

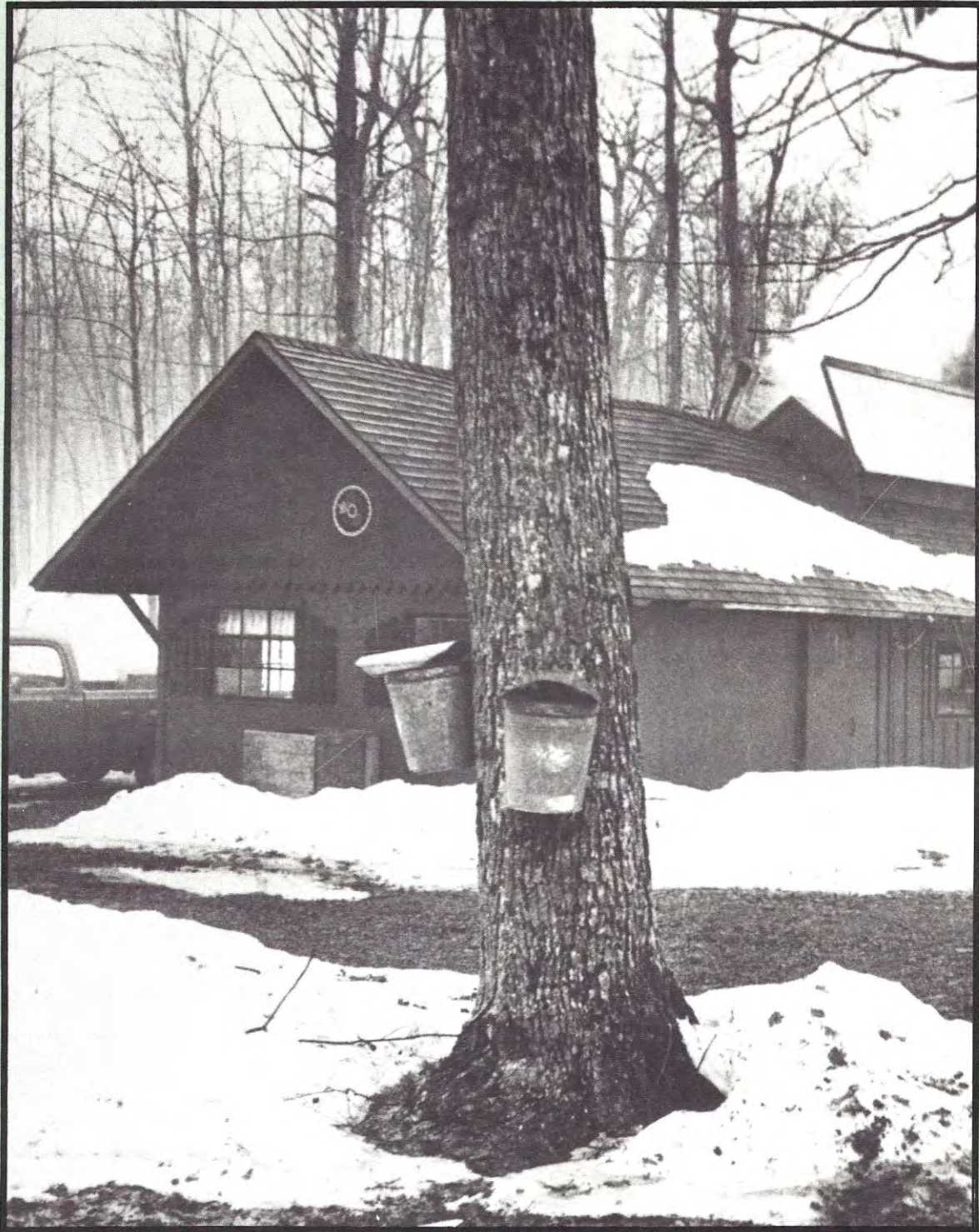
FOREST OWNER

A Publication of the New York Forest Owners Association

March/April 1992

People and Trees; Partners in Time

THE NEW YORK



THE NEW YORK FOREST OWNER

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OFFICERS & DIRECTORS

Stuart McCarty, President
4300 East Avenue
Rochester, NY 14618
(716) 381-6373

Charles Mowatt, 1st Vice President
PO Box 1182
Savona, NY 14879

Robert M. Sand, Recording Secretary
300 Church Street
Odessa, NY 14869-9703

Angus Johnstone, Treasurer
PO Box 430
East Aurora, NY 14052

John C. Marchant, Executive Director
45 Cambridge Court
Fairport, NY 14450
(716) 377-7906

Deborah Gill, Administrative Secretary
P.O. Box 180
Fairport, NY 14450
(716) 377-6060

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Robert A. Hellmann, Brockport
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COVER PHOTO:

Shown is Irwin King's Sugarbush Farm.

Photo by Darby Hill

FOREST OWNER

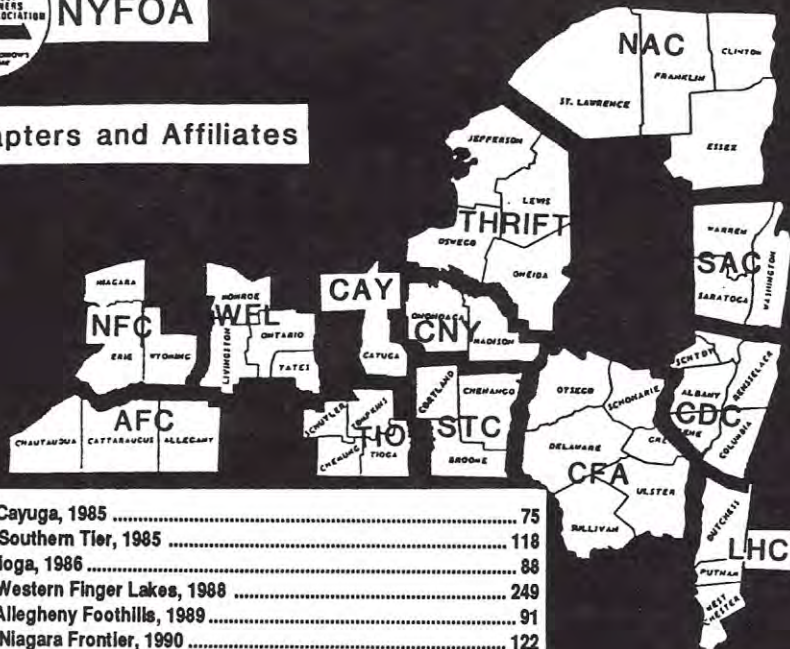
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President's Message

By Stuart McCarty

When one stops to think about it, there is an amazing amount of help available to the woodlot owner.

Starting right at home numerous books can be studied by the interested owner who wants to learn some of the fundamentals. Mary and I have enjoyed "Woodlands for Profit and Pleasure" by Reginald D. Forbes published by the American Forestry Association (our edition printed in 1979) and "The Woodland Steward" by James R. Fazio published by the Woodland Press of Moscow, Idaho. The latter has a personal touch because it has an interview with the late Evelyn Stock, Editor of the Forest Owner for some years, and refers in complimentary terms to NYFOA! Our affiliate, the Catskill Forest Association, has been offering it for sale to its members for some time.

The Cornell Cooperative Extension with offices around the state has a wealth of reading material available at modest cost as well as agents willing to answer questions and give advice on forestry. Dave Taber, of Cooperative Extension, is a frequent and constructive contributor to our magazine.

The College of Environmental Science and Forestry in Syracuse offers courses for the non-traditional student and in many ways supports the efforts of the woodlot owner to meet objectives. For example, Dr. Norman Richards, a professor at SUNY ESF and a director of NYFOA, is planning the program for our Annual Meeting on April 25, in which the preparation of Management Plans will be featured.

In the January/February issue of the Forest Owner, David Forness, a DEC Senior Forester, gave an excellent run down on the Federal Cost Sharing Programs, with which we all should be acquainted since they are there for our use. The newest, the Stewardship Incentive Program (SIP), is about to get under way so be alert to announcements as to how to proceed.

At some point in the cycle of caring for one's woods the forest owner should employ the services of a DEC forester or a consulting forester. They can bring it all together and help both to accomplish the owner's objectives for his or her woodlot and to avoid mistakes that may be impos-

sible to correct in a lifetime.

Now we have the new Master Forest Owner program also referred to in our last issue and of which our Executive Director, John Marchant, was one of the "prime proponents". This program holds great promise for the years to come as additional woodlot owners become certified. Thank you, John!

NYFOA's Forest Owner magazine, the newsletters and activities of the chapters and affiliates, and the meetings of the state organization offer our members a diversity of help and pleasure and are hard to beat.

Finally we are considering establishing

an information database available through an 800 number at NYFOA's headquarters. This would make it even easier for the forest owner to find answers to questions relating to his or her woodlot. John Marchant is in the early stages of mapping out the steps to instituting this service to our members and will let us know if and when it is decided to go ahead.

So there is lots of help out there and maybe even more coming! Let's make use of it.

An Odd Ode or Mary's Miracle Memorialized

By Richard Kesel

When Mary McCarty earned her degree by degrees,
Most of us thought she would major in trees.
At Nazareth she spoke to each tree on the grounds
Where the beech, the maple and chestnut abounds.
Sometimes she would branch out and speak to a cherry,
Flowering or plain, made no difference to Mary.
Poplar and elm, linden, willow and oak,
She leaves none unattended; they're all okey-doke.
Except for the time when she barked at a ginkgo
Which was rumored to be a true Chinese pinko.
She even mapped them right down to the very last pine,
Which Nazareth front office thought was just fine.
Mary's really quite fond of the whole arboretum;
"If they're trees," she avers, "You really can't beat 'em!"
So you see why it was a bit of a mystery
When she chose to matriculate in Religion and History.
"But," said Mary, "It's not very surprising.
I wanted to do it while the sap was still rising!"
So now her vocabulary encompasses Baalam's ass
With sweet gum and alder and old sassafras.
And added to subjects distinctly deciduous,
In matters doctrinal she's become quite meticulous;
Plus the movers and shakers of our civilization
Have their niche in her knowledge of historification.
Now then, she has triumphed; her exams are all through.
Give three cheers for Mary! Give a wife back to Stu!

NYFOA member the Reverend Richard Kesel of the First Presbyterian Church of Pittsford composed this poem for friend Mary McCarty (NYFOA President 1984-85) upon the occasion of her award of the Bachelor of Arts Degree by Nazareth College, Class of 1988.

About Burning, Fire Scars, and Squirrels

By Ronda C. Engman

As a member of NYFOA and one who lives within walking distance of the Danby State Forest, I would like to comment on Dave Riordan's article on burning that appeared in the January/February issue of NY Forest Owner.

Although I did not witness the actual burning of the site off Bald Hill Road in the Danby State Forest, I have visited this area countless times since the burning occurred. I have also spoken to Ralph Nyland specifically about this site.

If you were to walk this site today, you would notice that there is a dense understory of brambles and that most of the adult trees, which are almost exclusively oaks, have fire scars nearly six feet up their trunks, many display signs of rot. These trees are either already dead or are dying. Many have multiple sprouts coming from the bases of their trunks. This site, which is at the crest of a hill, was hit hard by gypsy moths last year, more so than a nearby

mixed stand of deciduous and coniferous trees.

Dave Riordan said that the burn was conducted to kill the understory. However, it is well-known that brambles are not killed when burned. In fact, a burn will fertilize the brambles, encouraging them to come back more heavily than before. According to Ralph Nyland, "Our experience has been raspberries have not deterred oak development. Oaks come through the raspberries quite adequately."

Nyland said that the sprouts at the base of the trees indicated that the fire had been too hot. "This method is all wrong," he said. Fire scars cause discoloration and fungus which affects the value of the trees "dramatically," he said. "Seventy-five percent of the value of the tree is in the butt sixteen-foot log. If you get rot in those things, some of them may be quite valueless."

My property is basically an extension of the Danby State Forest ecosystem. Yet, I

have no trouble with natural regeneration of hickories or red and white oaks. One reason may be that I have a healthy resident squirrel population that works continually during late summer storing mast. However, I can't remember ever seeing a squirrel at the Bald Hill Road site.

If you would like to increase the number of mast trees on your property, I caution you to think carefully before you burn or clearcut. I recommend you first do an inventory of your squirrel population. If you think it merits increasing, consider establishing a feeding station to attract squirrels (they love sunflower seeds) and erect nest boxes if natural nest sites are lacking.

Animals play a much more important role in the health of the forest than we tend to admit. In their own way, they fertilize, plant, and cultivate. We need to work with wildlife rather than work against it.

Ms. Engman acknowledges she is an active environmentalist.

Prescribed Burning: An Oak Management Tool On The Green Mountain and Finger Lakes National Forests

Because of its importance as a food source for wildlife and its value as a wood product, oak is a key forest resource on both the Green Mountain National Forest in Vermont and the Finger Lakes National Forest in southcentral New York. Consequently, the oak type is an important vegetative community to maintain as a component of New England and New York's diverse forest ecosystem. Although oak occurs on only about one percent of the Green Mountain, it comprises most of the Finger Lakes National Forest. On a larger scale, oak occurs on four percent of Vermont's forestland and 11 percent of New York's. The Forest Plans for both of these national forests require the oak type to be maintained and, where feasible, expanded.

On some sites, little advanced oak regeneration is present. Prescribed burning followed by shelterwood cutting during a good seed year can facilitate the establishment of oak regeneration. Summer logging that creates good soil scarification is an additional treatment practice which can

increase the probability of successfully establishing oak seedlings.

On the Green Mountain and Finger Lakes National Forests, oak regeneration is a long-term process rather than a single event. Prescribed burning and shelterwood cutting can be used to stimulate establishment of oak regeneration. Oak is a key forest resource because of its value as a wood product and its importance to many wildlife species that utilize the mast. The

public has clearly indicated to the two national forests their desire to maintain a healthy oak forest and to expand the forest type where feasible. We are eager to accomplish this goal using prescribed burning as a silvicultural tool.

Excerpted from an article by Robert R. Burt, Forest Silviculturist of The Green Mountain National Forest, as it appeared in Forest Management Update, Sept. 1991

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About Burning, Fire Scars, and Learning

By Ralph D. Nyland

Fires burned oak forests many times during spring and fall for centuries before people decided to control the fires. Cattle also commonly grazed in the woodlands of New York through the first 2-3 decades of the 1900's, clipping off many species of herbaceous and woody plants. As a result, the understory was probably park-like and quite open. The chestnut also died during the 1930's, reducing overstory density in those stands. Interestingly, many of New York's best oak sawtimber grew into overstory positions coincident with the death of those trees...a natural act that reduced overstory density just as we do with cutting today.

Somehow these pieces all fit together in the past. And we ended up with stands containing excellent oaks. Yet today we have difficulty regenerating oaks, and need to learn how to replicate the necessary conditions that gave us oaks in the past. And that may include using prescribed burning linked to cutting of some overstory trees to promote development of new oaks to replace the old ones. The research described in Dave Riordan's piece on page 4 of the Jan/Feb issue of your NY Forest Owner was an early step to find such a surefire way to perpetuate oaks in New York.

Those early trials included prescribed burning in areas not given an overstory cutting, and stands cut to reduce the overstory canopy density to improve light levels near the ground. This allowed us to separate effects of burning alone from those related to burning coupled with a reduction of crown canopy density. We also wanted to control the undesirable woody understory vegetation. Otherwise, we knew the stands would shift to red maple and beech...even as happens in unmanaged areas that suffer Gypsy moth defoliation, and where the oaks later die.

At first, we did not appreciate fully the circumstances whereby fires cause basal damage to standing trees. Available literature included little information about the problem. So when we had an opportunity to burn a stand where overstory cutting had already occurred, we gave it a try. That saved the time to find another stand, plan and make the burn, and then plan and make a cutting. We did know that in uncut stands,

only the dry leaf litter burns. Those fires move rapidly across the ground surface, and the flames pass by each tree in just a few seconds. The heat does not build up around the tree trunks sufficiently to damage the inner bark and cambium, except for stems less than about 3 inches in diameter. Those small ones die back to ground level, as do any woody shrubs.

As we began burning a couple of already-cut stands, we learned first hand that when a leaf litter fire ignites piles of small woody debris laying immediately adjacent to a standing tree, high temperatures at tips of the flames can last long enough to kill the inner bark and cambium layer. After the bark dies, it eventually falls off from a triangular area along the base of a damaged tree, opening it to possible invasion by wood-rotting fungi. These wounds become the classic basal fire scars that we all know about, just like the ones that formed after the fire at Danby State Forest. By contrast, fires burning in stands lacking the logging slash cause no damage to the large trees...an important lesson for the future.

In addition to damaging some of the standing oak trees, those early experimental fires stimulated sprouting of the oak seedlings already growing in the understory. With improved light caused by the overstory cutting, the seedlings grew fairly rapidly. And when they overtopped the raspberries, the DEC foresters removed the remaining old trees so the new young ones could develop without suppression. As a consequence, new oaks will replace the mature oaks, and the stand will not end up with just red maple and beech.

This research taught us much about regenerating oaks. Yet we still need to keep improving the techniques to make the methods foolproof. And that is exactly why Dave Riordan and his colleagues tried the burning and cutting at Danby State Forest. That project taught us burn the understory before attempting any cutting to reduce overstory density and increase light levels near the ground. And when we burn first, we get no fire scars.

In cooperation with Dave Riordan, Bob Demeree, and others from DEC we have begun a 10-year assessment of how well prescribed burning helps us to regenerate oaks in New York. Eventually we hope to have a proven technique. But that will take

more burning, more cutting, and more research. And we'll continue to learn...even by our mistakes. I am sure that Dave will keep you posted.

Dr. Ralph Nyland is a Professor of Silviculture, SUNY College of Environmental Science and Forestry at Syracuse, N.Y., and winner of NYFOA's Heiberg Award for 1978.

Conservation Easements

Dear Editor:

Thank you for the excellent article by John Krebs on conservation easements in your November/December 1991 issue. It clearly described the best answer for private landowners who cherish their land and want to protect it permanently from development, regardless of future ownership. Because non-profit land trusts work directly with landowners in writing and fine-tuning conservation easements to reflect the natural values of the property and the wishes of the owner, the means may be readily available for a landowner to voluntarily obtain legally binding protection in perpetuity for his or her land.

Dedicated to the permanent protection of our working landscapes, open spaces, scenic beauty, and plant and animal habitats, land trusts are increasingly providing an invaluable service to landowners and their communities. In its first 2 1/2 years of operation in the 12-county Finger Lakes Region, the Finger Lakes Land Trust - headquartered in Ithaca, and with chapters in Canandaigua and Skaneateles - has accepted donations of 13 conservation easement son 845 acres, owns three nature preserves and has handshake agreements on another 1789 acres. As a membership organization, we welcome new members and encourage participation in our programs. For information, write to Finger Lakes Land Trust, P.O. Box 4745, Ithaca, NY 14852 or call (607) 838-3590.

Sincerely,

Bob Beck, Executive Director

WETLANDS REVISITED

By Wes Suhr

Dave Taber's "Open Space" and "Wetlands" articles were well-written contributions to our last issue (Jan/Feb) of FOREST OWNER. I want to take a technical view of some statements made in "Wetlands Serve Nature and Society" on page 19. The intent of my remarks is to increase the awareness of the reader for the valuable wetland community.

Dave says "They (wetlands) are sinks that prevent floods by absorbing and holding water." Wetlands do not always "prevent" floods, but may at times contribute directly to flood runoff. The degree of flood reduction or contribution by wetlands depends on many factors related to the moisture in storms and the moisture on (and in) the watershed containing the wetland(s). Let's take a high moisture situation -- the soils of the watershed are fully charged with moisture and the wetland is

"filled full" of water -- not unusual, especially during spring snow-melt runoff. Any additional moisture from the snow-pack or the next storm that reaches the wetland will not be "absorbed" or "held", but most likely will contribute directly and rapidly to channel runoff or flooding downstream.

Here comes that word "prevent" again: "They (wetlands) hold sediment from erosion and prevent its further translocation." Again, this depends on the nature of the storm or source of moisture and the conditions of the watershed and wetland site. Wetland basins do act as traps for sediment and may accumulate tremendous loads. Let's take the above example where the site is at full moisture-storage capacity, and assume the "wetland" is a beaver pond(s) as the photograph on page 19 appears to be. At flood stage (level) with high runoff, water can breach the dam and may "flush out" much of the sediment in

the basin, possibly increasing the suspended sediment load by 100-to-1000 times in downstream flow. This is not an unusual situation -- it has been observed in many different locations. Wetlands do act as traps for sediment, but they may also act as sources of sediment, contributing suspended material to streamflow under certain conditions.

My final remark relates to "... this beautiful sight ..." in reference to the photograph of a wetland on page 19. As they say, "Beauty is in the eye of the beholder," and a stand of dead snags is not particularly attractive to this beholder, but then that's my problem!

Wes Suhr, Forester and Hydrologist, edits the NY Forest Owner's column "Ask a Forester" and has previously considered Wetlands, NYFO Jan/Feb 1989 and Mar/Apr 1989.

Gilead Tree Farm-- A Thirty-three Year Perspective

By Paul Steinfeld

In 1965 Forest Owner published my first written statement about beginning experiences as a tree farmer. In 1982 Forest Owner printed an update of these experiences. Now, at the end of 1991, a happy coincidence prompts these reflections. The coincidence is that 1991 marks the fiftieth anniversary of the American Tree Farm System and also our fiftieth wedding anniversary. Gilead Tree Farm became New York State Tree Farm #258 in 1963. An important theme binds our personal lives with tree farming. Our life, the lives of our children and grandchildren, and of many friends and relatives have been enriched by NYS Tree Farm #258. Management of these Catskill acres has taught us that human bonds and religious values are for us major ingredients of good stewardship.

Perhaps one reason this interrelationship between people and trees has been so important to us is that we came from urban backgrounds and had to learn from the ground up. Learning involves people. The first person who encouraged me to write about our tree farm was our dear departed Dave Hanaburgh, a highly experienced professional forester, one of the early lead-

ers of our Association. Rarely do I walk our farm without recalling details Dave taught about how to read the land and how to use its products wisely. That first article brought an encouraging response from Floyd E. Carlson, then Secretary of our Association, and a distinguished faculty member at the College of Forestry in Syracuse. Professor Carlson informed me that my article, "What My Forest Means to Me," would be used at the College for orientation to entering students.

