Chandlers’ Legacy a Gift Beyond Compare

By Douglas Rooks, Editor

Those who attended the Forestry Forum in January heard the news of a history-making gift to the Maine Woodlands Owners Land Trust: 2,500 acres of forest land in New Gloucester, by far the largest in the organization’s existence.

What is perhaps even more notable about the Chandler family’s decision to entrust Maine Woodland Owners with their land legacy is the rich and diverse history of the properties and those who lived there, extending all the way back to before the American Revolution.

In this case, legend and fact coincide neatly. In 1762, Peleg Chandler and his bride, Sarah, made the trek across the New Gloucester boundary and settled down to create a new life for themselves and their children. The family homestead, which became known as the Bell Tavern, still exists, although it was moved back from the road several decades ago. Peleg Chandler’s tavern sign, marked with his initials and its original carving, still exists and, after being passed down from generation to generation, was donated by the current generation of Chandlers to the New Gloucester Historical Society.

Recently, Charlie Chandler, his sister, Bertha, and his cousin Steve and his wife, Natalie, faced the difficult decision many woodland-owning families have to

Steve Chandler and one of the specimen white pines they’ve grown.

Appeal Continues

Donations to the Maine Woodland Owners Annual Appeal are still welcome. For more information, call 626-0005. For an update, see page 3.
Exploring Change

I recently spent some time in Nova Scotia, meeting with Andy Kekacs, executive director of the Nova Scotia Woodlot Owners and Operators, and Greg Watson, forest manager of North Nova Forest Owners Co-Op. It’s helpful to explore outside Maine to learn what others are doing, the opportunities they have, and the challenges they face. Andy, once a Maine journalist, explained industry transitions in Nova Scotia, and how his organization is responding with a focus on wood marketing and cross-sector collaboration – along with existing programs for education, demonstration forests, and peer mentoring.

I learned that landowners in Nova Scotia are quite similar to those in Maine: regular folks. For those who join a landowner organization in either Nova Scotia or Maine, well, we are special. Among all the many competing things we can spend time on, we choose to identify strongly with our land. I’d like to explore ways of connecting our two memberships so we can learn from each other.

One other thing holds true in Nova Scotia, as in Maine: The most clever and innovative person in the room may very well be sitting next to you in jeans and a flannel shirt. Greg, one of the forest managers with boots on the ground, is leading a transition away from clearcutting. Currently, 80% of harvests in Nova Scotia are clearcuts. Greg arranges “alternative” harvest techniques, including commercial thinnings, that aren’t the norm. I vowed to listen more, and be open to the ideas of innovators. Who knows what the next advance in forest stewardship will be, and who will suggest it?

North Nova was started in 1976 with federal funding, but has continued after that seed money ended. It uses a shareholder model, where landowners are also owners. Everyone says a co-op will never work in Maine because of our stubborn independence. Past attempts have failed. A graduate student in my Rural Communities class wrote an interesting paper about food hubs that suggested we may have been too narrow in our thinking about what constitutes a co-op, and how to measure its success. I wonder if, with all the changes in Maine’s forest industry, whether it might be time to explore this idea again.
Tree Growth to Be Debated Again at the Legislature

You may recall that last year, the administration proposed sweeping changes to the Tree Growth Tax Law program, many of which would be harmful to the program and small woodland owners. The Taxation Committee of the Legislature raised serious concerns about the proposed language, but agreed to hold the bill over until this session. It also asked representatives from a number of organizations (including us) and the administration to review the law and report back to the Committee in February with any proposed changes. I represented our organization on the group.

Though the Taxation Committee specifically asked the Maine Forest Service and Maine Revenue Service (Taxation) to participate in the review, the administration refused to allow them to serve on the review group. When we asked to have them appear at one of our meetings so we could get feedback, they were denied permission by the administration. We asked that the agencies provide certain data they had, but we were required to file written requests under the Maine Freedom of Access Act to get any of the information.

As I write this in early February, the report to the Taxation Committee is not yet final. However, I believe the report will recommend the following:

1. Allow for easier transfer from the Tree Growth to Open Space program;
2. Development of a non-technical document explaining the Tree Growth Tax Law program that can be widely distributed to assessors, landowners, foresters and real estate agents;
3. No change in the minimum parcel size (10 acres) eligible for the program;
4. Clarification of the ability of the assessor or agent of the assessor to bring a complaint to the Forester Licensing Board; if they believe a forester has inappropriately qualified a landowner for the program;
5. No additional enforcement authority for the Maine Forest Service (MFS) regarding the program. MFS should increase its focus on education and outreach to assessors, real estate agents, foresters and landowners - both to those enrolled currently and to those who would benefit from being in the program;
6. Maine Revenue Service review the current geographic boundaries used to determine Tree Growth forestland values to determine if the current configurations are appropriate or should be adjusted.

We will ensure that any changes to the Tree Growth Tax Law program make sense for the program and woodland owners. I will have a full report on the topic in next month’s newsletter. If we believe the program is at risk, we will email an alert asking for help in protecting this vital law. I expect the Legislature to act on any changes to the law in early March.

TIMBER TAX ASSISTANCE - JIM NORRIS
Retired Internal Revenue Service Forester
Licensed Forester #37

Federal income tax assistance stumpage/timber sales:
- Establishment of proper timber cost basis
- Compilation of itemized timber sales
- Completion of Form T Information report
- Completion of Schedule D for Capital Gain

jimnorris1650@gmail.com (207)215-7576
Chandler Gift  Continued from Page 1

make: How to ensure that the land, as they had come to know and understand it, would be permanently managed according to the ideas and principles they’d laid down over the years. Charlie’s and Steve’s fathers were extremely close, talking and visiting almost daily, and their children eventually acquired all the family interests in the land.

