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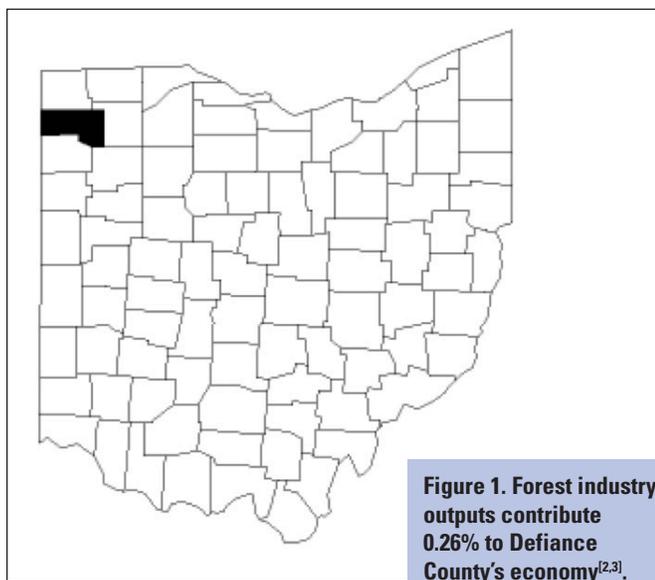
# Defiance County's Forest Economy

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**Figure 1. Forest industry outputs contribute 0.26% to Defiance County's economy<sup>[2,3]</sup>.**

**D**efiance County contains 411 square miles (263,300 acres) of land and is home to 39,000 citizens<sup>[1]</sup>. There are 152 industries in the county<sup>[2]</sup>, with the median household earning an income of \$44,480<sup>[1]</sup>. Major employers include businesses in the sectors of food services, state and local governments, motor vehicle parts manufacturing, and medical offices<sup>[2]</sup>.

The land resources of Defiance County provide many economic benefits. The county's 1,150 agricultural farms produce agronomic crops and dairy and milk products, among others<sup>[3]</sup>. An abundance of wooded acres are also present, providing community support to the county's

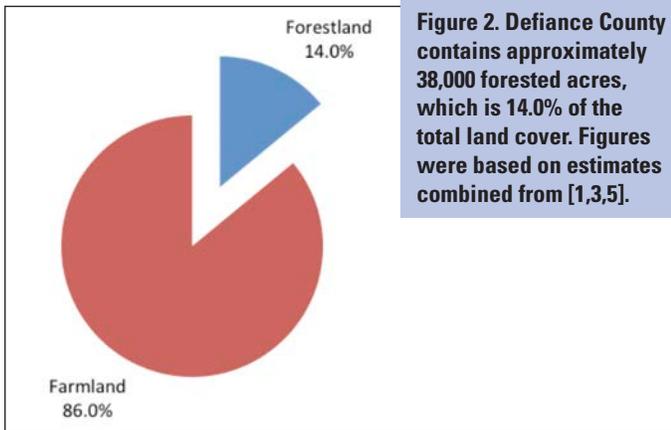
forest industries. These businesses generate \$7.43 million in industrial output and \$540,000 in taxes<sup>[2]</sup>.

Some of the many contributions Defiance County's forests and forest industries provide to the local economy are illustrated in this fact sheet using key figures and statistics. Figures 2–4, describing Defiance County's forest resources, were constructed using data from the 2011 forest survey database provided by the United States Forest Service's Forest Inventory and Analysis. Figures 5–8 explain the county's forest industries and were developed from data analyzed using IMPLAN<sup>®</sup>. Table 1 summarizes the IMPLAN<sup>®</sup> model for Defiance County's economy<sup>a</sup>.

