

The Ohio Woodlands, Water, and Wildlife Newsletter is published in part with funding from the Renewable Resource Extension Act (RREA).

## Where Do the Logs Go After Harvest? A Look at the Role of Hardwood Exports

*Matt Bumgardner, Forest Products Technologist, U.S. Forest Service*

If you have recently harvested timber, a question you might have is, "Where did the logs go after they left my woodland?" Most likely, they were processed somewhere in the United States. Just over 2.3% of the total hardwood log volume harvested in the U.S. was exported in 2014, the latest year for which data are available. Considering only the higher value portion of the log market (sawlogs and veneer logs), the export volume was 6.8% (UNECE/FAO 2016). By contrast, 18.6% of the total volume of hardwood lumber sawn in the U.S. was exported, and the percentage would be much higher if considering only the graded (higher value) portion of the hardwood lumber market.

As shown in **Figure 1**, hardwood lumber exports have risen much faster than hardwood log exports since 2003. Hardwood lumber exports represented a \$2.3 billion market in 2016, compared to \$717.9 million for hardwood logs (USDA Foreign Agricultural Service 2017). After adjusting for inflation, the value of hardwood log exports has increased about 9.6% in the past 14 years; the inflation-adjusted value of hardwood lumber exports has increased

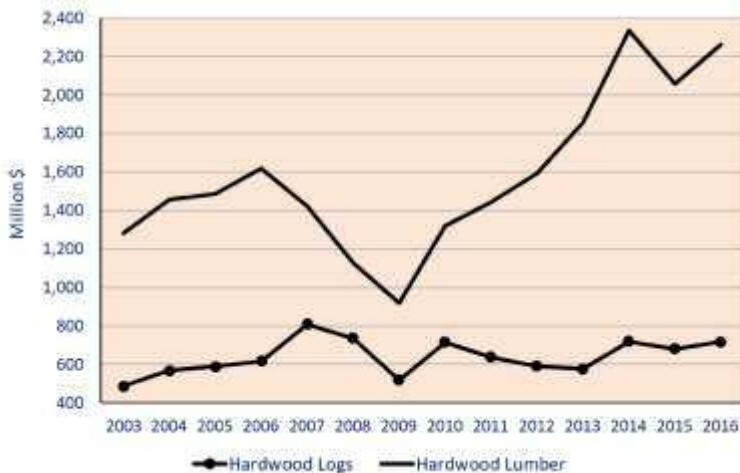
by 31.3% for the same period.

Export markets were critical to U.S. hardwood sawmills during the Great Recession and associated housing crisis, and remain quite important today. Hardwood lumber exports dipped during the recession but quickly recovered to reach a record level in 2014 (**Figure 1**). Log exports have been slower to recover and have yet to reach the pre-recession peak of 2007. Although not as large as the market for hardwood lumber exports, the log export market can add value to timberland and it is important to keep abreast of changes.

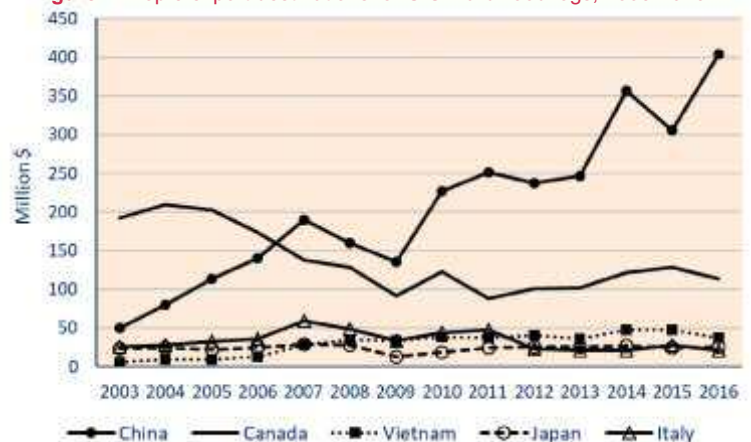
Perhaps the most notable change in U.S. hardwood log exports has been a shift from Canada to China as the primary destination. As shown in **Figure 2**, China surpassed Canada in 2007, and represented a \$404.6 million market for U.S. hardwood logs in 2016. Globally, there is a sharp drop-off in market size after Canada and China and the top 10 markets represent 91.9% of total exports (**Table 1**). However, U.S. hardwood logs were exported to 84 different destinations in 2016, mostly in relatively small amounts.

