

The OHIO WOODLAND Journal

Volume 30 • Number 1 • Winter 2023

A PUBLICATION OF THE OHIO TREE FARM COMMITTEE



- ◆ Family Forest Carbon Program
- ◆ Spongy Moth Update
- ◆ Marvel at the Marbled Salamander

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The OHIO WOODLAND Journal



INSIDE THIS ISSUE

4 Ohio Tree Farm Perspective *by Alan Walter*

6 Perspective from ODNR *by Dan Balser*

8 2022 Paul Bunyan Recap *by Jenna Reese*

10 A Carbon Program for Landowners
and Conservation *by Tristan Kinnison*

12 Calendar

14 She's a Force of Nature *by Cassie Ridenour*

16 Focus on Forest Health: Update on Spongy
Moth *by Tom Macy*

18 Wild Wonders in the Woods: the Marbled
Salamander *by Marne Titchenell*

21 Leafing Out: Swamp White Oak
by Dave Apsley

31 Connecting Kids to Nature
by Heather Sheets



4

6



8



14



18



21



On the Cover

Storm damage in Mohican-Memorial State Forest following a weather event in June 2022. Photo courtesy of ODNR Division of Forestry

ohioforest.org/mpage/OhioTreeFarmHome

OHIO TREE FARM COMMITTEE



Due to *The Ohio Woodland Journal* publication schedule and the work that goes into each issue, this is the first opportunity I've had to mention the success of the 2022 Tree Farm of the Year (TFOTY) field day honoring Mike O'Neill. We are very thankful to Tiverton Tree Farm for hosting on Mike's behalf, providing an easier event space and allowing hundreds of people to enjoy the successful educational field day. The selection committee is currently assessing nominees for the 2023 Tree Farm of the Year and will announce a winner at the Ohio Forestry Association (OFA) Annual Meeting on March 2.

If you have never attended the OFA Annual Meeting, or it has been several years since you have, I'd encourage you to register (*see page 13*) and attend this March. We are very thankful that Ohio Tree Farm Committee (OTFC) can ride the coattails of the Ohio Forestry Association at a venue we could never afford on our own. The meeting is a good opportunity to mingle with government and industry personnel who can impact how

we manage our tree farms. Each year annual market trends are discussed, and it is interesting and helpful to better understand the economic pressure timber buyers and harvesters are under when assessing our woodlands.

The Thursday morning educational sessions are typically a combination of government and industry speakers, followed by an awards luncheon and two afternoon program options. Under the direction of Tom Mills, the

Ohio Tree Farm Committee has taken an active role in scheduling educational sessions that are directly applicable to tree farmers. Feedback from attendee surveys directed program topic selection.

The Ohio Tree Farm Committee believes in-person, in-forest events are some of the best opportunities to educate current and prospective tree farmers. I personally was deeply affected by being able to see good forestry practices implemented

CHAIRPERSON'S PERSPECTIVE

Alan Walter
Committee Chair
Ohio Tree Farm

on farms belonging to my local regional woodland interest group, East Central Ohio Forestry Association (ECOFA). If you do not currently belong to a regional woodland interest group, or you've gotten lax in your meeting attendance since the pandemic, I strongly encourage you to join or become active again (*see page 30*).

In my case, before joining ECOFA, I'd never had the opportunity to walk through woods harvested under the terms of a timber management plan. It was an incredibly positive, eye-opening experience to be able to interact with landowners, their foresters, and sometimes even logging crews while they shared their goals and how they were being attained.

I encourage you to attend any field day in your local area, whether they are sponsored

by a local Soil and Water Conservation District office, nature center, or regional woodland interest group. The event will almost certainly be time well-spent to learn something new or get motivated about a project you've been delaying. If it is not too great a travel distance, please attend this year's Tree Farm of the Year field day, which will take place late summer or early fall. The details will be announced in a future issue.

The selection committee strives to review tree farms across the state and choose a candidate deserving of the honor. If you know a stellar example of forest management that we've overlooked (even if it is you), please point it out to your consulting forester, service forester, Tree Farm inspector, or any member of the Ohio Tree

Farm Committee.

There have been two recent developments that may expand the pool of potential tree farms eligible for Tree Farm of the Year. First, we know of past instances where deserving individuals have declined nomination because they were nervous about the time-commitment and planning involved in hosting a field day. To remedy this, the OTFC created a new committee tasked with handling as much of the day's logistics as the awardee would like to delegate, removing the pressure of lining up tents, food vendors, speakers, and tour guides. Second, based on last year's success with an offsite host for the field day, numerous past TFOTY awardees have offered to host on behalf of someone else in their vicinity who is deserving of being awarded but their farm is not logistically conducive to hosting a crowd. ♦

ENJOY THIS MAGAZINE WHILE
PLANNING YOUR 2023 ACTIVITIES.

PERSPECTIVE FROM ODNR

I imagine many of you remember June 13 and 14, 2022, when severe thunderstorms and multiple F1 tornadoes came through parts of Ohio.

The storm impacting Mohican-Memorial State Forest contained one F1 tornado with maximum winds of 105 mph from the northwest. This caused considerable damage to the trees at Mohican-Memorial State Forest, Mohican and Malabar Farm state parks, and neighboring districts, urban communities, and private woodlands. Within hours after the storm, Division of Forestry (DOF) crews, as well as other Ohio Department of Natural Resources employees and community members, mobilized, assessed the situation, and went to work clearing roads and trails to reach stranded visitors and campers. Public safety is always our highest priority and work was focused on clearing the areas most frequently accessed by visitors, residences, and the Mohican Young Star Academy facility.

The storm resulted in some level of damage to the entire forest, ranging from individual trees down or broken to entire stands of trees on the ground. For many parts of the forest, the damage impacted infrastructure and displaced recreational users. Roads in the state forest, the state parks, and most rural county and township roads were blocked with downed powerlines and trees.