Steve decided to become a forester, and graduated from the University of Maine in 1965. He began his career in Minnesota, and soon joined the U.S. Forest Service, serving all over the country, in Wyoming, two national forests in Michigan, two stints with the White Mountain National Forest, and West Virginia, from which he retired. Their children grew up in many different places.

Logger Bill Taylor and Steve Chandler go over the grade specs for white pine sawlogs.

When the fathers of Steve, Charlie and Bertha (Warner and Charles Sr.) began to work to care for the land, “good timber was rare to none” according to Charlie. Along with other management, Warner and Charles Sr. began the tree planting program which is still continued today.

Steve

Charlie – Charles P. Chandler, Jr. – actually the third of that name, with the “P” standing for Peleg – became the family historian and managed the financial responsibilities, among his other roles. He was one of the first graduates of the then-new Gray-New Gloucester High School, briefly attended MIT, then found his niche as a campus police officer at the University of Maine, in Orono. He and his wife, Orella, raised their children in Milford.

Charlie remembers seeing a photo of the Chandler Mill Pond and the sawmill, also called Lily Pond, with nary a tree along the water; it’s now surrounded by forest, one of the few entirely undeveloped shorelines in southern Maine. “When the mill burned the second time, there was no reason to rebuild it,” he said.

The current “Chandler Brothers” developed a “symbiotic relationship,” Steve said, in terms of land management, with Steve the doer and Charlie the planner. “We tried just about everything,” Steve said, including planting thousands of red and white pine seedlings, as was then recommended. The results were generally disappointing; natural regeneration, with subsequent thinning and pruning, is what has produced the magnificent white pine-dominated forest that now welcomes visitors.

But owning and managing land, particularly on this scale, takes not only time but money. A key development stemmed from the building in 1956 of the Maine Turnpike extension, from Portland to Augusta, which bisects the Chandler holdings. Charlie recalls

...
living room discussion with his father and uncle which focused on a triangular lot, away from the roadway, which the Turnpike Authority also wanted to buy. It would become the major gravel pit for road construction, “and we learned a lot about gravel on the outwash plains,” he said. Material from gravel producing lands became a major source of income to pay property taxes, which allowed removal of only poor quality timber favoring longterm growth of high-quality trees.

Having Cliff Foster as their forester was “a blessing,” Charlie said, and Foster continued to take an interest in the Chandler lands well past retirement. “He saw things we couldn’t see,” Steve recalls, and they encouraged his experimentation even where it didn't follow the conventional practices of the day. “We learned an awful lot about what worked, and what didn’t,” he said.

At first, they did almost no commercial harvesting, but when they started, they made an equally inspired choice with their logger, Bill Taylor, who's now been working with them for more than 30 years. “Bill is a smart logger,” Steve said. “He knows that the time spent carefully in the yard is where he makes money for himself and for us. Nothing he moves goes to the wrong market.”

Managing the land became a nearly life-long occupation for both Steve and Charlie, but the time came when they wondered what would come next. Thus began what Steve calls “a 12-year conversation” about the next generation. Charlie and Orella’s children “never really knew the New Gloucester land,” he said, and had begun their careers elsewhere.

For a long time, Steve and Charlie worked on ways to divide the property, and how it could remain forest land. More recently, though, there was “that difficult decision” where Steve and Natalie’s children realized they could not manage their parent’s shares, while living in other states, and still accomplish the kind of active management that has become the Chandler tradition.

When that moment arrived, Maine Woodland Owners became the obvious choice. “Most land trusts want an endowment before they’ll accept land donations,” Steve said, and, despite increased revenue from timber sales, the family fits the description of “land rich, cash poor.”

The only land the Chandlers have sold in the last several decades comprises the Chandler Mill Pond (Lily Pond) conveyed to the Department of Inland Fisheries and Wildlife, with the intent of preservation and public access; a small parcel was deeded to the town.

Maine Woodlands Owners “was the only organization that would carry on what we’d started,” Steve said. Over the next year, and possibly longer, the deed transfers will continue, as dozens of parcels that make up the Chandler lands are added to the 5,000 acres now owned by the Land Trust.

Said Executive Director Tom Doak, “We are still trying to grasp the reality of such a magnificent and generous gift from the Chandlers. Having walked on several of the properties, I can say it is some of the finest, if not the finest, long-term stewardship of forest land I have ever seen. It’s an honor that the Chandler family trusts our organization to carry on their work – and the staff and Board of Directors of the Maine Woodland Owners is committed to that legacy.”
Never Underestimate a Mourning Dove

Story and Photo
By Bob Duchesne

Pop quiz: What is the Number One game bird in North America? More than 20 million of these birds are shot every year, making it the most targeted critter in the country. And even though it's probably hanging around your backyard right now, and is likely pilfering seeds from beneath your bird feeder, you can't hunt it here.

Maine is one of just eight states where there’s no legal season on mourning doves. Throughout the South and Midwest, it’s a valuable game bird, hunted for food and sport. In many states, hunters and landowners actively conserve and increase habitat for mourning doves, especially in agricultural areas where the bird thrives. This conservation has allowed the mourning dove to increase and expand its range, despite the hunting pressure, and it is one of the most plentiful birds on the continent.

