2021

Native Plant Program Annual Report

Dept. of Facilities & Environmental Services

County of Albemarle, VA

Contents

Introduction

The goal of the County's Native Plant Program (NPP) is to increase the use native plants across the County, advocate for a plant-community based approach that supports biodiversity and strengthens ecosystem services, and to implement County Action Plans and policies. These goals will be reached by providing measurable deliverables including policy development, leadership, education, outreach, and planning. Outreach includes demonstration landscapes with native plants.

This NPP annual report covers the 2021 calendar year and reflects on 16 years of work with native plants at the County. The report introduces the NPP, tracks accomplishments, and sets expectations for the coming year. The NPP is an umbrella program that has been implemented by various departments and their staff with existing budgets and resources. This report recognizes the County, departments, staff, and the knowledge they bring to their daily work and projects. NPP is coordinated by the Environmental Services Division (ESD).

Native Plants

The definition of "native plants" can vary from organization to organization. For example, the Virginia Department of Conservation and Recreation, Natural Heritage Division (VA DCR) botanists determine if plants are native by county in the Commonwealth based on the presence of native plants found in their historic associated habitats (Digital Atlas of the Virginia Flora.) There are further designations for native plants: locally native plants or local ecotype, for example, are plants based on a (geographic) region. These regions vary based on who and why they are defining them. Some determine this region to be based on a 5-mile radius around a site of interest, others use county boundaries, and others use the EPA ecoregion maps. The NPP considers locally native to be the region made up of the 11 Counties found in the Northern Piedmont Native Plants guide (NPNP 2015). A single species of native plant does not function as ecosystem or habitat, but rather it takes a community of plants to form these complex systems. Habitats and plant-community are often used interchangeably. Albemarle County Natural Plant-Communities are listed in Appendix A of the Biodiversity Action Plan (BAP 2018). These plant systems are the foundation for biodiversity and ecosystem services.

> *"…Piedmont native plants are defined as plants that evolved in the region before influences of European settlements at Jamestown began to shape and change the landscape. There is strong evidence that the Monacan Nation and other indigenous peoples living on the lands that are now Virginia have contributed to the alteration of the landscape by cultivating and relocating species over the last 14,000 years."*
>
> NPNP 2015

Invasive Plants

Some plants are considered "invasive." VA DCR botanists have created the Virginia Invasive Plant Species List. Also, the Blue Ridge Partnership for Regional Invasive Species Management (PRISM) has developed fact sheets about invasive plants that most impact our region. *Noxious weeds* are given a specific legal designation that goes beyond the term invasive plants. The Virginia Department of Agriculture and Consumer Services' (VDACS) list of noxious weeds is developed by committee, as described on the Noxious Weeds webpage. Weeds in Tiers 1 and 2 are codified to be eradicated or suppressed in accordance with state code 2VAC5-317-80. VDACS has created model ordinances for localities to help eradicate noxious weeds. https://blueridgeprism.org/factsheets/

> *"An exotic species is a species that lives outside of its native range. An invasive species is an exotic species that causes harm. Invasive species may be transported by humans to new locations. In some cases, the transport is deliberate (e.g. garden plantings) but in others it is accidental (e.g. in packing material for items shipped across the globe). Once established, the spread of invasive species may be facilitated by a lack of predators or other biological controls in their new locations. Additionally, invasive species may be adapted to recent landscape changes that stress native species."*
>
> BAP 2018

Supporting Plans and Policies

The County has developed policies and plans that help steer the NPP, beginning with the County's mission, vision, and values statements:

Our Mission

"To enhance the well-being and quality of life for all community members through the provision of the highest level of public service consistent with the prudent use of public funds."

Our Vision

"Albemarle County envisions a community with the following, for present and future generations.

- *Abundant natural, rural, historic, and scenic resources*
- *Healthy ecosystems*
- *Active and vibrant development areas*
- *A physical environment that supports healthy lifestyles*
- *A thriving economy*
- *Exceptional educational opportunities"*

Our Values

***Stewardship**: "We honor our role as stewards of the public trust by managing our natural, human, and financial resources respectfully and responsibly."*

These County's statements do not directly mention native plants; however, they imply their importance to the public. Our Mission statement emphasizes we should enhance the quality of life, and quality of life is also mentioned in BAP 2018: "Over and over, Albemarle County residents have made clear that they value Nature for its contributions to their quality of life." Native plants are the foundation for Nature. Our Vision statement envisions present and future generations to have abundant nature, healthy ecosystems, and a physical environment that supports healthy lifestyles. All three of these rely on native plants to be successful. Lastly, Our Values statement honors our role as stewards of public trust by managing natural resources. The importance of natural resources is affirmed in the Comprehensive Plan, "…with each citizen survey taken over the past 20 years, natural resources are the most valued feature to the County." The Comprehensive Plan describes that, "natural resources support woodlands and wetlands, and provide ecosystems for flora and fauna." This is to say natural resource play a valuable role in the success of increasing native plant-communities, biodiversity, and ecosystem services

