silene virginica</i>	fire pink	Terrestrial Forb	Woods
<i>Sisyrinchium montanum</i>	blue-eyed-grass	Terrestrial Forb	Fields, woods
<i>Smilacina racemosa</i>	false salomons seal	Terrestrial Forb	Moist woods
<i>Smilax rotundifolia</i>	greenbrier	Terrestrial Forb	Mostly woods
<i>Solanum carolinense</i>	horse nettle	Terrestrial Forb	Fields, disturbed areas
<i>Solanum dulcamara</i>	bittersweet nightshade	Terrestrial Forb	Moist fields
<i>Solanum nigrum</i>	common nightshade	Terrestrial Forb	Lawns, fields
<i>Solidago odora</i>	early goldenrod	Terrestrial Forb	Meadow, fields
<i>Solidago odora</i>	sweet goldenrod	Terrestrial Forb	Meadow, fields
<i>Solidago rigida</i>	stiff goldenrod	Terrestrial Forb	Meadow, fields
<i>Solidago speciosa</i>	showy goldenrod	Terrestrial Forb	Meadow, fields
<i>Solidago altissima</i>	tall goldenrod	Terrestrial Forb	Meadow, fields
<i>Solidago caesia</i>	blue stemmed goldenrod	Terrestrial Forb	Meadow, fields
<i>Solidago erecta</i>	slender goldenrod	Terrestrial Forb	Meadow, fields
<i>Specularia perfoliata</i>	venus looking glass	Terrestrial Forb	Meadow, fields
<i>Spiranthes gracilis</i>	slender ladies' tresses	Terrestrial Forb	Meadow, poor soil
<i>Spomoea pandurata</i>	wild potato vine	Terrestrial Forb	Field edges, poor soil
<i>Stellaria media</i>	common chickweed	Terrestrial Forb	Ubiquitous
<i>Stellaria pubera</i>	star chickweed	Terrestrial Forb	Moist woods or bottomland
<i>Strophostyles umbellata</i>	pink wild bean	Terrestrial Forb	Meadow, fields
<i>Stylosanthes biflora</i>	pencil flower	Terrestrial Forb	Field edge, sandy soil
<i>Symplocarpus foetidus</i>	skunk cabbage	Terrestrial Forb	Seeps
<i>Taraxacum officinale</i>	dandelion, common	Terrestrial Forb	Mostly lawns, fields, road edge, sometimes woods
<i>Targopogon pratensis</i>	yellow goats beard	Terrestrial Forb	Meadow, fields
<i>Thalictrum polygamum</i>	tall meadow rue	Terrestrial Forb	Moist soil
<i>Tipularia discolor</i>	cranefly orchis	Terrestrial Forb	Woods
<i>Tradescantia ohioensis</i>	Ohio spiderwort	Terrestrial Forb	Woods, meadows
<i>Trifolium arvense</i>	rabbits' foot clover	Terrestrial Forb	Meadow, fields
<i>Trifolium pratense</i>	red clover	Terrestrial Forb	Lawns, meadow, fields, disturbed soils
<i>Trifolium procumbens</i>	smaller hop clover	Terrestrial Forb	Lawns, meadow, fields, disturbed soils
<i>Trifolium repens</i>	white clover	Terrestrial Forb	Lawns, meadow, fields, disturbed soils
<i>Trillium cernuum</i>	nodding trillium	Terrestrial Forb	Moist woods
<i>Trillium grandiflorum</i>	white trillium	Terrestrial Forb	Moist woods
<i>Uvularia perfoliata</i>	perfoliate bellwort	Terrestrial Forb	Moist woods
<i>Verbascum thapsus</i>	common mullein	Terrestrial Forb	Fields, road edges, dry slopes
<i>Verbena stricta</i>	hoary vervain	Terrestrial Forb	Fields
<i>Verbena urticifolia</i>	white vervain	Terrestrial Forb	Moist fields
<i>Vernonia noveboracensis</i>	New York Ironweed	Terrestrial Forb	Moist fields, stream or pool edges
<i>Veronica agrestis</i>	field speedwell	Terrestrial Forb	Lawns, fields
<i>Veronica arvensis</i>	corn speedwell	Terrestrial Forb	Lawns, fields
<i>Veronica hederifolia</i>	ivy-leaved speedwell	Terrestrial Forb	Lawns, fields
<i>Veronica perovica</i>	Persian speedwell	Terrestrial Forb	Lawns, fields
<i>Veronica serpyllifolia</i>	thyme-leaved speedwell	Terrestrial Forb	Lawns, fields
<i>Vicia augustifolia</i>	narrow-leaved vetch	Terrestrial Forb	Fields, field edges
<i>Vicia cracca</i>	tufted vetch	Terrestrial Forb	Fields, field edges
<i>Vicia sativa</i>	spring vetch	Terrestrial Forb	Fields, field edges

