The New York

FOREST OWNER

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Amphibians & NY's Forest Ecosystem Fostering Our Private Forest Richness NYFOA's Spring Meeting

THE NEW YORK FOREST OWNERS ASSOCIATION

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VERNAL POOLS —Photo courtesy of Terrestrial Environmental Specialists, Inc., 23 County Rte 6, Phoenix, NY 13135

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AMPHIBIANS AND NY'S FOREST ECOSYSTEMS



"Spring Peeper" (See page 4)

Table of Contents

NYFOA'S Board of Directors and Its Leadership, R.J. Fox	3
Amphibians and NY's Forest Ecosystems, Glenn Johnson	
In Praise of Aspen, Jim Engel	
A Maple Mini Mystery, Gene Bryant	
Indian Sugar, James H. Wait	
Is It Spring Yet?, John S. Braubitz	
Fostering Our Private Forest Richness, Norman Richards	
Forest Community Profiles, R.J. Fox	
Letters	
New York City's Watershed Agreement, Henry S. Kernan	14
NYFOA'S SPRING MEETING	
Nominations, Bob Sand, Chairman	
The Sustainable Forestry Initiative SM , René H. Germain	
Have You Checked Your Assessment Lately?, David Colligan	
Scale Insects with a Hard Covering, Douglas Allen	
Ladybug, Ladybug, Jane Sorensen Lord	

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NYFOA'S BOARD OF DIRECTORS AND ITS LEADERSHIP

By R.J. Fox

he formation of the New York Forest Owners Association some 35 years ago was determined by New York's Natural State and the people who own it and/or felt responsible for its quality. The accompanying issues, which outnumber the trees, often appeared to be hung-up "widow-makers", petrified or otherwise not harvestable.

Some ten years ago, NYFOA and the New York State Department of Environmental Conservation engaged the problems with an energetic determination to resolve the more prominent aspects, each in their own way. DEC proceeded, as in the manner of all governments, to establish a "bureau" (such as, the Empire State Forest System) and to offer programs (such as those of the 1946 Forest Practice Act and additionally, more recently, the Stewardship Incentive Program.) NYFOA in the competitive climate, formed local chapters and sought affiliation with other groups of like identity and resolved to spread the word of good forestry through local meetings and the NY FOREST OWNER.

The old guard in NYFOA, as represented during the leadership of Stuart McCarty prevailed upon the founder of the Western Finger Lakes Chapter, John

KNOWING NOT KNOWING

Sound of nouns at the edge of a forest.

Early words crying lion or fire

saying sun moon or rain

and later much later came the questions.

-Wayne Oakes

From a collection of poetry: <u>OCCUR</u> By Wayne Oakes ©1995. Published by Spuyten Duyvil, PO Box 1852, Cathedral Sta. New York, NY 10025

Marchant, to lend his considerable talents to the role of Executive Director of NY-FOA. John, serving in a volunteer capacity, worked with remarkable effectiveness to bring any and all approaches to the issues into some common or shared "in-basket" of everyone in the state and to some measure, the nation. John's most notable accomplishment was the cooperative creation in New York of an individual approach—the Master Forest Owner/CO-VERTS Volunteer, Critical cooperation among Cornell Cooperative Extension, DEC, the Ruffed Grouse Society, the Wild Turkey Federation, and NYFOA has produced some 113 of these individuals in 42 counties to help "resolve issues" and promote good forestry on their neighbor's land.

This harmoniously forged coalition was inherited by Don Wagner, NYFOA President for 1993-1995. Don made a special effort to develop an *esprit de corps* while charging committees with developing 501(c)3 capabilities, fixing a very weak treasury, and some way of providing a permanent Executive Director. Although there was voted an increase in the dues which relieved the concern for the treasury and many changes were made in the structure and operations of NYFOA, the committees failed to do much more than define the issues. Meanwhile the increase in dues created some new problems.

Both Don Wagner and John Marchant pursued numerous outreach efforts and additional cooperative ventures with other groups with varying degrees of success (e.g., the USDA Forest Owner Survey.) Under their combined leadership and with the help of some special Tree Farm and Stewardship Incentive Program funding, membership attained nearly 2000.

Despite the loss of John Marchant as NYFOA's Executive Director, Bill Minerd took on the Presidency and brought the issues to the table with a focused effort to resolve them. Because of the genuine and unanimous sentiment of the Board of Directors that NYFOA is a charitable and educational organization (501(c)3 elegible), a special cooperative arrangement with SUNY's College of Environmental Science and Forestry resulted in the formation of a Foundation to provide scholarships (The NYFOA Endowment Fund). This should strengthen the ties with SUNY-ESF.

As a consequence to a different expressed assessment of the value of DEC's Utilization & Marketing and Service Foresters, the Empire State Forest Products Association (ESFPA) and NYFOA agreed to disagree and NYFOA declined to renew its membership with ESFPA. However, NYFOA's Board has agreed to cosponsor the American Tree Farm System (under the leadership of Jack Hamilton as Chair of the NY Tree Farm Committee) which is an important landowner program by the industry and significantly supported by ESFPA. At a recent meeting of ESFPA, Bill Minerd was invited to present some information on NYFOA. This meeting resulted in preliminary discussions of a jointly sponsored "Educational Foundation" (another 501(c)3 entity.)

It was decided at the January 25, 1997 Board Meeting (the 208th since the founding of NYFOA) to send five people to the New York Section of the Society of American Foresters Meeting in Syracuse. The agenda of this meeting, ETHICS and "The Maine Referendum: Lessons for New York", was important to NY forestry and particularly to forest landowners. There will be reports appearing in the subsequent issues of the NY FOREST OWNER.

A special vote was taken at this last meeting. The Board agreed to fund the purchase of a computer and the necessary accessories required to produce the magazine with all graphics and photos in digitized pre-press form!

NOTICE

The Board of Directors has proposed a change in the Bylaws to be voted on at the upcoming Spring Meeting April 26, 1997:

Current— CHAPTERS:

...in timely manner and provide periodic financial statements.

Proposed— CHAPTERS:

2. ...in timely manner and required to furnish an annual financial report on or before January 15th of each calendar year.

AMPHIBIANS & NY'S FOREST ECOSYSTEMS

By Glenn Johnson

mphibians are backboned animals characterized by a larval or tadpole stage that metamorphoses into an adult, a body temperature that matches their surroundings, and smooth skin that must be kept moist. As a group they are truly transitional between dry land and wetland habitats and many spend part of their life in each. In fact, the word "amphibian" is Greek for "double life", Biologists divide modern amphibians into three broad groups. One group, called caecilians, is found only in the tropics. The other two, the frogs and the salamanders, are familiar to anyone who hikes in the woods and wetlands of New York.

In 1989, professional herpetologists (scientists who study amphibians and reptiles) gathered for a worldwide meeting, held that year in Canterbury, England. After a number of presentations on amphibian studies, it became apparent that many well-studied populations appeared to be declining in locations scattered all over the planet. The best information comes from western North America, Central America and Australia. Many factors have been implicated to explain this phenomenon, including increases in ultraviolet radiation, acid rain, habitat loss and fragmentation, and introduction of exotic species. The issue of whether amphibian decline is a global phenomenon resulting from many environmental disturbances or simply natural fluctuations of population size has not been resolved. Here in New York, Dr. Richard Wyman and his colleagues are investigating aspects of this problem at the Edmund Niles Hyuck Preserve in Rensselaerville.

KINDS OF FOREST AMPHIBIANS IN NEW YORK

New York is home to 18 species of salamanders. Two of them, the hellbender and the mudpuppy, are totally aquatic and tend to be found in large bodies of water. The remainder may be found in forested habitats. Some, such as the two-lined, spring, red, and dusky salamanders are intimately tied to woodland streams and creeks and are usually found in or near them. Others, such as the spotted and tiger salamanders, use small ponds for breeding and wander extensively in mature hardwood forests. The red-spotted newt lives in ponds as adults, but the orange or red juveniles, called efts, are forest animals.

The redback salamander is by far the most abundant salamander in New York forests. Sometimes it seems that every other log or rock on the forest floor harbors a redback



Red Eft; land stage of Eastern Newt. Photo be Glenn Johnson

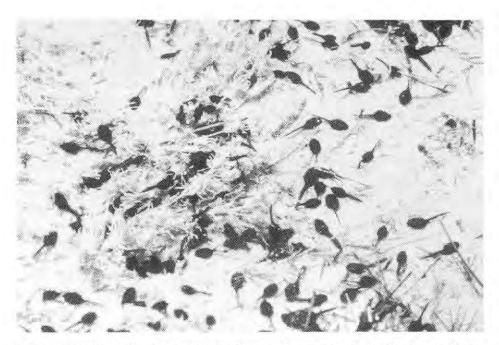
salamander. These small (up to four inches minus the tail) creatures come in two color varieties. Most common is the typical redbacked form with the prominent red stripe on the back from head to tail bordered by dark sides. The lead-backed form lacks this stripe. Both have a distinct salt-and-pepper mottling on the belly. Like other salamanders in its family, it lacks lungs and breathes through its skin and must remain in moist places. During dry spells they move deeper into the soil and leaf litter and are difficult to find. Redbacks lay their eggs on land; and metamorphosis from the larva to the adult occurs directly in the egg, freeing them of the aquatic existence that other amphibians require.

While it is possible to find any of New York's 16 frog and toad species in a forested situation, the majority are associated with ponds, lakes and wetlands. Leopard and pickerel frogs tend to be terrestrial, inhabiting grassy forest edges near water. Bullfrogs, green frogs and mink frogs are usually always found in water or foraging along the shoreline. The common forest frogs include the American toad, wood frog, gray tree frog and spring peeper. All require water for breeding and they tend to prefer small, temporary water bodies called vernal pools.