Red oak, walnut, and white oak topped the list for export species in 2016, with each representing over \$100 million in export value (**Table 2**). Ash was approaching the \$100 million mark as well. As shown in **Figure 3**, ash has been growing rapidly in importance as an export species. This is likely due, in part, to increased availability as landowners

**Figure 1.** U.S. hardwood log and lumber exports, 2003-2016.



**Figure 2.** Top 5 export destinations for U.S. hardwood logs, 2003-2016.



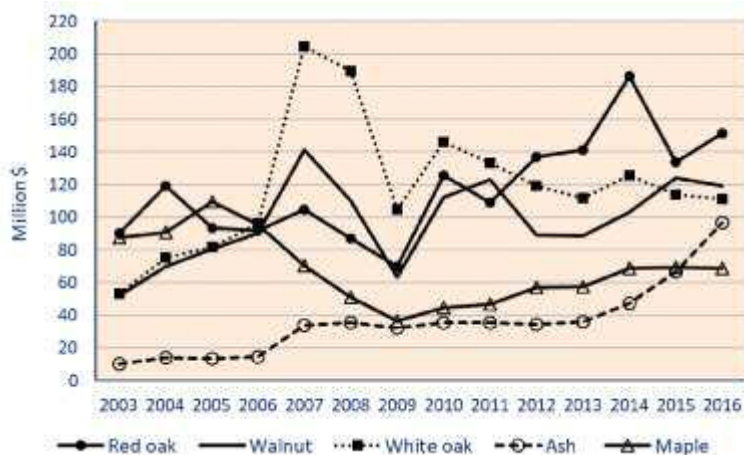


harvest their ash timber in response to the emerald ash borer. It is also possible that strong demand for white oak (Figure 3) has contributed to the increased interest in ash, as ash and white oak are both open-grained species that offer a similar look when used in cabinets and furniture.

**Table 1.** Top 10 export destinations for U.S. hardwood logs, 2016.

Destination	Value (million \$)	Value (%)
1. China	404.6	56.3
2. Canada	113.5	15.8
3. Vietnam	37.0	5.2
4. Japan	26.2	3.6
5. Italy	20.5	2.9
6. Germany	15.0	2.1
7. United Kingdom	13.7	1.9
8. Spain	13.4	1.9
9. South Korea	8.7	1.2
10. Turkey	7.0	1.0
Rest of world	58.3	8.1
<b>Total</b>	<b>717.9</b>	<b>100.0</b>

**Figure 3.** Top 5 U.S. hardwood log export species, 2003-2016.



**Table 2.** Top 8 U.S. hardwood log export species\*, 2016.

Species	Value (million \$)	Value (%)
1. Red oak	151.5	21.1
2. Walnut	119.2	16.6
3. White oak	111.1	15.5
4. Ash	96.7	13.5
5. Maple	68.9	9.6
6. Yellow-poplar	27.2	3.8
7. Cherry	23.3	3.2
8. Birch	14.9	2.1
Not identified/Others	105.1	14.6
<b>Total</b>	<b>717.9</b>	<b>100.0</b>

\* Values shown for individual species likely are slightly lower than the actual values because 14% of total exports were not identified by species in the export statistics.

