

BRANCHING OUT

Maryland's Woodland Stewardship Educator



University of Maryland Extension – Woodland Stewardship Education
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Maryland Birders Flock to Catch a Glimpse of the Snowy Owl

Scott Hommel, Staff Writer
HCC Times (Howard Community College)

“I’ve been working with raptors all my life and this is the largest Snowy Owl irruption I’ve ever seen,” says David Brinker, central regional ecologist for DNR Wildlife and Heritage Service. “The last big irruption I remember was in the 60’s in Wisconsin. Back then there was no e-bird or internet however, so birding records were confined to personal journals.”

The Snowy Owl (*Bubo scandiacus*) typically spends its winters in the Arctic hunting lemmings in the frozen tundra. However, just as this past holiday season was getting underway and the term “polar vortex” was being introduced into our vocabulary, excitement amongst Maryland bird-watchers began to build as a mass winter migration of Snowy Owls was making its way across the Free State.

This “irruption” of Snowy Owls, as it is called by ornithologists, descended from northern Canada and Greenland down into the northeastern United States. Besides being spotted in Maryland, other states such as New York and New England have seen a flurry of activity, with extremely rare sightings being reported as far south as Jacksonville, Florida. So what causes this irregular winter migration or “irruption” of Snowy Owls?

The primary reason for the irruption is neither below- average temperatures nor a low food supply in the Arctic as some



Photo Credit: Joe Hanfman

have suggested. “I have heard the shortage of lemmings theory,” says Joe Hanfman of the Howard County Bird Club, “but I think the real reason for the irruption is that the owls had a very good breeding season up north. This forces the juvenile owls to travel farther in search for food.”

“So far this winter I have seen reports of Snowy Owls in fourteen of Maryland’s twenty three counties, personally spotting them in nine of those counties,” adds Hanfman, who is an active contributor to the Maryland Biodiversity Project.

“Carroll and Somerset counties have now recorded their first ever Snowy Owls, but we are still hoping for one to show up in Howard County this year. The only records of Snowy Owls in Howard County date back to 1947, 1960, and an unconfirmed sighting in 1985.”

These Arctic birds of prey have been spotted near the Bay Bridge, Assateague State Park, and at BWI airport. Snowy Owls flock to airports because the flat runways resemble the Arctic tundra they are accustomed to. Assateague State Park Ranger Me-

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ghan Sochowski credits Assateague's ideal habitat and abundance of prey, such as rabbits and waterfowl, to the recent influx of Snowy Owls.

Ranger Sochowski concurs with Joe Hanfman's irruption theory stating that "the lemming population was very high during the summer of 2013 in northern Quebec. Breeding was so successful and there was such a great population of Snowy Owls, which is why we are seeing so many juvenile owls in search for food. This is by far the largest irruption I've seen here at Assateague State Park."

"The myth has been that the owls have been starving to death in the Arctic, and that's just not the case," elaborates David Brinker. "As a bird-bander you realize when you put your hands on these owls that their weight is normal and they are very healthy birds, not emaciated at all.

They are territorial owls and if you have a lot of birds in one region, eventually some will have to migrate elsewhere to find food. The juveniles cannot compete with the adults so they cross the boreal forest, arriving down in southern Canada and the States in search of food."

While birders are encouraged to embrace the rare opportunity to marvel at the Snowy Owl's beauty, Ranger Sochowski recommends proceeding with caution. "You want to give the owls at least 100 feet of space, as they are not accustomed to human interaction. Their talons are quite sharp, and flying away from humans expends extra energy which certainly does little to benefit the owls."

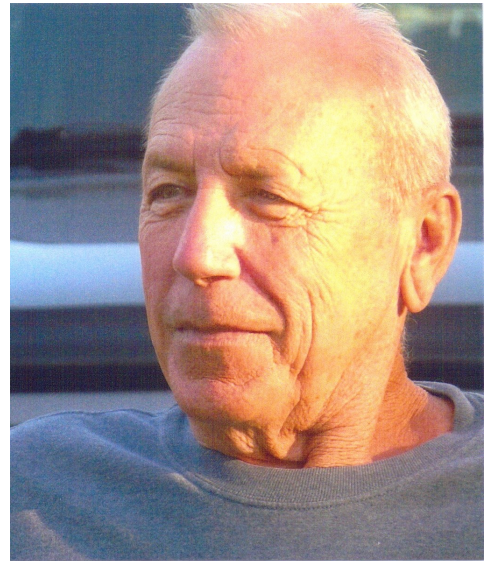
As more and more sightings are being confirmed around Maryland, and even in downtown D.C, local birders continue to flock to these hotspots in hopes of catching a glimpse of these mysterious owls. For more information on the irruption of Snowy Owls and to help fund ongoing research, bird enthusiasts are encouraged to visit www.projectsnowstorm.org, where ornithologist David Brinker and his colleagues track Snowy Owls to learn more about their winter migration habits.

In Memory:

Charles W. "Sonny" Newhall, Jr.

Sonny Newhall passed away on November 25, 2013 at the age of 78. He was a special friend of the University of Maryland Extension Woodland Stewardship Education program and forestry in general. Sonny moved to the family farm in Garrett County after retiring as a firefighter for Kensington, MD. He served on the Garrett County Forest Board and the Maryland Acres for Wildlife Cooperative. In 1987, he was honored as Outstanding Tree Farmer for Garrett County, the state of Maryland, and the Mid-Atlantic

region. With his passing he left behind his wife of fifty-years and five children, but he also left a legacy of activism for forest and wildlife management education that lives on to this day in the Maryland Woodland Stewards Program (formerly known as the Coverts Project).



