New England is home to nine species of bats. These nine species fall into two categories depending on where they spend the winter. One group migrates south, and the other group hibernates in caves, mine shafts, and other hibernacula. Two of these hibernating species, the Indiana bat and Northern Long-eared bat, are listed as federally endangered, and several of the other species are also listed as endangered or threatened in individual New England states. For hibernating bats, the primary reason they are threatened is because of White Nose Syndrome, a deadly disease caused by a fungus introduced from Europe.

Protecting hibernacula is critical for the overwintering species, but all nine bat species also use New England’s forests in the summer to forage, mate, and roost. This means that forest management decisions can help to protect and enhance the habitat conditions that bats need. Management strategies have mostly focused on ways we can help to protect bat roosting habitat by retaining live and dead cavity trees, trees with deep cracks or bark furrows, and trees with sloughing bark. But as the article in this science theme illustrates, roosting habitat is not the only concern for bats: a lack of suitable foraging locations also poses a limitation. Particularly where young forests are underrepresented in the landscape, insect foraging opportunities can be enhanced by creating periodic canopy gaps. These gaps can also support a range of other wildlife species, too.

Read the article on page 6.
New England Society of American Foresters

The News Quarterly is the official publication of the New England Society of American Foresters. It is emailed to members and advertisers in January, April, July, and October. Every effort has been made to ensure that all content is complete and accurate. Please accept our sincere apologies for any errors or omissions and report them to:
Matt Russell
nesafnq@gmail.com

Our mission as foresters is to be responsible stewards of the earth’s forests while meeting society’s vital needs. The challenge of our mission lies in keeping forest ecosystems healthy and intact while concurrently drawing on their resources. We will meet this challenge by carefully monitoring and managing the effects of natural and human forces on the forest. Our decisions will be guided by our professional knowledge, our compassion for all living things, our desire to improve citizens’ lives, and our respect and concern for the entire forest ecosystem. By advancing forestry science, education, technology, and the practice of forestry, NESAF will provide the leadership to achieve its mission.

NESAF Executive Committee Members

Chair: Adam Moore
moore@sheriffsmeadow.org
Chair-Elect: Mark Ashton
mark.ashton@yale.edu
Past Chair: Diana Frederick
diana.frederick66@gmail.com
SAF D6 Director: Karen Bennett
Karen.Bennett@unh.edu
Secretary: Mallory Bussell
Mallory.bussell@gmail.com
Treasurer: Donn Downey
Donn@forestmetrix.com

Canada: Vacant

CT: Frank Cervo
frank.cervo@ct.gov
MA: Joelle Vautour
joelle.vautour@gmail.com
ME: Carol Redelsheimer
carol.redelsheimer@gmail.com
NH: Ted Howard
Ted.Howard@unh.edu

RI/Elections Coordinator: Paul Dolan
pقدولان1@verizon.net
VT: Jess Wikle
jessica.wikle@uvm.edu

Science/Tech Chair: Ali Kosiba
alexandra.kosiba@uvm.edu
Membership Chair: Susan Francher
francher@comcast.net
Policy Chair: Susan Romano
susankromano2017@gmail.com
NESAF Archivist & Awards Chair: Ken Laustsen
KALaustsen@twc.com
Grant Chair: Mel Harder
mel.harder@snnet.net

CFE Coordinator: Andrew Fast
Andrew.fast@unh.edu
Website Administrator: Wendy Weisiger
Wendy.weisiger@gmail.com
News Quarterly Editor: Matt Russell
nesafnq@gmail.com

Division and Chapter Officers

 Granite State
Chair: Alexa Denhoff
adenhoff@landvest.com
Secretary: Samuel Taylor
samuell.taylor@dnr.nh.gov
Treasurer: Susan Romano
susankromano2017@gmail.com
News Corres: Steve Eisenhaure
woodlands@unh.edu

 Green Mountain
Chair: Ali Kosiba
Alexandra.kosiba@vermont.gov
Vice Chair: Bill Musson
bill@redstartconsulting.com
Secretary: Ginger Anderson
Qoveday56@gmail.com
Treasurer: Sarah Ford
sarahl@forestcarbonworks.com
News Corres: Ginger Anderson
qoveday56@gmail.com

 Maine
Chair: Kyle Burdick
kylerobyburdick@gmail.com
Secretary: Kris Hoffmann
kristen@fsmaine.org
Treasurer: Jake Metzler
jake@fsmaine.org
News Corres: Jason Desjardin
Jdesjardin@sevenislands.com

Yankee
Chair: Tim Hawley
tchawley@snet.net
Vice Chair: Michelle Wood
Michelle.Wood@ct.gov
Sec/Treas: Thomas Worlhey
thomas.worlhey@uconn.edu

 News Corres. N. Brunswick: Vacant
News Corres. Quebec: Vacant

Connecticut
Chair: Andrea Urbano
andrea.urbano@ct.gov
Vice Chair: Michelle Matteo
quercusconsult@gmail.com
Sec/Treas: Daniel Lawrence
Dnlawrence19@att.net
News Corres: Amanda Bunce
amanda.bunce@uconn.edu

 Massachuits
Chair: Ross Hubacz
Hubacz@Fieldstoneresources.net
Vice-Chair: Chris Capone
Capone@mass.gov
Sec/Treas/News Corres: Joelle Vautour
Joelle.vautour@gmail.com

Rhode Island
Chair: Christopher Riely
Christopher@sweetbirchconsulting.com
Vice-Chair: Vacant
Sec/Treas: Robert W. MacMillan
rmacmillan@provwater.com
News Corres: Christopher F. Modisette
chris.modisette@ri.usda.gov

Publication and Advertising Information

<table>
<thead>
<tr>
<th>Issue</th>
<th>Submission Deadline</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td>22-Dec</td>
<td>15-Jan</td>
</tr>
<tr>
<td>Spring</td>
<td>22-Mar</td>
<td>15-Apr</td>
</tr>
<tr>
<td>Summer</td>
<td>22-Jun</td>
<td>15-Jul</td>
</tr>
<tr>
<td>Autumn</td>
<td>22-Sep</td>
<td>15-Oct</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advertising Space</th>
<th>Advertising Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Page</td>
<td>$150/issue</td>
</tr>
<tr>
<td>One-Half Page</td>
<td>$90/issue</td>
</tr>
<tr>
<td>One-Quarter Page</td>
<td>$50/issue</td>
</tr>
<tr>
<td>One-Eighth Page</td>
<td>$30/issue</td>
</tr>
</tbody>
</table>
“How did I miss that tree?”

So I wondered, when my staff pointed out a pitch pine that was unmarked, yet clearly infested with the southern pine beetle. Between the plates of bark oozed orange globs of resin. Typically, a single southern pine beetle - black in color, and smaller than a grain of rice - was caught up in each glob of sticky resin. Some beetles were still swimming, in an attempt to escape the sap.

I puzzled for a bit, and attributed my apparent oversight to becoming a bit disoriented at the end of a hot, summer day of marking timber. I was at the Phillips Preserve, which is a mature forest of pitch pines and oaks on the island of Martha’s Vineyard, in the town of Vineyard Haven. The Phillips Preserve happened to be the site of one of the first outbreaks of the southern pine beetle to be recorded in Massachusetts. I was in the middle of marking a suppression cut, and filing a related forest cutting plan.

I took out my paint gun, marked the overlooked tree, and tallied it. And then I marked a few more, overlooked, infested pitch pines, plus a buffer around them for good measure. Yet just in case I had not overlooked these trees, and the beetles were actually moving from tree to tree every single day, we marked a few trees outside the buffer with yellow paint, just to see if these trees might become infested next.

I checked the next day, and indeed the yellow-painted trees were now infested, too. So I marked these trees with blue paint, and mapped a new perimeter around the newly infested trees. A week later I marked a third perimeter. By the time logging began, it was clear that the beetles were moving south at about 10 feet per day.

