



North Atlantic-Appalachian Region's Refuge Highlights

Heidi Hanlon/USFWS

We hope you enjoy learning about all of the great conservation and outreach work being accomplished on national wildlife refuges in our region! Our Regional priorities, listed to the right, represent the areas where we are focusing our work and investments. We have color-coded each story according to the key listed to the right in an effort to highlight how our efforts are supporting these priorities. For questions about Refuge Highlights, please contact Susan Wojtowicz at susan_wojtowicz@fws.gov.



Connecting People to Nature



Supporting Our Workforce



Strategic Conservation

Above: Monarch butterflies nectar on seaside goldenrod at Cape May NWR as they make their way to wintering grounds in Mexico.

Monarch Migration

Cape May NWR isn't just known for its bird migration! Monarch butterflies have made their annual migration south through Cape May NWR in New Jersey for years. This year, however, monarchs have been seen in large numbers, even continuing through late November! New Jersey Audubon Society surveys show that the yearly average of monarchs observed per hour in Cape May was 62 this year and numbers in November continued to range from 1-2 monarchs observed per minute.



A monarch butterfly nectars on goldenrod at the Cape May NWR to fuel up in order to continue its migration to Mexico.
Heidi Hanlon/USFWS

Maine Coastal Islands National Wildlife Refuge

Record Number of Saw-Whet Owls Banded

This year at Maine Coastal Islands NWR, a record of 452 saw-whet owls were banded at Petit Manan Point in Maine during the month-long season, exceeding the prior record of 428 owls in 2016. Saw-whet owl migration peaks usually occur every 4 years and are thought to be timed with boreal forest rodent population cycles. This station is part of the Project OwlNet network, which includes over 125 sites. Dave Brinker of Project OwlNet has been running the Petit Manan Point for the last 7 years. We appreciate all the volunteers who make this project happen, and especially Zoe Korpi for running the station in 2020.



Saw-whet owl
Zoe Korpi

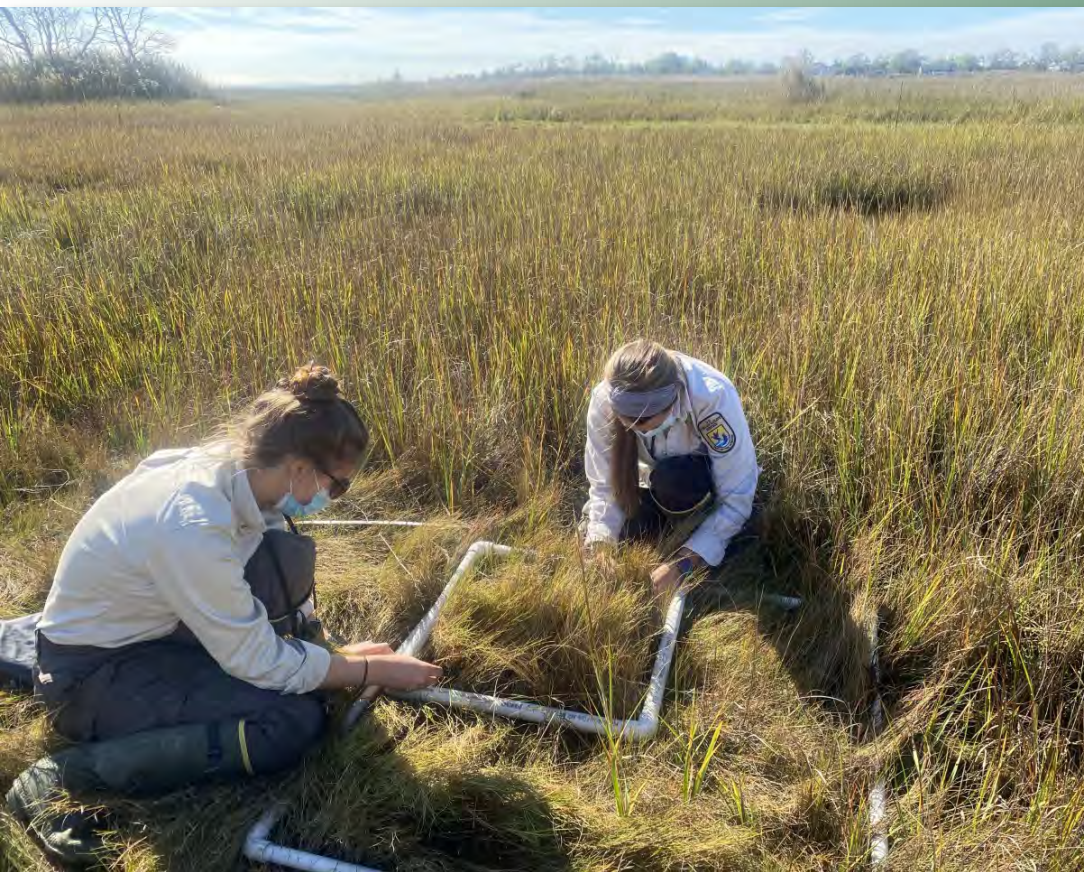
Great Dismal Swamp NWR Adds 256 Acres

On November 17, the Service acquired 256 acres at Great Dismal Swamp NWR in North Carolina and Virginia, for \$515,000 using Land and Water Conservation Fund dollars. The property consists of naturally functioning forested wetland and a 50-acre farm field that the refuge will restore to native habitat. The tract is located on a primary road offering access to additional refuge lands. Conservation of this property helps ensure healthy water quality for the Great Dismal Swamp ecosystem and provides the opportunity to restore historic forest communities, thus benefitting the federally endangered red-cockaded woodpecker.



