# Connecting with the Next Generation

American Chestnut Land Trust

## 4,600 acres preserved

# 22 Miles of Trails













# Master Naturalists Classes



### Master Gardeners

1948

# Fighting Invasives



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# Building Trails





# Land Management & Science at ACLT

By Nicole Stevens, CCC Intern

### Maryland Master Naturalist Class

- ACLT is a host site for the MD MN class
  - Teaches adults about the wildlife, ecosystems, climate, and geology of the area
  - Master Naturalists contribute to many of the following projects (THANK YOU)

UNIVERSITY OF MARYLAND N EXTENSION





### Trail Steward Program

- 22 miles of trails at our 3400+ acre preserve
- Volunteers are assigned to hike different trails and report on their condition
- If there are problems, experienced volunteers are sent out to fix them or they are worked on during one of our volunteer workdays (2x/wk)

#### Trail Creation & Maintenance

 Projects include: repairing storm damage, removing fallen trees, rerouting to limit erosion, sideledging hillsides, and building bridges/boardwalks





#### Invasive Plant Removal

- ACLT staff and volunteers have worked to remove wavyleaf basketgrass, oriental bittersweet, Japanese stiltgrass, multiflora rose, ailanthus trees, bamboo, Chinese lespedeza, barberry, and many others
- Techniques include handpulling, controlled burns, solarization, and occasional herbicide use

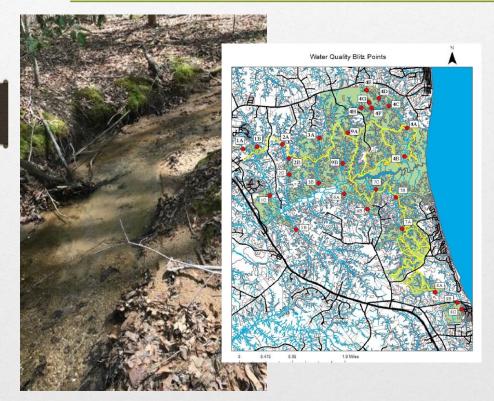


### Planting Projects

- Native plant buffer around crop fields on site
- Pollinator garden in the Griffin Meadow
- Natives in our Natural Play Space (MN project)



### Water Quality Monitoring



- Measurements (nitrates/nitrites, phosphates, TSS) collected 4x/year
- Annual Water Quality Blitz: 27 sites sampled in single day
- Benthic macroinvertebrates surveys at varying distances from crop fields

### Forest Diversity Surveys

- 23 1/4-acre plots throughout ACLT (6 established in 2020)
  - Each tree was identified and had its DBH measured
  - Each plot is re-surveyed once every 5 years
  - Coordinated with a researcher from SERC and help from MN



#### Animal Habitat Creation

- Bird nesting boxes: Eastern bluebirds, wood ducks, and barn owls
- Bat boxes
- Brush piles have for understory habitat for birds and small mammals



#### Amphibian Conservation & Surveys

- Capstone project for the CCC program
- Habitat creation: two large vernal pools for breeding sites
- Research: drift fence and frog call surveys and sampling eDNA to assess biodiversity
- Education: signage, frog blogs, students to make "toad abodes"



### **Double Oak Farm**

Our farm is composed of several different garden/farming project areas

• **EDGE Garden- EDGE** stands for Educational Demonstration Garden Experiment. Here, we have multiple gardening



have multiple gardening experiments and projects running all year like Hügel Mounds, Vertical Gardening, Native American Three Sisters planting towers, and raised beds throughout!

- **High Tunnel-** We currently use the high tunnel year round for planting and preparing cold crops in the winter and housing heat loving crops in the spring and summer
- **Flower Girls Garden** Our flower girls are a group of master gardeners who upkeep a beautiful flower and herb garden, encouraging sustainable landscaping practices and supporting a large amount of pollinators within our farm



• What do we do that makes us regenerative?

- Cover cropping
- Orip irrigation and use of olla clay pots
- Companion planting and crop rotation
- Integrated pest management plans (hand picking, natural insect killers, deterrent planting)
- Using biodegradable paper and grass row covers
- Composting
- It is of the utmost importance to demonstrate sustainable practices for educational purposes and to protect the valuable watershed that we are situated in



## Volunteer Engagement

- Besides our farm manager, Double
  Oak Farm is supported entirely by
  volunteers! Along with our weekly
  volunteers many of our volunteers are
  - School groups on educational field trips or completing service hours
  - Scout troops for one day events or merit badge projects
  - Religious groups
- We also currently have 2 high school interns at ACLT



## Outreach and Community Friendling

- Friends of Hunting Creek: water quality monitoring, paddles, land preservation education, county development education and engagement
- Friends of St. Leonards Creek: water quality monitoring, paddles, native biodiversity and pollinator education events, tabling and recruitment

Southern Maryland Conservation Alliance

- A new regional conservation partnership for Southern MD comprised of private, governmental, and non-profit conservation and preservation organizations
- Goals include helping achieve 30 by 30, starting more friends groups, expanding citizen science efforts, and conservation in general