The low mournful cooing of the mourning dove is familiar to most Mainers. They do well in neighborhoods, and it seems that Maine has a lot of them. However, they are not comfortable in wetlands and forest habitat, which covers 90% of our state, so their numbers are less robust than it would appear.

In some ways, the mourning dove has benefited from a lot of lucky accidents. Foremost, any animal that learns to live in proximity to humans tends to do pretty well, since human habitat is our only habitat that isn’t declining. Suburban breeders do well.

Secondly, we killed off the competition. In the 19th century, market hunters exterminated millions of birds, crated them in barrels, and carted them off to urban grocers and restaurants. At that time, the more desirable game bird was the passenger pigeon – a larger, more numerous cousin of the mourning dove.

The passenger pigeon is considered to be the most abundant bird to have ever lived on this continent, and yet it took only a few decades to drive it into extinction. The last of its kind died in captivity in 1914. By the time hunter’s sights were turned toward the mourning dove, laws were on the books to end market hunting.

Mourning doves also benefit from prolific breeding. In the warmer parts of their range, they can nest up to six times per year. Even in Maine, they can produce several broods annually. Three years ago, a dove nested in the eaves of my deck. I decided to concede her the space until the chicks were fledged. Little did I realize that the moment the youngsters were off the nest, she would start another brood, and then another. In August, I re-asserted my claim to use my patio furniture before she could start a fourth.

For most of the winter, mourning doves group together in larger flocks. This gives them more eyes to look for trouble, since woodland hawks love to sneak up on doves. They will roost together in places with good visibility, or alternatively, where they are well concealed. At mealtime, they forage together.

To minimize time on the ground, when they are most vulnerable, doves gorge on as many fallen seeds as possible, storing the seeds in their crops – an enlargement of the esophagus. They will then fly off to a safe perch to digest the meal. When all else fails, doves are fast flyers. At a top speed of 55 mph, they are as swift as many of their pursuers.

From New Jersey to Maine, only Rhode Island allows dove hunting. Mostly, that’s because doves are new to the Northeast. Although they have now reached Atlantic Canada, they were unknown in New Jersey.
England until the early 1950s. They are mostly found in suburban neighborhoods in Maine, where hunting isn’t possible.

For rural doves around fields and woodland edges, the populations aren’t dense enough to allow sustainable culling. Thus, they remain off-limits. It wasn’t until midway through the 20th century that mourning doves were classified as a game bird anywhere in the country, and that recognition only occurred when it became obvious that many people were hunting them anyway.

The days are getting longer. Any moment, you should start seeing courtship rituals begin. Mourning doves are monogamous. Mated pairs don’t have much to do with each other in winter, but they reestablish the bond in early spring, often in the same spot. Younger, unmated males may also try to woo the female, so don’t be surprised to see two birds sticking out their chests and strutting their stuff around a seemingly uninterested female. Courtship is tough.

Bob Duchesne, a legislator from Hudson, founded the Maine Birding Trail (www.mainebirdingtrail.com), writes for the Bangor Daily News, and has a weekly radio show on Sports Radio 92.9.
Birding Apps a Good Fit for Woodland Owners

By Casey Olechnowic

Birding is one of the largest recreational hobbies in the U.S., and its rapid growth is backed by emerging technology, such as apps, to aid user experiences. Woodland owners are in a unique position to encounter a wide variety of bird species on their land, and many establish management plans designed to attract certain birds to their property. If you need help recording bird observations, identifying birds, or learning birdcalls, there’s an app that can help. Following are a few different birding apps that can be extremely useful for woodland owners looking to understand the birds in their woods.

**Best Apps for Maine Woodland Owners**

**Merlin**

Merlin is a free Android birding app created by the University of Cornell’s Ornithology Lab. The app not only has an identification tool based on your location, but also a location-based guidebook of all species in your area. Under each species you can read brief descriptions, view photographic images of the bird perched, on the ground, or in flight, view range maps, and listen to various sounds and calls of each bird. This app has every bird species known to each geographic region, and you can download additional bird species from across North and Central America for free.

**Audubon Birds**

Audubon Birds is another free birding app that essentially serves as a detailed guide to every bird species in North America. While this app does not have an identification tool or location filters as Merlin does, it’s an extensive resource, containing vast amounts of information and sounds from every North American species. This app also has a citizen science component; with every bird species, you can view reported sightings pinned on a map, and report sightings of species yourself. This app is available both on iOS and Android.

**Peterson Birds**

If you’ve ever owned a Peterson Field Guide, this app will look familiar: It’s an online Peterson Field Guide that includes all the detail, images, and information of a hard copy version for iOS and Android devices. The app also has a search filter to sort through birds based on the time of year and location you viewed them. One major benefit of the app, compared to the text version, is that the app is free.

**Sibley Birds, iBirds, and Larkwire**

Sibley Birds, iBirds, and Larkwire are all included in their own section here because they all are a bit pricier compared to previously mentioned apps. These apps are designed for those with a passion for birding, and have some of the most extensive resources of any birding apps available. Sibley Birds and iBirds are both identification tools, with extensive visual ID information about all North American bird species and vast bird sound databases. Both apps have free versions for iOS and Android, but they are so limited...
that the upgraded versions of the apps are almost essential. Sibley Birds’ pro version is $19.99 and iBirds has upgraded versions ranging from $2.99 to $19.99. Larkwire is an iOS app aimed at teaching users to master birding by ear. It’s an interactive learning tool that quizzes you on various bird sounds to help you identify birds by call alone. It comes in two parts: $14.99 for land birds, and $12.99 for water birds.