An old farm field flanked by a forested wetland.

Chris Lowie/USFWS



Coastal biologist Terra Willi and biological technician Kelsey Taylor complete a vegetation survey at Seatuck NWR.

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Long Island National Wildlife Refuge Complex

Resiliency Monitoring Continues

Long Island NWR Complex biology staff in New York worked to complete vegetation surveys at Seatuck NWR and Lido Beach Wildlife Management Area from August through November. In a normal year, staff and interns would survey 203 one-meter square quadrats to assess how the salt marsh is responding to coastal resiliency projects. This year, due to Covid-19 restrictions and limited staffing, 106 vegetation plots were surveyed. The surveys recorded percent cover, stem density, and stem height. This marks the third growing season monitored following the Hurricane Sandy restoration projects that involved the use of coir logs to fill mosquito ditches, excavated channels for improved tidal flow, thin layer deposition, and the construction of a living shoreline.



Chronic Wasting Disease in White-tailed Deer

Chronic Wasting Disease (CWD) is a neurological disease found in deer, elk, and moose. Once present, this fatal disease can spread quickly through direct or indirect contact between animals. Controlling the spread of CWD is essential in preserving the health of white-tailed deer herds in West Virginia. Canaan Valley NWR is continuing to collect lymph node and obex (brain tissue) samples from road kill deer for testing this fall/winter. To date in Tucker County, 22 samples have been collected and sent to the West Virginia Department of Natural Resources for testing.

A deer on the Canaan Valley NWR, peeking out of the St. John's Wort.

Ken Sturm/USFWS

Great Dismal Swamp National Wildlife Refuge

Late Night with Biologists

Despite the pandemic challenges, three pairs of hatching-year red-cockaded woodpeckers (RCWs) were translocated to the Great Dismal Swamp NWR, located in North Carolina and Virginia, in fall 2020. The birds were captured at dusk and transported from Francis Marion National Forest in South Carolina and Piney Grove Preserve in Virginia. Staff observed the new birds happily greeting each other when released from their receiving tree at dawn. It was a time-intensive team effort, so many thanks for the assistance from masked volunteers and service biologists, as well as other partners, such as Virginia Department of Wildlife Resources, The Nature Conservancy, and Center for Conservation Biology.



A sleepy male RCW is photographed before he is carefully placed into an artificial insert. A screen with a long rope is placed over the hole so that it can be released at dawn.

Bryan Watts/Center for Conservation Biology

Recovering the Last Turtle Nest

On November 6, the biology crew of Back Bay NWR in Virginia excavated their final loggerhead sea turtle nest of the season. This was the 11th nest of the season, with eggs lain on August 28. Storms in early September caused wash over of the nest at only three weeks of incubation. Staff left the nest to incubate for 70 days before excavating. Upon excavation they found that 29 cm of sand had accumulated on top of the nest. Back Bay Interns had to use some team work to retrieve the eggs. There was a total of 128 eggs; however, none of them made it past early development. This is common for late nests.

Interns work together to retrieve eggs covered by storm wash over.

Lauren Mowbray/USFWS



Hydrology Used to Create Winter Habitat for Waterfowl

The “Big Fish Impoundment” on Wertheim NWR in New York is managed seasonally to optimize foraging habitat for a variety of bird species. The hydrology of the impoundment is manipulated by using a ‘stoplog’ water control structure to achieve the desired water levels. In the spring and summer months the water level is decreased to create tidal flats, which are used as a stop-over location for migrating shorebirds. In the late fall and winter months the water level is increased to create a winter habitat for waterfowl. American Black Ducks, Green-Winged Teal, and Mallards are some of the waterfowl species that commonly use this refuge feature. A biweekly survey is completed to document water level and record the species utilizing the impoundment.

Biological Science Technicians Bridget Giblin and Kelsey Taylor install boards to raise the water levels at the Big Fish Impoundment at Wertheim NWR.





Bee Baseline – Ten Year Partnership Persists

October 2020 marks the tenth year the Stewart B. McKinney NWR has collected bee samples for the Connecticut Agricultural Experiment Station's bee baseline inventory. The Salt Meadow Unit is one of several sites that has been surveyed since 2011. Researchers have documented some uncommon and rare bees on the refuge, as well as at other sites in the state. [Here is the link](#) to a 2016 paper which lists some of the new and noteworthy species identified in the monitoring program. The partnership between the state's agricultural experiment station and the refuge has been wonderful; we hope it continues into the future.

A bumblebee on butterfly milkweed at the Salt Meadow Unit of Stewart B. McKinney NWR.

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Eastern Shore of Virginia National Wildlife Refuge

Early Successional Habitat Management

Staff from the Great Dismal Swamp NWR fire crew assisted Eastern Shore of Virginia NWR staff with their shrub management beginning on October 27. Fire staff operated heavy equipment to set back succession on approximately 30 acres that had succeeded to a young forest stage. The area is primarily being managed to benefit fall migrating land birds and will provide a secondary function for early successional nesting birds. A spring burn is planned to complete the project.



Sam Getty from Great Dismal Swamp NWR operates a forestry cutter on the Eastern Shore of Virginia NWR shrubland management unit.