So began my introduction to the southern pine beetle. With gradually warming winters, the southern pine beetle has methodically worked its way northward, and has now established a firm foothold in New England. This summer witnessed several outbreaks, with at least nine outbreaks underway on Martha’s Vineyard, and one on Nantucket. It is only a matter of time before outbreaks occur on Cape Cod and elsewhere in New England. The beetle has found our dense forests of mature pitch pines to be precisely what it likes. I am in awe of this plague of beetles, a veritable force of nature. The southern pine beetle - its exponential reproductive capacity, its ability to quickly kill healthy trees - commands respect.

And the southern pine beetle is here to stay. While some may lament the arrival of our newest resident of the New England forest, I don’t believe that lamentation is the best approach. Certainly, the beetle will kill many thousands of mature pitch pines, and we will miss walking in the shade of stately pines, alongside a ground cover of Pennsylvanian sedge and huckleberry. Yet the southern pine beetle will yield much that is positive and beneficial.

The southern pine beetle will induce landowners to conduct forestry. Some will conduct suppression cuttings, some will prepare forest management plans and conduct thinnings, others will create patch openings here and there to give sunshine to seedlings. All will aim at a more resilient forest and all will aim at sustaining an ecologically unique and important forest cover type.

Furthermore, the southern pine beetle will engage the public in forestry in a friendly way. I think that using the felled pine timber - for flooring, paneling, decking of ships, furniture and the like - will be welcomed and appreciated by the public. I believe that, if the slash and bark can be turned into biochar, this will be especially welcomed. And if the public sees the vigorous growth of released, residual oaks, and of young pitch pines striving upward in sun-filled gaps, the public might even find some inspiration. The public definitely welcomes all efforts to reduce the risk of wildfire.

Finally, the southern pine beetle attests to the value of the forestry profession. Consider all of the questions raised by the beetle. How do we address an outbreak? How do we reduce the chances for a future outbreak? How do we ensure good habitat for the northern long-eared bat? What can we do with pitch pine lumber? How do we safely deal with piles of slash with houses nearby? How do we reduce the risk of wildfire? All of these questions, and more, call for answers from a forester.
Sometimes these columns write themselves. Other times it’s a struggle. This is a “struggle” column—not because there isn’t a lot going on with SAF nationally and locally—more because I’m distracted by the good weather (finally), fall chores, family stuff, and sundry forestry projects. Sound familiar?

By now you’ve heard the membership restructuring was approved. The new membership structure will be fully implemented by January 1, 2024, with dues notices sent on October 1, 2023. Read more on the website.

More than ¾ of the 30 state/multistate societies have been incorporated and more will have reached this milestone when you read this. Incorporation of state societies creates a level of legal standing and recognition for each state society and establishes separation between organizational and personal assets. All this helps mitigate legal and financial risk to the organization and volunteers at every level. This is a monumental effort by national staff, mostly in the person of Lori Rasor, and by every state society executive committee (in the future known as Boards of Directors). NESAF leadership has been hard at work to review, adapt, and sign many documents. With changes in SAF’s legal and business structures, all state societies (including NESAF) will need to update their bylaws using a suggested template. Look for a future vote on new bylaws that will implement this new structure.

Though I have a full year left as your District 6 Representative to the SAF Board, we are already talking about recruiting people to run for this position. If you think you might be interested in serving SAF in this way, get in touch with me. Being your District 6 rep has been a positive experience and I encourage you to consider serving in this capacity. If you’re not interested in being on the board, there are many other ways to become involved in SAF at the national level. Openings for national committees will be publicized in the October issue of the Forestry Source and in the E-Forester. More than 90 members currently participate in 11 national-level committees, and each year some of these volunteers rotate out of their positions. Check out the opportunities on the website here.

Thanks to Fred Borman and Bill Hill for correctly answering my trivia question, “Where will the national convention be held in 2025?” Of course, it will be in Hartford CT. Speaking of volunteer opportunities, there will be plenty of volunteers needed for this convention. The last time we had an in-person convention in New England was in Portland, Maine in 1995. I attended that convention, and it was pivotal for me. It opened my eyes to all that SAF has to offer. I have been to many conventions since and truly, the Portland Maine convention was amongst the best.

This issue’s trivia question is: When was SAF founded? Answering it correctly will get your name in my next column and the admiration of your peers. Remember to reach out to me if you have questions, concerns, ideas, or an answer to my trivia question at karen.bennett@unh.edu.

2023 SAF Convention

It’s not too late to register for the 2023 SAF National Convention in Sacramento, CA, on October 25 to 28. As one of the largest forestry and natural resources conventions in the nation, this is an event you won’t want to miss! This year, the convention will explore the proud legacy of forestry and the ongoing challenges and opportunities that foresters and natural resources professionals face through our theme: “Forestry: It’s in Our DNA.” safconvention.org
Call for 2024 NESAF Award Nominations

It is again time to consider nominating a fellow forester for the 2024 NESAF awards. Who do you know that is deserving of a NESAF Award - someone who was your mentor or someone you are mentoring? Do you know of a peer in forestry who comes to mind immediately when you think of character and integrity, or someone who really is top notch when it comes to silviculture or technology?

This is your chance to recognize those that are often the unnoticed individuals in our profession. NESAF gives you the opportunity to recognize one of these people with one of our annual awards. Check out the awards on the NESAF awards webpage or on the nomination form. Please give this some thought, be a champion, and nominate a peer or colleague this year.

The seven awards that NESAF offers annually are:

- Integrity in Conservation
- Distinguished Service Award
- James W. Toumey Award
- Austin Cary Practicing Professional Award
- Ernest M. Gould, Jr. Technology Transfer Award
- Mollie Beattie Young Forester Leadership Award
- David M. Smith Award

The nomination process requires a nomination cover letter, a biographical sketch of the nominee, and two letters of endorsement, along with the nomination form. The nomination deadline for NESAF awards is December 1, 2023. For further information or submission of the nomination forms, contact Ken Laustsen (207-873-2642) or email: Kalaustsen@twc.com

Save the Date!

2023 NESAF Winter Meeting
March 27-29, 2024
Hilton DoubleTree Hotel in Burlington, VT

The Green Mountain Division and NESAF Winter Planning Committee invite you to save the date for NESAF’s 104th Annual Winter Meeting.

Contact General Chair Jess Wikle at jessica.wikle@uvm.edu for any questions.
The presence of a wildlife species that is rare can influence when and where timber harvests occur and, in the Northeast, many species of bats are rare or endangered. Bats therefore affect forest management. Sometimes they even prevent timber harvest from occurring.

During the summer, bats often spend daylight hours roosting in large, old trees or snags. Maintaining these specific habitat features is critical to maintaining bat populations within the forest. Furthermore, felling a roost tree could result in the direct take of rare bat. Yet, a hyper focus on roost habitat can leave the wrong impression that if the region was old-growth forest then bats would be doing well. Bats need roost habitat, but providing roosting sites is not enough.

During the summer, bats also need foraging habitat. In a recent paper by Dan Wright (Wright et al. 2021), an MS graduate from UConn, we focused on bats foraging for insects at night.

Wildlifers classify bats based on how they forage. Open space foragers, such as Hoary bats, are large bats that fly fast and use long wavelength calls to forage in less cluttered environments within the forest canopy, in other words, larger gaps within the forest canopy. Edge foragers may forage along the edge of a recently harvested stand or may follow interior forest edges created by roads or streams. Many of the rare bat species, such as little brown bat and long-eared bat, are small in size and use short wavelength calls that allow for slow, agile flight through high clutter forest canopy. These species are classified as narrow space foragers and they even glean insects off leaves.

While the classification of bats by foraging strategy enhances our understanding of differences among bat species, identifying these places within the forest using descriptors that align with terminology that foresters use is not so easy. Furthermore, bats using different foraging strategies may be present in the same stand.

Using acoustic monitors, we measured more bat activity in harvested stands than in gaps created by a tree mortality or fall in adjacent forest about 100 m into unharvested adjacent forest. Our research goal was to improve our understanding of bat foraging, yet we wanted our results to be relevant foresters.

How could we be relevant to both bats and foresters at the same time? We had to measure something that matters to both. After many conversations among the co-authors, we designed our study around stand age.
We measured bat activity within 26 stands of regenerating forest that ranged in age from 1 to 12 years following harvest. Surprisingly, we found the most bat activity in very young forests, with bat activity decreasing by 12 years post-harvest. New England is predominately mature forest and in this context our research provides evidence that several species of bats are active and forage in young forest.