Casey Olechnowicz is a UMaine School of Forest Resources graduate student. He comes from a military family that moved frequently, but was shaped by his time living in Eliot.
Maine’s Oct. 30 windstorm, accompanied by heavy rains, snapped some 1,500 poles, the worst damage to electrical infrastructure since the ice storm of 1998. Our Maine storms are bush league, however, compared to coastal hurricanes farther south. According to a *Portland Press Herald* Story, repairs after Hurricane Katrina required 92,000 poles, while “superstorm” Sandy took out 65,000.

Utility poles, as Mainers were reminded recently, undergird the “internet superhighway.” How ironic it is that the new electronic economy depends on wood poles carrying phone and cable lines across states, counties, and towns and down the remotest rural roads. Just as in the glory days of railroading when the trains literally ran on wood, so today, the commerce of the globe runs on wooden utility poles.

Utility poles were once telegraph poles. They crossed the plains alongside railroads, revolutionizing communication and helping create a world run by telegrams. Patriotic lithographs of the 19th century depicted telegraph lines accompanying the valiant pioneers across the prairie, bringing this vital element of civilization with them (See illustration.) Aldo Leopold joked that when the telegraph arrived in remote Alpine, Arizona, “one old-timer asked if it could wire him a side of bacon.” Telephone lines connected Portland and Boston as early as 1848, and Portland to Calais by the following year.

After Alexander Graham Bell’s invention, they became telephone poles, although some railroads continued to use telegraphy into the 1950s. Those of us of a certain age remember learning Morse Code in Boy Scouts. After electrification was completed, and everybody had a telephone, cable TV’s expansion turned them into utility poles.

In this particular use, wood continues to reign supreme. When properly treated, installed and maintained, no substitute has yet emerged that delivers comparable performance and cost, though steel and fiberglass composites are coming into use in specialized situations. In some regions, wood poles are also used in transmission towers.

Poles are the most valuable products of softwood stands, where stumpage values are usually double the value of the same tree as a sawlog. Back in the day, silviculturists and forest economists used to calculate the optimum ways to manage stands for poles. Harvesting plans often included a “pre-logging” phase to open up crowded stands, and the poles would then be removed before the sawlog and pulp operation began, to avoid damaging them. In a typical longleaf stand in the South, about 15% of the trees of suitable height would make poles.

For years, western red cedar was a standard utility pole – it was highly durable and available in large sizes. Today, southern pine is the dominant species. It treats well and has high strength and resistance to bending.

Red pine treats well, and is often used for poles. Stella-Jones is an important buyer of poles for treating in the Northeast and central Canada. It recently opened a new peeling and treating plant in central...
Wisconsin, where red pine is abundant. At times in the past, red pine has been bought for poles in Maine. The state’s only treating plant announces itself on its answering machine as “Your source of treated southern pine.”

Why not spruce? Spruce is not as strong as either red pine or southern pine and it does not take treatment chemicals well.

How many trees in Maine could provide poles if we had a way to treat them? This is interesting to know anyway, as these trees are potential sawlogs. The standard 40-foot pole would have a diameter at six feet above the butt of nine to 13 inches, depending on type. The top diameter needs to be five-six inches. Ken Laustsen provided a tabulation of Norway, red and white spruce, and red pine trees by diameter class. Of the 119,000 trees of these species in these size classes, half are 10.9 inches or smaller. None of these trees would make the grade for poles (See chart.)

Experts have been tweaking the use of wood in poles. Some have experimented with glulam or other composites for the cross-arms that actually carry the wires on large poles. At present, no work on composites is underway at the University of Maine’s composites lab, probably because of the limited opportunities for our species mix for treating. In Europe many utility poles are made of reinforced concrete.

CMP alone has 650,000 poles in its system. Every time we have to go out to the garage and turn on the generator, we appreciate those poles and the crews who come out in all weather to fix them and deliver our power. We remember that while the wires are of metal, they are carried to us by wood.

Lloyd Irland, forestry consultant, teacher and writer, lives in Wayne. He is the author of The Northeast’s Changing Forest, and his interest in history dates back to college.
Maine’s Smallest Mammal Packs a Punch

By Robin Follette

Do you hear them from your tree stand? When you’re leaning against a wide hardwood, taking in your surroundings? Listening for snapping twigs or rustling boughs? “Weedle weedle weedle weedle” – a slight rustling and movement of the leaves, along with incessant vocalization, makes the masked shrew (Cinereus shrew) easy to find even when you’re 15 feet off the ground.

I’ve observed them following the same trails for weeks. Wondering if they’d change their course for an obstacle, I put a long stick in the length of the trail and waited. The shrew slowed on approach, stopped a second to take a look, and continued on its way directly over the stick. Creatures of habit, I’d say.

Shrews can live more than two years, but the average lifespan is 18 months. Mating and birthing season runs from May into September. Moms give birth to a single litter of one to six thin-skinned, hairless, clawless babies. When the offspring leave the nest, they are only four weeks old. They are sexually mature at two months but don’t reproduce until the following spring.