Pam Denmon/USFWS

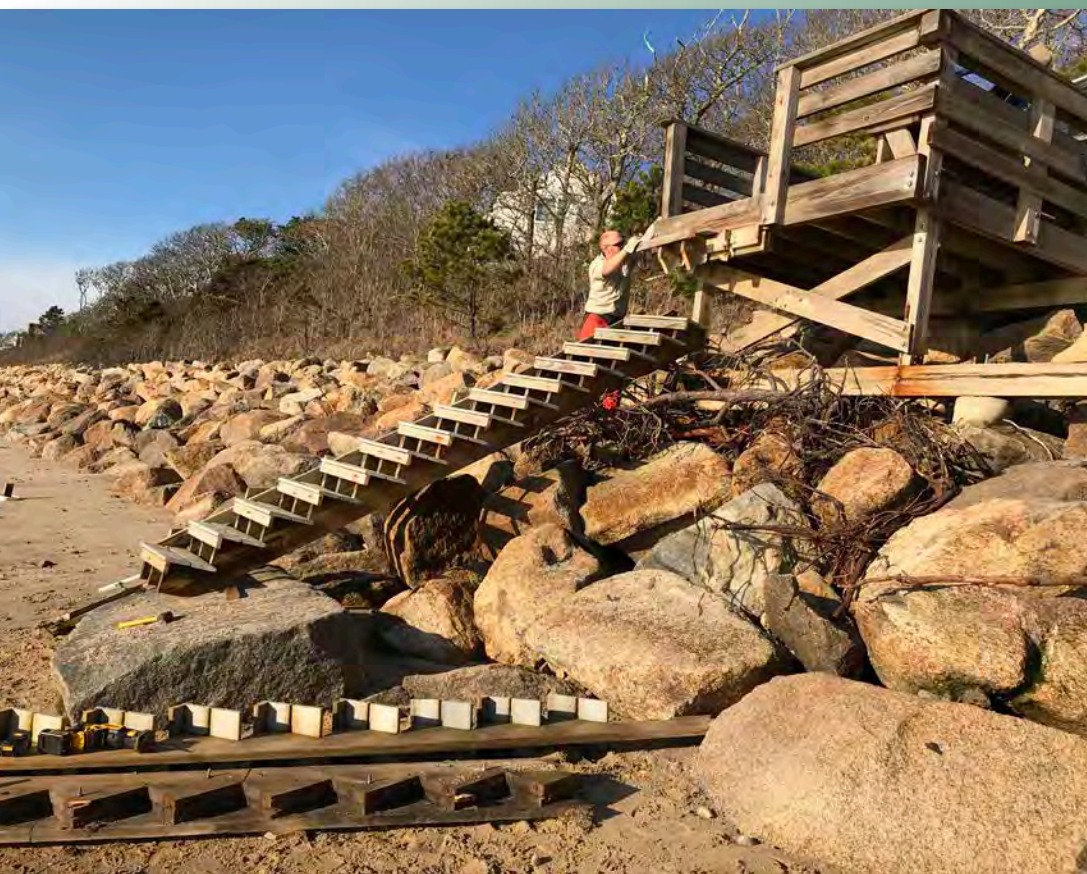
Back to Basics – Moist Soil Management

In 2016, Montezuma NWR in New York restored a 26-acre wetland directly in front of the refuge's Visitor Center to provide better wildlife viewing opportunities for refuge visitors. Since then, they have managed the unit for moist soil vegetation that supports migrating waterfowl and for mudflat/shallow water habitat that supports migrating shorebirds. This photo shows dense growth of *Echinochloa spp.* and *Panicum spp.* at the end of the growing season with the Visitor Center in the background. These species provide high quality food for waterfowl, and after the unit was flooded, refuge volunteers regularly counted more than 1,000 ducks in this little marsh.



Dense growth of moist soil vegetation in the "Visitor Center Wetland" in the summer leads to high concentrations of waterfowl in the fall.

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Morris Island Erosion

At Monomoy NWR in Massachusetts, the bluffs and beach of Morris Island are eroding quickly, causing changes to the refuge's trail system, including a boardwalk along the bluff and a large staircase to the beach. On November 19, refuge staff removed the lower portion of the staircase due to safety concerns caused by the erosion. The platform that once offered visitor's a resting place on the long staircase was turned into an observation deck. The deck provides beautiful views of the beach and Monomoy's offshore islands for the time being, but no longer provides beach access. Refuge staff will continue to monitor the erosion.

Staircase removal

Eileen McGourty/USFWS

Tree Planting Event Restores Riparian Buffer

Cherry Valley NWR in Pennsylvania partnered with the Brodhead Chapter of Trout Unlimited to restore the riparian buffer along the Cherry Creek with the planting of 1,000 tree seedlings on November 22. With assistance from staff from Wallkill River NWR, Trout Unlimited members and volunteers planted the tree seedlings, which had been donated by Pennsylvania Power & Light, at two tracts on the refuge in accordance with Centers for Disease Control and Prevention (CDC) Covid-19 guidelines. The trees will help stabilize the soil, limit erosion, and provide shade to restore the Cherry Creek to an optimal environment for native trout and other aquatic wildlife.



The newly planted native tree seedlings are protected by tree shelters along the Cherry Creek at the Cherry Valley NWR. Trout Unlimited volunteers work in the background.

Scott Lenhart/USFWS

Occoquan Bay National Wildlife Refuge

Creating Habitat Through Invasive Plant Treatments

In late September/early October, the Potomac River NWRC summoned a contractor to Occoquan Bay NWR, in Woodbridge, Virginia, to treat invasive plants. Over the course of two weeks, the contractor sprayed tenacious vegetation, including Callery pear and black locust, within 125 acres of former grassland units. The treatments will allow the saplings of native trees, such as oaks, hickories, and ashes, to grow with less competition and stress from invasive plants. In turn, this will facilitate the conversion of the units from grassland to forest habitat. The contractor will return for follow-up treatments next year.