In 1991 we celebrate the contribution of tree farming to family life. Each of our four children feels attached to Gilead Tree Farm and a personal involvement in some aspect of its development, such as timber stand improvement, forest plantations, wildlife, fish pond, timber and firewood harvests, and landscaping. The farm has served each family member in different ways and at different times as a haven for solitude and as a family gathering center. Now it similarly serves our four grandchildren. Beyond immediate family, siblings and their children and grandchildren have formed attachments to this place that have strengthened their attachment to one another. One of our little grandnephews used to say, "I

want to go to my farm." One of our nieces said, "I feel at home here." Friends have celebrated weddings at the farm, and relatives have been married under a canopy of larch boughs grown here. Each December a couple of old friends come with their grandchildren to choose and cut their Christmas trees.

Church and synagogue youth groups have visited. On the Feast of Tabernacles our Sukka, or ceremonial hut, fragrant with spruce boughs, has helped teach thanksgiving for bounty and responsibility to enhance the land's bounty as a religious obligation. Alone I could never be a good steward. Membership in NYFOA and its Catskill affiliate, the American Tree Farm System, NY State Department of Environmental Conservation, Greene County Extension Service, and interaction with family and friends have all enabled us to feel part of a continuing process of learning that has strengthened ties with family and community.

Paul Steinfeld, President of NYFOA for the years 1982-1984, currently serves forestry as a Director for the Catskill Forestry Association, a NYFOA affiliate.

Save Taxes Using Federal Tax Law for Timber Owners

By John P. Laschenski

By using the special provisions in the federal tax law benefiting timber land owners, you can save significantly on your income taxes.

Use Depletion

If you sell timber from land you own, claim the depletion allowance as a cost of the sale, reducing the taxable income from the sale. The depletion allowance is calculated by multiplying the number of board feet cut by a fraction, the numerator of which is your adjusted basis in all the timber on your land, and the denominator of which is the total number of board feet of timber on your land.

Get Capital Gains Treatment

Use the capital gains tax rate on your gain when you dispose of standing timber or cutting rights using a contract in which you retain an economic interest. To retain

an economic interest, you must be paid on a per unit cut basis, not with a fixed fee.

You can also use the capital gains tax rate and take a gain when you cut timber to use it in your own business (such as cutting it for logs and selling the logs).

Get Special Reforestation Incentives

Up to \$10,000 per year of your expenditures for "reforestation" can receive special tax benefits:

- Amortization over 84 months on your tax return;
- Creation of a 10% investment tax credit on your tax return.

Defer Tax on Federal or State Grants

If you receive federal or state "cost sharing" grants for improvements made to land which foster conservation, protect the environment, improve forests or supply a habitat for wildlife, you do not need to declare the grants as income on your tax

return until the year you sell the land or timber affected.

Take Loss For Ice Storm Casualty

If your timber was destroyed in the ice storm of 1991, you can deduct the amount lost using the depletion rules referred to above. If you are in the timbering business, you can deduct all of your loss. If your timber land is held as personal property, the amount of the loss that you can take is limited by special rules.

Use IRS Form T

To take advantage of the above federal tax law provisions, you must report your timber transactions on IRS form T, available from the IRS or your accountant.

John Laschenski is a Certified Public Accountant with the accounting firm; Heveron, Laschenski & Walpole of Rochester

Property Boundary Line Trees

Trees often grow on or near property boundaries in woodlands as well as in city and suburban housing lots. Sometimes disputes arise as to who owns the property boundary line trees. The question may involve who has the rights to cut a tree or remove branches from a tree growing on a property boundary line.

When legal questions are asked, it may take negotiations between lawyers to develop a satisfactory solution. Of course, the ultimate authority for resolving disagreements over interpretation of laws rests with the State and Federal courts.

Even if one is innocent, it is unpleasant, nerve-racking, time-consuming and costly to be accused of a law violation. Therefore, in many cases it may be advantageous to remain in the enviable position of not being involved in any way in a legal controversy.

Trespass, Line Trees

"On the line.—If the trunk of a tree is on the boundary line, the tree is common property of both owners whether marked as a boundary or not. A shade tree standing on a boundary between adjoining owners is common property of both, and the mere fact that it stands on border of sidewalk affording shade for pedestrian does not interfere with right of either to protect it or

recover damages for its destruction. 'Each of the owners upon whose land any part of a trunk of a tree stands, has an interest in that tree, a property in it, equal in the first instance, to, or perhaps rather identical with, the part which is upon his land; and, in the next place, embracing the right to demand that the owner of the other portion shall so use his part as not unreasonably to injure or destroy the whole.' As such trees are the common property of both, neither may destroy without the consent of the other and where a row of trees is on the line neither is entitled to make his own partition by cutting alternate trees and furthermore an injunction may be granted to prevent the destruction of a line tree. However the mere fact that a tree stands upon a boundary does not preclude either owner from cutting away the branches overhanging his land.

Line trees belong to the adjoining proprietors as tenants in common. Where such trees are destroyed by one of the adjoining proprietors a trespass action may be maintained by the other adjoining proprietor.

The following opinions may help you to understand the property boundary line tree situation.

1. The old tale is that every other merchantable tree growing on a property boundary line belongs to each adjoining owner.

This is not legally correct unless both owners agree.

2. Trees which stand on the boundary line belong to adjoining owners together as tenants in common. Where such trees are destroyed by one of the adjoining owners proprietors or agents a trespass action may be maintained by the other adjoining owner.

3. To prevent errors or trespass it would seem that most owners would prefer to keep a tree standing when marked as a boundary line tree as evidence of the boundary. Keeping a boundary line plainly marked would assist the owners as well as the logger to avoid trespass. Of course this is a decision of both owners collectively as a matter of their common interest.

4. Trees standing close to the boundary that are face blazed or painted are not jointly owned. They belong to the owner on whose land they stand. Face blazed trees also serve a useful purpose as witness to the boundary. The N.Y. State Department of Environmental Conservation does not want face blazed trees adjacent to the property line cut if they are located on the state-owned side of the boundary."

Excerpted from NY FOREST OWNER J/A 1983.

Chapter Reports

ALLEGHENY FOOTHILLS

Betty Densmore

On Jan. 25 twenty-six members met at the County Extension Building in Ellicottville for a presentation by Wayne Cooper, DEC Olean District Manager on 480-A N.Y.S. Forest Tax Law. The session was a lively one which started at 10 a.m. and with questions and answer period lasted till 3 p.m.. The AFC'S fund raising has enabled our treasury balance to top \$1000.00, the first time in our 2 1/2 year history. On Mar. 21 at 10 a.m. the AFC will meet again in the County Extension Bldg. in Ellicottville to hear Herbert Darling, Jr. present a program on the American Chestnut.

CAPITAL DISTRICT

Irwin King

Since our last report, the Capital District Chapter completed a mid-November woodwalk through the sugarbush of chapter president Irwin King. A clear and crisp day greeted the woodwalkers who toured portions of the 60 acre woodlot to observe a developing Christmas tree plantation and the mature sugarbush with its 2,500 tap operation. NYFOA president Stuart McCarty helped welcome the visitors. DEC Region 4 regional forester Carl Wiedemann had marked out several sample plots in the woodlot prior to the walk and described for the woodwalkers several harvesting options.

On January 18, the Chapter met at NYFOA member Eric Rassmussen's Lange's restaurant on Route 23 just east of Windham Ski Center. Mike Birmingham, DEC's resident expert on forest health provided a highly entertaining and interesting presentation about the status of various tree insect and disease problems as well as the types of management options available to deal with them.

Looking ahead, the Chapter is planning a May 16 woodwalk for Columbia County that should perk the interest of some of our non-resident woods owners. And, with SIP signups just around the corner, it looks like a busy spring for the Capital District Chapter.

CATSKILL FOREST ASSOCIATION

Ed Thorne

On Jan. 25 a workshop on 480-A and

Conservation Easements was held at the Ulster Community College at Stone Ridge with 40 attending. The workshop was co-hosted with the Rondout-Esopus Land Conservancy. The group learned ways to conserve their land and lower the economic burden of holding on to their land.

Ira Stern, Executive Director of the Rondout-Esopus Land Conservancy discussed conservation Easements, showing an actual plan for an easement. Dick Rommel, Senior Forester from DEC Region 3, covered Forest Tax Law 480-A, defining land eligibility, certification of forest management plans and filing of commitment forms with the county. Marjorie Dunbar, board member of CFA, with lands enrolled under 480-A, gave a landowners point of view and how enrolling in 480-A has helped them manage their land, and how savings in property taxes and returns from timber sales have helped them to cover costs of owning the land.

A Wildlife Enhancement Workshop will be held on March 28, 1-4 p.m. at Erpf House, Route 28 in Arkville showing different methods of attracting wildlife and wildlife habitat improvement.

CENTRAL NEW YORK

Tom Ellison

On Feb. 2 at 10 a.m. members met at Vern Hudson's Gurnee Woods in Elbridge. Vern has a tree farm and cross country ski resort. Our next meeting is in March at Heiberg Forest with a tour of the Maple Sugar operation. Information on this can be obtained by calling (315) 682-9376.

NIAGARA FRONTIER

Bob White

The Post-Holiday party held on Jan. 11 at Harry & Rita Hassey's in Varysburg was attended by 28. The dish-to-pass request resulted in a fabulous feast. Beth & David Buckley presented their Planting for Wildlife slide show which was enjoyed by all. It was such a beautiful day that some went on an impromptu woodwalk and others cross country skied. We discussed the upcoming elections, as the treasurer has agreed to another years service we only need a new Chairperson. A nominating Committee is in place to fill this office. Our next scheduled event is a tour of Julia Reinstien's Nature Preserve in Cheektowaga at 10:45

a.m. on May 23. Jeff Liddle will conduct the tour, bring a bag lunch and something to drink.

NORTHERN ADIRONDACK

Wes Suhr

January 18 was a very chilly, brisk day in Lewis, NY when about 20 visitors toured the Allen-Rogers Limited Sawmill. The scaling demonstration in the yard was informative but abbreviated due to the sub-zero temperature. The group saw white birch bolts debarked and sawed into squares, ready for turning. Hard maple was turned to produce ladder rungs. Mill personnel discussed purchasing logs, their quality requirements and the market for their final product. Thanks to the mill management and Dave Daut for arranging and providing this interesting tour.

Dave Forness is all set for the Potsdam Lumber Mill tour on February 8, starting at 10 am. It will take about 2 hours and will include a live sawing demonstration. Dave will review the tour in the next issue.

The Cornell University Uhleim Sugar Bush, located on Bear Cub Road in Lake Placid, is planning a tour for us on March 21, starting at 10 am. If weather is poor, this may be rescheduled to March 28. Drop Dave Forness a card with your name, address and phone number or call him to confirm the date. His address: NYS DEC, Court ST., Canton, NY 13617 or call 315-386-4546 (days) or 379-0512 (nights). We want a CROWD for the tour and also for an official vote of NAC's officers following the tour. We have developed a member ID card and member profile form which will be mailed to the NAC area in February. Its purpose is to identify the interests and desires of members to more adequately fulfill their needs.

LOWER HUDSON

Robert Davis

Fifteen members attended the Forest Stewardship Fair on Sept. 19, 1991. The LHC participated in the event which was sponsored by the DEC'S Bureau of Forest Resource Management at the Dept.'s Stony Kill Farm Environmental Education Center in Wappinger's Falls. Many Forestry

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Chapter Reports

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and Forest-related organizations were represented and demonstrated products from portable sawmills to wood-gasification systems to a pelletized-wood stove. Woodsy the Owl was on hand to entertain children and adults. Several cords of firewood and 2 Christmas trees (donated by local growers) were raffled off. The Lower Hudson Chapter made a tidy profit selling apples, cider and homemade doughnuts. A hayride was also provided by the DEC's farm manager. Special thanks to John and Jane Geisler and Bamber Marshall who worked the NYFOA booth and solicited new members. Thanks also to Bob Herberger for his efforts in the Chapter's concession stand on his first full day of membership!! We hope to participate in this event again in 1992.

SOUTHERN ADIRONDACK

Erwin Fullerton

On Sept. 21, 1991 NYFOA and the NYS Tree Farm System sponsored a program on Erwin and Polly Fullerton's Tree Farm in Warren County with 65 people attending. Brian Downing, Chairman of the Tree Farm Committee, gave a talk and Tom Wahl, Region 5 Forestry Manager, presented awards to DEC Service foresters Steve Warne, John Hastings and Ron Cadeau for certification of 250 tree farms. A woodwalk was conducted with multiple use discussions including a marked stand for selective harvest, wildlife habitat, wetlands and many other topics of interest. A buffet lunch was enjoyed in a building built with timber cut and sawn on the property. Ron Cadeau gave a talk on SIP. We were fortunate to have at least 5 foresters on hand to discuss management of tree farms. Ernie Spencer arranged our Nov. Program, a talk by Mike Greason of the DEC on 480-A and Don Peterson spoke on taxes and how they relate to the forest owner.

In May we will have an outing at the Tony Conti farm in Washington Co. with special emphasis on Wildlife Management. Information on this can be obtained from Erwin Fullerton at (518) 747-7230 or Ernie Spencer (518) 792-1726.

Our officers are: Chairperson, Erwin Fullerton; V.Chair, Nancy Najer; Sec., Brian McNeile; and Program Director, Ernst Spencer.

SOUTHERN TIER CHAPTER

Larry Lepak

The STC has had an interesting set of winter programs. In December, DEC Forester Gerald Kachmor addressed the chapter. Gerald is a member of the DEC Forest Stewardship practices committee. He updated the members on the Forest Stewardship program, including a review of eligible programs. In January, chapter member Harold Haslett gave a presentation on forest law issues, including record keeping. Harold's talk emphasized tax law implications of timber basics and the need for long term planning as it relates to taxable timber sales. On March 27 the chapter will have an annual pot luck supper at 6 p.m. at the Cooperative Extension Building on Front Street in Binghamton. The evening's activities will include a speaker and door prizes. All NYFOA members are welcome. Bring one or more food dishes to pass at the supper.

TIOGA CHAPTER

Pat McGlew

On January 22 seven members met, the outcome was: Pat McGlew continues as chapter Chairperson, Alan Knight will continue as Treasurer. Volunteers for the Program Committee are: Jim Signs, Rich Usack and Don Schaufler. The newsletter committee includes Brent Henry, Walt Heater and Dan Zajac. The position of Secretary needs to be filled.

On Feb. 6 from 7-8 p.m. a meeting was held at the Arnot Teaching and Research Forest, VanEtten, N.Y.. Gary Goff of Cornell Cooperative Extension discussed various thinning treatments within three distinct stages of forest succession (scrub, poles and sawtimber) with the effect on wildlife populations.

TIMBER MARKET REPORT

I continue to receive good prices for competitively bid timber. Discussions with lumbermen indicate that overall, lumber is moving. Species that are currently in demand are Hard Maple, Basswood and White Oak. Black Cherry is still strong. Red Oak and White Ash prices are down somewhat, but overseas markets (Germany) may soon help these. Softwoods aren't selling too well these days, although there are always active pulp and pole buyers around. If you have quality and volume, you can sell it.

WESTERN FINGER LAKES

Jack McMahon

Our January meeting was well attended (approx. 70 people), our guest speaker was Bruce Penrod, DEC Biologist. His talk and video explained his work and projects at Hi Tor.

Our next meeting will be March 18; Dan Ericson, a chain saw dealer, will give safety and maintenance tips on proper chain saw use. Gary Evans will present a program on Bluebirds, location of houses and how to attract them. Bill Morris will give an update on the SIP program.

Our steering committee has some tentative dates for woodwalks.

NYFOA WFL Member Floyd King Receives Environmental Award

Floyd King, outdoors columnist for the Rochester Democrat & Chronicle, is the recipient of the 1991 Hugh E. Cumming Environmental Quality Award presented by the Center.

King is being recognized for achievements in environmental communication that span five decades. Through news articles, feature stories, editorials and essays, King has chronicled the wonders of nature for generations of readers. His work conveys the essential message of respect for the environment.

While King was editor of the Outdoors page, it received numerous awards from the Outdoor Writers of America. King has been cited for excellence of craft by the New York State Outdoor Writers Association. He was named Conservationist of the Year by the Monroe County Conservation Council in 1975. At the age of 85, he remains active in many environmentally-related groups.

-from Center for Environmental Information Sphere, Nov/Dec 91

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The Sugar Maple - New York's Tree

By Stephen S. Davison

Among the many species of forest trees native to New York State, none is more beautiful and useful than Acer saccharum, the sugar maple. Valued as a timber tree, favored as an ornamental, and famous for its sugary sap, the sugar maple has been the official State Tree of New York since 1956. This aristocrat of our northern hardwood forest is largely responsible for the beautiful autumn color of eastern American forests.

The sugar maple is the best known of the maples in New York. Depending either on the product, the manufacturer, or the consumer, one of a number of common names are used when referring to this species. The names vary from the term "hard maple" used by the bowling pin and flooring manufacturers, to "rock maple" of the furniture makers and quite naturally to "sugar maple" by the syrup producers.

Sugar maple commonly attains a height of 60-80 feet and a diameter of 2 feet (max. 135 x 6 feet)¹. In the open, the trunk often branches near the ground and produces a large dense rounded, or ovoid crown. The root system is shallow to deep and wide spreading, depending upon the soil. Under forest conditions, the tree develops a clear straight bole that is valuable for lumber. Common associates in the forest are American beech and yellow birch, eastern white pine, eastern hemlock, black cherry, and the central hardwoods, including basswood, white ash, yellow poplar, hickories, and oaks. Sugar maple is found in 23 forest-cover types.

Sugar maple leaves are opposite and simple, about 4 inches in diameter, 4 to 6 inches long, five-lobed with five principal veins, smooth above and below. Each lobe has several lesser points along the margin but otherwise the edge is smooth. The sinuses between the lobes are broad and rounded. Sugar maple leaves are rather thin textured in contrast with those of most hardwoods. In color the leaves vary from a bright, light green to deep yellow-green, but in all cases the lower surface is slightly paler than the upper surface.

Flowering in sugar maple is polyga-

mous, occurring over the entire crown. The small yellow flowers seem to be perfect, but usually only one sex is functional within each flower. Both sexes are typically produced in the upper part of the crown but only males form in the lower part. In a good seed year (2 to 5 year intervals), just before the leaves expand, nearly every tree is so covered with flowers that at a distance it appears to be enveloped in a yellow haze.

Winged samaras, 1" to 1½" long and broadly "U" shaped, contain a pair of seeds. By autumn, enormous quantities of the winged fruits have developed and are released, reminiscent of little helicopters as they drift to the ground. The following spring, countless numbers of seedlings unfold their cotyledons as they emerge from their winter covering of leaves. They prosper even under a heavy forest cover and are extremely shade tolerant throughout life. It is a common experience in summertime to see little else but a carpet of sugar maple seedlings covering the forest floor in a mature hardwood stand. Sugar maple also regenerates by stump sprouts and sometimes root suckers.

The twigs of sugar maple are slender, shiny, dark brown, and spotted with white lenticels. The terminal bud at the outer tip of the twig, is conical in shape, 3/8" long, sharply pointed and shows 5 to 8 pairs of scales. A pair of smaller lateral buds generally accompanies the terminal. The leaf scars are narrow and "V" shaped.

The bark of sugar maple is variable. In general, it is dark gray and irregularly rough with plates and ridges becoming more pronounced with age.

Sugar maple is a fairly resilient species even though affected by a host of enemies. Bud miners kill the terminal bud and cause forking. The gypsy moth, forest tent caterpillar, pear thrips, linden looper, spring and fall cankerworms, maple trumpet skeletonizer, and saddled prominent are major defoliators. The sugar maple borer, maple callus borer and the carpenter worm bore tunnels under the bark of the tree. Road salt and verticillium will injure ornamental trees. Browsing deer, hungry squirrels, and thirsty sapsuckers also cause damage.

The best growth of sugar maple is made

on moist, rich, well drained soils, but the tree will persist on poorer sites. The natural range of sugar maple extends from north of the St. Lawrence River to Southern Manitoba, and south to Tennessee. Sugar maple may attain an age of 200 to 300 years.

Next to the red maple, sugar maple is the second most abundant tree in New York State. It occurs in practically any hardwood situation, even as a pioneer in old fields. Because it can withstand great shade, it persists in a crowded forest stand long after other species have been shaded out. The longer the forest remains undisturbed, the more sugar maple predominates. It is a climax species because of this tendency to dominate a forest over a long period of time.

Sugar maple has always been important to man. By the time the Europeans arrived, the Indians of the northeast were making sugar and syrup from the clear sap of the maple. The Indians taught the early settlers how to make maple sugar and syrup which became the staple sweets for rural families in New York during the 18th and 19th centuries. Potash was exported from the colonies, and sugar maple ashes were found to be high in this substance. Wood ashes were used in soap making. Forges were fired with maple charcoal.

Today, sugar maple is an excellent shade tree. It is relatively fast growing, long lived, compact and dense-crowned, full-leaved and golden-colored in the fall, sometimes with reddish trim. In the woods the tree is favored by the forester because of its ability to grow in strong competition with other species and for its economic value in the wood-using industries. As lumber, maple makes good flooring and better furniture. Curly and bird's eye maple are prized by the cabinet maker.

But sugar maple has other uses. It is excellent firewood, providing a bed of hot coals. The maple ashes containing potash are good for vegetable gardens. Its high specific gravity .56, hardness, splinter-free surface and high impact strength make it ideal for use as alley stock and the manufacture of bowling pins. Veneer, plywood, toys, rules, pallets, musical instruments,

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¹New York State record - 91 x 5 1/2 feet in Chautauqua County.

The Sugar Maple

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baskets, shoe lasts, and heels are a few of the useful products made from sugar maple. The annual harvest of hard maple in the State is substantial, totaling about 122.4 million board feet in 1987.

Besides its primary importance as a timber producer and an ornamental, sugar maple also yields valuable syrup and sugar. The sugar content of the sap varies widely from tree to tree, so thirty-two to forty gallons of the spring sap has to be boiled down to make a gallon of syrup or 8 pounds of sugar. Syrup production is an important industry in our State. New York ranked 2nd in 1980 with 243,000 gallons of syrup as compared to 1st place Vermont's 315,000 gallons. New York's total represented 1/4 of the syrup produced in the entire United States.

