



## RIPARIAN FOREST BUFFER MAINTENANCE THROUGH TRAINED VOLUNTEERS

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# ABOUT US



## Vision

Clean streams and rivers flowing through resilient landscapes, cared for by the people who live, work, and play in the Chesapeake Bay watershed.



# THE MAINTENANCE PROBLEM

- Forest planting sites need maintenance, or most trees will die
  - The recipe:
    - Mowing between trees 2-3x per year
    - Controlling veg around trees (herbicide typically) 1-2x per year
    - Doing tree-by-tree maintenance



10 year old buffer, no maint, 0% survival



1 year old buffer, excellent maint, 90% survival

# THE MAINTENANCE PROBLEM

- This is all **a lot of work!!!!**
- How are we going to take care of all the sites we want to plant?!?!?



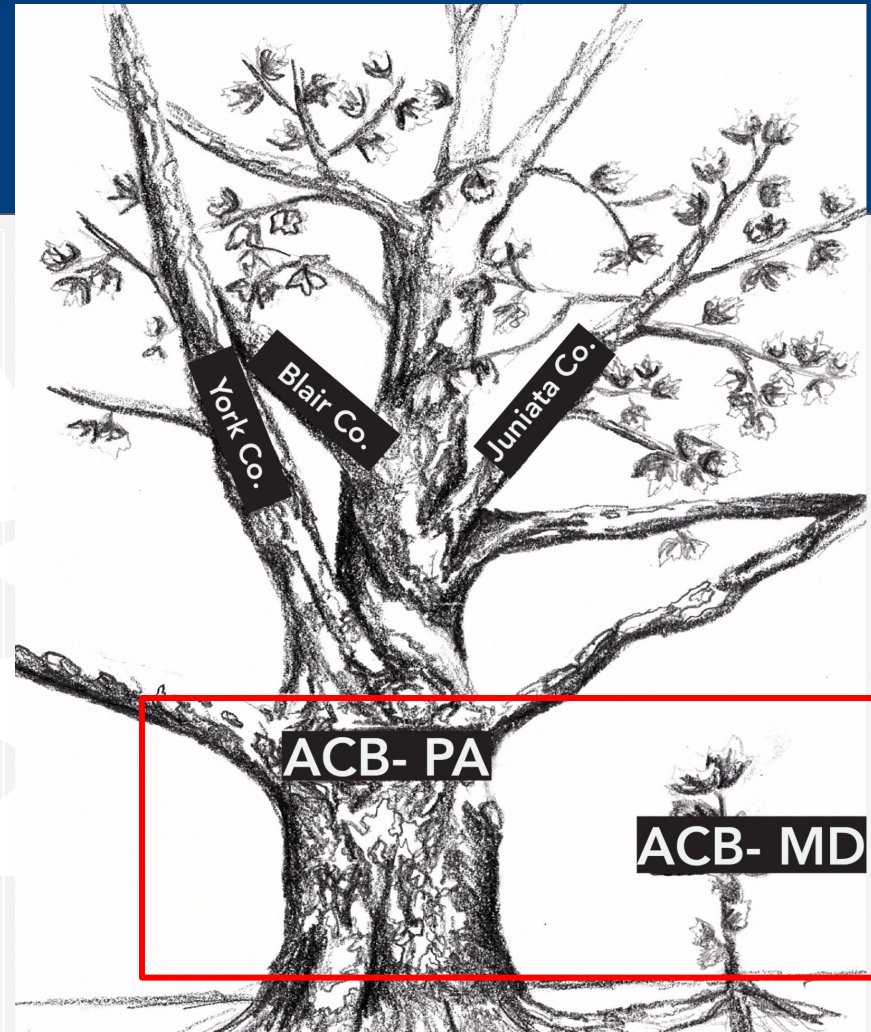
# THE SOLUTION: RIPARIAN RANGERS

- Luckily, a lot of people want to help!!!
- And buffer tending doesn't take much skill, just a little grit and a bit of training
- Riparian Rangers started in spring 2019