ECOLOGICAL ROLES OF AMPHIBIANS

A study in a New Hampshire woodland found that redback salamanders were the most numerous vertebrate animal in the Northern Hardwood Forest. In fact, despite their small size, their combined weight was double that of all the breeding birds and about equal to that of small mammals. This fact points to the incredible ecological importance of this tiny amphibian in the flow of energy from one food chain to another. Because these salamanders are coldblooded and do not have to use the energy in their food to maintain a high body temperature, they can be small, much smaller than the smallest bird or mammal. This is because a small animal has a high ratio of body surface to body volume and since heat is lost at the surface of an animal, a small animal loses heat quickly. It is not efficient for a warm-blooded animal to be too small because heat would be lost quicker than it could be replenished. Small salamanders can therefore eat prey too small for birds and mammals, in fact they are the lions and tigers of the decomposing food web. They themselves are a major part of the diet of birds and mammals and serve to repackage energy into a form that would otherwise be unavailable to these larger preda-

Another way amphibians positively affect energy flow in forested ecosystems has to do with their life history pattern, where the tadpole or larval stages live in a completely different environment than the adults. This has two important ecological consequences. The first is that the adults and larvae do not compete for the same food resources and so contribute to two different food chains. The second is that amphibian larvae are a significant source of energy flow and nutrient transport from aquatic



American Toad tadpoles in a vernal pool (Bergan Swamp). Photo by Marcelo del Puerto

and wetland habitats to forested ones. The larvae harvest energy fixed in highly productive aquatic environments and when they metamorphose into adults, export this energy in the tissues of their own bodies into forests.

For many folks, it may be difficult to make the connection between declining amphibians and forest health. Amphibians are among the most sensitive animals to environmental changes primarily due to the nature of their skin, which is very absorptive to pollutants and in close contact with their environment, and because they usually need two very different kinds of habitats to complete their life cycle. They can be thought of as the proverbial "canary in the coal mine" and act as barometers of the health of our environment. As such, they deserve our best conservation efforts.

VERNAL POOLS

Vernal pools are small isolated depressions in the landscape that fill with water for only part of a growing season, typically in the spring and early summer. They may range in size from a small puddle to a small pond. A characteristic of vernal pools is they contain organisms that occur nowhere else, primarily because the certain conditions of a vernal pool occur nowhere else. One important animal of these pools are fairy shrimp, a tiny crustacean that filters bits of organic matter from the water. They, in turn, are very important as food for larval amphibians.

In forested areas, these unique habitats are critically important to amphibians that need a place to lay their eggs free of fish. Fish and other predatory animals found in established water bodies prey upon the eggs and larvae of frogs and salamanders, and in some cases may prevent populations of amphibians from reproducing successfully. Species for which vernal pools are particularly important are spotted, marbled, and Jefferson's salamanders and wood frogs. Toads and spring peepers also use them, but will also deposit eggs in other aquatic habitats.

In general, adult amphibians do not wander over large areas. Some individuals of such species as spotted and tiger salamanders return year after year to the same vernal pool for breeding. If these pools were eliminated, successful reproduction might also be eliminated. Others, such as

the American toad are more opportunistic. I have observed toad tadpoles living in water-filled ruts and tire tracks of forest roads and skid trails.

NEW YORK STATE AMPHIBIAN AND REPTILE ATLAS PROJECT

In 1990, the Department of Environmental Conservation (DEC) initiated a project to map out the abundance and distribution of all of the state's amphibians and reptiles. The project, officially called the New York State Amphibian and Reptile Atlas Project, depends primarily upon interested volunteers who send in information detailing observations of amphibians and reptiles. If you have any interest in participating in this worthwhile project, please contact the DEC at 108 Game Farm Road, Wildlife Resources Center, Delmar, N.Y. 12054 or contact this author at 1 Forestry Drive, SUNY-College of Environmental Science and Forestry, Syracuse, NY 13210 or call (315) 470-6948. You will be provided with cards for entering the information, detailed instructions on how to participate, a list of known New York amphibians and reptiles, and participants will receive a periodical newsletter. The eventual goal of the project is to produce a book of maps and other information and make it available to the general public.

Dr. Glenn Johnson has done research on the red-shouldered hawk (with Professor Chambers) and the eastern massasauga rattlesnake (with Professor Leopold) at SUNY-ESF where he currently teaches Herpetology.

AMPHIBIAN SPECIES FOUND WITHIN NEW YORK

Eastern Hellbender
Mudpuppy
Marbled Salamander
Jefferson Salamander
Blue-spotted Salamander
Jefferson Salamander Complex(hybrid)
Spotted Salamander
Eastern Tiger Salamander
Red-spotted Newt
Northern Dusky Salamander
Mountain Dusky Salamander
Redback Salamander
Northern Slimy Salamander

Northern Slimy Salamander Wehrle's Salamander Four-toed Salamander Northern Spring Salamander

Northern Red Salamander Northern Two-lined Salamander

Longtail Salamander

Eastern Spadefoot Toad Eastern American Toad Fowler's Toad Northern Cricket Frog Northern Gray Treefrog Cope's Gray Treefrog Northern Spring Peeper Upland Chorus Frog Western Chorus Frog Bullfrog Green Frog Mink Frog Wood Frog Northern Leopard Frog Southern Leopard Frog Pickerel Frog

IN PRAISE OF ASPEN

By Jim Engel

oresters have been unsuccessfully searching since the dawn of modern forestry, if not longer, for methods to economically regenerate oak in second growth or mature hardwood forests so as to permanently maintain a forest in oak succession. The key word here is economically. With a great deal of effort, manpower and usually investment of money one can achieve a fair amount of success regenerating individual oak trees, but each healthy tree usually means considerable personal attention and care. Who can predict that the investment in money, labor and love devoted to a particular tree will pay off in the fifty to one-hundred years it may take to reach harvest size.

Nature has designed each forest species to survive and flourish under certain growing conditions and in certain environments that each is best suited to; and every forest species we have today is testament to the effectiveness to that natural design. One is destined for failure or a hard won victory, if natural design is overlooked in

managing the forest. I have found by trial and error that observing, understanding and then harnessing the natural processes of forest succession have worked very effectively and economically in encouraging the regrowth of valuable hardwood trees on my property.

The oak forests that are common throughout many areas of the state at this moment in time are a snapshot of forest succession. Most of us probably take these oak forests for granted and expect that they will remain basically unchanged. These forests won't change visibly that much in our life time, especially to the untrained eye, but a careful look at the seedlings growing in the leaf litter and undergrowth will reveal the future makeup of the forest which most likely will consist of a beech/maple climax forest, unless the hand of the forester intervenes to retard this steady course.

Most of the oak forests that we see today owe their existence to the demise of their kin, the American chestnut. With the extensive die-off of the chestnut at the beginning of the century, the shade intolerant seedlings of oak were allowed to take their place in the canopy. The other factor that played a role in the stands of oak today is the abandonment of large acreages of marginal farm land. This abandoned land was ideal for the process of natural succession to prepare the way for each wave of plant community which eventually led to the mature forests of oak, ash, maple, beech and cherry that surround us today.

I often pondered how these stands of oak, cherry, maple and hickory grew to timber size with straight clear trunks without the help of a forest owner or silviculturist to nurture them along by planting, pruning and thinning and why one tree would grow arrow straight and another tree would show the rotting stubs from long dead branches. The wolf trees that grew in the hedge rows and old pastures with their broad spreading crowns, large massive branches and numerous exposed decaying knots are readily discernible amongst the younger towering straight trunked hardwoods. What conditions were present that allowed these younger trees to develop with clear butt logs, few branches and narrow crowns?

Why do some trees show numerous large overgrown knots beneath their bark

and others have smooth clear trunks for thirty to forty feet? Why do some trees have forked trunks ten feet off the ground and others have a single trunk their entire height with hardly a stray branch to mar their perfect growth? The answer to these questions are numerous and varied. Part of the answer is inheritable traits or the trees genetic characteristics that predisposes a particular tree species or individual tree to a certain growth pattern and branching habit. But I believe the greatest factor affecting individual tree growth and branching pattern is its surrounding environment and this is where the landowner or forester can have the greatest impact on the growth of the tree with the least investment of time and ef-

I can usually read the evolution of a forest by the branching pattern of the individual trees in the forest. The size, shape and branching pattern of the trees can tell rather clearly which trees grew first, how the trees developed, their density, rate of growth and species composition. A group of even-aged oak saplings growing in the open will show relatively large two to four year-old branches that grow vigorously for the first few years and then quickly decline and die when overgrown by other branches. These branches can achieve a relatively large diameter and require a couple of decades or more of annual growth to heal and cover over the knot created by the dead branch. Trees growing in this environment are also prone to trunk forking and short intervals between branches. As any good forester knows, these defects can have a long term negative impact on the economic value of the logs that come from that tree. If the defects are numerous and severe, the devaluing impact on the log may be permanent or require so many years of growth to cover over the defect that retaining the tree in the stand is unrealistic.

Now enters the hero of this story, the white knight of the forest or maybe the white tree of the forest, the Aspen. Whaaat! Aspen! Ugh! Aspen! That can't be right, I am going to suggest that the best way to grow a good stand of veneer grade hardwoods on open land with minimal effort and cost is to plant or encourage Aspen. Don't take my word for it, go out into your woodlot or your neighbor's and look for yourself. By observing the growth of trees



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in different habitats and environments, I have found that the best type of environment for growing sun-loving hardwood species is a young to medium age stand of pioneer tree species which create an ideal environment for hardwood saplings to germinate and grow up through the pioneer species.

Aspen are pioneers of the forest both in time and space. Aspen lead the way in the advance of the forest from herbaceous plants and brush to trees and also lead the trees in their rush towards the sun. Aspen are notorious for their invasion of open spaces and their rapid colonization of these areas which makes them invaluable in competing with the grasses and other plants which compete very effectively with the other tree seedlings that you want to encourage. Aspen grow tall and straight and are relatively short-lived, so they generally die just as the highly valued species are ready to take their place in the forest canopy.

It seems that the majority of valuable hardwood species require planting sites with moderate to full sunlight exposure to effectively survive, grow and compete with the surrounding vegetation. White oak, Red oak, Black cherry, Walnut, Basswood, Tulip tree, Hickory, and Ash all require moderate amounts of sunshine for their seedlings to survive and all do great under a canopy of Aspen. Aspen trees filter out enough sunlight to effectively inhibit the growth of more sun loving plants like the grasses and forbs but allow enough sunlight to reach the ground for the seed of hardwood species to germinate and grow.