<i>Viola cucullata</i>	marsh blue violet	Terrestrial Forb	Moist woods
<i>Viola kitaibeliana</i>	field pansy	Terrestrial Forb	Lawns
<i>Viola papilionacea</i>	common violet	Terrestrial Forb	Lawns, fields, woods
<i>Viola pedata</i>	bird's foot violet	Terrestrial Forb	Moist woods
<i>Viola pensylvanica</i>	smooth yellow violet	Terrestrial Forb	Woods
<i>Viola rotundifolia</i>	round-leaved violet	Terrestrial Forb	Woods
<i>Yucca filamentosa</i>	yucca	Terrestrial Forb	Dry fields or old field
<i>Zizia aptera</i>	heart-leaf golden alexander	Terrestrial Forb	Moist fields or woods
<i>Zizia aurea</i>	golden alexander	Terrestrial Forb	Moist fields or woods
<i>Acer negunda</i>	Ash-leaved maple	Tree	Young woods
<i>Acer rubrum</i>	red maple	Tree	Woods
<i>Ailanthus altissima</i>	tree of heaven	Tree	Field edges, woods
<i>Alnus serrulata</i>	smooth alder	Tree	Stream edges
<i>Amelanchier arborea</i>	downy serviceberry	Tree	Upland woods, under story
<i>Asimina triloba</i>	paw paw	Tree	Moist woods
<i>Betula nigra</i>	river birch	Tree	Stream edges, pond
<i>Carpinus caroliniana</i>	ironwood	Tree	Moist bottomland, under story
<i>Carya glabra</i>	pignut hickory	Tree	Woods
<i>Carya tomentosa</i>	mockernut hickory	Tree	Woods
<i>Celtis occidentalis</i>	hackberry	Tree	Woods
<i>Cercis canadensis</i>	redbud	Tree	Fields, field edges, woods
<i>Chionanthus virginicus</i>	Virginia fringe tree	Tree	Wooded uplands, under story
<i>Cornus florida</i>	flowering dogwood	Tree	Upland woods, under story
<i>Diospyros virginiana</i>	persimmon	Tree	Upland woods, old fields
<i>Fagus grandifolia</i>	American beech	Tree	Old woods, stream edges
<i>Fraxinus pennsylvanica</i>	green ash	Tree	woods
<i>Hamamelis virginiana</i>	witch hazel	Tree	Bottomland woods, under story
<i>Ilex decidua</i>	Opossum haw	Tree	Stream edges
<i>Ilex opaca</i>	American holly	Tree	ubiquitous
<i>Juglans nigra</i>	black walnut	Tree	Woods, lawns
<i>Juniperus virginiana</i>	eastern red cedar	Tree	Fields, old fields, young woods
<i>Liquidambar styraciflua</i>	sweet gum	Tree	Fields, old fields, young woods
<i>Liriodendron tulipifera</i>	tulip tree	Tree	Woods
<i>Maculura pomifera</i>	osage orange	Tree	Woods
<i>Nyssa sylvatica</i>	black tupelo	Tree	Moist or wet woods
<i>Paulownia tomentosa</i>	princess tree	Tree	Road edges, disturbed areas, lawn edges
<i>Pinus virginiana</i>	Virginia pine	Tree	Fields, old fields, young woods
<i>Platanus occidentalis</i>	sycamore	Tree	Moist woods, stream edges
<i>Prunus serotina</i>	black cherry	Tree	Lawns, fields, field edges, woods
<i>Prunus virginiana</i>	choke cherry	Tree	Fields, field edges, young woods
<i>Quercus alba</i>	white oak	Tree	Moist or dry woods
<i>Quercus coccinea</i>	scarlet oak	Tree	Moist to dry woods
<i>Quercus falcata</i>	southern red oak	Tree	Woods
<i>Quercus phellos</i>	willow oak	Tree	Moist or dry woods
<i>Quercus prinus</i>	chestnut oak	Tree	Dry woods
<i>Quercus stellata</i>	post oak	Tree	Fields edges, old field, young woods
<i>Quercus velutina</i>	black oak	Tree	Moist to dry woods
<i>Robinia pseudo-acacia</i>	black locust	Tree	Fields, field edges, young forest
<i>Sassafras albidum</i>	sassafras	Tree	Fields, field edges, road edges, young woods
<i>Tsuga canadensis</i>	eastern hemlock	Tree	Moist woods, north facing slopes
<i>Ulmus rubra</i>	slippery elm	Tree	Stream valleys
<i>Campsis radicans</i>	trumpet-creeper	Vine	Fields, field edges, blow down
<i>Celastrus orbiculatus</i>	Asiatic bittersweet	Vine	Cedar thickets, road edges, field edges
<i>Clematis virginiana</i>	virgin's bower	Vine	Moist slopes and bottomland
<i>Convolvulus arvensis</i>	field bindweed	Vine	Fields, field edges
<i>Convolvulus sepium</i>	Hedge bindweed	Vine	Fields, field edges
<i>Cuscuta gronovii</i>	common dodder	Vine	Moist or wet meadow
<i>Fragaria spp.</i>	wild strawberries	Vine	ubiquitous in open areas
<i>Ipomoea hederacea</i>	ivy leaved morning glory	Vine	Meadow, fields, field edges
<i>Ipomoea lacunosa</i>	sm. wht. morning glory	Vine	Meadow, fields, field edges