There are three primary County plans that promote the use of native plants. These include the Comprehensive Plan, the Biodiversity Action Plan, and Climate Action Plan. The following excerpts highlight how each plan emphasizes the importance of native plants:

Comprehensive Plan, 2015

"Natural Resources- Objective 4: Protect the biological diversity and ecological integrity of the County in both the Rural Area and Development Areas., Strategy 4e: *Encourage the use of native plants in landscaping to protect and provide habitat for native biodiversity, to save water, and to connect landowners to the local ecosystem.*

Figure 6: Livability Project Goals *Recognizing the benefits of biological diversity and encouraging the retention and use of native plants.*

Natural Resources- Objective 4: Protect the biological diversity and ecological integrity of the County in both the Rural Area and Development Areas.

Strategy 4c & Strategy 4d *(sic, duplicates paragraphs)****:*** *Public lands and the ways they are managed play an important role in protecting open space, wildlife habitat, and biodiversity. Several land management practices, if implemented consistently on County-owned land, will contribute to enhancing biodiversity. Examples include controlling non-native invasive species, using locally native plants in landscaping, promoting natural plant-communities on site when possible (e.g., establishing native grassland habitat in place of turf or large lawn areas), maintaining wide riparian buffers along waterways, and reducing stormwater runoff.*

Strategy 4g, *page 4.24****:*** *Encourage the use of locally native plants in landscaping to to (sic) protect and provide habitat for native biodiversity, to save water, and to connect landowners to the local ecosystem. The term "locally native" refers to plants that are native to the central Piedmont region of Virginia. The use of locally native plants in landscaping, land management, and development projects is important to protect native biodiversity against invasive species, to save water compared to plantings not adapted to the local climate, to provide additional habitat for native species, and to help connect residents to the local ecosystems. In 2012, Albemarle County Department of General Services (since renamed Facilities and Environmental Services) staff developed a native plants database and currently strives to plant at least 80% native plants in County projects. Community Development Department staff should also promote use of native plants in conjunction with the site development process."*

https://www.albemarle.org/home/showpublisheddocument/5667/637393370022730000

Biodiversity Action Plan, 2018

Goal 8. 5. *Require the use of locally native plants for landscaping on county-owned land or projects. Recommend the use of locally native plants on projects on private land that require county approval.*
Goal 8.6. *Educate and promote the use of locally native plants for gardening and landscaping on private Lands*
Goal 19 *Promote the use of locally native plants in developed areas.*
Goal 20.2.f. *Educate the public on the importance of biodiversity and ways to protect it. Landscaping with locally native plants*
Goal 20.7. *Create signage on county land where locally native plants have been used in landscaping as a way to educate the public*
Goal 20.9. *Create more demonstration landscapes using locally native plants on county land."*

Climate Action Plan, 2020

Page 25 *"In addition to providing habitat and food for pollinators and other animals, the root systems of many native plants grow deeper into the soil than lawn grass, helping rebuild the health of soil and its ability to sequester carbon.*
Co-Benefits - …*Further, practices like replanting deforested areas (reforestation) and restoring native grasslands can increase wildlife habitat and biodiversity, a crucial benefit as many species' habitats are shrinking as a result of climate change and the human activities causing it.*
Proposed Actions:
L.2.1 *- Promote the use of trees, shrubs, rain gardens, and native meadows in lieu of turf grass in landscape design and property management; encourage native species for additional benefits.*
L.2.5 *- Encourage native Virginia Piedmont plantings along highway corridors and in solar energy generation facilities.*
L.4.3 *- On priority sites on County-owned land, engage in native forest and grassland plantings for combined sequestration and habitat demonstration projects.*
L.5.3 *- Increase informational programs on sustainable land management, native Virginia Piedmont species and habitats, and regenerative agriculture for local government and public-school staff.*
L.5.4 *- Increase access to information and resources on sustainable land management, native Virginia Piedmont species and habitats, and regenerative agriculture for teachers and students in public schools."*

In 2013, the Albemarle County Department of General Services (now called Facilities & Environmental Services) created a native plant standard operating procedure (SOP). This SOP required that new landscapes on County property include 80% or more native plants. In 2019, an 80% Native Plant Reference Sheet was created for the County's consultants and contractors on the Native Plant Program webpage.