While leading immediate clean-up efforts in the state forest, Mohican-Memorial State Forest Manager Chad Sanders also coordinated a Storm Response Plan for immediate and future recovery efforts. In the days and weeks following the storm,

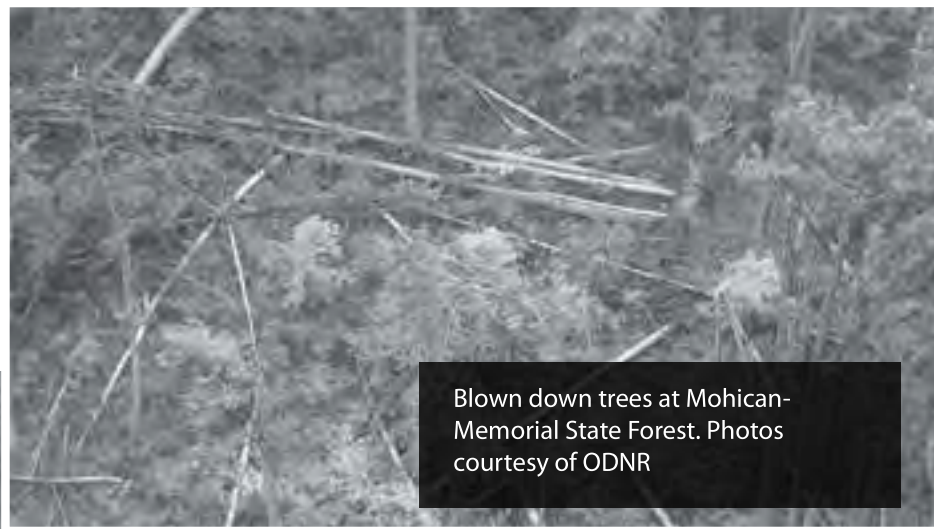
this included focusing on infrastructure such as access to Columbia Gas storage wells, parking areas, the horse camp, MARCS radio tower, and office facilities.

DOF forest crews continue to work through the prioritized tasks in the Storm Response Plan. Currently, the focus is on recreation areas and forest management. DOF staff conducted an aerial survey to map areas of severely damaged stands — stands with damage to 75 percent of the dominant trees.

Now that Mohican-Memorial State Forest is safe to visit, we are focused on our mission: sustainable forest management. Several crews are

at work salvaging damaged trees to recover their value, a portion of which will be shared with local governments. Salvaging some of the downed and damaged trees will restore wildlife habitat, reduce fire risk, and promote new forest regeneration in severely affected areas.

Thank you to all who have worked through this process and thank you to visitors to Mohican for their patience through the recovery efforts. ♦



Storm damage at Mohican-Memorial State Forest.

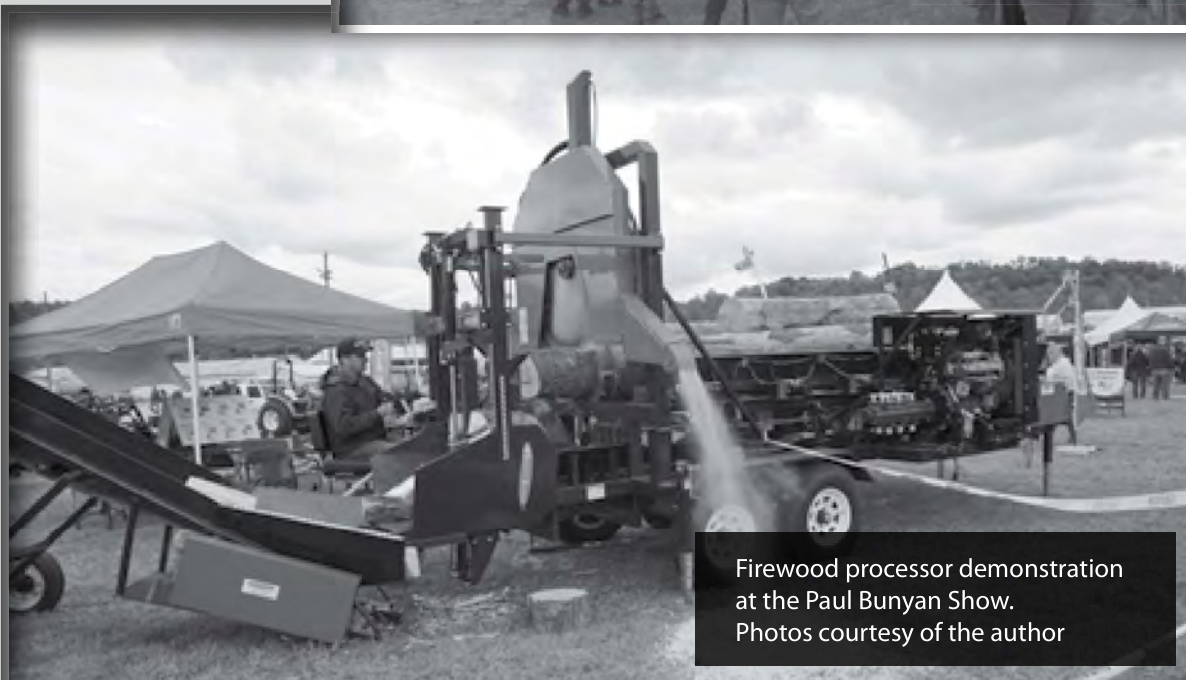


Large area of trees blown over at Mohican-Memorial State Forest.

2022 Paul Bunyan Show

I attended the Paul Bunyan Show for the first time this year, rounding out my list of “firsts” as the Ohio Forestry Association’s executive director. Many people have asked me throughout the year if I was getting a feel for the job and the industry, and I told them I would not feel like I had my feet under me until I had experienced

the Paul Bunyan Show. This year’s show was exceptional due to good weather, high attendance, a wide variety of vendors, and excellent volunteers. This show would not be possible without the tireless efforts of industry volunteers and staff who dedicated countless hours to this undertaking.



