A common recommendation to woodland owners is to seek the advice of a professional forester to assist with developing a management plan, conducting a timber sale, learn about cost share and other incentive programs, as well as general forestry questions – but who is a forester? What can a forester do for you? What kind of forester do you need? And how do you select one?

In Maryland, foresters are licensed professionals who can provide you a state license number, but requirements for foresters vary by state. West Virginia does have licensing of foresters, but Pennsylvania, Virginia and Delaware do not. This means there are no requirements and anyone can call himself or herself a forester. Landowners must be knowledgeable so they are not misled by someone who claims to be a forestry professional but lacks the credentials. The accompanying box lists state requirements for foresters.

## Types of Foresters

Professional foresters are either public or private. The first forester many Maryland landowners contact is the public or service forester, with the Maryland Department of Natural Resources Forest Service. Service foresters are state employees, located in each county, who can visit your property and provide basic information on your forest and its potential, management alternatives, financial incentive programs, and programs to reduce your property taxes. For a fee, they can write a forest stewardship management plan and provide other services but cannot conduct timber sales. Due to resource limitations they focus their efforts on landowners with 10 acres of more of woodland, or those in special target areas. They can guide you in the right direction and are a great place to start. There is a special directory of foresters for small acreage landowners described later. Extension foresters are public foresters with the University of Maryland Extension (UME) who provide research-based educational assistance through programs accessed at the local UME county office.

### Private Foresters

There are two types of private foresters: consulting and industrial. Consulting foresters are

<table>
<thead>
<tr>
<th>State</th>
<th>Requirements</th>
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<tbody>
<tr>
<td>Maryland</td>
<td>State license requires a bachelor of science degree from an accredited forestry school, 2 years of acceptable forestry experience, and recommendations from five people who verify forestry competency. Eight credits of continuing forestry education every 2 years are required for license maintenance. (<a href="http://www.dllr.state.md.us/license/for/forconted.shtml#req">www.dllr.state.md.us/license/for/forconted.shtml#req</a>)</td>
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<tr>
<td>Delaware</td>
<td>None</td>
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<td>Pennsylvania</td>
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<tr>
<td>West Virginia</td>
<td>Requires a bachelor of science degree from an accredited forestry school and 2 years of acceptable forestry experience, or graduation from an acceptable 2-year forestry program, plus a bachelor’s degree and 4 years of related experience; requirements enacted in 1999. (<a href="http://www.wvlicensingboards.com/foresters/registration.cfm">www.wvlicensingboards.com/foresters/registration.cfm</a>). Note: WV has a separate licensing requirement for forestry technicians.</td>
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- 2013 Logger of the Year
- Wood Stove Decathlon Recap
- Sustainable Wood Energy has Future in Maryland
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- News and Notes
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recommended for most landowners to conduct a timber sale. They are independent, working alone or in small businesses. Because they are contracted and paid by you, they are your agent, representing you and your interests. They are usually compensated through a percentage of timber sale revenues, hourly or on flat rate basis. If you are contemplating a timber sale, hire a consulting forester who will mark the timber, send it out to many buyers for competitive bids, and work with the logger to ensure the job is done correctly. Studies have shown that the fee you pay for a consulting forester easily is recovered in the increased price you receive for the timber.

Consulting foresters also provide information and professional services dealing with all aspects of forest stewardship, not just timber sales. These services include writing stewardship plans, marking boundaries, inventorying timber, designing timber stand improvement, invasive species control, establishing a cost basis, providing tax and estate planning guidance, enhancing wildlife habitat, and planting trees. For states that lack licensing of private foresters, there are national organizations with which foresters can affiliate. Members of the Association of Consulting Foresters (http://www.acf-foresters.org) must fulfill requirements of education, experience, continuing education, and ethics. All foresters who fulfill educational requirements can join the Society of American Foresters (SAF), a national organization of professional foresters. SAF also has a Certified Forester program that ensures a high level of competency (http://www.safnet.org/certifiedforester/index.cfm).

The other type of private forester in Maryland is the industrial forester who represents a sawmill or other forest products industry and has a responsibility to the employer to supply raw wood products. Some forest industry companies provide free management services as part of their own programs and have developed long-term relationships with private woodland owners.

