Hello from “Oh Fair New Mexico” ~ Alexa Denhoff

I recently attended the SAF National Convention for the second time as the Student Representative for District 6 with support from NYSAF and NESAF. This year’s convention was in the capital of New Mexico, Albuquerque. The rich southwest culture was amazing, as was the landscape, with mountains seeming to appear out of ground in a random assortment. My experience this year is definitely one for the books, and I hope to continue my involvement with SAF and attend future events!

The convention was very busy for me. My first task was to make a presentation to the House of Society Delegates on becoming more involved with students, then I watched my home school team compete in the Quiz Bowl tournament, conducted a very successful student workshop with the assistance of the Student Executive Committee, and lastly, attended several valuable technical workshops at the conference. What a busy meeting!

The best part of this year’s convention for me was making new connections, while getting back together with existing connections. My goal this year was to really branch out to as many students as possible, talk with them and help them to get the most out of convention. A fulfilling part for me is connecting students who are interested in holding leadership roles within SAF with leaders within the society and watching those connections take flight.

Another great part about the national convention is the region in which it is held. The southwest is chock full of culture, pinyon pine and delicious food! It is also a fantastic opportunity to see new places and landscapes that one might not have otherwise visited. Should you have the chance, I highly recommend it!

The Health of the Logging Industry in the Northeast and the Markets They Depend On

News Quarterly science theme ~ Dr. Anthony D’Amato, theme editor

The health of the logging industry is central to our ability to perform long-term stewardship on forestlands across the Northeast. A key driver of this health is reliable access to markets for the diversity of materials typically harvested as part of a logging job, including low-grade wood.

This theme highlights recent research led by Dr. René Germain at SUNY-ESF and Charles Levesque from Innovative Natural Resource Solutions, LLC on the status of the logging industry in the Northeast and the current and future outlook for the low-grade markets so critical to their survival. The profile of loggers currently thriving in these challenging markets highlights the importance of the ability to balance profitable and unprofitable jobs over time; however, recent trends in low-grade markets in the region suggest this balance may become increasingly challenging in the future affecting our ability to achieve long-term silvicultural objectives related to improving timber quality.

(Articles begins on page 4)
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It is truly an honor for me to serve as your Chair this year and I look forward to events, activities, and initiatives in which I will have the opportunity to meet and work with you. I have enjoyed my tenure as a member of the SAF and the friendships that I have developed over the past 30 years. I think back to my early SAF meetings as a student and remember wonderful seniors like Ed Wyman, Gibb Dodge, and Bob Frank speaking their mind. As a young professional I learned from leaders like BradWyman, David Fields, and Max McCormack. These people inspired me in my work in the woods, and also helped me understand the importance of SAF engagement- to be with professional peers who loved the forest as much as I did.

For those I have not yet met, a little background: I graduated from the University of New Hampshire in 1986, and spent my first summer doing inventory in Ashland Maine for International Paper. There I learned the importance of accuracy, and how to ask for beer in French. I then worked for Diamond International in Groveton NH, managing their 22,000 acres in Vermont. That job was short-lived as Diamond sold all its timberland in 1988 about two months after I got married and bought a house. I consulted for a few years, and then landed with Dartmouth College in 1993 - and for the last 24 years I have managed the College's 42,000 acres, with primary focus on the 27,000 acre Second College Grant property in Coos County NH. I love my work, and I love being a forester.

I have a few small goals for this year. I want to visit state division meetings as I am able to fit them into my schedule so that I can meet many of you individually. I also want to visit with some of the school forestry clubs, to encourage students to get involved and about the importance of being a member. I am pleased that my wife, Julie Renaud Evans who is Chair-Elect this year, will join me in this effort.

I would like to thank Jeff Ward for his leadership this year as chair, and to Fred Borman who will be leaving the board as immediate past chair. If you have a chance, please extend your own appreciation to these gentlemen; serving SAF in leadership positions takes a lot of time and dedication.

I think that the organizational committee of the 98th NESAF winter meeting have put together an exceptional agenda. Thanks to all those involved in planning, I extend my sincerest gratitude to you.

Please introduce yourself to me sometime in 2018!

Best regards, Kevin

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A Note from the Rocking Chair~ Ken Laustsen, NESAF Archivist

The amended constitution of SAF (Society), published in 1911, contained a provision authorizing the establishment of sections “where there are enough active members to form a strong local organization.”

An organizational meeting was held on April 3, 1920 in the office of State Forester Harold O. Cook in the State House in Boston, at which the New England Section was created, being the 11th Section within SAF.

The record names the following in attendance, and they are designated as charter members:

J.W. Toumey  R.C. Hawley  W. Munro  P.T. Coolidge  H. B. Shepard  D.A. Crocker  E.I. Terry

Professor Toumey was made temporary chairman and Professor Hawley the secretary. The record states that constitution and bylaws were presented by Hawley, but only the bylaws were recorded. The Nominating Committee, appointed by the chair, recommended the following, who were all subsequently elected: Chairman - Professor J.W. Toumey; Secretary - H.O. Cook; Executive Committee including the above officers: J.H. Foster (New Hampshire); D.A. Crocker (Maine), and J.R. Coolidge III (Massachusetts). The minutes note that 27 other members soon joined the Section by letter, and if my counting is correct represents an initial grand total of 43 members.

(article continues on page 19)
Logging plays a critical role in managing our forests for timber production and other benefits. This makes the financial success of loggers essential to forest management and the availability of many wood-based products used by the American consumer. However, there are serious concerns that logging businesses in Northeast are in decline, potentially threatening our ability to implement silvicultural prescriptions and conduct sustainable forest management.

To operate in the Northeast, loggers typically own some combination of felling, skidding and processing machines, along with trucks for delivery and excavation equipment for clean-up and BMP compliance. The variety of combinations is evident in the wide range of investment levels, from tens of thousands to millions of dollars. Systems comprised of older, used equipment have lower initial capital costs, but are subject to frequent breakdowns, drastically decreasing productivity. In contrast, owning new equipment is usually associated with high productivity, but corresponding high capital costs. Low-cost systems are more readily idled during times of low demand while high costs systems must have a steady flow of work to be viable.

The variability of harvest conditions associated with timber sale characteristics pose another challenge to logging businesses. This variability and associated lack of predictability is particularly difficult in hardwood and mixed-wood forest cover types of the Northeast. Therefore, productivity can vary from job to job, depending on some critical external variables associated with the harvest, including harvest volume per acre, species, stem size, area of harvest, average skidding distance, topography, access system, and amount of noncommercial timber stand improvement. Internal factors, such as type of harvest equipment, crew size, and skill levels, can also impact profitability on any given job.

Contract rates also influence logger profitability and ideally should fluctuate from job to job depending on market conditions, external, and internal variables. Loggers are commonly paid by a unit cost (e.g., per thousand board feet (MBF), per ton, or per cord) to cut, skid, and land. Germain et al. (2016) explored the effects of contract rates on profitability in the Northeast and found loggers rarely feel that they are positioned to negotiate higher rates for themselves. As price takers, loggers must look for ways to control costs and production rates to make individual jobs profitable.

Research focusing on the relationship between contract rates and profitability is almost non-existent in the Northeast. While it may seem obvious that higher rates would equate to higher levels of profitability, this relationship has not been adequately quantified. Germain et al. (2016) found current contract rates to range from as low as $110/MBF up to $180/MBF (depending on log rule) for sawtimber and from $12 to $22 per ton for pulpwood or chipwood.

The broader study examined factors influencing the profitability of loggers utilizing tree-length harvest systems on individual logging jobs across variable forested landscapes in New York and Northern Pennsylvania. The focus of this paper is to describe logger profitability on individual logging jobs.

**Methods**

The study was conducted on logging jobs located primarily in New York, supplemented by two jobs located just across the border in northeastern Pennsylvania. Working in partnership with procurement and consulting foresters, thirty-one loggers were identified for scheduled harvesting operations in the summer and fall of 2016. Of these, 23 agreed to participate and provided sufficient information to complete analysis.

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**Loggers of the Northeast: Are they Thriving, Striving or just Surviving?**

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(The following article is based on a presentation given at the 2017 NESAF meeting in Bangor, ME. A paper from that study is currently in review in the Journal of Forestry (Regula, Germain, Bick & Zhang 2018).)
Interviews were conducted at the harvest site at the close out of each job to ensure the logger fully reported clean-up costs and number of working days. Questions focused primarily on type of equipment, operating and ownership costs, and special characteristics of the harvest. The associated forester provided important information on each timber sale, including harvest area, maps, number of sawtimber stems marked for harvest (by species), actual sawtimber volume cut, pulpwood/firewood volume cut and other useful descriptive information. This allowed us to verify volumes provided by the logger and determine profit margins and ROI for each harvest.

