

## UPCOMING EVENTS

- APRIL 12**     **Spring Birding Walk**  
Van Scott Nature Reserve • 9am-11am
- APRIL 19**     **Rain to Drain**  
Van Scott Nature Reserve • 1pm-3pm
- APRIL 22**     **Earth Day Scavenger Hunt**  
Van Scott Nature Reserve • 10am-3pm
- APRIL 23**     **Spring Monitoring Volunteer Training**  
Van Scott Nature Reserve • 1pm-5pm
- APRIL 25**     **Boundin' Furbearers**  
Van Scott Nature Reserve • 3pm-4pm
- MAY 1 & 9**     **Spring Monitoring Volunteer Training**  
Van Scott Nature Reserve • 1pm-5pm
- MAY 4**         **Ramps U-Pick - Hosted by Delaware Valley Ramps**  
Equinunk, PA • 10am-3pm

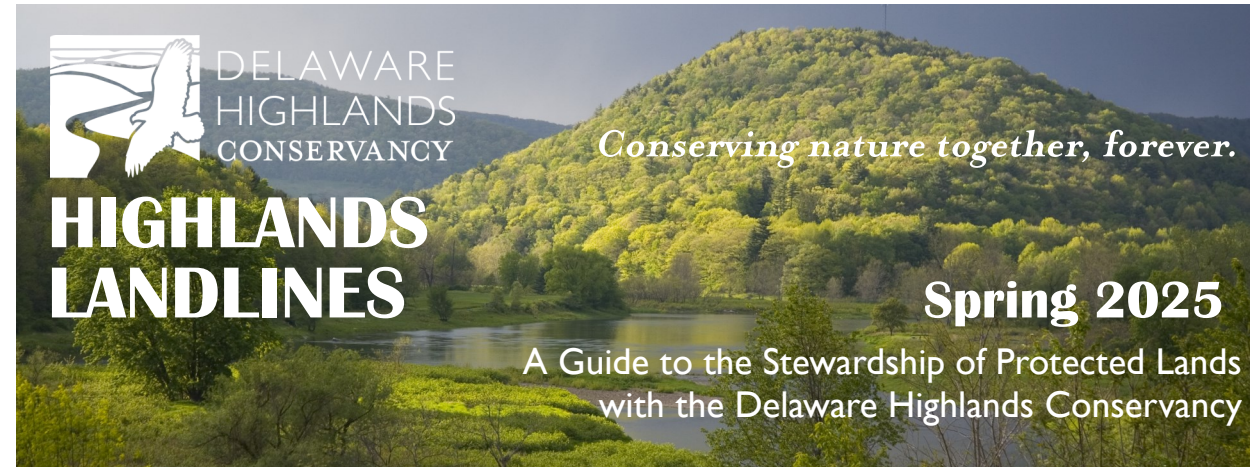
**Events require advance registration. Visit [www.DelawareHighlands.org/events](http://www.DelawareHighlands.org/events) or call 570-226-3164/845-583-1010 to learn more or register for these events.**

- **INSIDE**
- **Lingering Hemlock Search Project**
- **Understanding Chronic Wasting Disease**
- **Spring Stewardship**
- **Annual Monitoring Questionnaire**
- **Native and Invasive Species Spotlight**



Serving New York and Pennsylvania  
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**DELAWARE HIGHLANDS CONSERVANCY**



## Tree Species in Peril: The Lingering Hemlock Search Project

Part of the broader Tree Species in Peril initiative by The Nature Conservancy, the Lingering Hemlock Search Project is aimed at identifying and eventually breeding North American hemlock trees (*Tsuga canadensis* and *T. caroliniana*) resistant to the Hemlock Woolly Adelgid (HWA) (*Adelges tsugae*) in an effort to save the species. HWA, an invasive insect that has devastated hemlock populations across eastern North America, was introduced to the U.S. in the 1920s from Japan.



Hemlock trees are a keystone species of great environmental value, providing ecosystem services like food, shelter, and habitat for hundreds of species. Hemlock trees create the ecosystem in which they inhabit and play a key role in keeping water cool and clean – their shallow roots filter runoff, and their dense foliage shades waterways, maintaining water temperatures ideal for cold-water species like native trout.