Managing your forest land is a long-term endeavor with legal, financial, environmental, and personal considerations. A list of state, private consulting and industrial foresters is available at the “Find a Forester” page on the Woodland Stewardship Education program’s website (http://extension.umd.edu/woodland/your-woodland/find-forester). The page includes a link to a directory for DNR Forest Service foresters, Maryland consulting foresters and industrial foresters, which is maintained by the Maryland Department of Natural Resources Forest Service. The page also includes a link to a separate directory, developed by the University of Maryland Extension, for owners of 1 to 10 acres of woodland. This directory includes consulting foresters and industrial foresters willing to work with landowners on smaller acreage properties.

Before selecting a private forester:

- Talk with other landowners who have used a private forester. Contact natural resources professionals for their suggestions.
- Select several consulting foresters from the list and talk with them about your woodland stewardship objectives. Ask for references, experiences, and a prior job site to inspect. Determine if the forester is paid per diem, per job, or on a percentage basis, as for a timber sale (typically 10-15 percent). As with most professions, consulting foresters have a variety of expertise and fees.
- Have one or more of the foresters with whom you feel comfortable visit with you on the property. Many, including those from outside your immediate area, will make a brief initial visit at no charge.
- Select a forester who understands and can fulfill your goals, provides a reasonable return on the cost of services, has good references, and has a personality compatible with yours.
- Sign a written contract with the forester regarding the services and fees. Communicate regularly. The forester becomes a partner in the stewardship of your land.

A Third Partner

For forest landowners who have income from timber sales as an objective, the stewardship partnership with a forester expands to include a third party: the logger. Landowners may confuse foresters and loggers. To understand the difference, consider architects and builders. An architect works with a client to design the kind of building the client would like and specify how it should be built. A builder implements the architect's plan. The best architectural plan doesn't work if it's not in the hands of a good builder. Likewise, the best builder cannot construct a good building if the architectural plan is not sound. Foresters are "forest architects," helping landowners realize their goals. Loggers are the "builders" that make the plans a reality. The private forester and the logger work together to help you realize your goals.

Your forest land is a valuable asset. With other assets of comparable value you probably seek advice from a professional. You should do no less for your property. Consult with a professional forester. A forester can provide the information and guidance to make stewardship of your forest a rewarding, enjoyable experience.
2013 Logger of the Year: Eddie Moore & Forest Friendly Logging

The MD/DE Master Logger Steering Committee and the Maryland Forests Association are proud to announce Eddie Moore and Forest Friendly Logging as the 2013 Logger of the Year. Eddie has been an Active Master Logger since 1995 and won the Logger of the Year Award in 1990. Times have changed since then, and so has Forest Friendly Logging.

Eddie worked primarily on tree-length clearcuts for about 40 years, cutting with a chainsaw, skidding with an open cab, and selling much of the product to J.B. Wells Mill. When J.B. Wells closed its doors for good, it was clear to Eddie that he’d have to change his business model or also end up with permanently closed doors. He began to build up his thinning equipment, including a cutter with a bunching head and a small rubber tire skidder. He went from cutting big pine in their prime to thinning in 18-25 year old stands. Many of the tracts he thins now are the same ones that he personally clear cut 25 years ago.

Eddie isn’t the only one in it for the long haul. Most of his six-man crew has been working with him for 30-40 years now. Most are cross-trained, and are able to switch back and forth between cutting, skidding, loading, and driving, depending on the needs of the day.

All crew are CPR/FA trained and Eddie is an EMT. The crew keeps each other safe with frequent radio check-ins and weekly tailgate safety sessions. Trimming is only done with polesaws, and everyone wears fluorescent shirts and coats. Eddie keeps drivers safe with log truck warning signs in all directions, including at distant tricky intersections that look especially hazardous. Loaded lowboy trailers get escorted by service trucks with flashing lights, especially in the dark morning hours.

Just like the name implies, Forest Friendly Logging is a great steward of the environment. One of the crew will let the forester on the job know if something looks like a vernal pool or other sensitive area and stays out of the area until they get a green light to go ahead. Soils are probed for stability before the equipment is moved in, and wet sites are passed over until they’re able to dry out. Eddie keeps track of his job sites with a laptop in his truck. He also uses Google Earth to check out a tract’s topography and water resources before moving in, and to make sure that his road and trail layout is efficient without endangering any streams or ditches. The cutter has a GPS unit in the cab with the tract boundary loaded on its map to avoid any problems with timber trespass. Any soil problems are marked in the GPS unit for monitoring. Eddie will shut down the job to protect the soils in wet weather, getting a second opinion from a forester if needed.

