

Make a Cheap Moisture Meter - Part II

In the previous issue I discussed how a multimeter can be used to measure wood moisture content. For probes I used two metal nails spaced 1.25" apart and driven 1/4" into the wood. The resistance of nails is small so these distances are not critical.

A definitive way to measure moisture content is to weigh a sample, then heat it to drive off all the moisture. A microwave can be used for this and the resulting weight is called the dry weight. For example, a piece that weighs 100 grams initially and 83 grams after careful heating had a moisture content of 20%. This is found by dividing the change in weight (17 grams) by the dry weight (83 grams).

I weighed a sample of air-dried, quartersawn white oak to be 91 grams and the resistance measured along the grain was 30 megohms. I then soaked the oak in water for a day and it absorbed 7 grams of water for a new weight of 98 grams. The

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Fighting the Green Menace

Our property is about 50 miles from the Randolph, New York site where the Emerald Ash Borer was positively identified in June 2009. Our ash trees and yours will be visited by the boring beetle. It's not if but when. I have been in mourning regarding the certain fate of our ash trees and the perception I can do nothing about it. It is certain isn't it?

The borer has natural enemies in its homeland but not here, right? I recently read *Emerald Ash Borer The Green Menace* from the US Department of Agriculture, revision June 2009. It states, "Several natural enemies have been discovered attacking EAB larvae in North America, including woodpeckers and at least two species of parasitic insects. Unfortunately, these enemies have not effectively prevented trees from dying or substantially slowed the spread of the pest." But enemies exist and they are already here!

The January/February 2010 issue of *The New York Forest Owner*, published by NYFOA, has an article titled *Emerald Ash Borer is Now in New York: An Update*. There are approved chemicals that might help combat this critter, most for the professional but at least one for the homeowner. Check www.nyis.info/Insects/PDF/Insecticide_options.pdf, a must read 8 page article titled *Insecticide Options for Protecting Ash Trees From Emerald Ash Borer*.

Bayer, the maker of aspirin, has a product it calls Merit. The active ingredient is Imidacloprid and it's the number 1 ingredient in insecticides world wide. It's the active ingredient in Advantage that keeps fleas off our pets and Grubex that keeps lawn grubs in check. Bayer

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An adult Emerald Ash Borer.

Photo by David Cappaert, Michigan SU

Stephen Harris of Root Production Method (RPM) Ecosystems spoke April 10th at Sugar Bush Hollow. His company has developed a technique to increase the root biomass of trees for transplanting. Increasing the root biomass of a seedling improves the chances that it will survive and thrive. RPM seedlings show 2 to 3 times the growth rate of bare root plantings which means quicker nut and fruit production. Bare root plantings are less expensive but often spend their critical first year(s) growing roots below ground before adding wood mass above ground.

Steve recommends removing the sod in a 30" circle from a planting site and backfilling the hole with leaves, not the removed soil. Upon hearing this I was immediately reminded of the comments of Dr. Jana Lamboy at last year's Sugar Bush Hollow visit. She pointed out that micorrhizae fungi form a symbiotic relationship with higher plants and some of these plants cannot live without the fungi. Dr. Lamboy stated that leaf litter on the forest floor is often rich in the micorrhizae fungi that play a critical role in healthy trees. Adding leaves to the planting hole inoculates the seedling with these critical fungi.

For more information about RPM Ecosystems check www.rpmecosystems.com.

Dick Starr

Empire Farm Days

August 10th to 12th

Rodman Lott & Sons Farm, 2973 Rt. 414, Seneca Falls, NY 13148

The Western Finger Lakes chapter of NYFOA will participate by having a booth of information available for visitors interested in forestry related issues.

It's an opportunity to further our mission of educating forest owners about good stewardship practices in the woodlot and maybe gaining some new members.

We need volunteers to help staff the booth during the 3 day event. If you're willing to donate some time please call Dale Schaefer 585-367-2849 or Dick Starr 585-377-4849. For more information about EFD, call 877-697-7837 or www.empirefarmdays.com.

Fiddlers Fair

Saturday, September 18th 10AM to 6PM

Sugar Bush Hollow will host the 2nd annual Springwater Fiddlers Fair & American Crafts Show. Admission is \$5, children under 10 free when accompanied by an adult. Proceeds go to the town of Springwater for development of trails and parks.

Planned activities include fiddler's performances, fiddler's workshops, woodland performance sites, gourmet cuisine, local American craft vendors, nature tours and sugar house sound stage. WFL chapter of NYFOA will present some activities related to good stewardship and management practices of woodland property.