This smallest mammal in Maine has the attitude of a large predator. The shrew is 3.5 inches long from nose to tail, 1.5 inches of that being tail, and weighs only five grams. I can’t say they’re an attractive creature. Their pointy nose, drab brownish-gray color, and short tail and legs serve them well, but they lack any quality of cuteness I see in a mouse or even a mole.

Its small size doesn’t slow it down. The shrew can eat up to three times its body weight daily. They’re mainly insectivores that dine on centipedes, insect larva and spiders. I watched one as it sneak up on a cricket. By the time the cricket knew what was happening, it was too late.

Shrews will devour worms and snails, and even salamanders and small rodents. A field mouse is no match for a hungry shrew. You might spot shrews at the edge of the woodlot as they hunt for weed seeds. Closer to the house, watch under your bird feeders.

Shrews don’t back down from a challenge. Our dogs hunt for shrews, mice, voles and red squirrels around the garden shed where the chicken food and bird seed are kept. Zoey followed her nose along a trail, waited for the shrew – and got more than she bargained for.

The shrew reared on its hind legs and waved its front feet like a boxer. Zoey mouthed the shrew, and the shrew bit back much the way a meadow vole is likely to bite. It clung to Zoey’s lip as she shook her head.

I’d rather the dogs not snack on shrews the way they do other small rodents, and fortunately, they don’t want to. Shrews carry fleas and tapeworms. They have a musky smell that’s surprisingly strong for a small body.

If the cat leaves “mice” on the back step for you, it’s apt to be a shrew. Their odor is so offensive that predators with a good sense of smell probably won’t eat them. They do fall prey to fox, herons, hawks, owls, shrikes, snakes, and perhaps other predators. I once watched a bullfrog catch a mouse at the edge of our pond; maybe they eat shrews, too?

Shrews aren’t a common topic of conversation when we talk about the animals in our woodlots, but really, they’re quite interesting. And a little impressive. Watch for them!

Robin Follette is an outdoors writer from Talmadge. She enjoys kayaking, camping, hunting, fishing and wild harvesting. Her website is http://robinfollette.com

---

Focus on Wildlife

Buyers’ Guide to Local Wood

LocalWoodWorks, supported by seven Maine non-profits, is partnering with Green & Healthy Maine Homes magazine to produce a Buyers’ Guide to Maine local wood products for the Spring 2018 edition. Building on the 2017 directory of sawmills published by Maine Woodland Owners, the guide will contain additional listings and product information relevant to builders, engineers and design professionals. Listing your business in the guide is free. For more information, contact Lee Burnett at 324-1596. In mid-March visit www.localwoodworks.org
Maine's Department of Inland Fisheries and Wildlife is doing exceptional research to document the tragic deaths of our moose killed by ticks. Moose biologist Lee Kantar gets great credit for his moose research. Our moose population today may be as low as 50,000 (down from a possible high of 90,000), and moose hunting permits have been reduced by 50%, a devastating development for guides, sporting camps, and rural Maine towns.

IF&W recently reported locating, capturing, and collaring 83 moose in early January in northern and western Maine. This is the final year of the agency’s five-year study of moose mortality. And the research has been challenging.

As Kantar recently told BDN outdoor reporter John Holyoke, “The thing that’s the challenge is that there’s no perfect data on how many moose are in any of those areas.” Holyoke noted another gap in the data: It’s impossible to tell how many ticks are there, either.

“Ultimately, we want to know about survival rates about cows and calves because they’re so crucial to our moose population, and whether we have growth or decline or stability,” Kantar told Holyoke. “We want to know how that’s going to work, and we want to be able to predict at least the near future so we can satisfy what the public wants. Which is, they want to see moose, they want to hunt moose, and it seems, more importantly, they want to know that our moose are healthy.”

All very important and very true. Unfortunately, despite our ability to capture and collar moose, including collecting blood, hair, and fecal samples, conducting a tick count and weighing the moose, we are apparently unable to figure out a way to keep those ticks from killing the moose. I believe this is our next big challenge, now that we know how damaging these ticks are to our moose and our outdoor economy.

At my camp on Sourdnahunk Lake, next to Baxter Park, we used to have moose all around us. I have lots of photos of moose on our lawn, sometimes right beside our kids. But in the last three years, we’ve seen just one moose there. We used to see as many as a dozen moose in August in a nearby pond, eating plants. Today, I can’t find a single moose in that pond.

I’m wondering if we could put out food stands, and spray the moose and kill the ticks when the moose approach the stands to eat. I know they do this for cattle in Texas.

I’m hoping that the Legislature’s IF&W Committee will ask the department to research and implement an aggressive project to save our moose. There must be a way to do that.

Outdoors writer George Smith, who lives in Mount Vernon, offers more news at www.georgesmithmaine.com

Are you a landowner who wants to . . .

Put your tractor to work?

- Gather firewood and building materials.
- Create wildlife food plots and trails through the woods.
- Harvest when benefits are the greatest.

We strive to do right by you and your land.

<table>
<thead>
<tr>
<th>TWO TREES FORESTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jon Doty, NOW IN Farmington (207) 612-6823</td>
</tr>
<tr>
<td>Harold Burnett, Winthrop (207) 377-7196</td>
</tr>
<tr>
<td><a href="mailto:info@twotreesforestry.com">info@twotreesforestry.com</a></td>
</tr>
<tr>
<td><a href="http://www.twotreesforestry.com">www.twotreesforestry.com</a></td>
</tr>
</tbody>
</table>
Outlook for U.S. Timberland Investment

By Brooks Mendell

Over the past 50 years, U.S. industrial timberland ownership shifted dramatically, from vertically integrated firms owning sawmills and paper plants to forest management specialists. The financing and history of timberland investments continues to teach us how different timber-related investments—though anchored to a common asset—provide distinct investment opportunities while creating new markets and services for traditional forest managers.