The regal sugar maple has long been a part of the New York landscape. The importance of this King of trees can not be overlooked. Long live the King!

REFERENCES CONSULTED

Considine, Thomas J. Jr. and Thomas S. Frieswyk, Forest Statistics for New York, USDA Forest Service, 1980.

Goodman, Richard M., Harry W. Yawney, and Carl H. Tubbs, Acer saccharum Marsh. Sugar Maple, Silvics of North America, Volume 2, Hardwoods, Agriculture Handbook 654, USDA Forest Service, 1990.

Hall, Robert F., Symbols of the State, The Conservationist, Aug-Sept 1974

Harlow, William M., Sugar Maple, Trees of the Eastern and Central United States and Canada.

Harlow, William M. and Ellwood S. Harrar, Sugar Maple, Textbook of Dendrology.

Ketchledge, Edwin H., The Maples of New York, The Conservationist, April-May 1962.

Ketchledge, Edwin H., Recognizing Woody Plants in Winter, The Conservationist, Oct-Nov 1969.

Steve Davison is a Senior Forester with the NYS Department of Environmental Conservation at Region 7's Cortland Office.

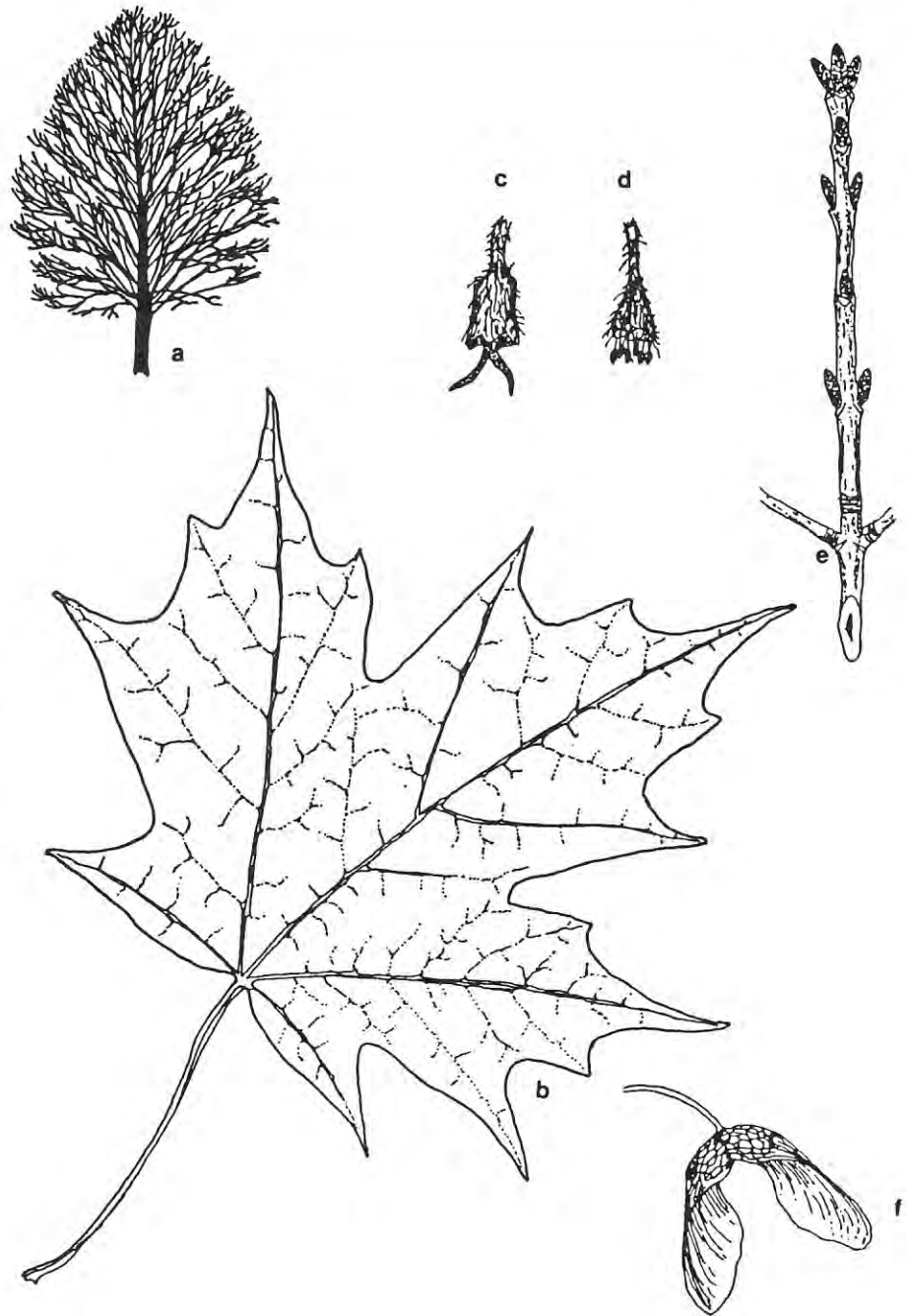


Figure 1. Distinguishing Characteristics of Sugar Maple.* a) typical mature tree shape, b) leaf, c) female flower, e) winter twig, and f) fruit. Drawings are not to scale.

*Excerpted from Cornell Cooperative Extension Publication 147FT18 Sugar Maple

Sugar maple is very sensitive to high sodium levels in the soil. Hence, it can sustain major injury from salt added to road surfaces to melt winter ice and snow. The use of salt in the winter is a common practice throughout much of New York State and New England. Thus, affected trees are found primarily along roadsides; although in some extreme cases water drainage from roads into maple stands has been responsible for extensive damage. The trees pick up salt through their roots and accumulate it throughout the tree. When soil moisture levels decrease, the high salt concentration in the tissues causes the death of many twigs. Therefore, salt damage becomes much more obvious following long dry periods during the summer.*

Sugar Maple Borer

By Douglas C. Allen

One of the most detrimental pests of sugar maples is an insect known as the sugar maple borer. The seriousness of this problem arises from both the location and nature of the damage, and the susceptible condition of sugar maple in many of today's northern hardwood stands. Outbreaks of this pest are relatively mundane compared to those of the principal maple defoliators. In the absence of additional disturbances (e.g., unfavorable weather such as drought, poor site and stand conditions), however, sugar maple usually can withstand one or two years of moderate to heavy defoliation. On the other hand, once a tree is attacked by maple borer the damage endures and its degrading effects may amplify over time.

THE INSECT

The adult borer is a dark brown to blackish, thick bodied beetle approximately an inch long and marked with distinct bright yellow bands that vary in width and length. It belongs to a group commonly referred to as the longhorn beetles; a name evoked by the unusually long antennae or feeler-like structures that are attached to the head.

Each female deposits one to a few eggs in bark crevices or holes that she chews through the bark. Eggs, and subsequent damage, usually are concentrated on the lower 20 feet of the tree trunk. Many trees are probably used for egg laying, but vigorous maples overcome feeding attempts by young larvae. Following egg hatch, the white to cream-colored, legless, grub-like larva enters the tree and feeds beneath the bark. Eventually it excavates a shallow transverse feeding gallery, which usually extends 4 - 6 feet up the trunk, and accompanying damage partially girdle the tree.

The presence of the larval gallery in the center of a conspicuous scar (Figure 1)

Figure 1. (right) Typical sugar maple borer injury. Note the horizontal larval gallery in the center of the scar.



Figure 2. (below) Cryptic sugar maple borer damage. Note telltale cracks in the bark (white arrows).



distinguishes maple borer damage from that of stem cankers associated with certain fungal infections. Recently formed borer scars are masked by dried and spongy bark that has not sloughed away (Figure 2).

The borer requires two years to develop from egg to adult. In preparation for overwintering during the second year, the fully grown larva excavates a 3/8 - 5/8 inch diameter vertical gallery that is several inches long and penetrates the sapwood to a depth of 2-4 inches.

Whether or not the maple borer causes significant damage, depends on your management objectives. By definition, in order to be considered a pest an insect must prevent you from maximizing your management goals.

THE DAMAGE

For example, if you own a woodlot solely for aesthetic reasons, as a place to

hunt, or as a source of firewood, you probably would not consider the maple borer a pest. Should your object be to produce maple syrup or a variety of wood products, however, the borer can have an important economic impact.

Because sugar maple borer most often attacks at some point on the first 20 feet of the stem, it damages, the most valuable part of the tree from a sawtimber standpoint - the butt log. This damage is manifested as mineral stain (a discoloration resulting from the tree's response to invasion), callus tissue that forms at the margins of the scar (another defensive mechanism that the tree uses to isolate or compartmentalize injury), and holes in the outer 4-6 inches of sapwood where the insect excavates a tunnel in preparation for its second winter. Generally, this interaction between the insect and the tree greatly

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Maple Borer

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decreases the value of the first log, because it is not acceptable for veneer or gives an undesirable appearance of lumber cut from the injured portion of the infested stem.

Damage affects sugarbush operators in two quite different ways. As a result of stem girdling, often large limbs are killed immediately above the injury, which effectively decreases crown size (and, hence, the volume of sap produced by the injured tree). When damage occurs within the region of the bole that normally is used for tapping (4-6 feet above the ground), the area of bole suitable for tapping is reduced.

When a tree 6-8 inches in diameter at breast height is attacked, it may be especially susceptible to wind snap. The tree bole may be weakened where the larval gallery becomes oblique or nearly hori-

zontal (in the vicinity of the catfaced scar) and during high, gusty winds many tree stems break at this spot.

CONTROL SUGAR MAPLE BORER WITH A CHAIN SAW!

The most effective means of minimizing borer damage is to maintain tree vigor. Studies indicate that the maple borer is a secondary insect; that is, it can only successfully attack sugar maple that is under stress. The most common source of stress associated with maple borer damage is intense competition for growing space between trees in overcrowded stands. Proper thinning of stands during the highly susceptible pole timber stage, when trees are between 5 and 11 inches in diameter at breast height, is especially important in a program of preventative maintenance. If your management objective is to produce wood products, removal of previously damaged trees is also recommended during

thinning or timber stand improvement activities. This will improve the quality of the residual stand, because it relinquishes growing space to sound, and presumably, more valuable trees.

Sugarbush operators can afford to be more liberal. If your objective is to produce maple syrup, use careful judgement before condemning a tree. It is not necessary to remove a tree just because it has a borer scar. As long as the tree pays its way in terms of sap production it should be retained in the bush.

Sugar maples in most of today's northern hardwood stands are especially vulnerable to borer damage, because these stands have not been properly managed. Most landowners can not justify the cost of thinning when the material removed has not or limited market value. Hence, stands are ignored or repeatedly highgraded; both practices degrade stand health and set the stage for additional damage by maple borer.

Trapping and Furbearer Management in New York State

By Gordon R. Batcheller

In the world of natural resources management, trapping and the related use of fur has caught the attention of many people, not the least of which is the media. In the last two years, there have been demonstrations, petitions, referendums, legislation, letters-to-the-editor, letters to politicians, and television and radio interviews.

An important question for the private forest landowner is what does this issue have to do with me? The answer is everything.

I view the harvest of renewable natural resources, whether wood fiber, meat, fish, or fur, in the same philosophical setting. Removing natural resources for human benefit is legitimate as long as it is done wisely and responsibly. That is what conservation is all about. This certainly is the case with modern forestry practices, it also is true with furbearer management.

The State of New York officially supports the trapping and hunting of furbearers. There are a number of reasons for this. Collectively, they provide the reasons why the Legislature has continued to uphold the legal authority for trapping.

The furbearers of New York are very abundant. Some species, like beaver and raccoons, are at an all time high. We conservatively estimate that there are about 2 million raccoons and 75,000 beavers in New York. All together, there are 16 species of furbearers in the state all of which

have populations that are secure and can sustain annual, renewable harvest.

The harvest of New York's furbearers is a highly regulated activity. There are a number of laws which must be followed. Among them:

- All new trappers must complete a mandatory trapper training course. This course, taught by voluntary instructors, stresses the teaching of ethical and humane trapping techniques.

- Trappers may only set traps within a specified time of the year and only in certain areas (wildlife management units). Most trapping occurs from mid-fall to late winter.

- Trappers may only set certain types of traps; traps are restricted both to size and style. For example, traps with teeth have been illegal for over 60 years. Foothold traps set on land may not exceed 5 3/4 inches in size.

- Trappers must report their take for six species. For the others, we conduct annual surveys to monitor harvest.

The New York State Bureau of Wildlife does studies each year to further refine our furbearer management programs. Recent research has focused on raccoons, muskrats, mink, coyotes, and river otter. We take pride in the fact that New York has one of the finest furbearer management programs in the country.

Furbearer management provides many benefits to people. For nuisance species,

like beaver and raccoon, trapping reduces problems for homeowners, farmers, and others. Trapping provides enjoyable outdoor experiences for thousands of people. It is a way of life for many of these people. It also is a valued tradition. Trapping is a source of income for many. In the words of one trapper, "It has been a godsend for extra income during the very tough times..." Trapping also provides direct economic benefits to furbuyers, the fur processing industry, and the garment industry.

So what is all the controversy about? In my personal view, it boils down to an attempt to impose the value system of one group (those who feel that trapping is wrong) upon another group (those who either trap or support trapping). In my view, this infringes upon the freedom of choice concept upon which this country is founded. Why should this matter to a forest landowner? Because the same people who say you shouldn't trap also say that you shouldn't cut down a tree. I think that it is important to recognize that the infringement of our freedom to choose affects all of us. That is why all people directly involved with the use of natural resources must speak up and be heard. This is true for trappers; it also is true for landowners managing forest resources.

Gordon Batcheller is Furbearer Project Leader with the NYS Bureau of Wildlife at the Wildlife Resources Center at Delmar, N.Y. 12054

Sweet Steam Signals Spring Sugarin' Time

By Irwin King

It seems that everyone on the street these days is talking about "Made in America" but there are few products that fit that title as accurately as pure maple syrup. Native to North America, the sugar maple is rooted deeply into the history of our Nation and that of our Canadian neighbors.

Although the sugar maple is indeed native to a fairly narrow band of eastern North America, the sweet products of the hard maple are known and prized throughout the world. In New York State, the sugar maple is so highly regarded that it is the official State Tree.

It isn't clearly established how the art of maple sugar making got its beginning but North American Indians were using maple products well before the birth of our nation. One story has it that an Indian squaw placed a pot alongside a maple in anticipation that her brave would go to the nearby stream to fetch water. The brave, indignant at the thought of doing "squaw work", slammed his tomahawk into the trunk of the tree just above the pot. When the squaw returned, the pot was full and she proceeded to boil the evening meal of venison. What resulted was a sweetened gourmet meal -- and harmony in the family. History is a little fuzzy in explaining how it was determined that the liquid in the pot came from the maple and not the stream.

Another tale has it that hunters watched how squirrels would nibble at maple sap icicles in late winter to gain the nutritional benefits of the sugar in the sap to help augment their caloric intake as the fall-gathered larder reached low levels. Again, the logical connection from the squirrel's sapcicle to amber maple syrup is difficult to track.

Every woodland owner has a list of reasons why forest ownership is important. For me, sugarmaking is clearly the woodland benefit that I treasure the most. Shortly after graduation from Cornell I purchased our farm in northwestern Albany County with the clear understanding that the 50 acre sugarbush would have to help make the mortgage payments. Over the past 30 years this managed woodlot has done its job well and because it is within 25 miles of the Albany, Schenectady, Troy tri-city area, several thousand visitors have had an

opportunity to trek through our woods and see the production of pure maple syrup. With my wife Christie we have a 2,200 tap operation and with favorable weather conditions (which haven't occurred in the past six years) we can make around 500 gallons of table grade syrup.

I have visited a good number of sugarhouses in New York and neighboring Vermont and I've never seen two identical operations. Some producers gather sap and sell it to a central production facility much as dairy farmers sell milk to a dairy -- except sap is sold according to sugar content rather than butter fat percentage. Others gather their own sap and boil it down over wood-fired evaporators or pass the freshly collected sap through reverse osmosis membranes. I continue to marvel at the variety of processes and the ingenuity of individual maple producers in their quest for the most efficient and economic way to reduce sap to syrup. After all, it takes about 40 gallons of sap to make one gallon of pure syrup -- everything else is water.

I don't consider myself an expert on maple sugaring but after thirty years I am familiar with the operation at our Sugarbush Farm. With that in mind, I'll discuss our operation and maybe, just maybe, some reader will get the urge to start sugaring and gain another benefit from his or her woodlot.

We tap about half of the trees in our woodlot. There are 1,500 buckets and an additional 700 taps utilizing plastic tubing. Tubing is really the preferred way to go but most of our woodlot is quite flat without enough pitch for sap to flow freely through the 5/16th inch tubing that connects one tree to the next.

We begin laying out tubing in late January or early February. By identifying each branch of tubing with a number and keying the numbers to a simple sketch map, it is not all that difficult to make sure the tubing follows the same route each year. Because we won't tap the trees at this time, the determining factors as to when to lay out tubing are really the weather and the energy level of the person stringing the tubing. We use baling twine to tie the tubing at waist height on each tree that we intend to tap. A branch of tubing may include as many as 30 taps before the branch is run into a larger, or main, line.

By mid- to late February, we begin studying the weather reports to determine when a strong warming trend may be moving toward our area. Then, we begin tapping the trees. We use a 7/16th drill bit and a small, gasoline powered drill to make the 2-1/2 to 3 inch deep hole into which we will gently hammer a spile, or spout. Metal spiles are used in trees that will carry buckets; plastic spiles where tubing is being used. Depending on the overall condition of the tree (broken branches, other signs of stress) we drill one taphole in a 12 inch diameter tree, 2 holes in an 18 inch tree, etc. By keeping within this tapping rate, only 15 percent of the tree's annual sap production is taken by the sugar maker. It takes about three days for two men to tap the woodlot.

We wait until we're quite certain that we'll get a run of sap before we put the buckets up and cover them with galvanized lids. Our gathering process is built around the availability of high school kids. Therefore, since the kids arrive from school around 4:00 pm and it gets dark by 6:30 pm we limit the number of buckets so all buckets can be emptied within two evenings. This translates to a team of four highschoolers, one tractor, one wagon and two 150 gallon gathering tanks on the wagon. The team can empty 7-800 buckets a night.

The amount of sap that will run, or drip into a bucket, on a given day depends upon the fluctuation in daily temperature and barometric pressure. It must be below freezing at night followed by a warm sunny day for sap to run. The number of freezing night/warm day combinations during March and early April determine the success or failure of the season. A rule of thumb used to be that each tap hole would produce 12 to 15 gallons of sap which equals about a quart of syrup. We have not approached that ratio in the past six years and in some years we have had less than a pint of syrup per taphole.

To make high quality syrup, sap must be gathered as soon after it leaves the tree as possible. If sap sets in a bucket on the tree on a warm day it will quickly deteriorate and make lower quality syrup. Likewise, once the sap is brought to the sugarhouse it should be quickly boiled down to syrup.

(Continued on page 15)

Sweet Steam

(Continued from page 14)

Larger sugarmakers may use refrigeration and ultraviolet lighting to lengthen the sap storage time but our operation is small enough that we boil it down immediately after it's gathered.

As soon as the sap is brought to the sugarhouse from the buckets and the tubing storage tanks it begins a nonstop process of boiling to remove water while concentrating the sugars. Our evaporator, a series of heated pans where the sap boils, is five feet wide and fourteen feet long. It is mostly stainless steel and heated by fuel oil at the rate of 14 gallons per hour. Fresh sap is continuously fed into one end of the evaporator at a rate of about 150 gallons per hour and periodically we are able to draw off syrup at a rate of 3-1/2 gallons per hour. As you can see, our fuel supplier loves to see us work 12 and 14 hour days. Ironically, our home, a short 600 hundred feet away, is passive solar with a wood stove for supplemental heat.

It is difficult to offer a word description of how an evaporator works but I'll try. Fresh sap is introduced at the end furthest from the heat source and the flow is controlled by a float valve. As water is boiled away in the form of steam, new sap flows in. In operation, this is a continuous flow and the depth of liquid in the evaporator pans is maintained at about an inch. As water is boiled away, the remaining liquid is a little heavier because the sugar in the sap is beginning to concentrate. The entering fresh sap pushes the heavier liquid forward through a series of baffles toward the end of the evaporator where syrup will be taken off. At any given time during the boiling process there will be fresh sap at one end, syrup at the other and varying concentrations of syrup at all places in between.

If you are not confused enough, let's add a couple of facts. Sap as it comes from the tree is approximately two percent sugar and weighs about the same as water, eight and one-half pounds per gallon. Standard density syrup weighs 11 pounds per gallon. Sap, much like water boils at 212 degrees; syrup boils at 219 degrees. A word of caution, however, because water boils at different temperatures depending upon barometric pressure and elevation it is imperative that sugarmakers check the boiling point of water and add seven degrees to that to determine the exact boiling point for syrup at that particular time and place.

Once the syrup is removed from the evaporator it is filtered through rayon filters to remove sugar sand which is mostly calcium that has concentrated and settled out of the liquid during the final stages of transforming sap to syrup. If the syrup isn't filtered, the final product will tend to be cloudy and over time the calcium will settle to the bottom of the container.

After filtering, the syrup is graded according to color -- light, medium and dark amber -- and poured into plastic jugs or metal containers while it is still hot to insure a sterile container. A unique physical property of pure maple syrup makes it an ideal product for on-farm processing. At standard density (remember, I mentioned earlier that standard density syrup weighs 11 pounds per gallon) maple syrup is a stable product. It will not ferment, it will not crystallize and it will not support bacteria. When you combine this natural property with the sanitation of hot packing, pure maple syrup has a tremendous shelf life.

Even having said this about the stability of pure maple syrup there are times when a consumer will find mold on the top of their partially used container. What has happened is that each time the container is

opened, a small amount of moisture from the room enters the container and eventually the top surface of the syrup becomes diluted and is no longer standard density. However, only the top thin layer is bad. Simply remove the mold, pour the syrup in a pan, heat it to a slow boil and re-pack it into a new clean container.

The art of making maple syrup is a unique part of our American heritage and a springtime ritual that is carried out in numerous woodlots big and small throughout the northeast. When you see steam billowing from a roadside sugar shack, stop in and introduce yourself. I've never met a sugar maker who didn't enjoy talking about his operation.

