

Black Oak Wildlife Sanctuary Wetland

Mitigation Project Loudoun County, Virginia



Goals:

To preserve and enhance the existing vernal pools and forest habitat, and to create 4+ acres of a connected matrix of wetlands that contribute to Limestone Branch and the Potomac River. This project will improve water quality, protect sensitive amphibian species, and serve as a wildlife corridor with surrounding conservation lands.

Project Details:

The 87+-acre property is located within the Potomac River Watershed. The property borders an unnamed tributary to Limestone Branch. The property is currently under contract to be purchased by the Loudoun Wildlife Conservancy, with assistance from VARTF, and will be established as a preserve to protect the significant assemblages of amphibian species onsite and the unique geologic features.



One of the existing forested vernal pools at Black Oak Wildlife Sanctuary.

Conservation information:

- The site is located within 1000 feet of Catoctin Mountain, a TNC Piedmont Portfolio site.
- Site drains to the Potomac River, which is designated as a TNC Stream Reach Portfolio river.
- 8 conservation lands within 2 miles of site.
- Potomac River stream conservation unit (which protects several rare species) is within 2 miles.
- Lucketts Ponds, a Natural Heritage conservation site is within 1 mile of site.
- 6 of the 7 obligate vernal pool species found in VA have been documented onsite.
- Site contains rare karst features.



Jefferson salamanders, spotted salamanders, and fairy shrimp, all of which are obligate vernal pool species, have been found onsite.

Existing Conditions:

The property is located in a unique region of the Piedmont underlain by a Leesburg Limestone Conglomerate of the Balls Bluff Formation, and is characterized by large boulder outcrops. The area has karst topography and vernal pools scattered throughout. The majority of the property is comprised of highly-disturbed old pasture that has had some scrub/shrub establishment in recent years. Invasive woody species have become established in these open areas and include autumn olive, tree-of-heaven, Japanese honeysuckle, and multiflora rose. In total, 11 vernal ponds have been located onsite (in various conditions) and are situated either in old-growth forest or in the abandoned agricultural fields.



Ecologists from the Virginia DCR - Natural Heritage Program visited the site in January 2018 and provided a survey of its condition. The Natural Heritage ecologists recommended that portions of the old pasture have good wetland restoration potential. The creation of a matrix of vernal pools intermixed with upland forest restoration would provide migration corridors between ponds and upland habitat for salamanders and frogs. The ecologists recommend that this site is highly worthy of conservation, restoration, and long-term management to protect and re-establish its unique geology, vernal pools, and salamander populations.

Restoration Activities:

A Prospectus will be submitted to the Corps and DEQ for a mitigation project which will include:

- Wetland creation (see design to the right)
- Wetland enhancement (tree planting in existing vernal pools)
- Wetland preservation
- Trash removal and invasive control
- Upland buffer planting
- Credit yield would equal 5 – 10 non-tidal wetland credits



Proposed design for wetland creation along the southeastern edge of the property.