Check out their web page at www.springwaterfiddlersfair.net which includes directions for finding SBH.

Annual Dinner Meeting

Wednesday November 3rd at 5PM

Cornell Cooperative Bldg., 249 Highland Ave., Rochester NY 14620

Our 5th annual dinner meeting will be held at the Cornell Cooperative Building in Rochester. Chef Brad of Laurier Catering will once again serve up succulent morsels to please the palate.

The chapter will subsidize part of the cost and we offer the dinner at \$20/person. Seating is limited so register early. Send checks to treasurer Ron Reitz, 6086 Canadice Hill Road, Springwater, NY 14560 by Friday October 29th if possible.

We're pleased that Bruce Robinson will be our keynote speaker. Bruce will address how to enhance properties for wildlife. Door prizes will once again be available, a 50-50 raffle and perhaps a silent auction. The doors should open at 5 PM with snacks served at 5:30 followed by the buffet dinner at 6 PM.

~ Upcoming Events ~

Small-Scale Woodlot Management

Saturday, October 9th 9AM to 1PM

7120 Marrowback Road, Conesus, NY 14435

Mark October 9th on your calendar. We're pleased to have Dr. Peter Smallidge of Cornell University conduct a workshop of special interest to owners of a small woodlot. The workshop is sponsored by WFL chapter of NYFOA, Cornell University, and Cornell Cooperative Extension.

Many woodlot owners want to be more active in gathering logs or firewood from their property. Often there are too few acres or too few trees to attract a commercial-scale operation. In other cases, the owner just wants to be more closely involved in the selection, felling and moving of wood. This workshop will focus on the skills needed to remain safe and accomplish the goals.

The workshop will emphasize three areas: safety, silviculture, and technique. Participants will learn how to inspect equipment and tools, utilize safe practices, understand basic silvicultural principles, and make appropriate tree selection choices for multiple ownership objectives.

Participants will learn how to create a felling plan, observe directional felling techniques and observe and discuss the use of an ATV and arch for moving sawlogs and firewood. The session is designed for woodland owners with knowledge in the novice to intermediate range and anyone interested in learning about sustainable woodland practices. Participants should dress for the weather and be prepared for walking on moderately rough ground. Hard hats are encouraged.

Registration is limited and receiving the \$10 per person registration fee by Friday October 1, 2010 is appreciated. Please send a check to WFL Treasurer Ron Reitz, 6086 Canadice Hill Rd, Springwater, NY 14560.

The workshop will run 9AM to 1PM at the property of Tony and Anne Ross, 7120 Marrowback Road, Conesus, NY. Juices, coffee, bagels and donuts will be available. Bring a folding chair if you think it will be useful.

The property sits on the western ridge overlooking the south end of the Hemlock Lake valley. Access is via the hamlet of Webster Crossing which is on Route 15 about half way between Springwater and Conesus. In Webster Crossing turn east on May Road, left on White Road then right on Marrowback Road. The property is on the right side of Marrowback Road about 1 mile from White Road.

For additional information, contact Dean Faklis, 585-669-2956, dfaklis@frontiernet.net or Tony Ross at 585-288-4821 (home) or 585-943-2109 (cell) aaross@frontiernet.net.

Welcome New Members

Candice Eldredge
Stanley, NY

Tim Feldman
Lyndonville, NY

Richard H. Kemp
Holley, NY

Nelson Leenhouts
Rochester, NY

Greg & Kathy Lessord
Spencerport, NY

Jennifer Maffett
Bradford, NY

Richard Maynard
Prattsburgh, NY

David Nussbaumer
Palmyra, NY

Gregory Palmer
Savannah, NY

Sharon Pierce & Doug Huck
Hamlin, NY

Charles Regan
Ontario, NY

Mary Grace Schmidt
Sodus, NY

Jim Sirianni
Painted Post, NY

For Sale

1947 Ford Tractor 2N
(9N-8N). Two speed Sherman
Transmission, 3 point hitch,
belt driven buzz saw. \$2,300
or best offer. (585) 367-2849

Dale Schaefer

What I've Been Doing in My Woodlot

Some time ago, I wrote in this space about the flurry of activity in getting trees marked, bids solicited and received, and a contract signed for a commercial thinning of my woodlot. Even though most of that activity was on the part of my forester rather than me, it was still interesting and a bit of an adventure as I had not been through this process before.

