Annual Report Albemarle County Natural Heritage Committee

FY 2013-2014

Committee Members

Anne Bedarf - Secretary

Peggy Cornett

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Devin Floyd

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Tom Olivier

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Staff

Scott Clark, Senior Planner

INTRODUCTION

The Albemarle County Natural Heritage Committee develops and maintains information on local biological resources, recommends policies and actions to protect county biological resources and educates the public on the importance of our biological heritage. The committee is a standing, citizen advisory committee supported by staff in the county Department of Community Development.

PURPOSE OF THE NATURAL HERITAGE COMMITTEE

The Natural Heritage Committee was created by action of the Albemarle County Board of Supervisors on July 6, 2005. The duties, function and tasks of the committee presented below are excerpted from the supervisors' motion that created the committee.

Duties/Function: The Natural Heritage Committee is an advisory committee that maintains the County's Biodiversity Assessment; advises the Board of Supervisors, the Planning Commission, and County staff on applying biodiversity information to land-use decision-making; and supports biodiversity education in the County.

TASKS:

- A. Input on and oversight of the maintenance, expansion, updating, and evaluation of the ongoing Biodiversity Assessment begun by the Biodiversity Work Group, and development of a protocol for assessing changes in the state of biodiversity (with reference to planning goals).
- B. Assistance in staff development of an action plan that specifies detailed steps for achieving protection of biodiversity as outlined in the Comprehensive Plan.
- C. Development of policy recommendations to the Board in response to biodiversity issues and information gathered from the Biodiversity Assessment. The Committee should be consulted on programs, regulations, and Comprehensive Plan changes that may affect biodiversity protection.
- D. Development of educational materials and programs on biodiversity.
- E. Provision of periodic reports to the Board of Supervisors on the state of biodiversity in the County.

Report presented to the Albemarle County Board of Supervisors on November 5, 2014

ORIGINS AND HISTORY

In 1997 Citizens for Albemarle, a local environmental organization, proposed that Albemarle County commit to identification and protection of its biological resources. Their proposal was made during development of the then new Natural Resources and Cultural Assets chapter of the Albemarle County Comprehensive Plan. Citizens for Albemarle asked that the new chapter include a call for conducting a biological inventory of the County and establishment of a standing citizen Biological Resource Advisory Committee.

Albemarle County adopted the new Natural Resources and Cultural Assets Chapter of the comprehensive plan in 1999. The chapter included a section, "Biological Resources and Biodiversity," that calls for conduct of a biological resources inventory, development of a biodiversity conservation action plan and creation of a continuing advisory citizen Biodiversity Committee. With the adoption of this chapter into its comprehensive plan, Albemarle County became a national leader in local government biodiversity conservation efforts.

In 2002 Community Development staff established an all-scientist Biodiversity Work Group. This group was to develop a scientific foundation to efforts for subsequent County biodiversity conservation efforts. In 2004, the Board of Supervisors accepted the report of the Biodiversity Work Group. Their report included an assessment of the state and locations of important biological resources, discussions of future threats and recommendations for conservation strategies.

In 2005 the Board of Supervisors created the Natural Heritage Committee. The duties and tasks of this committee are described in the "Purpose of the Natural Heritage Committee" section of this report. The committee has worked continuously since its creation. In the past the committee has:

- 1. Identified six initial high-priority biodiversity conservation areas of the County, totaling over 20,000 acres.
- 2. Established a committee web site with public education materials.
- 3. Collaborated with local organizations to create a high-resolution GIS land cover data layer.
- 4. Established a program of ongoing visits by committee members and knowledgeable citizens to important or biologically important places in the County.
- 5. Partnered with the Albemarle County Department of Parks and Recreation to assist with citizen outreach, biodiversity inventory and park conservation planning (e.g. Patricia Ann Byrom Forest Preserve Park).

- 6. Assisted in state and regional planning efforts, including serving on the Biscuit Run State Park planning team.
- 7. Supported local landowners and citizens by answering questions about local biodiversity and land management concerns.