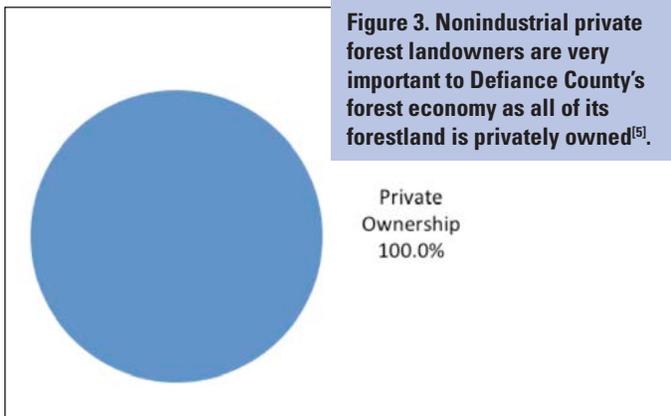
## Benefits of Woodland Management

- Properly managing your woodland improves forest health, aesthetics, and wildlife habitat. It also provides soil stabilization, clean water, carbon sequestration, self-satisfaction, and a potential source of income.
- Managing timber requires less long-term inputs compared to many other land uses.
- You are often able to obtain cost share funds to establish your woodland, property tax credits while managing your forest property, and preferable tax treatment at harvest.
- Standing timber is a stable form of wealth, often comparable in performance to mutual fund investments.

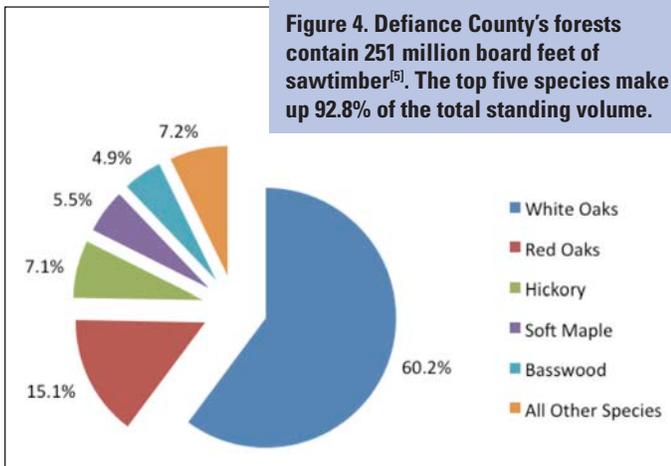
<sup>a</sup>For more information regarding IMPLAN<sup>®</sup> and the economic impact analyses for Defiance County, please contact the first author in the School of Environment and Natural Resources.



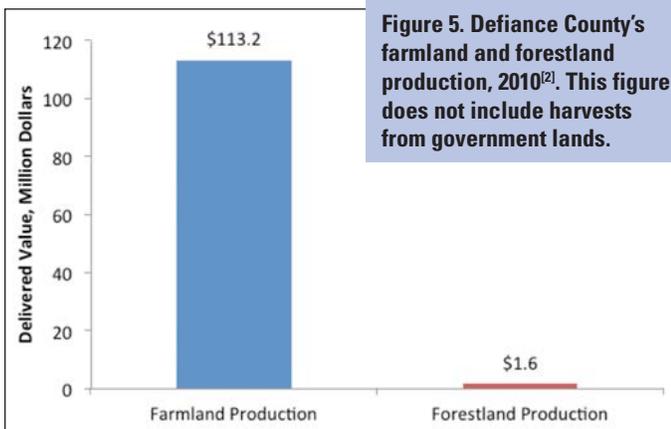
**Figure 2. Defiance County contains approximately 38,000 forested acres, which is 14.0% of the total land cover. Figures were based on estimates combined from [1,3,5].**



**Figure 3. Nonindustrial private forest landowners are very important to Defiance County's forest economy as all of its forestland is privately owned<sup>[5]</sup>.**



**Figure 4. Defiance County's forests contain 251 million board feet of sawtimber<sup>[5]</sup>. The top five species make up 92.8% of the total standing volume.**



**Figure 5. Defiance County's farmland and forestland production, 2010<sup>[2]</sup>. This figure does not include harvests from government lands.**

