The “Storm” After the Storm: Woodland Management and Timber Recovery

Eric McConnell, Forest Operations and Products Extension Specialist, OSU Extension, School of Environment & Natural Resources

Storms are one way in which Mother Nature practices forestry. However, it is difficult for many of us to view the recent storm of June 29 in this light.

For those of you starting to venture out into your woodland resources here are some basic points to consider.

Damage Assessment

- Never work in the woods alone. Wear a hard hat when walking your property. Hanging and broken branches may be difficult to see with the leaves still on trees.

- A good idea is to have a professional forester present with you to conduct the assessment.

- Identify immediate safety hazards and determine options for solution; when in doubt of your abilities, consult with a professional.

- Document the damage by photographing, mapping, and noting the damage type, tree species, and tree quality (grade).

- Damage types include stem and branch breaks, uprooted trees, major wounds, and bent trees. Many trees often have a combination of these injuries.

- Stem breaks generally cause the greatest damage monetarily. Fiber tear-out, shorter log lengths, and higher harvesting costs limit the potential for salvage.

- Uprooted trees in many cases still have the bole intact and may possibly be harvested for their intended use. Leaning trees are a sign of uprooting and should be evaluated for their recovery potential.

- Bent trees are usually younger in age and will recover.

- Branch breaks if excessive can lead to major wounding; wounding can also result from other fallen trees. Losses in quality may occur, but trees will often recover. Severely wounded trees should be considered for removal.

- Many of the standing trees with damage to as much as 75% of their crowns will survive. Exposed wounds and breaks are susceptible to wood deteriorating agents, but there is still a window of opportunity for salvaging some of your timber and its value.

Chainsaw Safety

- If it will cut wood, it will definitely cut you!

- Always have someone with you when operating a chainsaw.

- Never cut branches above your head or from a ladder; this is extremely dangerous.

- Trees that are hung on other trees, wires or buildings are especially hazardous; it is difficult to predict how they will fall; leave them for the professional.

- Fallen trees and branches can be under considerable pressure which can be released violently when cut with a saw; use extreme caution or better yet leave them for the professional.

- Assume that all downed power lines are electrified; never cut a tree that is near or on a power line. Even improperly connected generators can charge downed lines.