<i>Ipomoea purpurea</i>	common morning glory	Vine	Meadow, fields, field edges
<i>Lonicera japonica</i>	Japanese honeysuckle	Vine	ubiquitous
<i>Mitchella repens</i>	partridgeberry	Vine	Moist and dry woods
<i>Parthenocissus quinquefolia</i>	Virginia creeper	Vine	Ubiquitous
<i>Polygonum convulosus</i>	black bindweed	Vine	Moist woods, stream edges
<i>Polygonum perfoliatum</i>	tearthumb or mile-a-minute vine	Vine	Disturbed areas, road edges, fields
<i>Polygonum sagittatum</i>	arrow- leaved tearthumb	Vine	Moist or wet meadow
<i>Polygonum scandens</i>	climbing false buckwheat	Vine	Fields
<i>Rhus radicans</i>	poison ivy	Vine	Ubiquitous
<i>Smilax rotundifolia</i>	common greenbriar	Vine	Woods, wood edges
<i>Vinca minor</i>	periwinkle	Vine	Woods, field edges
<i>Vitis aestivalis</i>	summer grape	Vine	Woods, field edges, old field
<i>Vitis labrusca</i>	fox grape	Vine	Woods, field edges, old field
<i>Wisteria sinenses</i>	wisteria	Vine	Disturbed areas near old dwellings

Appendix IV. – Mammals Species List

Mammal Species

This list has been compiled by park staff through field observations and lists of animals found in the region that could occur here.

Scientific Name	Common Name	Status at ECL Park
<i>Blarina brevicauda</i>	Short-tailed Shrew	Confirmed
<i>Canis latrans</i>	Coyote	Confirmed
<i>Castor canadensis canadensis</i>	American Beaver	Confirmed
<i>Condylura cristata</i>	Star-nosed Mole	Possible
<i>Cryptotis parva</i>	Least Shrew	Probable
<i>Eptesicus fuscus</i>	Big Brown Bat	Confirmed
<i>Glaucomys volans</i>	Southern Flying Squirrel	Confirmed
<i>Lasionycteris noctivagans</i>	Silver-haired Bat	Probable
<i>Lasiurus borealis</i>	Eastern Red Bat	Confirmed
<i>Lasiurus cinereus</i>	Hoary Bat	Probable
<i>Lynx rufus</i>	Bobcat	Possible
<i>Marmota monax</i>	Woodchuck	Confirmed
<i>Mephitis mephitis</i>	Striped Skunk	Confirmed
<i>Microtus pennsylvanicus</i>	Meadow Vole	Confirmed
<i>Microtus pinetorum</i>	Woodland Vole	Confirmed
<i>Mus musculus</i>	House Mouse	Confirmed
<i>Mustela frenata</i>	Long-tailed Weasel	Probable
<i>Mustela vison</i>	Mink	Possible
<i>Myotis lucifugus lucifugus</i>	Little Brown Myotis Bat	Confirmed
<i>Nycticeius humeralis</i>	Evening Bat	Probable
<i>Odocoileus virginianus</i>	White-tailed Deer	Confirmed
<i>Ondatra zibethicus</i>	Muskrat	Confirmed
<i>Peromyscus leucopus</i>	White-footed Mouse	Confirmed
<i>Peromyscus maniculatus</i>	Deer Mouse	Confirmed
<i>Pipistrellus subflavus</i>	Eastern Pipistrelle Bat	Confirmed
<i>Procyon lotor lotor</i>	Raccoon	Confirmed
<i>Scalopus aquaticus</i>	Eastern Mole	Confirmed
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel	Confirmed
<i>Sorex longirostris</i>	South Eastern Shrew	Possible
<i>Sylvilagus floridanus</i>	Eastern Cottontail Rabbit	Confirmed
<i>Tamias striatus striatus</i>	Eastern Chipmunk	Confirmed
<i>Tamiasciurus hudsonicus</i>	Red Squirrel	Possible
<i>Urocyon cinereargenteus</i>	Common Gray Fox	Confirmed
<i>Vulpes vulpes</i>	Red Fox	Confirmed

Appendix V. – Reptile and Amphibian Species List

Reptile and Amphibian Species

This list has been compiled by park staff from field observations and lists of animals found in the region that could occur here.