Research conducted in Fairfax County and presented in 2021, confirms the need for 80% of landscape plants to be native to maintain healthy bird populations. This research was presented by Doug Tallamy, a renowned entomology professor with the University of Delaware who studies the relationship between native plants, caterpillars, and birds. This research and other related biodiversity information

was a part of his Smithsonian Magazine presentation. This 78-minute presentation is an important supplement to the NPP Annual report that conveys relevant information about habitat fragmentation, food webs, and the importance of native plants in landscaping.

Flora and Fauna Population Declines- Global and Local

Native plant-communities are vital for the health of native mammals, birds, reptiles and amphibians, fish, and insects, by providing habitat and food that cannot be substituted with exotic or invasive plants. These animals are experiencing dramatic declines in population numbers, listed in the "Local State of Biodiversity" section of the BAP 2018. The BAP 2018 cites scientific research that these changes are anthropogenic. The fact that these declines are caused by humans indicates that we capable of reversing these trends.

Direct Drivers of Changes in Nature

1) *Changes in land and sea use – causes habitat fragmentation*
2) *Direct exploitation of organisms*
3) *Climate change – will become number one in Direct Drivers by 2050*
4) *Pollution*
5) *Invasive alien species*

IPBES MR 2019

The United Nations' Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) released their 2019 report, 1048 pages, confirming many of the BAP 2018 conclusions. The landmark IPBES 2019 report is as important to biodiversity as the 1990 UN global warming report is to our understanding of climate change, which led to the creation of our CAP 2020. The IPBES 2019 confirms the need for the work the NPP has been doing on behalf of the County and the extreme challenges our local and global communities will face in the coming decades. The IPBES Media Release (IPBES MR 2019) conveys information of the IPBES 2019 in a concise manner and helps to clarify the scope of problems to the lay person. This is an important non-County document to review as a supplemental document to the NPP annual report. The County and the NPP are actively working to address items on the "Direct Drivers of Changes in Nature" list. The IPBES MR 2019 may help with future updates of the BAP 2018.

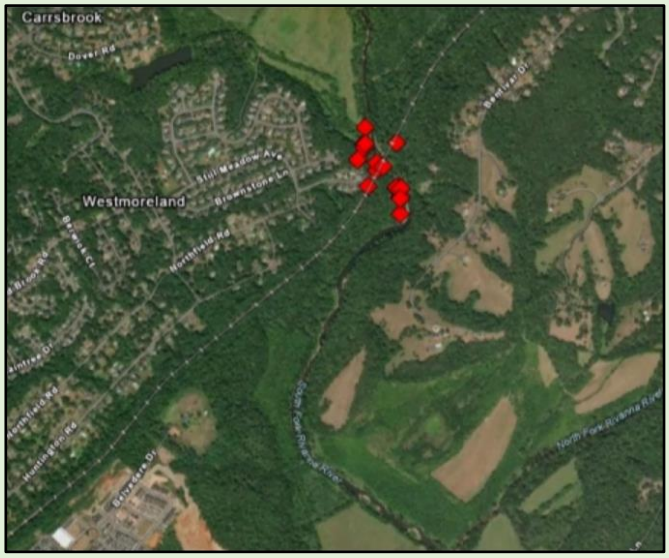
Economic Impacts

"In part, biodiversity is important to us because we consume tangible products of natural systems (e.g. wood products from forests). However, we depend more broadly on the services that ecosystems provide. Ecosystem services refer to the many benefits that humans receive, at no direct economic cost, from natural environments and functioning ecosystems."

BAP 2018

Native plant-community restoration and invasive species management significantly contribute to our local economy. The County has recognized that native plants can play a role in our local economy by including Goal 19.4 of the BAP 2018, "Provide assistance through the county's Office of Economic Development to help promote local nurseries and their marketing of locally native plants and consider making native plant nurseries a by-right use of land in rural areas." Nurseries and firms to manage native landscapes and invasive species are needed. These companies help provide ecosystem services needed for other key sectors, such as agriculture and tourism through the management of native plant-community and invasives species.

Invasive species disrupt native plant-communities, which impacts on our biodiversity and ecosystem services. Invasive plant management is needed at a County wide level to protect our existing native plant infrastructure and the restoration the NPP seeks to influence.



Spotted lanternfly location found by VDACS in July 2021- site treated with Bifenthrin by USDA and VADACS. Site will be revisited in 2022

The County has recently been confronted with the importance of invasive species management. In the last year we have learned firsthand that invasive species can also impact our local economy, such as our wine, cider, and (native tree) timber economic sectors. In 2021 the County partnered with VDACS and US Department of Agriculture regarding the invasive control of the spotted lanternfly. The first grouping of the spotted lanternfly was documented in Albemarle County on a railroad track crossing the south fork of the Rivanna river in Summer of 2021.