In late 1988, this young extension forester was called to a meeting at Sonny's home along with representatives of the Ruffed Grouse Society (RGS), and was asked to accept funding from RGS to start the Maryland Coverts Project, similar to a program in two other states. A covert (pronounced cov-ert) is an old English word meaning a thicket for wildlife. The Coverts project grew into today's Maryland Woodland Stewards; it remains a volunteer program that teaches woodland owners and manager's sound forest management practices that result in better overall forest health and more abundant and diverse wildlife. Each year about 25 woodland owners and other interested individuals attend a 3.5 day volunteer training and in return agree to develop a forest stewardship plan for their property and share what they learn with others in variety of ways. (Learn more about Maryland Woodland Stewards at <http://extension.umd.edu/woodland/maryland-woodland-stewards>; read more about the programs' first twenty years at <http://extension.umd.edu/sites/default/files/docs/programs/woodland-steward/MWS20Years.pdf>.)

Sonny's legacy is real! Since 1990, 456 people representing over 70,000 acres have graduated from the Maryland Woodland Stewards program. Sonny was also involved with advancing legislation that benefited woodland owners. He was responsible for initiating the blue paint law that allows private landowners to mark boundaries with blue paint strips that have the same meaning as no trespassing signs. It is true that one person can make a difference and Sonny's life was proof of that old saying. He will be missed.

Jonathan Kays, Natural Resource Extension Specialist, UME

Students Establish a Native Plant Demonstration Site at Bear Branch

Carolyn Puckett, MWS 2012 & Carroll Co. Forestry Board

On Saturday, October 5, 2013, a group of students helped volunteers from the Carroll County Weed Warriors plant hundreds of native plants along the vista trail at the Bear Branch Nature Center/Hashawha Environmental Center. Parents, along with adults from the Carroll County Forest Conservancy District Board and a group of Carroll County Master Gardeners, were there to give advice and help. But the more than 70 youths, who had participated in the Center's Outdoor School in 2012, were the real stars of the event. Over 100 volunteers spent two hours dividing up clumps of plants, digging holes, and backfilling dirt over the native plants. The students also had to haul many buckets of water from the pond, over and over again, to water in the plants.

Peter Childs, one of the student helpers at the event, said he attributed the success of the event to teamwork. "I really think you ought to emphasize how everyone worked together to get the plants in the ground and watered," he suggested. Certainly, everyone really worked. Because of the lack of rain in the weeks leading up to the event, the ground was very hard, and getting a shovel in the ground took considerable effort. Another student remarked, "I thought we were all through when we finished planting, but then we spent additional time cleaning up."

As the coordinator for the Carroll County Weed Warrior program, I believe a lot of credit for the big turnout should go to Carly Miller, who works with the outdoor school and sent the event information out to those families. I was afraid it would be chaos with such a large group, but it went extraordinarily well. I am absolutely thrilled with the results. Credit also should go to the Master Gardeners who spent several hours on Friday, October 4, digging hundreds of native plants from Carolyn's woodland garden so they could be moved to the nature center. Dave Flora, Peter Whitford, Donna Davis, and Connie Hoge also contributed plants and seed. Over 28 kinds of shade-loving flowers and ferns were transplanted, all native to the Maryland piedmont area.

The Carroll County Weed Warriors, a group of adult and student volunteers, worked all spring and summer removing invasive exotic plants from the area around the pond on the Bear Branch vista trail. Connie Hoge, chair of the

Carroll County Forest Conservancy District Board, explained, "Some exotic plants become invasive, spreading rapidly by producing hundreds of seeds, sending out runners, or even changing the soil chemistry. Because these invasive exotics have few native predators to keep their numbers in check, they take over an area, out-competing the native plants. When the native plants disappear, so do the native animals that depend on them. While butterflies can eat nectar from many plants, their caterpillars often can only digest the leaves of specific native plants. If the caterpillars starve, we have no butterflies. We also lose the birds that feed the caterpillars to their nestlings." The kinds of invasive plants the Weed Warriors removed included multiflora rose, oriental bittersweet, and stilt grass.



The Bear Branch area, now planted with native flowers and ferns, will become a native plant restoration demonstration site. In Spring 2014, the Master Gardeners and Forestry Board members will install signs explaining the problems that invasive exotic plants cause and identifying the native plants that were planted to replace the exotic plants removed earlier. Darla Tewell, one of the Weed Warriors, exclaimed, "It should be absolutely beautiful next year when the plants bloom."

The Carroll County Forest Conservancy District Board established the Weed Warriors in 2010. The Carroll County Master Gardeners and the Catocin

group of the Maryland Chapter of the Sierra Club also provide support to the Weed Warriors. Several times each year, the Weed Warriors hold classes in identifying and removing invasive exotic weeds. The training consists of a one-hour online course followed by a two-hour field training class at one of the nature centers. To get on the notification list for upcoming classes, one need just send an email to ccforestryboard@gmail.com.

The Weed Warriors normally hold weeding sessions at Bear Branch Nature Center/ Hashawha Environmental Center on the third Saturday of each month. Weeding sessions at Piney Run Nature Center are more ad hoc. The Weed Warriors also help out at Charlotte's Quest Nature Center, the Aubrey Carroll Audubon Sanctuary, and the Westminster Road Community Trail occasionally. Students receive volunteer service hours for the training and weeding sessions.