China is by far the leading destination for ash and represented 87.7% of U.S. ash export value in 2016. China also was the leading destination for several other U.S. log species including red oak (68.7%), cherry (65.5%), walnut (50.2%), and white oak (32.7%). Canada was the leading destination for U.S. birch logs (94.1%) and all U.S. maple logs (68.1%).

In summary, the hardwood lumber derived from U.S. timber harvests is more likely to be exported than the logs themselves. While most hardwood logs are consumed domestically, exports are important to the industry and can provide market diversity beyond fluctuations in the U.S. economy.

References:

UNECE/FAO. 2016. UNECE/FAO Forest Products Statistics, 2010-2014.

[www.unece.org/fileadmin/DAM/timber/statsdata/fps10-14.pdf](http://www.unece.org/fileadmin/DAM/timber/statsdata/fps10-14.pdf)

USDA Foreign Agricultural Service. 2017. Global Agricultural Trade System.

<https://apps.fas.usda.gov/gats/default.aspx>

## 2017 Gwynne Conservation Area

*Kathy Smith, Extension Program Director, Forestry*

It is that time of year again when we are looking toward the 2017 Farm Science Review. This year's Review is



taking place September 19, 20, 21 at the Molly Caren Agricultural Center in London, Ohio. The Gwynne Conservation Area committee has worked hard to put together a series of talks that cover a broad range of topics. Check out the schedule to see what we have to offer this year.

Tickets for the 2017 Farm Science Review are now available for purchase online at [fsr.osu.edu](http://fsr.osu.edu). Buying tickets online allows people to get the \$7 early discount price even though they may not live near an Ohio State University Extension county office or participating agribusiness, which are selling tickets at that price.

A new online directory is available that allows people to perform keyword searches to locate exhibitors and to organize a lineup of events they want to attend. For those who prefer paper, a map is provided in the middle of the program that you pick up at the Review.