Invasive plants withering due to treatment on Occoquan Bay NWR.

Chris Wicker/USFWS

Mascoma Easement Inspection

Staff from Silvio O. Conte NFWR have conducted two site visits to the Mascoma River Division conservation easement in New Hampshire during the month of November. In collaboration with Bear Hill Conservancy, WildLandscapes and Redstart Consulting, efforts are underway to collect baseline data on the conserved lands. On a recent site visit more than half a dozen bear nests were found in the top of mature beech trees on the property!

A beech tree bear nest at the Mascome River Division.

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Wallkill River National Wildlife Refuge

Atlantic White Cedar Planted

On November 10, Atlantic white cedar (*Chamaecyparis thyoides*) trees were planted in a wetland area at Wallkill River NWR. The 16-inch tall trees, contained in one-gallon plastic pots, were grown in the refuge tree nursery from 3 inch apical cuttings taken one year ago. We are working towards a goal of re-establishing this valuable native wetland habitat tree at our refuge. This project has received technical support from the Forest Ecology Working Group.

An Atlantic white cedar seedling.

Scott Lenhart/USFWS





Prescribed Burn in B-pool Impoundment

On November 10, fire crews from Great Dismal Swamp NWR and Alligator River NWR joined forces at Back Bay NWR, located in Virginia, to aid in habitat management. This particular impoundment had been slated to burn for almost 4 years, but weather and personnel issues prevented this development. With the help of wind and dry grass, staff achieved a mosaic burn through the impoundment that knocked back dying *Phragmites* and other perennials that restricted annual plant growth and water access for waterfowl. Marsh birds and waterfowl alike were enjoying the newly burned unit by the next day!

Head fires running across B-pool lit by marsh master crews.

Lauren Mowbray/USFWS

Northern Maine National Wildlife Refuge Complex

Upper Goodall Health Maintenance Action Team Project

A cross-programmatic team of Regional staff and wage grade professionals gathered at Moosehorn NWR in Maine in early November to complete the replacement of a failing water control structure. The installation of an open bottom arch culvert follows our mission to reduce the number of aquatic barriers as part of the road infrastructure. Additionally, this project will ensure that the public has safe access to the Baring Division's auto tour route to enjoy wildlife viewing, hunting, and fishing opportunities. Thanks to Mike Krug, Brandon Harriman, Bob Springfield, Phil Herzig, Darren Stover and Jesus Morales for your expertise and hard work on this project.



Michael Krug, Maintenance Mechanic, compacting the fill material around the new arch culvert.

Darren Stover/USFWS

Potter Farm Road Maintenance Action Team Project

A regional team traveled to Umbagog NWR in Maine during early October to complete the installation of an embedded clam-shell box culvert and realign the road for safer access. This project was made possible through funding from the Regional Federal Lands Transportation Program. The new 20' wide crossing provides aquatic organism passage for the first time in nearly a century by replacing three 30" round perched culverts. The team skillfully worked through many challenges, including many large boulders, high waters, 20-ton pre-cast concrete sections, inclement weather, and more to make the project a success. The skill and perseverance of the team was greatly appreciated as this is a major step toward making the Potter Farm Road more accessible to the public for hunting and fishing opportunities.

The completed installation of an embedded clam-shell box culvert.

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Silvio O. Conte National Fish & Wildlife Refuge

Measuring Water Levels and Temperature for Tiger Beetles

This month, Silvio O. Conte NFWR staff retrieved a water logger from the Connecticut River that was located near one of the two places tiger beetles have been detected. Refuge staff set up the water logger earlier in the summer to measure water levels and temperatures. The data can be correlated to water flow readings at nearby locations, such as the beach area inhabited by tiger beetles. This information provides important habitat clues as to why the tiger beetles choose specific areas to lay their eggs and how much inundation the eggs and larvae can tolerate.

Deputy Refuge Manager Dean Rhine removing the waterlogger.

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First Low-Water Crossing Constructed

The first low water crossing of its kind was constructed on Railroad Ditch Road at Great Dismal Swamp in Virginia. Its purpose is to restore hydrology by re-establishing a more natural flow path where the road acts as a dam to surface and ground water movement. The crossing was constructed at a low-lying area, which will allow water to flow over the road and still provide administrative access. This project was originally designed by Ducks Unlimited during the 2013 Hurricane Sandy Resiliency Project; and, they received a subsequent North American Wetlands Conservation Act (NAWCA) grant for construction. This crossing will serve as a case study example for future crossings.

Completion of low water crossing on Railroad Ditch Road
Chris Lowie/USFWS

Rachel Carson National Wildlife Refuge

Counting Shorebirds During Migration

Staff and volunteers from Rachel Carson NWR in Maine have recently completed shorebird surveys at five different sites across the refuge as part of the International Shorebird Survey (ISS) organized by Manomet. These surveys not only contribute important data to ISS, but also provide data the refuge can use to inform management decisions surrounding key stopover sites for migrating shorebirds. This season, two refuge staff members and one volunteer completed at least 50 surveys, with a minimum of 16 shorebird species and 60 different total species being recorded across all sites.



Semipalmated sandpipers and semipalmated plovers resting at a stopover site on Rachel Carson NWR.

Helen Manning/USFWS

Potter Farm Receives a New Roof

Staff from Umbagog NWR in Maine removed four layers of old roofing, applied a layer of 5 by 8 plywood, and installed a new asphalt architectural single roof on the Potter Farm. This building is going to be the new headquarters and visitor contact center for the refuge. The refuge has replaced all the windows and doors, re-sided the building, and made repairs to maintain the structure's integrity. Thanks to the regional equipment rental pool for providing an articulating boom lift to facilitate the project.