- Finally, many saw users succumb to the temptation of not utilizing safety gear when working in the extreme heat and humidity; pace yourself; try to work in the early
<table>
<thead>
<tr>
<th>Time</th>
<th>Cabin Event</th>
<th>Wildlife &amp; Aquatics</th>
<th>Woodland</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30-11:00</td>
<td>Consider This Before Selling Your Timber</td>
<td>JAWZ DEMO</td>
<td>Invasive Plant Species in Ohio’s Woodlands</td>
</tr>
<tr>
<td></td>
<td>Dave Apsley, OSU Ext.</td>
<td>Habitat Management for Bobwhite Quail</td>
<td>Steve McGinnis, ODNR, Forestry</td>
</tr>
<tr>
<td></td>
<td>Robyn Wilson, OSU, School of Env &amp; Nat Res.</td>
<td>Rob Chapman, Purdue Extension</td>
<td>Lenny Farlee, Purdue Extension</td>
</tr>
<tr>
<td>12:00-12:30</td>
<td>DRY FIRE HYDRANT DEMO</td>
<td>White-tail Deer Management</td>
<td>Wood ID</td>
</tr>
<tr>
<td>12:30-1:00</td>
<td>How to Design and Build and Economical Water Garden</td>
<td>Sunflower Management for Dove Hunting</td>
<td>Eric McConnell, OSU Extension</td>
</tr>
<tr>
<td></td>
<td>Judy Arnett, Central Ohio Water Garden Society</td>
<td>Rob Chapman, Purdue Extension</td>
<td></td>
</tr>
<tr>
<td>1:00-1:30</td>
<td>Stream Stewardship in the Backyard and On the Farm. Joe Bonnell, Jerry Iles,</td>
<td>Bluebird Bios; Nest Boxes, Trail Monitoring, Dealing with Sparrows</td>
<td>Tree ID (Start at 1:30 lasts 1 hr)</td>
</tr>
<tr>
<td></td>
<td>and Jessica D’Ambrosio, OSU Extension</td>
<td>Marne Titchenell, OSU Extension</td>
<td>Dave Apsley, OSU Extension</td>
</tr>
<tr>
<td>2:00-2:30</td>
<td>Harmful Algal Blooms (HAB)</td>
<td>Invasive Plant Species in Ohio’s Woodlands</td>
<td>Hobby Maple Syrup Production</td>
</tr>
<tr>
<td></td>
<td>Eugene Braig, OSU Extension</td>
<td>Steve McGinnis, ODNR, Forestry</td>
<td>Gary Graham, OSU Extension</td>
</tr>
<tr>
<td>2:30-3:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Feral Swine Damage and Disease Threats to Ohio’s Agricultural and Natural</td>
<td>JAWZ DEMO</td>
<td>Native Grass and Wildflower ID</td>
</tr>
<tr>
<td></td>
<td>Resources</td>
<td>All the Basics of Pond Aeration</td>
<td>Rob Chapman, Purdue Extension</td>
</tr>
<tr>
<td></td>
<td>Craig Hicks, USDA Wildlife Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00-11:30</td>
<td>How to Design and Build and Economical Water Garden</td>
<td>Sunflower Management for Dove Hunting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Judy Arnett, Central Ohio Water Garden Society</td>
<td>Rob Chapman, Purdue Extension</td>
<td></td>
</tr>
<tr>
<td>11:30-12:00</td>
<td>Local Food System Development in Ohio</td>
<td>DRY FIRE HYDRANT DEMO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Molly Bean, School Env. &amp; Nat. Res., Social Responsibility Initiative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00-12:30</td>
<td>Brown Trout in Ohio: Research and Stocking in 3 Ohio Streams</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ethan Simmons, ODNR, Wildlife</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:30-1:00</td>
<td>Asian Cars</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eugene Braig, OSU Extension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:00-1:30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Feral Swine Damage and Disease Threats to Ohio’s Agricultural and Natural</td>
<td>JAWZ DEMO</td>
<td>Tree ID</td>
</tr>
<tr>
<td></td>
<td>Resources</td>
<td>Plants for Bees</td>
<td>Dave Apsley, OSU Extension</td>
</tr>
<tr>
<td></td>
<td>Craig Hicks, USDA Wildlife Services</td>
<td>Denise Ellsworth, OSU, Dept. of Entomology</td>
<td></td>
</tr>
<tr>
<td>11:00-11:30</td>
<td>Nature’s Gliders: Flying Squirrels</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marne Titchenell, OSU Extension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30-12:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00-12:30</td>
<td>Asian Cars</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eugene Braig, OSU Extension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:30-1:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:00-1:30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
morning hours, limit the number of hours on the saw and hydrate often.

- The Ohio Forestry Association, Inc. offers chainsaw safety trainings through its Chainsaw Safety Awareness that Works (CSAW) program, http://ohioforest.site-ym.com/resource/resmgr/pdf/csawbrochure.pdf. Please contact OFA to let them know of your interest in offering a class.

- Give serious consideration to hiring an Ohio Master Logging Company to conduct your salvage operation. These logging firms must adhere to specific training, certification, and business practices criteria. http://ohioforest.site-ym.com/?page=MLProgram.

Overall, don't panic. Forests are resilient. Acting too quickly could result in additional and unnecessary damages to the trees and your investment. Below are some contacts should you like more information.

School of Environment and Natural Resources
Phone: (614) 688-3421
Web: http://www.ohiowood.osu.edu
http://woodlandstewards.osu.edu/

Call Before You Cut
Phone: (877) 424-8288
Web: http://www.callb4ucut.com/


Ohio Division of Forestry
Phone: (614) 265-6694, or toll free at 1-877-247-8733

Ohio Forestry Association, Inc.
Chainsaw Safety Awareness that Works (CSAW) Program

Ohio Master Logging Company Program
Phone: (614) 497-9580
Web: http://www.ohioforest.org/

Stop the Bug:
It May Just Impact You!
Eric McConnell, Forest Operations and Products Extension Specialist, OSU Extension, School of Environment & Natural Resources

Delimiting surveys continue to be conducted in and around Bethel, Ohio, to determine the extent of the Asian Longhorned Beetle (ALB) infestation. Thus far, of the 116,000 trees surveyed, 8,200 trees were infested. Infested tree removal began in November, 2011. With over one dozen genera susceptible to colonization, ALB is perhaps the most threatening non-native invasive insect to North America's forests. This makes early detection and quarantine critical to the successful eradication of ALB.

Clermont County is 35% forested, with the 37 Ohio counties within a 100 mile radius of Bethel containing a total of 3.5 million forested acres. These forests are key contributors to Ohio’s $22 billion forest products industry. While the environmental impacts of ALB in southwestern Ohio will likely be considerable, we will assess some potential economic effects here by taking an incremental approach to the ALB infestation. This will help provide us a clearer sense of what could happen in communities over time.