Firewood processor demonstration
at the Paul Bunyan Show.
Photos courtesy of the author

Recap

Jenna Reese
Executive Director
Ohio Forestry Association



Continued on page 28

Feller buncher harvester on display
at the Paul Bunyan Show.

A Carbon Program for Landowners



Across the United States, landowners strive to keep their forests healthy, create a better habitat for wildlife, and protect the legacy of their land, but in today's changing world, these goals may seem financially out of reach for some. Insert the growing popularity of the voluntary carbon market.

At its core, the carbon market is a platform through which landowners can earn income by reducing their carbon footprint. By managing their forests to sequester more carbon, companies can buy that additional carbon storage in the form of verified carbon credits to support their own strategy for reducing net carbon emissions. This voluntary market provides a place where companies and forest owners can come together to initiate new, additional climate-smart forestry to help mitigate climate change.

Historically, this marketplace was only accessible to landowners with large plots of land; however, carbon programs are evolving to take new approaches that allow landowners with a variety of property sizes to participate. Meanwhile, project developers

and international leaders are working to standardize principles and increase credibility. These standards will ensure landowners and corporate buyers are participating ethically and assure that their contribution to the carbon market is meaningful to the planet.

One such new program, created by two non-profits, the American Forest Foundation (AFF) and The Nature Conservancy (TNC), is leading the way for carbon programs suitable for small land holders. Launched in 2020, the Family Forest Carbon Program provides a critical revenue stream for landowners while helping them achieve their personal goals and make a positive impact on the planet. The program is set to expand into regions of Ohio in 2023.

How Did We Get Here?

A decade ago, carbon projects were developed solely on 5,000-plus acre tracts – large industrial pieces of forestland– but more than 80 percent of forestland in the U.S. is held in smaller tracts of 20 to 2,000 acres and owned by families and individuals. As of 2019, less than 1 percent of land in forest carbon projects included small land holdings. The lack of representation from small land holders can be attributed to high upfront costs for measurement, overall complexity of the market, and 100-year commitments to participate. Carbon projects were just not feasible for those with smaller woodlots.

Parallel to this, surveys from the USDA Forest Service show those with smaller woodlots want to do what's right for their land including improving biodiversity, caring for wildlife, and making their forests healthier for the next generation – all goals that need long-term planning and active sustainable forest management. What holds most back from achieving these goals is a lack of technical support from a professional forester and the high cost of management. Timber markets can help offset

expenses but are not frequent enough and usually fall short of the total cost.

AFF and TNC took all of this into consideration when creating their new program. Working with scientists, foresters, timber companies and more, they developed a program that could meet the needs of both landowners and corporate buyers.

“We know landowners have good intentions for their land, but that many are not equipped to take active steps to prioritize sustainable management,” says American Forest Foundation’s Family Forest Carbon Program senior director Christine Cadigan. “If we want to get more landowners off the sidelines and engaged in the fight against climate change, we need to find solutions that overcome all their barriers. We can solve the cost challenges with markets, but it needs to be paired with guidance and support if we are to make a meaningful impact on conservation.”

The Family Forest Carbon Program

The Family Forest Carbon Program is a long-term resource for landowners. The program provides payments to family forest owners to implement scientifically proven forest practices that increase the carbon sequestered and stored in trees. In addition, the program provides expert assistance from a professional forester and creates a forest management plan customized for the landowner’s property.

Each forest management plan is regionally specific, selected with the help of forestry experts and stakeholders in that landscape to ensure they not only increase carbon sequestration and storage, but also benefit wildlife and bird habitat, and forest resiliency. The program also offers options that allow a landowner to continue to perform thinning harvests and cut trees for personal use within

sustainable management requirements if they choose to do so. The program seeks to complement the forest products industry as an additional revenue option for landowners’ diverse forest goals.

The Family Forest Carbon Program is actively enrolling landowners through the U.S. Northeast and Midwest, as well as in Pennsylvania, West Virginia, and Maryland, with plans to expand to Ohio in the coming months.

Enrollment is available to properties with as little as 30 acres. In the Central Appalachian region, enrolled landowners commit to a 20-year contract to grow a more mature, quality forest by avoiding the unsustainable practice of high-grading. Some limited harvesting is allowed during the contract period, within sustainable harvesting requirements of the contract. Payments are determined by property size and forest conditions and are guaranteed throughout the contract period, regardless of carbon credit sales.

The program’s robust offerings appeal to a broad range of landowners, including those who are new to forest management. In the first months of the program, upwards of 65 percent of the landowners who enrolled did not previously have a management plan.

“I’ve been meeting with landowners on their property who have never met with a forester before,” says Sarah Hall-Bagdonas, Senior Forestry Manager for the Family Forest Carbon Program. “These visits are a gateway for landowners who may not have had the financial or technical resources to get started, and now they are hungry for more. Their journey may start with our program, but it’s unlocking a much broader opportunity to roll up their sleeves and tackle conservation.”

Continued on page 24

CALENDAR

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29-30

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APRIL 4-5

Ohio Forest Health Meeting

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Contact Tom Macy at Tom.Macy@dnr.ohio.gov.

28

Northeast Ohio Forestry Association Annual Banquet

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JUNE 9

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11-16

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She's a Force of Nature

Met Janice McMahon, owner of one of the world's most respected forest carbon verification bodies, Aster Global Environmental Solutions (Aster Global). Aster Global, based right here in Ohio, provides independent validation and verification services for agriculture, forestry, and other land use (AFOLU) projects worldwide.

