



Learn More About Our Upcoming Conference Register Here!

Catching Up!

New Jersey has lagged the country in statewide invasive species, but we're catching up! We're one of several states without a regulated list of invasive species or an aquatic invasive species management plan.

In our January newsletter, we reported on legislation that would ban the sale of invasive species. Efforts continue on refining proposed legislation, but we're getting closer through communications among legislators and state agencies along with conservation groups and the nursery trade.

In 2022, the state received funding to develop an Aquatic Invasive Species Management Plan. Nicole White (Little Bear Environmental Consulting) is working with the NJDEP – Division of Science and Research, NJ Fish & Wildlife, NJ Water Supply Authority and a working group representing numerous professionals providing feedback. The plan is to be completed by the end of 2023. Efforts to date indicate that this will be a thorough and thoughtful plan to guide coordinated efforts to mitigate impacts to aquatic ecosystems. The creation of the plan will allow the state to apply for implementation funding through the Mid-Atlantic Panel on Aquatic Invasive Species.

This month's Live and Learn is provided by Jared Rosenbaum of Wild Ridge Plants. Jared describes his observations as a botanist and land steward to better understand the role of soil health as a determinant of what plants grow where and how to focus stewardship efforts.

Mike Van Clef, Ph.D.

Michael Wan Clef

FoHVOS Stewardship Director Strike Team Program Director Lisa Wolff

Friends of Hopewell Valley Open Space Executive Director

Register for our Annual Conference!

- 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.



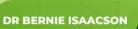


CONFERENCE HOST

APRIL 19

9AM - 4PM







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!

DR ALEXANDRA GILLETT

ASSOC OF F&W AGENCIES

KERRY WIXTED



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.







THANKS TO OUR **EVENT SPONSORS**



Conference **Agenda**

Conference **Speaker Bios** **Available CEUs**

Register Here!

Live and Learn

The Black Box

By Jared Rosenbaum, CERP

As a field botanist, I make a lot of assumptions about soils as I work. Find some maidenhair fern? Must be nutrient-rich, maybe calcareous. Lowbush blueberry? Soil's probably on the acidic side. Find a diverse herb layer with bloodroot, hepatica, showy orchid, and perfoliate bellwort? Must have found "native soils"!

The soil is a "black box" to me in many ways, but one thing is clear: the interdependencies between plants and the living soil are crucial for plant diversity and health. We mammals host a microbiome in our digestive tracts that breaks down large organic matter into nutrients we can utilize for growth and survival. Plants don't have a stomach per se, but maintain a digestive biome in the soil around them, ideally replete with beneficial fungal, bacterial, and other microbes. The soil is their stomach, as it were, and its microbiology is just as critical for their survival.

I often try to read the land use history of a site as I work in the field. Was this a woodlot, cropfield, or quarry? Is this site post-agricultural or mature forest? In many ways this is another proxy to guess at the diversity and "intactness" of the soil biome.

Recently I revisited Carla Lee and Bob Lewis' property, where I had done botanical survey work in 2019. Up on a small section of rocky limestone slope they have as many upland rare plant species as I've seen in a small area, anywhere. I even found another one stumbling around in a rocky tumble this February. They're just popping out of every filing cabinet and drawer.



Rocky slope covered in blue cohosh

Below this ridge is a swath of very young woodland overflowing with Japanese barberry and shrub honeysuckle. Carla and Bob are interested in restoring this area (they've been eradicating invasives here with NJISST's assistance). As we talked about potential restoration plantings, a question kept tugging at me. Could some of those high quality and rare species just meters away on the rocky slope migrate down to the lower slope here? If the invasives were removed and the area was deer fenced, would there be other barriers to successful recruitment or planting? Would the post-disturbance soils down here even be suitable for high floristic quality native perennials?

So I asked my friend and colleague Zach Baransky to do some testing. He's a soil microscopist trained in the Dr. Elaine Ingham, soil food web school of soil analysis. What he discovered was stark. The soils on the rocky limestone ridge were "textbook" examples of ideal soils, with large aggregates bound by fungal hyphae and a high weight per gram of fungi as well as other beneficial organisms. The soils in the young woods were not terrible, but were a far way off from the structure or fungal content of those just upslope, and virtually lacking in beneficial nematodes.



Zach Bransky taking a soil sample

The landowners are dedicated stewards and are contemplating their next steps. In addition to deer fencing and invasives removal, they are considering soil remediation. Adding wood chips. Inoculating with beneficial soil organisms. They test and monitor as they proceed. If we want to restore high quality forest plant communities, we'll need to open up the black box and start listening to what is recorded there, deep among the roots of the plants.

Upcoming Events

Please contact <u>Mike</u> if you are interested in attending any of the following scheduled events.

- March 21, 7:00pm-8:00pm, Zoom
 - Rutgers Cooperative Extension, Ocean County Invasive Species Threats, Identification, and Control
- 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
- May 12, 8:30am-3:00pm, Duke Farms, Co-led with Michael
 - 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 <u>mvanclef@fohvos.org</u> 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!

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