



Virginia Natural Heritage E-News Summer 2010

Join us on [facebook](#)

[Conserving Virginia's Biodiversity through Inventory, Protection and Stewardship](#)

The Virginia Natural Heritage Program was established in 1986 to protect the state's diversity of life. The program focuses on the identification, protection and stewardship of Virginia's natural communities, and rare plant and animal species.

[In This Issue:](#)

- [Surveys For Three Globally Rare Plants](#)
- [Sword-Leaved Phlox Discovered](#)
- [Federally Endangered Indiana Bats Found](#)
- [Fort A.P. Hill Natural Heritage Inventory](#)
- [Blue Ridge Parkway Vegetation Project](#)
- [Blue Belle Island, St Paul Site Visit](#)
- [Plant Eastern Shore Natives](#)
- [Volunteers Provide Assistance](#)
- [Certified Prescribed Burn Manager Program](#)
- [Spring 2010 Prescribed Burning](#)
- [Phragmites Control Partnership](#)
- [New Hiking Trail At Poor Mountain NAP](#)
- [Environmental Education on NAPs](#)
- [Crow's Nest NAP Spring Field Day](#)
- [Natural Area Preserve Public Access Guide](#)

SURVEYS FOR THREE GLOBALLY RARE PLANTS COMPLETED

DCR Natural Heritage field botanists completed surveys and reports for three globally rare plant surveys conducted in 2009 that were funded by the USFWS and administered by the Virginia Department of Agriculture and Consumer Services: Bentley's coralroot (*Corallorhiza bentleyi*, G1G2/S1/NL/LE), juniper sedge (*Carex juniperorum*, G2/S1/NL/LE), and Kankakee globe-mallow (*Iliamna remota*, G1Q/S1/NL/NL). Additional plants were found for Bentley's coralroot, known from a total of five counties in WV and VA. Juniper sedge, known from only three sites in Virginia, was not found at new

locations despite extensive searches, but three other rare plants were documented while conducting the surveys. Kankakee globe-mallow, known from only ten sites worldwide, seven of which are in Virginia, was found to have dramatically declined, now only known from two of its former seven Virginia locations.

SWORD-LEAVED PHLOX DISCOVERED AS PART OF VA NATIVE PLANT SOCIETY SPONSORED SURVEY

DCR's Natural Heritage Field Botanist, Nancy VanAlstine, concluded surveys to relocate historical occurrences of the globally rare sword-leaved phlox (*Phlox buckleyi*, G2/S2), known only from western Virginia and eastern West Virginia. This perennial herb, blooming in May and June, is typically found in open shale woods, and has not been



reported in 30 years. The 2010 survey effort in May and June focused on relocating occurrences in Craig, Wythe, Pulaski and Rockbridge counties. During the surveys in May and June, sword-leaved phlox was found in five of the nine historical locations where the plant was sought. During the June survey, populations of the plant were relocated and more accurately mapped in three of the five occurrences, with one along a road in Craig County north of New Castle within George Washington and Jefferson National Forests (GW & JNF), one with two colonies along a

road bank near Max Meadows in Wythe County, and one consisting of multiple colonies along a road within GW& JNF west of Pulaski. Sword-leaved phlox was not found in two other sites: a Wythe County location with probable increased road bank disturbances since the original discovery, and a Rockbridge County occurrence which may have either been subject to habitat degradation since the original find or possibly the description of the location has been mis-interpreted. Additionally, during the June field work two small road bank colonies were found beyond the previously documented locations, one in Pulaski County and one in Wythe County. The survey is part of a larger project, funded by the Virginia Native Plant Society, to relocate historical occurrences of rare plants around the state.