Our readers have been studying forest carbon, and many tree farmers have expressed interest in selling their carbon credits. As we are approached by programs, we must consider their legitimacy when deciding how or where to sell our credits. That's where Janice and her team can help. Simply stated:

1) Forest carbon project developers (like The Nature Conservancy, American Forest Foundation, and Forest Carbon Works) must follow approved methodologies to sell credits on voluntary or regulatory registries. These methodologies must be validated by approved technical experts. Aster Global is an approved methodology assessor for Verra – the registry that AFF is aligned with on the Family Forest Carbon Project. In fact, the Aster Global Team assessed VCS VM0045 Methodology for Improved Forest Management Using Dynamic Matched Baselines from national forest inventories (available on verra.org). That is the methodology being promoted by AFF and TNC.

2) Once these methodologies have been approved, carbon credits must be

verified. Validation and verification involve reviewing data and sampling of information to verify the claims of carbon sequestration. This involves knowledge of forestry as a well as strong statistical skills. Aster Global is an accredited validation/verification body. Their accreditation to ANAB (American National Standard Institute National Accreditation Board) has allowed them to complete more than 350 AFOLU offset project validations and/or verifications. The Family Forest Carbon Program will have to go through such a validation/verification process prior to selling carbon credits.

Janice studied wildlife ecology with a forestry minor at the University of Florida and next obtained her MS in wildlife science at Auburn University. Following graduate school, in January 2001, she started working for Environmental Services, Inc (ESI) as a project scientist working on wetland delineations, permits, endangered/threatened species surveys, monitoring and relocation projects, small scale forest inventories and management, prescribed burns, and more. She and her husband Shawn got in on the ground floor when forestry carbon became an industry in the early 2000s. After building a forest carbon team and a reputation from more than 13 years as a validation and verification body, in spring 2019, Janice and Shawn purchased the Forestry Carbon and GHG Services business from ESI and started a new company called Aster Global

Owner and President of Aster Global Environmental Solutions

Janice McMahon

By Cassie Ridenour

Environmental Solutions.

To put Janice's career in perspective, Verra, which is the world's leading carbon registry, incorporated in 2007. Since then, they have issued over one billion Verified Carbon Units (VCUs), each representing one metric ton of CO₂e offset (a typical car emits 5 tons of CO₂e/year). Janice and her team were among the first to work with Verra, and her work has contributed to the legitimacy of their carbon credit program.

Continued on page 25



Janice McMahon, owner and president of Aster Global Environmental Solutions.

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Focus on Forest H

Common Name Change

If you've never heard of spongy moth, allow me to introduce you to the new name of a not-so-new insect pest. "Gypsy moth" is likely a much more familiar common name of *Lymantria dispar*, a moth species native to Europe. In March of 2022, the Entomological Society of America (ESA) officially changed the common name to spongy moth, after several months of consultation with various agencies and stakeholders.

The new common name was derived from that used in France and French-speaking Canada, "spongieuse" – referring to the moth's sponge-like egg masses. The ESA is considering common name changes for other insects too, through their Better Common Names Project. "Gypsy" is a widely acknowledged ethnic slur referring to Roma/Romani people, who have throughout their history, been the targets of enslavement, genocide, forced migration, social exclusion, and other manifestations of anti-Romani racism.

While the use of an ethnic slur was reason enough to stop using the common name, using a name associated with a group of people historically victimized to describe an invasive insect pest targeted for population control and eradication is even more inappropriate. For more information about the name change, see this website: <https://entsoc.org/publications/common-names/spongy-moth>.

Spongy Moth Background and Description

Spongy moths were intentionally imported to Massachusetts in 1869 in an attempt to develop silk production. Like most invasive species, it subsequently escaped into nearby natural areas and since its introduction, has spread throughout New England, south to North Carolina, and west through portions of the Great Lakes states and Canada. The first documented spongy moth in Ohio was in 1971 in Ashtabula County. Today, 51 counties are quarantined for spongy moth by the Ohio Department of Agriculture.



Adult female spongy moths are mostly white, emit a mating pheromone to attract male moths, and cannot fly, while males are able to fly and are generally brownish gray in color. In Ohio, adult moths are typically present from late-June to early-September. After mating, females lay a single egg mass, which is tan, about 1 to 1.5 inches in length, fuzzy or spongy in texture, and can contain 500-1,000 eggs. Egg masses are often laid on the trunks and branches of trees but may also be deposited on other flat surfaces such as buildings, outdoor furniture, and firewood. The eggs overwinter, and larvae (caterpillars) begin to emerge



ealth: Update on Spongy Moth

Tom Macy
Forest Health Program Administrator
ODNR Division of Forestry

typically in mid-April. The larvae feed for six to eight weeks, molting several times as they grow larger. Young caterpillars are generally black, and the larger, older caterpillars develop rows of distinct blue and red dots and are covered in hairs. Larvae reach two to three inches in length before they pupate in early-June and emerge as adults in late-June.

Large swath of forest defoliated by spongy moth.
Photo courtesy of Pennsylvania DCNR



The larvae of spongy moth can feed on more than 300 species of trees and shrubs. While oaks are their preferred host plant, aspen, basswood, crabapple, birch, and willow are highly suitable hosts. Mature larvae are also capable of defoliating conifers like pines, hemlock, and spruce. Large outbreaks of spongy moth can occur and result in the near complete defoliation of hundreds or even thousands of acres of forest. While

most otherwise healthy deciduous trees can withstand a single defoliation event, and flush new leaves several weeks after being defoliated, consecutive years of spring defoliation by spongy moth caterpillars can weaken trees. Once in a weakened state, they are more susceptible to attack by diseases and other insects, can

Branch of oak tree defoliated by spongy moth caterpillars. Bill McNee, Wisconsin DNR



Spongy moth defoliation mapped in the Northeastern U.S. in 2021 and 2022. Photo courtesy of USDA Forest Service



Boundaries of the *Slow the Spread* project area in Ohio in 1999 and 2023, based on a decision algorithm ("DA"). Photo courtesy of Ohio Department of Agriculture

Continued on page 26



Wild Wonders in the Woods

The Marbled Salamander

When I encounter a vernal pool in the woods, or a stream with rocky side banks, I am unconsciously drawn to it. In fact, if you have spent time with me in the woods, you will have undoubtedly lost me a time or two as I veer off course to check out a resident pool or rocky shore. I'm drawn to the possibility of finding one of my favorite wild wonders in the woods (by this time, constant reader, you are realizing I have many favorites) — the salamanders!