It is the way that hardwood seedlings grow in this environment that make the valuable sawlogs in the distant future. The seedlings growing beneath Aspen are forced to reach for the sunlight. The tree to conserve energy and maximize sunlight collection continually reallocates its energy into new vigorous terminal growth to reach for the sunlight that it needs for its survival. Whatever the mechanism within the plant that makes this happen it is a matter of survival for the tree. If it fails to compete for the light and win, it will eventually die.

Lateral branches that do develop along the trunk of the tree are very small and as the tree's leader continues to grow taller, energy to these lateral branches is terminated by mechanisms within the tree. As these branches die, they become brittle and quickly decay allowing them to easily break off from wind, snow or neighboring trees.

This pattern of seedling growth creates a slender straight trunk with no branches or knots for many feet up from the base of the tree. The new wood added to the tree's diameter each year will be clear from any defect and will bring the highest price at harvest. Your investment in time and money to achieve this is almost nil. I usually spend a little time breaking off the dead lateral branches by hand or cutting out an occasional double leader.

One question remains, is this process completely up to nature or can good stewardship speed up this natural process? Two benefits of aspen are, they are ubiquitous and easy to transplant and grow. You need not buy seedlings but simply dig them up from somewhere and transplant them or create a patch of bare ground near a stand of Aspen that will quickly sprout numerous seedlings. So stop breaking your back and put nature to work for you.

Jim Engel owns a woodlot in Livingston County and operates a shade tree and ornamental nursery.

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A MAPLE MINI MYSTERY

By Gene Bryant

few springs ago, while emptying sap buckets, I noticed a fresh layer of small bark chips scattered on new snow beneath a prime specimen of Acer saccharum. Looking up, I saw that five or six feet of an upper branch had been gnawed bare to white wood and the edge of the wound was dripping sap. Somewhat surprised, I began more closely to examine all of the other hard maples in the area and found more scattered damage-one relatively young and vigorous tree, but still too small to tap, had been particularly hard hit with nearly half of its top chewed up, but no perpetrator in sight. I realized, however, that I had some serious local competition in the maple sugar business.

It's an intensely busy time for the sugar maker, but every few minutes that could be spared were devoted to stalking the elusive maple muncher. Porcupine was the presumed suspect, although the facts didn't add up. Porcupines are slow and incautious; besides I had already taken firm measures to control the local population of the spiny rodents after finding too many young pines

with scabs of bark missing, as if some arboreal gourmet had sampled each tasty dish in a smorgasbord.

Finally, while quietly moving through the forest, I caught a glimpse of one of the chippers at work; its coat a perfect camouflage against the rock maple bark. What gave the gray squirrel away was its tail blowing in the wind as it nibbled contentedly on the sweet inner bark. To make the story short, firm measures were used here also to limit the damage, which was generally light and scattered. For some reason the squirrels have simply hammered on a few individual trees. Besides the young tree (that never really recovered) the active little rodents have, over the course of several springs, and despite my best efforts, taken out almost the entire top of a large maple and formerly productive maple.

This may also be an explanation for the rotten limb and prematurely hollow trunk phenomenon that is not uncommon with sugar maples—an upper branch is probably girdled, then it dies back and carries the rot back down into the stem. It also may be a solution to the question of who first dis-

covered the technique of opening up the bark of hard maples for their sweet sap. Native Americans may have observed the squirrels, tasted the dripping juice—and the rest of the story is fairly well known.

I've never yet seen a red squirrel chewing on a sugar maple, and I've yet to see a gray bother with a single red maple. They seem to have an unerring sense of when the sap is running. There are some fairly extensive red oak groves towards the top of the hill, and I've followed the gray's trail as they troop down for their spring treat. It could be an interesting spring, since the acorn crop was so poor in 1995.

This article is reprinted from the Newsletter of the Small Woodland Owners Association of Maine (SWOAM NEWS, Mar '96.) For more information on red squirreis and their consumption of sugar maple sap, see NY FOREST OWNER MAR/APR '95.



Elm bark sap dish

By James H. Wait

ative Americans of the northeast welcomed the return of spring with festive celebrations. Early spring was called "sugar month" or "Maple moon." One ancient Iroquois religious festival was dedicated to the maple tree and included a "Maple Dance." Another special dance (a fusion of work and religious custom) was done at the tapping of the trees, "the performance of which will, it is hoped, bring on warmer weather and cause the sap to flow."

How did the Indian boil the sap before the coming of white men with their metallic vessels? Indian pots were of birch bark, hollowed out logs, or of clay (formed over wooden molds) fired to a usable hardness. Larger vessels used in sugar manufacture were suspended by grape vines which, where exposed to the fire, were covered with moist clay. Sap was boiled by heated stones which were placed in the vessels with sticks or wooden tongs. This process was awkward and tedious, but it worked.

Another resourceful method of converting sap into syrup without metal was to allow sap to freeze overnight on successive

INDIAN SUGAR
freezing to "change its color, and become"

brown and very sweet."

Reeds, "shingles" or concave pieces of bark were used as ducts to direct the sap flowing from the bottom of the "Vs" cut in the tree into gathering vessels made of birch bark. The bark was peeled in early spring and cut and folded into sap dishes or pans measuring 20 inches long, 7 to 10 inches wide, and 8 inches deep. Ends were folded and stitched along edges with thin strips of

Next, sap carrying vessels were made also from birch bark. The bark was cut, folded and seamed with pine resin to avoid leakage. The top of the rim was reinforced with a thin strip of wood and again stitched with basswood or spruce root. A cord across the top served as a handle. Two buckets (1 to 2 gallons each) were attached to the cord by wooden hooks suspended from a shoulder yoke.

basswood bark or spruce root.

Prior to boiling, the sap was stored in reservoirs of moose skin containing up to 100 gallons.

In these times of high technology in the sugar bush, it is well to remember that

maple syrup extraction originated with native Americans.

Although it can be somewhat time-consuming, anyone can make maple syrup at home, even if you have access to only one or two sugar maple trees. Now is the time to start lining up the necessary equipment. An early run of sap can occur by late February. It may then stop, only to start up again in early March.

Four excellent "low technology" sources of how-to-do-it information include: The Maple Sugar Book by Helen and Scott Nearing, Social Science Institute, Harborside, Maine 1970; Backyard Sugarin' by Rink Mann, Countryman Press, P.O.Box 175, Woodstock, VT 05091, 199; Making Maple Syrup by Noel Perrin, Garden Way Publishing, Charlotte, VT, 1980; and Sugaring Time by Kathryn Lasky, MacMillan Publishing Co., NY, 1983 (especially good for children). Jim Wait, a former Executive Director of Small Woodland Owners Association of Maine (SWOAM), was previously First Vice President of the Massachusetts Archeological Society. This article was reprinted from SWOAM NEWS, Feb 1996.

IS IT SPRING YET?

By John S. Braubitz

his morning my wife looked out the window and jokingly said, "Is it spring yet ?" I replied, "not until March 20." The answer was correct, but the date, March 20, did not produce a mental image of spring. I paused, took a deep breath, and mentally reviewed some of my past "first days of spring". I can vividly remember March 20,1971, getting up in the morning to 5 ft, of snow, Even April 1, the opening day of trout season, brings flash backs of frozen rod tips and Tundra temperatures.

So when is it really spring? After pondering this question for some time I came to the conclusion that, for me, Spring arrives with a phone call from my father (from Pennsylvania) asking, "Have you had any Spring Dandelion? Your mother and I just finished eating our second picking," When this occurs I feel a special excitement, I know Spring flowers and other Spring herbs will soon be here. Even at an early age I learned to love Dandelion. We enjoyed the tender greens my grandmother gathered as a Spring ritual. Later the bright yellow flowers fascinated me. I picked hundreds and was never scolded or reprimanded. In the lower pastures there were millions of those yellow flowers and nobody worried they would not come back next year. This was a childhood fantasy come true.

Common Dandelion (Taxaxacum officinale) is native to Europe and adjacent Asia. It has followed man to almost every inhabited corner of the United States and Canada. This plant is a survivor; it seems that no matter what we use to combat the Dandelion, it returns the following Spring. Herbs, like Dandelion, were very essential in pre-supermarket times because our ancestors were in need of vitamins and minerals in early Spring, before the gardens began to produce.

100 grams of Dandelion greens contain:

Vitamin A 14,000 R.E. Units Thiamine 0.19 milligrams Riboflavin 0.26 milligrams Vitamin C 35.0 milligrams Calcium 198 milligrams Potassium 397 milligrams

The lowly Dandelion was highly regarded as a tonic and a general remedy by early pioneers and before we used Vitamin pills.

Some people eat the roots as a vegetable; they also make a coffee from the roots after roasting them. My family only ate the roots in the Spring and occasionally made wine.

RECIPES WINE (Recipe from: Stalking the Wild Asparagus, By Euell Gibbons): (A) Place in crock Dandelion flowers without green sepals!

- (B) Cover and allow to steep three days.
- (C) Strain through cheese cloth.
- (D) Add 2 oranges and 1 lemon.
- (E) Add 3 pounds of sugar.
- (F) Boil for about 20 minutes ..
- (G) Add about 1/2 cake of yeast.
- (H) Cover crock for 6 days.
- (I) Strain off wine into jugs.
- (J) Place balloon over top.
- (K) Keep in dark for 1 month.
- (L) Decant.
- (M) Store for special occasions.

DRESSING (Pennsylvania Dandelion Dressing-Family Recipe):

(A) (1) Take 6-8 slices of bacon

- (2) Fry until crisp in frying pan.
- (B) (1) Pour off 90% of excess fat.
 - (2) Cut bacon into small strips and place in frying pan.
- (C) Allow pan to cool.
- (D) Take: 2 cups of water

1/4 cup of vinegar

2 eggs (if you do not use yolks, substitute 3 egg whites for each whole egg, or leave out egg and add flour until it reaches the desired texture.)