PROGRESS IN 2013-14

Highlights:

- Partnered with the Piedmont Native Plants "Go Native" campaign, which has helped reach out to local nurseries, consumers and governmental agencies to increase the supply, demand and use of native plants. Increasing use of native plants is an essential part of increasing urban biodiversity and meeting goals to clean up local streams, rivers and the Bay.
- Continued to engage Albemarle County Department of Parks and Recreation to integrate biodiversity conservation into the department activities
- Engaged the Board of Supervisors about immediate conservation opportunities and challenges, including William S.D. Woods Natural Heritage Area.
- Provided comments on draft chapters of new comprehensive plan to the Board of Supervisors. For example, the committee helped emphasize the importance of biodiversity to quality of life issues and its applicability to practical issues like storm water management.
- Continued identification in the field of "Special Sites" deserving of special conservation focus and support.
- Approved and finalized a permission form for site access so that we can document landowner permission for the sites we've accessed.
- Established an outreach program to local naturalists to help support our inventory and management of biologically important places in the County.
- Started a new initiative to invite members of the Board of Supervisors to participate on site visits, particularly within their districts. Board members participated in several site visits this year and added greatly to our outreach and inventory efforts.
- Recruited new members to the committee.

BIODIVERSITY INVENTORY SITE VISITS THIS YEAR

As part of a continuing effort to inventory biological resources in the county, the following

locations have been visited by committee members in the past year:

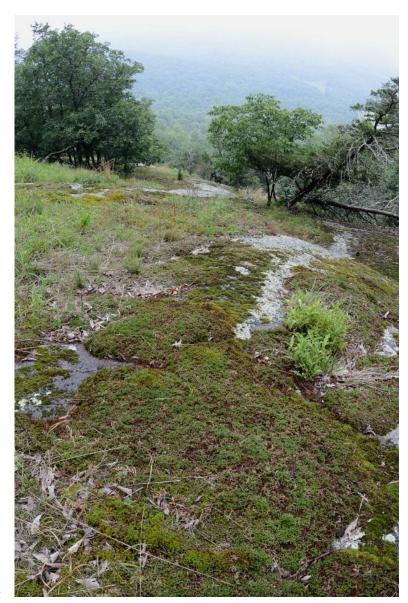
Buzzard Rock¹

Description: Piedmont Mafic Barren, containing many lithophytes (rockloving plants) and xeric species (highly drought-tolerant species)

Special Features:

Habitat is classified as a G1, or globally rare habitat with less than 20 known occurrences worldwide.

Status: Under an open space easement, but without direct protection of the habitats themselves. Also while there are few invasive species right now, highly invasive species are located nearby and pose a serious threat to the



habitat, particularly if there is additional disturbance of the surrounding forest.

¹ Buzzard Rock, photo by Gary Fleming (DCR)

Paper Birch / Bunchberry Dogwood site ²
 Description: A relict boreal ecosystem from the last Ice Age in a north facing cold pocket on a talus quartzite slope.

Special Features: Includes many rare boreal species, at least one of which is at the furthest SE known occurrence of its range in the United States

Status: Well protected from land use changes due to being part of the Shenandoah National Park. Fire suppression and climate change pose the most serious risks. The rarest plants were no longer getting enough sunlight to bloom or bear fruit, and may decline and disappear without active management. Many species at the site are also sensitive



to heat, and even a moderate increase in climate could wipe out this site.

• Old Mills Trail

Description: A river bluff over the Rivanna containing mafic outcrops and riparian species.

Special Features: An amazingly diverse area containing numerous spring wildflowers and also some unusual lithophytes more commonly found in shale barrens.

Status: Currently under the management of County Parks and Recreation. NHC is working with park staff on education and protection for this valuable County resource. Since a trail runs right through the site, it is in some danger of the impacts of foot travel but contains some great educational opportunities as well.

• Fan Mountains

Description: The Fan Mountains make up a very large and relatively undisturbed mountainous area of the County with near wilderness-like conditions. They contain a large range of habitats, including rich mountain coves, mafic rock bluffs, seeps and wetlands and pristine streams and waterfalls.