Let's focus on the maples and ash for this discussion as prices for these species are documented in the Ohio Timber Price Report. We will assume a typical 100 mile haul radius, with Bethel at its center (Figure 1). We will then examine the economic impacts in southern and southwestern Ohio incrementally on a per million board feet (MMBF) basis using IMPLAN® 2010 data for these counties’ economies (37 counties total). We will use a 2010 composite price of $210,576 per MMBF (1/4 inch International Log Rule) for hard and soft maples and ash delivered sawtimber as our output change by the logging sector.

Table 1. Estimated economic impact of one MMBF of delivered hard maple, soft maple, and ash sawtimber on southern and southwestern Ohio’s economy, 2010.

<table>
<thead>
<tr>
<th>Impact Type</th>
<th>Employment, jobs</th>
<th>Labor Income, $</th>
<th>Value Added, $</th>
<th>Output, $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>2.5</td>
<td>72,779</td>
<td>70,904</td>
<td>210,576</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>0.6</td>
<td>22,927</td>
<td>33,666</td>
<td>69,363</td>
</tr>
<tr>
<td>Induced Effect</td>
<td>0.8</td>
<td>31,738</td>
<td>56,794</td>
<td>91,919</td>
</tr>
<tr>
<td>Total Effect</td>
<td>4.0</td>
<td>127,444</td>
<td>161,365</td>
<td>371,858</td>
</tr>
</tbody>
</table>

From Table 1, one MMBF of hard and soft maples and ash delivered sawtimber directly produced 2.5 jobs in the regional logging industry, $72,000 in wages and benefits, and $70,000 in value added. Each MMBF indirectly generated an impact of $69,000 in other businesses that supplied goods and services to commercial logging. Each MMBF induced $91,000 in activity throughout communities as a result of household spending by the community.

50 Years of Farm Science Review
Kathy Smith, Forestry Program Director, OSU Extension, School of Environment & Natural Resources

The 2012 version of Farm Science Review takes place September 18th, 19th and 20th London, Ohio. This year marks the 50th anniversary of the show and the Gwynne Conservation Area once again has a wide variety of talks on offer during the three day event. All advance sale tickets are $5 each, ages 5 and under are free. Gate tickets will be $8. Advance sale tickets are available at the local OSU Extension office. For more information check out http://fsr.osu.edu
logging industry and its supply chain. Total impacts amounted to 4.0 jobs, $127,000 in labor income, $161,000 in value-added, and $371,000 in total economic activity. Thus, for each MMBF of sawtimber removed from the marketplace because of the ALB infestation, we could expect to see approximate losses of these magnitudes.

While disheartening for Ohio alone, this only tells part of the story. There is a great deal of impact we cannot account for in this basic study. The effects of ALB have and will continue to spill over into Indiana, Kentucky, and West Virginia. Additionally the impacts will change incrementally as supplies and prices change. Much is still left to be learned, and future research should address these issues.

Should ALB not be eradicated, this could significantly affect the forest products industry as well as the many communities in which it operates. Become a Beetle Buster by logging on to http://www.beetlebusters.info/.

* Please refer to the Winter, 2012, issue for economic impact analysis terminology and a complete listing of ALB-susceptible tree species.

American Chestnut Grower School

Are you interested in American chestnut? Then you will want to attend the Paul Bunyan Show on October 6th. This year’s show along with The American Chestnut Foundation will host an ‘American Chestnut Grower School’. The school takes place on Saturday October 6th from 9:30 am – 12:30 pm and registration is $10 (this is in addition to the $8 daily entrance fee to get into the show itself). Space is limited for the school so pre-registration is recommended. To pre-register go to http://www.ohioforest.org/events/ and find the ‘American Chestnut Grower School’ or call: 1-888-388-7337.

The topics to be covered include the history of the American chestnut, establishment of chestnut from seed and seedlings and post planting care, common chestnut diseases and pests and participation in ongoing site evaluation and pest surveys. Each participant will receive at least one, “pure” American chestnut seedling as well as some seeds to plant in the spring (these are not blight resistant).

The Paul Bunyan Show is held October 5, 6 & 7 at the Guernsey County Fairgrounds in Cambridge, Ohio. Entrance fees for the show is $8 for adults and $4 for seniors and kids – payable at the gate as you enter. For more information go to http://www.ohioforest.org/ or call 614-497-9580.