## How Can I Learn to Better Manage My Woodland?

- Become actively involved in the stewardship of your property.
- Join your local forestry association.
- Search Ohio State University Extension's website Ohioline (<http://ohioline.osu.edu/for-fact/index.html>) for further study of forestry related topics.
- Contact your local service forester at the Ohio Division of Forestry to help you develop a management plan for your property.
- Obtain soils and management information for trees suited to your soil types at your local Soil and Water Conservation District.
- Enlist the assistance of a professional forester when planning a timber sale.
- Consider hiring an Ohio Master Logging Company to conduct your harvesting operation.

## For More Information, Please Consult the Following Sources:

### School of Environment and Natural Resources

The Ohio State University  
 2021 Coffey Rd.  
 Columbus, OH 43210  
 Phone: (614) 688-3421  
 Web: <http://www.ohiowood.osu.edu/>  
<http://woodlandstewards.osu.edu/>

### Ohio State University Extension, Defiance County

06879 Evansport Rd., Suite B  
 Defiance, OH 43512-9722  
 Phone: (419) 782-4771  
 Fax: (419) 784-3883  
 Web: <http://defiance.osu.edu/>

### Ohio Division of Forestry

952-B Lima Ave.  
 Findlay, OH 45840-2320  
 Phone: (419) 424-5004  
 Fax: (419) 424-5008  
 Web: <http://www.ohiodnr.com/Home/landowner/LandownerAssistance/tabid/5279/Default.aspx>

### Defiance County Soil and Water Conservation District

06879 Evansport Rd., Suite C  
 Defiance, OH 43512  
 Phone: (419) 782-8751  
 Fax: (419) 782-1791  
 Web: <http://www.defiance-county.com/swcd/>

**Ohio Society of American Foresters**  
[www.osafdirectory.com](http://www.osafdirectory.com)

**Ohio Forestry Association**

Master Logging Company Program  
 Office: 746 Morrison Rd., Columbus, OH 43230  
 Mail: 1100-H Brandywine Blvd., Zanesville, OH 43701  
 Phone: (614) 497-9580  
 Fax: (614) 497-9581  
 Web: <http://www.ohioforest.org/>

**Call Before You Cut**

Phone: (877) 424-8288  
 Web: <http://www.callb4ucut.com/>

**Terminology**<sup>[5,6]</sup>

**Acre:** A unit of land measure equal to 43,560 square feet (208.7 feet x 208.7 feet). One square mile equals 640 acres.

**Direct Economic Impact:** The effect generated by the industry of interest in an economic impact analysis. This is measured through employment, value-added, and industrial output produced to meet demand for the manufactured product(s).

**Direct Federal Tax Impact:** Taxes collected by the United States government. These taxes are generated from labor income, indirect business taxes, households, and corporations associated with the industry of interest.

**Direct State and Local Tax Impact:** Taxes paid to state, county, and municipal governments. These taxes are generated from labor income, indirect business taxes, households, and corporations associated with the industry of interest.

**Employment:** The total wage and salary and self-employed jobs in a geographical area.

**Indirect Business Taxes:** Sales and excise taxes paid by individuals to businesses through normal operations. They do not include taxes on corporate profits and dividends.

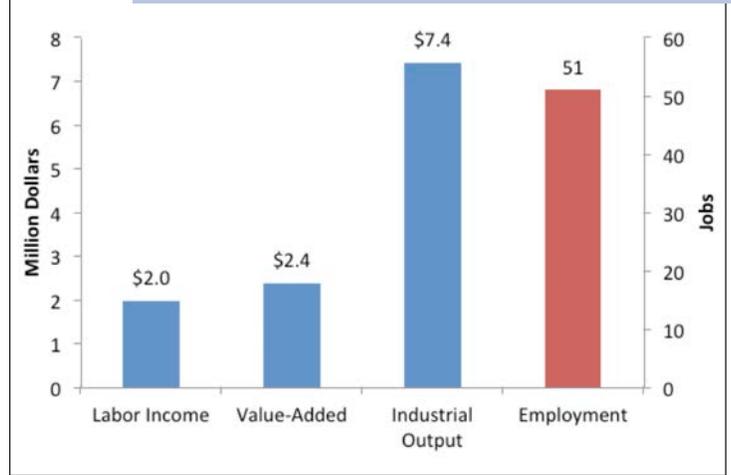
**Industrial Output:** The total value of production measured as the sum of value-added plus the cost of buying goods and services to produce the product(s).