Eddie happily leaves wildlife den trees, deer stand trees, and meets many other landowner requests. Thinning from below is standard, and makes sure that the trees with the most potential are left to keep gaining value for a later harvest. He has no trouble meeting the strict standards of Tree Farm, the Sustainable Forestry Initiative, and the Forest Stewardship Council.

Eddie Moore has led Forest Friendly Logging from the old world of clearcuts into the new world of thinning while maintaining the highest standards for safety, environmental protection, and client satisfaction. For these reasons, MFA and MD/DE Master Logger are proud to call Eddie and FFL the 2013 Logger of the Year.

Marking Property Access with Blue Paint

Landowners in Maryland have an alternative way of marking their property to aid hunters, recreationists and others. Painting vertical blue stripes on trees serves the same purpose as a series of posted signs. They indicate that the property is off-limits to people without permission.


The blue paint stripes must be at least two inches wide and eight inches long, and positioned from three to six feet above the ground. They should be used along entrances, public roads, waterways, and adjoining lands. While there is no set distance that the marks should be placed, they should be close enough that one can see the next stripe.

Consider using blue paint instead of using posted signs. Posted signs are subject to weather and vandalism. Paint marks last longer and do not mar your trees.
Wood Stove Decathlon Aims to Improve an Old-Fashioned Heat Source


The Wood Stove Decathlon concluded Tuesday, November 19, after five days of testing and judging among twelve teams that came from around the world to the National Mall in Washington, D.C. The goal? “Heat more cleanly, cheaply, and renewably,” said John Ackerly, organizer and president of the Alliance for Green Heat.

New Hampshire-based Woodstock Soapstone snared the $25,000 first prize with its hybrid stove, which regulates combustion and includes a regulator to ensure efficient heat. It also comes with unique plates that can be personalized to a homeowner’s taste.

Beyond the heating element, the decathlon had a warm air of collaboration and congeniality. Woodstock Soapstone shared its prize with the two teams that competed without financial sponsorship, Walker Stoves and IntensiFire. The $10,000 second prize was shared by Wittus-Fire by Design and Travis Industries, which donated its share of the prize back to the Alliance for Green Heat.

Winners for individual categories were: HWAM for innovation; Travis Industries for lowest carbon monoxide emissions and for market appeal; IntensiFire for affordability; the University of Maryland’s Mulciber for lowest particulate emissions; and Woodstock Soapstone for efficiency.

Revival of Wood Stoves

The use of wood for residential heating in the US has increased 33% over the last decade, with Maryland right at the national average. However, some counties in Maryland have had much greater increases, such as Calvert County (177%) and Anne Arundel County (124%), which have less access to lower-cost natural gas. Given the robust demand, proponents of wood stoves want to ensure environmental sustainability, but future economic growth as well.

There are still obstacles to creating the perfect wood stove, but this decathlon was a start, said Ackerly. “The goal is to get people to be aware that this technology is efficient. We need to get wood stoves a facelift by showing there really is a high-tech future.”

Citizens can dramatically reduce their energy bills by using wood or pellets and the technology and innovation demonstrated at the decathlon will help to advance the high-tech future. The University of Maryland Extension has many resources for homeowners interested in selecting and installing stoves and other topics at www.extension.umd.edu/woodland. Click the Publications Library link and select the Wood Energy category. In addition, the Maryland Energy Administration has a grant program that can offset part of the cost of a new woodstove (see box below).

For more information on the Wood Stove Decathlon, see:

- Tanya Basu, Winning Wood Stove Designs Announced, National Geographic Daily News
- David Agrell, Woodstock Soapstone Captures the Wood Stove Decathlon Grand Prize, Popular Mechanics

Resources for Woodstove Purchasers

Thinking of purchasing a new woodstove? You can also learn more about the benefits of heating with wood through the University of Maryland Extension class, “Learning How to Heat with Wood & Pellets … Save Money & Be Warm!” See the Events Calendar on p. 12 for more information.

One of the topics covered in this class is the Maryland Energy Administration’s Clean Burning Wood Stove Grant Program.

This project, which began as a pilot program in September 2012, is part of the Administration’s efforts to help Maryland homeowners invest in clean energy and to develop the bioenergy industry in the state. Its popularity has led the Administration to extend the program indefinitely.