> *"… the spotted lanternfly, an invasive sap-feeding planthopper that feeds on vine trunk, shoots, and leaves of grape plant…."*
> PennState Extension- Spotted Lanternfly Management in Vineyards

The spotted lanternfly was first found in Pennsylvania in 2014. In addition to impacting grapes, this agriculture pest impacts other crops. These include our native hardwood and ornamental trees, as well as apple trees. PennState Extension reports significant damage to plants, reduced crop yields, and death of grape vines. A decrease in the wine and cider economic sector of the County has the potential to have a ripple effect on other economic sectors such as wedding, restaurants, and hotels. The main host plant for the spotted lanternfly is the Tree-of-Heaven, *Ailanthus altissima*. VDACS has listed the Tree-of-Heaven as a tier 3 noxious weed. VDACS is partnering with USDA, Virginia Tech, and others to treat, survey, and trap spotted lanternflies and educate the public. An example of the education and outreach materials is the Spotted Lanternfly Best Management Practices for Businesses. Some areas of Virginia have been required by VDACS to establish a quarantine area for the spotted lanternfly because of the severity of infestation and trying to limit the spread. The NPP could help in the control of the spotted lanternfly and the Tree-of-Heaven through education and promoting the replanting of native plant species when invasive plants are removed. Developing a County noxious weed ordinance, which could include *Ailanthus altissima,* may be worth exploring further.

Promoting native plant-community habitats for pollinators and parasitoid wasps are necessary for our economy and ecosystems. Albemarle County ranks third out of 95 counties in Virginia as a producer of fruits, tree nuts, berries in the USDA 2017 Census of Agriculture County Profile. This economic sector requires the ecosystem services of pollinators. Not all pollinators are created equal in their pollinating effectiveness. Native solitary ground nesting bees are thirty percent more efficient at pollination than honeybees. All bees need flowering plant-communities to survive and thrive throughout the year; a single agriculture crop is not an adequate year-round food supply for a pollinator. All the NPP demonstration projects have an eye to support pollinator habitat. The Yancey School Community Center

Pollinator Space, explored in more detail below, is the first NPP project specifically created to support pollinator needs and to help increase crop yields of the adjacent food garden that supplements the area food bank.

The greatest biologic control on earth are cousins to bees; these insects are called parasitoid wasps. Parasitoid wasps control insects with a one-to-one hunter to prey relationship; a single species of parasitoid wasp can only prey on it's one corresponding species of insect. Parasitoid wasps will either lay (insert) their eggs on the body or eggs of their targeted insect, but not both. When the young wasps emerge, they eat their way out from the inside, "…the creature in *Alien* (1979 movie) is immediately recognizable as a parasitoid…" (Godfray, 1994, p. 3). Parasitoid wasps rely on native plant habitats as adults. Their primary food source as adults is the nectar of native wildflowers.

> In our region, many native Ash trees have been killed by the Emerald ash borer, an invasive beetle from Asia whose *"…larvae feed on the inner bark of native ash trees, disrupting the tree's ability to transport water and nutrients…"*
> Emerald Ash Borer Information Network

Parasitoid wasps provide an important ecosystem service. They control on the populations of insect pests, both around our homes and in the agricultural economic sector. The USDA has been researching parasitoid wasp predation on agricultural insect pests since before the 1970s. One insect of concern includes the destructive, invasive Emerald ash borer. These insects have brought widespread damage to native ash trees in our region. The Emerald ash borer feeding kills ash trees in two to three years. The loss of this canopy tree impacts how the County proceeds with the Biodiversity and Climate Action Plans. There are also minor economic impacts on timber harvesting. A tangible example of ash tree loss is in the Darden Towe Park's parking area. This changes the look of the Park, increases the heat island effect, and will have a cost to adjust the landscape practice. VDACS has listed the Emerald Ash Borer as a pest of concern. The USDA partnered with the City of Charlottesville to release a parasitoid wasp (*Oobius agrili*) in June of 2021 at the Ragged Mountain Reservoir. This wasp acts as a natural biologic control for the Emerald ash borer, Charlottesville and USDA Partner on Biological Treatment for Emerald Ash Borer. Our region, the County, and the NPP will partner with the USDA when possible to manage pests and promote native plant-communities to support parasitoid wasp habitat and restore landscapes. Parasitoid wasps save our agriculture sector and homeowners money in pesticide costs, replacement plant costs, and improve the quality of life for citizens by managing nuisance insects.

Annual Accomplishments

The NPP accomplishments section documents County actions taken within the 2021 calendar year to meet the County's goal of increasing native plant-communities, supporting biodiversity, and strengthening ecosystem services. Measurable deliverables this year include Leadership, Education, Outreach, and Planning.