How I found “Re-Leaf” as a University of Maryland Extension Maryland Woodland Steward

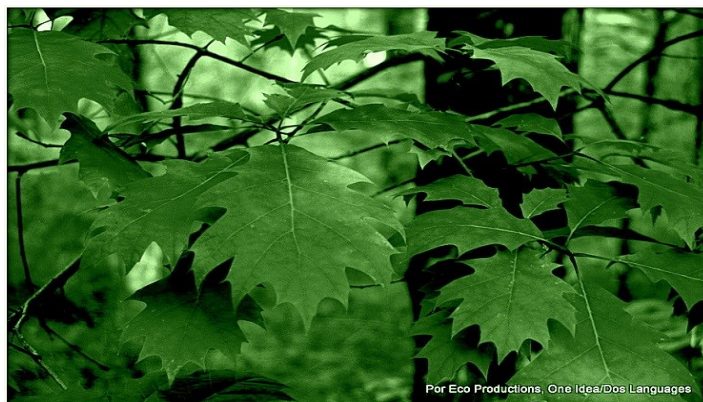
Cheryle Franceschi, MWS 2013

In March 2013, while searching on the internet for forestry and wildlife educational programs, I came across the listing for the University of Maryland Extension’s Maryland Woodland Stewards workshop. At last, I found an opportunity for me to walk in the boots of a forester. The path was just ahead, and the connecting trail was essential for working on my documentary about Maryland’s first State Forester, “Mr. Besley’s Forest.” Those three days at Shepherd’s Spring in Sharpsburg brought me a new sense of “re-leaf” for getting the story right.

The Maryland Woodland Stewards’ motto of “Neighbor Helping Neighbor” truly extends to every landowner within the Old Line State. From the less than an acre landowner like me, to the individual with hundreds of acres of woods, the principles of sustainable land management are the same. The average woodlot owner in Maryland has just under 10 acres. By contacting a professional forester, folks can learn about writing a forestry stewardship plan. The plan takes an inventory of the woodlot and the objectives for managing the natural resources. Some of the forest management principals started by Mr. Besley were thriving on the tree farm and conservation demonstration site my class visited in Hagerstown: an up-close-and-personal account of Mr. Besley’s teachings. While on the property, the tree farmers showed everyone examples of hardwood tree-seedling plantings that provided fields for wildlife habitat, and enhancement of stream buffers which resulted in healthier water quality for forest land within the Chesapeake Bay watershed.

Meanwhile, back in the lecture hall, my classmates and I were asked to develop an Outreach Action Plan to help inform the citizens of Carroll County about incentive plans, habitat restoration and forest conservation planning. Since all of us were from central Maryland, we decided to call ourselves the *Central Branch*. During our volunteer time spent at the 2013 Carroll County 4-H & FFA Fair, I gained a deeper understanding of what a forester needs to do, and the ways to implement on the ground practices.

At this point, the additional research for my film was rooted. The message of woodland stewardship crooked and prompted me to contact the Department of Natural Resources Forest Service. The 2013 Maryland State Fair was around the corner, and I was fortunate enough to get a booth for my group at the Department of Natural Resources tent; which is actually a building. I was branching



out to a larger community. Children stopped by to discover their State Tree is the white oak (*Quercus alba*). The white oak tree was the inspiration of Mr. Besley’s Big Tree Program. He was the first to officially recognize the value of big trees. Now, in the U.S., all 50 states have a National Tree Program, thanks in part to Mr. Besley and his forest. The back story for my documentary was spreading a canopy of its own.

Today, I have incorporated the lessons and observations from the MWS Experience into my own life. Thank you UMD Extension for allowing me to provide more solutions in my community.

MET’s Land Conservation Conference

The Maryland Environmental Trust (MET)’s 14th annual Land Conservation Conference will be held at the Claggett Center in Adamstown on April 3-4, 2014. The Maryland Land Conservation Conference is geared toward members within the land conservation community, including land trust staff and board members, watershed associations, planners and elected officials. This event is the only statewide land conference and training workshop of its kind in Maryland. The annual seminar provides a variety of educational workshops for volunteers, staff and board members of land trusts, and conservation organizations.

For information on the conference, sponsorship opportunities or to exhibit, please contact MET’s Land Trust Assistance Coordinator, Michelle Grafton at mgrafton@dnr.state.md.us or 410-533-4627.

MET currently holds 1050 easements totaling over 129,000 acres in Maryland. Governed by a citizen board of trustees, MET is affiliated with the Maryland Department of Natural Resources and promotes the permanent protection of land through its Conservation Easement, Stewardship and Land Trust Assistance Programs. For more information, visit the website dnr.maryland.gov/met.

Forest Tax Update for 2013

Dr. Bob Tjaden, Extension Specialist, University of Maryland Dept. of Environmental Science & Technology

Filing your federal and state income taxes can be an overwhelming task this time of the year. Especially figuring out what to do with taxes related to your forest lands. You may have planted trees, had a timber sale or developed a new forest stewardship plan. Knowing how to handle and report these expenses and income can save you much money, but you have to do your homework.

First of all, there are some valuable references available to you. The University of Maryland Extension has an excellent publication titled "Forest Management Account Book," also referred to as EB-360. (You can obtain a free copy online at www.enst.umd.edu/people/faculty/bob-tjaden/eb-360, by calling 410-310-4690, or sending an email to Bob Tjaden at rtjaden@umd.edu) It explains some of the basic items you need to think about when reporting either forest management expenses or income from timber sales. There are many examples given to help guide you through your forest management expenses and income reporting. It also serves as a tree farm journal for you to keep track of valuable records, expense and income. This publication also explains the State of Maryland's reforestation and timber stand improvement tax deduction. You can obtain a free copy of this publication

Other excellent resources are the "USDA Federal Income Tax on Timber: A Quick Guide for Woodland Owners" and "Tax Tips for Forest Landowners for the 2013 Tax Year."

