

# Virginia Natural Heritage E-News Summer 2011

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VIRGINIA NATURAL HERITAGE PROGRAM

## Conserving Virginia's Biodiversity through Inventory, Protection and Stewardship

The Virginia Natural Heritage Program celebrating 25 years of protecting the Commonwealth's diversity of life. The program focuses on the identification, protection and stewardship of Virginia's natural communities, and rare plant and animal species.

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**Staff Changes at Natural Heritage** Recent months have seen the departure of several key staff. Bryan Wender, Mountain Region Steward assumed a position with the National Park Service at Mesa Verde NP, Colorado. Bill Dingus, SW Region Operations Steward has moved on to become the new Public Works Director in his home Scott County. Greg Toussaint, Eastern Operations Steward is in the final stages of completing his degree in nuclear engineering and moved on in April. Paul Clark,

Natural Area Ecologist will be moving to Uganda to assume work with the Peace Corps.

We welcome Wes Paulos, the new Western Operations Steward who comes to VA from Florida State Parks with a strong background in fire management and invasive species control. Ryan Kopf, Mountain Region Steward joins us from Southern Illinois University at Carbondale, where he has studied plant biology / prairie community ecology and is working to finish his doctoral degree. He is experienced in both invasive species control and prescribed burning and has a particular interest in public outreach.

**Natural Area Preserve Field Trips & Canada Burnet discovery** Two DCR Natural Heritage biologists lead field trips to Buffalo Mountain and Grassy Hill Natural Area Preserves for the annual Virginia Native Plant Society botanical foray. The leaders talked about the significance of the sites, rare species protection, and management efforts designed to benefit the site's natural resources. During the Grassy Hill NAP hike, the leaders found a rare plant species that had not yet been recorded for the site, Canada burnet (*Sanguisorba canadensis*, G5 S2). The Virginia Native Plant Society is a key leader in the conservation of Virginia's native plant species.



**Rare Southeastern cane borer moth discovered** DCR Natural Heritage field zoologist Anne Chazal found a rare and yet to-be-described species of moth called the Southeastern

cane borer moth (*Papaipema* sp. 3, G4 S2S3) in Virginia Beach. This moth depends upon switch cane (*Arundinaria tecta*) to complete its life cycle. The caterpillars, which hatch in the spring, bore into the switch cane, where they feed and remain hidden from predators until they pupate. In the late summer/fall, the adult moth emerges. Switch cane grows in dense stands, often called ‘canebrakes’, in moist bottomland soils. Forest clearing and hydrology alterations have decreased the available habitat for canebrakes and thus for the Southeastern cane borer moth. Other species of Lepidoptera in Virginia also use switch cane as a host plant: Southern Pearly Eye, Creole Pearly Eye, Lace-winged Roadside-skipper, Reversed Roadside-skipper, and the Carolina Roadside-skipper.

**Frosted Elfin butterfly discovered – last seen in 1994** DCR Natural Heritage zoologists discovered a population of the Frosted Elfin butterfly (*Callophrys irus*, G3 S2?) in City of Suffolk. A population was also found at Antioch Pines NAP the previous week by a Natural Heritage volunteer. Prior to these sightings, this species had not been confirmed in the Commonwealth since 1994. This small butterfly is associated with habitats which are either fire dependent or undergo other frequent disturbances. These disturbances encourage the growth of the caterpillars’ food plants, lupine or wild indigo. This work is part of a two-year project to develop an atlas of rare butterflies, moths, dragonflies, and damselflies in Virginia.



**New Michaux’s Sumac Population** A population of the Federally Endangered Michaux’s Sumac (*Rhus michauxii*, G2G3 S1) was recently discovered on property owned by the Ward Burton Wildlife Foundation adjacent to Fort Pickett southeast of Blackstone, Virginia. Several Sumac concentration areas adjacent to

roads were known prior to DCR work on the property, but after surveying a small percentage of the 400+ acre tract, the numbers of Michaux’s Sumac stems were estimated to be in the thousands. Additional inventory work is needed to establish the total aerial extent of the population and numbers of stems present on the property. The discovery of the species in large numbers on the Ward Burton Wildlife Foundation tract is important, as the tract is large enough to support management efforts to benefit the species. This federally endangered plant was first discovered in Virginia by DCR Natural Heritage biologist in 1994, when conducting the first biological inventory at Fort Pickett.



