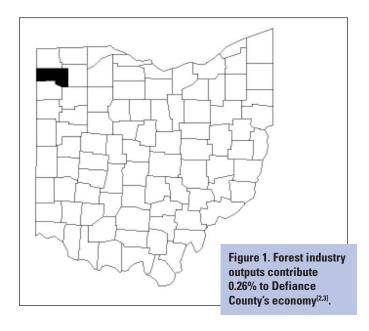
F-88-13

# **Defiance County's Forest Economy**

Eric McConnell, Ph.D.
Forest Operations and Products Specialist
Ohio State University Extension

#### Wm. Bruce Clevenger

Agriculture and Natural Resources
Ohio State University Extension, Defiance County



Defiance 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

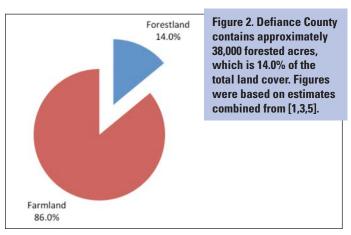
forest industries. These businesses generate \$7.43 million in industrial output and \$540,000 in taxes<sup>[2]</sup>.

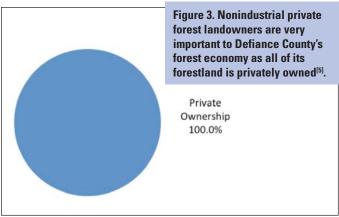
Some of the many contributions Defiance County's forests and forest industries provide to the local economy are illustrated in this fact sheet using key figures and statistics. Figures 2–4, describing Defiance County's forest resources, were constructed using data from the 2011 forest survey database 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®. Table 1 summarizes the IMPLAN® model for Defiance County's economy<sup>a</sup>.

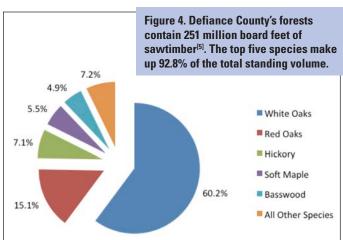
#### **Benefits of Woodland Management**

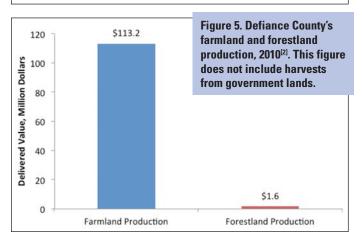
- Properly managing your woodland improves forest health, aesthetics, and wildlife habitat. It also provides soil stabilization, clean water, carbon sequestration, self-satisfaction, and a potential source of income.
- Managing timber requires less long-term inputs compared to many other land uses.
- 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>&</sup>lt;sup>a</sup>For more information regarding IMPLAN® and the economic impact analyses for Defiance County, please contact the first author in the School of Environment and Natural Resources.









### 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

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

#### **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 × 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.

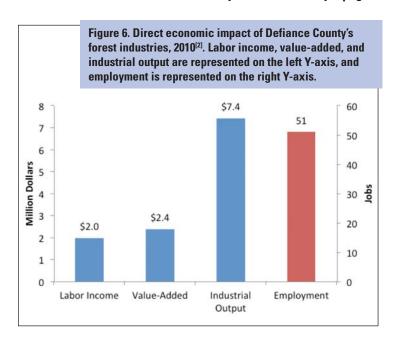
**Indirect Business Taxes**: Sales and excise taxes paid by individuals to businesses through normal operations. They do not include taxes on corporate profits and dividends.

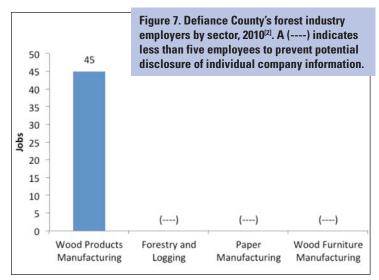
**Industrial Output**: The total value of production measured as the sum of value-added plus the cost of buying goods and services to produce the product(s).

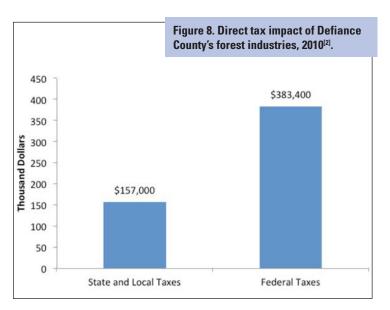
**Labor Income**: Wages and benefits paid to employees plus proprietary income for self-employed work.

**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.







**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
113 Forestry and Logging	()	()	()	\$569,105
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
321 Wood Products Manufacturing	45	\$1,647,914	\$2,029,994	\$6,462,932
322 Paper Manufacturing	()	()	()	()
337 Wood Furniture Manufacturing	()	()	()	()
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
Forest Industries	51	\$1,979,532	\$2,387,472	\$7,427,359
Total	21,877	\$827,469,771	\$1,367,059,855	\$2,833,019,305

#### 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.
- [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.
- [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.

### EMPOWERMENT THROUGH EDUCATION

#### Visit Ohio State University Extension's web site "Ohioline" at: http://ohioline.osu.edu

Ohio State University Extension embraces human diversity and is committed to ensuring that all research and related educational programs are available to clientele on a nondiscriminatory basis without regard to age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, sexual orientation, or veteran status. This statement is in accordance with United States Civil Rights Laws and the USDA.

Keith L. Smith, Associate Vice President for Agricultural Administration; Associate Dean, College of Food, Agricultural, and Environmental Sciences; Director, Ohio State University Extension; and Gist Chair in Extension Education and Leadership.

For Deaf and Hard of Hearing, please contact Ohio State University Extension using your preferred communication (e-mail, relay services, or video relay services). Phone 1-800-750-0750 between 8 a.m. and 5 p.m. EST Monday through Friday. Inform the operator to dial 614-292-6181.