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

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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

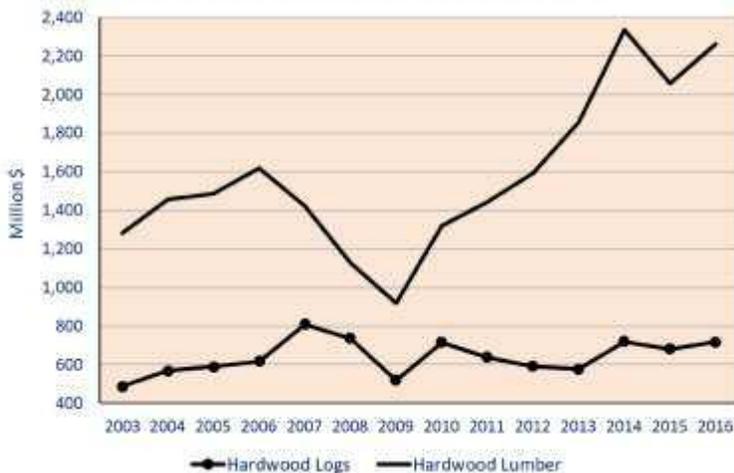
by 31.3% for the same period.

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.

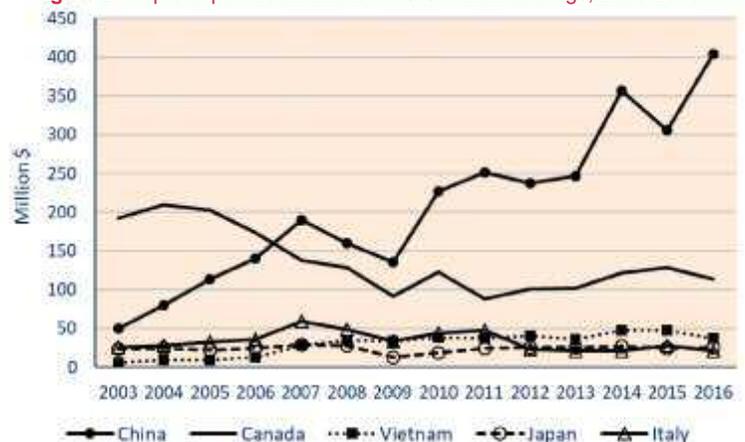
Perhaps the most notable change in U.S. hardwood log exports has been a shift from Canada to China as the primary destination. As shown in **Figure 2**, China surpassed Canada in 2007, and represented a \$404.6 million market for U.S. hardwood logs in 2016. Globally, there is a sharp drop-off in market 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.

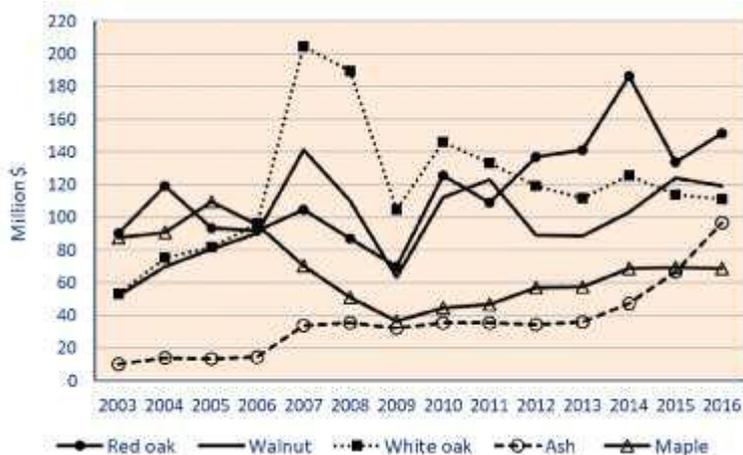


harvest their ash timber in response to the emerald ash borer. It is also possible that strong demand for white oak (Figure 3) has contributed to the increased interest in ash, as ash and white oak are both open-grained species that offer a similar look when used in cabinets and furniture.

**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.