Roosting habitat is critical for bats, but let’s not forget that bats use young forest too.

Reference


For more information on bats in New England’s forests:


Using an Open-access Tree Ring Database to Evaluate the Growth Potential of Eight Tree Species in Vermont

Paul G. Schaberg and Paula F. Murakami, USDA Forest Service, Northern Research Station, Burlington, VT
Paul.G.Schaberg@usda.gov
Paula.F.Murakami@usda.gov

Christopher F. Hansen and Gary J. Hawley, The University of Vermont, Rubenstein School of Environment and Natural Resources, Burlington, VT
Christopher.F.Hansen@uvm.edu
Gary.J.Hawley@uvm.edu

Tree rings provide detailed information on the age, annual wood production and growth trends of trees over time. Furthermore, by relating tree ring information to spatially and temporally specific environmental (e.g., precipitation, temperature, pollutant input) data, factors that modulate radial growth over time can be identified (e.g., Stern et al. 2021; Stern et al. 2022). Despite the great power of using tree ring measurements to help understand tree health, productivity and responses to the environment, this broad utility is limited by the need for expensive specialized instrumentation, familiarity with sophisticated statistical analyses to verify ring dates, and the overall time-intensive nature of conducting tree ring measurements. One way of circumventing the time, expertise and expense of collecting new tree ring data is to access previously collected data that is available from open access databases. For example, the well-known International Tree Ring Data Bank (ITRDB; Grissino-Mayer and Fritts 1997) is a repository for tree-ring data from hundreds of tree species and more than 4,000 sites spanning six continents (Sullivan and Csank 2016). However comprehensive, the ITRDB does not collect key ancillary data useful for ecological investigations and management such as information on sampling protocols (Sullivan and Csank 2016) or biometric measurements such as the diameter at breast height (DBH) of trees - a measurement that is needed to convert linear ring measurements into basal area increment (BAI) measurements that are a staple to land managers and ecologists assessing forest health and productivity.

In contrast to the ITRDB, there is a relatively new open-source repository of high quality dendrochronological and associated ecological data - the DendroEcological Network (DEN) that contains data on 17,729 cores from 8,843 trees representing a time span as great as 1630 through 2021, for 29 tree species from 32 studies across 543 plots in 10 US states. Importantly, in addition to providing linear tree ring data and associated statistical output that verifies the designation of the years that rings represent, the DEN includes DBH data so that annual BAI measurements can be calculated, and it lists crown position and tree health data. As such the DEN provides a rich resource for ecologists and managers to compare the health and productivity of many species and regions of interest. We downloaded data from the DEN for eight species in Vermont, USA: eastern white pine (Pinus strobus), eastern hemlock (Tsuga canadensis), northern red oak (Quercus rubra), white oak (Quercus alba), red maple (Acer rubrum), sugar maple (Acer saccharum), yellow birch (Betula alleghaniensis), and American beech (Fagus grandifolia) and calculated BAI for 1,505 trees at 89 plots across the state to compare their growth to each other and to expectations based on each species’ established silvics. This exercise is presented to highlight the value of the data in the DEN and is used to suggest more expansive analyses that utilize DEN data to address a range of scientific questions and management issues.

Annual xylem increment width (mm) and tree diameter (cm) measurements for eight tree species growing in Vermont were downloaded from the DEN. Species included dominant and co-dominant trees of eastern white pine, eastern hemlock, northern red oak, red maple, white oak, yellow birch, sugar maple and American beech from five individual studies on the DEN (Table 1). We calculated average annual basal area increment (BAI, cm2) from increment widths and tree diameters for each species for the common time period 1945–2014 (Figure 1). For the most recent ten years (2005–2014), we determined average

<table>
<thead>
<tr>
<th>Species</th>
<th>n sites</th>
<th>n trees</th>
<th>Ave annual BAI (cm²) ± 1 SE</th>
<th>Ave max annual BAI (cm²) ± 1 SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern white pine</td>
<td>13</td>
<td>250</td>
<td>36.76 ± 2.45a</td>
<td>46.95 ± 3.35a</td>
</tr>
<tr>
<td>Eastern hemlock</td>
<td>15</td>
<td>257</td>
<td>23.27 ± 1.64b</td>
<td>28.77 ± 1.66b</td>
</tr>
<tr>
<td>Northern red oak</td>
<td>11</td>
<td>214</td>
<td>21.16 ± 2.68c</td>
<td>25.87 ± 2.96c</td>
</tr>
<tr>
<td>Red maple</td>
<td>12</td>
<td>192</td>
<td>16.04 ± 1.80c</td>
<td>19.70 ± 2.27c</td>
</tr>
<tr>
<td>White oak</td>
<td>5</td>
<td>82</td>
<td>15.58 ± 3.10c</td>
<td>18.46 ± 3.49c</td>
</tr>
<tr>
<td>Yellow birch</td>
<td>12</td>
<td>172</td>
<td>13.95 ± 1.21c</td>
<td>18.53 ± 1.41c</td>
</tr>
<tr>
<td>Sugar maple</td>
<td>12</td>
<td>202</td>
<td>13.92 ± 1.55c</td>
<td>18.84 ± 2.21c</td>
</tr>
<tr>
<td>American beech</td>
<td>9</td>
<td>136</td>
<td>13.64 ± 1.04c</td>
<td>17.67 ± 1.24c</td>
</tr>
</tbody>
</table>

ANOVA: Prob>F=0.0001

Table 1. Average annual BAI (± 1 SE) for the most recent ten-year period (2005–2014) and average maximum annual BAI (± 1 SE) for that period, for n trees per eight species growing in n sites across Vermont, USA. Different letters indicate significant differences among species (Tukey-Kramer HSD, P<0.05).

- a: P<0.05
- b: P<0.01
- c: P<0.001
and maximum BAI and analyses of variance and Tukey-Kramer HSD tests were performed to ascertain differences among species in 10-year average annual BAI and maximum annual BAI for that same period (Table 1). Differences were considered significant if $P \leq 0.05$.

For all species, BAI growth generally increased during the early portion of the common period, which leveled off somewhat in the 1970s (Figure 1). Growth was particularly superlative for eastern white pine, which was significantly greater than all other species for the last 10 years of growth and for maximum annual growth during that period (Table 1). Eastern hemlock growth was greater than that for species emblematic of the northern hardwood forest (yellow birch, sugar maple and American beech), but overall, no differences in growth among hardwood species were detected (Table 1).

Growth of all species showed two distinct patterns: steady increases as trees developed, followed by a more plateaued growth indicative of a mature forest (Figure 1). This is the expected pattern of growth as trees become larger (Weiner and Thomas 2001), including forests recovering from historic land clearing as was widespread in the Northeastern US (Foster 1995).

The high growth rates of eastern white pine relative to other species was expected because it has a remarkable growth potential compared to other coniferous and hardwood species within its range (Burns and Honkala 1990). That eastern hemlock exhibited greater growth than species most characteristic of the northern hardwood forest was somewhat unexpected because hemlock has a relatively low growth potential (Burns and Honkala 1990). In contrast, the modest growth of the northern hardwoods was expected as they tend to divert resources toward greater wood density rather than expansive radial growth (Woodcock and Shier 2002). Better differentiation of differences among species’ growth potential was hindered by the high variation in growth across years and sites. However, interannual variations in growth may be of great interest to scientists and managers because it often represents exposure to sub-optimal growing conditions or periodic stress events (e.g., droughts, temperature extremes, insect and disease infestations, etc.) that can constrain growth (Dobbertin 2005) and alter forest structure and function (Dale et al. 2000).
Although we limited our analyses to eight tree species in one state, the data of the DEN would allow for a much more comprehensive analysis because the DEN currently includes information for 29 species across 10 states, and the database continues to grow. Importantly, DEN data allows for much more than comparisons among species. For example, although the magnitude and trajectory of sugar maple we summarized (Figure 1, Table 1) is very similar to patterns reported elsewhere (e.g., Stern et al. 2022), it is strikingly different from the precipitous declines in growth that started in the 1980s at the Hubbard Brook Experimental Forest in New Hampshire - a decline that was associated with even greater growth reductions following ice storm damage to tree crowns (Schaberg et al. submitted). As a general resource, the data of the DEN allows scientists and managers to explore how representative or potentially unique growth is for their study site relative to other locations. Furthermore, because some species have a broad geographic representation within the DEN, more explicit spatial analyses to assess possible differences in growth associated with latitude, longitude, or more explicit environmental gradients (e.g., temperature, precipitation, pollution inputs, etc.) are possible. Tree ring data in the DEN also includes a broad time scale - from 1630 through 2021. Therefore, temporal analyses are possible to see if growth has changed (e.g., increased, decreased, or become more variable) over time. Indeed, the spatial and temporal richness of the data on the DEN can help practitioners assess if particular events (e.g., droughts, temperature extremes, insect or disease infestations) align with growth anomalies for specific species, locations and time periods of interest. The DEN actively seeks to expand the diversity of species and spatial extent of available tree ring data. In addition, while data from dominant and codominant trees in unmanaged stands mostly encompass the DEN, it is expected that the database will expand via the inclusion of data from trees in intermediate and suppressed canopy classes and from lands under various management prescriptions. Thus, the DEN can become an even more valuable tool to ecologists, modelers and managers.