**Labor Income:** Wages and benefits paid to employees plus proprietary income for self-employed work.

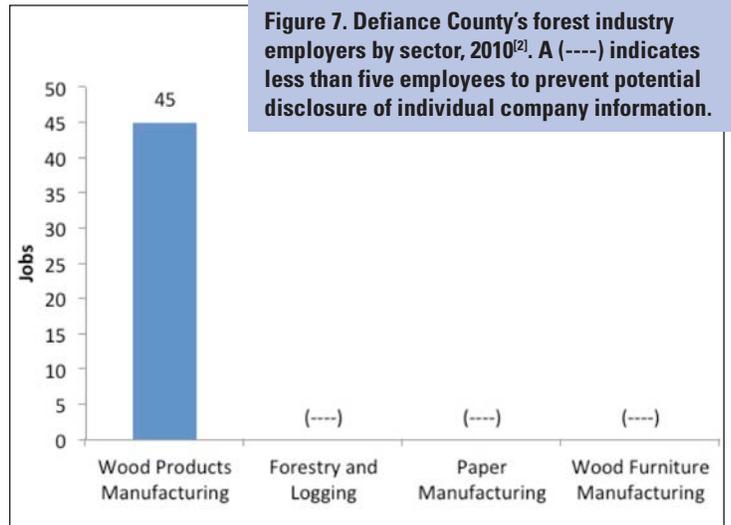
**Sawtimber Volume:** Net volume in board feet by the International 1/4-inch rule of sawlogs in sawtimber trees on timberland. Gross volume minus the deductions that affect use for lumber equals net volume.

**Value-Added:** The sum of labor income, interest, profits, and indirect business taxes.

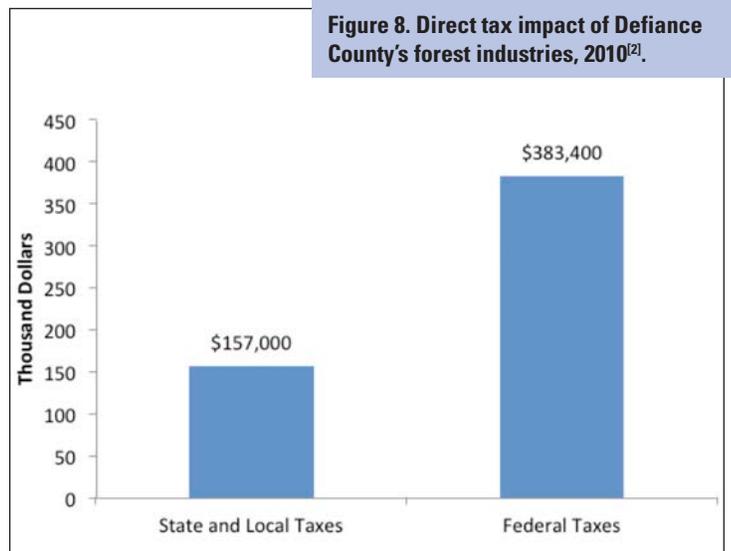
**Figure 6. Direct economic impact of Defiance County's forest industries, 2010<sup>[2]</sup>. Labor income, value-added, and industrial output are represented on the left Y-axis, and employment is represented on the right Y-axis.**