Amphibians

Scientific Name	Common Name	Status at ECL Park
<i>Ambystoma maculatum</i>	Salamander, Spotted	Confirmed
<i>Ambystoma opacum</i>	Salamander, Marbled	Confirmed
<i>Anaxyrus americanus</i>	Toad, American	Confirmed
<i>Anaxyrus fowleri</i>	Toad, Fowler's	Confirmed
<i>Desmognathus fuscus</i>	Salamander, Northern dusky	Confirmed
<i>Eurycea bislineata</i>	Salamander, Northern two-lined	Confirmed
<i>Eurycea guttolineata</i>	Salamander, Three-lined	Confirmed
<i>Hemidactylium scutatum</i>	Salamander, Four-toed	Possible
<i>Hyla chrysoscelis</i>	Treefrog, Cope's gray	Possible
<i>Hyla versicolor</i>	Treefrog, Gray	Confirmed
<i>Plethodon cinereus</i>	Salamander, Northern red-backed	Confirmed
<i>Plethodon cylindraceus</i>	Salamander, Slimy	Confirmed
<i>Pseudacris crucifer crucifer</i>	Peeper, Northern spring	Confirmed
<i>Pseudacris feriarum</i>	Frog, Southeastern chorus	Probable
<i>Pseudotriton montanus</i>	Salamander, Mud	Probable
<i>Pseudotriton ruber ruber</i>	Salamander, Northern red	Probable
<i>Lithobates catesbeianus</i>	Bullfrog, American	Confirmed
<i>Lithobates clamitans</i>	Frog, Green	Confirmed
<i>Lithobates palustris</i>	Frog, Pickerel	Confirmed
<i>Lithobates sphenoccephalus</i>	Frog, Southern leopard	Probable
<i>Lithobates sylvaticus</i>	Frog, Wood	Confirmed
<i>Scaphiopus holbrookii</i>	Toad, Eastern spadefoot	Possible

Reptiles

Scientific Name	Common Name	Status at ECL Park
<i>Agkistrodon contortrix mokasen</i>	Copperhead, Northern	Confirmed
<i>Apalone spinifer spinifer</i> *	Softshell, Eastern spiny	*Introduced / Removed
<i>Carphophis amoenus amoenus</i>	Snake, Eastern worm	Confirmed
<i>Chelydra serpentina serpentina</i>	Turtle, Common snapping	Confirmed
<i>Chrysemys picta picta</i>	Turtle, Eastern painted	Confirmed
<i>Chrysemys picta dorsalis</i>	Turtle, Southern painted	*Introduced / Removed
<i>Coluber constrictor constrictor</i>	Racer, Northern black	Confirmed
<i>Diadophis punctatus edwardsii</i>	Snake, Northern ringneck	Confirmed
<i>Pantherophis alleghaniensis</i>	Ratsnake, Eastern	Confirmed
<i>Plestiodon fasciatus</i>	Skink, Common five-lined	Confirmed
<i>Plestiodon laticeps</i>	Skink, Broad-headed	Confirmed
<i>Graptemys geographica</i> *	Turtle, Northern map	*Introduced / Removed
<i>Heterodon platirhinos</i>	Snake, Eastern hognose	Confirmed
<i>Lampropeltis calligaster</i>	Kingsnake, Mole	Confirmed
<i>Lampropeltis getula getula</i>	Kingsnake, Eastern	Possible
<i>Nerodia sipedon sipedon</i>	Snake, Northern water	Confirmed
<i>Opheodrys aestivus aestivus</i>	Snake, Rough green	Confirmed
<i>Pseudemys rubriventris rubriventris</i>	Slider, Northern red-bellied	Confirmed
<i>Regina septemvittata</i>	Snake, Queen	Confirmed
<i>Sceloporus undulatus hyacinthinus</i>	Lizard, Northern fence	Possible
<i>Scincella lateralis</i>	Skink, Ground	Possible
<i>Sternotherus odoratus</i>	Turtle, Eastern musk	Confirmed
<i>Storeria occipitomaculata</i>	Snake, Red-belly	Probable
<i>Terrapene carolina carolina</i>	Turtle, Eastern box	Confirmed
<i>Thamnophis sauritus sauritus</i>	Snake, Eastern ribbon	Possible
<i>Thamnophis sirtalis sirtalis</i>	Snake, Eastern garter	Confirmed
<i>Trachemys scripta elegans</i>	Slider, Red-eared	Confirmed
<i>Trachemys scripta scripta</i>	Slider, Yellow-bellied	Confirmed
<i>Virginia valeriae valeriae</i>	Snake, Eastern smooth earth	Confirmed

Appendix VI. – Authorship Information

Plan Authors

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Site Work Group

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