Leadership

The County's leadership in promoting native plants has influenced other localities. The Prince William Conservation Alliance included our 80% native plants SOP in their successful campaign to the Prince William County Board of Supervisors, which led to a policy to use 75% to 100% native plants on all Prince William County landscape projects.

Education

The County has offered several education opportunities this year. This education was both for our staff and the citizens of Albemarle. The ESD partnered with a local consulting firm (Ecosystem Services LLC) to host a regional stream restoration monitoring and maintenance training. This training covered the importance of native plants for the long-term success of stream restoration projects.


Stream Restoration Monitoring and Maintenance Training, May 27, 2021

The ESD teamed up with the Chesapeake Bay Landscape Professionals (CBLP) for a day of training; CBLP's primary function is to train and certify landscape professionals in the mid-Atlantic area. The training was attended by 30 managers and maintenance supervisors from FES, ACPR, and ACPS, as well as other regional partners. The training combined information on both native plants and maintenance of stormwater management facilities.



CBLP training for maintenance providers, October 29, 2021

COB McIntire campus's native plant demonstration landscapes were officially utilized in three tours during 2021. The first two tours were given as part of *County Stewardship Walk and Talk Tours,* originally scheduled to be part of the *Rivanna Conservation Alliance*'s *RiverFest*. The third tour showcased our landscapes as part of the Level 1 CBLP field training.

Stewardship Walk and Talk Tours, June 15, 2021

Level 1 CBLP field training, August 18, 2021

Outreach (demonstration projects)

Through outreach we increase the public's awareness for the need of native plant-communities to support biodiversity and strengthen ecosystem services. We accomplish this by creating education materials, demonstration (native plant landscape) projects, invasive species management, and involving volunteers in these activities. (After some deliberation, demonstration projects have been included in the Outreach section. Demonstration projects often include public involvement to create them, act as part of a larger marketing campaign to the community and elicited public feedback.)

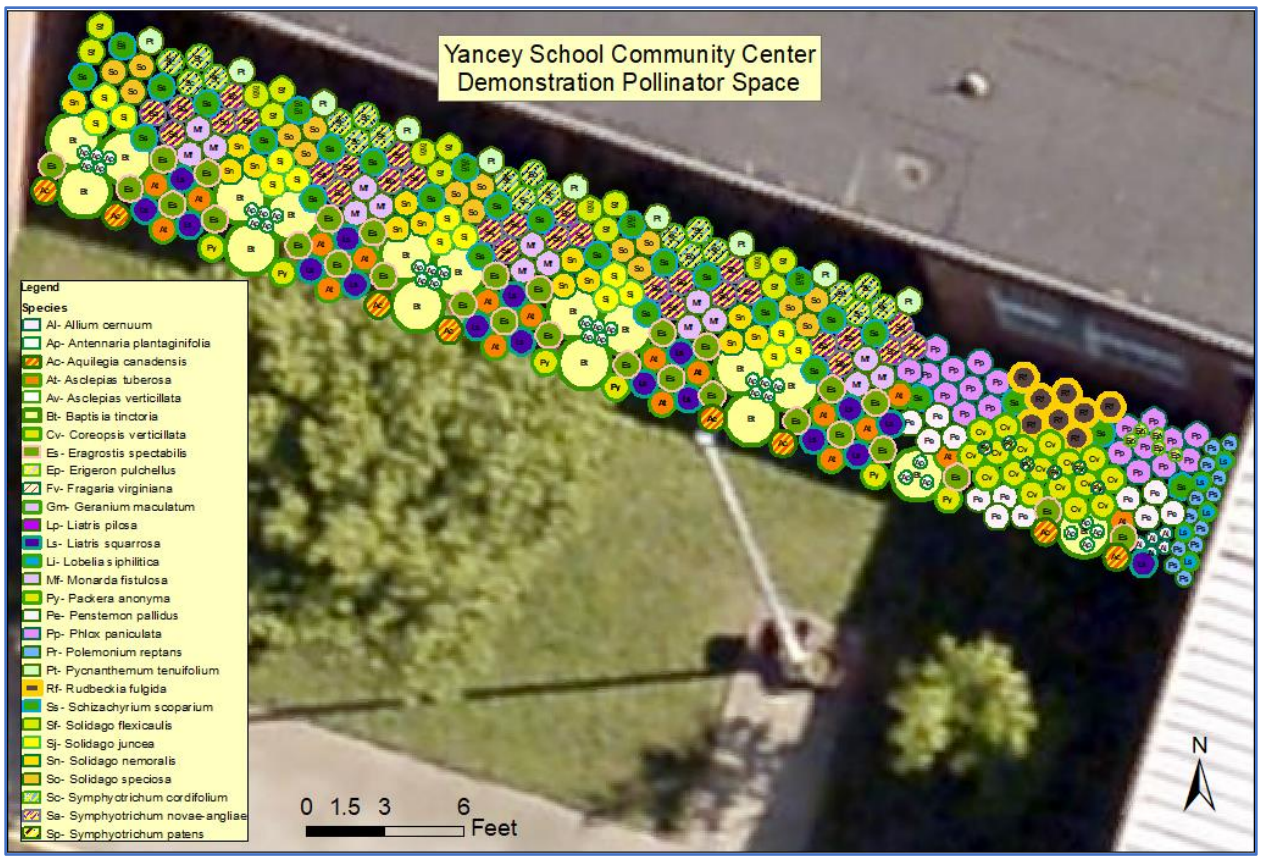
In 2011 the NPP established the Commonwealth's first Searchable Native Plant Database. After 10 years this database needs an update to both the software architecture and to the data. The NPP teamed up with the nonprofit Code for Charlottesville, as well as other partners, to work on these updates. There are several other goals we wish to accomplish with this update. These goals include displaying plant photos, increase plant description fields as requested by citizens, updating the plant list to include native plants added to the nursery trade, and the ability to have a printable format of the database based on the plant-description pages of the Piedmont Native Plants guide. The software architecture updates will allow the database to host the Planning Division's Albemarle County Recommended Plant List, which contains non-native plants, through a separate display portal to meet their needs. The