**State Rare Dragonfly Discovered** Natural Heritage field zoologist discovered a population of state rare chalk-fronted corporal skimmers (*Ladona julia*, G5 S1S2) while conducting surveys on the George Washington National Forest in Augusta County. Ranging from southern Canada to northern United



States, this small dragonfly prefers marshy or boggy ponds and lakes in Virginia. In addition, two watchlisted dragonfly species were noted: the American Emerald (*Cordulia shurtleffii* G5 S3) and the Dot-tailed whiteface (*Leucorrhinia intacta* G5 S3). These surveys are being funded by the Virginia Department of Game and Inland Fisheries through a state wildlife grant from the U.S. Fish and Wildlife Service, and DCR to develop a web atlas of Virginia’s rare butterflies, skippers, moths, dragonflies, and damselflies.

**Eagle Scout Project Completed at Crow’s Nest** Jay Buckle of Scout Troop 218 in Stafford, Virginia Natural Heritage E-News Summer 2011 2

Virginia has completed his Eagle Scout project at Crow's Nest Natural Area Preserve. Jay tackled an ambitious effort that entailed demolishing and removing an old shoreline dock structure that was in poor repair. He also built and installed a new waterfowl hunting blind used by hunters participating in DCR's managed lottery waterfowl hunts at the preserve. Jay's hard work and dedication has resulted in a cleaner shoreline as well as better hunting opportunities at Crow's Nest Natural Area Preserve. His project accomplished much needed and valuable work that otherwise would not have happened in such a timely fashion due to the current lack of staff at the preserve. Thanks, Jay...job well done.



Eagle Scout Jay Buckle and DCR's Greg Toussaint

**State Natural Area Preserve System Crosses 50,000 Acre Mark** In January, DCR and The Nature Conservancy added two important tracts of land totaling 63.83 acres to the Pinnacle Natural Area Preserve in Russell County, pushing the State Natural Area System over the 50,000 acre mark. The Lark tracts border the Clinch River and represent important land conservation steps to protecting the globally rare freshwater mussel and fish assemblages found in the Clinch River. The acquisition was supported by a U.S. Fish and Wildlife Service Endangered Species Recovery Land Acquisition Grant and the 2002 Park and Natural Areas Bond. The property is now owned by TNC and dedicated as a State NAP, and is being transferred to DCR.

**Chub Sandhill Natural Area Preserve addition** In March, DCR added 467 acres to the Chub Sandhill Natural Area Preserve. This addition represents a critical piece in the long term conservation of one of the most biologically intact rivers in the Albemarle/Pamlico ecosystem,

the second largest estuarine area in the U.S. The property has over three miles of frontage on the Nottoway River, protects significant bottomland hardwood communities, and will aid in the restoration of globally rare longleaf pine forests. The State Natural Area Preserve System now contains 60 natural area preserves covering 50,492 acres and supporting 584 mapped locations of 372 different exemplary natural communities and rare species.

**Natural Heritage Resources Discovered in Cooperation with VOF** While inspecting a prospective Virginia Outdoors Foundation (VOF) easement property in Montgomery County, Natural Heritage Program staff discovered a new subpopulation of the globally rare smooth coneflower (*Echinacea laevigata*)



(G2G3/S2 FE ST) and two significant community occurrences associated with the Elbrook dolomite geology of the area. The property also occupies an important part of the North Fork Roanoke River, which supports rare aquatic species, including the Roanoke logperch (*Percina rex*) (G1G2/S1S2 FE SE). This tract was brought to DCR's attention by VOF's routine use of Natural Heritage Data Explorer.

**Natural Heritage Program Recognized for Invasive Species Efforts** The Mid-Atlantic Panel on Aquatic Invasive Species (MAP-AIS) has announced the recipients of its first annual Rachel Carson awards program which recognizes organizations that work to prevent the introduction and spread of aquatic invasive species. A 2011 MAP Certificate of Merit was presented to DCR's Natural Heritage Program for its on-going commitment to control Phragmites – a tall non-native grass that invades and takes over coastal wetlands and shorelines. This award

recognition included a new Garmin GPSMAP 76CSx GPS unit, which will assist DCR staff in invasive plant mapping efforts. DCR's Natural Heritage Program was nominated for this award by Joe McCauley – Chief of Realty for Region 5 of the U.S. Fish and Wildlife Service – who previously served as Rappahannock River Valley National Wildlife Refuge manager and was a long-time partner with DCR in mapping and controlling Phragmites in Virginia.