FEDERALLY ENDANGERED INDIANA BATS FOUND AT POWELL MOUNTAIN KARST PRESERVE, WISE COUNTY

Recent surveys of two caves on the Powell Mountain Karst Preserve (PMKP) in Wise County, Virginia were very successful. The surveys turned up a small colony of the federally endangered Indiana bat (*Myotis sodalis*) (G2/S1/ LE/LE). This species was documented in 2009 the preserve when a single male was captured in a mist net. This individual, banded in June, was among the seven Indiana bats found hibernating in Parson’s Cave on March 11, 2010. These records demonstrate the importance of the site and indicate that the bats utilize the habitats at the preserve all year. Also found were more than 100 little brown bats (*Myotis lucifugus*) and Tri-colored bats (*Perimyotis subflavus*), along with a rare Small-footed myotis (*Myotis leibii*) (G3/S1) and several big brown bats (*Eptesicus fuscus*). No evidence of White Nose Syndrome was found at either site.

FORT A.P. HILL NATURAL HERITAGE RESOURCE INVENTORY COMPLETED

Natural Heritage staff submitted the final report on the re-inventory of natural heritage resources of the 75,600 acre U.S. Army’s Fort A.P. Hill in Caroline County. A natural heritage inventory was originally conducted on the Fort

in 1992-1993. In four field seasons, Natural Heritage ecologists, botanists and zoologists re-evaluated the status of the previously documented rare species and significant natural communities and surveyed for new occurrences of rare species and communities. The report documents the current status and any changes in numbers or habitat conditions for the natural heritage resources, and provides management recommendations to assist Fort A.P. Hill natural resource staff in decisions about land uses relating to their military mission as well as protection of areas with conservation value. The report was accompanied by GIS data on locations of natural heritage resources and detailed status information. Seventy-one (71) occurrences of natural heritage resources were observed in the re-inventory, this total consisting of 22



natural community occurrences, 35 plant occurrences, and 14 animal occurrences. Fort A.P. Hill remains the coastal plain

stronghold in Virginia for the federal and state listed plant species swamp-pink (*Helonias bullata* G3/S2S3/LT/LE) with four new occurrences found since 1992-1993, one during this re-inventory. The control of beaver at Fort A.P. Hill is critical if further losses of significant seepage communities and the swamp-pink are to be prevented. Three more occurrences of the federal and state listed plant small whorled pogonia (*Isotria medeoloides* G2/S2LT/LE) have also been found since 1992-1993 with one during this re-inventory. Attempts to relocate the state listed Bachman’s Sparrow (*Aimophila aestivalis* G3 S1B) were unsuccessful and this occurrence is now considered historical. This re-inventory further strengthens the conservation significance of many of the lands managed by Fort A.P. Hill. Natural Heritage staff is currently working at Fort A.P. Hill to develop a detailed vegetation classification and map of the base.

BLUE RIDGE PARKWAY VEGETATION MAPPING PROJECT

DCR Natural Heritage staff is working as part of a team to help the National Park Service understand the vegetation types found along the Blue Ridge Parkway, so the NPS can better interpret and manage these natural resources. Field data forms and GIS shapefiles supporting vegetation association identification along portions of the Blue Ridge Parkway in Virginia were submitted for review to the principal investigator representing NatureServe. These data were collected by DCR-Natural Heritage field botanists during May-October 2009 as part of an Accuracy Assessment of a vegetation map of the Blue Ridge Parkway in Virginia and North Carolina produced by the University of Georgia. This accuracy assessment was funded by National Park Service via a contract to The Nature Conservancy.

BLUE BELLE ISLAND, ST PAUL SITE VISIT

DCR Natural Heritage Southwest Region Steward, Claiborne Woodall visited Blue Belle Island on the Clinch River in Saint Paul with Mayor Kyle Fletcher and staff from The Nature Conservancy's (TNC) Clinch Valley Program.



Mayor Fletcher and the Saint Paul Town Council are very interested in protecting the island in perpetuity, providing public access for fishing and passive recreation such as hiking and birding, and in linking the island to the town park and the nearby Sugar Hill Park, owned by Frank Kilgore. DCR Natural Heritage offered to provide technical assistance with the Town's grant application to the Virginia Recreational Trails Fund.