The glamorous world of large-scale timberland investing evolved from mundane, yet structurally powerful, legislative changes. In 1960, President Dwight D. Eisenhower signed a collection of unrelated tax laws known as the Cigar Excise Tax Extension of 1960. The second half of this 13-page bill comprised the Real Estate Investment Trust Act of 1960. Real estate investment trusts, or REITs (pronounced “reets”), are companies that own and manage income-producing real estate of various types, such as office buildings, warehouses, and timberlands.

REITs address “double taxation,” whereby a firm pays corporate income taxes and shareholders also pay taxes on the after-tax income. With REITs, shareholders pay taxes on dividends received, but firms do not pay taxes on rental income generated from estate holdings. Though intended for traditional commercial real estate projects, after additional changes years later, it transformed timberland-owning companies.

The forest industry had begun changing on its own. In 1969, 14 of the 15 largest timberland owners were vertically integrated, mill-owning forest industry firms; as of 2017, only two of the top timberland owners from 1969, Weyerhaeuser and Potlatch, are still on the list. The Nature Conservancy is now third largest, while J.D. Irving ranks 13th.

Part of this shift resulted from a fundamental economic shift. In 1978, analyst Thomas Clephane issued a report from investment bank Goldman Sachs dissecting timberland ownerships and values in the forest products industry. His analysis indicated stock prices of large public forest products and paper companies were often trading below their timberland values. Clephane estimated that Crown Zellerbach, Weyerhaeuser, International Paper, and Potlatch owned timberlands valued at two to three times their stock price.

This difference in value provided investment opportunities for shareholders and the firms themselves. The forest industry began selling timberlands before the recession of 1981-82, and the opportunity to generate cash from these assets was attractive, given broader forest industry struggles. Firms were closing mills, laying off workers, and writing off hundreds of millions of dollars. The sale of timberlands accelerated.

Timberland sellers found interest from institutions looking to diversify their pension plans. The Employee Retirement Income Security Act of 1974 (ERISA) triggered a change in how pension funds invested. Congress designed ERISA to regulate private pension plans, requiring them to diversify beyond bonds and stocks. Timberlands, with regular cash flows and inflation-hedging characteristics, became a viable alternative. Timberland investment management organizations (TIMOs) stepped in to support institutions with these transactions. TIMOs provide management services; they do not own timberland themselves. TIMOs have grown; some 20 TIMOs now manage 25 million acres.

Timber REITs arrived in 1999, beginning with the conversion of Plum Creek from a master limited partnership to a REIT. Between 1999 and 2006, four publicly traded forest products firms converted more than 12 million acres of industrial timberlands into these corporate structures.

In 2008, the Journal of Forestry published the first peer-reviewed research evaluating timber REIT performance. The study concluded that investors
preferred holding industrial timberlands in a REIT structure. Weyerhaeuser made the REIT conversion in 2010. In February 2016, the completion of the merger of Plum Creek and Weyerhaeuser, the two largest timber REITs, reshaped the sector once more. The new firm held more than 13 million acres across 20 states (and Uruguay) and three dozen forest products manufacturing facilities.

This merger, however, reminds us of limited remaining growth options for REITs and TIMOs. Few opportunities remain to acquire timberlands from integrated forest industry firms. Increasingly, TIMOs and REITs are buying and selling to each other.

Fortunately, the presence of TIMOs and REITs has not diminished the demand for intensive and responsible forest management. In 2017, my firm, Forisk, surveyed the silvicultural practices of 15 industrial and institutional timberland owners and managers for 4.3 million acres of privately owned forests in the Pacific Northwest.

Firms actively employed silvicultural practices to improve growth and yields on lands, though activities varied. Only 40% of respondents applied fertilization. Pre-commercial thinning was reported by 93%, while commercial thinning was less common. Average final harvest age was between 50 and 52 years west of the Cascades, and 72 years to the east.

What can investors expect in the future? If U.S. timberlands are historically expensive, it reminds us that investing relies on relative performance. Thirty-year government bonds, a “riskless” alternative, yield 2.9%. Timberland, like bonds, provides a way to preserve wealth and store value. As real, long-term assets, they continue to provide a safe-haven and portfolio diversifier.

This interest in active forest management bodes well for the commitment from landowners, whether integrated firms or institutional investors or REITs, to forest productivity and sustainability. The world of institutional and corporate timberland investing referenced in newspaper headlines, however, requires context; it accounts for a small portion of U.S. forests. And while changing title to a forest is easy, changing the structure and landscape of a forest takes time.

Brooks Mendell is president and CEO of Forisk Consulting and author of From Cigar Tax to Timberland Trusts: A Short History of Timber REITs and TIMOs. This article originally appeared, in a different form, in the Nov.-Dec. 2017 issue of Western Forester.
Tree Growth Plans Need Regeneration, Not Just Harvesting

By Max McCormack

Maine’s Tree Growth Tax Law seems to be an ever-present topic among legislators and owners of Maine woodlands. Woodlot owners are attracted by property tax benefits and the potential eligibility for assistance programs. Penalties for withdrawing are a deterrent, and some landowners are hesitant to commit to the required forest management plans that must be signed by a Maine licensed forester. The plans must be updated, or recertified, at least every 10 years. Maine Woodland Owners members are regularly informed about legislation via this newsletter, and we benefit through the efforts of Executive Director Tom Doak.