The updated Potter Farm building.

Paul Casey/USFWS

John Heinz National Wildlife Refuge at Tinicum

Raven' About our Volunteers

In the late afternoon of November 5, over 50 volunteers from John Heinz NWR at Tinicum in Pennsylvania stopped by to pick up dinner. During this challenging time, Volunteer Coordinator Erika Scarborough and refuge staff wanted to show their gratitude to the volunteers and came up with the idea of a "Dinner Drive Thru". Volunteers that came by were able to see the staff, who were equally excited to see their sorely missed volunteers and expressed their gratitude through creative "Thank You" signs and fun decorations displayed in the parking lot for the event. A custom puzzle of the refuge in full fall colors, reusable bamboo cutlery, and a letter summarizing our yearly accomplishments from Refuge Manager Lamar Gore were also given out.

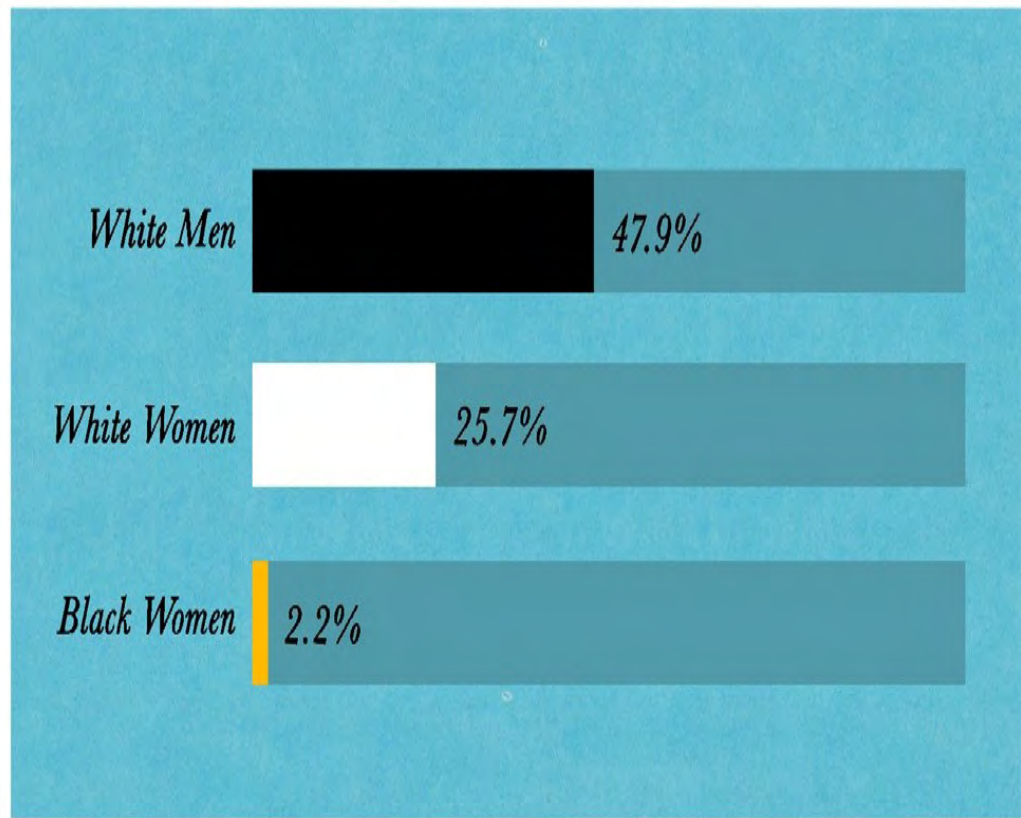


American Conservation Experience (ACE) Environmental Education Intern Ben Breslau displays some of the signs created for the event.

Wing Yi Kung/USFWS

Picture a Scientist

On November 10, Refuge Manager Virginia Rettig of Edwin B. Forsythe NWR in New Jersey participated in a panel hosted by Stockton University, which showcased the recently released *Picture a Scientist* documentary. The purpose of the panel of local female scientists was to discuss sexual harassment issues in science, ways to support each other, and how to continue to work together to ensure a safe work environment for all. Over 80 people attended and there is interest to use the opportunity to continue the conversation.



A slide from the discussion showing a few statistics on the number of PhDs in STEM fields awarded to U.S. citizens and their ethnicity, 2016

Picture a Scientist Discussion Guide

Rachel Carson National Wildlife Refuge

Native American Shell Midden Rediscovered in Southern Maine

On November 5, a Maine state archeologist accompanied Rachel Carson NWR staff on a site visit to inspect a previously undocumented shell midden that was discovered by staff on a refuge-owned salt marsh the previous summer. Several European historic materials (stoneware, glass, pottery) and possible Native American artifacts (fire burned rock, rock fragments from tool making) were identified on the surface. The refuge plans to partner with the Maine Midden Minders at the University of Maine to monitor and document erosion at this site on an annual basis.



The shell midden was covered by fill from construction in the early 1900s and has become exposed as the slope underwent erosion.

Dr. Arthur Spiess

Elizabeth Urban Wildlife Refuge Partnership Celebrates Bat Week

Staff from the Cherry Valley and Wallkill River NWRs joined staff from Groundwork Elizabeth for a belated Bat Week Celebration on November 6 as part of the Elizabeth Urban Wildlife Refuge Partnership with Great Swamp NWR in New Jersey. Staff greeted youth (in accordance with Centers for Disease Control and Prevention guidelines) along the Elizabeth River Trail with information about bats and the Service's work combating white-nose syndrome. Many of the youth remarked after the program that they were no longer afraid of bats.