The grant program provides a $500 rebate for the installation of a new stick-burning stove or $700 for a pellet-burning stove. Eligibility requirements apply. For more details, and a map of Maryland locations where the grants have been awarded, visit http://energy.maryland.gov/Residential/woodstoves/index.html.
Sustainable Wood Energy Has Future in Maryland

The use of wood chips as a fuel for residential and commercial applications was the topic of the October 30, 2013 conference "Advancing Sustainable Wood Energy in Maryland," sponsored by the Maryland Wood Energy Coalition. The 85 participants included policymakers, biomass industry, foresters, loggers, state and private organizations, and others. The expected passage of new biomass emission regulations will pave the way for the use of wood chips in commercial and biomass boilers, something other northeast states have encouraged for many years. This has the potential to create new markets for low-grade wood from woodlands, allowing for more active management of private woodlands, not mention large energy saving for commercial users.

The conference covered all aspects of wood energy including the technology, funding, new applications and more. For example, participants learned about new technology developments that provided a look into the future of residential wood and pellet applications. They also learned about improvements to the Maryland Wood Grant Program, which has demonstrated that the financial incentive it provides to residential users encourages the purchase of clean burning stoves. For more information, see the box on p. 4 or go to http://energy.maryland.gov/Residential/index.html.

The presentations from the conference will be posted in the near future at the Hughes Center for Agroecology website, www.agresearch.umd.edu/agroecol.

Count Maryland old-growth trees among Sandy's tragic toll

Great hemlocks and pines, older than U.S., felled one year ago

Dan Rodricks, The Baltimore Sun

Donnie Oates, manager of two great parks in Western Maryland, will never forget Hurricane Sandy's ferocious arrival there. On the last two days of October 2012, the storm brought two feet of heavy snow, high winds, thunder and lightning through Garrett County. Epic stuff. Oates had never seen anything like it.

From his house on Maple Glade Road, which leads to Swallow Falls State Park, Oates heard a forest in collapse — trees cracking and popping, trees being uprooted under the weight of the snow, trees hitting the ground and shak-
When I was there in September, the place was busy, with hikers on the trails and kayakers in the Youghiogheny River below. But with so many huge tree trunks in the undergrowth, and sunlight falling where it had not fallen in centuries — if ever — the park was a little spooky. I felt like I was among battlefield corpses. I should have asked the people around me to pause for a moment of silence.

"I can see my shadow now," Oates says of the loss of canopy from the hemlocks and pines in Swallow Falls. "Sunlight is penetrating portions of the forest floor, and already there's new growth. There are actually dandelions growing near the upper falls; they were never there before. ... And maple seedlings already popping up."

Work is still being done in the park. I asked Oates if there was any plan to haul the fallen hemlocks and pines out of Swallow Falls, to clean up what remains of the park's fallen royalty.

"No," he said. "We'll just leave them there and let nature take its course."

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**National Woodland Owners Association (NWOA) and National Association of University Forest Resources Programs (NAUFRP) Announce Winners of 2013 Family Forest Education Award**

The National Woodland Owners Association (NWOA) and National Association of University Forest Resources Programs (NAUFRP) are proud to announce that the University of Georgia’s Center for Invasive Species & Ecosystem Health and Cornell University’s ForestConnect Program are the joint winners of the 2013 Family Forest Education Award.

NWOA and NAUFRP present this annual award to an educational institution that has delivered the most effective education program that benefits non-industrial forestland owners in the United States.

This year’s recipients were recognized in two separate categories:

The best individual family forest education program was awarded to the University of Georgia’s Center for Invasive Species & Ecosystem Health (formerly known as the Bugwood Center). The mission of the center is to develop, consolidate, and disseminate information and programs focused on invasive species, forest health, natural resource and agricultural management through technology development, program implementation, training, applied research and public awareness at the state, regional, national and international levels. This individual family forest education program was recognized for the outstanding integration and accessibility of key information about invasive species, integrated pest management, and forest health that serves forestland owners across the southern region. Key innovations recognized in this award are the Bugwood Image Database, BugwoodWiki web page, Early Detection & Mapping system, and Bugwood Smartphone applications. Details about the University of Georgia’s Center for Invasive Species & Ecosystem Health can be found at: [http://www.bugwood.org](http://www.bugwood.org).

The best comprehensive family forest education program was awarded to Cornell University’s Cooperative Extension for the ForestConnect Program. This comprehensive program is widely recognized for its regional impact and outcome focus for New York’s woodland owners. It excels in collaboration with stakeholder groups to identify research needs that form the basis of their forestry extension program. ForestConnect programs also are widely recognized as innovative and have been instrumental in launching a national program supporting forest landowners among multiple universities and agencies.

Details about Cornell University’s ForestConnect Program can be found at: [http://www2.dnr.cornell.edu/extension/forestconnect/index.html](http://www2.dnr.cornell.edu/extension/forestconnect/index.html).