Some old timers say that the steam that swirls gently around the sugarmakers head tends to warp the brain. Perhaps that is partly true but I'd rather believe that the thing that has kept us sugarin' is our love of the woods and this added opportunity to enjoy our forest.

Irwin and Christie King own and operate Sugarbush Farm in the Town of Knox in Albany County. Irwin is President of the Capital District Chapter of NYFOA.

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Arthur E. Merle, Secretary of the NYS Maple Producers Association informed THE NY FOREST OWNER there were 560 paid members for 1991. Yearly dues are based on the number of taps used by the member.

The Annual Membership Meeting is June 10, 1992 at Raphael's on State Fair Boulevard, Syracuse, New York.

The Maple Hall of Fame and the Maple Museum are located at Croghan, N Y, where May 9, the New York State Maple Queen Contest will be held. The President of the NYS Maple Producers Association, Harold Tyler, has been nominated for the 1992 Maple Hall of Fame.

The Maple Festival in Albany is scheduled for late April subject to funding by the Department of Agriculture and Markets and the resources of the association.

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Marketing Christmas Trees Year-Round

By David Taber

Christmas tree growers may have felt the economic squeeze last year. An overabundance of real Christmas trees was available to buyers in many market areas. Too, many consumers were enticed to buy their Christmas trees by mail.

* One New York Times advertisement, in the middle of November, offered Christmas trees by mail for about \$35.

* Consumers received coupons from a multi-retail outlet in mid-November sent by a marketing agency that offered a \$5.00 discount on any cut Christmas tree valued at least \$25 and one from another business for \$5.00 off any fresh-cut Douglas fir.

Also, artificial Christmas trees, from 8 inches to 8 feet tall, are now available in a variety of fake species. They range in price from less than \$10 to more than \$200. They can be used for more than one year and they don't shed needles--features that some consumers like.

Throughout the 1980s two to three times as many trees were planted for Christmas trees than were being harvested. It is likely, therefore, that supply and demand could have a strong influence on reducing prices for cut Christmas trees. In addition, some growers, fearful their trees will become permanent forests, may have chosen to sell at lower than previously-planned prices.

Highlights from the New York State Department of Agriculture and Markets "1990 Christmas Tree Summary" are:

* Capitol District - "The best selling Christmas trees were Balsam, Fraser and Douglas firs. Most trees came from Canada, Vermont, New York, Pennsylvania, Michigan, and Maine in that order." Note the importance of trees not grown in New York State to consumers around Albany.

* Hudson Valley (Dutchess, Orange, and Ulster Counties) "The Balsam firmed ahead of the Douglas fir as the best selling tree. The Balsam trees hailed from Canada."

* Central New York (Syracuse) - "In some instances, 50 percent-off prices were posted by some vendors after only a week to ten days of selling.... Most retailers indicated a willingness to make price concessions to sell trees."

* Rochester - "Fraser fir came almost exclusively from North Carolina...Douglas fir came largely from the western US,



Christmas trees can be marketed for spring or fall planting, as well as use during the holiday season. In addition, Christmas trees may be sold as tiny trees in pots for disposable table top decorations throughout the year. Various size trees that are balled and burlapped, in baskets, or in pots, can meet consumer needs at a profit for growers and retailers. (Forest Stewardship Photo by Taber)

mainly Oregon.... The supply of trees this year was very heavy with a large number of retailers.... Dumping this year was much greater than last year with many retailers having to destroy about 30 to 40 percent of the trees purchased."

* Long Island and New York City - "The best selling Christmas trees were Balsam firs. Most Balsam firs came from Canada and Vermont. Fraser firs were from Canada and North Carolina. Douglas firs came from the states of Oregon and Washington." Dumpage in the Queens area of New York City ranged from 5 to 30 percent, mostly 15-20 percent for the retailers surveyed.

Alternatives for Christmas tree growers, relative to marketing the trees they grow, can be profit and pleasure, depending on their personal situation and preferences. Viable options for some growers include:

* Sell by choose and cut.

* Sell some trees in pots in the spring and fall for landscaping, and after Thanksgiving Day, for Christmas tree plants or plantable Christmas trees.

* Have trees dug, balled and burlapped, and sold for landscaping, by wholesale, retail, and/or landscaping businesses.

* Cut tops out of trees for marketing as shorter trees or table top trees and sell branches from stumps for roping, decorative boughs, and wreaths.

* Market seedlings, transplants, or small trees for Arbor Day, celebrated on the last Friday in April.

Successful marketing includes knowing one's production costs, marketing costs (which include advertising and selling costs), and expected profit, as a basis for establishing profitable selling prices.

Article 14 of the New York State Department of Agriculture and Markets Law requires that each grower of potted, or balled and burlapped evergreens (for sale) shall register as a "nurseryman; provided, however, that the word 'nurseryman,' shall not include persons engaged in the part-time production of plant products not sold in the regular channels of business." -See Circular 917 of the New York State Department of Agriculture and Markets.

Ants and Termites

By Carolyn Klass

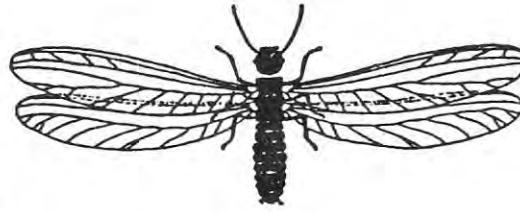
A few warm days in late February or March may trigger the indoor swarming of termites and ants. Both termites and ants live in colonies, or groups, and when the colony is large enough reproductives (males and queens) are produced. In our New York State climate it often takes three to five years for a colony to produce reproductives.

Swarms of either of these insects inside the home during the late winter or early spring may be an indication of a larger problem. Termites and carpenter ants are both structural pests. Other species of ants, which are not structural pests, may also swarm in the spring. The latter are usually soil nesting species that nested near the foundation and, when temperatures warm-up, swarm through any available openings.

The first thing a homeowner should try to do is to identify whether you have ants or termites. If the insects are termites, the problem may be very serious. Termites are aptly called a "hidden enemy" because they work in the dark, inside the wood actually eating it. Damage may remain hidden until someone accidentally falls through a floor or a porch step that has been hollowed out. As the termites work they need to maintain contact with the soil moisture. They often construct mud tunnels over inedible portions of the building or foundation.

If you find termites, contact a professional pest management firm. All termite treatment in New York State must be done by certified pesticide applicators.

If you find ants, determine if they are carpenter ants. Our common species of carpenter ant is large, queens are 1/2 inch



Termites: Antennae not elbowed, Waist not noticeably constricted, 2 pairs of wings, equal in size, Wings with many small veins

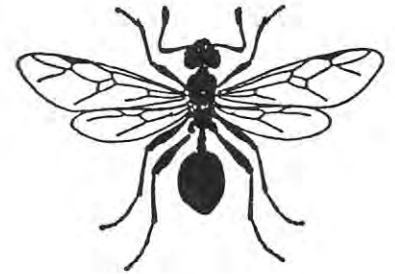
long or longer, and all black.

Carpenter ants excavate galleries in the wood and use the galleries as a nesting site. In their excavation work they bite off small particles of wood and discard them. This may result in piles of coarse, sawdust-like, chips near an exposed piece of wood.

Ants are active from spring until late fall. Workers can be seen very early in the spring as they forage indoors for food or water. Once trees leaf out and honeydew (a sweet sticky liquid given off by aphids and other sucking insects) is available, the ants forage out-of-doors and will be less visible.

If carpenter ants are the problem, try to find the nesting area. Sometimes you can hear them working in the walls at night, when all else is quiet. A paper cup (with the bottom cut out) held against the wall can help you determine more precisely where the ants may be at work. Be aware that mice and other small animals also may make noises as they move about inside walls.

In many cases carpenter ants attack



Ants: Elbowed antennae, Constricted waist 2 pairs of wings, but hind wings smaller than front wings, Wings with few veins

wood that is wet or that has suffered from water damage. If there have been leaks in the roof, walls, or plumbing, check these areas first. When the nest area is located, you can treat it yourself or contact a pest management service.

Replacement of structurally damaged wood and correction of any water or moisture problems are also recommended. If moisture problems are not corrected, carpenter ants might move back into the area in the future.

Soil nesting ants are a nuisance problem but do not threaten a structure. If you find soil nesting ants, try to locate how they are getting in and repair or caulk entrance holes. Ants can be swept or vacuumed and discarded. Remember to empty the vacuum bag, especially if the insects are live.

Carolyn Klass is with the Department of Entomology, NYS College of Agriculture and Life Sciences at Cornell University.

Update On Rabies

As of November 19, 1991, these animals have been confirmed rabid in New York:

raccoons	594	cows	9
skunks	92	woodchucks	9
red fox	86	horses	3
bats	79	deer	3
gray fox	11	otter	1
cats	11	sheep	1
dogs	10	opossum	1

Notice that deer, sheep, and opossum are new species confirmed rabid since our summer newsletter. The deer were from Orange (2) and Steuben (1) counties; the sheep was from Westchester County; and the opossum was from Nassau County.

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Ask A Forester: Forest Inventory & Management

By Dave Daut

The goal of this article is to give the Do-It-Yourselfer a brief summary of how to collect data, summarize it and to make decisions from the results.

As the primary goal in forest management is to satisfy the owners objectives, the first step is to determine what the objectives are. Believe me, there are many - timber production, aesthetics, recreation, wildlife, water quality, etc. Here we will deal with timber production, but the concepts are generally the same for the other objectives, with the possible exception of aesthetics, which is very individual.

The first step is to know where your boundaries are. This is often overlooked, but you can't manage something if you don't know where it is.

Next, comes the data collection part. Necessary items include a 50 foot tape measure, a pencil, paper and knowledge of the tree species on your property. The method I will be discussing will be a timber inventory using a fixed radius 1/10th acre plot. It is easier to do this with two people, although it can be done by yourself.

DATA COLLECTION

First, decide how many plots you want to take (on a ten acre woodlot, you might want to take ten, on more acres you need fewer plots per acre). Then, on a map of the property, place dots, indicating plot centers, at even intervals. Using a compass and measuring tape, on the ground, you should be able to come close to your map location. Exact location is not critical, however, it is important that your plots do not overlap.

Once you get to your plot center, put a stick in the ground so you can keep track of the center while you are measuring trees. Now we are ready to start counting trees. With two people it is easiest if one person stands on plot center holding one end of the tape and taking notes. The other person will go out the required radius and collect the data.

The data collector will go out 37'3" (the radius of a circular 1/10th acre plot) and, working around the circle, will measure each tree inside the circle. In a normal situation, you may want to count only trees that measure 18" circumference and greater. It is advisable for the note taker to keep the plots separate, preferably one plot per piece of paper.

The minimum amount of information

you should collect on EACH TREE will be: 1. tree species, 2. the circumference of each tree at 4'6" off the ground (normally referred to as Diameter Breast Height or DBH for short) to the nearest inch and 3. Whether it is an acceptable tree, (one of desired species and good quality).

Once you've measured each tree on every plot, the fieldwork part is done. It's as easy as that.

DATA SUMMARY

The raw data needs to be summarized into a usable form. The first thing we need to do is to convert circumference to diameter. Take your circumference measurement divide by 3.14 and round to the nearest whole inch, that's diameter.

Once we have all of the diameters, we need to find out what the basal area is. Basal area (B.A.) is an easily measured approximation of the percent crown closure. 100% crown closure would produce almost full shade on a sunny day in the summer. Basal area is measured in square feet. Most of the time, the term is talked about in basal area per acre. Technically, it is the area of the stump of each tree if they were cut off at 4'6" above the ground level.

Again, we are still working with a tenth acre plot. Some formulae will be different if plot size varies.

Now square each diameter and multiply by 0.005454154 and round to the nearest whole number. This will give you the basal

area of each tree. For each plot, add the basal area of each tree. That will be the basal area of the plot. Once you have done this for all of the plots, add all of the B.A.'s per plot together and divide by the number of plots. This will give you the average B.A. per plot. Now multiply by ten (because this is a tenth acre plot). This is the final B.A. per acre.

The next bit of info you will need is trees per acre. Add all of the trees you measured, then divide by the number of plots you took. This number is the average number of trees per plot. Multiply average trees per plot by 10 and you have trees per acre.

DECISION MAKING

Again assuming we are managing for timber production, we would go to a stocking guide (figure 1) to see if the woodlot should be cut. It is a simple matter of plotting basal area per acre against trees per acre and determining the stocking. The A-line on the chart represents full stocking. If you are at or above the A-line, a thinning is clearly needed. Thinnings should aim at hitting the B-line. Stocking at the B-line suggests a woodlot adequately stocked, with no thinning needed. Stocking below the C-line indicates understocking, i.e. the site is not being fully utilized by the overstory.

If you kept track of acceptable and

(Continued on page 19)

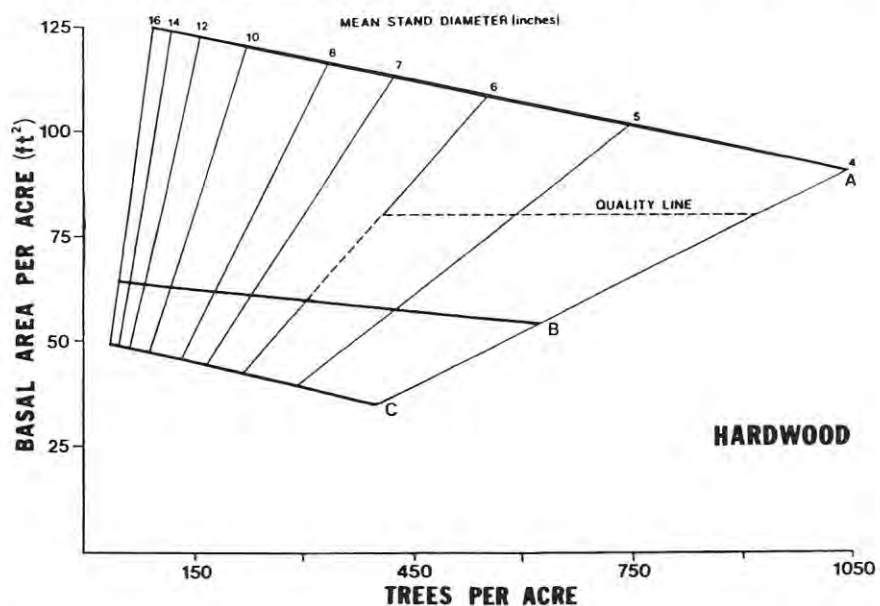


Figure 1-Stocking guide for main crown canopy of even-aged hardwood stands (beech-red maple, beech-birch-maple) shows basal area and number of trees per acre and quadratic mean stand diameter. The A line is fully stocked, the B line is suggested residual stocking. The C line is minimum stocking. The quality line is the density required to produce high quality stems of beech, sugar maple, yellow birch, and red maple. From USFS Publication NE-603.

Ask A Forester

(Continued from page 18)

unacceptable trees in all of your calculations, it is often helpful to chart total stocking and, on the same chart, acceptable stocking.

Once stocking is known and it is determined that you should cut, what should be cut? Ideally, whether managing even or uneven-aged, the first trees that should be removed are the unacceptable trees. If by removing those you are at the B-line, that's where you should stop. Managing a forest crop is very much like any other crop, you tend it by removing the weeds (unacceptable trees) and at some point the crop is

harvested. After the unacceptable trees are removed, if more need to come out, the decision starts to get more judgmental depending on your ownership goals. If managing for something other than timber production, this same data can be used along with stocking guides available for those objectives.

REFERENCE MATERIAL

This is a very simple summary of forest inventory and management. The theory is easy, the technical aspects of doing it get a little more complicated.

1. Silvicultural Guide for Northern Hardwood Types Research Paper NE-603
2. A Silvicultural Guide for white Pine in the Northeast

3. A Silvicultural Guide for Spruce/Fir in the Northeast

The address is: U.S.D.A., Northeastern Forest Experiment Station, 370 Reed Road, Broomall, PA 19008

For those with a computer with at least 640K RAM, a very user friendly, free program, SILVAH, is available from: U.S.D.A., Northeastern Forest Experimental Station, P.O. Box 928, Warren, PA 16365

Dave Daut is a member of the Northern Adirondack Chapter and is a consulting forester: Fountain Forestry, Inc., 26 Lincoln Drive, Tupper Lake.

SIP Is Finally Here

By Michael C. Greason

Starting March 2, 1992 nonindustrial private forest owners can sign up for the variety of STEWARDSHIP INCENTIVES PROGRAM (SIP) cost share practices described by Dave Forness in the last issue of the FOREST OWNER. A committee of Department of Environmental Conservation (DEC) foresters worked from the National SIP Handbook to develop practice standards and cost share rates. Input was received from the Forest Stewardship Committee and the New York Institute of Consulting Foresters.

To be eligible a landowner must own at least 5 acres of land suitable for forest management and not over 1000 acres; however, upon application to and approval of the State Forester waivers of up to 5000 acres may be considered by the Northeastern Area Office of the Forest Service. In addition, the owner must be a private individual, partnership, or nonforest industry corporation without publicly owned stock, or similar entity. The owner must have a FOREST LANDOWNER STEWARDSHIP PLAN or have one developed as the first practice in order to qualify for these incentive practices. The owner signs an "intent to accept and follow the plan." This should not be onerous because the plan is developed specifically to the owner's goals. At this time I must caution you that only 25% of New York's SIP allocation may be used for plan development. This is a national policy to assure Congress that the bulk of the money will result in on the

ground improvements.

I suggest a good first step is to talk with your DEC county service forester to discuss which practices may best suit your goals. Then the applicant must go to the county Agricultural Stabilization and Conservation Service office; no practice can be approved before this step is done. Having seen the forester first should reduce the need to adjust practice sign up. Sign up periods are two months; but landowners can sign up on a continuous basis. The benefit of the sign up period is to allow approvals to be based on established practice priorities rather than on a first come first served basis. Society will benefit from having the most needed stewardship practices applied.

Cost share rates are fixed rates based on 75% of an estimated fair cost to establish practices. The applicant signs a form pledging that the practice cost at least the amount paid; no profit is to be paid to an owner making improvements to his or her land.

As with other cost share programs, landowner labor is a cost shareable expense. For example if an owner plants trees or carries out a thinning, the labor is an allowed expense as it has been with ACP or FIP. So when you review the rates in the state handbook, the allowable cost you see is the amount you get as long as you can show that the practice cost at least that amount. In some instances you may absorb less than the 25% share and in others you may pay more than 25% of the actual cost. It will make careful planning worthwhile. It will also simplify allocation of funds; so that we can more effectively serve all our clients fairly.

This is a brand new program. We have discussed each practice thoroughly and carefully. We are excited about getting underway and feel these are good practices that will be well received incentives for New York forest owners. As we gain experience in administration we may need to make some adjustments.

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WOODLOT CALENDAR

Mar. 14, 15 - Draft Horse Logging Seminar, Tioga Co. (607) 699-3846

Mar. 18 - Dan Ericson: Chain Saw Use and Gary Evans: Bluebirds

Mar. 21 - AFC 10 AM. Ellicottville Cooperative Extension. Herbert Darling, Jr. "The American Chestnut". 716-557-2529

Mar. 21 - NAC 10 AM Cornell Univ. Uhllein Sugar Bush Tour, Lake Placid, 315-386-4546

Mar. 27 - SOT 6 PM Cooperative Extension Bldg., Front Street, Binghamton. Pot Luck Supper.

Mar. 28 - CFA 1-4 PM Erpf House, Rt. 28, Arkville, Wildlife Enhancement Workshop. 914-586-3054

Mar. ? - CNY Maple Sugar Tour, Heiberg Forest 315-682-9376

Apr. 24 - ARBOR DAY

Apr. 25 - 9AM-4PM NYFOA Annual Spring Meeting. Marshall Hall, Syracuse.

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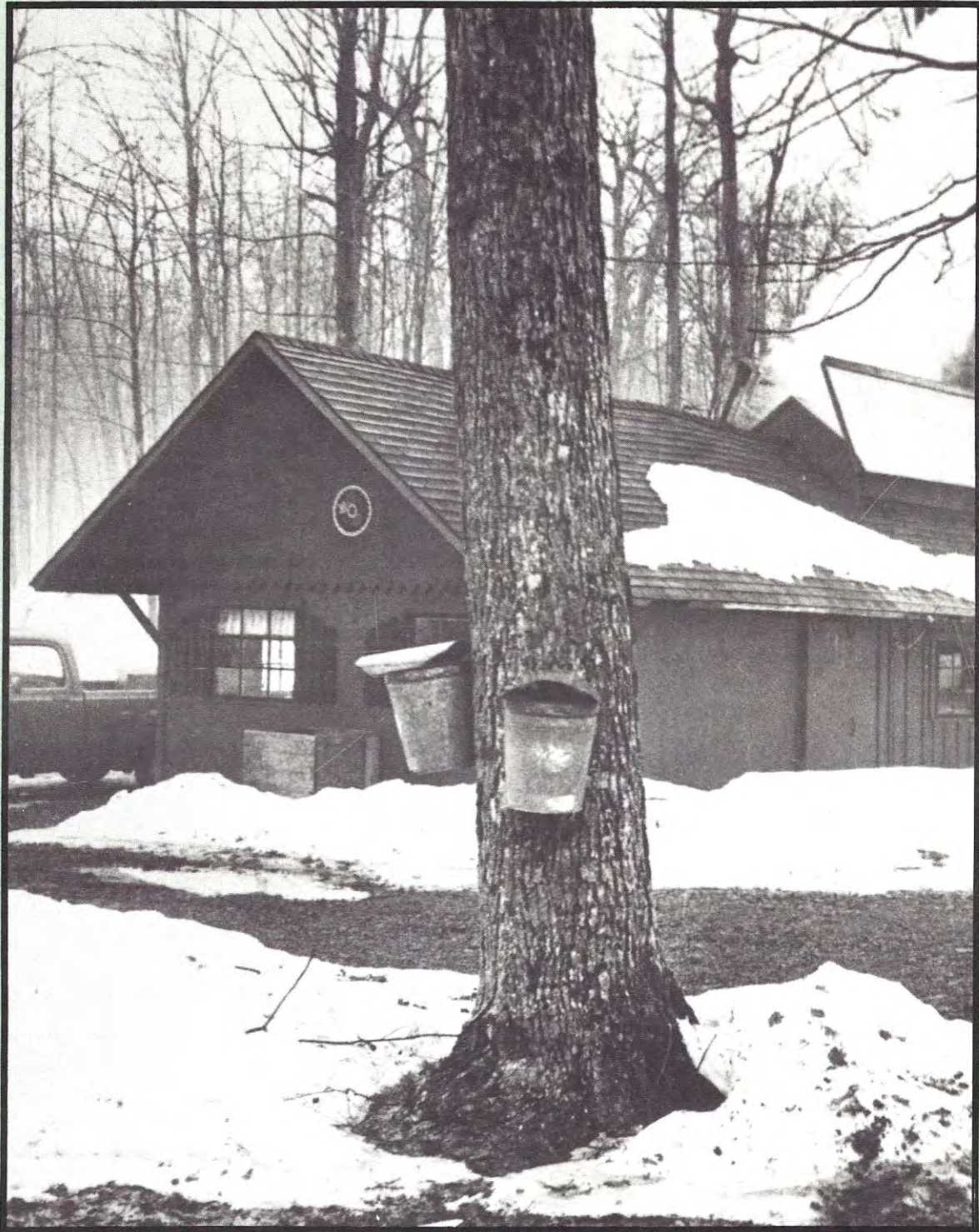
FOREST OWNER

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March/April 1992

People and Trees; Partners in Time

THE NEW YORK



THE NEW YORK FOREST OWNER

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OFFICERS & DIRECTORS

Stuart McCarty, President
4300 East Avenue
Rochester, NY 14618
(716) 381-6373

Charles Mowatt, 1st Vice President
PO Box 1182
Savona, NY 14879

Robert M. Sand, Recording Secretary
300 Church Street
Odessa, NY 14869-9703

Angus Johnstone, Treasurer
PO Box 430
East Aurora, NY 14052

John C. Marchant, Executive Director
45 Cambridge Court
Fairport, NY 14450
(716) 377-7906

Deborah Gill, Administrative Secretary
P.O. Box 180
Fairport, NY 14450
(716) 377-6060

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COVER PHOTO:

Shown is Irwin King's Sugarbush Farm.