One of the terms in the contract was that the bidder had a year from signing the contract to complete the work. That year ended today, and the trees are still standing there, still marked but not harvested. I don't know yet what went wrong; there will be some discussion about that, as well as what to do next, over the next couple of weeks. The point of this operation was to clear out a lot of low-grade stems, so I really want them to get cut. I have already taken in some money on the deal, since partial payment was required when we signed the contract, but the main goal was to thin the woodlot and that has not happened.

There are a couple lessons here, at least so far. One is that even when you work with a professional forester there is no guarantee that everything will go according to plan. There are a lot of moving parts in this process and nobody can bend them all to his will. Nevertheless, I am still pretty happy that I do have a forester handling the sale. Now he really gets to earn his money, in making phone calls and trying to figure out whether to cut a new deal with the bidder or start the whole process over again. I will

let you know how it goes.

In other news, summer has officially arrived. Not because of the summer solstice – that is still a few weeks away. Not because it is Memorial Day weekend – that is only the start of summer by convention. I know that spring has ended and summer is here because the deer flies are out in force again. They showed up first a few days ago, and today they were making it fairly uncomfortable to be outside. They were not too bad in the woods when I was cutting trees as part of my TSI work, but they were doing their best to make life miserable as I walked across the fields to get to the TSI area.

The TSI work itself was pretty inauspicious. I probably should have waited for better conditions, but as a weekend warrior (woodlotter?) I have to do what I can when I have the time and energy available. Wearing all the safety equipment – chainsaw resistant

boots, pants, shirt and gloves, as well as a hard hat – takes a lot out of me when it is 85 degrees, although it works pretty well in keeping the flies off. It did not help that I was working on a steep side hill, although I would have to wait a long time for that condition to change. And I am evidently out of practice, so that I managed to hang up several trees. At one point I had three wedges stuck in one tree and the chainsaw stuck in another (don't ask how that happened). Fortunately I had four wedges with me and I was able to get everything freed without having to trudge all the way back to the barn for another chainsaw.

All that was pretty annoying, but I kept reminding myself that this was supposed to be fun and that safety was a lot more important than speed. By the end of the day I had gotten a bunch of trees on the ground and I had no injuries to show for it, so it turned out to be a successful day all in all.

Mike Seager

Forestry Forum

By invitation of the Cornell Cooperative of Wayne County in Newark, May 15th found 5 WFL members leading a workshop on forest management practices. The Cooperative had been receiving phone calls about bad logging experiences and what could be done? Nothing after the fact but maybe some education could prevent future problems.

Even though a Saturday in mid May is a time for outside activities, 15 participants showed up to hear, many for the first time, information about woodland invasive species and how a management plan can enhance and focus wood lot activities. Information was also shared about how a timber sale might be conducted and the importance of having a forest professional involved. Attendees were appreciative and expressed interest in a follow up session. Five participants joined NYFOA before departure.

Thanks to Mark Gooding, Mike Seager, Jim Miller, Dale Schaefer, Dick Starr and CCE's Laurie Van Nostrand.

Make a Cheap Moisture Meter - Part II

Continued from cover.

resistance now measured 1.2 megohms. The specimen was placed in my microwave on low power for 15 seconds. After cooling, the weight and resistance were measured and the cycle repeated 20 times. The dry weight was 80 grams and resistance was off scale. Note that more moisture means less resistance to current flow.

The table shows a sample of the data collected for the white oak with computed moisture percentages and James' calibration results for comparison (William L. James, *Electric*

Weight (grams)	Measured Resistance (megohms)	Moisture Computed from Weight (%)	Moisture from James' Table (%)
98	1.2	22	20
97	2.6	21	18
91	30	14	13
80	Off Scale	0	0

Moisture Meters for Wood, currently available online at www.treesearch.fs.fed.us/pubs/9823). I was pleased with the similarities and now feel comfortable using James' calibration (see the graph) for my apparatus.

Calibration is slightly different

between species and I use the white oak graph to represent all woods. For me, using a multimeter and a couple of nails to get a sense if my firewood is seasoned (2 megohms or more) or my lumber is ready for homestead projects (50 megohms or more) is a fair trade.