References

Are you #social?
NESAF is looking for a Social Media Coordinator.
Interested?
Contact diana.frederick66@gmail.com for more information.
Forest Release: Supporting Forests in Ukraine

Forest Release is committed to supporting Ukrainian stakeholders to identify war-affected forests that most urgently need inspection and demining. It plans to facilitate forest restoration to improve resilience to climate change and the challenges of a post-war environment.

Forest Release will “escalate” from immediate needs of forest professionals working in Unexploded Ordinance (UXO) and mine-contaminated environments to successively more systemic solutions in the demining space, and then to forest restoration and resilience. The War has already caused a massive escalation in occurrences of forest fires.

Focus Release will focus on affected forests in regions where civilian nongovernmental organizations have reasonably safe access. This includes de-occupied forest areas in the Kyiv, Chernihiv, Sumy and Kharkiv regions, outside of the zones that are still subject to periodic shelling and rocket attacks. Forests in de-occupied areas closer to the active front, such as in the Donetsk, Luhansk, Zaporizhzhia and Kherson regions, will be considered later as security allows.

First stage priorities of Forest Release include (1) sharing new and used safety gear with foresters and forest fire fighters to reduce risk of injury, (2) developing a methodology for non-technical surveys and priority setting with Forests of Ukraine enterprise, (3) initiating dialogue on UXO clearance technical approaches in war-affected forests, and (4) identify reinforced vehicle options that reduce risk to forestry professionals working in UXO-contaminated areas.

Later stage priorities include (1) training and equipping forest-focused UXO clearance teams, (2) providing policy recommendations on forest and fire management adaptations in war-affected landscapes that incorporate climate resilience, and (3) equipping forest fire fighting professionals with equipment appropriate to UXO contaminated landscapes.

For more information on the Forest Release program, contact Brian Roth (rothb1969@gmail.com) and Lloyd Irland (lcirland@gmail.com).

The scale of UXO contamination is vast. This photo shows a destroyed Russian tank and mines in Kreminna Forest Management Unit, Luhansk Oblast. Source: Telegram.

Man standing in crater. The most severely war-affected forests post a serious technical challenge for UXO clearance due to large volumes of dead, windthrown trees.
New England Forestry Foundation Unveils New Video on Mass Timber

Mass timber is expanding rapidly across the globe, and it has caught on in the United States as well. In the last few years, the number of mass timber buildings constructed or planned has jumped from 200 to more than 2,000. Clearly, aesthetically pleasing mass timber is on the upswing, but many people don’t understand its potential as one of several ways we can use our forests to fight climate change.

The 2021, the New England-based Mass Timber Dialogue Project wanted to set the record straight, and the New England Forestry Foundation (NEFF) stepped forward to design and produce an animated video based on its findings that was not only accurate with the report’s most high-profile findings, but was also engaging, accessible to the general public, and visually compelling.

As the video itself states, our species’ current pace of global development will require us to build the equivalent of one New York City every 30 days for the next 40 years. Clearly, we can’t solve climate change if we continue to build primarily with carbon-polluting steel and concrete, and forest products provide our best solution—as long as we manage them well.

An animated explainer video seemed like an ideal tool to communicate this admittedly complicated topic, as it could both lay out a distinct narrative that tied the entire supply chain together and convey complex topics visually. For example, this video shows a cross-laminated timber panel being assembled and then placed in a tall wood building, and it also demonstrates how trees “breathe” in CO₂, keep the carbon and “breathe” out the oxygen, and then continue to lock that carbon in their wood even after harvesting for long-lived products.

The “Building a Sustainable Future With Mass Timber” video ultimately illustrates the importance of building with mass timber in the fight against climate change as part of a system of natural climate solutions. Thanks to its approachable narration, beautiful animation, and expertly structured narrative, the video should prove engaging to a wide variety of audiences and serve as a great introduction to complex topics.

Please share this video and let the whole world know about the promise of top-notch, climate-smart forest management as a powerful climate solution. You can view the video on NEFF’s website or at Vimeo’s video hosting service; both options will provide you with the opportunity to embed the video on your own website if it would further your own messaging goals.
NESA Summer Silvicultural Field Tour: White Oak

J.P. Barsky
Chair, NESA Silviculture and Utilization Working Group

Of all the challenges facing our profession, the ability to perpetuate white oak across our landscape might not be on the top of your list (or even on your list). Yet, a wide range of people, from ornithologists to distillers, are very concerned about the future of this species. Not only is it a foundational species of our forest, but it is also an important economic resource. Competition and herbivory, combined with a slow growth rate and low recruitment, are serious barriers to preserving this species throughout our region. Management practices aimed at retaining white oak on the landscape include artificial regeneration, control of herbivory and/or competing vegetation, prescribed fire, herbicide application, and various silvicultural prescriptions. However, these attempts to restore white oak on our landscape have had varying levels of success.

Expanding on a theme from the 2023 NESA Annual Winter Meeting, the Silvicultural Working Group held its first Summer Field Tour in nearly four years. The one-day event was held on August 25, 2023 at the Bear Brook State Park in Allenstown, NH and the New Hampshire State Forest Nursery in Boscawen, NH. Roughly thirty foresters and land managers from our region came to listen to presentations by Callie Schweitzer, Ph. D., and Stacy Clark, Ph. D., scientists with the USDA-Forest Service, Southern Research Station. Fortunately, they were both available and able to share their experiences navigating the many challenges they have had working with white oak as well as their successes with our group.

We experienced typical weather conditions for our area this year during the event, with moderate downpours occurring from time to time. The weather served as a paradox for the day, doing little to discourage or dampen anyone’s spirit. Our discussions of the silvicultural and planting requirements of white oak often continued despite the pouring rain.

Some key takeaways from the day included: (1) it is finally white oak’s time and place to get the attention it deserves, (2) there is nothing easy about white oak, (3) fire is not the answer everyone thinks it is, and (3) legally speaking, Tennessee whiskey must be filtered through sugar maple charcoal.

Lastly, this event could not have been made possible without the support of the NESA Board of Directors, the assistance of Steve Roberge coordinating the logistics, and Andy Fast serving up a lunchtime feast.

A soggy field day is better with friends! Participants in the tour to discussed how to address a lack of adequate oak regeneration in real-world situations. All photos by J.P. Barsky.

Growing white oak has challenges. From collection through planting and cultivation, nursery managers must contend with squirrels, deer, soggy conditions, and continual weeding.

The rain subsided by the end of the workshop and participants gathered for a photo opportunity at the State Forest Nursery in Boscawen, NH.
Elm zigzag sawfly found in Vermont (VT FPR)
This invasive insect was confirmed for the first time in Vermont in August. This is a relatively new pest to North America, and little is known about it. When it is present in high numbers, elm trees can be fully defoliated, and multiple years of defoliation may cause crown dieback or tree mortality. Staff from VT FPR will continue to monitor to better understand the extent of this pest in Vermont.