PATH 2.1, a spreadsheet software program that calculates and applies costs of the entire production system, was used to calculate productive machine hour (PMH) for each piece of equipment using throughput accounting (Bick 2017). After cumulative machine costs, overhead and job specific costs were calculated for each piece of equipment, total throughput (net sales - variable expenses), operating expenses, investment, net profit, and ROI were calculated for each harvest operation. Revenue for each job was based on contract rates paid to the loggers to cut-skiid and land primarily sawtimber and paid in $/MBF, but included pulpwood and firewood in a few instances.

Results

We interviewed eight single person operators, eight 2-person crews, four 4-person crews, and three 3-person crews. The sample consisted of veteran loggers with most contractors (83%) having over a decade of experience as owners of a logging business, and 43% having over two decades of experience. This information is based on the year they established their business and does not include any previous logging experience for another company.

The loggers participating in this study owned and operated tree-length harvesting systems. Nearly half of the machines being utilized (48%) were made between 1990-1999 followed by 2000-2009 (33%), 1980-1989 (16%), and 2010-present (3%). Nearly two-thirds of the equipment dated back to the 1980s and 1990s.

The average harvest area was 81 acres with a range of 5-300 acres. The mean harvest volume was 393 cubic feet (ft^3) (10.4 tons) per acre, ranging from 71ft^3 (1.9 tons) to 920ft^3 (24.4 tons). The average sawtimber volume harvested across the sites was 110MBF, ranging from 16.7MBF to 588.2MBF, and an average of 1.7MBF per acre. The loggers spent an average of 30 days on their respective logging job, with a range of 5 to 75 days. The average cost of operating various logging equipment across the 23 logging jobs was as follows: feller bunchers ($74.80/PMH), skidders ($71.04/PMH), dozers ($68.65/PMH), loaders ($68.12/PMH), and chainsaws ($43.14/PMH).

Profit margin and ROI were chosen to assess the profitability of each job. Per job profit margin ranged from -38% to 36% and ROI ranged between -466% to 295%. It should be emphasized that these values are for individual timber harvesting jobs and do not reflect the logger’s yearly investment. The surviving (losing), striving (breaking even) and thriving (making money) thresholds were then applied to profit margin and ROI values to categorize the profitability of each job. The profit margin breakdowns indicate eleven of the harvests qualified as surviving, four were considered striving, and eight were thriving (Figure 1).

(article continues on next page)
The ROI interpretation shows twelve harvests in the surviving category, two in the striving, and nine in the thriving category (Figure 2).

Discussion

Our sample focused on smaller operations with a heavy representation of single-operators and 2-person crews with tree-length harvest systems. These loggers had a fairly low level of investment, with most having acquired older, used machines. The tree-length harvesting method is used throughout the northeast region, though in many areas whole-tree harvesting is more prevalent. Sixty-four percent of the machines in this study were 15-30 years old, while the remaining thirty-six percent were less than 15 years old. The age and condition of these machines mean that there is a fairly low level of investment, but often higher input costs for repairs and maintenance. Consequently, the results of this study will be more representative of loggers with used equipment and relatively high variable costs.

To assess profitability, each individual harvest was categorized using profit margin and ROI according to three thresholds: surviving, striving, and thriving. Almost half of the individual jobs fell in the surviving category. In the short run, loggers, like any small business, will run without making a profit as long as they can cover variable costs. In the long run, the fortunes of each business can turn with the next job or a change in the weather. Most studies assessing logger profitability have been conducted on a job by job basis or through surveys which cannot fully or accurately speak to annual profitability. Annually, loggers will complete jobs across the profitability spectrum. Long-term economic viability requires loggers to be cognizant of potentially problematic, unprofitable jobs and to use them only to bridge the gap between jobs that are profitable, especially when idling the business would result in greater losses.

Unit cost in dollars per cubic feet was calculated for individual harvests to include all volume and revenue generated from sawtimber, pulpwood, and firewood. Our results showed an...
average unit cost of $1.53/ft³ ($58/ton) with a range of $0.70-2.65 ($26-100/ton). This study is unique in linking unit harvesting costs to ROI and profit. Based on the logging cost literature, it is evident that the logging costs represented in our study are generally on the higher end of the scale. We suspect the age of the equipment, and associated high operating costs, coupled with silvicultural prescriptions dominated by hardwood crown thinnings (versus regeneration cuts) resulted in lower economies of scale, and ultimately higher unit costs.

Loggers need to be cognizant of logging jobs with potentially low productivity and associated high unit costs, and have a good sense whether it will fall into one of three scenarios: surviving, striving or thriving. When the individual financial results of the study were shared with the participating loggers, the majority were not surprised with their respective profit margins and ROIs. They had a sense of what type of job they were on. Those on surviving jobs clearly understood that over the year they would need to balance out their portfolio of jobs with striving jobs, as well as thriving jobs. What should that balance look like? We offer that Pareto’s Principle of the “vital few” (often referred to as the 80/20 Rule) might be relevant in assessing the annual financial viability of logging contractors (Juran 1951). In this context, the 80/20 Rule suggests that a majority of the output results from a minority of the input. In the case of logging contractors operating in highly variable conditions in the Northeast, we propose that 80% of a logger’s annual profit results from 20% of the logging jobs. In anecdotal conversations with our sample loggers, they agreed that this breakdown could be in the ballpark. When conducting recent logger training workshops, we bounced the same theory off our audiences and they also concurred that a few really profitable jobs (due harvest characteristics and conditions) throughout the year subsidize the balance of their annual logging jobs. Clearly, the key to long-term economic viability is ensuring there are enough thriving jobs in the annual portfolio. In order to select those jobs, it is important that both logger and foresters know those variables that can impact harvesting costs and productivity.

Harvesting operations in the Northeastern US are characterized by challenging site conditions and unpredictable physical environments. Without a skilled and thriving logging workforce most forest management activities cannot be implemented. It is imperative that foresters, along with the greater forest products community, do their part to ensure the economic viability of the logging force.

**Literature Cited**


Whither Low-Grade Markets in the Northeast - Silviculture be Damned?

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(The following article is based on a presentation given at the 2017 SAF National Convention in Albuquerque, NM.)

Low-grade timber markets in the New England region have taken a beating in the last few years. The logic relating to the silvicultural effects of market reduction should be simple. Fewer low grade markets should mean more difficulty in practicing good silviculture - the goal of which should be to improve the quality and value of timber whether on private or public lands. This kind of harvesting - based on careful silvicultural prescriptions - is more sustainable than the alternative. But is that what is happening on-the-ground: is silviculture suffering as a result of the low-grade timber market fall (Figure 1)?

We already know that most of the timber harvested from a typical site in New England is going to be low-grade. So to try an answer the silvicultural question, we’ll start with a review of the three major low-grade timber market sectors in the region: pulp & paper; wood-fired electricity generation; and wood-fired thermal (heating buildings).

Pulp and Paper

Since 1999, the Northeast has lost 11 pulp mills - with six left with four in Maine and two in New York. Since 2014, roughly 4 million annual tons of market for low-grade wood has been lost. Most of this is from the loss in pulp and paper markets - especially softwood including white pine - but some is from shuttered biomass plants (some temporarily we believe) (Figure 2).

The graph below (Figure 3) shows the reduction in pulpwood consumption from Maine pulp mills since 2009. The huge recent reduction since 2014 has had a ripple effect on loggers’ and foresters’ access to pulp markets in the region. Those closest to the markets in Maine have had better access but as you reach out to the far ends of the procurement radii for the remaining mills, this more expensive wood is losing access to those markets. Where some of these markets were accessible to at least some harvests in Southern New England prior to 2014, that notion is nearly a pipe dream today. By contrast, in New York, the two remaining pulp mills have not seen their raw material purchases reduced to any great degree and these markets are still important to the western portion of New England harvests.
What is causing the severe reduction in pulp and paper markets in Maine? Simply put, reduction in global demand for the main paper product made at these largely aging mills: coated paper – the beautiful glossy paper we find in magazines from Time to National Geographic. And keep in mind, pulp and paper are global commodities. A new or much newer mill in the Pacific Rim producing the same glossy paper, can get it to market cheaper given its cheaper cost profile (larger size, cheaper labor, cheaper energy, etc.). And another big factor often ignored, currency exchange rates, also has a big effect here.

The result has not only been a reduction of access to pulpwood markets for foresters and loggers in the northeast but reduction in prices for those that do still have access. Supply and demand – economics 101 - plain and simple.