The awards were presented at the Society of American Foresters Annual Convention in Charleston, South Carolina on October 23, 2013.
Thank You, and Good Luck

Nevin Dawson, the forest stewardship educator for the University of Maryland Extension at the Wye Research and Education Center, is moving on. He is remaining with Extension, but has a new role as the Sustainable Agriculture Coordinator.

Since coming to UME seven years ago, Nevin has made numerous contributions to the Woodland Stewardship Education program. Several of his articles have been featured in Branching Out, including this issue’s “Don’t miss your opportunity!” He was an integral part in the continued success of Maryland Woodland Stewards, providing essential resources and energy to this vital project.

We wish to thank Nevin for all his hard work in contributing to this program’s success and wish him good luck in his new venture.

New Publications of Note

The University of Maryland Extension has developed a pair of new publications that can assist homeowners who are interested in moving towards green energy sources. Fact Sheet 953, Best Management Practices for Installing and Firing Outdoor Wood Boilers, shares helpful tips for purchasing this appliance, such choosing the most appropriate size of unit for peak energy efficiency. It also provides important installation guidelines and methods for ensuring that the owner gets the most from the wood used in the boiler. Fact Sheet 953 can be found on the Woodland Stewardship Education website at http://extension.umd.edu/sites/default/files/docs/programs/woodland-steward/FS-953_Best_Mgt_Prac_Install_Firing_OWBs.pdf.

Fact Sheet 956, Simplifying Solar: Homeowner Primer to Residential Solar Installation, is an introduction to the growing field of residential solar power. The publication provides an overview of the types of photovoltaic panels currently available, and covers the advantages and disadvantages of connecting solar panels to the existing electric grid, and outlines expected costs, rates of return on investment, and current energy credit programs, including tax credits for both Maryland and federal tax purposes. Find the fact sheet at http://extension.umd.edu/sites/default/files/docs/programs/woodland-steward/FS-956_Simplifying_Solar.pdf.

A third publication, Helping your woodland adapt to a changing climate, is a joint effort by the Maryland Department of Natural Resources Forest Service, the University of Maryland Extension, the USDA Forest Service, and the University of Maryland Center for Environmental Science. The publication takes a look at the ways that environmental changes are affecting Maryland’s woodlands, These include increasing temperatures, rising sea levels, and competition from invasive species. The publication examines each challenge and then provides management options that landowners can use in order to keep their woodlands healthy and thriving. Read it on the Woodland Stewardship Education website at http://extension.umd.edu/sites/default/files/docs/programs/woodland-steward/MD_Climate_Adaptation_Guide_for_Forest_Landowners_2013.pdf.

Federal Income Tax on Timber: A Key to Your Most Frequently Asked Questions

The 2013 edition of the USDA Forest Service’s Tax Tips for Forest Landowners provides a quick reference on timber tax laws that are important to woodland owners. It presents a concise and easy-to-understand explanation of the most commonly asked tax questions. Since the first income tax Form 1040 appeared in 1913, many timber tax provisions have been added to encourage management and stewardship of private woodland that are commonly unknown by tax professionals. This publication will help woodland taxpayers and their professional advisors to learn and utilize these tax laws. For more information, go to http://www.fs.fed.us/spf/coop/library/taxtips2013.pdf
After attending the funeral of a distant relative, you’re surprised to learn that he left his large shaggy mutt in your care. He knows how to sit, but not much else. You set up a dog run behind the house and make sure he’s comfortable, but you don’t have time to train him.

Over the years, he becomes more detached and aloof. You sometimes wonder if he might have been able to help out with your cattle if you had put some time into his training. Much later, when he’s old and gray, a family member mails you a certificate they found in a stack of old papers. It turns out that he’s not a mutt at all, but a purebred Vuilbaard. This rare breed was developed to herd and guard cattle. As the missed opportunity sinks in, you realize that with a little work you could have turned a burden into an asset.

Woodland ownership often follows a similar pattern, except that many owners never realize their missed opportunity. Many woodland owners did not seek out the wooded land they own, but merely accepted it as part of a package along with the house they wanted or because it was tucked into the non-tillable low spots on the family farm. Because it’s viewed as a freebie or even a nuisance, its value and potential are never realized. A little planning can help you turn your woods from a burden into an asset.