> 1-2 tablespoons of flour 1-2 tablespoons of sugar Add salt to taste

- (E) Yeast mixture in pan on low heat, stirring it until it reaches desired consistency or thickness. (Adjust the ratio of vinegar and sugar to taste, and regulate the amount of flour for thin, medium, or thick dressing.)
- (F) Turn off heat when dressing is fin-
- (G) Add greens (Do not boil greens-Add them uncooked.) I recommend that you pick the dandelions before they flower.
- (H) Allow the greens to sit in hot dressing for a few minutes and then serve.

This Dandelion dressing is good served as is or over mashed or baked potatoes.

I know dandelion for some people is a pejorative word, and they think of that plant as some lawn weed. Emerson's definition of a weed was, "...a plant whose virtue had not yet been discovered." They say spend time and money trying to exterminate it from their property with digging devices and poisons.

Maybe the answer is not to use resources and time to destroy it but to learn to appreciate it.

But as for me, I will again be looking forward with a great deal of anticipation to the arrival of Spring and that special Spring dinner that reminds me of its arrival: savory fresh Dandelion greens with warm dressing over a baked potato and freshcaught trout.

John Braubitz is a regular contributor to the NY FOREST OWNER and Professor in the Science Department of Cayuga County Community College.

FOSTERING OUR PRIVATE FOREST RICHNESS

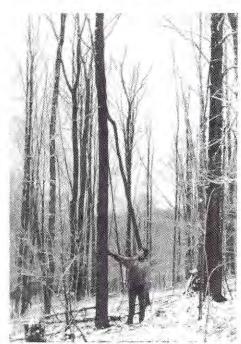
By Norman Richards

he January 1997 NY FOREST OWNER had an item attributed to the Catskill Forest Association's President Jack McShane attributing to me a "hypothetical" of five landowners with one thousand acres each fostering biodiversity by each doing something different with their forests. But like the party game "gossip" with a message whispered from one person to another around a circle, when this item came around to the NY FOREST OWNER, it made little sense and somewhat contradicts what I had in mind. So, I'll try to explain better the thoughts behind my casual comments Jack picked up.

While the Forest Owner item was labled "Biodiversity", my concern is broader. What I like to call forest resource richness includes non-human biotic diversity in its various dimensions -- genetic diversity of individuals, diversity of categories such as species and ecotypes, and habitat diversity at various scales. But it also includes use of forest landscapes by people--diverse individuals and groups using and valuing land resources in many different ways. I see no simple formulas for optimum forest resource richness. Rather, it is an ever-changing process of seeking balances among diverse human aspirations including sharing the richness of the earth with many other organisms.

What I want to consider here is how forest resource richness can best be fostered in our diverse mix of non-industrial private ownerships that make up most of New York's forest resources. To what extent can richness be promoted by outside agendas attempting to define what our forest resources should be, or is it better fostered by encouraging the diversity of forest owners to "do their own thing"--within some

—forest resource richness-an ever-changing process of seeking balances among diverse human aspirations including sharing the richness of the earth with many other organisms.



limits--according to their own resources and objectives?

Resource richness should be considered at various scales both within and among properties. A major flaw of the "hypothetical" in the January NY FOREST OWNER is the assumption that the 1,000 acre properties--unusually large among New York's private holdings--each followed a singular management track. Variations in site and history conditions within most forests favor some diversity of management responses. All but very small forests generally are divided into stands for differing management. Property sizes are a factor in potential richness of our forest resources.

The 1993 estimate for private forests in New York was about 475,000 owners of at least an acre of 14.4 million acres of "commercial" forestland. This is forest presumed to have some potential for timber production as the most common source of forest income, along with various other uses and values. However, about half of these forest holdings are less than 10 acres, raising the question of how small can a forest be? Such small wooded lots generally can provide only a few of the values we associate with more extensive forest areas. Also, as most result from parcelization of larger properties, they are somewhat in opposition to more extensive forest values. About 159,000 owners have 10 to 49 forest acres, totaling 3.6 million acres. These properties can provide more forest values including some timber harvest or a bit of wild forest environment, but they often are discounted as a forest resource. For example, they are too small to qualify under New York's current forest tax law [RPTL Section 480a].

The 69,000 owners of 50 to 1000 acres of forest totaling about 8 million acres probably are the key group in the richness of our private forest resources both within and among individual properties. They are the forest owners toward which state and federal programs in New York are most directed; the primary group for landowner organizations such as the Catskill Forest Association and NYFOA to try to reach; and probably offer the most potential for consulting forestry activity--all such efforts currently reaching a fraction of these owners. The larger forest properties, most likely to have professional management for particular objectives, have more potential for richness within but also may have larger subunits of singular management.

Virtually all forest holdings should be considered "managed" in that actions are taken toward owners' values and objectives. It makes little sense to say that land is "unmanaged" or that owners are "doing nothing" with their woodlands. Holding land, paying taxes and dealing with other hassles of land ownership are concrete management actions. In many areas of New York, resisting or delaying parcelization is a significant action in maintaining forest values.

What is "proper" or "good" management of private woodlands and who is to judge this? Any plan of action a forest owner follows is a "management plan", and whether it is good or poor depends on who is making the evaluation. Plans may link to providing SIP or other public subsidies to owners for planting or thinning efforts that benefit the owners but may have questionable public benefits beyond helping to support a public forestry agency. Plans to keep a forest free of any stand treatments or other human disturbances may be good for some values. Cutting large, poor-timber trees to improve timber production may be poor for flying squirrels. Conservative forest harvests periodically removing individual trees may reduce tree species diversity over time, but may increase diversity of some other organisms. Thinnings may

—the greatest resource richness may result from large numbers of forest owners "doing their own thing" according to individual values and resources--

increase growth of individual trees, but also the chance of windthrow damage.

A "high-grading" harvest of all saleable timber may be a logical plan for landowners with debts having high interest rates their forest growth can't possibly match. Such high-grading cannot be repeated for many years, but forests regrow if given a chance. For less-desperate owners seeking decent returns on their forest capital, some high-grading when the market is good may be a well-thought-out plan based on the reality that both land taxes and real estate markets rarely reflect timber values in New York. On the other hand, owners failing to get top dollar from timber sales may be unfortunate and should concern owner advocates, but is a "social problem" only to the extent that people often miss opportunities. Under the current, timber-focused NY forest tax law, management plans must aim to cash in significant merchantable timber volumes so they tend to favor highgrading. Also local ordinances that restrict clearcutting as a regeneration alternative commonly encourage high-grading under the "selective harvest" euphemism.

"High-grading" often is targeted by silviculturists and other professionals who decry the "short-sightedness" or "greed" of forest owners who cash in timber values to meet current objectives rather than defer returns or reinvest them in forest treatments for "good stewardship" or "sustainable forestry". One can get cynical in noting that most professional critics of short-sighted forest owners are salaried people whose work success depends greatly on what they do in the short-run, and also many have made no personal commitment to forest ownership. Similar observations might be made of many critics of all timber harvest, who are well supported by other current human uses of the earth.

More positively, one may applaud any forest owner altruism, including deferring present personal gains to benefit others in the future, but question whether forest

ownership should require greater altruism than does the use of most other forms of personal assets. Is there a unique character of forest ownership that should make it exceptionally responsible for "public interests". Most New York forest owners already forego more lucrative alternatives in keeping their land, are personally subsidizing non-market values involving public benefits, and through land-based taxes are disproportionately supporting local school systems. If greater altruism is mandated, rather than voluntary, ownership of forest properties larger than wooded building lots will be increasingly limited to the well-off who can afford the extra costs.

There are bio-economic constraints to altruism in forest ownership. It is easiest to be altruistic in sharing the benefits of highly productive forests. But much of New York's private forest resource has mediocre productivity as a result of limiting site and stand conditions, so development of quality trees is slow; and natural hazards add uncertainty. In light of relatively high costs of owning forest land, profitability of timber growing is marginal in much of our forest. Even conservative harvests from good sites are likely to require 15 to 25 years between significant harvests, so only large forest properties can provide continuous income. Smaller properties may support only a few profitable harvests over an ownership generation, requiring forest values to be supported by other means in the intervening periods.

What are reasonable limits to forest owners doing their own thing? A general answer is that our actions should not have significant adverse impacts on the wellbeing of others. But what are the limits of this specifically? It seems logical that owner actions should not cause increased sedimentation in streams, or otherwise physically damage other private or public property. But does a neighbor's ugly "commercial clearcut" leaving low-grade and damaged trees really hurt me or wider "public interests"? What about neighbors' noisy snowmobiles or shooting frenzies intruding on the quiet of my woodland, or a regrown hillside woods viewed from a public road being interrupted by a salvaged swath of blowdown trees, a clearcut regeneration patch, or a new house and roadway? A long-known addage of democracy is "to protect our rights to do things we think appropriate we must protect the rights of others to do things we may not like". A corollary is that the democratic process can be swayed by effectively promoted special interests in the name of public benefits, and it is often difficult to determine what constraints on our rights really are in broader public interest.

In summary, here is my hypothesis that got lost in translation to the January Forest Owner. For most of the private forest resources of New York, the greatest resource richness may result from large numbers of forest owners "doing their own thing" according to individual values and resources. As long as lands are maintained in forest use--including regeneration phases when desired--and physical damage to other people and resources is avoided, there may be little real damage to "public interests" even though individuals and interest groups may not be happy with what is done. My hypothesis is offered to stir debate while I'm still pondering how much of it I accept myself.

But I do think forest owner organizations and advocates should focus on owner interests, seeking to open eyes and opportunities to the rich range of alternative values that can come from forest ownership. We should relate to but be cautious about all special interests pushing agendas on forest owners through "stewardship" "biodiversity" and other value-loaded concepts. I would hope forest owner altruism and ethical concerns are encouraged as matters of personal choice, but I question greater imposed ethical burdens on private forests than those demanded of other types of personal assets. And finally, we need to be more critical of public policies that may constrain resource richness of our private forests.

Norman Richards is Professor in Forestry at SUNY College of Environmental Science and Forestry.