Photo by Darby Hill

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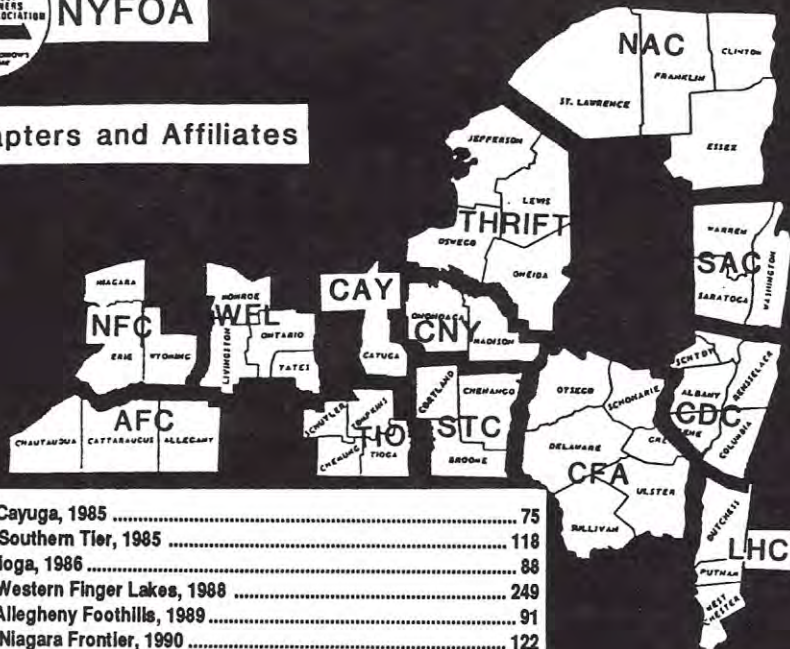
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NYFOA

Chapters and Affiliates



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President's Message

By Stuart McCarty

When one stops to think about it, there is an amazing amount of help available to the woodlot owner.

Starting right at home numerous books can be studied by the interested owner who wants to learn some of the fundamentals. Mary and I have enjoyed "Woodlands for Profit and Pleasure" by Reginald D. Forbes published by the American Forestry Association (our edition printed in 1979) and "The Woodland Steward" by James R. Fazio published by the Woodland Press of Moscow, Idaho. The latter has a personal touch because it has an interview with the late Evelyn Stock, Editor of the Forest Owner for some years, and refers in complimentary terms to NYFOA! Our affiliate, the Catskill Forest Association, has been offering it for sale to its members for some time.

The Cornell Cooperative Extension with offices around the state has a wealth of reading material available at modest cost as well as agents willing to answer questions and give advice on forestry. Dave Taber, of Cooperative Extension, is a frequent and constructive contributor to our magazine.

The College of Environmental Science and Forestry in Syracuse offers courses for the non-traditional student and in many ways supports the efforts of the woodlot owner to meet objectives. For example, Dr. Norman Richards, a professor at SUNY ESF and a director of NYFOA, is planning the program for our Annual Meeting on April 25, in which the preparation of Management Plans will be featured.

In the January/February issue of the Forest Owner, David Forness, a DEC Senior Forester, gave an excellent run down on the Federal Cost Sharing Programs, with which we all should be acquainted since they are there for our use. The newest, the Stewardship Incentive Program (SIP), is about to get under way so be alert to announcements as to how to proceed.

At some point in the cycle of caring for one's woods the forest owner should employ the services of a DEC forester or a consulting forester. They can bring it all together and help both to accomplish the owner's objectives for his or her woodlot and to avoid mistakes that may be impos-

sible to correct in a lifetime.

Now we have the new Master Forest Owner program also referred to in our last issue and of which our Executive Director, John Marchant, was one of the "prime proponents". This program holds great promise for the years to come as additional woodlot owners become certified. Thank you, John!

NYFOA's Forest Owner magazine, the newsletters and activities of the chapters and affiliates, and the meetings of the state organization offer our members a diversity of help and pleasure and are hard to beat.

Finally we are considering establishing

an information database available through an 800 number at NYFOA's headquarters. This would make it even easier for the forest owner to find answers to questions relating to his or her woodlot. John Marchant is in the early stages of mapping out the steps to instituting this service to our members and will let us know if and when it is decided to go ahead.

So there is lots of help out there and maybe even more coming! Let's make use of it.

An Odd Ode or Mary's Miracle Memorialized

By Richard Kesel

When Mary McCarty earned her degree by degrees,
Most of us thought she would major in trees.
At Nazareth she spoke to each tree on the grounds
Where the beech, the maple and chestnut abounds.
Sometimes she would branch out and speak to a cherry,
Flowering or plain, made no difference to Mary.
Poplar and elm, linden, willow and oak,
She leaves none unattended; they're all okey-doke.
Except for the time when she barked at a ginkgo
Which was rumored to be a true Chinese pinko.
She even mapped them right down to the very last pine,
Which Nazareth front office thought was just fine.
Mary's really quite fond of the whole arboretum;
"If they're trees," she avers, "You really can't beat 'em!"
So you see why it was a bit of a mystery
When she chose to matriculate in Religion and History.
"But," said Mary, "It's not very surprising.
I wanted to do it while the sap was still rising!"
So now her vocabulary encompasses Baalam's ass
With sweet gum and alder and old sassafras.
And added to subjects distinctly deciduous,
In matters doctrinal she's become quite meticulous;
Plus the movers and shakers of our civilization
Have their niche in her knowledge of historification.
Now then, she has triumphed; her exams are all through.
Give three cheers for Mary! Give a wife back to Stu!

NYFOA member the Reverend Richard Kesel of the First Presbyterian Church of Pittsford composed this poem for friend Mary McCarty (NYFOA President 1984-85) upon the occasion of her award of the Bachelor of Arts Degree by Nazareth College, Class of 1988.

About Burning, Fire Scars, and Squirrels

By Ronda C. Engman

As a member of NYFOA and one who lives within walking distance of the Danby State Forest, I would like to comment on Dave Riordan's article on burning that appeared in the January/February issue of NY Forest Owner.

Although I did not witness the actual burning of the site off Bald Hill Road in the Danby State Forest, I have visited this area countless times since the burning occurred. I have also spoken to Ralph Nyland specifically about this site.

If you were to walk this site today, you would notice that there is a dense understory of brambles and that most of the adult trees, which are almost exclusively oaks, have fire scars nearly six feet up their trunks, many display signs of rot. These trees are either already dead or are dying. Many have multiple sprouts coming from the bases of their trunks. This site, which is at the crest of a hill, was hit hard by gypsy moths last year, more so than a nearby

mixed stand of deciduous and coniferous trees.

Dave Riordan said that the burn was conducted to kill the understory. However, it is well-known that brambles are not killed when burned. In fact, a burn will fertilize the brambles, encouraging them to come back more heavily than before. According to Ralph Nyland, "Our experience has been raspberries have not deterred oak development. Oaks come through the raspberries quite adequately."

Nyland said that the sprouts at the base of the trees indicated that the fire had been too hot. "This method is all wrong," he said. Fire scars cause discoloration and fungus which affects the value of the trees "dramatically," he said. "Seventy-five percent of the value of the tree is in the butt sixteen-foot log. If you get rot in those things, some of them may be quite valueless."

My property is basically an extension of the Danby State Forest ecosystem. Yet, I

have no trouble with natural regeneration of hickories or red and white oaks. One reason may be that I have a healthy resident squirrel population that works continually during late summer storing mast. However, I can't remember ever seeing a squirrel at the Bald Hill Road site.

If you would like to increase the number of mast trees on your property, I caution you to think carefully before you burn or clearcut. I recommend you first do an inventory of your squirrel population. If you think it merits increasing, consider establishing a feeding station to attract squirrels (they love sunflower seeds) and erect nest boxes if natural nest sites are lacking.

Animals play a much more important role in the health of the forest than we tend to admit. In their own way, they fertilize, plant, and cultivate. We need to work with wildlife rather than work against it.

Ms. Engman acknowledges she is an active environmentalist.

Prescribed Burning: An Oak Management Tool On The Green Mountain and Finger Lakes National Forests

Because of its importance as a food source for wildlife and its value as a wood product, oak is a key forest resource on both the Green Mountain National Forest in Vermont and the Finger Lakes National Forest in southcentral New York. Consequently, the oak type is an important vegetative community to maintain as a component of New England and New York's diverse forest ecosystem. Although oak occurs on only about one percent of the Green Mountain, it comprises most of the Finger Lakes National Forest. On a larger scale, oak occurs on four percent of Vermont's forestland and 11 percent of New York's. The Forest Plans for both of these national forests require the oak type to be maintained and, where feasible, expanded.

On some sites, little advanced oak regeneration is present. Prescribed burning followed by shelterwood cutting during a good seed year can facilitate the establishment of oak regeneration. Summer logging that creates good soil scarification is an additional treatment practice which can

increase the probability of successfully establishing oak seedlings.

On the Green Mountain and Finger Lakes National Forests, oak regeneration is a long-term process rather than a single event. Prescribed burning and shelterwood cutting can be used to stimulate establishment of oak regeneration. Oak is a key forest resource because of its value as a wood product and its importance to many wildlife species that utilize the mast. The

public has clearly indicated to the two national forests their desire to maintain a healthy oak forest and to expand the forest type where feasible. We are eager to accomplish this goal using prescribed burning as a silvicultural tool.

Excerpted from an article by Robert R. Burt, Forest Silviculturist of The Green Mountain National Forest, as it appeared in Forest Management Update, Sept. 1991

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About Burning, Fire Scars, and Learning

By Ralph D. Nyland

Fires burned oak forests many times during spring and fall for centuries before people decided to control the fires. Cattle also commonly grazed in the woodlands of New York through the first 2-3 decades of the 1900's, clipping off many species of herbaceous and woody plants. As a result, the understory was probably park-like and quite open. The chestnut also died during the 1930's, reducing overstory density in those stands. Interestingly, many of New York's best oak sawtimber grew into overstory positions coincident with the death of those trees...a natural act that reduced overstory density just as we do with cutting today.

Somehow these pieces all fit together in the past. And we ended up with stands containing excellent oaks. Yet today we have difficulty regenerating oaks, and need to learn how to replicate the necessary conditions that gave us oaks in the past. And that may include using prescribed burning linked to cutting of some overstory trees to promote development of new oaks to replace the old ones. The research described in Dave Riordan's piece on page 4 of the Jan/Feb issue of your NY Forest Owner was an early step to find such a surefire way to perpetuate oaks in New York.

Those early trials included prescribed burning in areas not given an overstory cutting, and stands cut to reduce the overstory canopy density to improve light levels near the ground. This allowed us to separate effects of burning alone from those related to burning coupled with a reduction of crown canopy density. We also wanted to control the undesirable woody understory vegetation. Otherwise, we knew the stands would shift to red maple and beech...even as happens in unmanaged areas that suffer Gypsy moth defoliation, and where the oaks later die.

At first, we did not appreciate fully the circumstances whereby fires cause basal damage to standing trees. Available literature included little information about the problem. So when we had an opportunity to burn a stand where overstory cutting had already occurred, we gave it a try. That saved the time to find another stand, plan and make the burn, and then plan and make a cutting. We did know that in uncut stands,

only the dry leaf litter burns. Those fires move rapidly across the ground surface, and the flames pass by each tree in just a few seconds. The heat does not build up around the tree trunks sufficiently to damage the inner bark and cambium, except for stems less than about 3 inches in diameter. Those small ones die back to ground level, as do any woody shrubs.

As we began burning a couple of already-cut stands, we learned first hand that when a leaf litter fire ignites piles of small woody debris laying immediately adjacent to a standing tree, high temperatures at tips of the flames can last long enough to kill the inner bark and cambium layer. After the bark dies, it eventually falls off from a triangular area along the base of a damaged tree, opening it to possible invasion by wood-rotting fungi. These wounds become the classic basal fire scars that we all know about, just like the ones that formed after the fire at Danby State Forest. By contrast, fires burning in stands lacking the logging slash cause no damage to the large trees...an important lesson for the future.

In addition to damaging some of the standing oak trees, those early experimental fires stimulated sprouting of the oak seedlings already growing in the understory. With improved light caused by the overstory cutting, the seedlings grew fairly rapidly. And when they overtopped the raspberries, the DEC foresters removed the remaining old trees so the new young ones could develop without suppression. As a consequence, new oaks will replace the mature oaks, and the stand will not end up with just red maple and beech.

This research taught us much about regenerating oaks. Yet we still need to keep improving the techniques to make the methods foolproof. And that is exactly why Dave Riordan and his colleagues tried the burning and cutting at Danby State Forest. That project taught us burn the understory before attempting any cutting to reduce overstory density and increase light levels near the ground. And when we burn first, we get no fire scars.

In cooperation with Dave Riordan, Bob Demeree, and others from DEC we have begun a 10-year assessment of how well prescribed burning helps us to regenerate oaks in New York. Eventually we hope to have a proven technique. But that will take

more burning, more cutting, and more research. And we'll continue to learn...even by our mistakes. I am sure that Dave will keep you posted.

Dr. Ralph Nyland is a Professor of Silviculture, SUNY College of Environmental Science and Forestry at Syracuse, N.Y., and winner of NYFOA's Heiberg Award for 1978.

Conservation Easements

Dear Editor:

Thank you for the excellent article by John Krebs on conservation easements in your November/December 1991 issue. It clearly described the best answer for private landowners who cherish their land and want to protect it permanently from development, regardless of future ownership. Because non-profit land trusts work directly with landowners in writing and fine-tuning conservation easements to reflect the natural values of the property and the wishes of the owner, the means may be readily available for a landowner to voluntarily obtain legally binding protection in perpetuity for his or her land.

Dedicated to the permanent protection of our working landscapes, open spaces, scenic beauty, and plant and animal habitats, land trusts are increasingly providing an invaluable service to landowners and their communities. In its first 2 1/2 years of operation in the 12-county Finger Lakes Region, the Finger Lakes Land Trust - headquartered in Ithaca, and with chapters in Canandaigua and Skaneateles - has accepted donations of 13 conservation easement son 845 acres, owns three nature preserves and has handshake agreements on another 1789 acres. As a membership organization, we welcome new members and encourage participation in our programs. For information, write to Finger Lakes Land Trust, P.O. Box 4745, Ithaca, NY 14852 or call (607) 838-3590.

Sincerely,

Bob Beck, Executive Director

WETLANDS REVISITED

By Wes Suhr

Dave Taber's "Open Space" and "Wetlands" articles were well-written contributions to our last issue (Jan/Feb) of FOREST OWNER. I want to take a technical view of some statements made in "Wetlands Serve Nature and Society" on page 19. The intent of my remarks is to increase the awareness of the reader for the valuable wetland community.

Dave says "They (wetlands) are sinks that prevent floods by absorbing and holding water." Wetlands do not always "prevent" floods, but may at times contribute directly to flood runoff. The degree of flood reduction or contribution by wetlands depends on many factors related to the moisture in storms and the moisture on (and in) the watershed containing the wetland(s). Let's take a high moisture situation -- the soils of the watershed are fully charged with moisture and the wetland is

"filled full" of water -- not unusual, especially during spring snow-melt runoff. Any additional moisture from the snow-pack or the next storm that reaches the wetland will not be "absorbed" or "held", but most likely will contribute directly and rapidly to channel runoff or flooding downstream.

Here comes that word "prevent" again: "They (wetlands) hold sediment from erosion and prevent its further translocation." Again, this depends on the nature of the storm or source of moisture and the conditions of the watershed and wetland site. Wetland basins do act as traps for sediment and may accumulate tremendous loads. Let's take the above example where the site is at full moisture-storage capacity, and assume the "wetland" is a beaver pond(s) as the photograph on page 19 appears to be. At flood stage (level) with high runoff, water can breach the dam and may "flush out" much of the sediment in

the basin, possibly increasing the suspended sediment load by 100-to-1000 times in downstream flow. This is not an unusual situation -- it has been observed in many different locations. Wetlands do act as traps for sediment, but they may also act as sources of sediment, contributing suspended material to streamflow under certain conditions.

My final remark relates to "... this beautiful sight ..." in reference to the photograph of a wetland on page 19. As they say, "Beauty is in the eye of the beholder," and a stand of dead snags is not particularly attractive to this beholder, but then that's my problem!

Wes Suhr, Forester and Hydrologist, edits the NY Forest Owner's column "Ask a Forester" and has previously considered Wetlands, NYFO Jan/Feb 1989 and Mar/Apr 1989.

Gilead Tree Farm-- A Thirty-three Year Perspective

By Paul Steinfeld

In 1965 Forest Owner published my first written statement about beginning experiences as a tree farmer. In 1982 Forest Owner printed an update of these experiences. Now, at the end of 1991, a happy coincidence prompts these reflections. The coincidence is that 1991 marks the fiftieth anniversary of the American Tree Farm System and also our fiftieth wedding anniversary. Gilead Tree Farm became New York State Tree Farm #258 in 1963. An important theme binds our personal lives with tree farming. Our life, the lives of our children and grandchildren, and of many friends and relatives have been enriched by NYS Tree Farm #258. Management of these Catskill acres has taught us that human bonds and religious values are for us major ingredients of good stewardship.

Perhaps one reason this interrelationship between people and trees has been so important to us is that we came from urban backgrounds and had to learn from the ground up. Learning involves people. The first person who encouraged me to write about our tree farm was our dear departed Dave Hanaburgh, a highly experienced professional forester, one of the early lead-

ers of our Association. Rarely do I walk our farm without recalling details Dave taught about how to read the land and how to use its products wisely. That first article brought an encouraging response from Floyd E. Carlson, then Secretary of our Association, and a distinguished faculty member at the College of Forestry in Syracuse. Professor Carlson informed me that my article, "What My Forest Means to Me," would be used at the College for orientation to entering students.

In 1991 we celebrate the contribution of tree farming to family life. Each of our four children feels attached to Gilead Tree Farm and a personal involvement in some aspect of its development, such as timber stand improvement, forest plantations, wildlife, fish pond, timber and firewood harvests, and landscaping. The farm has served each family member in different ways and at different times as a haven for solitude and as a family gathering center. Now it similarly serves our four grandchildren. Beyond immediate family, siblings and their children and grandchildren have formed attachments to this place that have strengthened their attachment to one another. One of our little grandnephews used to say, "I

want to go to my farm." One of our nieces said, "I feel at home here." Friends have celebrated weddings at the farm, and relatives have been married under a canopy of larch boughs grown here. Each December a couple of old friends come with their grandchildren to choose and cut their Christmas trees.

Church and synagogue youth groups have visited. On the Feast of Tabernacles our Sukka, or ceremonial hut, fragrant with spruce boughs, has helped teach thanksgiving for bounty and responsibility to enhance the land's bounty as a religious obligation. Alone I could never be a good steward. Membership in NYFOA and its Catskill affiliate, the American Tree Farm System, NY State Department of Environmental Conservation, Greene County Extension Service, and interaction with family and friends have all enabled us to feel part of a continuing process of learning that has strengthened ties with family and community.

Paul Steinfeld, President of NYFOA for the years 1982-1984, currently serves forestry as a Director for the Catskill Forestry Association, a NYFOA affiliate.

Save Taxes Using Federal Tax Law for Timber Owners

By John P. Laschenski

By using the special provisions in the federal tax law benefiting timber land owners, you can save significantly on your income taxes.

Use Depletion

If you sell timber from land you own, claim the depletion allowance as a cost of the sale, reducing the taxable income from the sale. The depletion allowance is calculated by multiplying the number of board feet cut by a fraction, the numerator of which is your adjusted basis in all the timber on your land, and the denominator of which is the total number of board feet of timber on your land.

Get Capital Gains Treatment

Use the capital gains tax rate on your gain when you dispose of standing timber or cutting rights using a contract in which you retain an economic interest. To retain

an economic interest, you must be paid on a per unit cut basis, not with a fixed fee.

You can also use the capital gains tax rate and take a gain when you cut timber to use it in your own business (such as cutting it for logs and selling the logs).

Get Special Reforestation Incentives

Up to \$10,000 per year of your expenditures for "reforestation" can receive special tax benefits:

- Amortization over 84 months on your tax return;
- Creation of a 10% investment tax credit on your tax return.