Wallkill River NWR Refuge Specialist Chelsea Utter and Groundwork Elizabeth Green Team Leader Jules Tezen pose in front of the bat display table on the Elizabeth River Trail in Elizabeth, New Jersey.

Jared Green/USFWS



Parker River National Wildlife Refuge

Students Learn About Nature in a Wild Cranberry Bog

Twice during the month of November, students from the River Valley Charter School's outdoor classroom, which is based on the refuge, were given an opportunity to learn about and explore a wild cranberry bog within the dune lands at Parker River NWR in Massachusetts. They learned how this unique wetland – also called an interdunal swale – forms and about the wildlife species it supports. The students' learning was made even more memorable by the opportunity to collect and take home some cranberries, just ahead of Thanksgiving!

Students from the refuge's outdoor classroom collect wild cranberries in an interdunal swale.

Matt Poole/USFWS

Wheelin’ Sportsmen Hunt

Rappahannock River Valley NWR in Virginia was honored to host the 2nd Annual Virginia Wheelin’ Sportsmen hunt at the Tayloe Unit on November 2. The frosty morning led to the harvest of a deer on the refuge and a great experience for the three hunters and four hunter assistants. The crew then shared a socially distant lunch provided by refuge Friends group and Virginia Dept of Wildlife Resources. This hunt was one of nine Americans with Disabilities Act compliant hunts led by the Wheelin’ Sportsmen on public and private lands.



Wheelin’ Sportsmen hunters and assistants
USFWS

Long Island National Wildlife Refuge Complex

White-tailed Deer Hunt: Archery & Shotgun

The Long Island NWR Complex in New York kicked off its annual white-tailed deer hunt on November 2. The hunt runs through January 31, 2021. In addition to Wertheim NWR, Seatuck NWR opened archery hunting for the first time. Refuge staff received hundreds of public applications, which were entered into the lottery. Hunters selected during the lottery will enjoy the opportunity to enjoy outdoor recreation while directly helping manage an overabundance of white-tailed deer on Long Island refuges. Unlike previous years, Wertheim NWR trails will remain open to the public during the fall archery hunt. Wertheim trails will be closed during shotgun hunting for visitor and hunter safety. Seatuck NWR remains closed to non-hunters throughout the hunt season.



Two unsuspecting bucks hanging out at Wertheim NWR in July before the hunt season.

Ray Schwartz/USFWS

Mapping the Heavens – *Ailanthus altissima* on Milford Point

Refuge Biologist Kris Vagos from Stewart B. McKinney NWR in Connecticut, with help from a volunteer and another staff member, has been using Survey 1, 2, 3 to map tree-of-heaven on the Milford Point Unit. This unit is a barrier beach that is protected for nesting shorebirds. Tree-of-heaven, or *Ailanthus altissima*, is an invasive species that spreads clonally, taking up much of the habitat and harboring predators such as raptors and crows. It is also the preferred host of a new invader – the spotted lanternfly. The refuge would like to remove this invasive and will use the map to help guide this work.

On a very cold day in November, Refuge Biologist Kris Vagos maps tree-of-heaven on Milford Point with help from Visitor Services Manager Shaun Roche.

USFWS/Shawn Roche



Cape May National Wildlife Refuge

Coastal Shoreline Surveys

The shorelines along two divisions of Cape May NWR in New Jersey have been monitored since 2011. For consistency, these surveys are conducted at the same time of year, tide cycle, and moon phase. The results accurately show how the shorelines have changed over time. Over the years, the lines surveyed with a Trimble Global Positioning System (GPS) unit have been creeping higher and higher toward the dunes. Surveys occur at the Two-Mile Beach Unit along the Atlantic Ocean and the Delaware Bay Division (DBD) along the Delaware Bay. The DBD survey takes Biologist Heidi Hanlon all day to walk and covers 9.5 miles along the coast through neighborhoods and creeks!

Various wrack lines seen from previous high tides and the current high tide line being surveyed on the right with pebbles deposited along the inhabited Reeds Beach along the Delaware Bay.

Heidi Hanlon/USFWS



Adapting Outreach and Education in Times of Covid

Kate Owen, our Park Ranger at Maine Coastal Islands NWR in Maine, put together virtual programming for schools and the general public. With endless creativity, a green screen, and a lot of determination, our refuge has been able to give virtual field trips via Zoom and Google Meet to schools from the island communities, local schools within the county, and even schools from across the country. Not only have we reached the students around the area, our Park Ranger has also partnered with local libraries for evening programs for adults, and local education centers to help further their science messages. She has presented over 15 programs to students in grades 3 through 5 and adults wanting to learn more about the mission of the refuge.



Park Ranger standing in front of virtual field trip equipment.

Eddy Edwards/USFWS

Canaan Valley National Wildlife Refuge

Historical Farm Equipment

Along the new Farm View Trail, visitors were noticing several pieces of historic farm equipment. Some of the equipment was seen easily, while other pieces were hidden by the overgrowth of vegetation. Recently, refuge staff moved this equipment to a more prominent location for increased visibility. There are now three hay mowers, a hay rake, and a hay loader on display for visitors. This equipment dates back to the 1930s, when farming was the primary use of the land. This spring, a small display will be erected to describe the equipment and its uses. The historic farm equipment display is located approximately one mile from the Beall parking lot- Be sure to check it out!