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Forest Community Profiles —ALEC C. PROSKINE

By R.J. Fox

lec Proskine was born 82 years ago on the banks of the West Branch of New York's Delaware River at South Kortright, where his father was postmaster for 34 years and a sawmill owner and his grandfather, a hotel owner and log rafter. In 1936, Alec completed the course of study at the College of Forestry at Syracuse (now SUNY-ESF) and was awarded a BS in forestry. With early 4H-youth experiences planting larch, at age 12, in 1926 and treating blister rust on white pine, in 1929 and the legacy of two generations; it is not surprising that his formal education resulted in earning a degree in forestry.

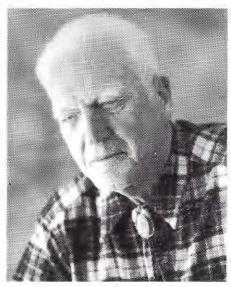
His work experience as a professional forester occurred mostly in New York but does include some experience in California where he managed a redwood outdoor furniture factory and in New Hampshire employment with the U.S. Forest Service on timber salvage and fire control after the hurricane of 1938. In New York and Pennsylvania, he served as a supervisor in various secondary forest products industries. Alec may be more generally recognized professionally as a timber appraiser and real estate broker, an occupation which spanned some 50 years.

However, the activities for which NY-FOA and the forest community may recognize Alec are his "hobbies." First of which began as a childhood fascination with the Delaware River. At a very early age, he constructed his first water-going vessel of packing crates and that was the beginning of a life-long marriage to canoeing and white water in all of New York and significant waters of Canada and other states. These adventures inspired Alec to author two books (guide-oriented): Adirondack Canoe Waters; South and West Flows (published by the Adirondack Mountain Club, RR 3 Box 3055, Lake George, NY 12845) and No Two Rivers Alike: 56

Canoeable Rivers in New York State, revised from an earlier edition (presently published by Purple Mountain Press, Ltd, PO Box E3 Fleichmanns, NY 12430; call 914/254-4062.) This last work has, in addition to the hard data of access, distance, gradients and ratings, a special quality of personalizing the stream by providing some detail of history, anecdote or personal experience. Therefore, a reading of No Two Rivers Alike...gives an earthy preview of the watercourse and the subsequent adventure the reader may take by travel on the water. 56 canoeable rivers are reviewed, most of which are accompanied with a photo. The book's practical suggestions for managing a canoe: launching and landing, maneuvering, transporting and portage and the required accessories are based upon years of experience dedicated to both the pleasure and the practice; and the lessons are capably illustrated with photos and diagrams. Alec writes for both the novice and the expert, hence the book is a pleasure to read, even if one does not canoe-the watercourse takes on a definition from this canoeist which imparts a value appreciated by the reader who may never do no more than wade.

Another hobby which Alec has is represented by his passion in photography. In particular—flare photography—the taking of pictures into the sun. He beguiled members of NYFOA at their 1987 Fall Meeting at the Casowasco Conference Center on Owasco Lake in Cayuga County with a slide show (or light show) of some of his best work out of a collection of shots numbering 5000.

In addition to a penchant for collecting (canoes, some 200 jackknifes, a similar number of canes, and the start of a collection of turquoise, to be aggressively pursued in his next life,) Alec decided to build a three-story home overlooking the Gulf of Mexico using 16-18 foot 12" by 12" (the



Alec C. Proskine

outer face is not sawn) cypress logs, notorious for their long life, "the wood eternal." The residence is known locally (in the panhandle, Carrabelle, FL) and by friends as the "Cypress Cathedral." This accomplishment prompted another book that deals with log homes which Alec currently is writing.

Alec Proskine has served his community as a past President of Trumansburg Rotary (he is a Paul Harris Fellow), Vice President of the Louis Agassiz Fuertes Council of the Boy Scouts of America; past President of the Finger Lakes Chapter Adirondack Mountain Club; past President Cayuga Trail Club; Life member Nature Conservancy; and past Director of NY-FOA.

Finally, Alec has known great satisfaction for nearly twenty camperships he established for young people residing in the communities of Jacksonville, Mecklenburg and Trumansburg. The funding is from a foundation created by Alec for that purpose. The applicants enjoy the campsites at the Casowasco Conference Center and have expressed their pleasure of the experience in letters to Alec.

Of an original land holding of some 200 acres, Alec in 1986 gave a 95 acre parcel to SUNY-ESF, but still manages a conifer plantation and Christmas trees.

Alec is the father of three children, grand-father of 7 and great grandfather of 4. This is the first in a series of articles which will profile individuals of the forest community from both the past and present.

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FORESTRY PROCEDURE

Every new forester must learn early that it is never good taste to designate the sum of two quantities in the form

$$(1) 1 + 1 = 2$$

Anyone who has made a study of basic calculus is aware that (a) $1 = \ln e$

$$1 = \sin^2 x + \cos^2 x$$

$$1 = \sin^2 x + \cos^2 x.$$
$$2 = \sum_{n=0}^{\infty} 1/2^n$$

Therefore, Eq(1) can be expressed more scientifically as

(2)
$$\ln e + (\sin^2 x + \cos^2 x) = \sum_{n=0}^{\infty} 1/2^n$$

This may be further simplified by use of the relations

(d)
$$1 = \cosh y \sqrt{1 - \tanh^2 y}$$
 and
(e) $e = \lim_{z \to \infty} (1 + 1/z)^z$.

Eq(2) may therefore be rewritten

At this point, it should be obvious that Eq(3) is much clearer and more easily understood than Eq(1). Other methods of a similar nature could be used to clarify Eq(1), but these are easily discovered once the reader grasps the underlying principles. -adapted from Ian Thomas, U. of Texas

NOTICE

The Forest Management Update, Number 17. Oct 96, is available for interested readers for a \$2 postage fee from the NY-FOA office (716/377-6060 or 1-800/836-3566.) Topics include: Yellow-Poplar: How Fast Can It Grow?, The Small Watershed Program, Another Planting Scheme, The sustainable Timber Investment Tax Incentive, Confused About Cost-Share Programs?, Iowa SAF Student Chapter Hosts Training Session, and Carpet Mulch Critique.

This irregularly published periodical is an excellent source of forestry news, tidbits, and research that comes from the staff at the Northeast Area office of the USDA Forest Service in Morgantown, West Virginia. Arrangments have been made with NYFOA to offer them to our members when they are available.

LETTERS

HERE'S AN IDEA

The water boiled from sap when making syrup should be collected and bottled and sold as a high quality "maple water". Consider 40 gallons of water to each gallon of syrup!

-Dick Fox, Moravia

CONSULTANT FORESTRY

About twenty years ago I bought some wooded land in New York to be managed for timber production. I took advice from a consulting forester in choosing the land and in all stages of management since then. I was led to believe that with a mixed age, mixed species plan I could expect to have a harvest every eight to twelve years. In so doing, aided by judicious timber stand improvement, I could expect the stands and profits to improve over my lifetime so that I could make a reasonable profit now and then hand over a healthy property to my family later.

I explained the above to my consulting forester and we had timber sales, improvement sales I think he called them, on about 400 acres. When the state forester saw one of the sales, he said that it had been carried out rather badly and that I would be lucky to have another sale in twenty years. When he saw another sale, he said that it had been carried out well. Somehow I never asked about the other sales. I continued to work with the forester until he showed no interest in continuing the relationship and then I consulted with a new private forester. The new man informed me that I could not expect to have a sale on the two properties he had looked at, for about fifteen years or about thirty years after the first sale. His strong opinion was that the first sale had been carried out very badly indeed. The better growing species had been cut. The dominant trees of better species had been cut; the better of the forked stems had been taken, etc. It rather perplexed me that he

had the same things to say that the state forester had said.

The management plans drawn up by the first forester do not include provisions for timber harvests in the next ten years so I assume the second forester is correct in his analysis. Because I have been in the RTPL Section 480a program and also have complete records from the timber sales, I have a great deal of information about the state of my stands before and after the sales.

I am puzzled now. I am not sure who to trust and how to get good management advice. Although I suspect my land has been gravely mismanaged in spite of all my efforts, I do not know whether I can expect any redress of grievances.

I would be curious to learn of any other landowners with similar problems and what might be done to avoid them.

-Name Withheld

INDUSTRIAL CONSULTING FORESTERS & DEC

I am rather curious as to the NYFOA viewpoint on DEC's move to advertise industrial (that is employed by Forest Industry) foresters as a type of consultant.

-Roy D. Hopke, NYFOA email

Some of the issues associated with professional foresters and their service to private forest owners will be addressed in forthcoming issues of the NY FOREST OWNER.

-Editor

TRUTH JUST IS. BUT ERROR MUST HAVE REASONS

-Stephen Jay Gould

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NEW YORK CITY'S WATERSHED AGREEMENT

...Some Observations

By Henry S. Kernan

y a dozen or more measures New York City's Catskill-Delaware watersheds are extraordinary. Here is a semi-wilderness, a million acres of rounded mountains and deep coves, heavily forested, sparsely settled, and almost within sight of half the state's population. Europeans first saw the Catskills while still mistaking the Hudson for a northwest passage to the Orient. During the centuries since that sighting, these highlands have retained their place largely above and apart from the swirl of commerce and industry, with their forests intact, the most beneficial cover a watershed can have. Their daily yield of water is 1.2 billion gallons!

These watersheds are exceptional in that they deliver potable water unfiltered. To do otherwise would involve enormous expense. The City, state, and federal government have therefore signed a Watershed Agreement that commits \$1.4 billion to maintain the flow and quality of that water. Such monetary attention indicates both the importance of watersheds and the concerns with their problems.

One of those problems is the ownership pattern of the forests upon which the steady flow and clarity of the water depends. They are mostly private, in parcels under 50 acres, and those parcels must number in the tens of thousands. New York City owns 62,023 acres and the state some 200,000 acres (mostly within the Catskill Preserve.) Private forest and near-forest land probably comes to at least half-a-million acres more. All of those forest lands are a negli-

gible source of non-point pollution.

Nevertheless, those who drew up and signed the Watershed Agreement have allocated \$260 million to buying "environmentally sensitive, vacant land," by which they mean forest. Their eyes are on 355,050 acres. The program is thus set—to change drastically the ownership of forest land in the Catskill-Delaware watersheds.