finished architecture of the database will be available for other Virginia localities and Native Plant Marketing Partners. Because of the volunteer nature of this project, a completion date is difficult to determine. We hope the work is completed by the end of 2022 but may extend into 2023.

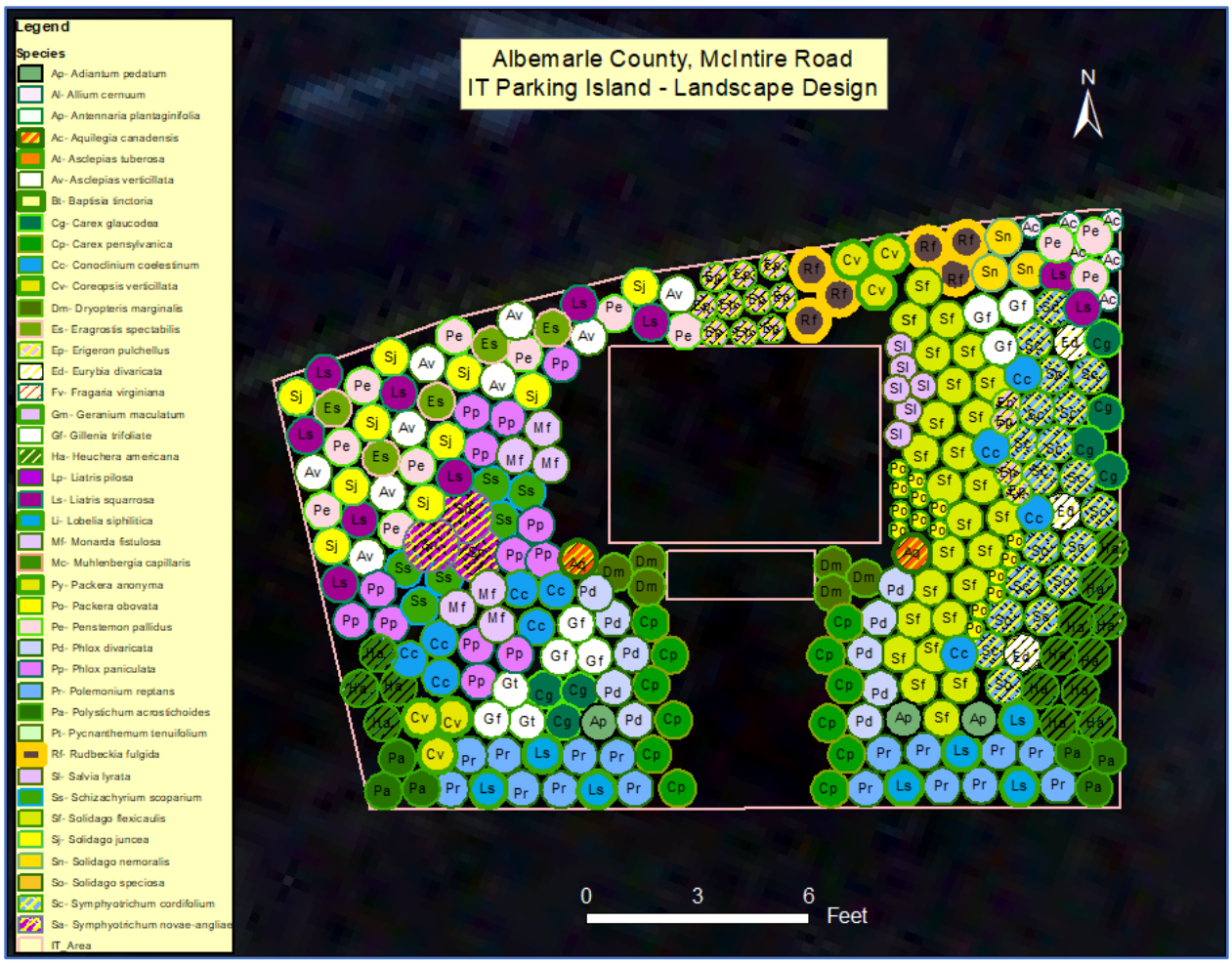
ESD has designed and installed three new native plant landscapes. A fourth demonstration project utilized native plants at the four bioretention required for the school addition managed by Facilities, Planning & Construction (FP&C). The scale and scope of these landscapes has not reached that of an implementation program; however, they provide a valuable resource to the community as outreach demonstration projects.

