



The Clifton Institute



Spring 2021 Newsletter

2021 is off to a great start!

After a challenging 2020, this spring we were grateful to be able to get back to close-to-normal. In April we hosted our first in-person school field trips since March 2020! Throughout the spring we continued to teach virtual field trips and to provide our Nature School, Nature Lab, Piedmont Polliwogs, and YHikes! series. By the end of June, 718 pre-K-12 students had visited us. That's up from 606 in the same period in 2019 and more than in all of 2020. We've also offered 34 adult programs—bird walks, nature walks, and seasonal programs to look for woodcock, wildflowers, frogs, dragonflies and more—which were attended by 336 people. Read on to learn about our new land management outreach program and the restoration and research work we accomplished this spring. 2021 is shaping up to be a great year!

COVER: Groundskeeper Ken Lang plants trees in our native grassland. You can read about this project on page 6.

BACK COVER: Students on a field trip visit the beaver lodge on the lower pond.



Students on a school field trip listen to the sounds of nature.



Students on a school field trip practice nature journaling in the forest.



Education Associate Alison Zak leads students on a field trip down the driveway.



Land Management Outreach Associate Marie Norwood on a property visit.

Learn More

website: cliftoninstitute.org

email: info@cliftoninstitute.org

phone: 540.341.3651

Facebook: [@clifton.institute](https://www.facebook.com/clifton.institute)

Instagram: [@clifton.institute](https://www.instagram.com/clifton.institute)

YouTube: Clifton Institute

iNaturalist: cliftoninstitute.org/inaturalist

You can support our work by donating at

cliftoninstitute.org/donate.

We can only provide environmental education, restore habitat for native plants and animals, and conduct scientific research with your help.

Thank you!

Land Management Outreach

In March, Marie Norwood became our first ever Land Management Outreach Associate. Marie is available to visit local properties and give free advice about how to manage land for the benefit of native plants and animals. Her expertise is in wildflower meadows and grassland restoration, but she gives advice on other topics too, such as invasive plant control, and native landscaping. Every property is different and every landowner has different goals. We are excited to now be able to give advice that is tailored to individual properties. Through the end of June, our staff visited 33 properties. If you're interested in having Marie visit your property, you can fill out a request form at cliftoninstitute.org/property-visit. If you're not yet ready for a personalized visit, you can find general resources on our website at cliftoninstitute.org/restoration/resources. Marie also works with partner organizations and agencies, power companies and the Virginia Department of Transportation to improve grassland management in our region, and she helps co-director Bert Harris manage the restoration projects at the Clifton Institute. We work hard to make sure our 900-acre property provides high-quality habitat for native plants and animals; through this outreach program we are helping to improve land management across northern Virginia. We are grateful to the Raines Family Fund for supporting this program!

Successful Prescribed Burn Season

Diverse grasslands and shrublands are declining in our region because they are invaded by non-native plants, they are easily developed, and, without any disturbance, they grow up into forests. In the past, these early successional habitats would have been maintained mainly by fires, which humans now tend to put out. Since 2019, we have partnered with Virginia Working Landscapes and the Oak Spring Garden Foundation to conduct an experiment that compares the efficacy of four different methods of establishing native plants and the effects



of burning and bushhogging as maintenance methods. At the Clifton Institute we are conducting the experiment in a 100-acre former fescue field. This spring we burned two experimental plots making up 30 acres, as well as 10 acres of shrublands. We also assisted our partners in burning 11 acres of grassland on their properties. The 30-acre grassland fire was our biggest prescribed fire yet and thanks to our volunteers we were able to get it done in a single day. In total, eighteen volunteers (some pictured here) spent 116 hours helping us burn this season. It's hard work and we are so grateful to our volunteers, as well as to the Robert F. Schumann Foundation for supporting this work. If you came on a walk here in February or March, you might have seen the blackened fields. It looked a little apocalyptic! However, within weeks plants started to grow and the fields started to green up. On the opposite page you can see what a field we burned in March looked like in June: it was almost head-high

and full of native plants, like the Wild Bergamot in the foreground. Other plants such as Early Goldenrod (pictured opposite), Narrow-leaf Mountain Mint, Indiangrass, and Green Milkweed benefitted from the fires.. Because of the abundance of native plants, we are seeing lots of bumblebees, including the Perplexing Bumblebee shown opposite, as well as the declining American Bumblebee. Declining shrubland birds such as Field Sparrows and Yellow-breasted Chats also bred in burned fields this season.



Staff and volunteers conduct a prescribed burn in March. Drone photo by Jacob Gilley / American Farmland Trust.



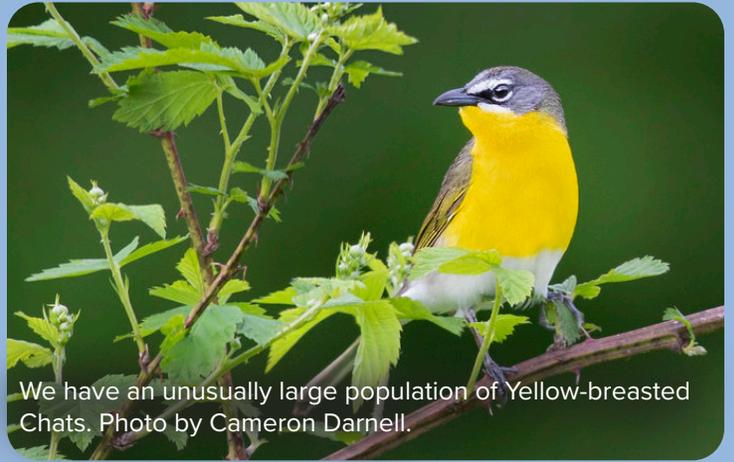
Early Goldenrod is one of the native species that seems to be more abundant after fires.