The advantages of such changes are not apparent. They will not cause more water yield or less pollution. The opportunity costs of spending such money on land purchase instead of upon school and street repair are high. There will be costs of administration and protection, and of change in the real property tax. The City will no longer receive its water without expense from private land.

The distrust of private ownership comes in part from the possibility of loss of forest to uses less favorable to watershed values. High real property taxes are believed to bring about such conversions and to discourage investment in long-term forest management, careful harvesting of timber and restraint directed to matching harvesting to the productive potential of the site. The City wishes to retain a vibrant economy in the watersheds, based upon agriculture and forestry, and sees in such management a means for doing so. Nevertheless, the Watershed Agreement does not consider lowering real property taxes on forest land in the watersheds.

Taxes are high in those forty-two watershed towns, higher than in other parts of the state, and much higher than elsewhere in the country, where they are typically between two and three dollars per acre per year. Town of Woodstock forest owners pay \$33.02 and those of Denning, \$25.98.

Taxes are high because land values are high; the tax base other than land is small and public services are expensive. There are outdoor opportunities within a few hours drive of one of the world's largest and most affluent metropolitan areas. They drive up the price of land. Mountain roads are expensive to build, to maintain, and to keep clear of snow. Villages are far apart.

At present New York City should have no interest in lowering real property taxes on forest land. The \$260 million will purchase more land if the taxes are high than if low. No doubt taxes levied upon 400,000 or so acres of forest will make a difference. When that occurs, the amount of forest land left in private hands may be so small that its taxation will no longer be a public issue.

In the meantime high taxes or low, public or private, the forests keep on growing. Their soils keep on absorbing water, and crowns keep on evaporating and transpiring water back into the atmosphere. Their roots keep on absorbing nutrients that would otherwise lower the quality of the water yield. Hardwoods are better for a watershed than conifers because they intercept and transpire less water and they filter out more nutrients. Thus control over the stocking and composition of the forest can influence the value of the watershed. Henry Kernan is a consulting forester in World Forestry, a Master Forest Owner, and a regular contributor to the NY FOR-EST OWNER. He offers free white spruce seedlings to all, May 3, 1997 at his property at 300B County Rte 40, So. Worcester

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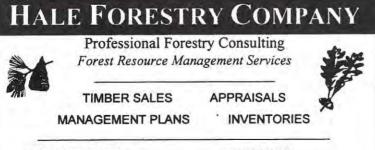
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NEW YORK FOREST OWNERS ASSOCIATION 35th ANNUAL SPRING MEETING

Saturday, April 26, 1997

Meeting Site: Marshall Hall, SUNY College of Environmental Science and Forestry. Syracuse, NY

PROGRAM

8:30	Registration			
9:30	Welcome —Jill Con	rnell, Short Meeting	3	
10:15	Panel Discussion:	"The Good, The I —Dr. Hugh Can —Mike Greason	Amendment of Section Bad, And Can It Fly? Tham, SUNY-ESF To, DEC Bureau of Price, Special Assist. to D	u —
11:30	"Challenges and Op_ —Dr. Peter Smallid	the strain or grown blackwise, by the large will be a galled such	ate Landowners - No sity Dept. of Natural	
12:00	Lunch			
1:00	Awards, Bob Sand,	Chairman, Awards	Committee	
1:30	"Wolves in New York	?" —Dr. Rainer B	rocke, SUNY-ESF	
2:10	"Recreation Leases on Private Land" —Richard Nason, Finch Pruyn, Inc.			
3:00	Adjourn			
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NEW YORK FOREST OWNERS ASSOCIATION, INC.

Nominations for Directors of the Association BIOGRAPHICAL SKETCHES

TO ELECT: Four (4) Directors for Three (3) Year Terms: (1997-2000)

HUGH O. CANHAM is a forester (SUNY/CESF '60, PhD '71) and a Professor of Forest and Resource Economics on the SUNY-ESF Faculty of Forestry. A member of SAF, he has been an active meeting speaker throughout New York and on the national scene. He has been a frequent program participant at many NYFOA functions and meetings. Dr. Canham has written many articles and is widely published. He owns a 198 acre tree farm in the Town of Butternuts, Otsego County. The Canhams reside at:

105 Primrose Lane, NO. SYRACUSE, 13212 Phone: 315/457-4972 (Office: 315/470-6694)

JOHN T. HASTINGS is a forester (SUNY/CESF '70) and works for NYS DEC out of the Warrensburg Office. Several years ago, New York recognized John as the Outstanding Tree Farm Inspecting Forester. Since 1984, he has owned and with his family has managed a 30 acre Tree Farm in Washington County. John continues to serve the Southeastern Adirondack Chapter as its Newsletter Editor. He has completed one term as a NYFOA Board Director. John is a member of SAF and is a Civil War history buff.

The Hastings reside at:

974 West Mountain Road, QUEENSBURY, 12804

Phone: 518/798-0248

RONALD W. PETERSEN has a BS & MS (Agr, and Land Economics) from Cornell University and is a NYFOA Charter member. He retired at the end of '94, after a 31 year career is State Government that began in the Ex. Chamber under Gov. Rockefeller, then as a Deputy Comm. with NYS DEC and, later, on the NYS Senate Staff with Senators Anderson & Marino. Ron owns a 213 acre Tree Farm in the Town of Sanford, Broome County and is a MFO '93. He and his wife, Peggy, reside at:

22 Vandenburg Lane, LATHAM 12110

Phone: 518/785-6061

ELIZABETH WAGNER is a homemaker and an independent contractor for a veterinarian clinic involved solely with race horses. Betty has completed one term as a NYFOA Board Director and is a Master quilter. She donated a quilt to be raffled in 1993, the proceeds of which went to the Central New York Chapter. This generosity was repeated in 1994, proceeds for a 501(c)3 Account for NYFOA. Betty and Don Wagner (NYFOA's Pres. 1993-'95) were the recipients of the NYFOA 1995 OUTSTANDING SERVICE AWARD. The Wagners actively manage two Certified Tree Farms. They reside at:

5330 Graham Road, UTICA, 13502 Phone: 315/733-7391

TERM: 3 Years 1997-2000

BALLOT: VOTE FOR FOUR (4) DIRECTORS

HUGH O. CANHAM	JOHN T. HASTINGS	RONALD W. PEDERSEN
	ELIZABETH WAGNER	
NAME	ADDRESS	

Make a copy if entitled to a second vote (Family Memberships)

See you in SYRACUSE on April 26, 1997 for NYFOA's 35th Annual Spring Meeting—Bob Sand, Chair., Nominating Committee

The Sustainable Forestry InitiativeSM is Moving Forward in New York

By René H. Germain

ecently there has been a great deal of discussion about sustainable forestry across the State of New York. Among the primary reasons for this phenomenon is the implementation of the Sustainable Forestry Initiative.

What is the SFISM?

The SFI is a commitment by the forest industry nationwide to sustainable forestry practices that allow for the growing, nurturing and harvesting of trees while conserving soil and water quality, as well as wildlife and fish habitat.

The initiative is a program of the American Forest & Paper Association (AF&PA) whose members account for a large percentage of the nation's paper and solid wood production and most of the nation's commercial forests. Here in New York, the program is being administered by the Empire State Forest Products Association.

What policies will SFI companies be implementing?

- Participating companies and organizations consist of all AF&PA members with forestry presence in the state. In order to maintain their membership in AF&AP, the companies must agree to promote and adhere to the following guidelines:
- 1. Meet the needs of the present without compromising the future generations to use the forest.
- Promote environmentally and economically responsible management practices.
- Improve long-term forest health and productivity by protecting against fire, pests and diseases.
- 4. Manage forests of biological, geological or historical significance to preserve their special qualities.
- Continuously improve forest management and regularly track progress toward achieving the goal of sustainable forestry.

What is the SFI doing in New York?

Given there are only eight AF&PA-member companies in the state, who in turn con-

trol only approximately 3-4% of the state's 17.3 million acres of private forestland, the program's overall success hinges on its ability to solicit the support and involvement from the balance of the state's forest industry, as well as nonindustrial forestland owners. As New York state's SFI coordinator, under the direction of the New York SFI Committee, I am currently working to promote awareness among non-AF&PA forest products companies, loggers and large and small landowners of this commitment to forest stewardship.

Current efforts are being centered on an outreach campaign to all primary forest products industries of the state. Throughout the Fall of 1996, regional forums were conducted to provide non-AF&PA member companies with information on the program. Complementing the regional forums is the implementation of the Basic Data Survey which is currently being sent to all 450 primary forest industries in the state. The three page survey is designed to provide reliable base line data by which to measure future progress in sustainable forest practices on industrial forest lands, procurement policies, as well as outreach to nonindustrial forest landowners. The survey is being distributed with an accompanying cover letter, the NYSFI information sheet and the SFI informational brochure. If nothing else, this will ensure that all forest industry members of the state are exposed to the literature on the SFI, as well as the program's importance to the future economic viability of the forest products

We are fortunate here in New York, as one of the primary objectives of the SFI, logger training, has been previously institutionalized through New York Logger Training, Inc. The SFI has consequently served as both a motivational and financial catalyst for the Trained Logger Certification program. To date, over 100 loggers have completed all three components of the program. The components are:

- 1) chainsaw safety & productivity training.
- 2) forest ecology and Best Management Practices (BMPs),

3) CPR and First Aid.

Equally important, an additional 800 loggers are currently enrolled in the program. Needless to say, we are extremely encouraged by our progress in this sector.

The SFI is an ambitious, long-term commitment to sustainable forestry. This is the first time an attempt has been made to quantify and document the progress of landowners, loggers and industry in providing for adequate reforestation, clean water, wild-life habitat, recreation and aesthetics. The information will form the basis of an annual progress report that will reveal areas of collective progress, as well as areas requiring additional focus and work by all.

For more information contact: René Germain, New York SFI Coordinator, 211 Marshall Hall, SUNY-ESF, Syracuse, NY 13210; Phone: 315/470-6698; Fax: 315/470-6956:

e-mail: rhgermai@mailbox.syr.edu.

