



NJ Invasive Species  
**Strike Team**

**FoHVOS**  
FRIENDS OF HOPEWELL VALLEY OPEN SPACE

[Learn More About Our Upcoming Conference](#)  
[Register Here!](#)

**Last chance to register - April 11**

## Strike Team Annual Conference

Looking to spend a productive day learning about invasive species and connecting with colleagues? Then please join us for our upcoming annual conference! It will be held on April 19th from 9:00am to 4:00pm at the Duke Farms Coach Barn.

Check out the links below to learn about the agenda, speaker profiles, and available CEU's. Special student rates are available, reach out to Mike if interested (mvanclef@fohvoss.org).

This month's Live and Learn is provided by Randi Eckel of Toadshade Wildflower Farm. Randi describes how to create a successful meadow restoration, including the identification of seedlings. Check out the great content and beautiful images!

Mike Van Clef, Ph.D.  
FoHVOS Stewardship Director  
Strike Team Program Director

Lisa Wolff  
Friends of Hopewell Valley Open Space  
Executive Director

## Register for our Annual Conference!

**LAST CHANCE - REGISTRATION CLOSING APRIL 11**

- April 19, 9:00am-4:00pm, 16 th Annual Strike Team Professional Conference, Duke Farms
  - Includes a panel discussion on Kudzu, presentations on the history of New Jersey's forests, biological control, and invasive wildlife and wildlife diseases along with invasive species control demonstrations.

- Continuing education units will be available for NJDEP Pesticide Control Program, PA Pesticide Program, NJ Urban and Community Forestry Program, and Society of Ecological Restoration.



**DR MIKE VAN CLEF**  
CONFERENCE HOST

# DUKE FARMS APRIL 19

9AM - 4PM



Event site at:  
[bit.ly/st-2023](https://bit.ly/st-2023)

**DR BERNIE ISAACSON**  
NJ FOREST SERVICE

A FORESTER'S VIEW OF OUR  
CHANGING LANDSCAPE



**DR ALEXANDRA GILLET**  
USDA: PHILLIP ALAMPI LAB

BIOLOGICAL CONTROL EFFORTS  
AT THE BENEFICIAL INSECT LAB



**KERRY WIXTED**  
ASSOC OF F&W AGENCIES

A NATIONAL LOOK AT  
INVASIVE SPECIES



**SPEAKERS**

## **INDUSTRY PROFESSIONALS**

Presented by and for conservation industry professionals. Continuing Education credits (CEUs) are available. Stay current on forestry, entomology, invasive & rare species, and more!

## **LEARN THE LATEST ABOUT INVASIVES**

Located in the coach barn at Duke Farms, the conference provides opportunities to network with experts, attend panels, and cool demos. Includes continental breakfast and full lunch.

### **SPECIAL PANEL: KUDZU**

DANIELLE BARA, NEW JERSEY AUDUBON  
MARC VIRGILIO, US FISH & WILDLIFE SVC  
MICHAEL VAN CLEF, NJ STRIKE TEAM



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Conference  
Agenda

Conference  
Speaker Bios

Available  
CEUs

**Register Here!**

# Live and Learn

## Creating a Native Plant Seedling Photo Library to Aid Habitat Restoration and Rewilding

By Randi V. Wilfert Eckel, Toadshade Wildflower Farm

Many restoration projects, both public and private, include a component where areas are seeded with native plant seed mixes. Generally, the goal is either to create an area of mature native plants in areas previously degraded by invasive species, or to create an ecologically productive habitat such as a meadow where there was once only lawn. As we all know, growing mature perennial native plants from seed takes time – which can lead to confusion along the way.



*Little Bluestem Grass (Schizachyrium scoparium) and Virginia Mountainmint (Pycnanthemum virginianum) in a mixed meadow*



*Butterfly Milkweed (Asclepias tuberosa), Tall White Beardtongue (Penstemon digitalis), and Brown-belted Bumblebees (Bombus griseocollis) in a mixed meadow*

Although many seeded restoration projects are a success, failures also occur due to a variety of reasons: poor site preparation or management during the critical first year, poor seed distribution, and others. Making sure that an area is cleared of aggressive invasive weeds is one obvious crucial factor. Additionally, seeds must be spread in a timely manner to accommodate cold stratification: the best time for planting native plant seeds mixes in our area is from November through the end of March. There must be good seed/soil contact for seeds to grow, yet many native plant seeds are very small and can easily be planted too deep. Proper soil preparation followed by pressing the seed into the soil surface is important.

After seedlings start to emerge, it is critical that an area is kept moist until the seedlings are large enough to withstand dry conditions and that vegetation is managed to prevent seedlings from being smothered by neighboring plants (or weeds) during the first year. Moisture can be managed with a combination of clean straw spread thinly over the seeded area



and watering as necessary during unusually dry spells through the spring. Vegetation can be managed by mowing high (8-10") several times during the first year to allow light to penetrate to the young seedlings close to the soil surface.