Refuge staff reposition old farm equipment along the new Farm View Trail.

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Improving Waterfowl Hunter Information

Staff at Edwin B. Forsythe NWR in New Jersey spent much of this year redesigning the worn-out migratory bird hunting information signs at boat ramps throughout the refuge. New maps were created, rules were updated, and five new ramp owners/ municipalities were contacted to improve communication to hunters. Maintenance Worker Roger Dutch and Federal Wildlife Officer Chris Pancila installed the first five signs just ahead of the first split.



New signs show hunting areas at 11 boat ramps near the refuge.

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Rhode Island National Wildlife Refuge Complex

Sixth Annual Veterans Deer Hunt

In honor of Veteran's Day, Ninigret NWR in Rhode Island partnered with the Freedom Hunters organization to host veterans for a special deer hunt from November 6 to 8. Hunters participated in a day of education and scouting on Friday, followed by hunting both Saturday and Sunday. Unseasonably high temperatures promoted deer movement during the night, resulting in no deer harvested. However, all participants expressed the value of this experience and relayed how much it meant to them that the refuge was willing to provide this special opportunity. A special thanks from Rhode Island NWR Complex to all those who have, and still serve.

Although no deer were harvested during the special hunt, the hunters enjoyed spending time connecting with nature at Ninigret NWR.

John Veale



Accessible Fishing Dock Completed

On September 30, Iroquois NWR in New York completed the installation of an accessible floating fishing dock at the Ringneck Marsh fishing area. The project was initiated last year when a trail was constructed to provide easier access to the refuge's primary public fishing area. Many of this year's field activities were delayed due to COVID 19, including finishing the trail and installing the floating structure. This project was completed in cooperation with Friends of Iroquois NWR, who provided \$3500 towards the project and received a grant of \$3500 from the National Fish and Wildlife Foundation.

The newly installed accessible floating fishing dock at the Ringneck Marsh. Another strategy from the Refuge's CCP completed!

Tom Roster/USFWS

Stewart B. McKinney National Wildlife Refuge

The Haymaking History of Our Marshes

Earlier this fall, Ranger Shaun Roche at the Stewart B. McKinney NWR in Connecticut gave a virtual presentation on the history of salt marsh haymaking in New England. He began with an emphasis on marshes as crucial habitat for unique species before telling the stories of thrifty farmers who toiled there to produce the sustainable fodder for their livestock. The joint effort with the Old Lyme Historical Society, Duck River Garden Club and Phoebe Griffin Noyes Library drew an audience of 60 people, tuning in from as far away as Maine. At the closing of the talk, several people commented it had been the best of the year.



Salt Marsh Haymaking in New England



Presented by Shaun Roche of
STEWART B. MCKINNEY
National Wildlife Refuge



Opening slide from the virtual presentation on salt marsh haymaking.

Shaun Roche/USFWS

Outdoor Archery Lesson

On November 7, Lenape NWR Complex's ever-popular archery trailer was deployed at the Christian Faith Fellowship Church in nearby Franklin, New Jersey. The Church planned a youth archery clinic for interested kids from the congregation. Outdoor archery lends itself well to social distancing and equipment can be easily sanitized before and after each use.



Students at the Christian Faith Fellowship Church take aim!

Fran Stephenson/USFWS



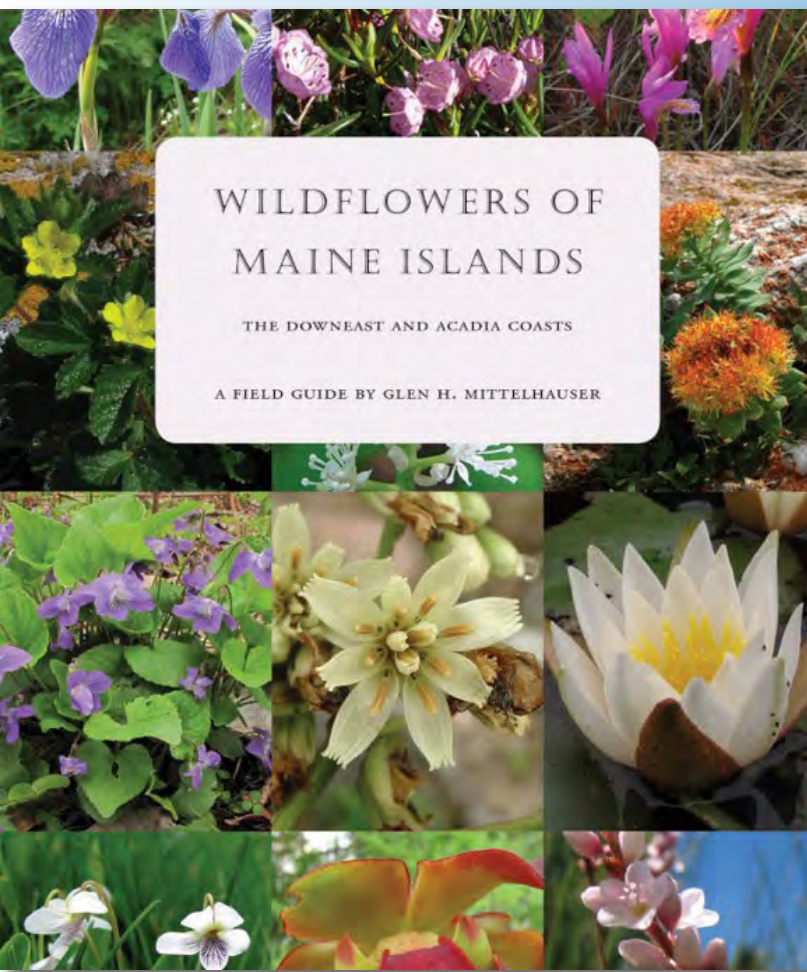
Logo for the 2020 Arctic NWR Virtual Bird Fest