PLANT EASTERN SHORE NATIVES CAMPAIGN

DCR Eastern Shore Natural Areas Steward, Dot Field, recently presented an overview of the "Plant Eastern Shore Natives Campaign" at the UVA Anheuser-Busch Coastal Research Center (ABCRC) in Oyster, VA. Plant Eastern Shore

Natives uses social marketing techniques to encourage the use of native plants in landscaping projects on the Eastern Shore. The campaign was initiated by the VA Coastal Zone Management



Program and implemented in partnership with the DCR-DNH Eastern Shore office, DGIF, VCE, DEQ Office of Environmental Education, The Nature Conservancy, the Alliance for the Chesapeake Bay, the Eastern Shore Soil and Water Conservation District, ABCRC and other local organizations. Eastern Shore residents and horticultural businesses were surveyed as part of the development process. Landowner participation is being encouraged through radio ads, window decals, information sessions and the publication of "Native Plants of Accomack and Northampton", a pictorial guide available free-of-charge to local residents. For more information on the campaign, including a PDF file of the guide go to www.deq.virginia.gov/coastal/go-native.html

VOLUNTEERS PROVIDE ASSISTANCE ACROSS THE NATURAL AREA PRESERVE SYSTEM

Twenty three students from the University of Rochester and members of the Eastern Shore master Naturalist Chapter planted 2,400 fruit-bearing shrubs in



abandoned agricultural fields at Magothy Bay NAP, Northampton County. Migratory songbirds will now have 50 more acres of stopover habitat during the fall migration period. In addition to the planting, the students participated in a beach clean-up at Savage Neck Dunes NAP, cleared vegetation along a boardwalk at Cape Charles Coastal Habitat NAP, and assisted Kiptopeke State Park staff with maintenance projects. The students are

planning to return again next year to assist with stewardship projects.

In March, seven members of the Alternative Spring Break group from North Carolina Central University assisted Natural Heritage Mountain Region staff at Difficult Creek Natural Area Preserve.



Projects undertaken included, installing interpretive signage, as well as fire line construction and maintenance.

Also in March, eight members of the Grassy Hill Volunteer Stewardship Committee assisted with fire line maintenance at Grassy Hill Natural Area Preserve located in Franklin County.



VIRGINIA CERTIFIED PRESCRIBED BURN MANAGER PROGRAM

Claiborne Woodall and Rick Myers from the DCR Natural Heritage Stewardship Section served as instructors in the fields of fire ecology, fire behavior, firing tactics, and ignition techniques. Other instructors came from DOF, Virginia Tech, the National Weather Service, and Department of Game and Inland Fisheries (DGIF). The student body consisted of personnel from DOF, DGIF, DCR-State Parks, US Dept of Defense, US Forest Service, as well as forest industry, private contractors, and landowners. DCR has been part of the instructor cadre at the Virginia Certified Burn Manager Training for 10 years.

SPRING 2010 PRESCRIBED BURNING AT STATE NATURAL AREA PRESERVES

DCR Natural Heritage staff, with great support from its fire management partners



including the U.S. Fish & Wildlife Service, The Nature Conservancy, State Parks, VA Tech, and an Americorps Crew have completed key prescribed burns on 392 acres at three state natural area preserves this Spring. Two units totaling 97 acres were burned at the 599-acre Chub Sandhill Natural Area Preserve in Sussex County. The 80-acre Unit 6 encompasses the first extensive native genotype longleaf pine restoration site in Virginia and was burned for the first time to control competing vegetation, encourage establishment of fire-adapted native ground cover plants, and benefit development of the two-year old longleaf seedlings. 40,000 containerized seedlings, grown from local Virginia source seeds collected by DCR and Dept of Forestry staff in 2006, were planted in early 2008 on this unit.