Dean Faklis

Moisture Content, White Oak (James)

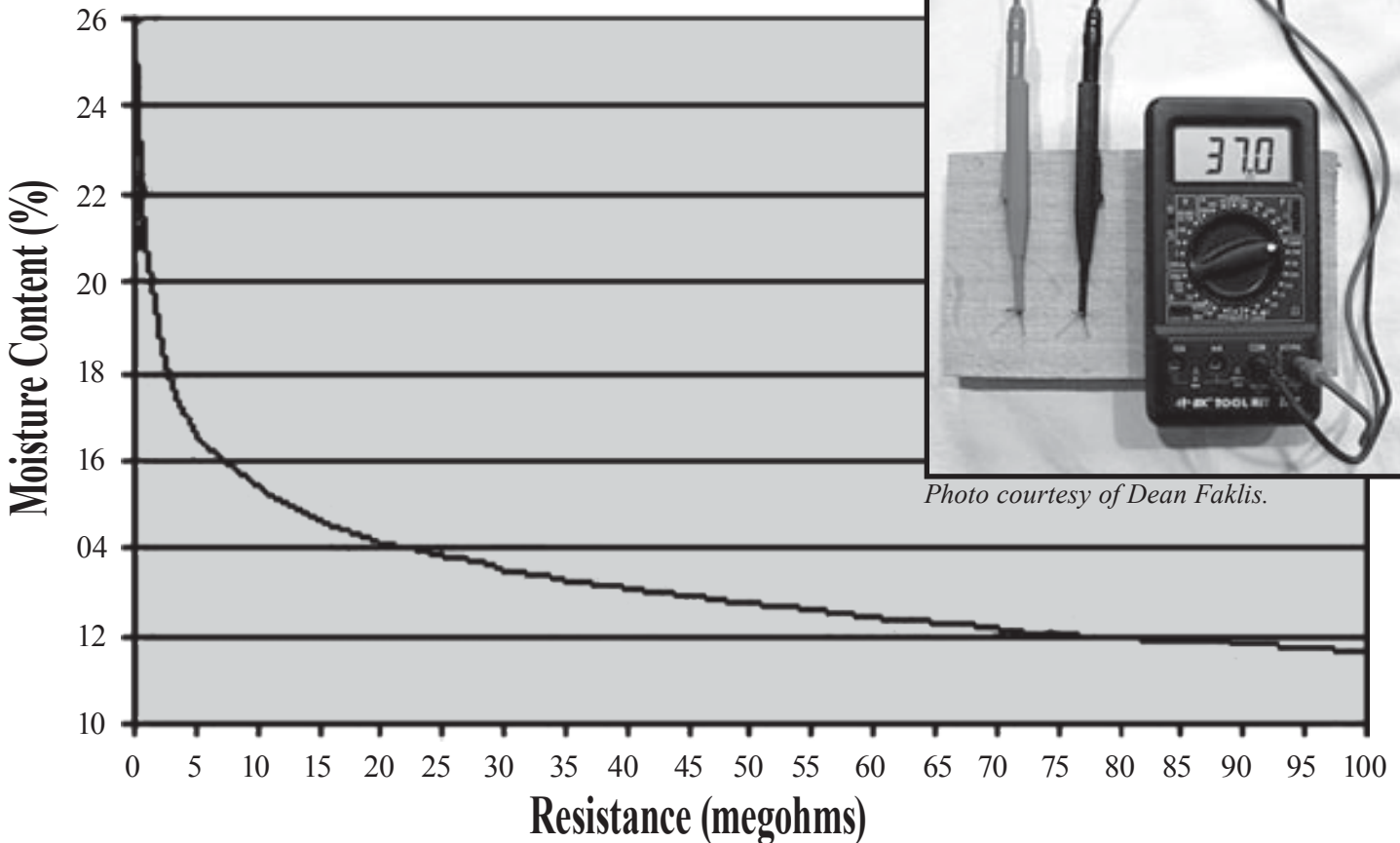


Photo courtesy of Dean Faklis.

Sugar Bush Hollow #8

April 10th found over 20 WFL members and friends once again enjoying Sugar Bush Hollow. Pancakes and syrup were popular, as always, but so was the wild flower walk and sampling fresh leeks right out of the ground. As we walked the wooded path owner Chuck Winship pointed out how a west facing beech tree monoculture morphed into a sugar maple grove as we rounded to the south side of the hill.

Jo Beth Bellanca from the US Department of Agriculture shared aspects of the Natural Resources Conservation Service (NCRS) program and the Environmental Quality Incentive Program (EQIP). Steve Harris of Root Production Method Ecosystems shared how his company has developed a technique to enhance root mass in seedlings.

There's a table in the sugar house made from sugar maple boards that show the staining which results from tapping a maple tree. It's interesting that loggers will often say such a log is defective and therefore less valuable but in board form it's considered specialty wood. As such it can sell for twice that of a normal sugar maple board.

NYS is a net importer of maple syrup. We consume more syrup than is produced even though NYS produces 4% of maple syrup world wide. It appears spring 2010 was not a good season. Chuck made 2/3 of last year's record crop and about 1/2 of what he hoped for. Those without vacuum systems were particularly hard hit.