Defer Tax on Federal or State Grants

If you receive federal or state "cost sharing" grants for improvements made to land which foster conservation, protect the environment, improve forests or supply a habitat for wildlife, you do not need to declare the grants as income on your tax

return until the year you sell the land or timber affected.

Take Loss For Ice Storm Casualty

If your timber was destroyed in the ice storm of 1991, you can deduct the amount lost using the depletion rules referred to above. If you are in the timbering business, you can deduct all of your loss. If your timber land is held as personal property, the amount of the loss that you can take is limited by special rules.

Use IRS Form T

To take advantage of the above federal tax law provisions, you must report your timber transactions on IRS form T, available from the IRS or your accountant.

John Laschenski is a Certified Public Accountant with the accounting firm; Heveron, Laschenski & Walpole of Rochester

Property Boundary Line Trees

Trees often grow on or near property boundaries in woodlands as well as in city and suburban housing lots. Sometimes disputes arise as to who owns the property boundary line trees. The question may involve who has the rights to cut a tree or remove branches from a tree growing on a property boundary line.

When legal questions are asked, it may take negotiations between lawyers to develop a satisfactory solution. Of course, the ultimate authority for resolving disagreements over interpretation of laws rests with the State and Federal courts.

Even if one is innocent, it is unpleasant, nerve-racking, time-consuming and costly to be accused of a law violation. Therefore, in many cases it may be advantageous to remain in the enviable position of not being involved in any way in a legal controversy.

Trespass, Line Trees

"On the line.—If the trunk of a tree is on the boundary line, the tree is common property of both owners whether marked as a boundary or not. A shade tree standing on a boundary between adjoining owners is common property of both, and the mere fact that it stands on border of sidewalk affording shade for pedestrian does not interfere with right of either to protect it or

recover damages for its destruction. 'Each of the owners upon whose land any part of a trunk of a tree stands, has an interest in that tree, a property in it, equal in the first instance, to, or perhaps rather identical with, the part which is upon his land; and, in the next place, embracing the right to demand that the owner of the other portion shall so use his part as not unreasonably to injure or destroy the whole.' As such trees are the common property of both, neither may destroy without the consent of the other and where a row of trees is on the line neither is entitled to make his own partition by cutting alternate trees and furthermore an injunction may be granted to prevent the destruction of a line tree. However the mere fact that a tree stands upon a boundary does not preclude either owner from cutting away the branches overhanging his land.

Line trees belong to the adjoining proprietors as tenants in common. Where such trees are destroyed by one of the adjoining proprietors a trespass action may be maintained by the other adjoining proprietor.

The following opinions may help you to understand the property boundary line tree situation.

1. The old tale is that every other merchantable tree growing on a property boundary line belongs to each adjoining owner.

This is not legally correct unless both owners agree.

2. Trees which stand on the boundary line belong to adjoining owners together as tenants in common. Where such trees are destroyed by one of the adjoining owners proprietors or agents a trespass action may be maintained by the other adjoining owner.

3. To prevent errors or trespass it would seem that most owners would prefer to keep a tree standing when marked as a boundary line tree as evidence of the boundary. Keeping a boundary line plainly marked would assist the owners as well as the logger to avoid trespass. Of course this is a decision of both owners collectively as a matter of their common interest.

4. Trees standing close to the boundary that are face blazed or painted are not jointly owned. They belong to the owner on whose land they stand. Face blazed trees also serve a useful purpose as witness to the boundary. The N.Y. State Department of Environmental Conservation does not want face blazed trees adjacent to the property line cut if they are located on the state-owned side of the boundary."

Excerpted from NY FOREST OWNER J/A 1983.

Chapter Reports

ALLEGHENY FOOTHILLS

Betty Densmore

On Jan. 25 twenty-six members met at the County Extension Building in Ellicottville for a presentation by Wayne Cooper, DEC Olean District Manager on 480-A N.Y.S. Forest Tax Law. The session was a lively one which started at 10 a.m. and with questions and answer period lasted till 3 p.m.. The AFC'S fund raising has enabled our treasury balance to top \$1000.00, the first time in our 2 1/2 year history. On Mar. 21 at 10 a.m. the AFC will meet again in the County Extension Bldg. in Ellicottville to hear Herbert Darling, Jr. present a program on the American Chestnut.

CAPITAL DISTRICT

Irwin King

Since our last report, the Capital District Chapter completed a mid-November woodwalk through the sugarbush of chapter president Irwin King. A clear and crisp day greeted the woodwalkers who toured portions of the 60 acre woodlot to observe a developing Christmas tree plantation and the mature sugarbush with its 2,500 tap operation. NYFOA president Stuart McCarty helped welcome the visitors. DEC Region 4 regional forester Carl Wiedemann had marked out several sample plots in the woodlot prior to the walk and described for the woodwalkers several harvesting options.

On January 18, the Chapter met at NYFOA member Eric Rassmussen's Lange's restaurant on Route 23 just east of Windham Ski Center. Mike Birmingham, DEC's resident expert on forest health provided a highly entertaining and interesting presentation about the status of various tree insect and disease problems as well as the types of management options available to deal with them.

Looking ahead, the Chapter is planning a May 16 woodwalk for Columbia County that should perk the interest of some of our non-resident woods owners. And, with SIP signups just around the corner, it looks like a busy spring for the Capital District Chapter.

CATSKILL FOREST ASSOCIATION

Ed Thorne

On Jan. 25 a workshop on 480-A and

Conservation Easements was held at the Ulster Community College at Stone Ridge with 40 attending. The workshop was co-hosted with the Rondout-Esopus Land Conservancy. The group learned ways to conserve their land and lower the economic burden of holding on to their land.

Ira Stern, Executive Director of the Rondout-Esopus Land Conservancy discussed conservation Easements, showing an actual plan for an easement. Dick Rommel, Senior Forester from DEC Region 3, covered Forest Tax Law 480-A, defining land eligibility, certification of forest management plans and filing of commitment forms with the county. Marjorie Dunbar, board member of CFA, with lands enrolled under 480-A, gave a landowners point of view and how enrolling in 480-A has helped them manage their land, and how savings in property taxes and returns from timber sales have helped them to cover costs of owning the land.

A Wildlife Enhancement Workshop will be held on March 28, 1-4 p.m. at Erpf House, Route 28 in Arkville showing different methods of attracting wildlife and wildlife habitat improvement.

CENTRAL NEW YORK

Tom Ellison

On Feb. 2 at 10 a.m. members met at Vern Hudson's Gurnee Woods in Elbridge. Vern has a tree farm and cross country ski resort. Our next meeting is in March at Heiberg Forest with a tour of the Maple Sugar operation. Information on this can be obtained by calling (315) 682-9376.

NIAGARA FRONTIER

Bob White

The Post-Holiday party held on Jan. 11 at Harry & Rita Hassey's in Varysburg was attended by 28. The dish-to-pass request resulted in a fabulous feast. Beth & David Buckley presented their Planting for Wildlife slide show which was enjoyed by all. It was such a beautiful day that some went on an impromptu woodwalk and others cross country skied. We discussed the upcoming elections, as the treasurer has agreed to another years service we only need a new Chairperson. A nominating Committee is in place to fill this office. Our next scheduled event is a tour of Julia Reinstien's Nature Preserve in Cheektowaga at 10:45

a.m. on May 23. Jeff Liddle will conduct the tour, bring a bag lunch and something to drink.

NORTHERN ADIRONDACK

Wes Suhr

January 18 was a very chilly, brisk day in Lewis, NY when about 20 visitors toured the Allen-Rogers Limited Sawmill. The scaling demonstration in the yard was informative but abbreviated due to the sub-zero temperature. The group saw white birch bolts debarked and sawed into squares, ready for turning. Hard maple was turned to produce ladder rungs. Mill personnel discussed purchasing logs, their quality requirements and the market for their final product. Thanks to the mill management and Dave Dautfor arranging and providing this interesting tour.

Dave Forness is all set for the Potsdam Lumber Mill tour on February 8, starting at 10 am. It will take about 2 hours and will include a live sawing demonstration. Dave will review the tour in the next issue.

The Cornell University Uhlein Sugar Bush, located on Bear Cub Road in Lake Placid, is planning a tour for us on March 21, starting at 10 am. If weather is poor, this may be rescheduled to March 28. Drop Dave Forness a card with your name, address and phone number or call him to confirm the date. His address: NYS DEC, Court ST., Canton, NY 13617 or call 315-386-4546 (days) or 379-0512 (nights). We want a CROWD for the tour and also for an official vote of NAC's officers following the tour. We have developed a member ID card and member profile form which will be mailed to the NAC area in February. Its purpose is to identify the interests and desires of members to more adequately fulfill their needs.

LOWER HUDSON

Robert Davis

Fifteen members attended the Forest Stewardship Fair on Sept. 19, 1991. The LHC participated in the event which was sponsored by the DEC'S Bureau of Forest Resource Management at the Dept.'s Stony Kill Farm Environmental Education Center in Wappinger's Falls. Many Forestry

(Continued on page 9)

Chapter Reports

(Continued from page 8)

and Forest-related organizations were represented and demonstrated products from portable sawmills to wood-gasification systems to a pelletized-wood stove. Woodsy the Owl was on hand to entertain children and adults. Several cords of firewood and 2 Christmas trees (donated by local growers) were raffled off. The Lower Hudson Chapter made a tidy profit selling apples, cider and homemade doughnuts. A hayride was also provided by the DEC's farm manager. Special thanks to John and Jane Geisler and Bamber Marshall who worked the NYFOA booth and solicited new members. Thanks also to Bob Herberger for his efforts in the Chapter's concession stand on his first full day of membership!! We hope to participate in this event again in 1992.

SOUTHERN ADIRONDACK

Erwin Fullerton

On Sept. 21, 1991 NYFOA and the NYS Tree Farm System sponsored a program on Erwin and Polly Fullerton's Tree Farm in Warren County with 65 people attending. Brian Downing, Chairman of the Tree Farm Committee, gave a talk and Tom Wahl, Region 5 Forestry Manager, presented awards to DEC Service foresters Steve Warne, John Hastings and Ron Cadeau for certification of 250 tree farms. A woodwalk was conducted with multiple use discussions including a marked stand for selective harvest, wildlife habitat, wetlands and many other topics of interest. A buffet lunch was enjoyed in a building built with timber cut and sawn on the property. Ron Cadeau gave a talk on SIP. We were fortunate to have at least 5 foresters on hand to discuss management of tree farms. Ernie Spencer arranged our Nov. Program, a talk by Mike Greason of the DEC on 480-A and Don Peterson spoke on taxes and how they relate to the forest owner.

In May we will have an outing at the Tony Conti farm in Washington Co. with special emphasis on Wildlife Management. Information on this can be obtained from Erwin Fullerton at (518) 747-7230 or Ernie Spencer (518) 792-1726.

Our officers are: Chairperson, Erwin Fullerton; V.Chair, Nancy Najer; Sec., Brian McNeile; and Program Director, Ernst Spencer.

SOUTHERN TIER CHAPTER

Larry Lepak

The STC has had an interesting set of winter programs. In December, DEC Forester Gerald Kachmor addressed the chapter. Gerald is a member of the DEC Forest Stewardship practices committee. He updated the members on the Forest Stewardship program, including a review of eligible programs. In January, chapter member Harold Haslett gave a presentation on forest law issues, including record keeping. Harold's talk emphasized tax law implications of timber basics and the need for long term planning as it relates to taxable timber sales. On March 27 the chapter will have an annual pot luck supper at 6 p.m. at the Cooperative Extension Building on Front Street in Binghamton. The evening's activities will include a speaker and door prizes. All NYFOA members are welcome. Bring one or more food dishes to pass at the supper.

TIOGA CHAPTER

Pat McGlew

On January 22 seven members met, the outcome was: Pat McGlew continues as chapter Chairperson, Alan Knight will continue as Treasurer. Volunteers for the Program Committee are: Jim Signs, Rich Usack and Don Schaufler. The newsletter committee includes Brent Henry, Walt Heater and Dan Zajac. The position of Secretary needs to be filled.

On Feb. 6 from 7-8 p.m. a meeting was held at the Arnot Teaching and Research Forest, VanEtten, N.Y.. Gary Goff of Cornell Cooperative Extension discussed various thinning treatments within three distinct stages of forest succession (scrub, poles and sawtimber) with the effect on wildlife populations.

TIMBER MARKET REPORT

I continue to receive good prices for competitively bid timber. Discussions with lumbermen indicate that overall, lumber is moving. Species that are currently in demand are Hard Maple, Basswood and White Oak. Black Cherry is still strong. Red Oak and White Ash prices are down somewhat, but overseas markets (Germany) may soon help these. Softwoods aren't selling too well these days, although there are always active pulp and pole buyers around. If you have quality and volume, you can sell it.

WESTERN FINGER LAKES

Jack McMahon

Our January meeting was well attended (approx. 70 people), our guest speaker was Bruce Penrod, DEC Biologist. His talk and video explained his work and projects at Hi Tor.

Our next meeting will be March 18; Dan Ericson, a chain saw dealer, will give safety and maintenance tips on proper chain saw use. Gary Evans will present a program on Bluebirds, location of houses and how to attract them. Bill Morris will give an update on the SIP program.

Our steering committee has some tentative dates for woodwalks.

NYFOA WFL Member Floyd King Receives Environmental Award

Floyd King, outdoors columnist for the Rochester Democrat & Chronicle, is the recipient of the 1991 Hugh E. Cumming Environmental Quality Award presented by the Center.

King is being recognized for achievements in environmental communication that span five decades. Through news articles, feature stories, editorials and essays, King has chronicled the wonders of nature for generations of readers. His work conveys the essential message of respect for the environment.

While King was editor of the Outdoors page, it received numerous awards from the Outdoor Writers of America. King has been cited for excellence of craft by the New York State Outdoor Writers Association. He was named Conservationist of the Year by the Monroe County Conservation Council in 1975. At the age of 85, he remains active in many environmentally-related groups.

- from Center for Environmental Information Sphere, Nov/Dec 91



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The Sugar Maple - New York's Tree

By Stephen S. Davison

Among the many species of forest trees native to New York State, none is more beautiful and useful than Acer saccharum, the sugar maple. Valued as a timber tree, favored as an ornamental, and famous for its sugary sap, the sugar maple has been the official State Tree of New York since 1956. This aristocrat of our northern hardwood forest is largely responsible for the beautiful autumn color of eastern American forests.

The sugar maple is the best known of the maples in New York. Depending either on the product, the manufacturer, or the consumer, one of a number of common names are used when referring to this species. The names vary from the term "hard maple" used by the bowling pin and flooring manufacturers, to "rock maple" of the furniture makers and quite naturally to "sugar maple" by the syrup producers.

Sugar maple commonly attains a height of 60-80 feet and a diameter of 2 feet (max. 135 x 6 feet)¹. In the open, the trunk often branches near the ground and produces a large dense rounded, or ovoid crown. The root system is shallow to deep and wide spreading, depending upon the soil. Under forest conditions, the tree develops a clear straight bole that is valuable for lumber. Common associates in the forest are American beech and yellow birch, eastern white pine, eastern hemlock, black cherry, and the central hardwoods, including basswood, white ash, yellow poplar, hickories, and oaks. Sugar maple is found in 23 forest-cover types.

Sugar maple leaves are opposite and simple, about 4 inches in diameter, 4 to 6 inches long, five-lobed with five principal veins, smooth above and below. Each lobe has several lesser points along the margin but otherwise the edge is smooth. The sinuses between the lobes are broad and rounded. Sugar maple leaves are rather thin textured in contrast with those of most hardwoods. In color the leaves vary from a bright, light green to deep yellow-green, but in all cases the lower surface is slightly paler than the upper surface.

Flowering in sugar maple is polyga-

mous, occurring over the entire crown. The small yellow flowers seem to be perfect, but usually only one sex is functional within each flower. Both sexes are typically produced in the upper part of the crown but only males form in the lower part. In a good seed year (2 to 5 year intervals), just before the leaves expand, nearly every tree is so covered with flowers that at a distance it appears to be enveloped in a yellow haze.

Winged samaras, 1" to 1½" long and broadly "U" shaped, contain a pair of seeds. By autumn, enormous quantities of the winged fruits have developed and are released, reminiscent of little helicopters as they drift to the ground. The following spring, countless numbers of seedlings unfold their cotyledons as they emerge from their winter covering of leaves. They prosper even under a heavy forest cover and are extremely shade tolerant throughout life. It is a common experience in summertime to see little else but a carpet of sugar maple seedlings covering the forest floor in a mature hardwood stand. Sugar maple also regenerates by stump sprouts and sometimes root suckers.

The twigs of sugar maple are slender, shiny, dark brown, and spotted with white lenticels. The terminal bud at the outer tip of the twig, is conical in shape, 3/8" long, sharply pointed and shows 5 to 8 pairs of scales. A pair of smaller lateral buds generally accompanies the terminal. The leaf scars are narrow and "V" shaped.

The bark of sugar maple is variable. In general, it is dark gray and irregularly rough with plates and ridges becoming more pronounced with age.

Sugar maple is a fairly resilient species even though affected by a host of enemies. Bud miners kill the terminal bud and cause forking. The gypsy moth, forest tent caterpillar, pear thrips, linden looper, spring and fall cankerworms, maple trumpet skeletonizer, and saddled prominent are major defoliators. The sugar maple borer, maple callus borer and the carpenter worm bore tunnels under the bark of the tree. Road salt and verticillium will injure ornamental trees. Browsing deer, hungry squirrels, and thirsty sapsuckers also cause damage.

The best growth of sugar maple is made

on moist, rich, well drained soils, but the tree will persist on poorer sites. The natural range of sugar maple extends from north of the St. Lawrence River to Southern Manitoba, and south to Tennessee. Sugar maple may attain an age of 200 to 300 years.

Next to the red maple, sugar maple is the second most abundant tree in New York State. It occurs in practically any hardwood situation, even as a pioneer in old fields. Because it can withstand great shade, it persists in a crowded forest stand long after other species have been shaded out. The longer the forest remains undisturbed, the more sugar maple predominates. It is a climax species because of this tendency to dominate a forest over a long period of time.

Sugar maple has always been important to man. By the time the Europeans arrived, the Indians of the northeast were making sugar and syrup from the clear sap of the maple. The Indians taught the early settlers how to make maple sugar and syrup which became the staple sweets for rural families in New York during the 18th and 19th centuries. Potash was exported from the colonies, and sugar maple ashes were found to be high in this substance. Wood ashes were used in soap making. Forges were fired with maple charcoal.

Today, sugar maple is an excellent shade tree. It is relatively fast growing, long lived, compact and dense-crowned, full-leaved and golden-colored in the fall, sometimes with reddish trim. In the woods the tree is favored by the forester because of its ability to grow in strong competition with other species and for its economic value in the wood-using industries. As lumber, maple makes good flooring and better furniture. Curly and bird's eye maple are prized by the cabinet maker.

But sugar maple has other uses. It is excellent firewood, providing a bed of hot coals. The maple ashes containing potash are good for vegetable gardens. Its high specific gravity .56, hardness, sliver-free surface and high impact strength make it ideal for use as alley stock and the manufacture of bowling pins. Veneer, plywood, toys, rules, pallets, musical instruments,

(Continued on page 11)

¹New York State record - 91 x 5 1/2 feet in Chautauqua County.

The Sugar Maple

(Continued from page 10)

baskets, shoe lasts, and heels are a few of the useful products made from sugar maple. The annual harvest of hard maple in the State is substantial, totaling about 122.4 million board feet in 1987.

Besides its primary importance as a timber producer and an ornamental, sugar maple also yields valuable syrup and sugar. The sugar content of the sap varies widely from tree to tree, so thirty-two to forty gallons of the spring sap has to be boiled down to make a gallon of syrup or 8 pounds of sugar. Syrup production is an important industry in our State. New York ranked 2nd in 1980 with 243,000 gallons of syrup as compared to 1st place Vermont's 315,000 gallons. New York's total represented 1/4 of the syrup produced in the entire United States.

The regal sugar maple has long been a part of the New York landscape. The importance of this King of trees can not be overlooked. Long live the King!

REFERENCES CONSULTED

Considine, Thomas J. Jr. and Thomas S. Frieswyk, Forest Statistics for New York, USDA Forest Service, 1980.

Goodman, Richard M., Harry W. Yawney, and Carl H. Tubbs, Acer saccharum Marsh. Sugar Maple, Silvics of North America, Volume 2, Hardwoods, Agriculture Handbook 654, USDA Forest Service, 1990.

Hall, Robert F., Symbols of the State, The Conservationist, Aug-Sept 1974

Harlow, William M., Sugar Maple, Trees of the Eastern and Central United States and Canada.

Harlow, William M. and Ellwood S. Harrar, Sugar Maple, Textbook of Dendrology.

Ketchledge, Edwin H., The Maples of New York, The Conservationist, April-May 1962.

Ketchledge, Edwin H., Recognizing Woody Plants in Winter, The Conservationist, Oct-Nov 1969.

Steve Davison is a Senior Forester with the NYS Department of Environmental Conservation at Region 7's Cortland Office.