Both can be found for free at www.timbertax.org. Also on this site is the newly revised Federal Form T for you to report your 2013 timber sales as well as information on estate planning and webinars focused on timber taxes.

Since space is limited for this article and taxes related to forestry as so specific to individuals, I will not go into much detail, but to me the single most important thing you can do is establish your "basis." The first thing you need to do is keep good and accurate records. These records will help you establish a basis. If you purchased your forestland, you paid a single price for the land, the timber, and any associated buildings and equipment. In addition, you probably had additional acquisition costs, or real estate or timber appraisal costs such as lawyers' fees, title fees, survey costs, or real estate or timber appraisals costs. These costs plus the purchase price make up the total acquisition cost. In order to classify these costs properly as capital assets, you must establish a separate value for the land, the timber, and other real assets such as buildings. This value at the time of acquisition is called the original basis.

The basis is the single most important figure for you to have in your records, because when you sell your timber you are only taxed on the amount of money you made above your basis. This could save you hundreds or even thousands of dollars, so take the time to establish the basis!

EPA Proposes Regulations for New Wood Stoves

In January 2014, the Environmental Protection Agency (EPA) proposed new rules that would reduce gas and particulate emissions from residential wood stoves and other wood-fired heaters built in 2015 or later. The new proposals have been in development since 2011 and are part of an effort to reduce pollutants that can present a significant health hazard in parts of the country. The rules would go into effect in 2015 and become more strict after five years, although the EPA is considering phasing them in over eight years instead.

The new guidelines would not apply to wood heaters already in use or to other wood-burning situations, such as residential fireplaces. The new rules would require manufacturers of wood stoves, wood pellet stoves, forced-air wood furnaces, wood boilers, fireplace inserts and masonry heaters to develop and build appliances that burn 80% more cleanly than current models.

According to the U.S. Energy Administration, about 11.5 million U.S. homes use wood for heat. The EPA estimates

that approximately 12 million wood stoves are in use in the U.S.; perhaps as many as 9 million of these are older, less-efficient models. As reported in the last issue of *Branching Out*, the use of wood for residential heating has increased 33% over the last ten years. In Maryland, some counties have seen much greater gains, such as in Calvert and Anne Arundel counties, due to limited access to lower-cost natural gas for heating. This nationwide trend leads the EPA to estimate that 85,695 wood stoves will be manufactured and sold in 2015.

These new regulations are the first overhaul in performance standards for these wood-burning devices since the original rules were issued in 1988, and are the first to include wood-pellet stoves and outdoor wood boilers. Neither was addressed in the original regulations. The new directives come on the heels of a federal lawsuit brought by seven states. It sought to obtain a federal court order that would force the EPA to review and update emissions limits for outdoor wood boilers and indoor wood stoves.

The coalition of states includes Maryland, Rhode Island, Vermont, Massachusetts, Connecticut, New York and Oregon.

Fine particulate emissions, known as PM 2.5, are a nationwide health issue. One EPA study estimated that 13 percent of all soot pollution in the United States is due to wood-burning devices. An EPA senior advisor, Alison Davis, said particulate emissions have been linked to heart attacks and strokes, and can aggravate asthma. She noted that a number of studies have linked these emissions to premature death among people who suffer from heart and lung disease.

Additionally, wood smoke pollutants, including carbon monoxide and other organic compounds, can contribute to smog. Some communities where wood is commonly used for heat occasionally issue “no-burn” alerts when the concentration of particles in the air becomes too high. For example, in the week before the new guidelines were announced, the National Weather Service issued Air Quality Alerts for the Fairbanks, Alaska region due to fine particulate pollution. In December 2013, Utah temporarily banned the use of wood-burning stoves in five counties due to unhealthy air conditions.

Under current EPA regulations, a non-catalytic wood stove is compliant if it produces less than 7.5 grams of PM 2.5 per hour. The new regulations would reduce that to 4.5 grams per hour for all stoves manufactured after the new

guidelines go into place, with a target of 1.3 grams per hour by 2019.

Currently, only a few stoves on the EPA’s certified stove list would meet the 2019 standards. Yet some manufacturers feel they are too restrictive. Reg Kelly, the founder of woodstove manufacturer Earth Outdoor Furnaces of Mountain Grove, Missouri, claimed in testimony before the Missouri legislature, “There’s not a stove in the United States that can pass the test right now—this is the death knoll [sic] of any wood burning.” More than three dozen Missouri legislators have co-sponsored a bill that would protest the new EPA guidelines.

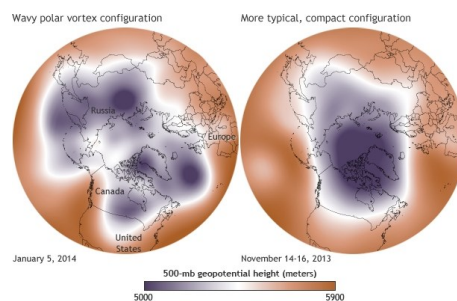
Legislators and regulators in other states would disagree. For example, Washington and New York already have regulations in place that are stricter than the new proposals. Alaska is considering regulations that set the PM 2.5 levels to 2.5 grams per hour.

Regardless of whatever levels are set, it is important to ensure that the wood you choose to use in your wood-burning appliance is properly seasoned. Consult our Publications Library’s “Wood Energy” section at <http://extension.umd.edu/woodland/your-woodland/publications-library-wood-energyrenewable-sources> for a variety of helpful publications, including “Heating with Wood,” “Buying A Clean-Burning Wood Stove,” and “Buying & Storing Firewood & Pellets.”