Camel’s Hump logging lawsuit dismissed by judge
A 2022 lawsuit brought forth by Standing Trees, a VT-based forest preservation group sought to halt a timber harvest project on Camel’s Hump State Forest on the grounds that the project was approved without appropriate public process, resulting in potential damages. In September, a judge ruled that the plaintiffs did not have standing to bring the suit and dismissed the case. The state plans to move forward with the management project, while Standing Trees has stated that they will continue their efforts to “increase accountability and transparency in Vermont state lands management.”

Green Mountain Division News ~ Jess Wikle

NESAF 2024 Winter Meeting
The Green Mountain Division has been hard at work beginning to plan next year’s winter meeting. Save the date for March 27-29, 2024. The meeting will be held at the Hilton DoubleTree Hotel in Burlington, VT. More details to come soon!

GMD Fall Meeting
The Green Mountain Division will hold its annual Fall meeting on October 19th. The meeting will take place at Groton State Forest and discuss themes related to adaptive silviculture practices including forest inventory, pre-harvest non-commercial treatments, harvest layout and operations, wildlife habitat consideration, post-treatment planting, and long-term monitoring.

NESAF Membership Report

<table>
<thead>
<tr>
<th>CURRENT</th>
<th>S</th>
<th>G</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granite State</td>
<td>1</td>
<td>14</td>
<td>135</td>
</tr>
<tr>
<td>Green Mountain</td>
<td>2</td>
<td>9</td>
<td>91</td>
</tr>
<tr>
<td>Maine</td>
<td>18</td>
<td>27</td>
<td>159</td>
</tr>
<tr>
<td>Yankee</td>
<td>21</td>
<td>17</td>
<td>161</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>5</td>
<td>6</td>
<td>84</td>
</tr>
<tr>
<td>Connecticut</td>
<td>16</td>
<td>7</td>
<td>63</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>0</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>67</strong></td>
<td><strong>546</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FORMER</th>
<th>S</th>
<th>G</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granite State</td>
<td>5</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Green Mountain</td>
<td>2</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Maine</td>
<td>24</td>
<td>0</td>
<td>41</td>
</tr>
<tr>
<td>Yankee</td>
<td>14</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>6</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Connecticut</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45</strong></td>
<td><strong>0</strong></td>
<td><strong>112</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CURRENT</th>
<th>S</th>
<th>G</th>
<th>F</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granite State</td>
<td>1%</td>
<td>8%</td>
<td>81%</td>
<td>10%</td>
</tr>
<tr>
<td>Green Mountain</td>
<td>2%</td>
<td>8%</td>
<td>80%</td>
<td>11%</td>
</tr>
<tr>
<td>Maine</td>
<td>8%</td>
<td>12%</td>
<td>70%</td>
<td>10%</td>
</tr>
<tr>
<td>Yankee</td>
<td>9%</td>
<td>7%</td>
<td>71%</td>
<td>12%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>5%</td>
<td>6%</td>
<td>82%</td>
<td>8%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>16%</td>
<td>7%</td>
<td>62%</td>
<td>16%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>0%</td>
<td>18%</td>
<td>64%</td>
<td>18%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6%</strong></td>
<td><strong>9%</strong></td>
<td><strong>74%</strong></td>
<td><strong>11%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FORMER</th>
<th>S</th>
<th>G</th>
<th>F</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granite State</td>
<td>11%</td>
<td>0%</td>
<td>64%</td>
<td>25%</td>
</tr>
<tr>
<td>Green Mountain</td>
<td>10%</td>
<td>0%</td>
<td>62%</td>
<td>29%</td>
</tr>
<tr>
<td>Maine</td>
<td>29%</td>
<td>0%</td>
<td>49%</td>
<td>23%</td>
</tr>
<tr>
<td>Yankee</td>
<td>20%</td>
<td>0%</td>
<td>42%</td>
<td>38%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>22%</td>
<td>0%</td>
<td>44%</td>
<td>33%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>19%</td>
<td>0%</td>
<td>38%</td>
<td>43%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20%</strong></td>
<td><strong>0%</strong></td>
<td><strong>51%</strong></td>
<td><strong>29%</strong></td>
</tr>
</tbody>
</table>

Former Members include expiration May 31, 2020 through March 31, 2023. Member Categories are: S = Student; G = Golden; F = Full (including [Silver, Gold, Platinum, Ret.]; T = Transitional. Totals include dropped members currently in their two month grace period.
From Alexa Kosalek, Granite State Division Chair:

The Granite State Division of SAF recently co-sponsored two successful workshops. The White Oak Silvicultural Tour at Bear Brook State Park received positive feedback, as well as the Hands-On Forest Health at Burley Farm in Epping. Participants spent a full day in the field with educators from University of New Hampshire Extension, the State of NH and US Forest Service employees. Participants discussed white oak silviculture and cycling through six stations at the Burley Farm becoming familiar with a unique set of insects, invasive plants, and diseases.

The GSD-SAF is also engaged with the review of The Good Forestry in the Granite State: Recommended Voluntary Forest Management Practices for New Hampshire. A committee of professionals from multiple forestry sectors are part of the review process. The goal of the review process will be to add chapters and revise existing chapters in the guide. The EC has nominated a GSD SAF member to serve on the steering committee. Visit goodforestry.org for the current version and to access information about the third edition revision.

The Low-Grade Timber and Wood Emerging Market Commission, established through NH HB 1005, continues to work on “studying the state of the existing low-grade timber and market economy and new and emerging markets for low-grade timber and wood products”, to report findings back to the NH House of Representatives.

From Steve Roberge, Extension State Specialist, Forest Resources, Forestry News for Foresters:

NH Timber Harvesting Laws Guide Updated

The Guide to New Hampshire Timber Harvesting Laws was recently updated and is now available for download. Special thanks to Karen Bennett, Rick Evans, Andy Fast, Amy Gaudreau, and Chief Steven Sherman for their help and review. UNH Extension will continue to update as rules and legislation are changed or created.

Upcoming events:

NHTOA Fall Professional Logger Program, various ongoing.

NELMA Softwood Lumber Grading, October 20.

2023 NHTOA Loggers and Truckers Convention, October 21.

Wildlife Track and Sign Certification, October 25.

Commercial Pesticide Applicators, Supervisory Trainings, October 30, November 8.
Southern Pine Beetle by Paul Gregory

Southern pine beetle (*Dendroctonus frontalis*; SPB) has been confirmed on the islands of Nantucket (one site) and Martha’s Vineyard (three sites) including within the Manuel F. Correllus State Forest in West Tisbury. It was first identified during Massachusetts Dept. of Conservation & Recreation’s (DCR) Forest Health annual aerial survey in July of this year. In total, 84 pitch pine trees have been identified as being infested with SPB within the State Forest.

DCR is employing the cut-and-leave method as it has been used successfully in other states in dealing with small infested areas of the SPB. Infested trees and a non-infested tree buffer have been cut with trees being felled back towards the center of the infestation. Cutting trees disrupts the pheromones that cause the beetles to aggregate and attack trees, reduces beetle survival, and has been shown to not increase infestations around treatments.

SPB is native to the southern U.S. but has been expanding its range northward due to warming conditions driven by climate change. This northward spread has put pitch pine trees at risk. This is the first year DCR has observed significant infestations and tree mortality caused by SPB. For prevention purposes, pitch pine stands should be thinned to 60 - 80 sq. ft. per acre or less to reduce susceptibility to SPB. For further information visit the [North Atlantic Fire Science Exchange’s Southern Pine Beetle Working Group webpage.](https://northatlanticfire.org/)

Healey Administration Biodiversity Executive Order

The Healey Administration announced the Biodiversity Executive Order on September 21, 2023, which asks for the Department of Fish and Game to review their current biodiversity conservation efforts in order to establish targeted goals for biodiversity conservation for the years 2030, 2040, and 2050 respectively. Equitable access to nature, a climate resilient landscape, as well as the opportunity to provide for plant, animal, and other habitats are the main goals of the Executive Order. The full press release can be found here: [Healey Administration - Biodiversity Executive Order](https://www.mass.gov/about-the-governor/governor-healey/press-releases/)

New Publication - Emerald Ash Borer

There is a new publication titled, “Managing Northeastern Forests Threatened by Emerald Ash Borer”. The publication addresses adaptive strategies for managing the loss of ash on the landscape while also creating opportunities for ensuring survival of ash species from infestation.