Landowner Workshop: Your Woods, Water & Wildlife

The Ohio Woodland Stewards Program is offering a fall workshop for landowners November 10, 2012 at the Der Dutchman Restaurant (formerly Troyer’s Dutch Heritage) on SR 97 in Bellville, Ohio. The agenda for the day will offer sessions on woodland management, wildlife management, dealing with invasive species, timber marketing and ticks to name a few. Registration information for the program will be available in early September at the Woodland Stewards website http://woodlandstewards.osu.edu or contact us at 614-688-3421.

Where Did All The “Young Forests” Go?

Jeff Herrick, Habitat Management Biologist, The Wildlife Management Institute

When we think about hiking, or visiting the “forest” most people have images of magnificent trees, towering oaks, colorful unbroken canopies and so open underneath that you can see for a country mile. No one can dispute the feeling that comes over them from such an experience. Can we have too much of one habitat type on our lands and what would that mean? Do you like young trees that are the size of seedlings and saplings so dense and numerous that you can hardly walk or see through them? Do I detect a bias?

Wildlife need “Young Forest” habitat integrated with a mosaic of successional forest age classes to provide the food and cover which will benefit a broad diversity of species in every season. By creating high stem density and low growing vegetation, you will provide nesting, escape, and winter cover for wildlife, while producing a smorgasbord of berries, insects, and browse for fledgling young birds, mammals, and songbirds to feed on.
The Problem:

According to the U.S. Forest Service Forest Inventory Analysis, Ohio is losing its young forests at an astounding rate. In a short 33 years from 1968 to 2001 the percentage of seedling-sapling stage habitat declined from 56% of Ohio's forest base to 11%. During the same period the saw-sized (> 11" dia.) timber class grew from 31% to over 63% of the forest base. Changing forest management practices, development, public misunderstanding resulting in negative perceptions of forest practices, invasive species, and profit margins have all contributed to the problem.

Figures provided by the U.S. Fish and Wildlife Service demonstrate that the American woodcock population has declined by an average of about 1% annually over the last 40 years in the central management region, which includes Ohio. Surveys conducted by the Ohio Division of Wildlife show an average of 21 ruffed grouse heard drumming per 100 survey stops in 1990 with a long term decline to a low of 2.3 grouse heard per 100 stops in 2010. Prairie warblers, field sparrows, yellow breasted chats, whip-poor-wills, brown thrashers, and other "edge" species have also shown long term population declines in Ohio.

Recent mist netting studies have documented the broad benefits of having young forest on the landscape. Birds that breed in deep woods often bring their fledglings into re-growing forest to eat the abundant insects and fruits that those light-drenched areas produce. The dense vegetation affords protection against predators while young birds gain body mass and prepare for migration. Ohio's endangered species like the snowshoe hare and bobcat also require young forest as a habitat component for survival. Over 70 wildlife species depend on young forest growth at some stage in their life cycle.

Reversing the Downward Trend:

A new regional habitat initiative, which includes Ohio, is the "Lower Great Lakes Young Forest Initiative." This initiative was started in 2011 to become the fifth regional "Young Forest Initiative." It joins the recently started Appalachian Mountains Young Forest Initiative and both in combination cover the eastern half of Ohio.

Coordinating the effort is the Wildlife Management Institute (WMI), a respected non-profit dedicated to sound scientific management of the continent's wildlife resources. The National Fish and Wildlife Foundation provide financial support to WMI to make this initiative possible. Other partners working to create young-forest habitat in the Buckeye State include the Ohio Division of Forestry, Division of Wildlife, Muskingum Watershed Conservancy District, the USFWS Partners for Fish and Wildlife Program, and several conservation organizations and clubs.

The "Young Forest Initiative" actions include improving public awareness and interest, enlisting partners to assist with the effort, providing technical assistance to landowners, exploring funding opportunities for landowners, monitoring wildlife response to habitat treatments, and setting up demonstration areas where landowners can observe methods to manage their own forest and habitat for an increased diversity of wildlife species.