The “Polar Vortex” May Have Done Some Good After All

The cold and snowy weather in Maryland and in the Eastern U. S., attributed in part to the weather pattern called the “polar vortex,” may have helped with a particular bane of woodlands and woodland property owners. According to Lisa W. Foderaro in the *New York Times*, many insect experts were cheering the arctic temperatures. Foderaro wrote that “the extreme cold has the potential to beat back some of the invasive insects threatening treasured local tree and plant species.”

For example, the lethal temperature for the hemlock woolly adelgid is minus 4 or 5 degrees Fahrenheit, so entomologists such as Richard S. Cowles of the Connecticut Agricultural Experiment Station was cheering the polar vortex in January. “I was cheering ... because most of the adelgids will be dying from the temperatures we saw.” In an interview for NPR’s *Science Friday* program, Rob Venette, a research scientist with the USDA Forest Service in St. Paul Minnesota, noted that gypsy moth egg masses begin to suffer mortality at around minus 17 F.



On the other hand, the emerald ash borer needs even colder temperatures for mortality. Studies suggest that temperatures have to reach minus 20 to 30 F. to have an effect, but Venette notes that “2 to 3 seconds” of these temperatures is enough to inflict mortality. While foresters and scientists in Midwest states such as Minnesota and Michigan experienced similar temperatures this winter and hoped for an EAB die-off, few areas in the Eastern U.S. where EAB exists were subjected to similar temperatures.

Venette noted that one of the things that made the polar vortex so “miserable” for humans was the wind chill that accompanied it. “Wind chill is not something that generally affects insects” because they are cold-blooded.

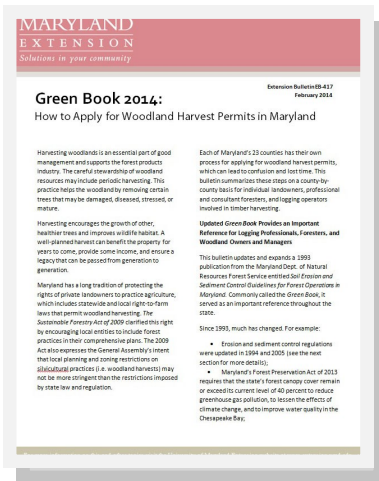
Read the full story at <http://www.nytimes.com/2014/01/09/nyregion/experts-cheer-the-deep-freeze-as-a-killer-of-invasive-insects.html>. The *Science Friday* program is available at <http://www.sciencefriday.com/segment/01/10/2014/cold-snap-knocks-out-some-invasive-insects.html>.

Update of the “Green Book”

In the 1990s, the Maryland Department of Natural Resources Forest Service issued a compendium of regulations and guidelines for obtaining timber harvest permits on private property. The guide examined the policies and practices in each of the state’s 23 counties, and it quickly became a valuable resource for landowners, consultants, and timber harvesters across the state.

Since that time, much has changed. For example, sediment and erosion practices and regulations have been updated, and there is an increased awareness of maintaining woodland health and watershed protection. Consequently, the Woodland Stewardship Education program has updated the “Green Book” to take into account new statewide and local regulations and practices.

The new publication has been issued as University of Maryland Extension Bulletin EB-417, *Green Book 2014: How to Apply for Woodland Harvest Permits in Maryland*. The bulletin is now available in the “Managing Your Property” section of the Publications Library at <http://extension.umd.edu/woodland/your-woodland/publications-library-managing-your-property>.



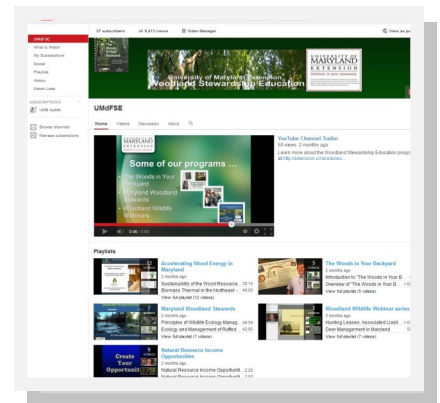
WSE’s YouTube Channel

Resources for Woodland Owners and Managers

YouTube has a feature called “channels” that allows frequent contributors to collect their submissions in one place. Channels make it easier for both uploaders and followers to find both old and new submissions. Visitors to the site can subscribe to any number of channels to suit their tastes, and will be notified when the channel has new content to view.

The Woodland Stewardship Education program’s channel, called “UMdFSE,” now contains over forty videos in five playlists:

- “Woodland Wildlife Webinar” contains videos from the 2013 presentations.
- “Accelerating Wood Energy in Maryland” includes recordings from the 2012 conference in Annapolis.
- “Maryland Woodland Stewards” contains selected recordings from the 2013 training sessions.
- “The Woods in Your Backyard” documents a presentation of the program.
- “Natural Resources Income Opportunities” includes a number of business ideas, including the popular topic, shiitake mushrooms.



The channel is available by visiting <http://www.youtube.com/channel/UC2Lyn1NQzg6f17zAIQJTBKQ> or by going to YouTube and searching for “UMdFSE.”

Back issues of *Branching Out* online

When the Woodland Stewardship Education program debuted its new website under the University of Maryland Extension umbrella last year, we began posting older issues of *Branching Out* to the new website. That process is now complete; digital versions of the newsletter from 1993 to 2013 are now available. You can catch up on older issues or re-visit favorite articles by going [here](#).

You can also subscribe to the newsletter through the website. Go to <http://extension.umd.edu/woodland> and click the “Subscribe here” link.