It was difficult to choose a species to feature in this article, as Ohio has quite a diversity of salamanders, but I chose the marbled salamander due to its unique lifestyle. Many of you are likely aware of the late winter to early spring migrations

of spotted salamanders and other large-bodied “mole” salamanders (ambystomatids) to breeding pools.

The marbled salamander, despite also being a mole salamander, does not join its fellow ambystomatids in these early-year journeys. Are you wondering why they wait and where they breed? Let's venture inside the life of a marbled salamander...

The Life of a Marbled Salamander

Marbled salamanders are short (3.5 to 5.5 inches in length) and stout, with bold white or gray



Marbled salamander in the soil.
Photo courtesy of Matt Muir

markings on a black body. In some individuals, the black base is almost dark purple in color. During the breeding season, males and females show sexual dimorphism — the cross markings on males turn a pale, bright white, while females stay gray, slightly rose, or purple in coloration. In Ohio, marbled salamanders are fairly common in the southeastern part of the state and in a few northeastern counties, particularly Lake and Geauga counties.

The bold coloration of marbled salamanders makes it difficult to confuse them with others in the family Ambystomatidae, of which there are seven species in Ohio, including the spotted salamander and Jefferson salamander.

Ambystomatidae salamanders are sometimes called mole salamanders because they spend much of their lives underground similar to our mammalian moles. They are known for their migrations to vernal pools, especially pools within forests. Once they reach their chosen vernal pool, males and females mate, females deposit eggs, then adults leave



Marbled salamander.
Photo courtesy of Matt Muir

(Ambystoma opacum)

What is a vernal pool?

A vernal pool is a shallow pool that holds water through spring (and sometimes into the summer in larger pools). They typically do not contain fish. However, don't be fooled into thinking vernal pools are devoid of life; they are diverse and dynamic ecosystems. For breeding amphibians, these pools are critical breeding sites, lacking the fish other water bodies have that might prey on tadpoles and larvae. Vernal pools that are surrounded by woodlands are ideal because they provide both breeding and terrestrial habitat.



Marbled salamander walking along a path. Photo courtesy of Jake Schneider

the pools and head back to their solitary lives.

Marbled salamanders, on the other hand, wait until fall to begin their journey to the same vernal pools. They prefer pools located in or near their preferred habitats,

including mature deciduous or bottomland forests and river floodplains. Mating may take place at or near the pool, but it can also take place some distance away. Females lay eggs terrestrially under logs, moss, leaves, or debris along the margins of the pool or within the pool if it is dry. Eggs are typically laid in September to October and hatch when the pool fills with fall rains. The larvae overwinter in the pool and complete metamorphosis in the spring.

Perhaps at this point, you may be wondering a few things. Why do marbled salamanders wait until fall to breed, and how can they lay eggs in a dry pool? Ah, just another marvel of science, evolutionary adaptation, and ecological intrigue. The name



Marbled salamander curled up. Photo courtesy of Matt Muir

Continued on page 23

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LEAFING OUT: Swamp White Oak

Dave Apsley
Ohio State University Extension

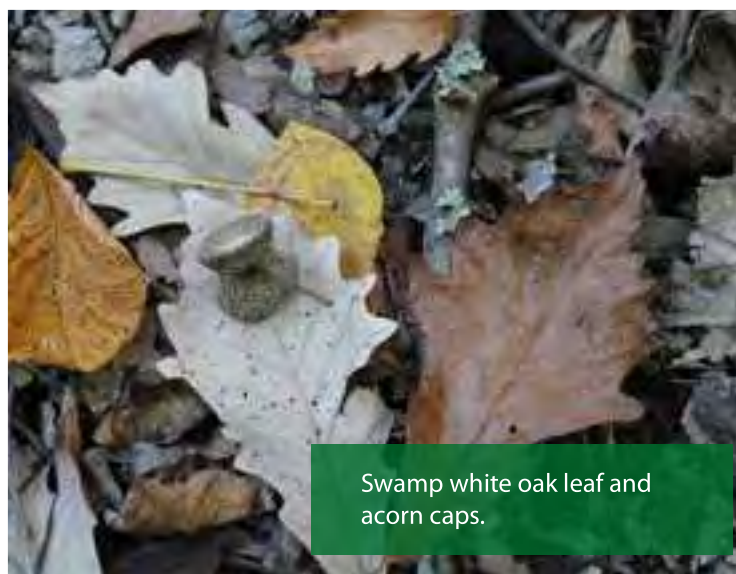
Swamp white oak is quite an appropriate common name for this species, belonging to the white oak group (*subgenus Leucobalanus*) and typically found in swamps, moist bottomlands, and upland wet depressions (Leopold et al. 1998). Much of the tree's range occurs north of the Ohio River Valley, but it can be found throughout Ohio except for Butler, Preble, and Washington counties (BONAP 2015). Swamp white oak is listed by the U.S. Army Corps of Engineers as a facultative wetland plant (USDA Plants 2023), which means it usually occurs in wetlands but may also occur in non-wetlands (NWPL 2020). It is often found in mixed stands with other wetland species like pin oak, red maple, silver maple, and American elm (Rogers 1990).

Swamp white oak's scientific name, *Quercus bicolor*, is also very appropriate. *Quercus* is of course the genus for oak, and *bicolor* refers to the contrast in color between the upper dark green surface of the leaf and the leaf's underside, which is nearly white and somewhat hairy. This characteristic is even useful for identification when the leaves have fallen to the ground (see photo 1). These bicolored leaves are typically 5 to 7 inches long with large, rounded teeth or lobes and very shallow sinuses between lobes.

