



# The Clifton Institute

**Saving Virginia's Remnant Prairies**





# New Effort to Save Remnant Grasslands

To most people, a remnant grassland won't look like much. They're often just a strip of tall, grassy vegetation growing along a roadside or in a powerline clearing, easily overlooked and forgotten almost immediately. But **remnant native grasslands are one of Virginia's most diverse and most endangered habitats**, and they're disappearing faster than we can study them. The Clifton Institute, in partnership with the Piedmont Discovery Center and Virginia Tech, has a plan to save them.

The term "remnant grasslands" refers to pieces of the huge swathes of "savannae" that once covered the Virginia Piedmont region (as recorded by John Lederer in 1669.) These open areas were dominated by grasses and wildflowers and supported a myriad of plants and animals. Virginia's grasslands were historically maintained by natural wildfires, herds of grazing Bison, and Indigenous communities. Due to colonization, the extinction of Bison in the eastern US, and the expansion of farming, native grasslands have all but vanished from the landscape.

Despite the tremendous loss, surviving remnant grasslands have proven to be the most diverse plant communities in the state. Amazingly, **950 species of plants have been found in old-growth Piedmont grasslands**, which accounts for 30% of all plant species in Virginia (Piedmont Discovery Center data). Piedmont grasslands have more species than the famous tallgrass prairies of the Midwest, which makes them some of the richest plant communities in the entire country!

Several grassland-specialist plants in Virginia, like Basil Mountain-mint, Epling's Hedge-nettle, and Torrey's Mountain-mint, are at significant risk of global extinction. Others, such as American Bluehearts and Hairy Hedge-nettle, are on the edge of extinction in Virginia but are hanging on in other states. So far we have recorded 21 species of plants in these grasslands that are at serious risk of extinction.

In addition to plants, remnant grasslands are important breeding habitat for several declining birds, including Field Sparrows, Prairie Warblers, Yellow-breasted Chats, and American Woodcocks. We have also found 24 species of rare and specialized butterflies, bees, katydids, and beetles. No systematic studies have been done on Piedmont grassland insects, so there are surely many more rare species to be found.

Today, most of the small patches of grasslands that remain are found under power lines where periodic mowing allows these full-sun plant communities to persist. Unfortunately, they remain at high risk from herbicides, non-native plants, and urban development. Ancient plant and animal communities are disappearing before we can even document what's living there, and important sites have been lost in just the last few years.

Clifton is excited to debut a new program in 2026 that is dedicated to locating, researching, and preserving rare plants, insects, and birds in remnant prairies in northern and central Virginia. Together with our colleagues at the Piedmont Discovery Center and Virginia Tech, we have identified more than 100 remnant grasslands. We will start to address the threats facing these habitats by hiring a **Grassland Steward** who will:

- educate private landowners, public lands managers, and power company employees on the value of remnant grasslands and how to manage them,
- coordinate with power companies to improve management,
- host education programs for the public at the grasslands,
- work with volunteers to control invasive plants at 10 of the richest and most vulnerable prairies,
- collect seeds for grassland restoration projects,
- and explore other options such as land purchase and burning woodlands adjacent to power lines to allow for the expansion of rare plants.

Importantly, we will also partner with the Piedmont Discovery Center to improve management of grasslands in the central Piedmont. These interventions will raise awareness of the importance of remnant grasslands, reverse the degradation of key sites, and provide much needed seed sources for restoration projects in the region. If you'd like to help, we are looking for volunteers to help us manage these special grasslands. Thank you to the Raines Family Fund, the Wrinkle in Time Foundation, Jennifer and Brian Krebs, and Chris Ludwig for financial support for this project!

We can only do this work with the help of people like you. You can support our restoration, research, and education programs by making a donation at [cliftoninstitute.org/donate](https://cliftoninstitute.org/donate). Thank you!