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HAVE YOU CHECKED YOUR ASSESSMENT LATELY?

By David J. Colligan

Individuals today are being taxed from all angles. We are required to pay income taxes, property taxes, mortgage taxes, sales taxes, "sin" taxes and the list goes on and on. Most people believe that they are powerless to affect the amount of taxes they pay. This article will discuss some basic considerations as to how an individual can reduce the amount of taxes paid. This can be done by checking the assessed value of your home and challenging that assessment if it is too high.

BASIC CONSIDERATIONS

The assessed value of property is determined by the local assessor. The assessor has his/her own method for determining what (s)he feels is the value of your property for tax purposes. This value may be incorrect and reflect a total value which your property does not necessarily have. One reason for this is that assessments can often be several years old. As a result, the assessment does not necessarily reflect changing market conditions or the condition of your property.

How can you tell if your property is over-assessed? One way is to watch for sales of similar property in your area. This lends some guidance as to prevailing property values in your neighborhood or community. The second option would be to have the property appraised by a professional appraiser. It should be noted however, that this can be an expensive process.

You can find out the assessed value of

your property from the local assessor's office. The local assessor is required to file a tax assessment roll with the town clerk every year. For most towns this occurs on May 1st; this date is considered the tax record date. There are two procedures which can be pursued to challenge your assessment if you believe the assessment is overvalued. First is an Article 7 review under New York's Real Property Tax Law. The second procedure is a Small Claims Hearing.

I FEEL MY ASSESSMENT IS WRONG, WHAT CAN I DO NOW?

You have decided to take action and challenge your assessment. What do you do now? Some property owners will seek to pursue the procedures outlined in Article 7 of New York's Real Property Tax Law. This is potentially a two-step process. The first step is an administrative ruling and the second step involves judicial intervention. This section outlines the two step process.

First, a complaint must be filed with the Board of Assessment Review. This must be done by the 4th Tuesday in May and should be based upon the grounds that the current assessment is excessive, unequal or even unlawful. The Board of Assessment Review meets on the 4th Tuesday of May to listen to the complaints. The Board will entertain testimony from the taxpayer and the assessor; and each side offers proof regarding their respective positions. The Board then

makes a final determination of the assessed value. If the Board rules in your favor, the process is over and your assessment will be reduced. On the other hand, what occurs if you are dissatisfied with the Board's determination?

By the first day of July, the assessor will complete the final tax assessment roll. A notice of its completion will then be published. The landowner who is unhappy with the Board's determination may commence an action in the state Supreme Court by filing a petition within thirty days after the completion of the final assessment roll. The petition will not be considered if it is filed more than thirty days after the final assessment roll is completed. The petition should be filed in the county in which the property is located. An attorney should be retained as tax challenge petitions are very technical.

After the commencement of the proceeding, a judicial conference is scheduled at which the judge will attempt to facilitate a settlement. If a settlement is not reached, the judge will require both sides to obtain an appraisal and file it with the court before trial. During the course of the proceeding, the assessment is presumed to be correct. In order to prevail, the property owner must prove by substantial evidence that the current assessment is incorrect. Therefore, the burden of proof is on the property owner and not the assessor. The judge is the final arbiter of the value of the property if a settlement was not reached.

It should be noted that tax assessment cases at the Supreme Court level can take several years until the issue is finally determined. Therefore, the property owner must decide whether to pay the taxes in the interim. If the taxes are not paid, the property could become subject to a tax foreclosure sale. In addition, each year's tax assessment roll will constitute a new cause of action. Consequently, petitions must be filed every year that the property owner seeks to challenge the assessment, even if a previous challenge is still pending.

IS THERE ANY OTHER WAY?

A second procedure exists to challenge a property tax assessment. This is through the use of the Small Claims Assessment Hearing. The Small Claims option is avail-



able if a property owner received only a partial reduction in the tax assessment or no reduction at all in the assessment. This option would be pursued in place of the appeal to the Supreme Court. There are two prerequisites to utilizing the Small Claims procedure. First, you must be the owner or occupier of a one, two or three family home or the owner or occupier of a farm with an assigned homestead lot. The second prerequisite is that the reduction in taxes sought to be paid cannot exceed Seven Hundred and Fifty Dollars (\$750.00).

The Small Claims procedure requires a filing fee of twenty-five (\$25.00) dollars and the filing of a petition. The petition generally must be filed within thirty days after the final tax roll is adopted and filed. Some jurisdictions also require that a petition be filed with the school district within a specified time period. The failure to do either of these could result in the dismissal of your case. The petition which must be filed is a standard form which may be obtained from places such as the assessor's office, the County Real Property Tax Service and the State Board of Equalization. New York State has a publication entitled "How to File a Complaint on Your Assessment" which is a useful tool for the mechanical and technical aspects of the assessment review process.

The Small Claims Hearing is informal. Generally, the property owner presents his/her case first. The assessor or its representative then has an opportunity to ask questions. The town will then have an opportunity to present its case after which the property owner is allowed to question the town's representatives. The hearing usually lasts fifteen to twenty minutes.

There are several tips which can be followed to help improve your presentation. First, attach your exhibits, analysis and any other data you will utilize to the petition. If the material is lengthy, highlight the most important information so the hearing officer can easily scan the information before and after the hearing. Also, copies of all material should be brought to the hearing in case additional copies are needed. After the hearing is scheduled, submit a written request for all appraisals and other data which the assessor will use in defending his/her assessment. The information should probably be received five to seven days before the hearing. The request should be made in writing and mailed to the hearing officer, the assessor and the town, village or city attorney. Finally, and most importantly, ensure that your presentation is professional and factual, generally lasting no more than ten minutes. The hearing officer is more likely to respond favorably to this type of presentation than one that is overladen with emotions.

CONCLUSION

Many people are afraid to challenge their property tax assessments. As a result, they resign themselves to a lifetime of paying inflated property taxes. This does not have to be the case. Procedures exist to challenge a potentially faulty assessment. These procedures exist because the ultimate goal is equitable and accurate taxation. The procedure can be lengthy and there are costs associated with challenging the assessment. Therefore, a property owner should ensure that the property is over-assessed and that the tax savings will exceed any costs before a review is sought. Hopefully this article has taken some of the fear out of challenging an overvalued tax assessment.

In addition, there are very technical rules and stringent time deadlines which must be complied with when challenging an assessment. The time guidelines discussed herein are relatively standard, but deadlines in your individual community may vary. You should verify the necessary filing deadlines in your community if you seek to challenge your assessment.

Dave Colligan, a member of NYFOA's Niagara Frontier Chapter, is a practicing attorney with a Buffalo law firm (Watson, Bennett, Colligan, Johnson & Schechter; 600 Fleet Bank Buiding, 12 Fountain Plaza, Buffalo 14202) and regularly provides articles on legal matters of interest to forest owners.



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SCALE INSECTS WITH A HARD COVERING

By Douglas C. Allen

the insect world is divided taxonomically into approximately 31 different Orders or groups of insects that share certain general characteristics, such as type of mouthparts, wing structure and kind of metamorphosis. The latter refers to the manner in which an insect changes form as it grows. The Order Homoptera [home-op-terra] contains a very diverse group of sucking insects like aphids, adelgids, mealybugs, cicadas, leafhoppers, and scales. The most distinguishing feature of families that constitute this group is the presence of piercing-sucking mouthparts, Also, these insects undergo an incomplete metamorphosis which is defined by only three life stages (egg, nymph and adult). The more advanced insect groups like moths, beetles, wasps, and flies have four life stages: egg, larva, pupa, adult. Two of the most important types of homopteran pests of ornamental and shade trees are the soft scales, described in the Nov./Dec. issue of the NY FOREST OWNER, and a group known collectively as armored scales.

Importance - armored scales include many species that are serious pests of agricultural crops as well as trees and shrubs. Rarely do they kill woody plants, but their feeding can detract from the appearance of a tree by altering foliage color, reducing foliage density and occasionally killing individual branches within the crown.

The presence of an armored scale infes-

tation often goes undetected due to the insect's small size, their unusual appearance and the secretive nature of some species.

General Appearance - armored scales are highly specialized and. like the soft scales, do not resemble typical insects. Adult females are wingless and legless. Males (rarely seen by the casual observer) of some species lack mouthparts altogether and have a single pair of legs. In other species they are wingless and resemble a smaller version of the female. A single pair of wings is unusual as most adult insects (except wingless forms and true flies which also have only one pair) possess two pairs of wings. After settling down to feed, armored scales cover their body with secretion which, combined with caste nymphal skins, imparts a very characteristic appearance to each species. The covering protects the insect and its eggs. Winged males lack this covering and appear like a more conventional insect.

The first nymphal stage (the form that hatches from the egg) has legs and often is referred to as a "crawler". Other than winged males, it is the only stage capable of active dispersal. Once it locates a suitable feeding site on the host plant, the crawler settles down permanently and inserts its mouthparts into plant tissue. Of all the life stages, the crawler is most vulnerable to mortality. It is very susceptible to low humidity, temperature extremes, excessive rain, and lack of suitable sites for settling on the host. As it feeds, the scale ex-



Fig. 2. Pine needle scales cretes a waxlike material that covers its body and, in the case of the female, eventually this structure is enlarged to form a covering which protects the eggs (Fig. 1).

Biology - many armored scales that are important pests of trees and ornamentals overwinter as eggs beneath the waxy covering. Eggs hatch from May to early June, depending on geographic location. Two or more generations a year often occur in southern parts of a species' distribution.

Scales feed by inserting their threadlike mouth parts into plant tissue and extracting plant juices that contain the products of photosynthesis.

Pine needle scale - this is certainly the most common armored scale infesting pines, most especially Scots and mugho, and it is very familiar to Christmas tree growers. The waxlike covering is bright white and very distinct on the green background of host needles (Fig. 2). It is a common pest of ornamental pines throughout the United States and Canada. The tan colored "head" of the scale is actually the caste skin of the first nymphal stage (crawler). The purplish body of the female resides beneath the waxlike covering immediately behind this structure (see Fig. 1).

