NATIONAL WILDLIFE REFUGE SYSTEM

WATERMARKS

In This Issue

REPORTING FOR DUTY
Our staff never stopped present the world around a pause

TEEMING & TEMPORARY
Visiting a vibrant vernal pool to watch as spring unfolds

THE GROW MUST GO ON
Quarantine didn't stop important conservation planting projects

ANIMAL UPDATES
Big-Headed Babies
Animal Rescue Update
Floating Wetland Update

Reporting for Duty

Our staff never stopped present the world around a pause

By Bill Hybertsen

The COVID-19 pandemic made the world stand still. But our refuge staff members never stood up, and, even during a shutdown, they were busy at work.

Very sensitive office and fieldwork activities across the country and the globe, the pandemic forced us to cancel or postpone many of our usual activities, including our annual Refuge Week celebration. Nevertheless, our staff members continued to work hard to keep our refuges and our mission moving forward.

A New Normal

Our staff members adapted to the new normal, some doing their work from home and others working in the field or at their offices. Some of our staff members were able to continue their work with little change, while others had to adjust their work schedules to accommodate their new circumstances.

Tamara De Vaguez changed her special duty assignment to a full-time position at Great Swamp National Wildlife Refuge in New Jersey. Tamara's new position involves working with the refuge's Friends group, which was formed last year, and helping to develop a strategic plan for the Friends group.

Great Swamp Refuge Staff Curator Jeffrey Gallagher, Park Land Unit Chief Jeremy Dunn and Park Land Unit Biologist Jessica Ryan continued their work on the refuge's Great Swamp Watershed Restoration Project, which involves working in Vaughn's Pond with Rivers and Streams Program Biologist Ryan Mulvey and Rivers and Streams Program Biologist Jeremy Hoover.

Wrapping around a tree with protective social distancing—on foot but adjust their some behaviors.

Jessica Ryan, Great Swamp National Wildlife Refuge

Animal Care And Welfare

Our staff members at the Conservation Fund's Freshwater Institute in West Virginia continued their work with the endangered Candy darter and other species of fish and mussels.

They cared for artificial spawning habitat for the Candy darter in a manner that minimized contact with other people. They also continued their work with the Kanawha River Mussel Recovery Program, which involves the propagation of mussels within the Kanawha River. Staff members also continued their work with the Center for Conservation Biology, which is a partnership between the College of William and Mary and the Smithsonian Institution, to conduct research on the Candy darter and other species of fish and mussels. The Center for Conservation Biology also continued its work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Candy darter.

Staff members at the Fish and Wildlife Conservation Commission's Pheasant, Quail and Partridge Program continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Northern bobwhite quail, which is a species of concern in Virginia.

Virginia Department of Game and Inland Fisheries Pheasant, Quail and Partridge Program Biologist Ryan Yates and Virginia Department of Game and Inland Fisheries Wildlife Biologist Ryan Yates

Animal Programs

Staff members at the Virginia Department of Game and Inland Fisheries Pheasant, Quail and Partridge Program continued their work with the Virginia Department of Game and Inland Fisheries Wildlife Biologist Ryan Yates to develop a conservation strategy for the Northern bobwhite quail. Staff members also continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Candy darter, which is a species of concern in Virginia. Staff members also continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Northern bobwhite quail, which is a species of concern in Virginia.

Animal Rescue

Staff members at the Virginia Department of Game and Inland Fisheries Pheasant, Quail and Partridge Program continued their work with the Virginia Department of Game and Inland Fisheries Wildlife Biologist Ryan Yates to develop a conservation strategy for the Northern bobwhite quail, which is a species of concern in Virginia. Staff members also continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Candy darter, which is a species of concern in Virginia. Staff members also continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Northern bobwhite quail, which is a species of concern in Virginia.

Who's That Behind the Mask?

The *Grow* Must Go On

Quarantine didn't stop important conservation planting projects

By Bill Hybertsen

While most volunteering across a year's worth of conservation projects came to a halt in 2020, a few projects were able to continue with little change or with only minor changes. One of the projects that was able to continue with little change was the Leading Conservation Research, Education, and Training (LCRET) program, which is a partnership between the Fish and Wildlife Service and the Smithsonian Institution's Center for Conservation Biology (CCB). LCRET participants conducted research on the Candy darter, which is a species of concern in Virginia. Staff members also continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Candy darter, which is a species of concern in Virginia.

Staff members also continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Northern bobwhite quail, which is a species of concern in Virginia. Staff members also continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Candy darter, which is a species of concern in Virginia.

Staff members also continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Northern bobwhite quail, which is a species of concern in Virginia. Staff members also continued their work with the Virginia Department of Game and Inland Fisheries to develop a conservation strategy for the Candy darter, which is a species of concern in Virginia.

Volunteers at the Great Swamp National Wildlife Refuge in New Jersey

Staying Plastic-Free This July

Teeming & Temporary

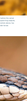
Visiting a vibrant vernal pool to watch as spring unfolds

By Bill Hybertsen

While we were quarantined in our homes from March to June, spring was out there doing its thing.

Every year in October, amphibians move toward the forest floor and burrow into the leaf litter and underground to spend the winter. Some species, such as the wood frog, can even freeze solid and survive the winter.

In February, amphibians begin, with Spring peeper and Wood frogs, to emerge from their winter hibernation and begin their annual migration to their breeding habitat, which is a vernal pool. Vernal pools are temporary bodies of water that are fed by snowmelt, groundwater, and rainfall.



Maryland Makeover

Animal Updates

Big-Headed Babies

Animal Rescue Update

Floating Wetland Update