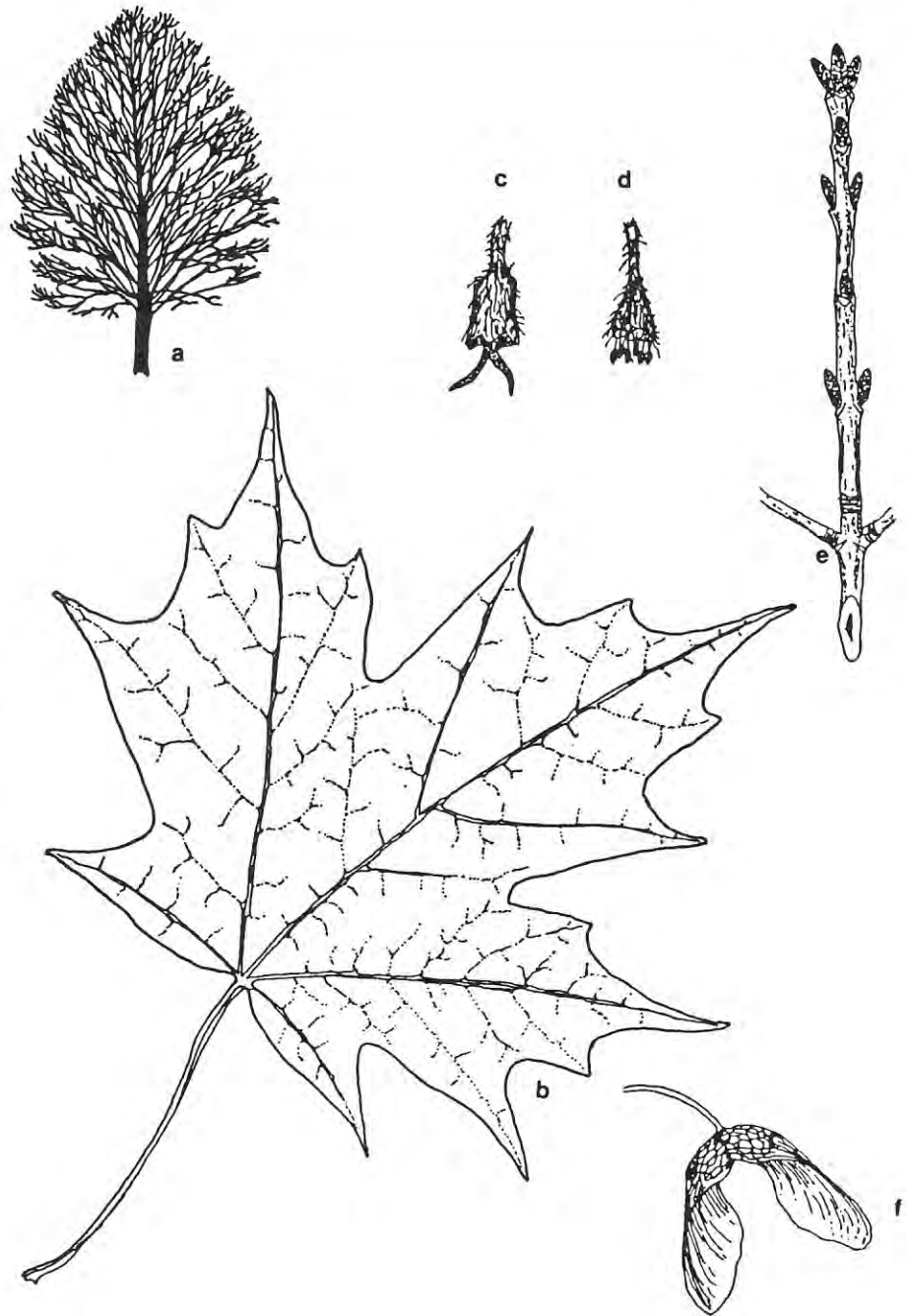


Figure 1. Distinguishing Characteristics of Sugar Maple.* a) typical mature tree shape, b) leaf, c) female flower, e) winter twig, and f) fruit. Drawings are not to scale.

*Excerpted from Cornell Cooperative Extension Publication 147FT18 Sugar Maple

Sugar maple is very sensitive to high sodium levels in the soil. Hence, it can sustain major injury from salt added to road surfaces to melt winter ice and snow. The use of salt in the winter is a common practice throughout much of New York State and New England. Thus, affected trees are found primarily along roadsides; although in some extreme cases water drainage from roads into maple stands has been responsible for extensive damage. The trees pick up salt through their roots and accumulate it throughout the tree. When soil moisture levels decrease, the high salt concentration in the tissues causes the death of many twigs. Therefore, salt damage becomes much more obvious following long dry periods during the summer.*

Sugar Maple Borer

By Douglas C. Allen

One of the most detrimental pests of sugar maples is an insect known as the sugar maple borer. The seriousness of this problem arises from both the location and nature of the damage, and the susceptible condition of sugar maple in many of today's northern hardwood stands. Outbreaks of this pest are relatively mundane compared to those of the principal maple defoliators. In the absence of additional disturbances (e.g., unfavorable weather such as drought, poor site and stand conditions), however, sugar maple usually can withstand one or two years of moderate to heavy defoliation. On the other hand, once a tree is attacked by maple borer the damage endures and its degrading effects may amplify over time.

THE INSECT

The adult borer is a dark brown to blackish, thick bodied beetle approximately an inch long and marked with distinct bright yellow bands that vary in width and length. It belongs to a group commonly referred to as the longhorn beetles; a name evoked by the unusually long antennae or feeler-like structures that are attached to the head.

Each female deposits one to a few eggs in bark crevices or holes that she chews through the bark. Eggs, and subsequent damage, usually are concentrated on the lower 20 feet of the tree trunk. Many trees are probably used for egg laying, but vigorous maples overcome feeding attempts by young larvae. Following egg hatch, the white to cream-colored, legless, grub-like larva enters the tree and feeds beneath the bark. Eventually it excavates a shallow transverse feeding gallery, which usually extends 4 - 6 feet up the trunk, and accompanying damage partially girdle the tree.

The presence of the larval gallery in the center of a conspicuous scar (Figure 1)

Figure 1. (right) Typical sugar maple borer injury. Note the horizontal larval gallery in the center of the scar.



Figure 2. (below) Cryptic sugar maple borer damage. Note telltale cracks in the bark (white arrows).



distinguishes maple borer damage from that of stem cankers associated with certain fungal infections. Recently formed borer scars are masked by dried and spongy bark that has not sloughed away (Figure 2). The borer requires two years to develop from egg to adult. In preparation for overwintering during the second year, the fully grown larva excavates a 3/8 - 5/8 inch diameter vertical gallery that is several inches long and penetrates the sapwood to a depth of 2-4 inches.

THE DAMAGE

Whether or not the maple borer causes significant damage, depends on your management objectives. By definition, in order to be considered a pest an insect must prevent you from maximizing your management goals.

For example, if you own a woodlot solely for aesthetic reasons, as a place to

hunt, or as a source of firewood, you probably would not consider the maple borer a pest. Should your object be to produce maple syrup or a variety of wood products, however, the borer can have an important economic impact.

Because sugar maple borer most often attacks at some point on the first 20 feet of the stem, it damages, the most valuable part of the tree from a sawtimber standpoint - the butt log. This damage is manifested as mineral stain (a discoloration resulting from the tree's response to invasion), callus tissue that forms at the margins of the scar (another defensive mechanism that the tree uses to isolate or compartmentalize injury), and holes in the outer 4-6 inches of sapwood where the insect excavates a tunnel in preparation for its second winter. Generally, this interaction between the insect and the tree greatly

(Continued on page 13)



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Maple Borer

(Continued from page 12)

decreases the value of the first log, because it is not acceptable for veneer or gives an undesirable appearance of lumber cut from the injured portion of the infested stem.

Damage affects sugarbush operators in two quite different ways. As a result of stem girdling, often large limbs are killed immediately above the injury, which effectively decreases crown size (and, hence, the volume of sap produced by the injured tree). When damage occurs within the region of the bole that normally is used for tapping (4-6 feet above the ground), the area of bole suitable for tapping is reduced.

When a tree 6-8 inches in diameter at breast height is attacked, it may be especially susceptible to wind snap. The tree bole may be weakened where the larval gallery becomes oblique or nearly hori-

zontal (in the vicinity of the catfaced scar) and during high, gusty winds many tree stems break at this spot.

CONTROL SUGAR MAPLE BORER WITH A CHAIN SAW!

The most effective means of minimizing borer damage is to maintain tree vigor. Studies indicate that the maple borer is a secondary insect; that is, it can only successfully attack sugar maple that is under stress. The most common source of stress associated with maple borer damage is intense competition for growing space between trees in overcrowded stands. Proper thinning of stands during the highly susceptible pole timber stage, when trees are between 5 and 11 inches in diameter at breast height, is especially important in a program of preventative maintenance. If your management objective is to produce wood products, removal of previously damaged trees is also recommended during

thinning or timber stand improvement activities. This will improve the quality of the residual stand, because it relinquishes growing space to sound, and presumably, more valuable trees.

Sugarbush operators can afford to be more liberal. If your objective is to produce maple syrup, use careful judgement before condemning a tree. It is not necessary to remove a tree just because it has a borer scar. As long as the tree pays its way in terms of sap production it should be retained in the bush.

Sugar maples in most of today's northern hardwood stands are especially vulnerable to borer damage, because these stands have not been properly managed. Most landowners can not justify the cost of thinning when the material removed has not or limited market value. Hence, stands are ignored or repeatedly highgraded; both practices degrade stand health and set the stage for additional damage by maple borer.

Trapping and Furbearer Management in New York State

By Gordon R. Batcheller

In the world of natural resources management, trapping and the related use of fur has caught the attention of many people, not the least of which is the media. In the last two years, there have been demonstrations, petitions, referendums, legislation, letters-to-the-editor, letters to politicians, and television and radio interviews.

An important question for the private forest landowner is what does this issue have to do with me? The answer is everything.

I view the harvest of renewable natural resources, whether wood fiber, meat, fish, or fur, in the same philosophical setting. Removing natural resources for human benefit is legitimate as long as it is done wisely and responsibly. That is what conservation is all about. This certainly is the case with modern forestry practices, it also is true with furbearer management.

The State of New York officially supports the trapping and hunting of furbearers. There are a number of reasons for this. Collectively, they provide the reasons why the Legislature has continued to uphold the legal authority for trapping.

The furbearers of New York are very abundant. Some species, like beaver and raccoons, are at an all time high. We conservatively estimate that there are about 2 million raccoons and 75,000 beavers in New York. All together, there are 16 species of furbearers in the state all of which

have populations that are secure and can sustain annual, renewable harvest.

The harvest of New York's furbearers is a highly regulated activity. There are a number of laws which must be followed. Among them:

- All new trappers must complete a mandatory trapper training course. This course, taught by voluntary instructors, stresses the teaching of ethical and humane trapping techniques.

- Trappers may only set traps within a specified time of the year and only in certain areas (wildlife management units). Most trapping occurs from mid-fall to late winter.

- Trappers may only set certain types of traps; traps are restricted both to size and style. For example, traps with teeth have been illegal for over 60 years. Foothold traps set on land may not exceed 5 3/4 inches in size.

- Trappers must report their take for six species. For the others, we conduct annual surveys to monitor harvest.

The New York State Bureau of Wildlife does studies each year to further refine our furbearer management programs. Recent research has focused on raccoons, muskrats, mink, coyotes, and river otter. We take pride in the fact that New York has one of the finest furbearer management programs in the country.

Furbearer management provides many benefits to people. For nuisance species,

like beaver and raccoon, trapping reduces problems for homeowners, farmers, and others. Trapping provides enjoyable outdoor experiences for thousands of people. It is a way of life for many of these people. It also is a valued tradition. Trapping is a source of income for many. In the words of one trapper, "It has been a godsend for extra income during the very tough times..." Trapping also provides direct economic benefits to furbuyers, the fur processing industry, and the garment industry.

So what is all the controversy about? In my personal view, it boils down to an attempt to impose the value system of one group (those who feel that trapping is wrong) upon another group (those who either trap or support trapping). In my view, this infringes upon the freedom of choice concept upon which this country is founded. Why should this matter to a forest landowner? Because the same people who say you shouldn't trap also say that you shouldn't cut down a tree. I think that it is important to recognize that the infringement of our freedom to choose affects all of us. That is why all people directly involved with the use of natural resources must speak up and be heard. This is true for trappers; it also is true for landowners managing forest resources.

Gordon Batcheller is Furbearer Project Leader with the NYS Bureau of Wildlife at the Wildlife Resources Center at Delmar, N.Y. 12054

Sweet Steam Signals Spring Sugarin' Time

By Irwin King

It seems that everyone on the street these days is talking about "Made in America" but there are few products that fit that title as accurately as pure maple syrup. Native to North America, the sugar maple is rooted deeply into the history of our Nation and that of our Canadian neighbors.

Although the sugar maple is indeed native to a fairly narrow band of eastern North America, the sweet products of the hard maple are known and prized throughout the world. In New York State, the sugar maple is so highly regarded that it is the official State Tree.

It isn't clearly established how the art of maple sugar making got its beginning but North American Indians were using maple products well before the birth of our nation. One story has it that an Indian squaw placed a pot alongside a maple in anticipation that her brave would go to the nearby stream to fetch water. The brave, indignant at the thought of doing "squaw work", slammed his tomahawk into the trunk of the tree just above the pot. When the squaw returned, the pot was full and she proceeded to boil the evening meal of venison. What resulted was a sweetened gourmet meal -- and harmony in the family. History is a little fuzzy in explaining how it was determined that the liquid in the pot came from the maple and not the stream.

Another tale has it that hunters watched how squirrels would nibble at maple sap icicles in late winter to gain the nutritional benefits of the sugar in the sap to help augment their caloric intake as the fall-gathered larder reached low levels. Again, the logical connection from the squirrel's sapcicle to amber maple syrup is difficult to track.

Every woodland owner has a list of reasons why forest ownership is important. For me, sugarmaking is clearly the woodland benefit that I treasure the most. Shortly after graduation from Cornell I purchased our farm in northwestern Albany County with the clear understanding that the 50 acre sugarbush would have to help make the mortgage payments. Over the past 30 years this managed woodlot has done its job well and because it is within 25 miles of the Albany, Schenectady, Troy tri-city area, several thousand visitors have had an

opportunity to trek through our woods and see the production of pure maple syrup. With my wife Christie we have a 2,200 tap operation and with favorable weather conditions (which haven't occurred in the past six years) we can make around 500 gallons of table grade syrup.

I have visited a good number of sugarhouses in New York and neighboring Vermont and I've never seen two identical operations. Some producers gather sap and sell it to a central production facility much as dairy farmers sell milk to a dairy -- except sap is sold according to sugar content rather than butter fat percentage. Others gather their own sap and boil it down over wood-fired evaporators or pass the freshly collected sap through reverse osmosis membranes. I continue to marvel at the variety of processes and the ingenuity of individual maple producers in their quest for the most efficient and economic way to reduce sap to syrup. After all, it takes about 40 gallons of sap to make one gallon of pure syrup -- everything else is water.

I don't consider myself an expert on maple sugaring but after thirty years I am familiar with the operation at our Sugarbush Farm. With that in mind, I'll discuss our operation and maybe, just maybe, some reader will get the urge to start sugaring and gain another benefit from his or her woodlot.

We tap about half of the trees in our woodlot. There are 1,500 buckets and an additional 700 taps utilizing plastic tubing. Tubing is really the preferred way to go but most of our woodlot is quite flat without enough pitch for sap to flow freely through the 5/16th inch tubing that connects one tree to the next.

We begin laying out tubing in late January or early February. By identifying each branch of tubing with a number and keying the numbers to a simple sketch map, it is not all that difficult to make sure the tubing follows the same route each year. Because we won't tap the trees at this time, the determining factors as to when to lay out tubing are really the weather and the energy level of the person stringing the tubing. We use baling twine to tie the tubing at waist height on each tree that we intend to tap. A branch of tubing may include as many as 30 taps before the branch is run into a larger, or main, line.

By mid- to late February, we begin studying the weather reports to determine when a strong warming trend may be moving toward our area. Then, we begin tapping the trees. We use a 7/16th drill bit and a small, gasoline powered drill to make the 2-1/2 to 3 inch deep hole into which we will gently hammer a spile, or spout. Metal spiles are used in trees that will carry buckets; plastic spiles where tubing is being used. Depending on the overall condition of the tree (broken branches, other signs of stress) we drill one taphole in a 12 inch diameter tree, 2 holes in an 18 inch tree, etc. By keeping within this tapping rate, only 15 percent of the tree's annual sap production is taken by the sugar maker. It takes about three days for two men to tap the woodlot.

We wait until we're quite certain that we'll get a run of sap before we put the buckets up and cover them with galvanized lids. Our gathering process is built around the availability of high school kids. Therefore, since the kids arrive from school around 4:00 pm and it gets dark by 6:30 pm we limit the number of buckets so all buckets can be emptied within two evenings. This translates to a team of four highschoolers, one tractor, one wagon and two 150 gallon gathering tanks on the wagon. The team can empty 7-800 buckets a night.

The amount of sap that will run, or drip into a bucket, on a given day depends upon the fluctuation in daily temperature and barometric pressure. It must be below freezing at night followed by a warm sunny day for sap to run. The number of freezing night/warm day combinations during March and early April determine the success or failure of the season. A rule of thumb used to be that each tap hole would produce 12 to 15 gallons of sap which equals about a quart of syrup. We have not approached that ratio in the past six years and in some years we have had less than a pint of syrup per taphole.

To make high quality syrup, sap must be gathered as soon after it leaves the tree as possible. If sap sets in a bucket on the tree on a warm day it will quickly deteriorate and make lower quality syrup. Likewise, once the sap is brought to the sugarhouse it should be quickly boiled down to syrup.

(Continued on page 15)

Sweet Steam

(Continued from page 14)

Larger sugarmakers may use refrigeration and ultraviolet lighting to lengthen the sap storage time but our operation is small enough that we boil it down immediately after it's gathered.

As soon as the sap is brought to the sugarhouse from the buckets and the tubing storage tanks it begins a nonstop process of boiling to remove water while concentrating the sugars. Our evaporator, a series of heated pans where the sap boils, is five feet wide and fourteen feet long. It is mostly stainless steel and heated by fuel oil at the rate of 14 gallons per hour. Fresh sap is continuously fed into one end of the evaporator at a rate of about 150 gallons per hour and periodically we are able to draw off syrup at a rate of 3-1/2 gallons per hour. As you can see, our fuel supplier loves to see us work 12 and 14 hour days. Ironically, our home, a short 600 hundred feet away, is passive solar with a wood stove for supplemental heat.

It is difficult to offer a word description of how an evaporator works but I'll try. Fresh sap is introduced at the end furthest from the heat source and the flow is controlled by a float valve. As water is boiled away in the form of steam, new sap flows in. In operation, this is a continuous flow and the depth of liquid in the evaporator pans is maintained at about an inch. As water is boiled away, the remaining liquid is a little heavier because the sugar in the sap is beginning to concentrate. The entering fresh sap pushes the heavier liquid forward through a series of baffles toward the end of the evaporator where syrup will be taken off. At any given time during the boiling process there will be fresh sap at one end, syrup at the other and varying concentrations of syrup at all places in between.

If you are not confused enough, let's add a couple of facts. Sap as it comes from the tree is approximately two percent sugar and weighs about the same as water, eight and one-half pounds per gallon. Standard density syrup weighs 11 pounds per gallon. Sap, much like water boils at 212 degrees; syrup boils at 219 degrees. A word of caution, however, because water boils at different temperatures depending upon barometric pressure and elevation it is imperative that sugarmakers check the boiling point of water and add seven degrees to that to determine the exact boiling point for syrup at that particular time and place.

Once the syrup is removed from the evaporator it is filtered through rayon filters to remove sugar sand which is mostly calcium that has concentrated and settled out of the liquid during the final stages of transforming sap to syrup. If the syrup isn't filtered, the final product will tend to be cloudy and over time the calcium will settle to the bottom of the container.

After filtering, the syrup is graded according to color -- light, medium and dark amber -- and poured into plastic jugs or metal containers while it is still hot to insure a sterile container. A unique physical property of pure maple syrup makes it an ideal product for on-farm processing. At standard density (remember, I mentioned earlier that standard density syrup weighs 11 pounds per gallon) maple syrup is a stable product. It will not ferment, it will not crystallize and it will not support bacteria. When you combine this natural property with the sanitation of hot packing, pure maple syrup has a tremendous shelf life.

Even having said this about the stability of pure maple syrup there are times when a consumer will find mold on the top of their partially used container. What has happened is that each time the container is


opened, a small amount of moisture from the room enters the container and eventually the top surface of the syrup becomes diluted and is no longer standard density. However, only the top thin layer is bad. Simply remove the mold, pour the syrup in a pan, heat it to a slow boil and re-pack it into a new clean container.

The art of making maple syrup is a unique part of our American heritage and a springtime ritual that is carried out in numerous woodlots big and small throughout the northeast. When you see steam billowing from a roadside sugar shack, stop in and introduce yourself. I've never met a sugar maker who didn't enjoy talking about his operation.

Some old timers say that the steam that swirls gently around the sugarmakers head tends to warp the brain. Perhaps that is partly true but I'd rather believe that the thing that has kept us sugarin' is our love of the woods and this added opportunity to enjoy our forest.

Irwin and Christie King own and operate Sugarbush Farm in the Town of Knox in Albany County. Irwin is President of the Capital District Chapter of NYFOA.

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New York State Maple Producers Association, Inc.

Arthur E. Merle, Secretary of the NYS Maple Producers Association informed THE NY FOREST OWNER there were 560 paid members for 1991. Yearly dues are based on the number of taps used by the member.

The Annual Membership Meeting is June 10, 1992 at Raphael's on State Fair Boulevard, Syracuse, New York.

The Maple Hall of Fame and the Maple Museum are located at Croghan, N Y, where May 9, the New York State Maple Queen Contest will be held. The President of the NYS Maple Producers Association, Harold Tyler, has been nominated for the 1992 Maple Hall of Fame.

The Maple Festival in Albany is scheduled for late April subject to funding by the Department of Agriculture and Markets and the resources of the association.

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Marketing Christmas Trees Year-Round

By David Taber

Christmas tree growers may have felt the economic squeeze last year. An overabundance of real Christmas trees was available to buyers in many market areas. Too, many consumers were enticed to buy their Christmas trees by mail.

* One New York Times advertisement, in the middle of November, offered Christmas trees by mail for about \$35.

* Consumers received coupons from a multi-retail outlet in mid-November sent by a marketing agency that offered a \$5.00 discount on any cut Christmas tree valued at least \$25 and one from another business for \$5.00 off any fresh-cut Douglas fir.

Also, artificial Christmas trees, from 8 inches to 8 feet tall, are now available in a variety of fake species. They range in price from less than \$10 to more than \$200. They can be used for more than one year and they don't shed needles--features that some consumers like.

Throughout the 1980s two to three times as many trees were planted for Christmas trees than were being harvested. It is likely, therefore, that supply and demand could have a strong influence on reducing prices for cut Christmas trees. In addition, some growers, fearful their trees will become permanent forests, may have chosen to sell at lower than previously-planned prices.

Highlights from the New York State Department of Agriculture and Markets "1990 Christmas Tree Summary" are:

* Capitol District - "The best selling Christmas trees were Balsam, Fraser and Douglas firs. Most trees came from Canada, Vermont, New York, Pennsylvania, Michigan, and Maine in that order." Note the importance of trees not grown in New York State to consumers around Albany.

