

# Friends of White's Woods Monthly Newsletter



## Feb. 27th Webinar Focuses on Causes of Tree Seedling Regeneration in PA Forests

Dr. Danielle Beglev-Miller, post-doctoral scholar in the Penn State University department of ecosystem science and management, will present a webinar titled "One Size Does Not Fit All: Complex Interactions Of Soil Chemistry and Deer-Browsing Explain Forest Plant Regeneration" Feb. 27 from 4 to 5 p.m. An ecological forester, Begley-Miller owns Forest Management Solutions, LLC, a consulting firm that offers various services to land managers, including forest inventories and assessment. She has worked in plant community ecology and served for five years as director of science at the Teatown Lake Reservation, a 1,000-acre nature preserve and education center, in Ossining, N.Y.

She was the lead author with a team of researchers who recently completed a long-term study investigating factors affecting tree seedling regeneration in Pennsylvania forests. The research team



Dr. Danielle Begley-Miller

monitored 24 sites in central Pennsylvania for seven years and compared the impact of deer-exclosure fencing, reduction of soil acidification, and non-selective use of herbicide on tree seedling growth. The researchers emphasize that the complex causes of the ongoing limited forest regeneration across Pennsylvania are hard to identify. Still, the interaction of many interacting variables likely affects native plant and tree regeneration.

Following decades of acid deposition, soil throughout the northeast has become increasingly acidic with direct effects on plant nutrition. Plants respond to their en-

#### **UPCOMING EVENTS**

**Feb. 27: One Size Does Not Fit All: Complex Interactions Of Soil Chemistry and Deer-Browsing Explain Forest Plant Regeneration** webinar by Dr. Danielle Begley-Miller, Penn State University Department of Ecosystem Science and Management, 4 to 5 p.m.

March 27: Public Land Priorities in the Latino Climate Justice Framework webinar by Olivia Juarez, Public Lands Director, <u>GreenLatinos</u>, noon-1 p.m.

**April 5: Community-wide effort: Removing Japanese barberry from the WWNC,** 10 a.m. to noon.

April 22 (Earth Day): Predicting and Managing Pollinator Health in a Changing World webinar by Dr. Christina M. Grozinger, Director, Huck Institutes of the Life Sciences, Pennsylvania State University, noon-1 p.m.

May 17: WWNC Big Tree Walk, meet at 12th St. Entrance, 11 a.m. to 1 p.m.

**June 7: A History of White's Woods: Walk** with Dr. Kevin Patrick, author, "Near Woods: A Year in an Allegheny Forest," 11 a.m. to 1 p.m. - Meet at the WWNC 12th St. Entrance.

Catch the FWW Naturally column monthly in the Indiana Gazette.

Please check friendsofwhiteswoods.org/events and/or your email for up-to-date information on upcoming events. Register for webinars by sending an email to info@friendsofwhiteswoods.org

For more information, visit: friendsofwhiteswoods.org Like us on FaceBook: Friends of White's Woods, Inc. Follow us on Instagram: friendsofwhiteswoodsinc vironment in total, and ecological interactions are pervasive throughout nature.

Both deer-exclosure fencing and treatment of soil acidification yielded the best results for promoting tree seedling regeneration. By contrast, the researchers estimated that it would require at least a decade for tree seedling regeneration to recover after broad use of herbicide.

The long-term study, "Complex interactions of deer herbivory, soil chemistry, and competing vegetation explain oak-hickory forest tree regeneration in central Pennsylvania, USA," published in the Canadian Journal of Forestry in October, 2024, is <u>available online</u>.

You can register for this webinar by sending an email to <u>info@friendsof-</u><u>whiteswoods.org</u>

### New Chair of White Township BOS Addresses White's Woods Issues

The newly elected chair of the White Township Board of Supervisors included White's Woods in his opening statements after assuming office.

Rich Gallo said:

"Five years ago, an epic event occurred with the concerns for the future of White's Woods and its stewardship. We heard from the citizens of the community and we responded. We formed a stewardship committee to hold public fact-finding meetings with public input on what they felt was in the best interest on how we should take care of White's Woods. After almost two years, the stewardship committee has done an excellent job and brought forward an in-depth report. This is an example of how important public involvement is to us as elected officials; we need to hear the thoughts and the input of the community."

Gallo emphasized the need for public input, saying: "As we move into a new year, I want to make it clear that our meetings are always open public meetings. We invite the citizens of White Township to come with their concerns and ideas."

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# Planting Certain Native Plants May Mitigate Deer Browse

Removing invasive plants and replacing them with native plants may reap additional benefits: many native plants are deer-resistant.