*Blue Giant Hyssop (Agastache foeniculum)*



*Butterfly Milkweed (Asclepias tuberosa)*  
seedlings

All of these factors are important, but there is yet another issue that often creates serious confusion: lack of proper seedling identification. When any area, large or small, is seeded with a native plant mix, the first seedlings are eagerly awaited. Seedling confusion at restoration sites, however, can result in both the declaration of failure (when, in fact, a seeding has been successful) as well as the declaration of success (when, in fact, the seeding has been a failure). We have seen massive stands of Hairy Crabgrass (*Digitaria sanguinalis*) allowed to mature and go to seed because they were mistaken for Little Bluestem Grass (*Schizachyrium scoparium*) as seedlings.



*Blue Giant Hyssop (Agastache foeniculum)*



*Trumpet Creeper (Campsis radicans)*  
seedling

Virtually all native seedlings from that particular seeding were smothered and out-competed by this prolific and aggressive annual weed, and the project had to be re-seeded (and a plan to manage the Hairy Crabgrass was put in place). In another case, we have seen a very successful seeding that included Blue Giant Hyssop (*Agastache foeniculum*), Butterfly Milkweed (*Asclepias tuberosa*), and 11 other native species declared a complete failure – all of the young native perennials were mis-identified as unspecified ‘weeds’. Fortunately, we were able to intervene before ‘corrective’ action was taken. In yet another example, a gentleman was adamant that he had a disaster on his hands at the border between a woods edge and meadow – what he perceived as a veritable sea of Poison Ivy (*Toxicodendron radicans*) seedlings were, in fact, Maple seedlings (*Acer* sp.), the offspring of the very tree he was standing next to. Information on seedling identification of native plants can be difficult to track down, and waiting to identify plants until after they have flowered can allow invasive

plants to get well established before corrective actions are taken.

To solve this problem, there need to be better resources available for field identification of seedlings, both of native plants and invasive species, and we are addressing that need. For the past six years we have been working on a project to photograph native plant seedlings to aid in field identification. We are currently growing or researching over 800 species of native plants – grasses, herbaceous perennials, annuals, vines, shrubs, trees, etc... and in the process we are creating a photographic library of their seedlings, with thousands of photos taken so far.



*Native plant seedlings at Toadshade Wildflower Farm*

Our goal is to publish these photos, creating a comprehensive guide to native plant seedling identification allowing for early evaluation of seeding successes as well as failures. Our primary photographic emphasis so far has been native plants, but we plan to expand the project to include some of the more common weeds as well as both established and emergent invasive species for comparison. In the end, this will allow for seedling identification not only in seeded restoration projects, but deer exclusion and land reclamation projects as well, aiding both homeowners and professionals alike in their restoration and rewilding efforts.

## Upcoming Events

Please contact [Mike](#) if you are interested in attending any of the following scheduled events.

- **April 6, 7:00pm-8:00pm, Zoom**
  - Wild Ones NJ Gateway Chapter, Invasive Species Threats, Identification, and Control
- **April 12, 6:00pm-7:00pm, Flatrock Brook Nature Center**
  - Urban Green Spaces Lecture Series - Invasive Species Identification, Prioritization, and Control Strategies
- **April 23, 10:00am-2:30pm, Marion Clawson Memorial Park, Ringoes**
  - East Amwell Green Scene - Tabling event with outreach materials and open Q&A session
- **April 29, 12:00pm-4:00pm, Central Park, Whippany**
  - Whippany River Watershed Action Committee - Earth Day Celebration
- **May 12, 8:30am-3:00pm, Duke Farms, Co-led with Michael Bellaus**
  - Spring Invasive Plant Management Workshop – Topics include identification, prioritization, and management techniques.  
[Register Here](#)
- **May 22, 7:30pm-8:30pm, Zoom**
  - East Amwell Environmental Commission, Open invasive species Q&A session

- **June 17, 9:00am-1:30pm, Duke Farms, Hillsborough (Presentation and Field Visit / Demonstrations)**
  - Master Ecologist Program - Invasive Species Threats, Identification, and Control

## Volunteer with us!

Looking for a volunteer opportunity?  
The NJ Invasive Species Strike Team is the organization for you!  
Visit our sign up genius below to share your interests with us.  
Contact [mvanclief@fohvos.org](mailto:mvanclief@fohvos.org) for more information.

I'm Interested!

Volunteer Stewardship Teams Information

## Consider a Membership Donation

**The Strike Team needs your help to fight invasive species throughout New Jersey. By making a membership donation, you directly fund our efforts to keep invasive species at bay and protect our native plants and wildlife. Donate through the link below!**

Donate

Our website

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## Contributing Partners



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