In the northeastern United States, where hemlock mortality has not yet reached catastrophic levels, the Lingering Hemlock Project is beginning its search for hemlocks that show resistance to HWA. To be considered a lingering hemlock, a tree must: 1) be at least 4" in diameter at breast height (DBH), 2) grow in a forested setting, 3) have over 80% of surrounding hemlocks dead and/or dying, 4) display dark green needles and thick, full branches, and 5) not have been treated with pesticides or horticultural oils in the last 15 years.

If you believe you have a lingering hemlock on your property, learn more about the project at [Blogs.Cornell.Edu/LingeringHemlock](http://Blogs.Cornell.Edu/LingeringHemlock) and download the TreeSnap app to upload your find.

*Photos courtesy of Western Pennsylvania Conservancy and Cornell.*

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570-226-3164  
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**What is Highlands LandLines?**

You already receive the Delaware Highlands Conservancy's regular newsletter, *Highlands Journal*. Our newsletter is distributed to all of our landowners, members, and other like-minded folks who are interested in the Conservancy's activities, accomplishments, and conservation goals.

**This publication, *Highlands LandLines*, comes to you twice a year and is dedicated to landowners who have a conservation easement with the Conservancy.** *LandLines* provides you, the landowner, with useful information and tips for the stewardship of your land and conservation easement.

This publication is also available electronically.

**Participate in LandLines!**

We are interested in your ideas for future articles and features, or your comments on the publication in general.



DELAWARE  
HIGHLANDS  
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**Van Scott Nature Reserve**  
**571 Perkins Pond Rd**  
**Beach Lake, PA 18405**

**www.DelawareHighlands.org**

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**Annual Monitoring Visit Questionnaire**

To prepare for your annual monitoring visit, please complete the below survey and mail to:  
Delaware Highlands Conservancy Attn: Stewardship Staff  
571 Perkins Pond Rd, Beach Lake, PA 18405  
Or email: [steve@delawarehighlands.org](mailto:steve@delawarehighlands.org)

You may also complete the survey online at  
[DelawareHighlands.org/Landowner/Caring-For-Your-Land/Monitoring-Form](http://DelawareHighlands.org/Landowner/Caring-For-Your-Land/Monitoring-Form)

Contact: \_\_\_\_\_ Email: \_\_\_\_\_

*Annual monitoring visits are an important part of caring for your conserved property in partnership with the Conservancy. These visits allow the Conservancy to document the property's condition, assess its conservation values, and ensure the terms of the conservation easement are being upheld. Annual monitoring visits are also a great time to discuss any questions or concerns about the property, and help strengthen the connection between the Conservancy, its members, and landowners. These visits ensure the long-term stewardship and protection of your property, and are required on an annual basis.*

- Do you plan to attend the annual monitoring visit?..... Yes No
- Are there any plans to sell, subdivide or lease the property?..... Yes No
- Are there any plans to build or replace any structures within the boundaries of the conservation easement?..... Yes No
- Are there any plans for land disturbance as a result of construction, digging or filling, fencing, or other? ..... Yes No
- In the last year, has the property experienced any adverse effects?
  - Insect damage..... Yes No
  - Storm damage..... Yes No
  - Fire..... Yes No
  - Vandalism; trespassing, dumping, abusive use of ATVs or other vehicles.... Yes No
  - Property line violations from neighboring parcels..... Yes No
- Do you plan for or has there been any timber harvesting on the property?..... Yes No
  - If so, is this a result of a recommendation by a current Forest Management Plan?.... Yes No
- In the last year, has the property experienced any changes in its natural character?
  - Invasive vegetation or animals..... Yes No
  - Change in flow, quality or quantity of water ..... Yes No
  - Livestock in or near waterways or wetlands..... Yes No
  - Erosion along banks or channels..... Yes No
- Has any recent lease been signed for the land? (e.g. gas, mineral extraction, etc.).. Yes No

Do you have any additional notes, questions, or concerns not already outlined?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Stewardship of Your Property

Stewardship staff encourage you to reach out any time you have questions or concerns about your conservation easement. There are several activities and uses that may require the Conservancy's feedback or approval, so it is always a good idea to contact us before making any significant changes, including the following:



### BEFORE YOU BUILD

A conservation easement may allow for residential or agricultural structures to be built on the property. However, it is important to confirm with the Conservancy that your easement permits new structures or the expansion of existing structures, and to follow the proper process before beginning any construction.