But all is not lost. The remaining mills in Maine have seen some investment (or are in the middle of it) to the tune of over $400 million in capital in just the last 2 years. These remaining mills are the largest of all those that graced the Maine landscape and their owners seem to be saying - “OK, we’ve weeded out the riff-raff and now we are ready to compete for the long term.” And collectively, including the two New York pulp mills, demand for pulpwood is still approaching 8 million tons per year.

Wood-fired electricity generation - aka - Biomass

Biomass markets in New England are also having a tough time surviving. Low wholesale power prices, combined with flagging public policy incentives for renewable biomass from states in Southern New England, have left biomass plants throughout the region struggling to continue operations.

As markets for low-grade wood - both pulpwood and biomass - have declined in the Northeast, remaining low-grade markets, especially biomass markets, have become increasingly important. Today, when all 20 biomass power plants are operating in the New England/New York region, this amounts to demand for over 5 million tons of wood each year. Not all have been running at all times in the last couple of years, however, and the future does not look rosy for this sector, unfortunately, despite serious policy efforts by the legislatures in Maine and New Hampshire in the last two years (Figure 4).

Recognizing the important role biomass plants play in the forest economy, states have been acting to support continued operations. In 2016, Maine allocated nearly $14 million to support continued operations at four biomass plants, attempting to close
the gap between:

- the cost of fuel and operations,
- what biomass plants get paid for their power and Renewable Energy Certificates (their two revenue sources).

In 2017, it was New Hampshire’s turn. The state has six “legacy” biomass plants - all under 20 megawatts in capacity - built decades ago. It also has a 50 megawatt facility that was converted from coal a decade ago on the Seacoast, and a new 75 megawatt plant at the site of a closed pulp mill in the Berlin, NH. These plants represent increasingly important markets for loggers and landowners in the state and region.

Recognizing the challenging economics that biomass plants face in today’s energy market, the New Hampshire legislature modified the state’s Renewable Portfolio Standard (RPS), a law that establishes required levels of renewable energy purchases by state utilities. While complex, the modified RPS is expected to raise what the state’s six legacy biomass plants get paid for their Renewable Energy Certificates - in essence the “renewable” part of renewable energy. In July of 2017, New Hampshire Governor Chris Sununu allowed the legislation to become law without his signature.

The new law impacts the market for three years - 2017, 2018 and 2019. It is expected that most or all of the six legacy plants will be able to use this additional support to continue operating for a few years. The following graph (Figure 5) shows the challenge with the current revenue streams for a typical biomass electricity plant in the northeast - expenses are, on average, more than revenue for a good part of the year. A business is no more if that kind of thing continues for any significant length of time unless a crystal ball showing better times ahead is in the possession of plant owners and investors. The Maine and New Hampshire legislature’s attempt is to alter the economics of these plants - at least for a short while.

But what about after these subsidies end? Wholesale electricity markets are expected to stay low, with plentiful and inexpensive natural gas the primary fuel used to generate electricity in the region. Policy supports from the large renewable markets in Southern New England for biomass - notably Massachusetts and Connecticut - are gone or shrinking. The economics of selling biomass power in New England doesn’t look like it will improve over the next few years.

Given these events, all of region’s biomass market - totaling approximately 5 million tons annually - is in jeopardy just a few years from now. While the legislation just enacted provides a welcome and needed reprieve, the industry has just a few short years to explore new business models to remain economically viable. Achieving this - and retaining the critical markets these plants provide - will require creative thinking not only from the biomass plants, but from their suppliers and policy-makers, all of whom have a stake in maintaining this market.

Wood-fired thermal (heating buildings)

The only bright spot in low-grade wood markets in the region has been wood-fired thermal - heating buildings with wood chips and pellets. Though using the words “bright spot” is probably a misnomer. It was a bright spot before the severe drop in fossil fuel prices started in 2014. Since then, while the sector has largely maintained its spot, it has struggled to grow although it had been doing so before 2014.

![Figure 5: Biomass Plant revenues and expenses in 2017](image-url)
What does this sector look like? It includes commercial and institutional users of wood chips and pellets for heating buildings like schools, hospitals, businesses and other public buildings. It also includes use of these fuels - and regular old firewood - in thousands of residential buildings in the region. The commercial and institutional users, the larger of which use clean wood chips, are approximately use somewhere around 250,000 tons of chips and pellets a year to heat with. A drop in the bucket compared to biomass for electricity and pulpwood for pulp and paper mills, but significant nevertheless. And don’t forget traditional chunk firewood - with 2 million cords of estimated use annually.

There are special efforts in New York, Vermont, New Hampshire, Massachusetts and Maine - so-called State Wood Energy Teams - seeking to increase use of wood fuel in the thermal sectors, but, while they have made some in-roads since those efforts started in 2014, the going is tough, primarily because of the low fossil fuel price situation. The technology being used for wood thermal is very modern, very clean and very attractive for those who have adopted or who are switching from fossil fuel to wood today. But the economic advantage felt in 2014 and before - with the long-term cost analyses showing it cost about half to install and run a new wood-fired boiler to heat a commercial or institutional (or residential) building as compared to a fossil fuel boiler - has nearly evaporated. This has made fuel switching to wood a difficult choice today for all but the truly dedicated “wood geeks”. This could change quickly should fossil fuel prices climb significantly to where they were pre-2014. Long-term forecasts, unfortunately, say they will not - at least for many years to come.

Wood pellet mills, part of the new and growing biomass thermal sector the northeast has experienced, have grown in number and output tremendously over the last two decades (there were none at the start of that period). But a cold winter three years ago with barely enough supply for the increasing demand has been followed by two mild winters (2015-16 & 2016-17) and extra production resulting from the increased demand felt in the winter of 2014-15 has nearly spelled disaster for the sector. There are many pellet mills shut down, working less than full-time or struggling to sell all of their output.

So What About Silviculture?

So as we asked in the introduction - is this recent reduction in low-grade timber markets having an effect on the practice of silviculture? It is important to lay some context to our northeastern situation with regard to low-grade timber markets. This article is based on a presentation made at the 2017 SAF convention in Albuquerque, New Mexico. Compared to New Mexico and many other states in the southwest, where loggers are often being paid $500 to $1000 per acre to do improvement harvesting (or more), the northeast situation is still robust. That doesn’t mean we are satisfied with the changes we have experienced in these markets. Indeed, if our silvicultural decisions are based on trying to grow the highest quality trees that the best markets pay top dollar for (sawlogs and veneer in both hard and softwood), then the low-grade market situation really matters.

At Innovative Natural Resource Solutions, LLC, we dig to find data and information from all sources to answer the questions our
clients pose to us. To help try to answer the silviculture question in this article, we found only one true quantitative source of data that helps and we also relied on interviews with professional loggers and foresters in the region to gain some insight. Here’s what we learned:

First, the data source was Report of Cut data from New Hampshire. This is data filed for all logging jobs in the state after the harvest is complete – actual harvest volumes from the job. The time series below shows two years of data – from before the most recent loss of low-grade markets in 2014, and 2015 (Figure 6).

The take-home data can be summarized as follows:

- Less pulpwood (and more biomass) being harvested
- Result is lower $$$ to the landowner
- Reduced sawlog harvest
- Consequences to silvicultural goals of growing more high quality/high value timber - UNCLEAR.

Figure 6: The loss of low-grade markets in New England shows a decline in pulpwood harvest and increase in biomass harvest between 2010 and 2015
Interviews told us a little more. The key findings include:

From foresters:
- Worries about doing improvement work - thinning/shelterwood to remove low-quality wood,
- Some loggers are refusing to cut these jobs already or paying less for them,
- More wood going into the chipper for whole-tree harvesting operations as pulpwood markets are reduced = lower value for landowner,
- Increased out-of-pocket expenses on low value harvests for wildlife habitat purposes,
- Simply not harvesting some areas or lots that are high to low-quality of small average diameter or both.

From loggers:
- Financial goal of harvests are to get the most gross revenue in the shortest period of time on the job,
- They will sacrifice total gross revenue from a harvest if it can speed up completion of the job and their cash flow,
- Result is that for whole tree harvesting configurations - more wood is going into the chipper,
- Most would not put a good sawlog into the chipper but a low-quality one may get chipped with increased turn-around of chipped wood vs pulpwood and sawlogs,
- As low-quality market options get reduced - especially for softwood - they may not bid on a job with a lot with improvement work.

Overall, silvicultural findings can be summarized as:
- Early effects of low-grade market reduction are being felt in the woods,
- Where Southern New England had access to low-grade markets, they are no longer within procurement radii, and
- More forested areas in need of improvement silviculture prescriptions will remain untouched or deferred.

Black Fly Story Hour

To take place at NESAF Meeting in March 2018. Story tellers needed!

Are you a good story teller? Do you have a 4 or 5 minute story you would like to tell at the NESAF meeting in March?