² Cornus Canadensis, photo by Sharon Snyder

Special features: Rich mountain cove hardwood forests contain species normally associated with the Blue Ridge Mountains. They also contain several species that are rare in the County, including walking fern and rhododendron.

Status: Partially protected. The University of Virginia has a "dark skies" easement over many (but not all) of the parcels across the area, but there are many opportunities to pursue new easements and enhanced easements that are more protective of biological resources.

Brush Mountain ³

Description: A Piedmont Mafic Barren rock outcrop community.

Special Features: Brush Mountain is part of the larger Fan Mountains (see above) and is significant in that it is another area very similar to Buzzard Rock. It has the benefit of being surrounded by relatively mature timber. It



could also potentially qualify as a G1 (globally rare) habitat, although it does lack some of the exceptional species diversity of Buzzard Rock.

Status: Partially under a "Dark Skies" ordinance, which encumbers the property from getting a more complete and protective easement.

• Red Hill Wetlands

Description: A high quality wetland containing an amazing diversity of species. Underlain by clay soils which hold water close to the surface.

Special Features: A great example of several different types of wetlands from wet meadow to swamp type habitats. Serves an important role in buffering runoff and contamination of the Hardware River from Highway 29. Contains some species that are confirmed in one or just a few other places. The exceptional management by the landowner of this resource and willingness to share it with local naturalists has led to some unique educational opportunities.

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³ Chalk Rock, photo by Repp Glaettli

Status: Property is not under easement, but ostensibly protected by the County's water protection ordinance. Its close proximity to Rt. 29 makes it susceptible to hazardous spills or other contamination. The landowner has been a good steward this wetland, leaving it in exceptional condition.

Polo Grounds Road

Description: A series of ephemeral pools and floodplain forest along the south fork of the Rivanna River.

Special Features: In addition to being a vital buffer from economic activity for the health of the Rivanna River, it was also one of the few known breeding locations for spotted salamanders in the County.

Status: Sadly, increased traffic and development along Polo Grounds Road, along with recent clear cutting, may have destroyed most of the ecological integrity of this ecosystem and extirpated the population of salamanders there.

The Fan Mountains and Brush Mountain are located within the Southern Mountains, a large area in southern Albemarle County. The Southern Mountains were identified in the <u>Natural Heritage</u> <u>Committee 2007 annual report</u> as one of six highest near-term priorities for biological conservation in the county. The Polo Grounds Road site was recognized in the 2004 <u>Biodiversity Work Group report</u> as one of 39 biologically important sites in the county.

GOALS FOR FY 2014-2015

During the recent recession, staff support for the committee was cut, leading to cessation of progress on some important fronts. With the restoration of staff support for the current fiscal year, some long-stalled initiatives have been re-started. These include:

- a) Completion of a GIS layer showing locations of important small-scale county biological resources. This layer will be consulted by staff conducting rezoning and special use permit reviews. A version will also be made available to the public.
- b) Development of a county-wide GIS biodiversity landscape analysis. The goal of this analysis is to provide an integrated, county-wide picture of our biological resources along with constrains on and opportunities for conservation. This analysis is the last prerequisite to development of the biodiversity protection action plan called for in the comprehensive plan.
- c) Update and expand biologically important site information in the biological inventory.

FURTHER GOALS

The Natural Heritage Committee has tentatively identified goals for next year, FY 2015-2016. These are:

- 1. Develop and propose a county biodiversity protection action plan. This is a key element in the charge of the committee.
- 2. Establish a centralized database for different county biological resource data sets. This data set would be of value to the Natural Heritage Committee and other departments of the county government (e.g. Parks and Recreation)
- 3. Re-establish a public education subcommittee within the Natural Heritage Committee. Increasing membership of the committee opens the door to this possibility.
- 4. Continue expanding and updating site information in the biological inventory

WEB LINKS:

Report of the Biodiversity Work Group, 2004 www.albemarle.org/department.asp?department=cdd&relpage=3977

Report of the Natural Heritage Committee, 2007 https://www.albemarle.org/upload/images/Forms_Center/Departments/Board_of_Supervisors/Forms/Agenda/2007Files/20070606/NaturalHeritageAttachB.pdf