### BEFORE YOU CUT

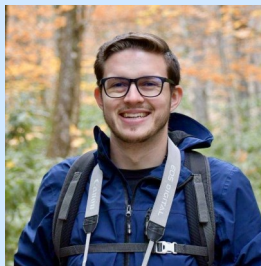
Your conservation easement may require the forest on your property to be cared for and managed in accordance with a forest management/ stewardship plan. Please contact the Conservancy before starting any forest management activities, as they must be reviewed and approved prior to any timber harvesting activities per the easement terms. We can also provide a list of natural resource professionals to help you achieve your land management goals.



### BEFORE YOU SELL

Conservation easements run with the land even if you sell or transfer the conserved property, which means subsequent landowners are also bound by the terms of the easements. Informing and connecting the Conservancy with the realtor and ultimately the new landowner(s) before selling or transferring your property helps with reducing the risk of easement challenges or violations after the transition is complete.

### STEWARDSHIP STAFF



**Steven Gosch**  
Stewardship Coordinator  
steve@delawarehighlands.org  
570-226-3164 x8

## Invasive Species Corner

### Fishpole bamboo (*Phyllostachys aurea*)

One of the strongest and most useful species of bamboo, fishpole bamboo is an evergreen perennial grass native to southeast China. Renowned as an ornamental species and its use in creating fences, fishpole bamboo is readily sold in nurseries across the US, though it is a prohibited species in New York.

Drought tolerant and growing up to 35-40 feet tall, fishpole bamboo is an aggressive spreader that can quickly create a monoculture and outcompete native vegetation. Once established, it is also difficult to remove due to its fast-growing underground stems called rhizomes. Removal efforts require heavy digging, sometimes 3-4 feet into the earth in order to prevent rhizomes from spreading to adjacent areas.

Fishpole bamboo is easily identified by its compressed internodes at the base of each stem, giving the stem a tortoiseshell-like appearance. In full or partial sun, the bamboo canes turn yellow as they age, reaching a gold-orange color and giving fishpole bamboo its secondary name – golden bamboo. Native alternatives to fishpole bamboo include eastern red cedar (*Juniperus virginiana*), big bluestem (*Andropogon gerardii*), or horsetail (*Equisetum hyemale*).

Sources: Bamboo Garden and Western Pennsylvania Conservancy. Photo: Trees.com



## Native Species Spotlight

### Dragon Horn Cladonia (*Cladonia squamosa*)

The woods can be a mysterious place, and while you may not encounter a full-size dragon in your explorations you may certainly come across one that evokes a similar thought. Dragon Horn Cladonia, named for its appearance to the horns of a scaly, multi-headed dragon due to its intricate, branching structures, is an epiphytic (growing on trees and rocks but not parasitizing them) lichen native to the northeastern United States and southeastern Canada.

Dragon Horn Cladonia is found in environments that are acidic and moist, relying on the air for nutrients as they don't have roots. They can be anywhere from 1.5-7mm in length, and 1-5mm wide, with coloration ranging from tan to cinnamon varying towards greenish gray. Dragon Horn Cladonia forms mats or clumps that can cover large areas of soil, rock, trees, and even on top of moss.

As a bioindicator, the lichen can indicate changes in air pollution, especially sulfur dioxide levels. If air quality is not ideal, the lichen will begin to show signs of stress including discoloration, thinning or shriveling, fragmentation, or decay and disintegration.