Project	Need	Vegetation Type	Work Force
Yancey School Community Center (YSCC), Pollinator Space	Support and increase local pollinators by providing year-round flowers (food) to increase pollination rates and crop yields for the adjacent community food garden, and improve beautification and biodiversity	Wildflowers and grasses	6 volunteers 3 ESD staff 1 YSCC staff
Charlotte Humphris Park, memorial garden	highlight the entrance and memorial, and improve beautification and biodiversity	Wildflowers and grasses	4 volunteers 1 ESD staff 4 ACPR staff
COB McIntire, IT parking island behind the auditorium	Improve beautification and biodiversity	Wildflowers and grasses	1 ESD staff 1 PW staff
Crozet Elementary, 4 bioretention	Required for new construction	Trees, shrubs, Wildflowers, and grasses	1 FP&C Contractor

Yancey School Community Center, Pollinator Space installation September 14 through 17, 2021



Charlotte Humphris Park, memorial garden installation, September 30, 2021



In addition to designing and installing new native landscapes, the NPP has augmented 10 existing landscapes this year. This is part of routine maintenance.

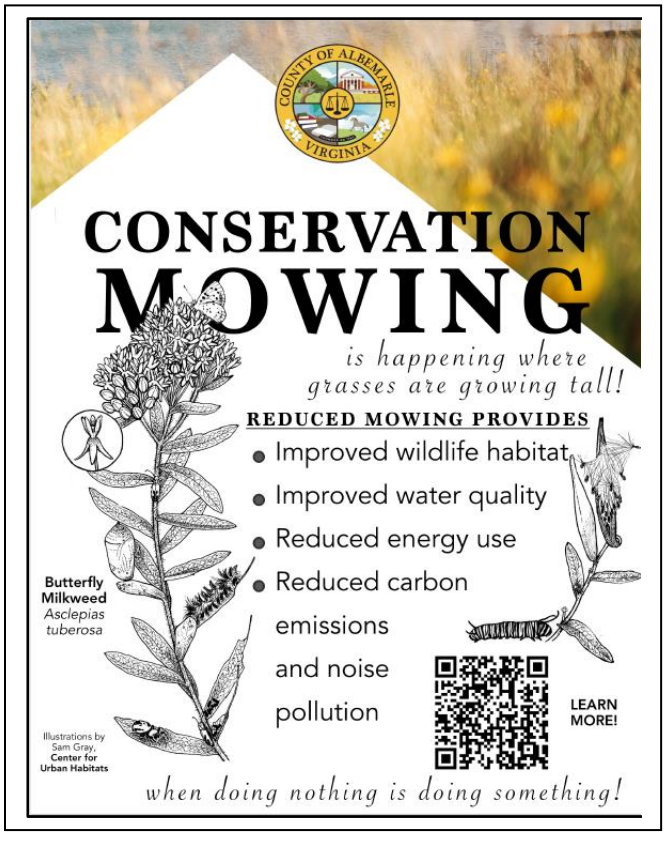
Project	Need	Vegetation Type
COB McIntire, middle parking lot electric charging stations	plants displaced by construction	wildflowers and grass
COB McIntire, visitor entrance parking islands	attrition	wildflowers and grass
COB McIntire, fountain garden	attrition	wildflowers and grass
RiverRun neighborhood, stream restoration	supplemental	wildflowers and grass
Four Seasons, stream restoration	accompanied restoration retrofit	live stake shrub, wildflowers, and grass
Four Seasons, retention basin	help manage geese on Four Seasons Dr.	shrubs
Regional Firearms Train Center, bioretention	attrition	shrubs
Crozet, stormwater wetlands	biodiversity	wildflowers
Simpson Park, bioretention	attrition	shrubs

Darden Towe Park, parking area	Main entrance, and between dog park and shelter area	trees

Over 70 species of locally native plants were installed at County native landscapes. Approximately 36 trees, 45 shrubs, and 2800 wildflowers and grasses were installed. Both the Yancey School Community Center and Charlotte Humphris projects are scheduled to have educational signs installed and maintenance plans developed in the coming year.