# 2017 Gwynne Conservation Area Schedule of Events

	Cabin	Wildlife & Aquatics	Forages and Grazing	Woodland	Woodland Demo Area
<b>Tuesday - Sept 19<sup>th</sup></b>					
10:30					Forestry Students
11:00	Prairie Restoration Plots <i>Speaker: Mike Retterer</i>	Managing Aquatic Vegetation <i>Speaker: Perry Orndorff</i>	Warm season bunch grasses <i>Speaker: Christine Gelley</i>		
11:30		Creating and enhancing pollinator habitat <i>Speaker: Denise Ellsworth</i>		Low-Impact Logging <i>Speaker: Lee Beers</i>	Chainsaw maintenance, sharpening and safety demonstration
12:00	Common Ohio Woodland Fungi <i>Speaker: Curtis Young</i>	Bee Identification <i>Speaker: Denise Ellsworth</i>	Managing Native Warm Season Grasses for Grazing, Haying and Wildlife, <i>Speaker: Bob Hendershot</i>	Fall Mushroom Hunting <i>Speaker: Erika Lyon</i>	
12:30		The Exclusion Solution: How to Build a Deer Exclusion Fence, <i>Speaker: Lenny Farlee</i>			Chainsaw cutting techniques demonstration
1:00	Outdoor Photography <i>Speaker: Erika Lyon</i>		Winter stock piled forages <i>Speaker, Dave Libben</i>		
1:30	Attracting and utilizing pollinators on your farm <i>Speaker: Amanda Bennett</i>	Deer Food Plots <i>Speaker: Tim McDermott</i>			
2:00	New Herbicides for the Management of Aquatic Plants in Ponds <i>Speaker Eugene Braig</i>	Attracting Hummingbirds to Your Backyard <i>Speaker, Marne Titchenell</i>	Warm season annuals <i>Speaker: Mike Estadt</i>	When is it time to harvest your trees? <i>Speakers: Dave Apsley and Bob Mulligan</i>	
2:30				Trees and Taxes <i>Speaker: Lenny Farlee</i>	
3:00					
<b>Wednesday - Sept 20<sup>th</sup></b>					
10:00					
10:30	Electroshocking demonstration <i>Speaker: Nick Radabaugh</i>				Forestry Students
11:00	Prairie Restoration Plots <i>Speaker: Mike Retterer</i>	Hydroponics <i>Speaker: Brian Kleinke</i>	Versatility of warm-season annual grasses <i>Speaker: Christine Gelley</i>		
11:30	Attracting Bluebirds and Purple Martins to Your Farm, <i>Speaker: Marne Titchenell</i>	Aquaponics <i>Speaker: Matt Smith</i>		Fall Mushroom Hunting <i>Speaker: Erika Lyon</i>	Chainsaw maintenance, sharpening and safety demonstration
12:00	Electroshocking demonstration <i>Speaker: Nick Radabaugh</i>		Legume options <i>Speakers: Dan Lima and Clifton Martin</i>	Trees and Taxes <i>Speaker: Lenny Farlee</i>	
12:30	Worm Composting <i>Speaker: Carri Jagger</i>	Recreational Fisheries Basics for Farm Ponds <i>Speaker: Eugene Braig</i>			Chainsaw cutting techniques demonstration
1:00			To renovate or not to renovate the pasture? <i>Speaker: Clif Little</i>		
1:30	Electroshocking demonstration <i>Speaker: Nick Radabaugh</i>	Basics of Pond Aeration <i>Speaker: Perry Orndorff</i>		Is it a pine? Conifer ID <i>Speaker: Clifton Martin</i>	
2:00	New Herbicides for the Management of Aquatic Plants in Ponds <i>Speaker Eugene Braig</i>	Attracting Hummingbirds to Your Backyard <i>Speaker, Marne Titchenell</i>	Warm season grasses? <i>Speaker: Carri Jagger</i>	Conservation Tree Planting <i>Speaker: Lenny Farlee</i>	
2:30				Own woodlands? Overview of Ohio's Property Tax Programs for woodlands, <i>Speaker: Cotton Randall</i>	
3:00					
<b>Thursday - Sept 21<sup>st</sup></b>					
10:30	Prairie Restoration Plots <i>Speaker: Mike Retterer</i>	Establishment of Wildlife Food Plots <i>Speaker: Mark Landefeld</i>		When is it time to harvest your trees? <i>Speaker: Dave Apsley and Bob Mulligan</i>	Forestry Students
11:00			Year-round grazing <i>Speaker: Tim McDermott</i>	Own woodlands? Overview of Ohio's Property Tax Programs for woodlands, <i>Speaker: Cotton Randall</i>	
11:30		Putting Pollinator Habitat to Work <i>Speaker: Colleen Sharkey</i>			Chainsaw maintenance, sharpening and safety demonstration
12:00	How to Build the Best Bat Houses <i>Speaker: Marne Titchenell</i>	Controlling Wildlife Damage around the Home and Yard, <i>Speaker: Brian MacGowan</i>	Pasture Walk <i>Speakers: Mark Landefeld</i>	The Secrets of Tree ID <i>Speaker: Kathy Smith</i>	
12:30					Chainsaw cutting techniques



## Spicebush - *Lindera benzoin*

Amy Stone, Extension Educator, Lucas County

There are two reasons we have included this article in the newsletter. The first is to be sure everyone knows about spicebush. If this is a new shrub to you – maybe you have the perfect spot or spots that are ideal for this plant. The intention of this article is to introduce you to the shrub and see if anyone is seeing any wilting and/or dieback in existing plants. Several Extension professionals have had reports of wilting and/or dieback and we want to see how widespread (if at all) this phenomenon is. If you have noticed these before, please let us know. The information that we are seeking is included at the end of this article. Enjoy the read and hopefully healthy spicebush too!