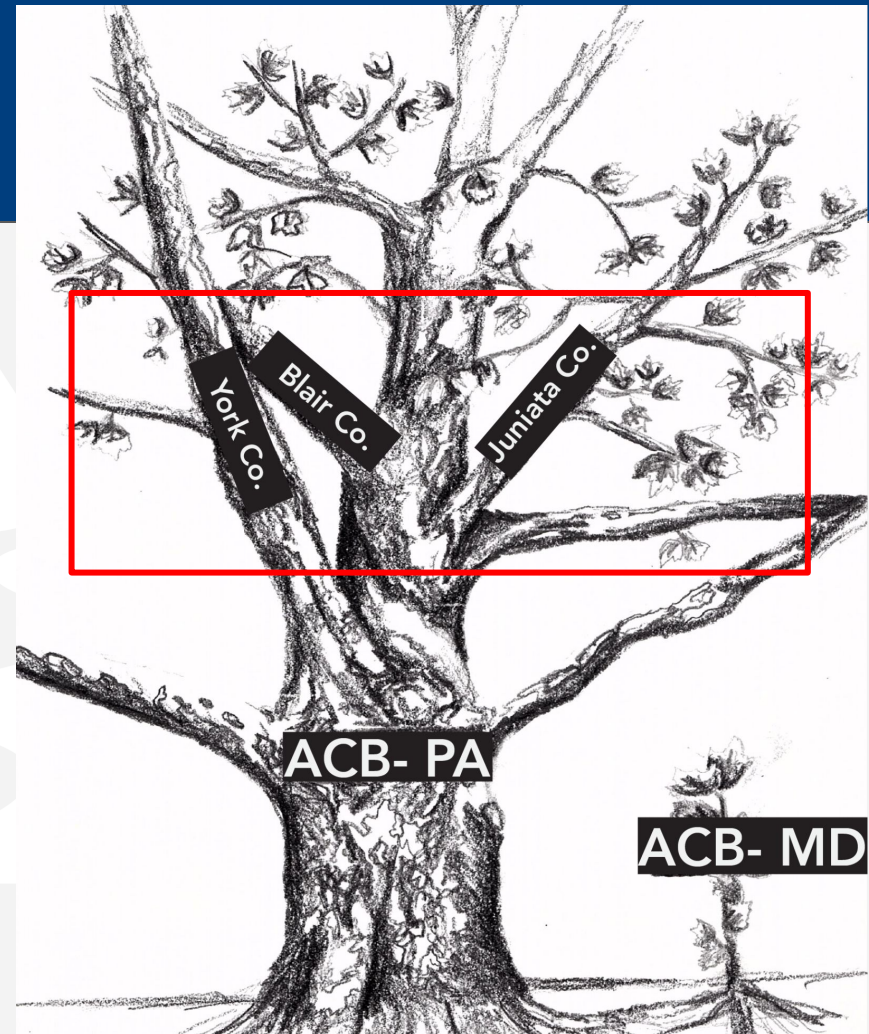
# PROGRAM STRUCTURE

- The “Trunk:”
  - The Alliance and directly trained Riparian Rangers
  - Maintain Alliance-planted sites (mostly)
  - Directly trained
    - Group trainings
    - 1-on-1
  - Volunteer base: local volunteer organizations, environmental stewardship groups, folks that sign up at Alliance events
  - Lancaster, York, Chester, Lebanon, Cumberland, Adams, and Franklin Counties



# PROGRAM STRUCTURE

- The “Branches”
  - Regional based volunteers in expanded locations
  - Run by Branch Leaders that the Alliance trains to coordinate and train RR’s
    - Branch in charge of volunteer recruitment
  - Current Branches: York, Juniata, Cumberland, Snyder/Union, Dauphin/Lebanon (soon)



# EXPECTATIONS OF A RIPARIAN RANGER

- Monthly sites visits, March-October
- Regular communication
- Required tasks:
  - Straightening stakes
  - Fixing tree shelters
  - Removing bird nets
  - Remove competing plants in shelters
  - Monitoring invasive species
  - Complete reporting form
- If possible:
  - Check on site after flood events
  - Assist with replanting
  - Remove invasive species





# TRAINING PROCESS

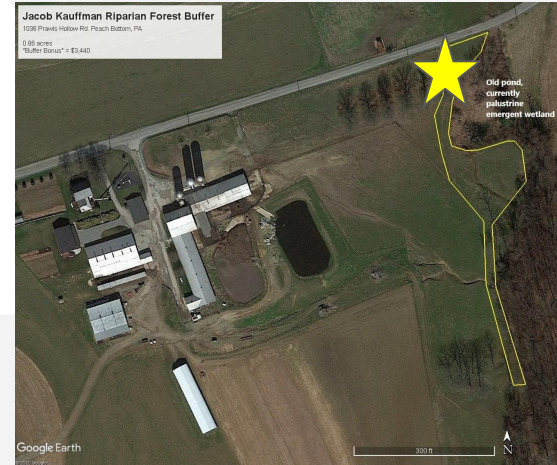
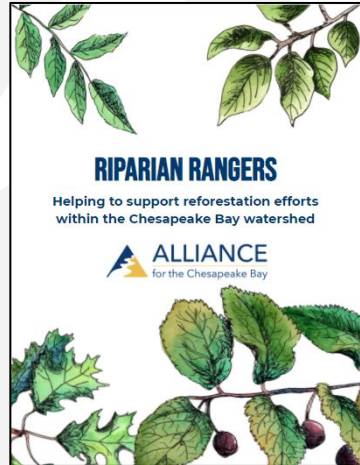
## 1) Group Training