Sources: National Park Service and iNaturalist. Photo: James Lindsey. 3



## Understanding Chronic Wasting Disease

As a landowner of a conserved property, you're probably no stranger to wildlife sightings. However, have you ever noticed a solitary deer that seemed unusually low-weight, uncoordinated in its movement, or acting abnormally? If so, there is a chance that you have spotted a deer affected by Chronic Wasting Disease (CWD). While it doesn't affect humans, CWD was first identified in Colorado in 1967 and has since spread to 36 U.S. states, including Pennsylvania and New York. CWD is a growing concern for wildlife management as it poses a major risk to deer populations, ecosystems, and those who rely on deer for outdoor activities such as hunting or wildlife spotting.

### What is Chronic Wasting Disease?

CWD is caused by a misfolded protein called a prion, which is similar to how a virus causes illness in the body. These prions damage the brain and lead to symptoms such as drastic weight loss (called wasting), drooping, poor coordination, and sometimes unnatural behaviors like isolation from the herd. The disease is always fatal and, unfortunately, there is no known cure or vaccine.

### Why Should Landowners Care?

CWD can negatively affect local wildlife populations, and if you manage land where deer or elk live, you may notice changes to the herd or even a drop in population. Since CWD impacts deer health, it can also affect hunting, wildlife viewing, and even the broader ecosystem by altering predator-prey relationships.

### How Can You Protect Your Land?

There are several ways to minimize the risk of CWD on your property:

- 1. Monitor Deer Health:** Keeping an eye on deer health and reporting any suspicious signs can help local wildlife agencies track CWD and prevent its spread.
- 2. Control Feeding:** Avoiding or limiting wildlife feeding stations can help reduce the chance of animals congregating, which helps prevent disease spread.
- 3. Dispose of Carcasses Properly:** Make sure deer carcasses are disposed of according to regulations to avoid contamination in other areas.
- 4. Disinfecting Equipment:** If you're involved in activities like hunting, disinfecting your tools and gear can stop prions from moving to other locations.

By staying informed and working alongside local authorities, you can contribute to protecting wildlife health on your property and in your community. If you're unsure or have questions about CWD, don't hesitate to contact your local wildlife agency.



## Spring Stewardship: Get Outside, Enjoy Your Land, and Ensure It's Well

Spring is here! It's a great time to get outside, enjoy your land, and look at how it's doing after the winter. Spring stewardship is all about making sure your land is healthy and secure, while also checking on the conservation values outlined in your conservation easement. Here are some key things to check on this season.

**Look at Plants and Trees.** Take a walk around your property to see how the plants and trees are doing after the winter. Winter storms can cause damage, and it's also a great time to spot new growth. Look for any fallen trees that might need clearing away, such as those impeding trails or paths – those that aren't an obstruction will become great new wildlife habitats. Keep an eye out for invasive species – early detection is key to preventing their spread.

**Walk Your Boundaries.** While you're walking your land, check out your boundaries – this is also a great time to explore parts of your property you might not visit often. Winter weather can weaken fences, and snow or ice can damage wood or stone structures. Look for any sagging posts, broken wires, or gaps that could affect the integrity of your boundary. Ensure boundary markers are intact – sometimes they can be blown away or knocked over during the winter months. Walking the boundary is also a great way to assess for any signs of trespass or encroachment to bring to the attention of Stewardship Staff.

**Walk Your Trails and Paths.** If your property has maintained trails or paths, spring is the perfect time to walk them and perform any routine maintenance – you might find areas that need a little repair or clearing. Look for washouts or places that have become obstructed by fallen branches or rocks. A little upkeep now will keep your trails safe and enjoyable for the warm season ahead.

**Check Your Water Features.** Spring rains can sometimes change water flow or cause small areas of flooding. Look at any ponds, streams, or drainage areas to make sure everything is flowing as it should. Check that any culverts, dams, or water-retention systems are in-tact and functioning properly. This is also a great time to observe what wildlife may be enjoying the water features as well.

Focusing on your land's health, boundaries, and infrastructure will set it up for a successful spring season. It's a great time to enjoy your land, but also keep an eye out for any changes. If you notice anything unusual or need assistance, reach out to Stewardship Staff before your annual monitoring visit – they're here to help!



Photo by Nicole DeCarolis