Blue Vervain and other native flowers attract bumblebees, like this *Bombus perplexus*.



Field Sparrows are abundant in fields we burned in the winter. Photo by Mel Kelley.



We have an unusually large population of Yellow-breasted Chats. Photo by Cameron Darnell.



The same field on the left in full bloom in June.



Staff and volunteers on a tree-planting day in April.

975 Trees Planted

In most of our 100-acre grassland restoration experiment, we are trying to establish and maintain grasses and wildflowers. However, we also wanted to restore the degraded stream that runs through the pasture. In April and May, volunteers helped us do so by planting 975 tree seedlings in an eight-acre area! Forty-nine volunteers contributed 331 hours over six days in this mammoth effort. The trees will provide food and habitat for insects, birds and other wildlife; sequester carbon; stabilize the stream banks; and improve water quality. The new planting will also create a corridor that Spotted Salamanders can use to migrate from the forest to the vernal pool in the field. We planted a diverse mix of species that are characteristic of riparian areas in our region, including pin oak, American hornbeam, sycamore, and river birch. Next time you come on a walk, head out to the grassland and check out all the seedlings! Thank you so much to all of the volunteers that made this project possible, to the Natural Resources Conservation Service and the PATH Foundation who funded the project, and to the Friends of the Rappahannock who kindly loaned us tools!



Volunteers Owen and Chris Kemp plant a seedling in the grassland.

Native Plant Sale

We provide local-genotype native plants to the public for use in landscaping and restoration projects. In the fall of 2019 and 2020 we collected seeds from local populations of native plants and propagated them into seedlings. (We always collect with permission and leave the vast majority of seeds.) We focused on collecting species that are either unavailable commercially or of which only Midwestern varieties are available. In May we held a plant sale, which was attended by over 150 people and at which we sold over 700 seedlings. The species we sold included Green Milkweed, Pasture Thistle, and Purple-headed Sneezeweed. We will hold another plant sale in September. We will plant some of our seedlings in our restoration projects, where they will serve as backup populations for rare species, should the original populations be eliminated by herbicide spraying or invasive species. We will also plant some seedlings in rows on our property to make seed collection easier in the future. Thank you to the Cathy Mayes Memorial Fund at the Virginia Native Plant Society and the Warrenton Garden Club for supporting this work!

Kestrel Habitat Research

The American Kestrel is one of the priority species that we want to support through our grassland restoration work.



Kestrels are declining across the country and little is known about how land management affects their nesting success. Our research team (Executive Director Dr. Bert Harris, Dr. Joe Kolowski from Smithsonian-Mason School of Conservation, Alan Williams, interns Caylen Wolfer and Sarah Cain, and volunteer Megan McDaniels) deployed GPS transmitters on 19 female kestrels this spring. After being properly fitted with a backpack transmitter harness (as shown in the picture), the birds were safely placed back in their nest boxes. Over the last couple of months, the team has been hard at work downloading the birds' locations from the transmitters and measuring the vegetation in the fields around the kestrel boxes and we are about to start analyzing the data. Our results will inform the way we and other landowners manage their fields. We look forward to sharing what we've learned soon! Thank you to the Raines Family Fund, the Peregrine Fund, the Virginia Society of Ornithology, the Washington Biologists' Field Club, and Janine Moseley for supporting this project!



Visitors browse the seedlings for sale at our native plant sale in May.



Upcoming Events

Nature Camp for Grownups, Aug. 28-29
Mushrooms with Mayor Nevill, Sep. 4, 2-4 p.m.
Creatures of the Night, Sep. 4, 7-9:30 p.m.
Piedmont Wildflower Walk, Sep. 11, 10 a.m. - 12 p.m.
Night-time Family Nature Walk, Sep. 11, 7:30-9 p.m.
Raptor Migration Field Trip, Sep. 18, 1-3 p.m.
Party in the Pawpaw Patch, Sep. 24, 6-7:30 p.m.
Native Plant Sale, Sep. 25, 10 a.m. - 2 p.m.
Nature Club for grades 6-12, 1st Saturdays, 1-3 p.m.
Bird Walks, 2nd Wednesdays, 4th Saturdays, times vary
Walks with a Naturalist, 3rd Saturdays, 1-3 p.m.
Learn more and register at cliftoninstitute.org/events.

Open-access Days

We invite Friends of the Clifton Institute to come explore our trails every Saturday through mid-October. You can learn more about our open-access days, including rules and where to park, at cliftoninstitute.org/events. You can become a Friend of the Clifton Institute by making a minimum annual donation of \$40 at cliftoninstitute.org/donate. Your support will help us reach our goals of expanding and improving our education, restoration, and research programs this year.

Thank you!

We hope we'll see you soon!