Learn more about us at [cliftoninstitute.org](https://cliftoninstitute.org) or by following us on social media [@clifton.institute](https://twitter.com/clifton.institute)



## Rediscovery of a Threatened Prairie Plant: the Earleaf False Foxglove

The Earleaf False Foxglove (*Agalinis auriculata*) (see cover photo) is one of the rare and beautiful plants that rely on Piedmont grasslands. This species was last seen in Virginia in 1993 in Prince William County before the site was developed into homes. Multiple professional botanists have searched for it since without success, but a local young naturalist named Gray Catanzaro rediscovered the species this year at an undisclosed public park in Prince William County!

Gray first photographed the plants in March of this year but didn't identify them until August. Clifton Co-Director Bert Harris saw the observation on iNaturalist and organized a visit with the park manager. It turns out that most of the area where the plants occur was a young forest until last winter when it was forestry-mulched. Earleaf False Foxglove is an annual that seems to require recent disturbance—otherwise it can't compete with aggressive perennials. It probably depended on disturbance from fires and Bison in the past. False Foxgloves are also hemi-parasitic, which means that they do some photosynthesis but they derive the rest of their nourishment by tapping into another plant, in this case a member of the aster family.

These adaptations worked fine for the species in the past but it's not doing well in the modern world. Rediscoveries are exciting, but rediscovered species are always vulnerable and many species end up going extinct for good. We are working with the park managers and other partners to ensure that the species isn't lost again.

**Cover:** Earleaf False Foxglove was recently rediscovered in Virginia after an absence of over thirty years.

**Top:** A roadside remnant prairie.

**Middle:** Changeable Blister Beetle, *Pyrota mutata*, is a rare inhabitant of remnant grasslands in the Virginia Piedmont.

**Bottom:** Co-Director Eleanor Harris in the grassland where the Earleaf False Foxglove was recently rediscovered.

**Back Cover:** Gray Goldenrod seedlings growing at a farm enrolled in our native seed project.



Our work conserving remnant grasslands was recently highlighted in an article in the Washington Post. Scan the QR code to read it.





### Virginia Native Seed Pilot Project Reenergized

Saving unplanted remnant grasslands is our top priority because they are irreplaceable and can't simply be recreated by planting seeds in plowed sites. But with plenty of seeds and a lot of effort, diverse grasslands can be planted. The key is to use seeds that have Virginia genetics. When using local-ecotype seeds, restoration plantings can connect fragmented plant populations in remnant grasslands. And local-ecotype restoration projects provide superior resources for pollinators because seeds that have out-of-state genetics often bloom at the wrong time.

The problem is that the supply of seeds with Virginia genetics is severely limited. So, together with our partners (VA Dept. of Conservation and Recreation, Capital Region Land Conservancy, VA Dept. of Wildlife Resources, Ernst Conservation Seeds, Roundstone Native Seed, and the Nature Conservancy) we started the Virginia Native Seed Pilot Project to launch the native seed industry in the state. We collect seeds from unplanted sites in the wild, grow seedlings from those seeds, and give them to participating farmers who plant them in rows. The farmers then harvest the seeds from the crops and Roundstone Native Seed cleans and sells the seeds.

The project got off the ground in 2022 with funding from the Natural Resources Conservation Service. The federal grant crisis in 2024 led to a lapse in funding, but we are up and running again thanks to funding from the Coastal Zone Management Program at the Virginia Department of Environmental Quality. We hired a new project coordinator (Rachel Martin) in October and she has already worked with seven of our farmers to harvest seeds from their crops of seven species. She has recruited two new farmers from the Coastal Plain and collected wild seeds in eight Coastal Plain and Piedmont counties. We were also able to harvest around fifteen pounds of cleaned native wildflower and grass seeds of seven species.

With the project still in its infancy, we are turning our focus to developing a business plan and farmer contracts. This plan will outline a business strategy for current farmers and connect them with customers. The contracts will ensure project buy-in and provide a long-term incentive for participating farmers. Stay tuned for updates: 2026 will be a big year for this project. Thank you to the VA DEQ Coastal Zone Management Program / NOAA, Kathryn Everett, NRCS CIG, and the Nature Conservancy for financial support for this project!