Please contact Charlie Levesque with your forest or forestry story idea at levesque@inrsllc.com or 603-588-3272.

On Tuesday, March 27 at 7:30 PM at the NESAF meeting, come have a drink and snacks and enjoy your story-telling colleagues as they share their funny, wonderful, sad and engaging experiences in the woods.

This will truly be an experience you will not forget!
Anaplasmosis

Anaplasmosis disease, spread by the same tick that carries Lyme disease, is becoming a significant concern in southern Maine and in coastal areas. Reported cases of the disease have more than doubled during the past two years, with 500+ cases reported during the first ten months of 2017. The number of reported cases has likely increased in November and early December, due to mild temperatures.

Ten percent of ticks in some areas of Maine have tested positive for the disease. Precautions should be taken if temperatures remain moderate or vacillate during winter months.

The Economic Outlook

Efforts during the year to address the economic plight of logging contractors and forest landowners have resulted in limited improvement. Biomass plants in Jonesboro and Enfield have seen almost no activity and prospects going forward are uncertain. Foreign woods workers operating in Maine have allegedly added to the problem experienced by Maine’s loggers. New products, such as cross-laminated timber (CLT) and biochemical manufacturing facilities hold promise, but these potential prospects have yet to happen. During this same time period, the governor continues to oppose releasing federal funds for job training programs, which further burdens the state’s economic resources. It’s uncertain if the upcoming legislative session can address any of the issues that have weighed on the forest industry in 2017. MESAF members are encouraged to speak to their state and federal representatives in order to keep this current economic situation on the minds of our elected officials. Such inquiries hold hope of initiating some economic activity.

Efforts to Combat Winter Moths

Winter moths, which were introduced from Europe, remain a concern in parts of Maine and other states in New England due to their defoliation of deciduous trees and shrubs in the spring. The moths remain active into early winter when temperatures are above freezing. The Maine Department of Agriculture is asking citizens to report the location of moths sighted during winter months. Sightings should be reported to: (207)-287-2431 or www.maine.gov/dacf/wintermothsurvey.

MESAF Fall Meeting

On October 6, MESAF members joined with members of The American Chestnut Foundation in Portland to share a meeting that focused on presentations about Maine’s Tree Growth Tax Law (TGTLL) and progress that’s been made with restoration of the American chestnut to the forestlands of eastern United States.

Tree Growth Tax Law: Presentations about the TGTLL were made by Lisa Whynot, Supervisor with the Maine Department of Revenue Services; Don Mansius, Director of Forest Policy & Management at the Maine Forest Service; Representative Steve Stanley, with the Maine Legislature; Dr. Steve Shaler, Director of the UM School of Forest Resources; Dr. Adam Daigneault, Assistant Professor at the School of Forest Resources, and Tom Fox, a consulting forester with Fox Forestry.

Business Meeting: At the business meeting, MESAF members were recognized for their membership in SAF:

- 50 Years- Calvin B. Gammon and Lee B. Stover
- 40 Years- Charles D. Agnew Jr., Michael H. Dann, David D. Griswold, Marcia McKeague, Robert M. Spivey, William C. Sylvester, and John D. Wilson
- 30 Years- D. Jensen Bissell, Lisa D. Carr, Francis T. Cuff, Donald W. Floyd, Glenn P. Nadeau and Mark W. Rabon
- 20 Years- Lawrence E. Caldwell, David A. Irving, Laura S. Kenefic, Luc G. LeBel and John W. Willard
- 10 Years- Scott R. Barnes, Karl J. Buckley, Jason P. Desjardin, Alexander R. Ingraham, Eugene R. Mahar, Amber M. Roth, Cassie L. Vaillancourt and Stacy Trosper

Congratulations are extended to these individuals for their service and commitment to SAF.
Public Comments Sought on Forests, Recreation and Wood Products

As the administration of Governor Scott explores economic development issues, several major projects to collect public information on issues related to Vermont’s forests have been launched.

The Vermont Outdoor Recreation Economic Collaborative (VOREC) was formed earlier this year to make recommendations on ways to increase sustainable outdoor recreation opportunities in the state. Public meetings were held in seven locations and on-line to gather information on an industry that currently clocks in $2.5 billion dollars in consumer spending in the state.

The responses have been numerous and diverse. Some of the suggestions apply to uses and incentives for recreation on private as well as public forest lands, town roads, trails and parks. These are being compiled and reviewed.

A series of four “early bird” (7:30 AM-9:30 AM) public meetings were held in December to listen to local concerns related to Vermont’s Forest Economy. Presentation on Vermont’s “Cut with Confidence” outreach program to landowners, an update on the Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs), a review of the Wood Utilization and Wood Energy program and the latest on the Vermont’s Use Value Appraisal Program (Current Use were discussed.

Meanwhile the Vermont Sustainable Jobs Fund is conducting an on-line survey on Vermont’s forests and the forest and wood products businesses to gauge the perception of the industry.

Reports on all of these are pending, but the FPR website www.vtfpr.org will have updates and links.

New Wood Energy Coordinator

Vermont Forests, Parks & Recreation hired Emma Hanson as its new Wood Energy Coordinator. Emma’s charge is to help Vermont reach a goal of doubling the use of wood fuel for building heating by 2035 to help reduce Vermont’s dependence on fossil fuels.

Forest Tent Surveys Begin for 2018

Forest Tent Caterpillar surveys began in Vermont in November when the leaves were off the trees. All sugar license areas on state land have been evaluated, and State Forest Protection staff are responding to requests from other sugar makers on private forest land owners for evaluations. In 2017, the hardest-hit areas were Essex, Lamoille and Orleans Counties. Some sugarbushes at risk of defoliation were sprayed with Bt last May. Spray permits are issued through the VT Agency of Food, Agriculture and Markets with VT Forests, Parks and Recreation assisting with surveys and mapping support to landowners. One state timber sale was pulled from the schedule in 2017 when it was found to have significant defoliation from FTC.

Portable Truck Bridges Available in Vermont

Thanks to a grant from the US Fish and Wildlife Service, Vermont has a new portable steel truck bridge for temporary stream crossings for logging. The new bridge is in place on private land in Addison County as a rental unit. A second bridge is on the way to Central Vermont. The steel bridges have a span of 35 feet and hold 99,000 lbs. Vermont has long been a supporter of skidder bridges, with partners working together to make rentals available statewide as well as workshops for loggers on building the bridges.

Good Neighbors Means Sharing between State and Forest Service

The State of Vermont and the Green Mountain National Forest are working together to hire a new entry-level forester to spend time on both public lands. The joint position will have equal time on both state and federal lands, giving both organizations more capacity to prepare timber sales and accomplish project work. The new forester will be located in Rutland where state and federal offices for each are within yards of each other. While the new forester will technically be a state employee, the costs will be shared.

(article continues on next page)
Granite State Division News ~ Stephen Eisenhaure

Upcoming Opportunities

We hope to see you at our two upcoming meetings this winter. The Granite State Division will be having its Annual winter meeting Friday February 9, 2018 at the Grappone Conference Center in Concord. Come to hear updates on what is happening with forestry in NH and gain some insight on how LIDAR is being used in Forestry. For program information contact Tim Fleury, Tim.Fleury@unh.edu. Register here https://goo.gl/B6qCik, or for registration information contact Gabe Roxby, groxby@forestsoociety.org.

We’re excited that the NESAF Winter Meeting, 2018: New England Forest Stories, will be held in Nashua this year March 27-29. Sounds like a creative and interesting program and you will not want to miss out on it! See the highlighted section in this newsletter for more information.

Student Support

Our division continues to show their support for students through the Student Incentives fund. This year we awarded $3000.00 to qualifying businesses that hire students. This program is a great success and we are looking forward to continuing it into the New Year.

Policy Committee

The GSDSA has set up a policy subcommittee to review the New Hampshire Timber Yield Tax. Two bills have been filed in this year’s legislative session. The first bill seeks to repeal the yield tax altogether. The second looks to modify administrative procedures to improve the filing process, supplemental reporting and assessment procedures. Research in archives has revealed that some of these problems have existed for decades. The GSDSA subcommittee is working to develop recommendations for improvement of the yield tax when these bills are presented.

Green Mountain News ~ Continued

GMD Embarks on Reorganization

The Green Mountain Division of NESAF is examining its bylaws and seeking to promote the benefits of leadership within the Division. The division will be working with the membership to encourage more planning and participation in the Division’s learning and leadership opportunities.