**New Invasive Species Publications** The Virginia Invasive Species Working Group has completed three publications to raise awareness of invasive species, the problems they cause, and the costs to society to manage them. The publications are: 1) A twelve-page color brochure: Twelve Invasive Species of High Concern in Virginia, introduces the issues and profiles twelve species, including established species like tree-of-heaven and potential threats such as sirex wood-wasp; 2) An educational poster “Invasion of the Habitat Snatchers” playfully introduces the issue and promotes the Invasive Species of Virginia website; 3) An informational poster offers quick facts on each of the twelve species highlighted in the brochure. The publications are being distributed to state and federal resource agencies, non-profit organizations, and industry stakeholders. They will also be distributed to schools, especially science classrooms. Electronic versions of the posters and brochures are available at [www.vainvasivespecies.org](http://www.vainvasivespecies.org)

**Volunteers Sign New Trails at Poor Mountain NAP** Dedicated volunteers from VA Master Naturalist and Native Plant Society groups converged at Poor Mountain Natural Area Preserve. The objective was to sign the trails. The volunteers devoted the better part of the day in searing heat (mid 90's) to hike over 4 miles with equipment



and metal signs on their back, mount signs, remove garlic mustard and trim back tree limbs and shrubs. It was also a learning experience as the group identified plants along the trail. Without the help of these volunteers, it would have been nearly impossible to implement the signage program without many days of laborious work. Virginia greatly appreciates the hard work that these individuals put into the management of Poor Mountain Natural Area Preserve. A Special Thanks go to Fred Cramer, Butch Kelly, Bill Fabian, Nancy Fabian, and James Bush.

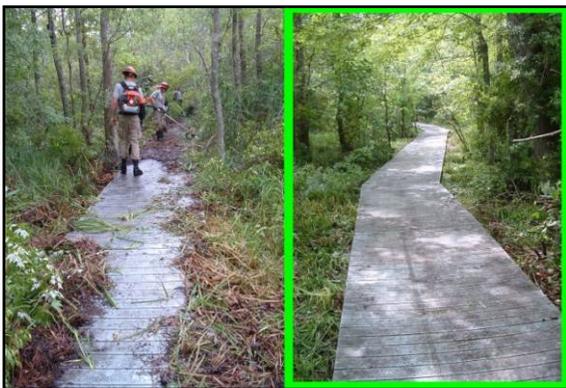


**Ogdens Cave Natural Area Preserve Volunteer Work Day** Members of the Ogdens Cave Natural Area Preserve Volunteer Stewardship Committee and volunteers from the Virginia Region of the National Speleological Society, led by Chairperson Jeff Jand, spent the day helping to build a cave entrance gate and clear fencing and other trash from fence rows and sinkholes. This was an outstanding effort by a group of 24 exceptional volunteers. Work on the cave gate went beyond the call of duty, as three welders donated time and equipment plus several hundred dollars worth of steel. The gate was installed with care and intention to preserve the scenic beauty of the entrance room while still effectively blocking access to cave reaches where natural heritage resources occur.



**AmeriCorps helps prepare North Landing River Natural Area Preserve for re-opening in 2012**

North Landing River Natural Area Preserve, Virginia Beach was at one point the state's flagship Natural Area Preserve, complete with an interpretive hiking trail and a hand-carry boat launch. However, since 2002, the preserve has been closed due to law enforcement staff shortages and the preserves ongoing issues with illegal activities including drug dealing, motor vehicle trespass, target shooting and significant trash dumping (by the dump truck load). Pending new LE staff hiring approval, DCR plans to re-open the preserve and its water access to the North Landing River as early as possible. With coordination with US Fish & Wildlife Service, Natural Heritage staff teamed up with



AmeriCorps and the Department of Defense to clean up the trail and boardwalks, preparing them again for public use. The team included wounded soldiers working on the team as part of their recovery program.