The Lure of Ginseng

Habitat loss and over-hunting around the world put a variety of animal species at risk of extinction. They also threaten plant species. Maryland is home to more than 500 plants that are protected by the state; of these, ten are considered federally threatened or endangered. At this time, American ginseng is not on either state or federal lists. However, current market pressures and habitat loss have led several states to list ginseng as a plant of “special concern,” “threatened,” or “endangered.” Tennessee lists it as “commercially exploited, and Pennsylvania and New York consider it “vulnerable.”

American ginseng is a long-lived perennial that grows in woodlands throughout the mountain regions of the Eastern United States and Canada. The cause for concern stems in large part to the plant’s commercial appeal. Dried ginseng roots are particularly prized in China and Korea, where they are used in herbal medicine. Many different Native American tribes use it for similar purposes. But Asian countries provide the largest market for export, purchasing more than 30 tons of wild American ginseng per year.

Because wild ginseng can fetch up to \$1,000 a pound, it is at risk of being over-harvested. According to the Maryland

Dept. of Agriculture, exports of ginseng from the state are worth roughly \$550,000 annually. To ensure that the plant is responsibly harvested, Maryland established the Ginseng Management Program in 1978. The program licenses both ginseng collectors and dealers, and in conjunction with the state Dept. of Natural Resources, helps provide training for its conscientious stewardship through training, information and support.



American ginseng. Photo © Thomas G. Barnes @ USDA-NRCS PLANTS Database / Barnes, T.G., and S.W. Francis. 2004. *Wildflowers and ferns of Kentucky*. University Press of Kentucky.

However, the responsible management of ginseng is challenged by the popularity of a reality television show called “Appalachian Outlaws,” which portrays ginseng hunters who harvest it illegally both out of season and on private property. According to the Maryland Dept. of Agriculture, “Such portrayals not only do a disservice to the honest people who have made the stewardship of ginseng and other native medicinal plants an important part of their lives, it also undermines the long-time efforts made by many state and federal agencies and individuals towards conservation of a relatively rare and important native plant species.”

To learn more about the Maryland Ginseng Management Program, go to http://mda.maryland.gov/plants-pests/Pages/ginseng_mgmt_program.aspx.

New Market Opportunity for Wood

A woodland owner who sells forest products typically has the option of selling wood as saw timber or veneer that goes into dimensional lumber, which brings the best price. However, there is always a lot of low-grade material that is typically harder to market; while its removal would allow remaining trees to grow at a faster rate and enhance wildlife habitat, this wood is sold as pulpwood or firewood, for a low price. For Maryland woodland owners, there will be a new option.

A recent change in air emission regulations has opened up another market for low-grade wood for Maryland woodland owners: the sale of low-grade wood as wood chips, which is used to fuel commercial boilers instead of traditional fossil fuels. Most northeast states have developed a wood biomass industry to supply schools, hospitals, greenhouse companies, and other small- to medium-sized institutions and businesses. Maryland is now catching up.

The EPA and Maryland Department of Environment have regulations for boilers over 10 million Btu/hr., but they are in the process of adopted proposed amendments to COMAR

26.11.09 which sets a high standard of air quality for biomass energy systems ranging in size from 350,000 Btu/hr. to 10 million Btu/hr. Such boilers are currently prohibited, but the new regulations, which are expected to take effect by May, will permit this clean-burning biomass technology. In the more rural areas of the state, they cannot emit more than 0.23 lbs. of particulates per million Btu; in the urban non-attainment zones, they must meet an even stricter emission standard of 0.1 lbs. of particulates per million Btu.

The biomass commercial boiler technology is computer-controlled and clean; no smoke can be seen leaving the smokestack of a facility. Do not confuse this technology with outdoor wood boilers seen on farms and residential homes.

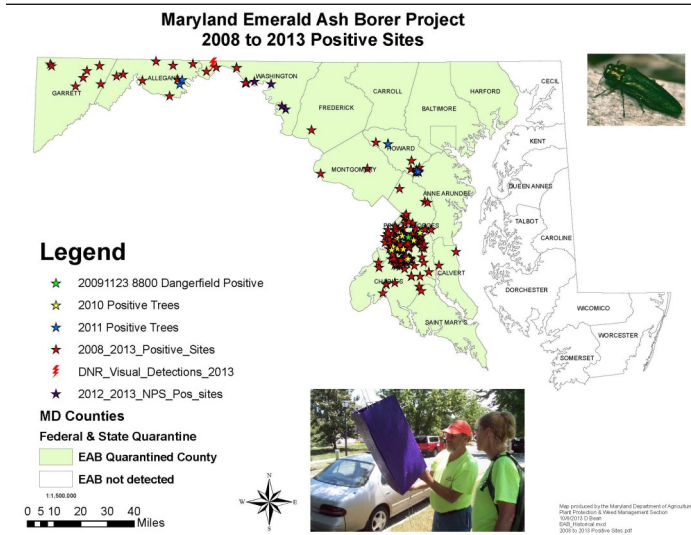
It will take a while for projects to develop, but as the biomass industry develops in Maryland, hopefully it will provide another income opportunity for woodland owners. More details on the regulation are available at <http://www.dsd.state.md.us/MDRegister/4102/Assembled.htm>.