Invasive plants and animals are problematic to native plant-communities. Invasive management is an emerging component of the County's and NPP outreach. FES is contracting the removal of invasive plants at more than 10 County properties. These invasives include the Tree-of-Heaven, which are the primary host plant for the spotted lantern fly. ACPR is actively managing invasive species on Park properties, including wavy basket grass. ACPR organized a four-day student volunteer group to remove nonnative plants at Charlotte Humphris Park this past summer. Management of County Property involves plant surveys and management plans. ACPR contracted with Virginia Forestry and Wildlife to create the first Non-Native Invasive Species Survey for Ivy Creek Natural Area.

Lastly, the County is fortunate to have an active Natural Heritage Committee (NHC). The NHC has been promoting the use of native plants by working with the Piedmont Master Gardeners on distributing information to the community and labelling plants in local nurseries. The NHC participated in the outreach event at Scottsville Pollinator Festival (2021) with an interactive display to engage citizens and share information on land stewardship practices that protect biodiversity and natural landscapes. The NHC created Conservation Mowing signage which has been posted at Darden Towe, Walnut Creek, and Totier Creek Parks. The flyer is being resized to be printed as a yard sign and posted in the conservation mowing areas. The NHC has engaged with ACPR staff to reduce mowing and restore more natural landscapes. Below are several additional contributions of the NHC that are working in concert with the NPP. Created a new landowner welcome letter and completed a pilot mailing for land transfers over 20 acres in the conservation focus areas. Worked with Albemarle County Historical Society (ACHS), Piedmont Master Gardeners (PMG), and the Village School to create a demonstration area of native plants in the ACHS courtyard and under the kiosk across from Lee Park. Worked with the Scottsville library to develop native plantings on the library property and educational outreach to library patrons. Working with the PMG on the PNPN Garden Liaison Program. Developing monthly NHC Instagram post with CAPE.



Looking Forward

The NPP is pursuing several exciting endeavors in 2022. ESD will have a series of meetings with other County stakeholders to discuss County-wide landscape management policies as part of the larger effort to create a set of Sustainable Operations Policies and Procedures to guide local government work. ACPR is leading a stakeholder conversation regarding management of invasive plant management on County property. This work will likely be incorporated into the landscape management policies. ACPR and FES hope to partner with Charlottesville Area Tree Stewards, also called CATS, to increase tree cover on County property. This will include surveys of Park property by staff, some of which may also lead to changes in mowing maintenance that may be covered in the landscape management policies. FES and ACPR will work to improve signage of native landscapes. These signs will focus on more recently installed native landscapes. FES is looking to partner with CBLP to install a buffer along a stream in the County as part of a local education opportunity. FES, ACPR, and the NHC will be investigating the possibility to install a new meadow on Park property. Several of the Stream Health Initiative proposals involve increasing retention and restoration of native vegetation on the landscape, through regulatory, incentive-based, and educational opportunities.

Appendix - Historic Accomplishments

Timeline of Major Events

2007 Recommend Bioretention Native Plant list for CDD Engineering
2010 Public Searchable Native Plant Database
2013 Native Plant SOP for General Services (now FES)
2013 Native Plant Symposium
2015 Guide- Northern Piedmont Native Plant guide
2018 Native Plants Program website
2018 map of native landscapes to visit
2019 Consultants and contractors reference sheet NPP website

Past Landscape Installations

2006 raingarden - first installation
2008 5th St COB - Police gate parking island and
2013 Shade garden between ACPR offices and the Copy Center
2013 Crozet Wetland
2014 COB Bioretention
2014 County Court house
2015 and 2018 Church Road Basin
2016 and 2020 Greenroof (native additions)
2017 5th St COB - 4 parking islands
2018 Colonial Basin wet meadow
2019 Middle Parking Lot
2019 CATEC meadow
2020 Visitor Parking Islands
2020 Rio Road Bridge Planters
2020 COB Fountain Planter
2020 Chapel Hills Stream Restoration
2020 RiverRun Stream Restoration