The recent adoption of Forester licensing by the State of Vermont has resulted in the need for expanded training and workshops that utilize SAF-certification of learning credits. The importance of NESAF and the Green Mountain Division for providing and promoting these experiences is only one reason for examining the current structure and systems within the Division. Providing a broad base for forestry information, policy recommendations and continuing education in Vermont is dependent on committed leadership that draws on foresters at all stages and experience levels as members as well as leaders. All GMD members are encouraged to share their thoughts and ideas and to consider how they can support leadership in the Division by contacting Mike White at mike@calfeewoodland.com.

Volunteers Needed for 2019 NESAF Meeting

The Green Mountain Division will host the 2019 NESAF meeting in the late winter/early spring of that year. Planning for this meeting is in the very first stages and a chair for the event will be announced soon. Volunteers are needed for many positions to make this exciting project run smoothly so please consider making a little time available to help. Vermont has always provided an interesting and well-attended NESAF meeting, so be a part of the 2019 team! Contact mike@calfeewoodland.com.
Connecticut Urban Forest Conference and Forest Forum (by Chris Donnelly)

On November 7th, the Connecticut Urban Forest Council and the Connecticut Forest and Park Association worked together to host the Connecticut Urban Forest Conference and Forest Forum. The event, held at the Aqua Turf in Southington, was well-attended, with nearly 200 attendees. Attendance was drawn from the ranks of Connecticut’s forest practitioners, tree wardens, arborists, citizen volunteers, master gardeners and more. The theme of the meeting was, “What Do You Know About Connecticut’s Forests?” The keynote speaker for the event was Dr. Tom Wessels of Antioch University in Keene, NH. Dr. Wessels spoke on “Reading the Forested Landscape”. For an hour, he held most all in the room transfixed, as he related the story of New England’s forests, including the role of Merino sheep, row crops and natural disasters. For the vast majority in the room, it was an eye-opening talk. On the previous day, Dr. Wessels had given a walk at the headquarters of the CT Forest and Park Association, which gave him additional material to draw from for this audience. Breakout sessions included:

- Innovation on Small Woodland Parcels
- Recreation and Balance in Connecticut’s Forests
- Planning for the Future: Protecting Our Drinking Water
- History and Culture - What Do People Look For in Parks?
- Towns and Forest Management
- GIS Technology for the Urban Forest

Each session lasted for an hour and 15 minutes and were well-attended. The wrap-up speaker was DEEP Deputy Commissioner Susan Whalen. In her closing remarks, Susan discussed the state of the forest in Connecticut, including DEEP’s continued commitment to both the forests and to maintaining a strong and contributing Division of Forestry.

2017 Timber Tax Tips - available online from the CTDEEP

A timely 2 page publication 2017 Timber Tax Tips is available online from the CTDEEP Forestry web page. Another useful publication is Income Tax Deduction for Timber Casualty Loss. Just go to the CTDEEP webpage, select forestry under the natural resources tab, then select publications. The list of available forestry publications is extensive under the categories timber; forest practices (which includes the CT BMP’s publication); forest conservation; services; forest economics; and annual timber production information. Also available are USDA Forest Service publications related to CT and the northeast.
Paul Dolan, Elected SAF Fellow

The Society of American Foresters (SAF) has announced Paul Dolan of North Scituate, Rhode Island as a recipient of a 2017 Fellow Award. The Fellow Award is a prestigious award that recognizes an SAF member for long standing service to forestry at the local, state, and national level. The SAF Fellow is recognized as an ambassador for the advancement of forestry.

Paul, an SAF member since 1979, is the Area Director of the Rhode Island RC&D Council. He is retired from the Rhode Department of Environmental Management’s Division of Forest Environment where he worked for 34 years, in positions ranging from Service Forester to Deputy State Forester. He has been involved in all levels of SAF activities including serving in leadership roles in the RI Chapter, the Yankee Division and NESAF Executive Committee. He is a past Chair of NESAF and has been involved in the planning of NESAF Annual Meetings, the SAF National Convention and served on the SAF House of Society Delegates. His region-wide reputation for excellence resulted in his selection as the Yankee Division’s David M. Smith Outstanding Forester Award in 2004. Paul has also devoted much of his own time to various forestry projects in Rhode Island and across New England. benefited from Paul’s involvement.

Paul was recognized at the 2017 SAF National Convention, in Albuquerque, New Mexico.

Robert W. MacMillan, Recipient of Presidential Field Forester Award for District 6: New England SAF.

The Society of American Foresters (SAF) has announced Rob MacMillan of North Kingstown, Rhode Island as a recipient of its 2017 Presidential Field Forester Awards. The awards recognize foresters who have dedicated their professional careers to the application of forestry on the ground using sound, scientific methods and adaptive management strategies. The awards are presented to individuals who have displayed uncommon talent, skill, and innovative methods to achieve a record of excellence in the application of forest management.

Rob, an SAF member since 1990, is the senior forest supervisor for the Providence (Rhode Island) Water Supply Board (PWSB). He also works as a consulting forester and is a technical service provider with the US Natural Resources Conservation Service. He served in the US Air Force from 1984 to 1988 and was a member of the Rhode Island Air National Guard from 1990 to 2006.

Rob develops and implements the forest-management program for the PWSB’s 12,500 acres of watershed forest, based upon a comprehensive forest inventory, GIS database and maps, and applied knowledge of science-based forest and watershed management principles. He helped to develop and direct a deer-management plan for PWSB’s Scituate Reservoir. He and other PWSB foresters coordinate regular public tours to highlight the forest management work that they do and its relationship to protecting the state’s premier drinking water supply. Rob is the past chair and a current member of the Rhode Island Tree Farm Program Executive Committee and is a Tree Farm inspecting forester. Rob is actively involved with the Rhode Island Forest Conservators Organization, the Northern Rhode Island Conservation District, and the New England Water Works Association.

Rob was recognized at the 2017 SAF National Convention, in Albuquerque, New Mexico.

RI Tree Farm Tour

The Rhode Island Tree Farm Program held its annual Fall Tour in the woodlands of the Scituate Reservoir. This year’s tour focused on the impacts of the past few years of drought and defoliations on our oak resource. Chris Cassadei from Hull Forests Products discussed potential impacts to markets of widespread oak mortality. Dr. James (URI-Retired) discussed research that he conducted in the 1980’s on the response of Eastern White Pine to various levels of defoliation.
MA Greening the Gateway City Plants over 11,000 trees

The Massachusetts Greening the Gateway Cities Program (GGCP) is an environmental and energy efficiency program designed to reduce household heating and cooling energy use by increasing tree canopy cover in low income urban residential areas in the state’s 26 Gateway Cities. The Department of Conservation and Recreation (DCR) Urban & Community Forestry Program, partners with cities and local grassroots organizations to spread the word and assist with this free tree planting program. Most of these 6-10 foot trees are planted in small residential yards by DCR crews hired from local neighborhoods after residents call for a tree and DCR foresters visit the yard with residents to select tree species using the “right tree/right place” approach to increase and diversify the urban canopy. Residents agree to water the trees for the first two years and samples of past plantings show an 80-90% survival rate. About 20% of the trees are planted along streets with the assistance of city crews and equipment. Studies of energy use after extensive tree removals due to the Asian Longhorn Beetle disaster in Worcester and elsewhere have shown that each 1% of new canopy cover will reduce summer and winter energy use by more than 1%. Planting trees is also the only all-local energy efficiency tool supporting local jobs at tree nurseries and in tree planting. The goal of the GGCP is to add 5% of new canopy to neighborhoods of about 500 acres in size (about 2,500 trees). In the past three years the program has expanded from 3 pilot cities to now 13 cities and passed the 11,000 tree threshold this fall. The three pilot cities are now close to their 2,500 tree goals. In addition to saving energy in Environmental Justice neighborhoods where surveys show energy costs are a significant stress on local budgets, the program is valued by residents for the aesthetic, health, wildlife and property value benefits. The program is funded largely by the MA Department of Energy Resources via an efficiency fund as well as environmental bonds. As part of the program, pilot installation of tree filters to reduce stormwater are also taking place with a US Forest Service grant in three cities. DCR also partners with state and local public housing authorities and is planting 800 trees in one large public housing neighborhood this spring in Quincy.

From the Rocking Chair, continued from page 3

At some point the term Section was changed to a State Society, of which there are now 32 state societies. State society chairs get together before the annual national convention and meet in what is called the House of Society Delegates (HSD). Initially the New England Section comprised members from the six New England States, but in 1930 provision was made for the admission of members from the eastern provinces of Canada.