Emerald Ash Borer Update

Kimberly A. Rice

Entomologist - State Survey Coordinator
Plant Protection & Weed Management,
Maryland Department of Agriculture

Emerald Ash Borer has been in Maryland since 2003. After an initial eradication was attempted, the beetle was found again in 2006. With assistance from the USDA's Animal and Plant Health Inspection Service Plant Protection and Quarantine (APHIS PPQ) program, an additional eradication was undertaken, but unfortunately was not successful. The Maryland Department of Agriculture (MDA) then



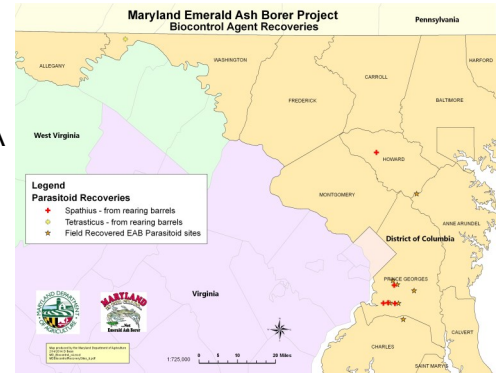
turned to an extensive survey to determine the spread of EAB. With the help of this statewide survey, MDA has found EAB in eleven counties west of the Chesapeake Bay: Allegany, Anne Arundel, Calvert, Charles, Frederick, Garrett, Howard, Montgomery, Prince George's, St. Mary's and Washington. Presently, Maryland's Eastern Shore is not infested with EAB, but surveying continues in this region and in the other counties that are still negative for the beetle. In 2013 MDA had 347 EAB traps throughout the state. The majority of these traps were located on the Eastern Shore. The trapping survey in 2013 added two new positive counties: Frederick and Calvert. The 2014 trapping season will begin in late April and will include all of Maryland's Eastern Shore as well as Baltimore, Carroll and Harford counties and Baltimore City.

Because of the large number of infested counties in Maryland, MDA has issued a quarantine. This state quarantine limits the movement of the following articles from regulated areas into non-regulated areas: ALL HARDWOOD FIREWOOD; wood containing emerald ash borer, all stages; ash nursery stock; ash wood bark, including logs, limbs, branches and roots; and un-composted ash chips larger than one inch in two dimensions. In Maryland, all counties

west of the Chesapeake Bay and the Susquehanna River are under the state quarantine. There is also a federal quarantine issued by USDA APHIS PPQ which can be found on the USDA emerald ash borer website, http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/downloads/eab_quarantine_map.pdf.

MDA also participates in parasitoid releases for the EAB. These parasitoids are supplied by USDA APHIS PPQ. The three parasitoids that we release are *Oobius agrili* (egg parasitoid), *Spathius agrili* (larval parasitoid) and *Tetrastichus planipennis* (larval parasitoid). Releases began in 2009 and have continued every year since. A total of 212,373 parasitoids have been released at 34 locations throughout the state. MDA has recovered all three parasitoids, confirming their ability to overwinter and survive.

These parasitoids kill either the egg or larval stage of the emerald ash borer and although we do not think it will eradicate this pest, the hope is that it will help in reducing emerald ash borer's populations so that ash trees will continue to be a part of Maryland's environment.



EAB Committee Notes

On February 4, 2014, the Maryland Interagency Emerald Ash Borer Committee met in Annapolis to review the current state of EAB in the state, to assess current response to the situation, and to consider future courses of action.

The committee heard the results of baseline ash tree surveys in several communities and along the C&O Canal National Historical Park. Participants also discussed the need for surveys in communities that are considered on the leading edge of the insect's spread. These include: Frederick, Oakland, Hagerstown, Westminster, Frostburg, Rockville, Columbia, and Baltimore City.

Some of these communities have inventories that already exist; others have inventories that need updating to reflect current conditions.

EAB and Woodland Owner Options

Ash is distributed across Maryland woodlands with major concentrations occurring in central and western portions of the state. White ash is the most dominant species, making up 68 percent of the total. Ash is found on nearly 81,000 acres, or 4 percent, of the state's woodland. However, in native woodlands, ash is rarely the most abundant species, representing less than 25 percent of the tree basal area.

Ash has been a primary species in tree planting efforts across the state and while it is not used in current tree planting projects due to EAB, many landowners have plantations with a high percentage of ash species.

If you are a woodland owner, you should be concerned about the fate of ash trees on your property, but are unsure what action to take to minimize the potential impact. First, there are few realities:

- There is no assurance EAB will be controlled or eradicated.
- Our knowledge about EAB and its management are constantly evolving and expanding.
- It would be a serious error to assume EAB is only a concern if you are near current EAB infestations or in a quarantine area.
- Proactive owners will have greater control in minimizing the long-term impact of EAB over their woodland resources.
- There are a number of considerations when evaluating and selecting the management strategy a woodland. The best management decisions are those made in consultation with a professional forester.

Maryland is fortunate to utilize materials developed from other states that have woodlands already seriously impacted by EAB. The publication, "Management Options for Minimizing Emerald Ash Borer Impact in Ohio Woodlands," provides a guide for woodland owners that evaluates alternative management strategies to address four situations:

1. A tree planting where, if it were not for EAB, ash would be a species in the planting;
2. An existing tree planting (plantation) containing ash, in which the trees are less than 2 inches at dbh (diameter breast height at 4.5 feet from the ground).
3. An existing woodland containing ash in which the dominant trees are less than 12 inches dbh.
4. An existing woodland containing ash in which the dominant trees are greater than 12 inches dbh.

The fact sheet provides easy to use diagrams with alternative management strategies. Each alternative management strategy is described for the two possible outcomes: 1) EAB is allowed to naturally progress across the state and ultimately infests the woodland, and 2) EAB for whatever reason never infests the woodland. The publication is available in the Publications Library at <http://extension.umd.edu/woodland/your-woodland/publications-library-wildlife-and-insect-damage> .