Woodland can be a source of extra income. Selling timber is the obvious option, especially on parcels of 10 acres or more. Finding a buyer for smaller parcels is more difficult, but there is a growing number of loggers who operate on this scale. Always contract the services of a licensed forester to serve as your representative when selling timber.

Other income opportunities include the sales of firewood, shiitake mushrooms, and crafts from natural materials like grapevine wreaths.

There is a second group of projects that will usually cost you some time and money, but can bring a lot of enjoyment in return.

Wildlife is one of the biggest reasons that people enjoy woodland ownership. Whether your goal is hunting or watching, there are many things you can do to attract a

The Maryland Department of Natural Resources is now accepting tree seedling orders through the John S. Ayton State Forest Tree Nursery. More than 50 tree species — many new to the nursery this year — are available to meet a variety of aesthetic and environmental needs. Visit the Nursery’s site at [http://www.dnr.md.gov/forests/nursery/](http://www.dnr.md.gov/forests/nursery/) to learn more and to view an online catalog.

Seedlings are available for conservation purposes defined as: watershed protection, wildlife habitat, Christmas trees, forest products, soil protection, buffer planting and windbreak protection. Seedlings are available in units as small as 25 per species with a minimum order of 100. Although the Nursery accepts orders through April 2014 for the next growing season, landowners are encouraged to order early as supplied are limited.

Landowners who purchase seedlings from the John S. Ayton Nursery agree to:

- Plant all seedlings and shrubs in Maryland or Delaware for conservation purposes
- Provide a planting report upon DNR request
- Protect plantings as much as possible from fires, grazing animals and trespassers
- Keep live, rooted trees in place (trees with roots attached may not be uprooted for sale as live or ornamental trees)

According to Nursery manager Richard Garrett, “In 2014 the Maryland State Forest Tree Nursery celebrates 100 years of service. Through the years, the nursery has built a reputation for serving the needs of our customers, and we are proud to continue that commitment today. We strive to provide you with high quality seedlings and excellent service at competitive prices.”

The DNR notes that new and expanded incentives that encourage Maryland landowners to plant trees and to better manage their forests. [Maryland’s Forest Preservation Act of 2013](http://www.dnr.state.md.us/forests/pdfs/FAQ_ForestManagement.pdf), which requires that the state maintains or exceeds its current tree canopy of 40 percent, assists citizens and local governments who work to increase tree cover on their property with more tools and tax benefits. This first-of-its-kind legislation is part of a statewide effort to reduce greenhouse gas pollution, prevent further climate change and improve water quality in the Chesapeake Bay. Go to [http://www.dnr.state.md.us/forests/pdfs/FAQ_ForestManagement.pdf](http://www.dnr.state.md.us/forests/pdfs/FAQ_ForestManagement.pdf) to see if you qualify.
higher diversity and number of critters. Possible projects include brush piles, managing for food or nest trees, creating a water source, or creating new natural areas.

There are other goals you can manage for as well, like increased water and air quality, and reduced soil erosion.

If you have at least five acres of woods, there’s probably a cost assistance program out there that will pay for a large percentage of any project in this group. Staff in your county Forest Service and USDA Service Center offices can also provide free technical advice.

The first step in any project is to write a plan. Even if you’re not about to jump into hands-on management, you should still have at least a written outline of your goals and the steps you will take to reach them.

For small scale do-it-yourself projects, you can write a simple plan yourself. A plan written by a licensed forester is preferred for larger projects, and is required to participate in almost all cost assistance programs. It’s also the first step in qualifying for tax abatement programs and for Tree Farm certification.

Talking to your county forester and the folks at your USDA Service Center is the best way to figure out which program is the best fit for you and your property. Between the Natural Resources Conservation Service, the Farm Service Agency, and your state Forest Service, there’s probably a program available to help you pay for any project that enhances the quality of water, soil, or wildlife habitat, and even the cost of writing a plan. There are also a few that pay you for setting certain types of land aside.

Most programs also allow you to include your own labor in the expenses that you’re reimbursed for. In some cases this could mean that you would break even or come out with a few dollars extra in your pocket.

Don’t let your woodland become a burdensome missed opportunity. Take a few minutes to jot down the things you’d like to get from your woods, whether it’s wildlife, water quality, or some extra income. Then take action. Call one of your county service offices for advice and information on the next steps to saving money and improving your woodland.

Got Mushrooms?

Pat Vega’s 11-acre property in Washington County provides a great quality of life: woodlands, wildlife, privacy, and a connection with nature. But it also provides another woodland product: shiitake mushrooms, a specialty mushroom with a distinctive flavor that is grown on oak logs.