Admittedly, both the common and scientific names provide great clues for identifying this species, however, one of the easiest and most reliable ways to identify swamp white oak is by its peduncle. So, what is a peduncle? Simply put, for oaks it's the stalk that connects the acorn cap to the twig. With most other Ohio oaks peduncles are typically less than 1 inch long, while those of swamp white oak can be up to 4 inches in length (bottom photo). Acorns are about 1 inch in diameter, and around one-third of the nut is enclosed by a bowl-shaped cap (Leopold 1998). Like its white oak relatives, the acorns mature in one growing season and are preferred and valued food for turkey, deer, squirrel, and other rodents. Because swamp white oaks grows in or near water, its acorns are also an especially important food source for ducks (Rogers 1990).

Like other oaks, the tree's reddish-brown buds occur in clusters with whitish gray hairs at the tips of the tree's twigs. Their buds are also more rounded and not angled (Leopold 1998). Bark found on the tree's branches is often thin and exfoliates by peeling away in ragged papery scales (Harlow et al. 1991). Another characteristic that differentiates it from other white oaks, is its inability to self-prune. Mature swamp white oak trees often have small dead branches or knots along the main trunk. While their wood is nearly indistinguishable from other white oaks and can be used for comparable purposes including cooperage, its inability to self-prune results in considerably more defects decreasing the amount of usable wood and consequently its value.

Continued on next page



Swamp white oak is a medium to large tree that grows relatively quickly. Although it is naturally found in wet soils, it can grow well under droughty soil conditions once it becomes established. It does not grow well in basic, high pH, soils (Leopold 1998). These trees are highly desirable shade trees for most landscape settings if there is adequate space for growth and maturation. If you've got wetland habitat or a vacant place in your landscape, consider planting swamp white oak and you will not be disappointed. ♦

Visit <http://go.osu.edu/treeid> to find a short video clip on swamp white oak identification and ecology



References

Harlow, W.M., E.S. Harrar, J.W. Hardin and F.M. White. 1991. Textbook of Dendrology. 7th edition. Page 301

Kartesz, J.T., The Biota of North America Program (BONAP). 2015. North American Plant Atlas. (<http://bonap.net/napa>). Chapel Hill, N.C

Rogers, R. 1990. Swamp white oak. Silvics of North America, Volume 2 Hardwoods. R. M. Burns and B.H. Honkala. Ag. Handbook 6544. USDA Forest Service 1990. Pages 614-617

USDA, NRCS. 2023. The PLANTS Database (<http://plants.usda.gov>, 01/05/2023). National Plant Data Team, Greensboro, NC USA.

U.S. Army Corps of Engineers 2020. National Wetland Plant List, version 3.5 <http://wetland-plants.usace.army.mil/>

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Did you know?

Other salamander species operate even further outside of their double-life standard. Red-backed salamander eggs don't need water at all and are laid under a damp rotting log or rock. The larval stage takes place inside the egg, so upon hatching, they are tiny versions of a metamorphosed adult.

amphibian refers to the fact that they lead two lives – one in the water and one on land. In fact, one of the facts shared with us in elementary school about these charismatic critters, is that amphibians need water to breed. But nothing is absolute in nature, right? There are always exceptions. In the case of the marbled salamander, the eggs *do* need water to hatch, however, they can exist for a time outside of water, in a terrestrial environment.

Another unique behavioral aspect of marbled salamanders is female parental care. Many amphibians lay eggs and exit, leaving their young to figure out life on their own. Marbled salamander mamas stick around a little longer, which helps to ensure their offspring have a better chance of making it to their watery hatch date. Females guard their nests, of roughly 70 to 100 eggs, for several weeks.

Research has shown that guarded nests have higher clutch sizes, egg viability, and hatching success than unguarded nests. Interestingly, adult females cannot swim, so they must leave their eggs before the pool (or floodplain) fills with water and return to their preferred habitats under leaf litter, rocks, logs, or within small-mammal burrows. One might think that marbled salamanders are late in the breeding game by waiting until fall, but in truth, they are getting a leg up on the competition, namely other

Ambystomatidae salamanders that breed in late winter and early spring. For example, by the time spotted salamanders are arriving at pools, marbled salamander larvae are a solid 2 to 3 months ahead, well on their way to completing metamorphosis and swimming. This doesn't always bode well for other Ambystomatidae salamanders, because along with invertebrates, marbled salamander larvae also feed on smaller salamander larvae!

Signs To Look For

Amphibians' lives are very seasonal, making it easy for us to know when to start looking for activity (or listening in the case of frogs). Frogs start calling as early as February. Mole salamanders travel to pools in March through April, and egg masses can be found shortly after.

Use your ears to locate vernal pools if you aren't already aware of any on your property. Listen for wood frogs, chorus frogs, and spring peepers. If you hear them, odds are there is a vernal pool out there that may also be used by salamanders in the spring and marbled salamanders in the fall. Migrations of marbled salamanders to pools often occur on rainy nights in September through November. Check under logs, rocks, and other debris along the borders of pools for adults.

Wrapping It Up

We are fortunate in the United States to have more species of salamanders than anywhere else in the world. In fact, the southern Appalachians are a hot spot, and in Ohio, we pick up the edge of that diversity. When it comes to wild *amphibian*-wonders in the woods, we certainly have a lot to brag about!

Want to learn more about Ohio's amphibians? Check out ODNR Division of Wildlife's Amphibians of Ohio Field Guide (www.wildohio.com) or obtain a copy of Amphibians of Ohio, published by the Ohio Biological Survey (www.ohiobiologicalsurvey.org/publications/).

Cautionary note:

To keep our salamanders safe, be sure to flip over rocks and logs carefully so as not to destroy the microhabitat underneath (or the log itself). If you are lucky enough to find a critter taking cover below, enjoy your find and then replace the log (or rock) with care if the animal has not moved. If the animal has moved, nudge it outside of the space covered by the log to avoid crushing it when replacing the log. Once everything is back in place, it will quickly retreat underneath once again. Finally, chemicals on our skin can irritate the permeable skin of amphibians, so if handling is necessary, make sure your hands are wet and free of soaps or lotions.