EAB Webinar

The spread of Emerald Ash Borer and Maryland's response to it will be the subject of an interactive webinar this spring presented by the Woodland Stewardship Education program. The webinar will feature data about the insect's spread, tools for homeowners, treatment information, and future strategies. Current participants include Jonathan S. Kays (WSE), Mike Raupp (University of Maryland Dept. of Entomology), Kimberly Rice and Dick Bean (both Maryland Dept. of Agriculture).

More information will be forthcoming; check the Event Calendar at <http://extension.umd.edu/woodland> in April for exact time and date.

"Lawn to Woodland" Partnership

The Maryland Dept. of Natural Resources (DNR) has embarked on a partnership with the National Arbor Day Foundation. The program, called "Lawn to Woodland," is an expansion of the Rural Residential Stewardship initiative, which debuted in Baltimore County in 2005. With the assistance of funding from the U.S. Environmental Protection Agency, the county and interested landowners restored trees to several small properties, thereby helping to improve air, water, and wildlife quality. The goal of the new program is to build upon this initial project by converting large areas of turf to small woodlands across Maryland.

When property owners sign up for the free program, they are contacted by a forester from the Maryland Forest Service to schedule a property assessment. The forester will help locate areas suitable for tree planting, determine appropriate species of trees and shrubs for planting, and coordinate with a contractor who will perform the planting. The contractor fees are covered by the Forest Service.

The Forest Service also pledges follow-up visits to monitor the plantings to determine survival rates and to schedule re-plantings if necessary.

The “Lawn to Woodland” program provides bare-root seedlings of eight particular tree and shrub species that have been produced by the John S. Ayton State Tree Nursery. These species have been selected for their suitability in Maryland’s environment.

Interested property owners can learn more by seeing the brochure at http://www.dnr.maryland.gov/forests/pdfs/50086101_Lawn_to_Woodland_1-10-13.pdf, and sign up through the Arbor Day Foundation’s website at <http://arborday.org/partnerships/maryland/index.cfm#dForm> or by calling at 888-448-7337.

There are both similarities and differences between the new DNR-Arbor Day Foundation partnership and the Woodland Stewardship Education’s “The Woods in Your

Backyard” program. Both programs wish to encourage the conversion of large expanses of lawn to woodlands for the benefit of air, water and habitat quality. Both encourage planting trees and shrubs and working with professionals. However, “The Woods in Your Backyard” helps property owners to appreciate how their land is part of a larger ecosystem, such as understanding that they can work with their neighbors to increase wildlife habitats, stabilize waterways, and develop recreational access. “The Woods in Your Backyard” also promotes developing a long-term view of property management by fostering family participation. Learn more about “The Woods in Your Backyard” by visiting <http://extension.umd.edu/woodland/woods-your-backyard>.

Wildlife and Winter

The value of good winter habitat for wildlife was clarified by this winter’s cold temperatures and heavy snowfall. Large expansive lawns provide little shelter or food for small mammals, birds and other wildlife. However, the pictures below shows a 2-acre wooded area that grew back from a large lawn that was abandoned. The brambles and under-story vegetation provide needed shelter food sources.



The abundant number of tracks and other wildlife signs after a large snowfall are valid testimony of the area’s value to wildlife. The *Woods In Your Backyard* program provides educational materials to help you create needed wildlife habitat on your property.



Events Calendar

For more events and information, go to <http://extension.umd.edu/woodland/events>

April 3-4, 2014

Maryland Land Conservation Conference

Adamstown, MD

The Maryland Environmental Trust (MET)’s 14th annual Land Conservation Conference will be held at the Claggett Center in Adamstown. For more information, see the article on page 4.

April 29, 2014—7-9 p.m.

Understanding Sustainable Forestry

Talbot County Community Center, Easton MD

Learn about how landowners, foresters, and loggers can work to implement sustainable forestry to protect the forest resource for future generations. This is the place to bring your questions about forestry and have them answered. The workshop is free; for more information or to register, call 410-822-1244 or email sdill@umd.edu.

May 3, 2014— 9:30—10:30 a.m.

Alien Invader

Meadowside Nature Center, Rockville MD



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All information, including links to external sources, was accurate and current at the time of publication. Please send any corrections, including updated links to Andrew A. Kling at akling1@umd.edu.

Send news items to Andrew A. Kling at akling1@umd.edu or 301-432-2767 ext. 307.

Help the native plants of the park to thrive. This session will focus on removing garlic mustard. Registration is required for this family-friendly event. For more information, go to the Montgomery County Parks site at <http://www.parkpass.org/Activities/Activities.asp?SCheck=513615019&SDT=41695.4916666667§ionid=261>.

May 14, 2014— 6:30– 9 p.m.

The Woods in Your Backyard

Prince Frederick, MD

Sponsored by the Calvert County Forestry Board. Geared towards small-acreage property owners (10 acres or less). Learn stewardship concepts and how to apply them to your land. Topics include wildlife, recreation and non-traditional forest products. For more information, contact Brian Stupak at 410-535-1303 or via email at bstupak@dnr.state.md.us .

July 20-26, 2014

Natural Resources Careers Camp

Garrett County, MD

Do you know a high school student with an interest in natural resources? If so, encourage them to consider attending the Natural Resources Careers Camp. This conference is presented by the Maryland Association of Forest Conservancy District Boards and the Maryland Forestry Boards Foundation in partnership with Allegany College of Maryland and the Maryland Department of Natural Resources Forest Service. Join field professionals and high school students from across Maryland for seven days of intense instruction at a rustic camp in Garrett County. Students will learn about working in the field of natural resources, educational requirements, employment and career opportunities in forestry, water resources, and other related disciplines from teams of natural resource professionals.

Spaces are limited. For more information, email wcfb@myactv.net.