Behind the common button and oyster mushrooms, the shiitake mushroom is the third most widely-produced mushroom in the world, and American production of shiitake has increased faster than any other specialty mushroom. Pat has been growing shiitake mushrooms as a hobby for over nine years and his interest was tweaked after some reading and visiting another large grower. Shiitakes are grown on green oak logs that are cut to a manageable length in the spring and inoculated with spores (also called spawn), which are purchased from commercial suppliers easily found online. Pat has found that certain strains are better suited for his operation, so it pays to talk with some other growers if possible or just experiment. A fun and easy way to start is to purchase some of the sawdust blocks with mushroom spawn implanted - just add water in a conducive environment and watch them grow.

Inoculation can be time consuming if you are a commercial producer with hundreds or thousands of logs, but the hobbyist can complete the process with an electric drill in a short time. Rows of holes are drilled about 6 inches apart along the length of the log after the logs are cut from live trees in the spring. The depth and diameter of the holes is determined by the type of spawn used. Some spawn comes in plug form and other comes in loose form, but regardless, the hole should be sealed afterwards to prevent contamination. Growers use wax or, more commonly, polyethylene plugs for sealing.

Pat has a small area in the woods behind his house that is shaded and good air circulation. He uses a tarp to cover the log storage area, increasing the shade since his woodland is younger in age. It is critical to prevent the logs from drying out but not keeping them so wet that mold will form. After inoculation, the mushroom mycelium will work its way through the wood tissue. Many times the mushrooms will begin to fruit the first fall, but the best production usually occurs the second and third years. Depending on the log diameter, logs may last 3-5 years. Fruiting can be initiated by “force-fruiting,” or soaking the logs in a creek or water tank for 24 hours. Some of the varieties Pat uses will fruit naturally without soaking in cooler and wet weather, which
can stretch the growing season beyond the hot summer months, sometimes as late as mid-November. When temperatures regularly drop below freezing, all mushroom growth typically stops.

Pat grows more mushrooms that his family can eat, but he enjoys sharing his knowledge and the fruits of his labor with others, including this writer. As fall and colder weather approaches, he usually brings some of his logs into the basement to extend the fruiting period. Many growers start as hobbyists and then decide to start selling mushrooms as a commercial venture, but that requires a lot of planning, time, and business and marketing skills. For Pat, he is happy with his small hobby operation.

If you are interested in growing shiitake mushrooms, the University of Maryland Extension has a number of publications that can help at www.extension.umd.edu/woodland/your-woodland/publications-library-enterprise-ventures. You can also research “growing shiitake mushrooms” or “shiitake mushroom spawn” online to find a variety of resources from University extension and commercial vendors. There are also a couple of authors who have written specifically on growing shiitake. Paul Stamets and Mary Ellen Kozak have a number of useful books worth checking out.

Pat would be happy to share his experience with readers. If you are interested, please contact Jonathan Kays (jkays@umd.edu) and he will connect you with Pat.

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**Working Lands for Wildlife: A Maryland Conservation Opportunity**

Mitchell Blake, Project Forester, NWTF

To quote Aldo Leopold, “conservation is a state of harmony between men and land.” This principle was recognized in the late 1940’s and is best represented by the private landowner today, as no one else is as well positioned on the landscape to carry out this relationship. While conservation is controversial to some, to others, it is an opportunity - an opportunity to create, enhance, or restore a wildlife population or habitat not only for the personal benefit, but the benefit of the natural community. Such a conservation opportunity exists today in Maryland between landowners and the Golden-winged Warbler.

The Golden-winged Warbler is a migratory bird indigenous to the Appalachian and specific to young forest. Golden-winged Warblers winter in South America and migrate north in the spring to breed and nest in the young forest of the Appalachian region, as well as other parts of North-central United States and lower Ontario province. Western Maryland, characterized by plateaued mountain-tops and heavily forested land cover, has a declining population of Golden-winged Warblers. In fact, the population occupying Garrett County is estimated to be declining by 5.5% a year.

The reason behind the drastic decline not only in Western Maryland, but over the entire Golden-winged Warbler range is the hybridization with the Blue-winged Warbler and the loss young forest habitat. The forests of Appalachia are getting older. A maturing landscape causes the forest to become devoid of the early stages of succession; habitat that is critical for many birds and mammals, specifically the Golden-winged Warbler. The absence of a dense forb, shrub, and sapling understory coupled with overlapping ranges of a close relative, the Blue-winged warbler, has made the Golden-winged warbler a species of concern and young forest a critical habitat.