Arctic NWR Virtual Bird Fest

John Heinz National Wildlife Refuge at Tinicum

Arctic Refuge Virtual Bird Fest

Does that bird outside your window migrate to Alaska? Refuge Biotech Garrett White coordinated with Arctic NWR for the Virtual Bird Festival, during which he took us on an exploratory journey to answer that question. To explore the natural connections around us in Pennsylvania, Garrett created Facebook live videos featuring avian species that fly through the refuge during their migration to Alaska. Alongside Arctic, Valle de Oro, and San Francisco Bay NWRs, Service staff encouraged participants to share their favorite photos, memories, and questions through daily hashtags and themes. John Heinz NWR at Tinicum was proud to work with staff from across the country. Episodes can be seen here: [Episode 1](#), [Episode 2](#), [Episode 3](#), [Episode 4](#), [Episode 5](#).



"Wildflowers of Maine Islands" Field Guide Now Available

Non-profit Maine Natural History Observatory, a long-time partner of Maine Coastal Islands NWR in Maine, has authored an excellent wildflower guide for Maine islands that is now in print by the University of Maine Press, also a non-profit. Much of the data used to make the guide was collected during botanical inventories of refuge islands, funded by refuge contracts and cooperative agreements. This guide includes all wildflowers that occur on the Maine coast between Muscongus Bay and the Canadian border (Knox, Waldo, Hancock, and Washington counties), and is the first of its kind for the region.

The "Wildflowers of Maine Islands" field guide, now in print by the University of Maine Press.

Glen Mittelhauser

Patuxent Research Refuge

Patuxent Research Refuge Owl Prowl

Ranger Diana Ogilvie and eastern screech owl, Red, from Patuxent Research Refuge in Maryland, visited Baltimore City's Masonville Cove for an evening Owl Prowl on Thursday, November 5. More than 20 people attended the outdoor program, all masked and socially distanced to adhere to State COVID guidance. After learning about owl adaptations that make them mighty hunters at night, visitors split into two smaller groups to experience what it would be like to hunt for food with the owl's adaptations, and to walk the grounds listening for owls or other wildlife. A final bonus included an owl pellet take-home activity.



Ranger Diana Ogilvie and eastern screech owl Red

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Celebrating a Collective Sense of Wonder Through Art

As part of the 50th Anniversary Celebration of the renaming of Rachel Carson NWR in Maine, refuge staff have partnered with the Friends of Rachel Carson NWR to hold a year-long Sense of Wonder Art Contest. This contest celebrates the spirit and legacy of Rachel Carson by encouraging refuge visitors to express their sense of wonder for the natural world through visual arts and poetry. Select submissions of each monthly category are shared by the Friends, and all winning entries will be featured in a 2022 wall calendar commemorating the Refuge's 50th Anniversary.

Silent Spring to Autumn's Palette

October's glory when autumn's palette
and nature's art abounds,
with crimson reds, bright golden yellows,
oranges and browns.

We take to the woods and countryside
to see the awesome sight.
And climb to lofty vantage points
to see such colors bright.

Nestled near the coast of Maine
a traveler will find,
a most inviting place to walk
and exercise your mind.

Where ocean water meets tidal marsh,
a special place resides,
where resilient flora and fauna
exist among the tides.

So many acres to explore
its impact might be huge.
Come dwell in autumn's palette
at Rachel Carson Wildlife Refuge.

One of the winning entries of the Sense of Wonder Art Contest for October's category, Autumn on the Refuge: "Silent Spring to Autumn's Palette," by Dave Pasake.

Dave Pasake

John Heinz National Wildlife Refuge at Tinicum

Connecting Through Art

In November, the fall foliage at John Heinz NWR at Tinicum, located in Pennsylvania, received a splash of color from a local public art initiative, Hagopian Arts, and their newly completed eco-mural. Over several months, with interruptions from COVID, artists from the group worked to transform one side of our often-seen kayak trailer with images inspired by nature and the people who are part of it. The first of the ecologically themed art pieces highlights the conservation world with images of a bald eagle, young child, and king fisher thriving in the freshwater tidal marsh of the refuge. Hagopian Arts will complete the rest of their environmental art pieces in the spring, including the back of the trailer and our environmental education lunchroom.



A newly decorated kayak trailer depicting a bald eagle, young child, and kingfisher sharing the wetlands of the refuge.

Wing Yi Kung/USFWS



Janet and Harmony Frost living their wild on the Seneca Trail viewing tower

Janet Frost

Montezuma's Day in the Wild Challenge Event

On October 17, 2020, the Montezuma NWR in New York hosted its first-ever Montezuma's Day in the Wild Challenge as part of the Welcome to Wild Events during National Wildlife Refuge Week. Thirty-seven participants took a self-guided (guidebook provided) tour of the refuge, challenged with visiting a prescribed number of trails and viewing areas. #MontezumaWild/Live You Wild signs were posted along the way for participants to record and verify that they met each part of the challenge. Completing the challenge earned participants a Live Your Wild hat. Comments from challengers included: I come here all the time, but this challenge got me out onto the walking trails; We enjoyed some nature and family time; At East Road Overlook... I didn't know this was here!; That was really fun!; You really can spend a whole day here!