Two units totaling 115 acres were burned at the 1017-acre Antioch Pines Natural Area Preserve in Isle of Wight County with the objective of maintaining Pine-Scrub Oak Sandhills natural community (G1/S1) with open canopies and a diverse groundcover supporting various rare plant species.

Three units totaling 180 acres were burned at the 818-acre Difficult Creek Natural Area Preserve (DCNAP) in Halifax County, with fire crew from DCR-Natural Heritage and State Parks, The Nature Conservancy, and Virginia Tech participating. Fire management goals at DCNAP include restoration of a mafic Piedmont grassland/woodland community supporting six



known rare plant species and including the federally-endangered smooth coneflower (*Echinacea*

laevigata) (G2G3 S2 LE LT). Rare species, native prairie plants, and grassland nesting birds (e.g. bobwhite quail) are being benefited by prescribed fires at DCNAP.

DCR TEAMS WITH PARTNERS AND PRIVATE LANDOWNERS TO CONTROL PHRAGMITES

This fall, DCR Natural Heritage will lead Phragmites control projects on the Northern

Neck as well as on the Eastern Shore. A total of 400 acres of the 15-foot tall, highly invasive grass from Europe will be treated with a helicopter applied, EPA-approved herbicide. Natural Heritage is working with nearly 100 landowners, State Parks, US Fish & Wildlife Service, The Nature Conservancy, and Northumberland Association for Progressive Stewardship. DCR's aerial treatments are being leveraged on the Eastern Shore with US Fish & Wildlife Service leading ground based control efforts. This year's Phragmites control projects are part of DCR's on-going efforts to protect heritage resources and vulnerable wetland habitats across coastal Virginia.

NEW HIKING TRAIL AT POOR MOUNTAIN NATURAL AREA PRESERVE

A 1.2-mile section of new hiking trail was completed in April at Poor Mountain NAP near Roanoke. The "Cascade Trail" descends the steep, dry slopes of Poor Mountain, and ends



at an overlook of a small mountain stream. This section of trail will combine with additional planned trail sections to form a 4.2-mile loop trail system at

the preserve. Trail design and construction is being funded by a grant from DCR's Virginia Recreational Trail Program and with strong volunteer support and trail building expertise from the Pathfinders for Roanoke Valley Greenways.

ENVIRONMENTAL EDUCATION ON STATE NATURAL AREA PRESERVES

From Southwest Virginia to the Chesapeake Bay, Natural Area Preserves provide environmental education experiences on a regular basis. Students enrolled in



the Century 21 summer school program at Cleveland Elementary School, Russell County recently enjoyed a hike into the Pinnacle Natural Area Preserve to the Big Falls of Big Cedar Creek with Bill Dingus, DCR Natural Areas Steward. The students viewed various plants and animals while hiking the trails and learned about the basic ecology of the NAP.

On the other side of the state the 8th Grade class from Chesapeake Academy spent the day at Dameron Marsh Natural Area Preserve honing their field ecology skills. Led by DCR Natural Areas Steward Rebecca Wilson, the students



observed coastal processes and were introduced to the concepts of ecosystem structure and function,

shoreline erosion, and natural succession. The preserve's diverse community types – salt marshes, tidal mudflats, beach strands, old fields, and maritime forest – were observed to provide habitat for a large number and high diversity of animal and plant species. This field trip helps to highlight the value of state natural area preserves as unique sites for educating students about natural history, field ecology and biology, and natural resource conservation.

CROW'S NEST NATURAL AREA PRESERVE SPRING FIELD DAY

In just four hours, all 120 reservations were filled for the May 1st Spring Field Day at



Crow's Nest Natural Area Preserve hosted by DCR and Stafford County. This event attracted residents of Stafford County

and nearby Fredericksburg, as well as nature enthusiasts from Richmond to Maryland who

wanted to get a glimpse of one of the most remarkable sites in the State Natural Area Preserve system. Five separate guided hikes were offered during the day with emphasis on the more than 60 migratory bird species that utilize Crow's Nest. Some of the highlights of the day included bald eagles, scarlet tanagers and numerous species of warblers, some of which had just arrived at Crow's Nest after flying from southern wintering grounds in South America. Occasional field days arranged by Richmond-based DCR staff will be offered at Crow's Nest until such time as positions and funding are available to open the preserve to the public full-time. Otherwise, the preserve will remain closed to the public.