Spicebush is a deciduous shrub hardy from zone 4 to 9. Its height can range from 6 – 12 feet, with a similar spread, usually between 6 – 15 feet wide. This shrub prefers permanently moist to wet soils and thrives in full shade to part shade. You can observe this plant growing in the understory of many Ohio woodlands in moist to wet sites. With that said, once established, spicebush can adapt to sites on the drier side with more sun. In these scenarios spicebush may grow denser and produce more flowers and fruit. Because of this, spicebush can be incorporated into rain gardens in addition to its favorite spots in the landscape and woodlot.

Pruning is typically not needed, unless you are trying to maintain the shrub within a smaller site. This shrub is one of the first to bloom in the spring. Its twigs, branches and leaves emit a spicy fragrance when scratched or crushed. If plants have reached an unmanageable look and have outgrown their space, they can be cut back to rejuvenate or revitalize.

Spicebush flowers are yellow and appear in late winter to early spring. These blooms result in bright red fruits in late summer to early autumn on female shrubs. They are highly preferred by wildlife and serve as the larval host for the Spicebush Swallowtail (*Papilio troilus*), the Promethea silkmoth (*Callosamia promethea*) and the Eastern Tiger Swallowtail (*Papilio glaucus*).

Many of the references indicate that spicebush has no serious insect or disease problems. This is great news when considering incorporating new plants into the landscape. As with any additions, diversity is always key. We urge you to

### Shrub Highlights

**Common Name:** spicebush

**Scientific Name:** *Lindera benzoin*

**Plant Type:** Deciduous shrub

**Plant Family:** *Lauraceae*

**Native Range:** North America,

**Hardiness Zone:** 4 to 9

**Height:** 6 to 12 feet

**Spread:** 6 to 15 feet

avoid monocultures, or a planting of all the same plant. While many of our favorite plants can be exciting and something that we may love – it won't provide the same feeling if a pest wipes it out all at once. We don't have to go too far back in our memory to feel that. Does emerald ash borer rekindle some sad and depressing memories of what a single pest can do to single genus? Lessons learned I hope – avoid monocultures!

Back to the pest problems. While no one lists any serious problems, we have recently had a couple phone calls from different parts of the state describing what sounds like the same situation. While some texts state that occasional tip dieback on spicebush is common, these phone calls describe a more concentrated wilting and dieback. The sites appear to fit the needs of the plants, and spicebush had been present for quite some time. Callers described some of the plants wilting, not as vigorous and having some dieback. While we don't want to cause alarm, we do want to see what everyone is seeing



### Spicebush images:

Flower – Fruit – Kathy Smith, OSU Extension  
Leaves – Ansel Oommen, Bugwood.org

across the state. If you could be so kind to look at existing stands of spicebush and let us know what you are seeing, we would appreciate all input. Email messages and photos are encouraged. Included in your feet on the ground and eyes on the shrub report, we would like to know the age of the plants (if you know that), overall health, and a description of the site –soil conditions, exposure to sun or

shade, and moisture levels, city and county location, and your name. We thank you in advanced and will be sharing any feedback that we receive.

Reports can be made by emailing [stone.91@osu.edu](mailto:stone.91@osu.edu) or calling 419-578-6783. Please leave a message if there is no one available.

## Calendar of Events

<b>September 15</b>	<b>Fascinating Woodland Fungi</b>	<b>OSU Mansfield</b>
<b>September 19-21</b>	<b>Farm Science Review</b>	<b>London, OH</b>
<b>October 14</b>	<b>Capturing Nature's Wonders</b>	<b>OSU Mansfield</b>
<b>October 18</b>	<b>Forest Health: Invasive Species</b>	<b>Medina County</b>



Non-profit Org.  
U.S Postage  
PAID  
Columbus, OH  
Permit # 711

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

## facebook

Ohio Woodland Stewards is now on Facebook.

## Come find us at:

[www.facebook.com/OhWoodlandStewards?ref=nf](http://www.facebook.com/OhWoodlandStewards?ref=nf)

### 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.  
Website:  
[woodlandstewards.osu.edu](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](mailto: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