**VOLUNTEER POSITIONS AVAILABLE**

The Yankee Division has begun planning the [2025 NESAF Annual Meeting](https://www.nesaf.org/). Volunteers are needed to help with Program, Arrangements, Finance, and Outreach. The world is run by those who show up, and if you are not at the table, you may be on the menu.

Contact Tim Hawley at tchawley@snet.net to help make it a great meeting that helps everyone.

Connecticut Chapter News ~ Amanda Bunce

CT’s Department of Energy and Environmental Protection (DEEP) Forestry Division suggests you keep an eye out for exciting positions opening up for urban forestry professionals. Recent calls by DEEP for a new service forester (engaging and assisting state forest landowners) and an outreach forester (a newly created position intended to seek out and engage with Connecticut’s diverse populations of forest stakeholders) are being filled as we speak. Be prepared to hear from the agency on their new team members and the exciting projects they are getting off the ground!

What’s up with the maple trees?

You may have noticed the leaves of local maples, which should be starting to blaze in all their glorious fall colors, turning crispy and brown and dropping from the trees. They are being heavily impacted this fall by anthracnose disease, from a fungus which causes brown spots and can blight whole leaves and even cause dieback of twigs. This common fungus affects maples, ash, sycamores, tulip trees, and many other local tree species every year. In maples symptoms are look-alikes to drought and heat stress, but are caused by the exact opposite conditions. In a cool wet spring the disease causes extensive leaf drop but trees have time to re-foliate by mid-summer. This year, a wet and cool summer and fall is impacting the leaves at a time when they will not be able to re-foliate. Maples will be playing less of a role in the fall leaf color pallet this season. It is possible that some impact may be felt in the sugar content of sap come sugaring season. In the long-run, without consistent repetition of the issue, trees will fully recover. You can learn more from the CT Ag Experiment Station here: [https://portal.ct.gov/CAES/Fact-Sheets/Plant-Pathology/Anthracnose-Diseases-of-Trees](https://portal.ct.gov/CAES/Fact-Sheets/Plant-Pathology/Anthracnose-Diseases-of-Trees).


Southern New England Forest Climate Adaptation Network Field Tour

On a sunny day at the end of September the SNE Forest CAN, a working group of natural resource professionals running climate-adaptive forestry projects in the region, gathered in Mohegan State Forest for a look at the adaptive management underway there. UConn and CT DEEP Forestry worked together on this forest which had been heavily impacted by successive years of drought and defoliation by spongy moths. An experimental management plan was co-developed in a workshop by forestry and ecology specialists and other interested parties, to improve the capacity of the forest to handle the vulnerabilities of our regional forests to climate change impacts such as novel pest outbreaks, more severe storms, and periods of drought. In 2021 and 2022 the plans were implemented and what participants saw today was a regenerating oak forest with stands that protected unique habitats, stands that were showcasing newly diverse habitat structures, clearings with new young oak populations, and openings where hybrid and native chestnut seedlings were peeking out of the plastic cages protecting them from deer browse. This management project was done in cooperation with the Adaptive Silviculture for Climate Change Network and is now one their climate-focused forest management experiments that will help us understand how to better support forests facing climate vulnerabilities. Read more about the network and the Southern New England Oak sites at [adaptablesilviculture.org](http://adaptablesilviculture.org).

CT Extension Forester Tom Worthley shares this cautionary photo of several saddleback caterpillars on a sassafras tree - A common species and lovely to look at, but keep your hands clear! The sting of this caterpillar gives you what state entomologist Victoria Smith refers to as the “Crazy Itches” and can induce anaphylaxis if you are allergic.
From Mohegan, the group progressed to the Spring Hill tract of the UConn forest where they were treated to a showcase of oak-regeneration trials within a 6 year old irregular shelterwood. The same spongy moth outbreak that impacted Mohegan had taken the sheltering canopy off of the Spring Hill operation just a year after it was implemented (instead of the planned 10-15 years later), and so dendrology professor and Extension Forester Tom Worthley, with fresh crews of forestry students each year, have been releasing oak saplings from competition, protecting saplings with slash or fencing, and leaving them in dense raspberry thickets, to provide a diversity of possibilities for young oak to be competitive in the new forest stand. Tour participants came from a variety of backgrounds making for excellent discussions on the value of oak in the ecosystems (white oak especially), the impacts of climate change on oak species, and a large suite of potential solutions.

From the Southern New England Forest Climate Adaptation Network field tour, Sept. 27th in Mohegan State Forest and Spring Hill Tract of UConn Forest. Left: The tour discusses forest adaptation in the experimental stand designed to maintain the forest composition and structure and resist climate change impacts. Right: A hybrid chestnut seedling outgrew its deer protection cone in a single growing season! The cone template has now been adjusted accordingly. Photos: Amanda Bunce.

List Your Job Opening on NESAF.org

- NESAF accepts job listings from members and non-members, and posts them on our website as a service to NESAF members.
- There is no cost to post job listings on the site.
- Job listings are posted for 45 days, then automatically removed.
- Please resubmit the listing in 45 days if the positions is still open.
- When approved your listing will appear on the Job Board
Dirt to Trees to Wildlife

Dirt to Trees to Wildlife (DTW) is an online mapping tool that allows landowners and land managers ready access to explore the relationships between soils, habitat types, and the wildlife that they support. Originally conceived in 2016 and focused on New Hampshire’s inland soil types, the DTW Mapper allows users to define a project area, such as an entire woodlot or forest stand(s) and identify forest types expected to occur based on underlying soils. Links are then made between the forest type(s) and preferred breeding habitats of New England wildlife species.

The success of the DTW tool for private forestry applications in New Hampshire and value for fulfilling state Wildlife Action Plans piqued the interest of soils, land, and wildlife practitioners in several surrounding New England states with connections established through a recently completed, multistate oak resiliency project. Meetings between representatives in Massachusetts, Rhode Island, Connecticut, and the tool’s New Hampshire development team began in the summer of 2022. For more information visit dirttreeswildlife.org.

Partners: USDA Forest Service, State, Private, & Tribal Forestry; Massachusetts Department of Conservation & Recreation and NRCS; Rhode Island Department of Environmental Management and NRCS, Connecticut Division of Forestry and NRCS; National Wild Turkey Federation; NH Granite; University of New Hampshire; University of Rhode Island; and consulting foresters from the region.

Tornado

On August 18, 2023, a tornado caused significant damage along a discontinuous path in Scituate, Johnston, and North Providence, Rhode Island. This is the strongest tornado to have struck Rhode Island since the F-2 tornado in Cranston and Providence on August 7, 1986. The tornado first touched down on Providence Water Supply Board woodlands and adjacent residential homes on Byron Randall Road in Scituate which is where the most severe damage occurred. There were hundreds of large trees either uprooted or snapped at their bases. Damage was consistent with winds of around 115 mph which is classified as EF-2 on the Enhanced Fujita Scale.

Courtesy of: Richard Blodgett, PWSB and The National Weather Service would like to thank the Rhode Island Emergency Management Agency,

Rhode Island Department of Environmental Management - Division of Agriculture and Forest Environment (DAFE) Updates:

BMP Manual Updates

RIDEM has begun the process to update the Rhode Island’s existing BMP Manual. The redesigned manual will include updated graphics and changes to align the Manual with changes to current laws. For more information please contact: Nancy Stairs, Cooperative Forestry Program Supervisor, Department of Environmental Management - Division of Forest Environment at 401.539.2356 x17 or Nancy.Stairs@dem.ri.gov.

RIDEM Announces it will Spray Targeted Sections of Smithfield Along Douglas Pike that have Spotted Lanternfly Infections with Insecticide Treatments

RIDEM announced that it will begin treating pockets of spotted lanternfly (SLF) infestation that have been found along Douglas Pike (Route 7) in Smithfield with insecticide, weather permitting, on Wednesday, September 21. RIDEM announced that it had found the state’s first SLF population along the Douglas Pike corridor and surrounding neighborhoods. The United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) confirmed the detection. DEM scientists have spent the last three weeks surveying the area to gauge infestation levels.