NATURAL AREA PRESERVE PUBLIC ACCESS GUIDE

A new guide to the Commonwealth's Natural Area Preserve System has just been published. The guide includes photos and descriptions of 17 of Virginia's 59 natural area preserves, along with visitation guidelines and background information on the entire System. An electronic version can be found at www.dcr.virginia.gov/natural_heritage/documents/napbook4web.pdf

Copies are being distributed statewide at local tourism offices, bed and breakfasts, hiking and sporting goods stores, and can be requested by contacting DCR's Public Communications Office pco@dcr.virginia.gov

Bob McDonnell, Governor

*Doug Domenech,
Secretary of Natural Resources*

*David A. Johnson, Director
Department of Conservation &
Recreation*

**Virginia Department of
Conservation and Recreation**

Division of Natural Heritage
217 Governor Street

Richmond, VA 23219-2010

PHONE: 804/786-7951

FAX: 804/371-2674

WEBSITE:

www.dcr.virginia.gov/natural_heritage



STAFF

Tom Smith, Division Director
Jason Bulluck, Information Manager
Liz Crocker, Business Manager
Rene' Hypes, Project Review Manager
Chris Ludwig, Chief Biologist
Rick Myers, Stewardship Manager
Larry Smith, Protection Manager
Lindsey Adkins, Project Review Assistant/NHDE Steward
Richard Ayers, Eastern Shore Stewardship Tech
Alli Baird, Coastal Locality Liaison
Bill Balfour, Karst Specialist
David Boyd, Conservation Lands GIS Planner
Tracey Boyd, Chesapeake Bay Stewardship Tech
Vacant, Conservation Planner
Anne Chazal, Field Zoologist
Vacant, VCLNA GIS Planner
Vacant, Mountain Region Operations Steward
Paul Clarke, E. District Manager/Restoration Ecologist
Bland Crowder, Botany Intern
Bill Dingus, Southwest Operations Steward
Art Evans, Field Zoologist
Dot Field, Eastern Shore Region Steward
Gary Fleming, Vegetation Ecologist
Neil Gunter, Conservation Lands Specialist
Vacant, Ecology Assistant/GIS Technician
Kirsten Hazler, GIS Ecologist
Kevin Heffernan, Stewardship Biologist
Chris Hobson, Natural Areas Zoologist
Angela Hutto, Project Review Assistant
Charles Kline, Database/GIS Specialist
Danielle Kulas, Natural Heritage Conservation Intern
Darren Loomis, Southeast Region Steward
Faye McKinney, Office Manager
Cathy Milholen, Information Specialist
Amberly Moon, Project Review Assistant
Wil Orndorff, Karst Protection Coordinator
Karen Patterson, Vegetation Ecologist
Vacant, Western/Piedmont Locality Liaison
Steve Roble, Zoologist
Megan Rollins, Database Manager
Kristin Taverna, Field Ecologist
Red Thompson, Database Specialist
Greg Toussaint, Eastern Operations Steward
Johnny Townsend, Botanist
Nancy VanAlstine, Field Botanist
Joe Weber, GIS Projects Manager
Bryan Wender, Mountain Region Steward
Irvine Wilson, Natural Areas Protection Specialist
Rebecca Wilson, Chesapeake Bay Region Steward
Claiborne Woodall, W. District Mgr / Southwest Region
Steward

Selected in 1994 by The Nature Conservancy and
2007 by NatureServe as the
Outstanding Natural Heritage Program
in the Western Hemisphere

July 2010