Ensuring High Integrity for All Stakeholders

The Family Forest Carbon Program aims to make a meaningful impact on the planet, which is why integrity is at the root of our program – both for landowners and companies.

The carbon generated by enrolled landowners in the program is measured and verified by a new forest carbon accounting methodology that improves accuracy and transparency. It is approved by Verra's Verified Carbon Standard, the first to use a dynamic baseline approach. This new methodology compares the carbon sequestered on lands enrolled in the Family Forest Carbon Program to highly comparable forests that are not enrolled in the program in real time. By measuring the difference between the forests, the methodology pinpoints the program as the sole variable that creates additional carbon benefits on enrolled landowners' properties.

The Family Forest Carbon Program also prioritizes integrity shown through their parameters used to determine who they allow to purchase carbon credits. The program only works with companies who are taking a comprehensive approach to their net-zero strategy, reducing as much of their emissions as technically and economically possible. Once these collective efforts have been exhausted, they are choosing to take the last step needed to neutralize their residual or supply-chain emissions through verified carbon credits.

Stewardship-minded Landowners Choose the Family Forest Carbon Program

Linda and Mike Jackson were gifted 113 acres outside the greater Pittsburgh area from Laura's mother in 1983. They were thrilled to move to the

property and spend time in the woods documenting the wildlife as amateur nature photographers.

Two unsustainable high-grading harvests of the past had left many of the stands degraded. An infestation of spongy moths further damaged the trees that remained. What was once a healthy forest became a challenge to manage when invasive species of non-native shrubs and vines began popping up all over. In 2000, they took a forest stewardship training course and learned the value of forest management. They applied for a cost-share program, did a crop tree release, and more.

It didn't take long for them to realize that staying on top of the invasives would be an ongoing task and they needed resources to support healthy forest growth. That's when the Jacksons discovered the Forest Family Carbon Program. They were drawn to a carbon program because it offered a steady, long-term revenue stream to enable them to take on their forest projects and continue to improve their forest's health. A program run by two reputable non-profits with an emphasis on science-based forest management appealed to their commitment to use their forests to fight against climate change. They also liked the program's ethical guidelines used to select its carbon credit buyers and their efforts to help those companies conserve forest ecosystems. They enrolled 80 acres in the program's Growing Mature Forests practice and 28 acres in the Enhancing Future Forests practice.

The Jacksons are hopeful the Forest Family Carbon Program will show other landowners the ecological value of their trees. The program is a "really positive way for landowners to benefit their forest, their pocketbook, and wildlife," says Laura Jackson. ♦

Landowners who are interested in enrolling their forests in the Family Forest Carbon Program can learn more at www.familyforestcarbon.org.

Here are Some of Janice's Thoughts in Her Own Words:

Agriculture, Forestry, and Other Land Use (AFOLU) will continue to be a very important part of the puzzle to help combat climate change. The future is very bright and the AFOLU sector will continue to grow because there are a lot of people and organizations trying to develop methodologies and programs to include all landowner types and forest sizes, because every forest and farm can make a difference.

Her advice to landowners considering carbon programs:

Do your homework. There are multiple options that currently exist, but there are additional options that will become available very soon for small forest landowners. When approached by carbon offset development companies, ask for references, existing project lists, and approvals. Proper competencies and experience are very important in this sector.

Janice's work has taken her around the world. She presented at a climate conference in Dalian, China and then headed to

South Africa to validate and verify a forest restoration project that included local community members collecting native seeds, growing trees in small nurseries, and planting them on cleared and degraded lands. While her international travel has slowed, her ambition and drive have not, as she leads Aster Global while being a busy mom of three children.

Janice's work benefits Ohioans, carbon programs worldwide, and the future health and safety of our environment. She is a true force of nature! ♦



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lead to widespread tree mortality. Coniferous trees are generally killed after a single defoliation event.

Spongy moth outbreaks are highly susceptible to two main diseases causing their outbreaks to generally last two to four years. The first, nucleopolyhedrosis virus (NPV) causes high levels of caterpillar mortality only when the spongy moth population is at very high densities. The second, *Entomophaga* fungus, is more dependent on weather than the spongy moth population density. With plentiful rainfall and high humidity, the fungus can cause significant spongy moth population declines even when population densities are low. So, while wet springs can exacerbate some plant disease issues, they can be helpful in decreasing spongy moth populations.

Management Options

Besides the naturally occurring NPV and *Entomophaga* fungus, the most effective treatments for landscape-scale suppression of spongy moth involve aerial application of insecticides (by crop dusting-type aircraft) that target the caterpillars, or the spongy moth mating pheromone, which can disrupt the ability of adult moths to mate. The most commonly used insecticide for control of the caterpillars (“larvicide”) is *Bacillus thuringiensis* variety *kurstaki* (“Btk” for short), a naturally occurring bacterium found in soil. Btk is a common control method for butterfly and moth caterpillars. The spongy moth mating pheromone can also be synthetically produced and applied to forests to disrupt male moths’ ability to find females to mate.

Recent Developments

In 2021 and 2022, there were major outbreaks of spongy moth in parts of New England, New York, Pennsylvania, and Michigan. The total acreage of defoliation was 2.6 million acres in 2021 and 1.7 million acres in 2022. We have been fortunate here in Ohio with no significant outbreaks of spongy moth since the mid- to late-1990s. This is due in large part to the efforts of several key agencies. The Ohio Department of Agriculture, with funding support from the USDA Animal and Plant Health Inspection Service (APHIS) and Forest Service, implements several programs to monitor, suppress, and eradicate spongy moth populations and limit their damage. This integrated pest management approach involves monitoring thousands of traps across the state every summer to identify areas

where spongy moth populations are building and conducting chemical or biological treatments to help control their populations and impact.