**Figure 7. Defiance County's forest industry employers by sector, 2010<sup>[2]</sup>. A (----) indicates less than five employees to prevent potential disclosure of individual company information.**



**Figure 8. Direct tax impact of Defiance County's forest industries, 2010<sup>[2]</sup>.**



**Table 1.** Direct industrial contributions within Defiance County's economy, 2010<sup>[2]</sup>. The IMPLAN® model's 440 sectors were aggregated into 12 industries by each sector's 2-digit North American Industry Classification System (NAICS) code number. A (----) indicates less than five employees or a value less than \$500,000 to prevent potential disclosure of individual company information.

Industry NAICS Description	Employment	Labor Income	Value-Added	Output
11 Agriculture, Forestry, Fishing, and Hunting	1,430	\$20,421,275	\$40,786,818	\$117,407,245
<b>113 Forestry and Logging</b>	(----)	(----)	(----)	<b>\$569,105</b>
21 Mining	(----)	(----)	(----)	\$637,217
22 Utilities	27	\$1,883,239	\$10,575,104	\$13,946,371
23 Construction	877	\$26,607,466	\$34,916,218	\$94,809,605
31–33 Manufacturing	3,494	\$272,324,278	\$433,649,098	\$1,220,866,950
<b>321 Wood Products Manufacturing</b>	<b>45</b>	<b>\$1,647,914</b>	<b>\$2,029,994</b>	<b>\$6,462,932</b>
<b>322 Paper Manufacturing</b>	(----)	(----)	(----)	(----)
<b>337 Wood Furniture Manufacturing</b>	(----)	(----)	(----)	(----)
42 Wholesale Trade	477	\$28,984,632	\$54,396,252	\$70,934,593
44–45 Retail Trade	2,912	\$72,866,817	\$108,422,387	\$165,120,770
48–49 Transportation and Warehousing	621	\$30,321,528	\$40,575,333	\$71,483,352
51–56 Professional Services	3,418	\$108,193,839	\$336,306,548	\$557,197,756
61–72 Educational, Health, and Recreation Services	5,213	\$128,768,901	\$153,961,325	\$301,563,464
81 Other Services	1,190	\$30,672,907	\$33,255,149	\$77,619,907
92 Government and non-NAICS Industries	2,211	\$106,277,014	\$120,025,243	\$141,432,072
<b>Forest Industries</b>	<b>51</b>	<b>\$1,979,532</b>	<b>\$2,387,472</b>	<b>\$7,427,359</b>
<b>Total</b>	<b>21,877</b>	<b>\$827,469,771</b>	<b>\$1,367,059,855</b>	<b>\$2,833,019,305</b>

## References

- [1] United States Census. 2010. United States census quick facts. <http://quickfacts.census.gov/qfd/states/39/39039.html>.
- [2] Minnesota IMPLAN Group. 2012. 2010 Ohio state and national package database. MIG, Inc., Hudson, WI.
- [3] United States Department of Agriculture National Agricultural Statistics Service. 2012. 2010 Ohio county summaries. [http://www.nass.usda.gov/Statistics\\_by\\_State/Ohio/Charts\\_and\\_Maps/index.asp](http://www.nass.usda.gov/Statistics_by_State/Ohio/Charts_and_Maps/index.asp).
- [4] United States Forest Service Forest Inventory and Analysis. 2012. Northeast Forest Inventory and Analysis Methodology: Common definitions used by FIA. [http://www.fs.fed.us/ne/fia/methodology/def\\_ah.htm](http://www.fs.fed.us/ne/fia/methodology/def_ah.htm).
- [5] United States Forest Service Forest Inventory and Analysis. 2012. Defiance County 2011 forest survey database. <http://apps.fs.fed.us/fido/standardrpt.html>.
- [6] Minnesota IMPLAN Group. 2004. IMPLAN Professional®: Users Guide, Analysis Guide, Data Guide. 3rd edition. MIG, Inc.

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