In June of 1949, the Society constitution was again amended to authorize the creation of chapters within the sections. Accordingly, the Granite State Chapter was authorized on February 22, 1952; the Green Mountain Chapter, approved on August 16, 1956 with an application of 16 members, was officially organized on January 16, 1957 with 30 members present; and the Yankee Chapter, comprising Rhode Island, Connecticut, and Massachusetts was authorized on February 19, 1959, and organized on February 20, 1960 at Stafford, Springs, CT with 43 members present. The record states that these chapters have been vigorous, and very useful to the members in relation to their local interests.
Northeast Silviculture Institute for Foresters 2017 - a re-cap

“I attended all 5 Institute sessions. Absolutely fantastic experience. It made my year...” Private consulting forester

Through a grant from the USDA Forest Service, State and Private Forestry, the North East State Foresters Association (NEFA) offered the Northeast Silviculture Institute for Foresters (Institute) in 2017, a series of 5 two-day training workshops in graduate level silviculture. NEFA hopes to offer the training again in 2018 if sufficient funding can be secured. 250 people attended the 5 workshops which had a limit of 50 at each.

The Institute workshops are designed to provide northeast U.S. foresters with the latest knowledge to make sound, science-based decisions for forest ecosystem management, harvests and regeneration. This project is designed so it can be used in the USDA Forest Service’s National Advanced Silviculture Program (NASP) to provide landscape-specific materials for northeast forests. Prior to the Institute, such a curriculum had not existed for the northeast under NASP.

The Institute five distinct modules delivered in 2017 covered the following:
- NASP New England and Northern New York Overview (2 days)
- Spruce - Fir Forest Type (2 days)
- Pine, Oak and Hemlock Forest Type (2 days)
- Northern Hardwood Forest Type (2 days)
- Mixed Oak Hickory Forest Type (2 days)

Each of the forest type workshops included at least:
1. Silvics of individual species & stand dynamics including land use history
2. Silvicultural systems and practices including growth, yield, quality and regeneration
3. Economics, utilization & markets
4. Forest health
5. Wildlife considerations specific to forest type
6. Soils
7. Site quality and productivity
8. Sample prescriptions& work assignment
9. Legal, landowner objectives & carbon considerations
10. Field Trip into forest type (1 day)

All of the 2017 Institute sessions were filmed and will be available as online resources in early 2018. This will make the information available for all foresters in the region, whether they are able to attend the Institute training modules or not.

Here’s what some of the attendees have said about the training in 2017:

I started adjusting my marking the day after the session. I am doing a better job planning and laying out regeneration harvests based on what species need advance regen or not. I am also thinking much harder about when and how to remove low and intermediate shade species.
All in all the entire workshop, presenters, field trip leaders and field trips were excellent. The material, its quality and content were first rate. It’s too bad we didn’t have a week (or more) to cover things in greater depth.

The material covered in the workshop and the input from other foresters made me realize that I do not understand the statistics behind the numbers I use every day in this field. I have become dependent on computer programs to reach conclusions. Understanding the relationships between the stand’s condition, the data I collect, and the conclusions of the data will make me a better forester.

The forest hydrology session was the first time I have ever been exposed to this technical material and research. Great presentations by all and I felt that the presentation skills and climate adaptation were important in my everyday work.

I thought this workshop was great. It was a TON of information packed into a short time. I will certainly do some follow up reading to learn more about each topic - the readings and references in and of themselves were worth attending for.

In Memoriam

Dick Weyrick, long time SAF member, passed away this fall. He moved to NH with his family in 1964 to teach Forestry and Environmental Sciences at the University of New Hampshire. He was a beloved professor/advisor to thousands of students over his 40 plus year career. He remained an environmental advocate and served for years as Chair and member of the Lee Conservation Commission and was a founding advocate for the Lee N.H. Recycling initiatives. Whenever there was a calling for conservation, environmental, or forest management, he was quick to volunteer and he served with passion including the Durham Community Church. He took the time to connect with each student in all his endeavors to deliver his messages in ways that each one would be the most receptive to. A careful, compassionate ear for listening was his brand.

John E. Trowbridge, 70, of Hampton, passed away Sunday, November 26, 2017 at his home surrounded by his family. Born in Hartford on November 21, 1947, son of the late John P. and Mary (Ryan) Trowbridge. He graduated from UCONN with a degree in Civil Engineering in 1971. In 1972 he started his Logging business. For over 45 years, he led the industry in innovation both in equipment and markets. Being one of the first logging companies to export logs to Canada and overseas. In addition, he supplied wood to Mystic Seaport for the ships "Morgan" and "Amistad" which were used for masts, spores and planking. His business was built on integrity and honesty. Most importantly John cared. He cared about the men who worked for him, the resource and the landowners who trusted their forestland to him. His love for the outdoors was demonstrated in every aspect of his life. His memory will continue in the hearts of all who knew and loved him.

Hazel Fellner Tuttle, 94, of Fort Collins CO and formerly of Middlebury CT, died on September 12, 2017 in Fort Collins. She received a Bachelors degree from Sweet Briar College and a Masters from Yale School of Forestry and Environmental Studies. With a passionate interest in plants, especially mushrooms and trees, Hazel was active in several organizations such as Connecticut Forest and Park Association, the Colorado Mycological Society, and the Society of American Foresters.
## Continuing Forestry Education Update ~ Andrew Fast, UNH