High populations give host foliage a whitewashed appearance. Heavy and pro-

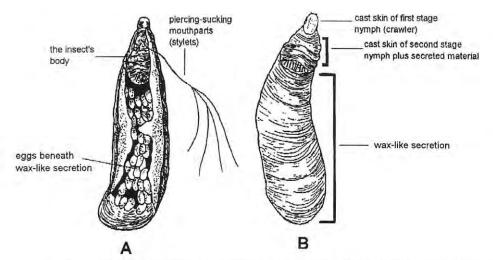


Fig. 1. A, ventral or bottom view of female oystershell scale; B, dorsal or top view.

longed infestations may cause foliage to turn yellow or brown and needles may drop prematurely.

Oystershell scale - of all the armored scales, this species is probably the one most frequently encountered on broadleaved trees and shrubs throughout North America.

It has over 100 known host plants. Heavy infestations are especially commonplace on ash, beech, apple, aspen, and maple. The straight to slightly curved (oystershell-like) covering varies from chestnut to dark brown or may even have a distinctly grayish or black caste as it ages, depending on the host. This scale usually attaches to smooth bark, not foliage (Fig. 3). The body of the adult female is whitish and visible only if the covering is removed.

As with most species of scales, heavy infestations may result in discolored foliage, crown dieback or occasional death of a branch. A heavily infested branch or section of tree trunk that harbors a dense population often looks as if it is encrusted with coral or a thin layer of rough cement. Males of both species are wingless and have a covering which is similar in color to that of the female but much smaller. The "ma-



Fig. 3. Oystershell scales.

ture" female scale (insect plus covering) of both species is 1/16" to 1/8" long (Fig. 3).

<u>Pest management</u> - direct control is not practical under forest conditions but, fortunately, infestations are usually restricted

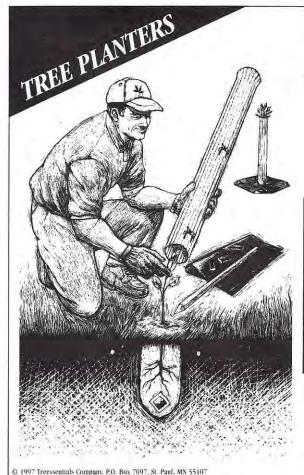
individual trees or small groups. However, control may be important when infestations occur in Christmas tree plantations or on ornamentals.

Both species are subject to mortality from insect parasites and predators, but generally these natural enemies are unable to contain populations when suitable hosts are available and environmental conditions favor survival.

Dispersal is passive compared to many insects, because adult females are unable to fly and movement from plant to plant relies mostly on wind that blows crawlers from one host to another. In dense plantings where branches from individual trees intermingle, however, crawlers are very likely to walk to adjacent plants. Therefore, careful spacing of susceptible landscape plants will reduce the likelihood of this movement.

Several synthetic organic chemicals, horticultural oils and insecticidal soaps are available for use, but several treatments may be required and timing is critical.

This is the 31st in the series of articles contributed by Dr. Allen, Professor of Entomology at SUNT/ESF.



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LADYBUG, LADYBUG...

By Jane Sorensen Lord, PhD, OTR, ND

keep more than 25 herbs and aromatic plants over winter in our conservatory with ten casement windows and three sealed skylights. The plants go outside in summer. Some of them get sunk in their pots in the herb gardens while others grace covered porches in more protected and controllable sites.

I dig holes in the garden for the plants after they have weathered outside and put the 10-12" pots in the ground. This keeps the plants somewhat "bonsaied," which maintains a manageable size and permits a return before frost in the fall—and I get fresh herbs all winter. Shortly before our frost date, after summering in the garden, each plant is lifted up and given a root prune, then taken inside. I keep them an attractive 2-4" high. I have a rosemary, a pomegranate, a pineapple sage, and a lemon verbena, to name several, which lived this way for many years.

The more fragile herbs like bay, jasmine, scented geraniums and caramom stay more sheltered near the house. I let them grow large enough (3' plus) that they can sit on the floor of the narrow conservatory. Then, when you walk by and brush them, or shake the leaves with your hands, the plants give off their aromatic scent. Very nice on a freezing cold day!

Even though all the plants are hosed off and inspected thoroughly before they are brought indoors, some insect pests seem to make the move inside each year. I can't use insecticides indoors. I have 8 cats and Gordon. A few years ago I discovered Tea Tree Oil which when mixed with water and sprayed regularly, seems to keep some control.

We had a very damp summer this past year, though, and a number of my plants were distressed. The desert-thriving aloe had a stubborn case of scales. So did my ten year old bay tree. My patchouli had white flies and I found aphids on a couple of other plants. The bugs persisted inside even after horticultural and tea tree oil sprays.

Fit to be tied, I was worried because there are so many types of plants crowded into the 10'x20' conservatory. What if they all got sick and died? I contemplated triage, but the affected plants still looked healthy.

Then, one sunny October afternoon, the solution literally flew in through the open casement windows. Ladybugs! Hundreds and hundreds got in before I got all the windows closed. They were crawling all over the windows, skylights and walls, bouncing off me in mid-flight. I have liked ladybugs since I was a kid and still think of them as lucky. Heeding the old superstition about not shooing them, but instead waiting for the bugs to fly away voluntarily, I kept them from making the yellow spots Doug Allen [NYFO J/F'97] says lady bugs make when brushed, threatened, harassed or annoyed.

I was tickled to see them. I had never seen so many ladybugs at once. I didn't know if they came in to die, hide, hibernate or what. I prayed that some had an appetite and would rescue my affected plants. And I figured even if the bugs came to die, I could just sweep up the carcasses from the tile floor and dump them into the plant pots for a bit of nitrate.

As I write this, the lady bugs have been here a couple of months. Lots have died (?) in the corners of the room and on the window sills. Others seem to have hibernated, at least they are staying still on the soil in plant pots and in cracks of plant shelves.



Bay Tree

But the rest of the visiting ladybugs saw my plants and said "home!" They ate the aphids first and are keeping the scale in check so well that I don't have to spray. I haven't seen any more white flies. The lady bugs have done such a good job in the conservatory that I have carried individuals out to plants in rooms throughout the house.

Most of the time the bugs seem to stay in the plants. On warm days you see a few of them crawling on the sun warmed windows and skylights. Watching the little spotted domes, with feet not apparent, moving along surfaces makes me smile, I hope they don't all leave in the spring. I hope they stay in my plants and gardens keeping the plants pest free. Ladybugs are welcome here anytime of the year.

And if next fall, ladybugs visit you, why not stay calm and wait to see if they make your plants happy before you vacuum the little babies up and throw them away!

Dr. Jane, a regular contributor, is a Master Forest Owner and Certified Tree Farmer. She has a private consulting practice in Occupational Therapy and Naturopathic Medicine and teaches on the faculty of Health at Indianapolis University.



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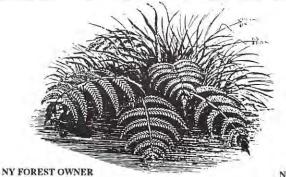
Circulation 1800.

Consulting Forester Receives Chapter Award

Bruce Robinson was presented with the Allegheny Foothill Chapter's Outstanding Service Award for 1996. He was recognized for his leadership dating with the chapter's initial formation and for his continual contributions to both the AFC and to NYFOA.

Betty Densmore in the AFC newsletter, applauded his wit, puns, wisdom and, most especially, his ability to convey his excitement about forestry to his audience. Bruce is owner of Bruce Robinson, Inc. one of the finest forest management companies in New York State because, according to the Newsletter, Bruce has a very busy schedule.

Despite his busy schedule, he always finds time to help the AFC present programs that teach good forestry. His knowledge of all aspects of forest ecology is vast and he shares it with generosity.



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- Boundary Line Location
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No property is too small or too large to benefit from experienced professional assistance when you are faced with important decisions regarding its use.

Contact Lake George Forestry today to arrange a free initial consultation.

Christian Gearwear, President LAKE GEORGE FORESTRY, INC.

50 Hendrick Street Lake George, New York 12845 Tel: 518-668-2623 1-800-773-4611 Fax: 518-668-2486

NOTICE

THE FOREST OWNER is mailed third class and will **not** be forwarded; notify Administrative Secretary Debbie Gill, PO Box 180, Fairport 14450 or call 1/800/836/3566 with a **change in address!**

PONDS UNLIMITED INVITES YOU....

to think of all of the benefits you could enjoy from having a pond or a lake on your own property. This idea could become a reality if the right conditions prevail. From our experience it normally requires favorable watershed conditions, good site conditions, owner-commitment to stewardship for enhancement of forest land values, appropriate engineering planning and design, and good construction practices.

PONDS UNLIMITED CAN EVALUATE the site of your choice. We can provide all of the engineering services needed to plan, design and oversee the construction of a dam to create a handsome pond or lake on suitable property. You can get additional information by calling 315/422-POND or sending a letter of inquiry to:

PONDS UNLIMITED

719 E. Genesee St. Syracuse, NY 13210 315/422-7663 FAX/476-3635



FOUNDED 1963

WOODLOT CALENDAR

MAR 5: WFL; 7:30PM; Old Growth Forests; Highland Ave;716/367-2849 (eve.)

w8:30-5PM; Woodland Wkshop.; NYS Fairgrnds; 315/255-3662

MAR 15: NFC; Maple Syrup Bkfst/Fundraiser; D. Colligan; 716/832-3611.

MAR 20: CNY; 6:30PM; Potluck Supper; St. Pauls Church; Syr., 315/673-3691

APR 5-6: SEA; Upper Hudson Maple Producers Open House; 518/642-2856.

APR 15-18: CFA; "GAME OF LOGGING Levels 1-4"; Soren Erikson; 914/586-3054

APR 19: CNY; 12:30 PM; Baillie Lumber Tour; Watyerloo; 315/255-3662

APR 26: NYFOA SPRING MEETING, Syracuse.

MAY 3: Free WS Seedlings; Henry Kernan's; So. Worcester; 607/397-8805

JUN 14: CDC & SEA; FAMILY FOR-EST FAIR; 518/753-4336.