Tall Timber 4.0 Carbon

FOREST PRODUCT & CARBON INVENTORY WITH COMMON PRACTICE LEVELS

L.E Caldwell Company, Winthrop, Maine

Web: ttimber.com Email: support@ttimber.com
Free Trees Available, Just in Time for Fall Planting: Registration Begins August 25 for Popular Energy-Saving Trees Program

RIDEM, along with partners the RI Tree Council, Rhode Island Nursery and Landscape Association, and the Arbor Day Foundation – is giving 1,000 trees away to Rhode Islanders this fall through the Energy-Saving Trees program. Now in its seventh year, this popular semiannual program helps Rhode Islanders save energy and lower their utility bills by strategically planting trees on their property. Funding for the program is provided by the Regional Greenhouse Gas Initiative.

DEM Forest Restoration Project Aims to "Future-Proof" 45-Acre Parcel in Richmond from Effects of Climate Change

RIDEM is announcing that it will begin a forest health improvement project that, along with harvesting standing dead oak trees that were killed by a combination of repeated insect defoliations and drought, aims to “future-proof” a 45-acre state parcel in Richmond by planting species of trees that may be better adapted to endure Rhode Island’s hotter and drier future.

This is first project in Rhode Island where DEM has partnered with foresters and scientists from the Adaptive Silviculture for Climate Change (ASCC) network. ASCC is conducting a series of experimental silvicultural trials across a network of different forest ecosystem types throughout the United States and Canada to research long-term ecosystem responses to a range of climate change adaptation actions.

For more information on RIDEM programs and initiatives, visit www.dem.ri.gov. Follow RIDEM on Facebook, Twitter (@RhodeIslandDEM), or Instagram (@rhodeisland.dem) for timely updates.

NESAF Policy Updates ~ Susan Romano

During this time of climate transition, society needs direction from forestry professionals about how our forests play a role in mitigating climate change as a potential solution. Bill Hill, Policy Committee Member for the Massachusetts SAF Chapter, shares an update on the current activity regarding this topic in his state.

Forests as Climate Solutions

The Massachusetts Executive Office of Environmental Affairs (EEA) held a virtual meeting as public outreach for their "Forests as Climate Solutions" agenda moves forward. As noted in the previous News Quarterly, this effort is part of Governor Healy's promise to examine forestry, particularly on state lands, and its relationship to carbon sequestration and storage. The meeting was held on September 12 at which the public was given an opportunity to provide feedback to the panel of experts drafting guidelines for state lands management. Opportunity for written comment is still available by using this link. In November there will be one more public meeting at which time draft guidelines will be presented. Of note, a pause in the sale of forest products from state lands remains in effect until the guidelines are completed.

Bill Hill
Policy Committee Member
Massachusetts SAF
Happy autumnal equinox! I don’t know about you, but this is certainly my favorite time of year! But so is spring, and also winter, and well, summer too! Perhaps what I find most enjoyable, after all, is our distinctly unique seasons. We’re hoping this transitionary season is fruitful and festive for all.

**MESAF Activity**

Member-at-large Cullen Utermark organized an excellent field tour of Loon Echo Land Trust in July. Having the Loon Echo Executive Director and the forester in attendance lent personal and inspirational perspectives on management strategy and upcoming activities that truly made for informative and engrossing conversation. Cullen has a particular skillset utilizing unmanned aerial systems (drones) which he graciously shared his experiences and expertise on, with the group, in a live demonstration.

About a month later, a dozen or more folks joined member-at-large Brandon Learnard in Arrowsic at the Holt Research Forest. Tour guide and forester, Barrie Brusila, along with Maine TREE staff shared management perspective, the wealth of long-term information, and depth of history of the forest. The group toured a large part of the research forest, which included a recent (2020/21) harvest operation that has some interesting results. Aside from the response in regeneration and residual trees, a somewhat obscure pest got a lot of attention as well. The oak leaf roller (tier), an infrequent forest pest, had emerged following harvest in force, causing multi-year defoliation, to which many oak succumbed. Though unfortunate, the insect and dead trees provide more fodder for research and management options that we can all undoubtedly benefit from in the future. Follow this link for the full story.

Looking to the future, we have a couple more back-to-back events we hope to see you at. On October 6th, member-at-large Jason McLellan is organizing a bridge construction and stream crossings workshop in Brownville. The tour will visit four different stream-crossing structures with discussion guided by landowner representatives as well as other resource professionals.

Right on the heels of Jason’s tour is our annual meeting in Orono, on October 10th. The theme and agenda will enable us to hear from local experts about current and emerging forest health challenges while providing an excellent forum for connecting with colleagues.

**Markets and Business**

The Forest Resources Association (FRA) has an optimistic view of Maine’s evolving forest product offerings. An article from August boasts we are going to see more forest products, which equates to revitalizing demand for wood that, in recent history, had become quite bleak following the loss of several pulp mills in a relatively short period of time. Through FOR/Maine (Forest Opportunity Roadmap) efforts, the State is seeing investment in wood-using technology which includes products like insulation for home construction, biochar, and biofuels - a testament to the resiliency and ingenuity of our industry and its people.

Using wood fiber for home insulation and biofuels has been popping up in discussions more frequently, but what is biochar? A recent MaineBiz article describes biochar as the solid material obtained from the thermochemical conversion of biomass (a.k.a. waste wood and residuals) in an oxygen-limited environment. The output of that process is a charcoal-like product that permanently locks carbon in a product that can be used for things like agriculture soil amendments, environmental remediation (think PFAS and heavy metals), and a “green” additive to cement and asphalt - to name a few. Production at a facility in Greenville began in July.
grant to develop and offer a 10-week, virtual course that will enable Mainers to obtain micro-credentials or college credits that are needed for many jobs in Maine’s forest sector. The course titled “The Business of Maine’s Forestry Products Sector” envisions producing skilled workers, earning family-supporting-wages, by leveraging industry and workforce partnerships to link Mainers with job opportunities, education, and industry experts. The program will be offered through Washington County Community College and available virtually to all Mainers statewide. More details expected in the near future.

Other Forestry News

Maine TREE is hosting it’s first Forest Awards Night to recognize the 2023 recipients on October 19, during Forest Products Week at the Morgan Hill Event Center in Hermon. The University of Maine School of Forest Resources is receiving the Austin Wilkins Award for their outstanding contribution to the forest products industry and the State. Additionally, Sarah Medina, a Maine Forestry Museum Hall of Fame inductee, will receive the Sherry Huber Forest Champion award for her inspiring record as a champion of Maine’s forests.

The 2023 Forests of Maine Teachers’ Tours traveled through the Katahdin and Downeast regions in August, learning about Maine’s forest ecology, economy, and community. The weeklong tours build foundational understandings of our forestry sector which educators integrate into their schoolwork planning. Maine TREE has produced an elegant story highlighting the people and themes that make this such an amazing program. We encourage you to visit the online storymap for an immersive experience.

A fascinating report from University of Maine collaborations has just been released, entitled “Data Frontiers: The Intersection of Emerging Technology & Maine’s Heritage Industries”. The report weaves the fields of artificial intelligence technology and the related areas of data science and informatics with the future of Maine’s natural forest resources industries. The report lays out plans to expand investments in research and development in Maine’s forestry sector as well as workforce development to prepare Maine students to utilize the technologies of the future. Follow this link for the full report.

Training and Networking

Pesticide Recertification Credits: The University of Maine Cooperative extension and the Maine Board of Pesticides control is offering a virtual training on October 17th from 1 to 4pm. The training is worth three credits. Pre-registration is required. Register here.

The Maine GIS User Group is hosting their Fall Conference on November 16th at the Wolfe’s Neck Center for Agriculture and the Environment; Smith Center. Visit their website for more details.

Great news! The Climate Adaptation and Forest Carbon training for foresters through the Silviculture Institute will be available online for free! The online training course is expected to become available this fall through the Northeast Silviculture Institute for Foresters. Please visit their website for more details.
In Memoriam

Please forward NESAF member obituaries to nesafnq@gmail.com for publication.