- Talk through the program
- Invasives species ID
- Native Tree ID
- Maintenance Demo
- Tree Shelter Removal Demo
- Receive Resources



## 2) Meet on assigned site

- Get the lay of the land/ walk through the site
- Answer individual questions
- Connect with landowner if possible
- Additional training as needed



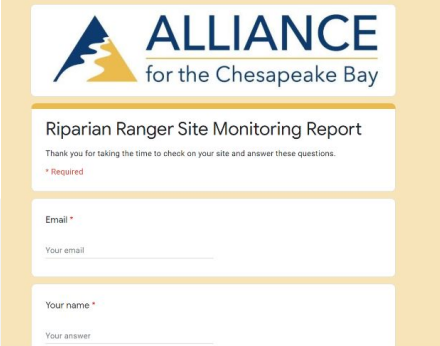
# MONTHLY CHECKS

- Expectations, as previously stated:

- Monthly sites visits, March-October
- Required tasks:
  - Straightening stakes
  - Fixing tree shelters
  - Removing bird nets
  - Remove competing plants in shelters
  - Monitoring invasive species
  - Complete reporting form
- If possible:
  - Check on site after flood events
  - Assist with replanting
  - Remove invasive species

- Monitoring Report Form

- Questions:
  - Length of site visit?
  - Mowed and herbicide rings?
  - Invasive species?
  - Number of dead trees?
  - Animal damage?
  - Other damage?
  - Questions/ comments/ photos?



The screenshot shows a digital form titled "Riparian Ranger Site Monitoring Report" from the "ALLIANCE for the Chesapeake Bay". The form includes a thank-you message and a list of required fields: "Email \*", "Your name \*", and "Your answer".

**ALLIANCE**  
for the Chesapeake Bay

Riparian Ranger Site Monitoring Report

Thank you for taking the time to check on your site and answer these questions.

\* Required

Email \*

Your email

Your name \*

Your answer

# RESOURCES PROVIDE

- In person trainings
- Riparian Rangers packet
- Training video
- Reporting form
- Landowner outreach packet
- Online photo guide
- Tree planting specific supplies
  - Stakes
  - Tubes
  - Zip ties
  - Bird nets

**RIPARIAN RANGERS CONTACT INFORMATION**

CONTACTS

Alliance staff (when available)

Name: \_\_\_\_\_  
 Email: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Water: \_\_\_\_\_  
 Email: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Other staff:

Name: \_\_\_\_\_  
 Email: \_\_\_\_\_  
 Phone: \_\_\_\_\_

For Headquarter:

Other Notes: \_\_\_\_\_

**ALLIANCE**  
 for the Chesapeake Bay

**RIPARIAN RANGERS**  
 Landowner Guide

**PROGRAM OVERVIEW**

The Riparian Rangers project is run by the Alliance for the Chesapeake Bay. Riparian Rangers are passionate volunteers who care about environmental restoration and want to help support your reforestation efforts. Riparian Rangers are shown the tree planting site and trained by an Alliance staff member on how to properly take care of your trees; after this training they will visit the tree planting site once a month from March-October. During these visits, they perform maintenance tasks that help the trees to grow faster and healthier. Your site should receive regular maintenance and monitoring for at least 3 years after the planting; after that, Riparian Rangers may periodically visit to remove tree shelters and do other maintenance as needed.

**WHAT TO EXPECT FROM A RIPARIAN RANGER**

Riparian Ranger volunteers will take-out with the following tasks:

- removing or respiking bird nets as needed
- straightening stakes
- fixing tree shelters
- marking and labeling to replace dead trees
- monitoring and removing invasive species, when possible
- removing tree shelters when they are ready
- communicating site needs with the Alliance

Your Riparian Ranger will notify you prior to visiting your property, unless you communicate otherwise. Volunteers are not responsible for mowing or herbicide application. They complete more detailed maintenance tasks that help boost tree survival/rate!

Removing bird nets

Fixing stakes and stakes

Marking dead trees for removing

Removing tree shelters once the trees are large enough

**1) Milk Thistle**

**2) Blackberry**

**3) Tree of Heaven**

**4) White-flowered**

**5) Common Knotweed**

**6) Japanese Knotweed**

**7) Purple Loosestrife**

**8) White Mulberry**

**9) Japanese Hollyhock**

**10) White Mulberry**

Each page includes a photograph of the plant and a short text description of its characteristics and identification tips.

# RIPARIAN RANGER ASSISTANCE HIGHLIGHTS

Reporting livestock access



Fixing flood damage



Removing tree shelters



# UPCOMING NEEDS AND PLANS

- Currently 55 (trunk) Riparian Rangers taking care of Alliance Sites
- Need **at least 50 more** Riparian Rangers to take care of old sites, sites planted in Fall of 2021, and upcoming Spring 2022 sites!
- Working to start more Branches in neighboring counties
- Working to recruit a wider variety of volunteers





**Questions?**