

Travis A. Voyles
Secretary of Natural and Historic Resources

Matthew S. Wells
Director

Andrew W. Smith
Chief Deputy Director



COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

Frank N. Stovall
Deputy Director
for Operations

Darryl Glover
Deputy Director for
Dam Safety,
Floodplain Management and
Soil and Water Conservation

Laura Ellis
Deputy Director for
Administration and Finance

May 12, 2023

USDA Forest Service
ATTN: Jesse Overcash, Project Leader
110 Southpark Drive
Blacksburg, VA 24060

Re: White Pine Removal Project

Dear Mr. Overcash:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

Gatewood & Caseknife

According to the information currently in our files, the Rt. 710 Roadbanks Conservation Site is documented within the project area in the above site. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. The Rt. 710 Roadbanks Conservation Site has been given a biodiversity significance ranking of B3, which represents a site of high significance. The natural heritage resource of concern at this site is:

Phlox buckleyi Sword-leaf phlox G2G3/S2/SOC/LT

Sword-leaf phlox, a rhizomatous, perennial herb in the Jacob's-ladder family (Polemoniaceae) is endemic to western Virginia and eastern West Virginia and grows in woodlands, woodland edges, and roadbanks underlain by shale (Weakley in prep.). Bright pink, five-petaled flowers bloom from May-June in clusters at the top of an erect stem with up to seven pairs of opposite, linear to lanceolate leaves (Gleason and Cronquist 1991). Also present are sterile shoots with evergreen leaves arising from the rhizomes. Surveys should be conducted during the May-June flowering period when the bright pink flowers are highly visible.

Threats include mowing, herbicides, road maintenance activities, competition from invasive species, and shading. Please note that this species is listed as threatened by the Virginia Department of Agriculture and Consumer Services (VDACS).

A DCR botanist supports the proposed harvest of white pine as it has the potential to improve habitat for the *Phlox buckleyi* populations that already exist on the adjacent roadbanks and perhaps will allow them to extend off of the roadside and into the forests. The species needs open or semi-open habitats in order to thrive. These areas will be returned either to an oak-dominated forest or perhaps to a different type of pine, or a mixture of both. With this native forest type in place, prescribed burning will be able to proceed, further enhancing the habitat for this rare plant species and other potential rarities.

In addition, stands within the Gatewood & Caseknife sites are situated on karst-forming carbonate rock and can be characterized by sinkholes, caves, disappearing streams, and large springs. The Virginia DCR, Division of Natural Heritage karst staff screened this project against the Virginia Speleological Survey (VSS) database, the Virginia Department of Energy (VDE) sinkhole coverage, and other karst layers for documented sensitive karst features.

Stands at these sites have intersected the spelaea screening layer. Encountering undocumented caves, sinkholes or other sensitive karst features in this area is possible. One small cave is reported in the belt of limestone in the Elbrook Formation located to the south of the project area. The cave entrance is approximately 1000 feet to the south of the tree stand located at: 80.8720895°W, 37.0095534°N. No invertebrate or bat records are known from this cave. DCR recommends reduction of soil transport off the site. The cave resources associated with the screening layer should not be negatively impacted by this project as long as sediment is not discharged in that direction.

These sites have also intersected the karst bedrock screening layer. Encountering undocumented caves, sinkholes or other sensitive karst features in this area is possible. During every phase of the project, DCR recommends stabilization of the soil around the site. Minimizing surface disturbance, strict use of E&S control measures appropriate for the location and adherence to best management practices appropriate for karst will help to reduce any potential impact to the karst, groundwater and surface water resources as well as any associated fauna and flora.

If karst features such as sinkholes, caves, disappearing streams, and large springs are encountered during the project, please coordinate with Wil Orndorff (540-230-5960, Wil.Orndorff@dcr.virginia.gov) the Virginia DCR, Division of Natural Heritage Karst Protection Coordinator, to document and minimize adverse impacts. Activities such as discharge of runoff to sinkholes or sinking streams, filling of sinkholes, and alteration of cave entrances can lead to environmental impacts including surface collapse, flooding, erosion and sedimentation, contamination of groundwater and springs, and degradation of subterranean habitat for natural heritage resources (e.g. cave adapted invertebrates, bats). These potential impacts are not necessarily limited to the immediate project area, as karst systems can transport water and associated contaminants rapidly over relatively long distances, depending on the nature of the local karst system. If the project involves filling or “improvement” of sinkholes or cave openings, DCR would like detailed location information and copies of the design specifications. In cases where sinkhole improvement is for storm water discharge, copies of VDOT Form EQ-120 will suffice.