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<td>17-Oct</td>
<td><strong>NH Timber Harvesting Law</strong></td>
<td>Colebrook, NH</td>
<td>6.0/I</td>
</tr>
<tr>
<td>17-Oct</td>
<td><strong>The Great Acadia Fire 70 Years Later (Day 1)</strong></td>
<td>Bar Harbor, ME</td>
<td>2.0/I</td>
</tr>
<tr>
<td>18-Oct</td>
<td><strong>The Great Acadia Fire 70 Years Later (Day 2)</strong></td>
<td>Bar Harbor, ME</td>
<td>4.0/I</td>
</tr>
<tr>
<td>18-Oct</td>
<td><strong>RISI North American Conference (Day 3)</strong></td>
<td>Boston, MA</td>
<td>4.5/I</td>
</tr>
<tr>
<td>19-Oct</td>
<td><strong>NH Timber Harvesting Law</strong></td>
<td>Hillsborough, NH</td>
<td>6.0/I</td>
</tr>
<tr>
<td>20-Oct</td>
<td><strong>Overview of the ecology and practice of adding large wood in 1st order streams</strong></td>
<td>Albany, NH</td>
<td>4.5/I</td>
</tr>
<tr>
<td>23-Oct</td>
<td><strong>Fundamentals of Forestry</strong></td>
<td>Lancaster, NH</td>
<td>2.5/I, 3.5/I</td>
</tr>
<tr>
<td>24-Oct</td>
<td><strong>Forestry for Maine Birds</strong></td>
<td>New Limerick, ME</td>
<td>3.0/I</td>
</tr>
<tr>
<td>26-Oct</td>
<td><strong>Fundamentals of Forestry</strong></td>
<td>Hillsborough, NH</td>
<td>2.5/I, 3.5/I</td>
</tr>
<tr>
<td>28-Oct</td>
<td><strong>Farm Tractors for Forestry</strong></td>
<td>Bridgewater, NH</td>
<td>3.5/I</td>
</tr>
<tr>
<td>30-Oct</td>
<td><strong>Northeast Silviculture Institute for Foresters Mixed Oak-Hickory (Day 1)</strong></td>
<td>Sturbridge, MA</td>
<td>7.5/I</td>
</tr>
<tr>
<td>31-Oct</td>
<td><strong>Northeast Silviculture Institute for Foresters Mixed Oak-Hickory (Day 2)</strong></td>
<td>Sturbridge, MA</td>
<td>7.5/I</td>
</tr>
<tr>
<td>1-Nov</td>
<td><strong>Wildland Fire Control Course (Day 1)</strong></td>
<td>Waterbury, VT</td>
<td>2.0/I</td>
</tr>
<tr>
<td>2-Nov</td>
<td><strong>Forest Wildlife Habitat Seminar</strong></td>
<td>Plainfield, MA</td>
<td>5.0/I</td>
</tr>
<tr>
<td>3-Nov</td>
<td><strong>Succession Planning for Foresters</strong></td>
<td>White River Junction, VT</td>
<td>4.0/I</td>
</tr>
<tr>
<td>3-Nov</td>
<td><strong>The Emerald Ash Borer and What it Means for You</strong></td>
<td>Washington, NH</td>
<td>1.5/I</td>
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<tr>
<td>3-Nov</td>
<td><strong>NHACD Annual Meeting &amp; Working Lands Conference</strong></td>
<td>Keene, NH</td>
<td>4.0/I, 5.0/I</td>
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<tr>
<td>4-Nov</td>
<td><strong>Wildland Fire Control Course (Day 2)</strong></td>
<td>Waterbury, VT</td>
<td>4.5/I</td>
</tr>
<tr>
<td>8-Nov</td>
<td><strong>Business Skills for Logging Professionals</strong></td>
<td>Chester, VT</td>
<td>6.0/I</td>
</tr>
<tr>
<td>9-Nov</td>
<td><strong>Business Skills for Logging Professionals</strong></td>
<td>Hardwick, VT</td>
<td>6.0/I</td>
</tr>
<tr>
<td>9-Nov</td>
<td><strong>A practitioners guide to adding large wood in 1st order streams</strong></td>
<td>Albany, NH</td>
<td>3.5/I</td>
</tr>
<tr>
<td>16-Nov</td>
<td><strong>2017 Regional Conservation Partnership: Broadening the Base of Support</strong></td>
<td>Nashua, NH</td>
<td>4.5/I</td>
</tr>
<tr>
<td>16-Nov</td>
<td><strong>Conserving Maine’s Bats</strong></td>
<td>Dover-Foxcroft, ME</td>
<td>1.0/I</td>
</tr>
<tr>
<td>29-Nov</td>
<td><strong>Wetland Shrub in Water</strong></td>
<td>Framingham, MA</td>
<td>3.5/I</td>
</tr>
<tr>
<td>30-Nov</td>
<td><strong>AV Forest Policy Task Force/SFI Vermont Year End Meeting</strong></td>
<td>Montpelier, VT</td>
<td>6.0/I</td>
</tr>
<tr>
<td>2-Dec</td>
<td>The 18th Annual Meeting of the MA/RI Chapter of TACF</td>
<td>West Whately, MA</td>
<td>3.0/I</td>
</tr>
<tr>
<td>3-Dec</td>
<td><strong>Restoring Degraded Forest Tree Farm Tour</strong></td>
<td>Ashfield, MA</td>
<td>2.5/I</td>
</tr>
<tr>
<td>5-Dec</td>
<td>TallTimber and Timberpad</td>
<td>Houlton, ME</td>
<td>3.0/I</td>
</tr>
<tr>
<td>7-Dec</td>
<td>TallTimber and Timberpad</td>
<td>Bangor, ME</td>
<td>3.0/I</td>
</tr>
<tr>
<td>5-Dec</td>
<td><strong>Logger Leadership - Management Training</strong></td>
<td>Lincoln, ME</td>
<td>8.0/I</td>
</tr>
<tr>
<td>7-Dec</td>
<td><strong>Logger Leadership - Management Training</strong></td>
<td>Auburn, ME</td>
<td>8.0/I</td>
</tr>
<tr>
<td>7-Dec</td>
<td><strong>Chop and Drop: Fisheries Habitat Enhancement</strong></td>
<td>Greenville, ME</td>
<td>2.5/I</td>
</tr>
<tr>
<td>12-Dec</td>
<td>TallTimber and Timberpad</td>
<td>Augusta, ME</td>
<td>3.0/I</td>
</tr>
<tr>
<td>12-Dec</td>
<td><strong>Maine Forest Stewardship Coordinating Committee</strong></td>
<td>Lyman, ME</td>
<td>4.5/I</td>
</tr>
<tr>
<td>12-Dec</td>
<td><strong>Chop and Drop: Fisheries Habitat Enhancement</strong></td>
<td>Houlton, ME</td>
<td>2.5/I</td>
</tr>
<tr>
<td>13-Dec</td>
<td><strong>Chop and Drop: Fisheries Habitat Enhancement</strong></td>
<td>Bangor, ME</td>
<td>2.5/I</td>
</tr>
<tr>
<td>14-Dec</td>
<td><strong>Chop and Drop: Fisheries Habitat Enhancement</strong></td>
<td>Scarborough, ME</td>
<td>2.5/I</td>
</tr>
<tr>
<td>15-Dec</td>
<td><strong>Beyond Communication: Advocating for Science and our Forests</strong></td>
<td>Burlington, VT</td>
<td>4.5/I</td>
</tr>
<tr>
<td>15-Dec</td>
<td><strong>Efficient Logging Using the Latest Technology Workshop</strong></td>
<td>Caribou, ME</td>
<td>4.0/I</td>
</tr>
</tbody>
</table>
New England Forest Stories:
The People - The Management - The Technical Knowledge
98th Annual Winter Meeting—March 27-29, 2018

Accommodations:
A block of rooms is held under the group name New England Society of American Foresters at the Radisson Hotel Nashua. The single and double room rate is $105 per night plus 9% New Hampshire room tax. Make your reservations by calling 1-800-333-3333. The event-price reservation cut-off date is March 12, 2018 at 5PM. Room requests will be on available basis and current rates after that date.

Registration
The fee schedule is beneficial to those who register by February 15th. Online registration is available at www.nesaf.org or use the hard copy registration form in this issue of the News Quarterly.

Exhibitors, Sponsors, and Raffle Items Needed
There are many opportunities to support this event. Please visit www.nesaf.org for a list of opportunities or to donate electronically. Questions? Harold Cook welcomes your calls at his cell 603-496-5757; his office 603-323-7114; or email glp@nhland.com

Posters and Flash Talks
To engage all members, we are seeking both traditional poster presentations and flash talks. Researchers, field foresters and other land managers are encouraged to participate with a poster or flask talk, as sharing your experiences will benefit the entire membership.

An abstract is required for either poster or for a flash talk. The abstract includes a title and author’s names, affiliations, and locations, and the lead author’s contact information. The body of the abstract (not including names, etc.) is limited to 300 words. The deadline for submission is February 23rd

The lead authors of posters and flash talks accepted for presentation will be notified by email by March 9th and accepted abstracts will be included in the Spring issue of the NESAF News Quarterly.

Poster Guidelines: Posters will be in a prominent location and available for viewing on March 27th and 28th. NESAF will provide easels and 48 x 48 on foam core board for display. Please send your abstract to Tony D’Amato @ awdamato@uvm.edu by February 23rd.

Flash Talk Guidelines: The flash talk session will be on March 28th from 3 to 4:15. Up to ten presentations will be selected from submitted abstracts. The 10-minute timeframe is strictly enforced with 7 minutes for presentation and 3 minutes for questions. All visual presentation need to be sent to Chris Woodall @cwoodall@fs.fed.us and loaded before the session. Please send your abstract to Chris by February 23rd.

Alumni Socials
The time set aside for Alumni Socials is Wednesday, March 28th at 7:00 PM. Anyone interested in reserving space for their Alumni Social should contact Jon Horton at 603-271-2214. As in years past, alumni groups must contract with the hotel directly for catering needs. Jon can provide details.

Student Sponsors
Student registrations are provided at a below-cost discount to encourage their attendance. Please consider supporting this initiative in addition to your registration.

Planning Committee Chair: Susan Francher Susan.Francher@dnr.nh.gov or 603-271-2217

Program Committee Chair: Julie Renaud Evans jevans@northernforest.org or 603-724-8322

Arrangements Committee Chair: Jonathan Horton jonathan.horton@dcnr.nh.gov or 603-271-2214
# NESAF Annual Winter Meeting

**New England Forest Stories:**
*the People, the Management, the Technical Knowledge*

March 27-29, 2018

## Tuesday, March 27

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am to 5 pm</td>
<td>Registration, Exhibits and Posters</td>
</tr>
<tr>
<td>10:00 am to 10:30 am</td>
<td>Call to Order &amp; Welcome</td>
</tr>
<tr>
<td></td>
<td>Kevin Evans, NESAF Chair, Maggie Machinist, Granite State Division Chair, Susan Francher, General Meeting Chair</td>
</tr>
<tr>
<td>10:30 am to 12:00 noon</td>
<td><strong>Keynote: North American Forest Partnership</strong>- Will Novy-Hildesley, Executive Director</td>
</tr>
<tr>
<td>Noon to 2:00 pm</td>
<td>Lunch and Business Meeting</td>
</tr>
<tr>
<td>2:00 to 3:15 pm</td>
<td><strong>Concurrent Sessions</strong></td>
</tr>
<tr>
<td></td>
<td>Ecology and Management of Northern Red Oak in New England</td>
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<td></td>
<td>Getting out the Good Forestry Message</td>
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<td></td>
<td>The Quiet Corner Initiative in Northeast Connecticut</td>
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<tr>
<td></td>
<td><strong>Speakers:</strong></td>
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<tr>
<td></td>
<td>Karen Bennett, UNH Cooperative Extension, Bill Leak, U.S. Forest Service, Jeff Ward, Connecticut Agricultural Experiment Station, Mariko Yamasaki, U.S. Forest Service</td>
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<tr>
<td></td>
<td>Will Novy-Hildesley, North American Forest Partnership</td>
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<td></td>
<td>Mark Ashton, Yale University</td>
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<tr>
<td>3:15 to 3:30 pm</td>
<td>Break</td>
</tr>
<tr>
<td>3:30 pm to 4:45 pm</td>
<td><strong>Concurrent Sessions</strong></td>
</tr>
<tr>
<td></td>
<td>Emerging Forest Health Issues</td>
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<tr>
<td></td>
<td>Timber Depletion - A “Value-Added” Service for Foresters</td>
</tr>
<tr>
<td></td>
<td>Ecology and Management of Habitats in Greatest Need of Conservation</td>
</tr>
<tr>
<td></td>
<td><strong>Speakers:</strong></td>
</tr>
<tr>
<td></td>
<td>Isabel Munck, U.S. Forest Service</td>
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<td></td>
<td>Bill Davidson, EAB program, NH Division of Forests and Lands</td>
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<tr>
<td></td>
<td>Andrew Fast, UNH Cooperative Extension</td>
</tr>
<tr>
<td></td>
<td>Matt Tarr, UNH Cooperative Extension, Kelly Bolland, Natural Resource Conservation Service</td>
</tr>
<tr>
<td>5:30 to 7:00 pm</td>
<td>Ice Breaker Reception</td>
</tr>
<tr>
<td>7:30 pm</td>
<td>Black Fly Stories - Engaging Stories from your Colleagues -</td>
</tr>
<tr>
<td></td>
<td>Moderated by Charlie Levesque</td>
</tr>
</tbody>
</table>
### Wednesday, March 28