Ohio has been a part of the national spongy moth Slow the Spread program since 1998, which aims to slow the advancement of spongy moth to noninfested areas. From trapping data and various algorithms, a spongy moth infestation line has been identified. Since 1999, that line has been pushed back (to the north and east) in Ohio by an average of nearly 60 miles (approximately 2.6 miles per year). In fact, Ohio has seen the most success of any state involved in the Slow the Spread program, where the average spread rate is 2.1 miles per year. In the absence of Slow the Spread, spongy moth would advance approximately 13 miles per year.

Due to the low populations of spongy moth recorded in Ohio in 2022, planned treatments in 2023 will only include application of spongy moth mating disruption across 14,000 acres. This is the smallest amount of acreage treated in the history of ODA’s spongy moth programs, and the only time they have not used aerial application of a larvicide. These are significant milestones pointing to the program’s success. Of course, the possibility of future spongy moth outbreaks certainly remains if conditions are right.

Collecting a specimen or getting a quality photo is the best way to determine if you have discovered a spongy moth. Please report any life stage of a possible spongy moth to the following:

- Ohio Department of Agriculture using their plant pest reporter (<https://agri.ohio.gov/divisions/plant-health/invasive-pests>), or call (614) 728-6400, or email plantpest@agri.ohio.gov
- The Great Lakes Early Detection Network smartphone app
- The ODNR Division of Forestry at (614) 265-6694 ♦



Aerial application of larvicide for spongy moth control. Photo courtesy of John Ghent

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2022 Paul Bunyan Show Recap continued from page 9

It is amazing how inextricably linked weather and attendance are for outdoor trade shows. We could not have asked for a better weekend with the sunshine and crisp air. Great weather always makes it easier to set up, host, and tear down the show, especially when you are not mired in multiple feet of mud! Attendance increased by about 3,000 people compared to last year and as much as I would like to think it had something to do with a new executive director, it was likely because of the better weather. Attendance was also likely impacted by the number of popular YouTube influencers that attended, such as Outdoors with the Morgans, Buckin' Billy Ray Smith, and Burton Ferguson. According to gate numbers, we estimate over 13,000 people attended between October 7th and 9th. In addition to the increased number of attendees, there were considerably more booths and exhibiting companies this year, along with an army of volunteers. It is my understanding that the "Flapjacks for Lumberjacks" hosted by the Ohio Tree Farm Committee was also a success, with several people commenting how good the flapjacks were this year.

I was most impressed by how much industry education is available at the show. Don't misunderstand me, driving around to the different equipment dealers, while very pregnant, and seeing the large chipper and grinder demonstrations was also awesome — that is what trade shows are all about! I witnessed firsthand

and received feedback regarding the wide variety of trainings offered at the show and impressive amount attendees learned. This event provides opportunities to professionals and the general public alike and is critical to Ohio Forestry Association's mission of supporting the management of Ohio's forest resources. Tree farmers, foresters, and loggers benefit from training, on topics like invasive species management, and demonstrations highlighting the latest equipment available and safety measures to make the entire industry better. Attendees from the general public can learn how to better manage their own property and increase forest management around the state. From how to become a certified tree farmer, to how to safely execute a hinge cut on a hazardous tree, any level of interest or engagement in forestry could find relevant and timely information.

Another important aspect of the show is how tangibly it demonstrates the scale of the forest products industry in Ohio. I had the opportunity to introduce several partner organizations in the broader agricultural industry to what forestry offers the state. A conversation explaining the \$29 billion economic impact of forestry only goes so far, but *seeing* the impact in person makes an indelible impact. Ohio forestry has a compelling story to tell, and the Paul Bunyan Show provides a unique stage to showcase it. ♦





Aerial tree service helicopter at the Paul Bunyan Show.

Reserve October 6-8 2023 on your calendar for this year's Paul Bunyan Show!

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Bundle up and enjoy a stroll around your yard, neighborhood, local park, or evergreen forest. On your winter walks, try the following:

- Stop and listen to the sounds of winter (e.g., wind or snow under feet). Ask: *How does our walk sound, smell, or look different from the last time we walked? What is the same?*
- Search on the ground for cones. Look up high in the trees for cones still on them. Look at the branches and knobs on deciduous trees. With the leaves gone, these shapes are easier to see.
- Find places that are out of the wind (e.g., close to a building or next to a tree or hedge). Ask: *If you were an animal outside in winter, where would you stay?* Search on the ground for tracks and other animal signs.
- Search for animal homes in deciduous trees. Nests and holes should be more visible now. Look for evidence of ways animals survive in winter.
- Lie down under evergreens, and look up through the branches. Talk about the visible patterns, and experience the way evergreens provide shelter from wind, rain, and snow.
- Look for the whorls of branches on conifers, such as pine, spruce, and fir. Each year, the tree adds a new whorl of branches. You can estimate the age of the tree by counting the whorls. Add two or three years to represent the first few years of growth before the tree started making whorls.

Once back inside, prepare and enjoy some hot tea or cocoa, and remind children that these tasty treats also come from trees! Plan to visit the trees again in the spring to look for new growth.

Winter Treats

Mix one part peanut butter (or suet, if available) with five parts corn meal and pack the mixture into the crevices of a large pinecone. This Audubon-approved, all-season mixture will attract woodpeckers, chickadees, titmice, and warblers.



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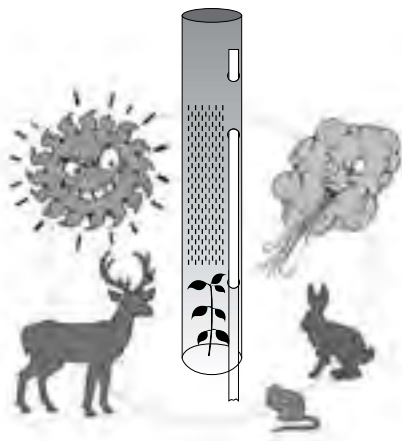
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