The Pennsylvania Department of Conservation and Natural Resources (DCNR) defines a native plant as plants "which occurred within this region before settlement by Europeans. Native plants include the ferns, grasses, perennial and annual wildflowers, woody trees, shrubs, and vines that covered Penn's Woods when the first settlers came."

A 2023 Penn State Extension article outlines the benefits of native plants. These plants help protect Pennsylvania's biodiversity:

"Our native wildlife, especially birds, butterflies, pollinators, and other organisms, evolved with the plants here; many can only feed on plants they co-evolved with. Unfortunately, unwise development has led to large expanses of lawn and exotic (nonnative) plants replacing natural areas. If your garden has no native plants, it becomes an ecological desert for the pollinating insects that are essential to our survival. Without insects to pollinate our crops, we would have none, or humans would need to perform the task. This is occurring in China where they use costly hand pollination for some fruit crops due to the lack of pollinating bees. Additionally, native plants are needed to support songbirds by supplying food for the insects that most baby birds require. They provide the habitat (food, cover, and places to rear their young) that wildlife needs. Without native plants, our wildlife is at risk of extinction."

Native plants are generally not invasive – they don't disrupt the soil cycle or crowd out other plants with explosive spread.

And when used in a landscaped area, native plants are easier to grow and maintain.

Most Pennsylvanians, including Indiana County residents, have found that deer have quite an appetite for native plants, including flowers, shrubs, and tree seedlings. But deer won't eat invasives! The good news is that many organizations are working to assemble deer-resistant native plant lists. Over a bad winter, a hungry deer will eat almost any plant. But most of the time, deer-resistant plants will suffer only mild damage from deer-browse.

<u>Penn State Extension</u>, <u>DCNR</u>, <u>Audubon</u> <u>Society of Western Pennsylvania</u> provide these examples of deer-resistant plants:

#### **NATIVE SHRUBS:**

Shade-tolerant: spicebush, red-osier dogwood, winterberry, maple leaf viburnum, elderberry, Allegheny blackberry, sweetbay magnolia, ninebark.

Sun: shrubby St. John's-wort, red chokeberry, cinquefoil.



Sugar Maple



Great Blue Lobelia



St. John's Wort

#### NATIVE SMALL TREES:

Shade-tolerant: eastern redbud, witch hazel, serviceberry, flowering dogwood. Sun: paw-paw

#### NATIVE LARGE TREES

Shade-tolerant: tulip poplar, sugar maple, American hornbeam, black birch, American beech, white ash, spruces, pines, eastern hemlock.

Sun: honey locust, sweet gum, black gum, green ash, river birch.

#### NATIVE HERBACEOUS PLANTS:

Shade-tolerant: great blue lobelia, Virginia bluebells, black cohosh, wild columbine, Jackin-the-pulpit, goat's beard, wild ginger, butterfly milkweed, mayapple.

Sun: beebalm, purple coneflower, wood geranium, great St. John's-wort, black-eyed Susan, creeping phlox, goldenrod, swamp milkweed.

## Please Support New 2025 FWW Projects

FWW needs your help to ensure that the White's Woods Nature Center is managed and maintained for recreation, conservation, and historical preservation – the purposes of its acquisition under Project 70 funding. Our organization's mission is to preserve the Nature Center as a natural area by allowing its natural succession into a mature hardwood forest and to educate the general public about the value of natural areas in general and White's Woods Nature Center in particular.

Here are two of our new 2025 projects for which we need your donation:

• The FWW children and young adult nature education program to be run in concert with the Indiana Free Library.

• Securing research consultants to assess the WWNC for endangered species, including the Indiana Bat and the flying squirrel. Both the U.S. Fish & Wildlife Service and the Pennsylvania Game Commission have indicated that White's Woods is within the range of the Indiana bat; we have evidence that flying squirrels are in the surrounding area. We need to protect these species AND their White's Woods habitat permanently. Both projects will require extra funds. Please help! Even small donations will make a big difference.

You can donate by going to the <u>FWW website landing page</u> and clicking on the button labeled <u>"Support</u> <u>FWW 2025 Projects."</u> Or, mail your check to:

Friends of White's Woods, Inc. P.O. Box 1271

Indiana, PA 15701

If you have other questions, please contact Friends of White's Woods at <u>info@friendsofwhiteswoods.org</u>. Thank you so much for your donation.

For more information, visit: friendsofwhiteswoods.org We welcome feedback. Email us at: info@friendsofwhiteswoods.org

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