Wyrick

According to the information in our files, the Crab Orchard Lake Forest Conservation Site is located within the Wyrick site of the project area. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element’s conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. The Crab Orchard Lake Forest Conservation Site has been assigned a biodiversity rank of B4, which represents a site of moderate significance. The natural heritage resource associated with this site is:

The little brown myotis is a small brown insect eating bat which uses a wide range of habitats including caves and human-made structures (NatureServe, 2015). Since 2008 there has been a significant decline in population numbers (greater than 90%) for this species due to white nose syndrome. Please note, the little brown myotis is listed as endangered by the Virginia Department of Wildlife Resources (VDWR).

Due to the legal status of the little brown bat, DCR recommends coordination with the VDWR, Virginia's regulatory authority for the management and protection of these species to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

All Sites

In addition, if at any of stands are not allowed to regrow into forests, the proposed project will impact Ecological Cores (**C1, C2, C3, C4 and C5**) as identified in the Virginia Natural Landscape Assessment (<https://www.dcr.virginia.gov/natural-heritage/vaconvisvnl>). Mapped cores in the project area can be viewed via the Virginia Natural Heritage Data Explorer, available here: <http://vanhde.org/content/map>.

Ecological Cores are areas of at least 100 acres of continuous interior, natural cover that provide habitat for a wide range of species, from interior-dependent forest species to habitat generalists, as well as species that utilize marsh, dune, and beach habitats. Interior core areas begin 100 meters inside core edges and continue to the deepest parts of cores. Cores also provide the natural, economic, and quality of life benefits of open space, recreation, thermal moderation, water quality (including drinking water recharge and protection, and erosion prevention), and air quality (including sequestration of carbon, absorption of gaseous pollutants, and production of oxygen). Cores are ranked from C1 to C5 (C5 being the least significant) using nine prioritization criteria, including the habitats of natural heritage resources they contain.

Impacts to cores occur when their natural cover is partially or completely converted permanently to developed land uses. Habitat conversion to development causes reductions in ecosystem processes, native biodiversity, and habitat quality due to habitat loss; less viable plant and animal populations; increased predation; and increased introduction and establishment of invasive species.

DCR recommends avoidance of impacts to cores. When avoidance cannot be achieved, DCR recommends minimizing the area of impacts overall and concentrating the impacted area at the edges of cores, so that the most interior remains intact.

If stands in the **Bromley Hollow, Tract Fork, Wyrick and Gatewood & Caseknife** sites are not allowed to regrow into forests the project will impact one or more cores with very high to outstanding ecological integrity. Further investigation of these impacts is recommended and DCR-DNH can conduct a formal impact analysis upon request. This analysis would estimate direct impacts to cores and habitat fragments and indirect impacts to cores. The final products of this analysis would include an estimate of the total impact of the project in terms of acres. For more information about the analysis and service charges, please contact Joe Weber, DCR Chief of Biodiversity Information and Conservation Tools at Joseph.Weber@dcr.virginia.gov.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

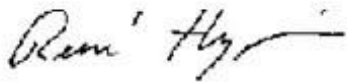
New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The Virginia Department of Wildlife Resources (VDWR) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Amy Martin at 804-367-2211 or amy.martin@dwr.virginia.gov. There is potential for the little brown bat (*Myotis lucifugus*) and /or the tri-colored bat (*Perimyotis subflavus*) to occur within **all sites in the project area, except for East Gatewood**. Therefore, DCR recommends coordination with the VDWR, Virginia's regulatory authority for the management and protection of these species to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570). According to the information currently in our files, there is also potential for the northern long-eared bat (*Myotis septentrionalis*) to occur within these project areas. Due to the legal status of the northern long-eared bat DCR recommends coordination with the USFWS and the VDWR to ensure compliance with protected species legislation.

The U.S. Fish and Wildlife Service (USFWS) utilizes an online project review process (<https://www.fws.gov/office/virginia-ecological-services/virginia-field-office-online-review-process>) to facilitate compliance with the Endangered Species Act (16 U.S.C. 1531-1544, 87 Stat. 884) (ESA), as amended. The process enables users to 1) follow step-by-step guidance; 2) access information that will allow them to identify threatened and endangered species, designated critical habitat, and other Federal trust resources that may be affected by their project; and 3) accurately reach determinations regarding the potential effects of their project on these resources as required under the ESA. If you have questions regarding the online review process, please contact Rachel Case at rachel_case@fws.gov.

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Sincerely,



S. René Hypes
Natural Heritage Project Review Coordinator

Cc: Wil Orndorff, DCR
Amy Martin, VDWR

Literature Cited

Gleason, H.A. and A. Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada. Second Edition. The New York Botanical Garden. Bronx, NY. 910 pp.

NatureServe, 2015. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe. Arlington, Virginia. Available <http://explorer.natureserve.org> (Accessed: April 21, 2016).

Weakley, A. In prep. Flora of the southern and mid-Atlantic states. Working draft of 15 May 2011. University of North Carolina Herbarium, North Carolina Botanical Garden, University of North Carolina at Chapel Hill, NC.