What does this have to do with silviculture? A lot. A Tree Growth management plan must contain a harvesting plan. Harvesting activities are the front line of silviculture practices, and provide the only time that you are absolutely certain that you will be in your woods manipulating species composition, tree quality and spacing.

It’s also a convenient time to establish permanent trails that form the infrastructure that facilitates intensive management. A well-planned trail network provides ready access for salvaging high quality timber, and protection functions, such as sanitation treatments and fire suppression. Enjoyment of a woodlot is enhanced by the comfort and safety of a permanent trail system that can be accompanied by maps and signage.

The harvesting plan should not stand alone. A valuable complement that is sometimes neglected, or even omitted, is a regeneration plan. Given our commitments to sustain healthy forests for watershed protection, scenic landscapes, wildlife habitats, and a variety of timber values, the need for assuring desirable regeneration is essential.

According to a plan-defined set of priorities, the legacy of a harvesting operation should include improved access to sites with healthy, robust residual trees of preferred species, soil surface conditions suitable for planting or natural regeneration seedbeds, and retention of established young growth. In this process it’s advisable to review the silvical characteristics of the preferred tree species to be sure that harvesting disturbances and vegetation growth are coordinated as much as possible to support the development of the future stand. Considerations should also be given to minimizing conditions that will favor undesirable invasive plants.

The woodlands of New England, for the most part, are comprised of second- and third-growth forest stands. Individual woodlots often are the result of spontaneous re-vegetation determined by the farming that took place on the land over past years. Many stand boundaries have been determined by property ownership lines that have little relevance to natural, biologically based site conditions. Nature’s course has been interrupted.

We must thus endeavor to apply science-based forestry to guide forest development toward a desirable set of outcomes suitable for present, and projected, environments. This includes keeping a sharp eye on the mounting threats of aggressive invasive plants, insects, and diseases.


Max McCormack is research professor emeritus at the University of Maine, and lives in Unity. E-mail him at: mlm2@uminets.net
Wild leeks, fiddleheads – and property taxes

The Kennebec Land Trust and Maine Woodland Owners will sponsor an introduction to non-timber forest products, and current use property tax programs, on Wednesday, April 4, 6 p.m. the Mill Stream Grange on Route 41 in Vienna. Dave Fuller, of UMaine’s Cooperative Extension, and Harold Burnett, of Two Trees Forestry, will present; all are welcome.

Woodlots produce more than just trees and wildlife habitat. Dave Fuller will discuss and sample some wild edibles with some other non-timber forest products as potential sources of recreation, income, and sustenance. Opportunities to gather materials for familiar Maine products, including maple syrup, balsam pillows and wreaths, and birch bark, will be discussed.

When it comes to property tax options, the list is shorter though the confusion has increased. Recent increases in Tree Growth assessment rates have put some Open Space and Tree Growth assessments surprisingly close to parity. State and municipal concerns about alleged program misuse have heightened landowner concern. Harold Burnett will discuss which current use program might be best-suited to your needs. Interested landowners may bring their property’s assessment record to plug into the calculator.

Pizza and light refreshments will be provided. And “save the date” for a field walk designed to accompany this workshop, which will be held on Sunday, April 29, at the Vienna Woods on Trask Road. To RSVP, contact Kirsten Brewer at 377-2848 or email Kbrewer@tklt.org.

Forestry Night Set

Forestry Night, the Houlton Winter Agriculture School, will be held on two consecutive Thursdays, March 29 and April 5, at the Houlton Higher Education Building, 18 Military St. Both sessions run from 6-9 p.m. and each will earn 2.5 hours of continuing education credits. District Forester and Chapter Leader Dan Jacobs will lead; presenters on March 29 include Tom Doak, Maine Woodland Owners executive director; Ken Laustsen, Maine Forest Service biometrician; and Dave Wilson, Kathadin Forest Management’s chief forester. For more information, contact Dan Jacobs at 441-4128 or dan.jacobs@maine.gov
Roots and Branches
News From the Chapters

St. Croix
Chapter Lunch Meeting
Saturday, March 10, 11 a.m.
Baileyville

Please join other Washington County members for our annual chapter meeting. This year we will meet at the Nook and Cranny restaurant, 575 Airline Rd (Route 9), Baileyville. Please bring your forestry tour idea for the upcoming year. Lunch will be available for purchase. Contact Kyle Burdick at 214-4341 to RSVP, or e-mail kyleleroyburdick@gmail.com.

Western Maine
Tree Growth Facts and Fiction
Thursday, March 15, 7 p.m.
Oxford Hills Comprehensive High School

The Western Maine chapter will present a program on Maine’s Tree Growth Tax Law, and some of its facts and fiction surrounding it, with speaker Tom Doak, executive director of Maine Woodland Owners. He will also provide an update on proposed legislation in the current legislative session that could affect woodland owners. Follow signs to meeting room. Contact: Rich Merk at 415-1628 or mqh@fairpoint.net

Upper Kennebec Valley
Chainsaw Maintenance and Filing
Thursday, March 22, 5:30-7:30 p.m.
Foster Technology Center, Farmington

This training is geared for the part-time chainsaw operator, to gain more confidence with chainsaw service and maintenance. The evening clinic, presented by Pete Tracy, certified logging professional trainer, will cover operator maintenance, filing, and servicing.