The best tracts of land in the effort to restore declining wildlife species and young forests will be the larger ones, possibly one hundred or even a thousand acres that can be set up in long term management units. Rotational cutting or treatments designed to look like a checkerboard from the air will provide many different age classes of forest to benefit the broadest spectrum of wildlife species. However, this concept does not bode well in Ohio where 95% of the land is in private ownership and commercial ownership of forests is almost non-existent. If we are going to restore this habitat niche to Ohio's landscape it will take concerned landowners such as the Ohio Tree Farmer's and Ohio Forestry Association Chapters, land trusts, metro parks and land conservancies. Even a small landowner can help by providing a habitat type unavailable in a given area or by linking it to neighboring parcels. As a rule of thumb think of managing part of your land for young forest under the 5-5-5 plan: manage at least 5% of your land as seedling, sapling, or shrub type habitat, regenerate at least 5 acres through cutting or treatments, and wait 5 years before repeating treatments.

What Potential Does Your Land Offer?

Not every place is suitable for creating young forest: don't just start cutting down trees. Are there unique habitats or rare species that might be harmed by heavy cutting? Check for streams, ponds, or wetlands that may need protection. Invasive species need to be identified and controlled.

Blocks of forest may be set aside to provide a hard mast (acorns, nuts, seeds) component for wildlife or to manage for timber production with occasional selective cutting if understory species are desirable. If understory species have low value or you happen to acquire a forest that was high-graded with only poor quality trees left in your canopy, the healthiest prescription for your future healthy forest and wildlife may be to clearcut it and allow thousands of new seedlings, saplings, and stump sprouts to emerge. Depending on the area of the state you live in, clearcutting low-value red maples or aspens can add much wildlife value. The aspen trees, if cut when dormant have tremendous potential to sprout hundreds of new trees from the roots, providing the dense thickets in a couple of years. Removing the red maple provides full sunlight which encourages other pioneering tree and shrub species with much more wildlife and commercial value to establish. The maple stump sprouts that return will provide structure value for up to ten years. In areas that just won't grow quality trees or there is an old field you are ready to convert to shrubland, aim to promoting or planting silky or gray dogwoods, viburnum, elderberry, sumac, hawthorn, crabapple, American plum, alder, and willow. All of these provide the high-density, low-growing early successional habitat and most provide soft mast berries or fruit. If these species get too dense and too tall it may
require one of the many types of set-back mowing or mulching to make it young again.

**Assistance:**

Technical assistance is available. The WMI “American Woodcock and Young Forest Initiative” website that provides technical guidelines for landowners, demonstration areas, contacts and more can be found at Timberdoodle.Org. You can contact WMI Habitat Management Biologist Jeff Herrick at jcherrick@myfrontiermail.com. Service Foresters with the Division of Forestry, Private Lands Biologists with the Division of Wildlife, Biologists with the USFWS, Partners for Fish and Wildlife Program, and in some counties the Soil and Water Conservation District or USDA- Natural Resource Conservation Service can also be of assistance.

**facebook**

Ohio Woodland Stewards is now on Facebook. Come find us at:

http://www.facebook.com/pages/Ohio-Woodland-Stewards-Program/197418573782?ref=nf

**Calendar**

- **August 21** – After the Storm @ ODNR Div. of Forestry offices, Athens, OH
- **September 18, 19, 20** – Farm Science Review @ OSU Molly Caren Agricultural Center, London, OH
- **October 5, 6, 7** – Paul Bunyan Show @ Guernsey County Fairgrounds, Cambridge, OH
- **October 17** – 2012 Tree Forum @ Hilton Garden Inn, Wooster, OH
- **October 18** – Good, Bad, and Hungry @ Chippewa Lake/Krabill Shelter, Medina, OH
- **November 2** – Forest Food for Wildlife @ Knox County
- **November 7** – Ohio Community Wildlife Cooperative Conference @ 4-H Center, Columbus, OH
- **November 10** – Landowner Workshop: Your Woods, Water & Wildlife @ Der Dutchman Restaurant, Bellville, OH

**Check Us Out On The Web!**

Look for newsletter articles, links to fact sheets and other publications by browsing our site. Registration for upcoming Woodland Stewards classes may also be done electronically. Go to:

http://woodlandstewards.osu.edu

Kathy L. Smith
Program Director - Forestry
Ohio Woodland Stewards Program Coordinator

**Contact Us!**

For program information contact Mary Slyby at 614-688-3421 by email: ohiowoods@osu.edu or by mail at:

Ohio Woodland Stewards Program
School of Environment & Natural Resources
210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210

OSU Extension embraces human diversity and is committed to ensuring that all educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, age, gender identity or expression, disability, religion, sexual orientation, national origin, or veteran status.

Keith L. Smith, Associate Vice President for Agricultural Administration and Director, OSU Extension

TDD No. 800-589-8292 (Ohio only) or 614-292-1868