8:00 am to 5 pm  Registration, Exhibits and Posters

7:00 am to 8:00 am  Working Groups

8:30 am to 9:45 am  Concurrent Sessions

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Speakers: Karen Bennett, UNH Cooperative Extension Andrew Fast, UNH Cooperative Extension John Gunn, UNH Cooperative Extension</td>
<td>Speakers: Russell Edgar, University of Maine Frank Lowenstein, New England Forestry Foundation</td>
<td>Speakers: Jim Oehler, NH Fish and Game Department, Rachel Stevens, NH Fish and Game Department</td>
<td>Speakers: Kevin Doran, Maine Forest Service, Amanda Mahaffey, Forest Stewards Guild</td>
</tr>
</tbody>
</table>

9:45 am to 10:00 am  Break

10:00 am to 11:15 am  Concurrent Sessions

<table>
<thead>
<tr>
<th>Dead Wood in New England: Resource Analysis and Dynamics in the Context of Global Change</th>
<th>Maple Syrup Production Financial Benchmarks 2013 to Present and Updates on Current Research from Proctor Maple Research Center</th>
<th>Emerging Technology - What is the Science Fiction of Today that is in the Toolbox of Future Foresters?</th>
<th>What Every Forestry Business Needs to Know about Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speakers: Christopher Woodall, U.S. Forest Service Anthony D’Amato, University of Vermont Shawn Fraver, University of Maine</td>
<td>Speakers: Mark Cannella, University of Vermont Mark Isselhardt, University of Vermont</td>
<td>Speakers: Will Mercier, James W. Sewall Company Mark Ducey, University of New Hampshire Tony Guay, University of Maine</td>
<td>Speaker: Nancy Clark, Drive Brand Studio</td>
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</table>

11:20 am to 1:20 pm  Awards Luncheon

1:30 pm to 2:45 pm  Concurrent Sessions

|---|---|---|---|
### Wednesday (continued), March 28

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:45 pm</td>
<td>Break</td>
</tr>
<tr>
<td>3:00 pm</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td></td>
<td><strong>State of Forest Products Markets in the Northeast: and What's Next for Low Grade</strong>&lt;br&gt;Speakers: Eric Kingsley and Charles Levesque, Innovative Natural Resource Solutions</td>
</tr>
<tr>
<td></td>
<td><strong>Silvicultural Practices in Urbanizing Areas</strong>&lt;br&gt;Speakers: Rich Hallett, U.S. Forest Service</td>
</tr>
<tr>
<td></td>
<td><strong>Field-Ready Technology for Foresters and Lessons Learned</strong>&lt;br&gt;Speakers: Jarlath O’Neil-Dunne, University of Vermont Donn Downey, Forest Metrix Max Nova, Silviaterra</td>
</tr>
<tr>
<td>5:00 pm</td>
<td>Student Quiz Bowl and light supper for students pending sponsorship</td>
</tr>
<tr>
<td>7:00 pm</td>
<td>Alumni Socials</td>
</tr>
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</table>

### Thursday, March 29

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am</td>
<td>Coffee and Gather</td>
</tr>
<tr>
<td>8 am - 12 noon</td>
<td><strong>FIELD TRIPS</strong></td>
</tr>
<tr>
<td>Forest Management in a Public Water Supply Ownership for New Hampshire's Largest City with Heavy Recreational Use&lt;br&gt;Location - Manchester/Auburn&lt;br&gt;Tour Leader - John O’Neil, Forester, City of Manchester</td>
<td></td>
</tr>
<tr>
<td>Habitat and Silviculture Projects&lt;br&gt;Location - Merrimack or Londonderry&lt;br&gt;Tour Leaders - Charlie Moreno, Consulting Forester and Matt Tarr, UNH Cooperative Extension</td>
<td></td>
</tr>
<tr>
<td>Durgin and Crowell White Pine Saw Mill&lt;br&gt;Location - Springfield NH&lt;br&gt;(1.25 hours NW of Nashua)&lt;br&gt;Tour Leaders - Steve Roberge and Brooks Weathers</td>
<td></td>
</tr>
<tr>
<td>8:30 am - 12 noon</td>
<td><strong>Workshop: Practical Ethics Workshop</strong></td>
</tr>
<tr>
<td>Marianne Patinelli-Dubay, State University of New York College of Environmental Science and Forestry</td>
<td></td>
</tr>
<tr>
<td>This workshop will introduce a variety of approaches to ethical problem solving. We will learn about six of the primary methods that we employ every day when faced with ethically weighted situations. Following a discussion about each approach, its central ideas and an overview of how the method works, we will put those techniques to use to reach consensus on a series of case studies/project situations provided by participants.</td>
<td></td>
</tr>
</tbody>
</table>
REGISTRATION FORM
New England Society of American Foresters
98th Annual Winter Meeting,
March 27 - 29, 2018
Radisson Hotel- 11 Tara Blvd, Nashua, NH

<table>
<thead>
<tr>
<th>Name:</th>
<th>Company/Affiliation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>City:</td>
</tr>
<tr>
<td>Phone:</td>
<td>Email:</td>
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</tbody>
</table>

Name and Affiliation as it should appear on your NAME TAG (if different than above):

<table>
<thead>
<tr>
<th>Member Category</th>
<th>Program Category</th>
<th>Early Bird (by: Feb 15)</th>
<th>Standard (by: Mar 17)</th>
<th>Late After: Mar 17</th>
<th>Sub-total:</th>
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<tbody>
<tr>
<td>SAF Member</td>
<td>Full Program (includes all 3 days)</td>
<td>$150.00</td>
<td>$175.00</td>
<td>$205.00</td>
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<tr>
<td></td>
<td>1-Day Rate</td>
<td>Please circle which day you will attend:</td>
<td>$90.00</td>
<td>$100.00</td>
<td>$130.00</td>
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<td></td>
<td>(Thursday - Field Trip)</td>
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<tr>
<td>Non-Member</td>
<td>Full Program (includes all 3 days)</td>
<td>$205.00</td>
<td>$225.00</td>
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<td>1-Day Rate</td>
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<td>$160.00</td>
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<td>(Thursday - Field Trip)</td>
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<td>Student</td>
<td>Full Program (includes all 3 days)</td>
<td>$80.00</td>
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<td>$100.00</td>
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<td></td>
<td>1-Day Rate</td>
<td>Please circle which day you will attend:</td>
<td>$50.00</td>
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<td>$60.00</td>
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<tr>
<td></td>
<td>(Tuesday, Wednesday, or Thursday)</td>
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Additional Options | Price | Quantity |
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</thead>
<tbody>
<tr>
<td>Spouse/ Guest Banquet Ticket</td>
<td>$50.00</td>
<td></td>
</tr>
<tr>
<td>Student Sponsor</td>
<td>$50.00</td>
<td></td>
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</tbody>
</table>

Mail completed registration form and payment to (checks payable to: NESAF Winter Meeting):
Wendy Weisiger, Society for the Protection of NH Forests, 54 Portsmouth Street, Concord, NH 03301
Pre-registration is highly encouraged. Walk-ins cannot be guaranteed meals or other refreshments.
Registration Questions? Please contact:
Wendy Weisiger wveisiger@forestsoceity.org or Steve Junkin sjunkin@forestsoceity.org 603-224-9945
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, NE SAF will provide the leadership to achieve its mission.