Young forests, often called early successional forest, are ephemeral by nature as forests are constantly in a state of change. Young forest will gradually mature into pole stage timber and ultimately a mature forest stand, changing the dynamic of the landscape and the wildlife species who use it. In order to establish a state of equilibrium on a forest track and maintain a diverse landscape, oftentimes young forests have to be continuously created. Early successional habitat can be created by natural disturbances such as windstorms or fires or can be created mechanically by silvicultural methods, more specifically, timber harvesting. Contin-
uous creation of young forest stands over time on a track of forest fits well with the standard forest rotation prescribed on mixed hardwood and mixed oak/hickory forest in Western Maryland and throughout the Appalachian region.

The benefits of having early successional habitat on a property are numerous and multifaceted. Besides the Golden-wing warbler, many other wildlife species will benefit from the creation of young forest including game species such as white-tail deer, ruffed grouse, woodcock and wild turkey as well as more than 15 different song bird species. Landowners can enjoy a diversity of wildlife on their property with the implementation of early successional habitat and also enjoy a healthier stand of timber in the years to come.

In order to encourage the creation of young forest habitat, The Natural Resource Conservation Service (NRCS) has implemented a habitat incentive program for private landowners called Working Lands for Wildlife (WLW). The WLW program provides incentive payments to private landowners for improving wildlife habitat and forest health through silviculture practices and other forest best management practices. Landowners working with NRCS will be creating critical habitat for Golden-winged warblers and also excellent deer, wild turkey, and ruffed grouse habitat for little or potentially no cost.

The NRCS has partnered with the National Wild Turkey Federation (NWTF) to assist landowners interested in creating young forest habitat. The NWTF has a great staff of wildlife biologists and foresters throughout the Appalachian region that can meet with the landowner to discuss where and how to create young forest habitat on their property. The program is available to private landowners in Washington, Allegany, or Garrett County, Maryland as well as other portions of the Appalachian region. To qualify for the program, the property to be managed has to be roughly 1000 feet above sea level and have >70% forested land surrounding the property. Landowners are asked to create or restore a minimum of 10 acres of young forest habitat on their property.

Following a property visit, the biologist or forester will draft a wildlife management plan which includes recommendations on how to improve wildlife habitat by creating young forest through a variety of silviculture methods, a schedule detailing when the prescribed practices are to be implemented, and detailed maps describing where each practice will occur. There is no cost or obligation associated with the initial site visit or the wildlife management plan. This program is a great opportunity for landowners looking for technical and financial assistance to create better wildlife habitat on their property.

So, while you are in pursuit of your favorite game this winter or taking one last stroll on your woodlot, take notice of the landscape and what you see. Besides the early winter flora and fauna, you might just see a conservation opportunity.

If you are interested in this program or have any questions regarding program logistics or qualifications, please contact Mitchell Blake, Project Biologist, National Wild Turkey Federation.

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Branching Out on the Woodland Stewardship Education website

Earlier in 2013, we moved our website to a new system under the University of Maryland Extension umbrella. Since that time, we have been working to bring all of the previous issues of Branching Out to the new website. With over twenty years of newsletters to include, it’s a long process, but so far we have several years’ worth of the most recent issues 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.
Events Calendar

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

December 8, 2013—2-3 p.m.
Oh, Deer!
Upper Marlboro, MD

White tail deer are ever-present throughout Maryland. Many of us see and experience these animals throughout the year, but how much do we know about them? Join a naturalist at the Merkle Wildlife Sanctuary and Visitor’s Center to explore the lives of this species. A portion of the program may take place outside, so dress warmly and wear comfortable shoes.

For more information about the program, go here. For directions and more information about the Sanctuary, go here.

December 9, 2013—7–9 p.m.
Learning How to Heat with Wood & Pellets … Save Money & Be Warm!
Prince Frederick, MD

Are you someone who heats with oil, propane, or a heat pump, but needs to know more before heating with wood or pellets? Is the high price of oil or the cold air from your heat pump getting you down? Perhaps you are interested in an inside stove or an outdoor wood boiler. Advances made in wood burning technology have dramatically improved efficiency and reduced emissions of residential stoves. This isn’t Grandpa’s smoky old wood stove! Firewood is one of the most economical forms of renewable energy available today and the use of wood pellets is increasing because they are readily available and pellet stoves are easily installed without the need of an expensive chimney.

Fee is $5 per person. Go here for more information and registration.