Any sap left in the plastic collection tubing soon has yeast and bacteria growing in it. With changes in air pressure this contaminated sap can reenter the tree triggering a response that begins sealing off the wound (tap hole) thus reducing sap flow.

Chuck switched to a new spile this spring that has a check valve which allows sap out of the tree and prevents it from reentering. An even newer technology has spiles that contain silver. Apparently silver kills yeast and bacteria.

Dick Starr

Fighting the Green Menace

Continued from cover.

states Imidacloprid kills EAB and university studies tend to confirm this (see article at end of previous paragraph).

Bayer Advanced Tree and Shrub Insect Control contains Imidacloprid and is packaged for homeowner use. I found it at Lowes in liquid concentrate and ready to use granules. The liquid concentrate states it kills EAB but the granules do not make that claim. The concentrate contains 1.47% Imidacloprid while the granules are 1.1%. Grubex, for comparison, is 0.2%.

Like many chemicals Imidacloprid has side affects. It's a registered chemical in NYS and only professionals can handle certain concentrations. It is persistent and can migrate into waterways, including wells for drinking water. It's toxic to aquatic invertebrates, may be linked to colony collapse disorder and is harmful to some beneficial insects. Some countries ban it altogether.

Annual applications are required near the base of a tree at 1 ounce per inch of circumference. Two trees of 25 inch diameter at breast height would use up a 5 quart \$70 container of concentrate. But what value is placed on a nice ash tree? Using Imidacloprid might be an option worth consideration for a favorite yard tree but probably not for general treatment of woodlands.

New York's battle with the borer has just begun. We can hope the woodpeckers and parasitic insects get them under control before the trees are gone. In the meantime Imidacloprid provides some hope for potentially saving a favorite yard tree. DEC's hotline for EAB is 866-640-0652.

Dick Starr



March 24th, 2010 General Meeting

Our March 24th, 2010 general meeting was held at the Cornell Cooperative Extension Building in Rochester.

Our featured speaker was Ron Walker of Friends with Feathers, Limited. Ron has an extensive wildlife education background. He taught high school biology for 30 years and has been a scout leader and nature interpreter for more than 25 years, helping students of all ages to understand their natural environment. He was instrumental in the development of Tinker Nature Park in Henrietta, and a former presenter

at Cummings Nature Center.

Ron brought a Snowy Owl, a Red Shouldered Hawk, and a Barred Owl to the meeting and discussed their natural history and biology.

The Friends with Feathers aviary is home to birds of prey that cannot be released into the wild due to an injury or defect. It was a very interesting evening for all.

Keith Maynard



Ron Walker with his "friends."

Photos courtesy of Eileen Schaefer.



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The Western Finger Lakes Forest Owner is published for members of the Western Finger Lakes Chapter of the New York Forest Owners Association (NYFOA) and is published 4 times per year. NYFOA was founded in 1963 and is organized to encourage the wise management of private woodland resources in New York State by promoting, protecting, representing and serving the interests of woodland owners. The Western Finger Lakes chapter was founded in 1988 and encompasses Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Steuben, Wayne, and Yates counties.

Membership is open to anyone interested in understanding how to manage a woodlot. NYFOA membership can bring returns in the satisfaction of growing quality timber, stabilizing forest industries and markets, providing permanent jobs, increasing the value of your woods, enlarging areas of natural beauty across the state, and leaving behind a monument in living trees to bless the tomorrows for the boys and girls of today. For information on becoming a NYFOA member, contact Liana Gooding, NYFOA Secretary, NYFOA, P.O. Box 541, Lima, NY, 14485 or at 1-800-836-3566. Annual membership is \$30 for individuals and \$35 for families and includes: subscriptions to this newsletter; to the bimonthly NYFOA state-wide publication, *The New York Forest Owner*; attendance at chapter meetings; and at two statewide meetings. Membership at the Contributing level (\$50- \$100) and Supporting level (\$101 & up) are also offered. For more information visit www.nyfoa.org.

Readers are encouraged to submit articles for publication in this newsletter. Articles should be mailed or e-mailed to: Richard Starr at the address to the left. Electronic submissions are preferred. Any letters should be sent to the Chair for consideration.



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Summer 2010

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Upcoming Events in this Issue ~ Mark your Calendar

August 10 - 12th • Empire Farm Days

September 18th • Fiddler's Fair

September 26 - 27th • DEC Hunting/Fishing Days

October 9th • Woodlot Management

November 3rd • Annual Dinner Meeting