Former Coos and Cheshire County Extension Forester, Marshall Patmos passed away August 19th. Marshall was a graduate of UNH’s Forestry Program and spent his career helping NH landowners steward their forests. When Marshall retired, I was lucky enough to fill his position in Cheshire County. Despite retiring, he was always happy to provide advice, promote the work of the County Foresters, and help landowners in his town. I’ll miss seeing Marshall at events and the occasional joke via email. ~from Karren Bennett

For more on his life, read his obituary here.

Editor’s Note: Glenn Freden passed away in 2018, but we didn’t find mention of it in the News Quarterly archives. Adding it here to recognize his tremendous impact in the profession.

Glenn Freden was a 1977 graduate of Yale School of the Environment (YSE) and started his own consulting firm in Massachusetts and did a lot of work with the Mount Grace Land Conservation Trust. Glenn co-authored a 2007 book, Forest Stewardship by Mount Grace Land Conservation Trust: Case Studies and Lessons. The foreword is by another YSE alum, David B. Kittredge. Glenn also worked for Green Diamond Forestry Services.

Glenn was honored by the New England Society of American Foresters in 2003 with its Austin Cary Practicing Professional Award. For more on his life, read his obituary here (page 7). ~from Tim Hawley

LandVest® TIMBERLAND

Serving Timberland Investors Since 1968

Full Service Forestry Consulting, Timberland Marketing and Investment Analysis Services across the U.S. and Canada

Forest Management • Consulting • Marketing • Sales

• Appraisal & Valuation
• Management Plan Development
• Operation Logistics/Roads
• Ecosystem Services/Carbon
• Timber Sale Administration
• Biometrics/Growth & Yield

• GIS & Technical Services
• Conservation Easements
• Forest Certification
• Tax Abatement Plans
• Purchase & Sale Due Diligence
• Wildlife Habitat Plans & Invasives Control

Foresters and Licensed Real Estate Professionals in 18 Regional Offices

www.landvest.com
Upcoming Events

Climate-Smart Forestry Webinar Series
Offered by The Forest School at the Yale School of the Environment

The Yale Forest Forum is excited to announce a speaker series for Fall 2023 on the topic of Climate-Smart Forestry. Webinars will take place on Mondays September 11–November 27 from 12:00 pm–12:50 pm U.S. ET. The series is jointly hosted by The Forest School at the Yale School of the Environment, the USDA Northeast Climate Hub, and the USDA Southeast Climate Hub, and co-sponsored by the Yale Center for Natural Carbon Capture. The series has already begun, but it continues virtually through the end of November. Recordings of previous sessions and registration can be found on the Yale Forest Forum website.

The series will primarily focus on forest management practices in the United States. We will dig into both the hype and the practice of the term ‘climate smart forestry’ and hear from a wide range of perspectives and experiences. Speakers will include public-sector organizations like the US Forest Service, nonprofits, researchers, and academics from across the country, as well as “on-the-ground” practitioners.

Upcoming webinars:

• 10/23: Climate-Smart Forest Management from the U.S. Forest Service’s Perspective: Definitions, Policy, and Incentives  
  - Stephanie Chizmar - Research Economist, USDA

• 10/30: Climate-Smart Forestry in an Urban Context  
  - Clara Pregitzer - Deputy Director, Conservation Science, Natural Areas Conservancy  
  - Kristen King - Chief of Environment and Planning, NYC Parks

• 11/6: Management of Novel Ecosystems and Ecosystem Change  
  - Mike Dockry - Assistant Professor, University of Minnesota

• 11/13: How Carbon Credits Influence Commercial Forest Management  
  - Kyle Burdick - Vice President, Baskahegan Company

• 11/27: Climate-Smart Forestry on Private Lands  
  - Andrea Colnes - Deputy Director, New England Forestry Foundation

Connecticut Certified Forest Practitioners may receive 1.0 CEU credits for each live lecture attended. Email yff@yale.edu for further details.

USDA NRCS Technical Service Providers Workshop
Offered at the SAF Convention in Sacramento, CA  
Weds Oct 25, 8:00 a.m. to 3:30 p.m.

Technical Service Providers (TSPs) provide conservation planning assistance to private landowners on behalf of USDA’s Natural Resources Conservation Service (NRCS). TSPs are certified by NRCS to develop planning and practice design documents such as Forest Management Plans to help private forest landowners assess the current condition of their lands and to schedule conservation practices meeting NRCS standards and specifications.

For interested TSP applicants, this workshop will give participants a detailed overview of the process to become a TSP. This workshop will satisfy the TSP training requirements of the “TSP Orientation and Conservation Planning” course as well as the “Introduction to the Field Office Technical Guide” course. For current and renewing TSPs, this workshop will have a break-out session which will cover TSP program updates, the TSP Registry renewal and modification processes, and other important program guidance.

The USDA NRCS TSP Workshop is free and open to the public. Convention registration is not required to attend this event. However, workshop registration is required. Register here.
**USDA NRCS Technical Service Providers Workshop**

Offered at the SAF Convention in Sacramento, CA  
Weds Oct 25, 8:00 a.m. to 3:30 p.m.

Technical Service Providers (TSPs) provide conservation planning assistance to private landowners on behalf of USDA’s Natural Resources Conservation Service (NRCS). TSPs are certified by NRCS to develop planning and practice design documents such as Forest Management Plans to help private forest landowners assess the current condition of their lands and to schedule conservation practices meeting NRCS standards and specifications.

For interested TSP applicants, this workshop will give participants a detailed overview of the process to become a TSP. This workshop will satisfy the TSP training requirements of the “TSP Orientation and Conservation Planning” course as well as the “Introduction to the Field Office Technical Guide” course. For current and renewing TSPs, this workshop will have a break-out session which will cover TSP program updates, the TSP Registry renewal and modification processes, and other important program guidance.

The USDA NRCS TSP Workshop is free and open to the public. Convention registration is not required to attend this event. However, workshop registration is required. [Register here.](#)

---

**Northeast/Mid-Atlantic SAF Leadership Academy**

November 15-17, 2023  
Grey Towers National Historic Site, Milford, PA

---

**2023 NESAF Winter Meeting**

March 27-29, 2024  
Hilton DoubleTree Hotel in Burlington, VT

---

**Forest METRIX**

*We make foresters happy.*

Mobile Forest Inventory Software for the 21st century  
[www.forestmetrix.com](http://www.forestmetrix.com)
This summer was a bumper crop seed year for many trees in central Maine where I live and work. In particular, I’ve never seen so many cones on white pine trees until this past summer. From a distance, white pines looked more brown than green because of their abundant cones. I thought this was a Maine thing, but as my wife and I caught a concert this summer in Saratoga Springs, NY, we saw lots of cones on pines, even as we were enjoying the music. The well above-average rainfall across the Northeast is a likely contributor.

In his book *The Maine Woods*, Thoreau described a conversation he had with a lumberman about the size of white pines. One white pine brought to a mill in Bangor contained 4,500 board feet. No doubt the tree was desirable as the logging crew had to cut a road over three miles just to get it. Thoreau mentions it was worth about $90.

It’s difficult to visualize how many seeds a tree like Thoreau’s “mega pine” could produce. Professor Emeritus Bob Seymour’s research from the University of Maine’s DeMeritt Forest has measured seed crops in white pine of well over 1,000 pounds per acre. That’s a big enough pool of biomass that we ought to consider monetizing pine seeds for the forest carbon marketplace.

As the growing season concludes and we start to ponder what next year’s crop might bring to the forest floor, I’m optimistic about more white pine. As the pine seedlings emerge across my small woodland, I’ll probably invest much more than $90 in sweat equity protecting them from deer and competing vegetation to produce seed in the future.

Safe travels to those of you attending the SAF Convention in Sacramento, CA. And a special congratulations again to New England’s national award winners (Peter Farrell, Ken Laustsen, and Mariko Yamasaki) and newly elected SAF Fellows (Phil Bryce, Tony D’Amato, Susan Francher, and Jeff Ward).

Enjoy the rest of fall, and see you in the next issue at the start of the year!