Southern Maine
Lumber Mill Tour
Wednesday, April 4, 1 p.m.
Limington Lumber, Rt. 113 East Baldwin

Here’s a great opportunity to tour a modern white pine mill, with visits to the log yard, sawmill, and planer mill. Bring your hard hat if you have one; a limited number will be available. The address is: 411 Pequawket Trail. Contact: Gordon Stuart 854-4944 or Peter Lawrence 772-8717.

Upper Kennebec Valley
Spring Woodlot Management Class
Mt. Blue High School, Farmington

This five-session class will help you decide what to do with that piece of forest you own, with various topics designed to aid forest landowners in understanding their choices. The course will be instructed by various speakers and facilitated by MFS District Forester Patty Cormier. Class size limited to 25. Each session runs from 5:30-8 p.m, and is offered through Franklin County Adult Education. To sign up, or for more information call 778-3460 or e-mail lizadonald8@gmail.com. There’s a small fee.

Topics and dates follow:
- March 29: Tree ID and planning steps for your woodlot, and basic mapping programs.
- April 5: More on planning, cost-share programs and Tree Growth Tax Law.
- April 12: Managing for bird and wildlife habitats
- April 19: Products from your woodlot
- April 26: Working with professionals, including legacy planning.

Forestry Services in Down East Maine
Forest management plans, tree growth certification, MFS Woodwise plans, inventory, & other services
Thomas Dodd, LF#407
www.acadiaforestry.com or 207-779-7739

Need a Bush Scythe for your wood lot? A perfect tool for saplings & young unwanted growth. Scythe Supply is a Maine Business selling and promoting the European Scythe. www.scythesupply.com or 207-853-4750
New Members

February

Out of State
Paul Damren
David and Ellen Kubek
Derek Whiting

Penobscot Valley
Richard Grant
Brian McKinnon
Brenda L. Thornton

Southern Maine
Jeffrey Kershner
George W. St. Clair Jr

Two Rivers
Steve Benner
Tim Kachnovich

Upper Kennebec Valley
Peter J. Fontanini
Thomas N. Herbert
Richard Mason

Spring is in the Air
Help Us Promote
Maine Woodland Owners

Join Today

Receive 12 monthly issues of the popular Maine Woodlands and other member benefits by joining the only statewide organization devoted solely to the interests of Maine woodland owners. You’ll find it’s one of the best investments you’ve made.

Please choose your membership

- $45  Basic
- $60  Contributor
- $125  Sponsor
- $250  Sustainer
- $500  Benefactor
- $1000  Lifetime

Name: ____________________________________________
Address: __________________________________________

- I do not own land
- I own ____ acres in Town _______________________

Send newsletter by:  □ mail  □ online

Email address: ________________________________

Tick Tools and/or Tick Kit

- For $12.00 /4 – These tick removal tools make it easy to remove those unwanted ticks. Just place the notch near tick and slide forward.

- For $15.00 – This kit provides a great tick solution for people who spend their time enjoying the outdoors. The kit includes one pair of velcro pant-leg straps and 4 tick removal tools.

Name: ________________________________
Address: ________________________________

Send your request, mailing information and payment to: Maine Woodland Owners, PO Box 836, Augusta, ME 04332-0836, or order online at www.mainewoodlandowners.org

All pricing includes shipping and handling
Belfast Features Top Beech, Locust, and More

By Jan Santerre

While there are many reasons to tour Maine – lighthouses, state parks, lobster rolls, high peaks – the Maine Forest Service has also encountered many big tree enthusiasts, guiding them to trees throughout the state. The list wouldn’t be complete without a trip to Belfast to view two outstanding champions: European copper beech and black locust. Both trees have held their championship spot since roughly 1980.

The copper beech (*Fagus sylvatica*), located at the intersection of Church Street and Northport Avenue, is an early example of a non-native specimen placed on the list. This impressive specimen is located at the equally impressive “White House,” an 1840 mansion placed on the National Register of Historic Places 45 years ago. The tree is located in the front yard and is easily viewed from the city sidewalk. Measuring 110 feet tall, 241 inches in circumference and 88 feet across, with a total point value of 373, the tree narrowly beats other hulking giants located in Castine, Bar Harbor, and Lewiston.

A few hundred yards to the south, at 11 Northport Avenue, the black locust (*Robinia pseudo acacia*) towers over a gingerbread-clad home at 96 feet, 220 inches in circumference, and 91 feet across, for a total of 339 points. This specimen seems held together with a complicated web of cabling and bracing, and in my opinion best viewed in winter, when the dark and twisting form looks like an Edward Gorey illustration. While visiting Belfast, it’s worth a cruise around several of the neighborhoods where they have managed to plant a wide variety of species, including a number of healthy butternut (*Juglans cinerea*) and American chestnut (*Castanea dentata*).

Update from last month: While on your way to or from Belfast, you can still view half of the Eastern white pine in Morrill. Working with the landowner, the Maine Department of Transportation was able to minimize the risk of failure by removing the portion hanging over Route 131 but leaving the main trunk leaning into the woods. While only a little over half the tree it was, it is still impressive. That said, we will be seeking a new champion in this category.

For more on Maine’s Register of Big Trees, contact Jan Santerre, coordinator, at 800-367-0223, or visit: [http://projectcanopy.maine.gov](http://projectcanopy.maine.gov)