**DCR teams up with partners on Valentine's Day to spread a little love for migratory birds**

DCR Natural Heritage staff welcomed the volunteer help of AmeriCorps and Master Naturalists to begin a two-year long project to restore 200 acres of migratory songbird and wetland habitats on Mutton Hunk Fen Natural Area Preserve. The preserve, located in Accomack County on the seaside of the Eastern Shore, is part of a globally important coastal migration corridor for the passage of millions of

shorebirds, songbirds, raptors, seabirds, waterfowl, and wading bird species. The restoration project will offer benefits to migrating songbirds such as the prairie warbler, but also to resident birds and wildlife such as the northern bobwhite and bald eagle. More than 2,300 Wax Myrtle shrubs, which are



native to the shore and loved by birds, were the first to be planted. The project is funded through a North American Wetlands Conservation Act grant with additional assistance from The Nature Conservancy and DCR State Parks. DCR staff is especially appreciative of the effort put in by the Eastern Shore Chapter of the VA Master Naturalists. Members of the chapter contributed over 250 volunteer hours to the project.

**Longleaf Pine Restoration Work Continues on State Natural Area Preserves**

Longleaf pine once covered over 1 million acres in southeastern Virginia, today approximately 120 trees remain. In March, another major step was taken by DCR's Natural Heritage Program to restore longleaf pine and associated fire-dependant



species within their former range in Virginia. Approximately 55,000 containerized longleaf seedlings, grown in partnership with VA Department of Forestry from seed collected from the few remaining wild Virginia longleaf pines, were planted on 100

acres of sandy uplands near the Blackwater River at Antioch Pines Natural Area Preserve in Isle of Wight County. The area was burned in winter of 2010-11 to prepare the site for planting. Antioch

Pines NAP contains some of the last few mature native longleaf pine remaining in Virginia, and also supports at least 17 rare plant species associated with frequently burned longleaf pine savannas. This preserve will play a prominent role in the restoration of this species to its historic northern range limit. Another 102 acres of longleaf pine restoration is planned at Antioch Pines for fall 2011 – winter 2012. DCR Natural Heritage Staff also planted some 1300 seedlings at Chub Sandhill NAP. This work is being supported by funding from NRCS under a WHIP (Wildlife Habitat Incentives Program) contract. DCR has planted some 114,000 native longleaf pine seedlings on 225 acre of State Natural Area Preserve to-date.



**2011 Winter-Spring Prescribed Burning on Natural Area Preserves** DCR Natural Heritage staff, with support from key partners the U.S. Fish and Wildlife Service, The Nature Conservancy and VA State Parks, has completed a successful spring prescribed burn season on natural area preserves in the Eastern District. Ten burn units on four preserves were safely treated with prescribed fire through early May for a total of 413 acres burned. These fires will help to restore and maintain fire adapted natural communities such as Pine / Scrub-Oak Sandhills which support a large number of rare, fire-dependant species of plants and animals.



Spring Burn Images

**Rare Lily Thrives After Fire** The Gray's lily (*Lilium grayi* G3 S2) population is doing well at Big Spring Bog Natural Area Preserve in Grayson County. Southwest Region Steward Claiborne Woodall observed seven flowering plants during a monitoring visit on 6/22/11. Deer browse on lilies appears reduced and more plants are flowering than have been observed in recent years. Flowering Gray's lily plants were only observed in areas that have been treated with prescribed fire.



*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](http://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  
Barbara Gregory, 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  
Paul Clarke, E. District Manager/Restoration Ecologist  
Bland Crowder, Botany Intern  
Vacant, Southwest Operations Steward  
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 Specialist  
Danielle Kulas, Database Specialist  
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  
Wes Paulos, Mountain Region Operations Steward  
Vacant, Western/Piedmont Locality Liaison  
Steve Roble, Zoologist  
Megan Rollins, Database Manager  
Kristin Taverna, Field Ecologist  
Red Thompson, Database Specialist  
Vacant, Eastern Operations Steward  
Johnny Townsend, Botanist  
Nancy VanAlstine, Field Botanist  
Joe Weber, GIS Projects Manager  
Ryan Klopff, Mountain Region Steward  
Irvine Wilson, Natural Areas Protection Specialist  
Rebecca Wilson, Chesapeake Bay Region Steward  
Claiborne Woodall, W. District Mgr / Southwest Region Steward

**Celebrating 25 Years of Conserving Virginia's  
Natural Communities and Rare Species**

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