* Hudson Valley (Dutchess, Orange, and Ulster Counties) "The Balsam firmed ahead of the Douglas fir as the best selling tree. The Balsam trees hailed from Canada."

* Central New York (Syracuse) - "In some instances, 50 percent-off prices were posted by some vendors after only a week to ten days of selling.... Most retailers indicated a willingness to make price concessions to sell trees."

* Rochester - "Fraser fir came almost exclusively from North Carolina...Douglas fir came largely from the western US,



Christmas trees can be marketed for spring or fall planting, as well as use during the holiday season. In addition, Christmas trees may be sold as tiny trees in pots for disposable table top decorations throughout the year. Various size trees that are balled and burlapped, in baskets, or in pots, can meet consumer needs at a profit for growers and retailers. (Forest Stewardship Photo by Taber)

mainly Oregon.... The supply of trees this year was very heavy with a large number of retailers.... Dumping this year was much greater than last year with many retailers having to destroy about 30 to 40 percent of the trees purchased."

* Long Island and New York City - "The best selling Christmas trees were Balsam firs. Most Balsam firs came from Canada and Vermont. Fraser firs were from Canada and North Carolina. Douglas firs came from the states of Oregon and Washington." Dumpage in the Queens area of New York City ranged from 5 to 30 percent, mostly 15-20 percent for the retailers surveyed.

Alternatives for Christmas tree growers, relative to marketing the trees they grow, can be profit and pleasure, depending on their personal situation and preferences. Viable options for some growers include:

* Sell by choose and cut.

* Sell some trees in pots in the spring and fall for landscaping, and after Thanksgiving Day, for Christmas tree plants or plantable Christmas trees.

* Have trees dug, balled and burlapped, and sold for landscaping, by wholesale, retail, and/or landscaping businesses.

* Cut tops out of trees for marketing as shorter trees or table top trees and sell branches from stumps for roping, decorative boughs, and wreaths.

* Market seedlings, transplants, or small trees for Arbor Day, celebrated on the last Friday in April.

Successful marketing includes knowing one's production costs, marketing costs (which include advertising and selling costs), and expected profit, as a basis for establishing profitable selling prices.

Article 14 of the New York State Department of Agriculture and Markets Law requires that each grower of potted, or balled and burlapped evergreens (for sale) shall register as a "nurseryman; provided, however, that the word 'nurseryman,' shall not include persons engaged in the part-time production of plant products not sold in the regular channels of business." -See Circular 917 of the New York State Department of Agriculture and Markets.

Ants and Termites

By Carolyn Klass

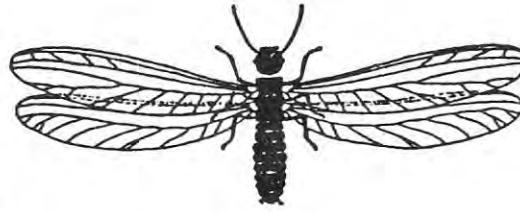
A few warm days in late February or March may trigger the indoor swarming of termites and ants. Both termites and ants live in colonies, or groups, and when the colony is large enough reproductives (males and queens) are produced. In our New York State climate it often takes three to five years for a colony to produce reproductives.

Swarms of either of these insects inside the home during the late winter or early spring may be an indication of a larger problem. Termites and carpenter ants are both structural pests. Other species of ants, which are not structural pests, may also swarm in the spring. The latter are usually soil nesting species that nested near the foundation and, when temperatures warm-up, swarm through any available openings.

The first thing a homeowner should try to do is to identify whether you have ants or termites. If the insects are termites, the problem may be very serious. Termites are aptly called a "hidden enemy" because they work in the dark, inside the wood actually eating it. Damage may remain hidden until someone accidentally falls through a floor or a porch step that has been hollowed out. As the termites work they need to maintain contact with the soil moisture. They often construct mud tunnels over inedible portions of the building or foundation.

If you find termites, contact a professional pest management firm. All termite treatment in New York State must be done by certified pesticide applicators.

If you find ants, determine if they are carpenter ants. Our common species of carpenter ant is large, queens are 1/2 inch



Termites: Antennae not elbowed, Waist not noticeably constricted, 2 pairs of wings, equal in size, Wings with many small veins

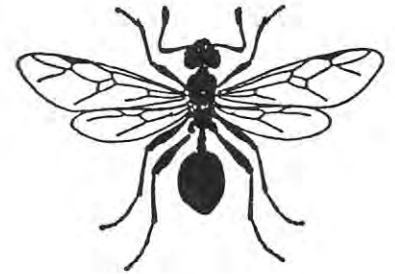
long or longer, and all black.

Carpenter ants excavate galleries in the wood and use the galleries as a nesting site. In their excavation work they bite off small particles of wood and discard them. This may result in piles of coarse, sawdust-like, chips near an exposed piece of wood.

Ants are active from spring until late fall. Workers can be seen very early in the spring as they forage indoors for food or water. Once trees leaf out and honeydew (a sweet sticky liquid given off by aphids and other sucking insects) is available, the ants forage out-of-doors and will be less visible.

If carpenter ants are the problem, try to find the nesting area. Sometimes you can hear them working in the walls at night, when all else is quiet. A paper cup (with the bottom cut out) held against the wall can help you determine more precisely where the ants may be at work. Be aware that mice and other small animals also may make noises as they move about inside walls.

In many cases carpenter ants attack



Ants: Elbowed antennae, Constricted waist 2 pairs of wings, but hind wings smaller than front wings, Wings with few veins

wood that is wet or that has suffered from water damage. If there have been leaks in the roof, walls, or plumbing, check these areas first. When the nest area is located, you can treat it yourself or contact a pest management service.

Replacement of structurally damaged wood and correction of any water or moisture problems are also recommended. If moisture problems are not corrected, carpenter ants might move back into the area in the future.

Soil nesting ants are a nuisance problem but do not threaten a structure. If you find soil nesting ants, try to locate how they are getting in and repair or caulk entrance holes. Ants can be swept or vacuumed and discarded. Remember to empty the vacuum bag, especially if the insects are live.

Carolyn Klass is with the Department of Entomology, NYS College of Agriculture and Life Sciences at Cornell University.

Update On Rabies

As of November 19, 1991, these animals have been confirmed rabid in New York:

raccoons	594	cows	9
skunks	92	woodchucks	9
red fox	86	horses	3
bats	79	deer	3
gray fox	11	otter	1
cats	11	sheep	1
dogs	10	opossum	1

Notice that deer, sheep, and opossum are new species confirmed rabid since our summer newsletter. The deer were from Orange (2) and Steuben (1) counties; the sheep was from Westchester County; and the opossum was from Nassau County.

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Ask A Forester: Forest Inventory & Management

By Dave Daut

The goal of this article is to give the Do-It-Yourselfer a brief summary of how to collect data, summarize it and to make decisions from the results.

As the primary goal in forest management is to satisfy the owners objectives, the first step is to determine what the objectives are. Believe me, there are many - timber production, aesthetics, recreation, wildlife, water quality, etc. Here we will deal with timber production, but the concepts are generally the same for the other objectives, with the possible exception of aesthetics, which is very individual.

The first step is to know where your boundaries are. This is often overlooked, but you can't manage something if you don't know where it is.

Next, comes the data collection part. Necessary items include a 50 foot tape measure, a pencil, paper and knowledge of the tree species on your property. The method I will be discussing will be a timber inventory using a fixed radius 1/10th acre plot. It is easier to do this with two people, although it can be done by yourself.

DATA COLLECTION

First, decide how many plots you want to take (on a ten acre woodlot, you might want to take ten, on more acres you need fewer plots per acre). Then, on a map of the property, place dots, indicating plot centers, at even intervals. Using a compass and measuring tape, on the ground, you should be able to come close to your map location. Exact location is not critical, however, it is important that your plots do not overlap.

Once you get to your plot center, put a stick in the ground so you can keep track of the center while you are measuring trees. Now we are ready to start counting trees. With two people it is easiest if one person stands on plot center holding one end of the tape and taking notes. The other person will go out the required radius and collect the data.

The data collector will go out 37'3" (the radius of a circular 1/10th acre plot) and, working around the circle, will measure each tree inside the circle. In a normal situation, you may want to count only trees that measure 18" circumference and greater. It is advisable for the note taker to keep the plots separate, preferably one plot per piece of paper.

The minimum amount of information

you should collect on EACH TREE will be: 1. tree species, 2. the circumference of each tree at 4'6" off the ground (normally referred to as Diameter Breast Height or DBH for short) to the nearest inch and 3. Whether it is an acceptable tree, (one of desired species and good quality).

Once you've measured each tree on every plot, the fieldwork part is done. It's as easy as that.

DATA SUMMARY

The raw data needs to be summarized into a usable form. The first thing we need to do is to convert circumference to diameter. Take your circumference measurement divide by 3.14 and round to the nearest whole inch, that's diameter.

Once we have all of the diameters, we need to find out what the basal area is. Basal area (B.A.) is an easily measured approximation of the percent crown closure. 100% crown closure would produce almost full shade on a sunny day in the summer. Basal area is measured in square feet. Most of the time, the term is talked about in basal area per acre. Technically, it is the area of the stump of each tree if they were cut off at 4'6" above the ground level.

Again, we are still working with a tenth acre plot. Some formulae will be different if plot size varies.

Now square each diameter and multiply by 0.005454154 and round to the nearest whole number. This will give you the basal

area of each tree. For each plot, add the basal area of each tree. That will be the basal area of the plot. Once you have done this for all of the plots, add all of the B.A.'s per plot together and divide by the number of plots. This will give you the average B.A. per plot. Now multiply by ten (because this is a tenth acre plot). This is the final B.A. per acre.

The next bit of info you will need is trees per acre. Add all of the trees you measured, then divide by the number of plots you took. This number is the average number of trees per plot. Multiply average trees per plot by 10 and you have trees per acre.

DECISION MAKING

Again assuming we are managing for timber production, we would go to a stocking guide (figure 1) to see if the woodlot should be cut. It is a simple matter of plotting basal area per acre against trees per acre and determining the stocking. The A-line on the chart represents full stocking. If you are at or above the A-line, a thinning is clearly needed. Thinnings should aim at hitting the B-line. Stocking at the B-line suggests a woodlot adequately stocked, with no thinning needed. Stocking below the C-line indicates understocking, i.e. the site is not being fully utilized by the overstory.

If you kept track of acceptable and

(Continued on page 19)

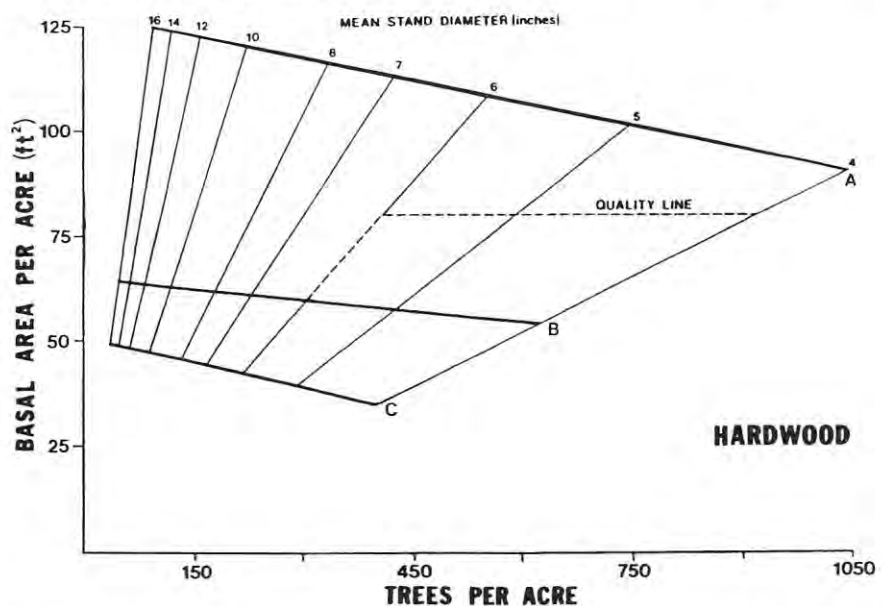


Figure 1-Stocking guide for main crown canopy of even-aged hardwood stands (beech-red maple, beech-birch-maple) shows basal area and number of trees per acre and quadratic mean stand diameter. The A line is fully stocked, the B line is suggested residual stocking. The C line is minimum stocking. The quality line is the density required to produce high quality stems of beech, sugar maple, yellow birch, and red maple. From USFS Publication NE-603.

Ask A Forester

(Continued from page 18)

unacceptable trees in all of your calculations, it is often helpful to chart total stocking and, on the same chart, acceptable stocking.

Once stocking is known and it is determined that you should cut, what should be cut? Ideally, whether managing even or uneven-aged, the first trees that should be removed are the unacceptable trees. If by removing those you are at the B-line, that's where you should stop. Managing a forest crop is very much like any other crop, you tend it by removing the weeds (unacceptable trees) and at some point the crop is

harvested. After the unacceptable trees are removed, if more need to come out, the decision starts to get more judgmental depending on your ownership goals. If managing for something other than timber production, this same data can be used along with stocking guides available for those objectives.

REFERENCE MATERIAL

This is a very simple summary of forest inventory and management. The theory is easy, the technical aspects of doing it get a little more complicated.

1. Silvicultural Guide for Northern Hardwood Types Research Paper NE-603
2. A Silvicultural Guide for white Pine in the Northeast

3. A Silvicultural Guide for Spruce/Fir in the Northeast

The address is: U.S.D.A., Northeastern Forest Experiment Station, 370 Reed Road, Broomall, PA 19008

For those with a computer with at least 640K RAM, a very user friendly, free program, SILVAH, is available from: U.S.D.A., Northeastern Forest Experimental Station, P.O. Box 928, Warren, PA 16365

Dave Daut is a member of the Northern Adirondack Chapter and is a consulting forester: Fountain Forestry, Inc., 26 Lincoln Drive, Tupper Lake.

SIP Is Finally Here

By Michael C. Greason

Starting March 2, 1992 nonindustrial private forest owners can sign up for the variety of STEWARDSHIP INCENTIVES PROGRAM (SIP) cost share practices described by Dave Forness in the last issue of the FOREST OWNER. A committee of Department of Environmental Conservation (DEC) foresters worked from the National SIP Handbook to develop practice standards and cost share rates. Input was received from the Forest Stewardship Committee and the New York Institute of Consulting Foresters.

To be eligible a landowner must own at least 5 acres of land suitable for forest management and not over 1000 acres; however, upon application to and approval of the State Forester waivers of up to 5000 acres may be considered by the Northeastern Area Office of the Forest Service. In addition, the owner must be a private individual, partnership, or nonforest industry corporation without publicly owned stock, or similar entity. The owner must have a FOREST LANDOWNER STEWARDSHIP PLAN or have one developed as the first practice in order to qualify for these incentive practices. The owner signs an "intent to accept and follow the plan." This should not be onerous because the plan is developed specifically to the owner's goals. At this time I must caution you that only 25% of New York's SIP allocation may be used for plan development. This is a national policy to assure Congress that the bulk of the money will result in on the

ground improvements.

I suggest a good first step is to talk with your DEC county service forester to discuss which practices may best suit your goals. Then the applicant must go to the county Agricultural Stabilization and Conservation Service office; no practice can be approved before this step is done. Having seen the forester first should reduce the need to adjust practice sign up. Sign up periods are two months; but landowners can sign up on a continuous basis. The benefit of the sign up period is to allow approvals to be based on established practice priorities rather than on a first come first served basis. Society will benefit from having the most needed stewardship practices applied.

Cost share rates are fixed rates based on 75% of an estimated fair cost to establish practices. The applicant signs a form pledging that the practice cost at least the amount paid; no profit is to be paid to an owner making improvements to his or her land.

As with other cost share programs, landowner labor is a cost shareable expense. For example if an owner plants trees or carries out a thinning, the labor is an allowed expense as it has been with ACP or FIP. So when you review the rates in the state handbook, the allowable cost you see is the amount you get as long as you can show that the practice cost at least that amount. In some instances you may absorb less than the 25% share and in others you may pay more than 25% of the actual cost. It will make careful planning worthwhile. It will also simplify allocation of funds; so that we can more effectively serve all our clients fairly.

This is a brand new program. We have discussed each practice thoroughly and carefully. We are excited about getting underway and feel these are good practices that will be well received incentives for New York forest owners. As we gain experience in administration we may need to make some adjustments.

FOR SALE

- ★ 122 acres hardwood forest
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WOODLOT CALENDAR

Mar. 14, 15 - Draft Horse Logging Seminar, Tioga Co. (607) 699-3846

Mar. 18 - Dan Ericson: Chain Saw Use and Gary Evans: Bluebirds

Mar. 21 - AFC 10 AM. Ellicottville Cooperative Extension. Herbert Darling, Jr. "The American Chestnut". 716-557-2529

Mar. 21 - NAC 10 AM Cornell Univ. Uhllein Sugar Bush Tour, Lake Placid, 315-386-4546

Mar. 27 - SOT 6 PM Cooperative Extension Bldg., Front Street, Binghamton. Pot Luck Supper.

Mar. 28 - CFA 1-4 PM Erpf House, Rt. 28, Arkville, Wildlife Enhancement Workshop. 914-586-3054

Mar. ? - CNY Maple Sugar Tour, Heiberg Forest 315-682-9376

Apr. 24 - ARBOR DAY

Apr. 25 - 9AM-4PM NYFOA Annual Spring Meeting. Marshall Hall, Syracuse.

SEE INSERT



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Authors of —

- ★ "Basics of Growing Christmas Trees"
- ★ "Addendum to - Basics of Growing Christmas Trees"
- ★ "Growing Conifer Seedlings, Transplants and Trees in an Outdoor Nursery"

**NEW YORK FOREST OWNERS ASSOCIATION
SPRING MEMBERSHIP MEETING**

APRIL 25, 1992

**Marshall Hall Auditorium
SUNY College of Environmental Science and Forestry
Syracuse, New York 13210**

Registration* opens at 8:30 a.m. in Auditorium Foyer
Coffee and Donuts in Nifkin Lounge

9:30 a.m. ---- Business Meeting

President's report - Stuart McCarty
Executive Director's report - John Marchant
Treasurer's report - Angus Johnstone
Chapter affairs - Charles Mowatt

**PROGRAM: MANAGEMENT PLANNING FOR
SMALL WOODLAND OWNERSHIPS**

10:30.. ---- Management of a family woodland over 60 years.

Harriet Hamilton, Wayland NY
(Dr. and Mrs. Hamilton were the
National Outstanding Tree Farmers for 1991)

**11:15 ---- Woodland managed primarily for amenity values
Jane Sorensen Lord**

**12:00 ---- Buffet Luncheon - Nifkin Lounge
Presentation of awards**

**1:30 ---- Making our land more attractive to wildlife
Beth and Dave Buckley, West Valley NY**

**2:15 ---- Using your personal computer in woodland management
John Marchant, Fairport NY**

**3:00 ---- Management perspectives of small woodland owners
Laura Alban, Syracuse NY**

* Advanced registration is required by April 15 to determine luncheon setting.
See registration form for details.

NEW YORK FOREST OWNERS ASSOCIATION , INC.

Nominations for Directors of the Association. BIOGRAPHICAL SKETCHES

To Elect: one DIRECTOR for a T W O (2) Y E A R Term (1992-1993)

CHARLES MOWATT P.O Box 1182, SAVONA, NY 14879 Phone: 607-583-7006
Charlie is a graduate forester from the College of Forestry at Syracuse,
with a long DEC service career. He is now with the Region 8 Office at
BATH, NY. One of the organizers of the ALLEGANY FOOTHILLS CHAPTER, he
serves NYFOA as 1st. Vice Pres., and has contributed much time and talent
to the success of this Association. He is an enthusiastic member.

To Elect: Four DIRECTORS for T H R E E (3) YEARS terms (1992-1994)

ELIZABETH DENSMORE 8228 South Canada Hill Road, MACHIAS, NY 14101
Phone: 716-942-6600 Betty and her husband have been NYFOA members for
years. Together they own over 150 acres of forestland and helped found
the AFC Chapter, serving as Chairperson for two years. She is the Editor
of the AFC/NFC Newsletter, together with many volunteer responsibilities.

RICHARD J. FOX R.D.#3 Box 88 MORAVIA, NY 13118 Phone: 315-497-1078 Dick
has served two terms as Director of NYFOA. He was the early champion of
Chapter development, and was instrumental in founding the CAYUGA CHAPTER.
He has served both the Chapter and NYFOA with boundless energy, including
the Chairman of the Editorial Committee, Advertising Manager of the
1990 Directory Issue, Awards Committee. He was recently appointed to be
the Acting Editor of the FOREST OWNER. He has a life-long interest in
innovative educational and sociological programs. He is a member of the
Region 7 Forest Practice Board, and is a Master Forest Owner.

JOHN W. KREBS 1239 West Bloomfield Road, HONEOYE FALLS, NY 14472
John, with his wife Carol, own 434 acres in the Town of Springwater,
Livingston County, and have practiced forest and wildlife management
for 27 years. The Krebs have been members of NYFOA for 8 years. John
is employed by Eastman Kodak as a Unit Manager in the Consumer Film
Manufacturing Division. He is a Master Forest Owner

STUART McCARTY 4300 East Ave. ROCHESTER, NY 14618 Phone: 716-381-6373,
has been active in the Association since 1981 serving as Treasurer, First
Vice Pres. and, since April as President. With wife, Mary, past Pres. of
NYFOA and a present Director, own a 67 acre woodlot in Broome County.

--- DETACH-----COMPLETE----MAIL----BEFORE APRIL 10, 1992---Mail--to:---
N Y F O A c/o Deborah Gill, Admin.Sec'y P.O.BOX 180 FAIRPORT, NY 14450

B A L L O T Vote for five (5)

R E S E R V A T I O N F O R M
30th. Annual Meeting Apr.25, 1992
Marshall Hall SUNY-CESF Syracuse, NY

DIRECTOR: TWO YEARS
Charles Mowatt _____

PLEASE RESERVE _____ places for the
A W A R D S L U N C H E O N
@ \$ 15.00 each: Payable to: NYFOA
Amount Enclosed \$ _____

DIRECTORS : THREE YEARS
Elizabeth Densmore _____
Richard J. Fox _____
John W. Krebs _____
Stuart McCarty _____

name

ADDRESS: _____

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name

ADDRESS: _____