



F-95-13

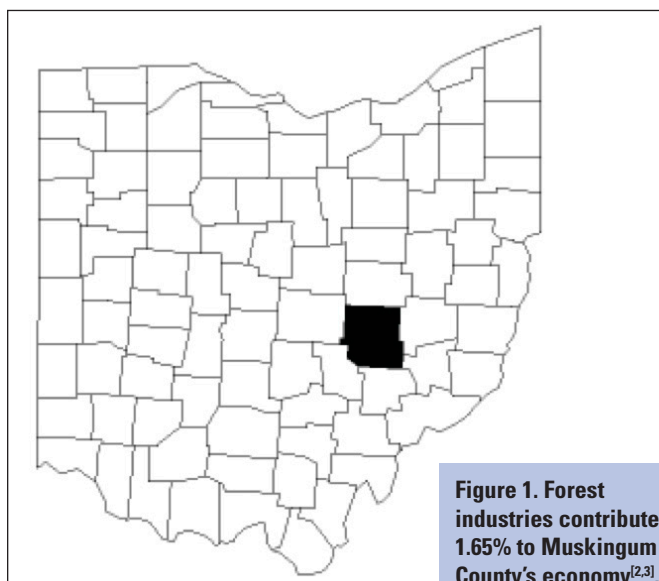
Muskingum County's Forest Economy

Eric McConnell, PhD

Forest Operations and Products Specialist
Ohio State University Extension

Mark Mechling

Agriculture and Natural Resources
Ohio State University Extension, Muskingum County



Muskingum County contains 664 square miles (425,300 acres) of land and is home to 85,950 citizens^[1]. There are 187 industries in the county^[2], with the median household earning an income of \$40,600^[1]. Major employers include businesses in the sectors of food services, state and local governments, health services, and wholesale trade businesses^[2].

The land resources of Muskingum County provide many economic benefits. The county's 1,140 agricultural farms produce agronomic crops and livestock, among others^[3]. An abundance of wooded acres are also present, providing community support to the county's forest

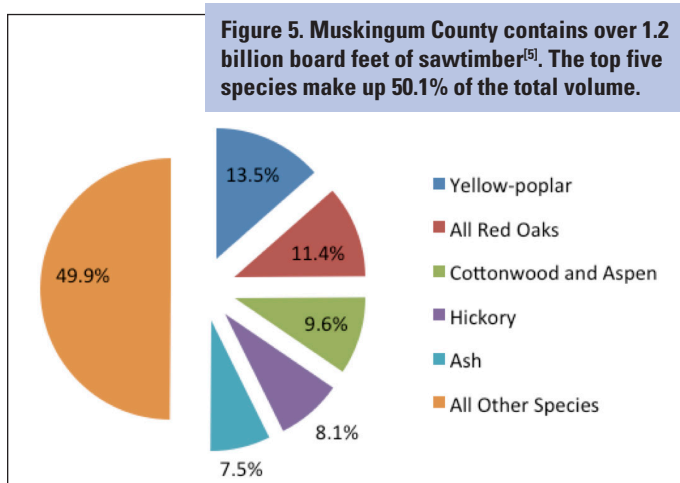
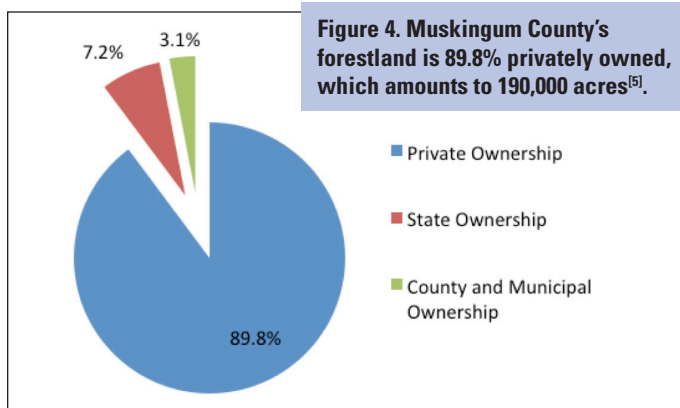
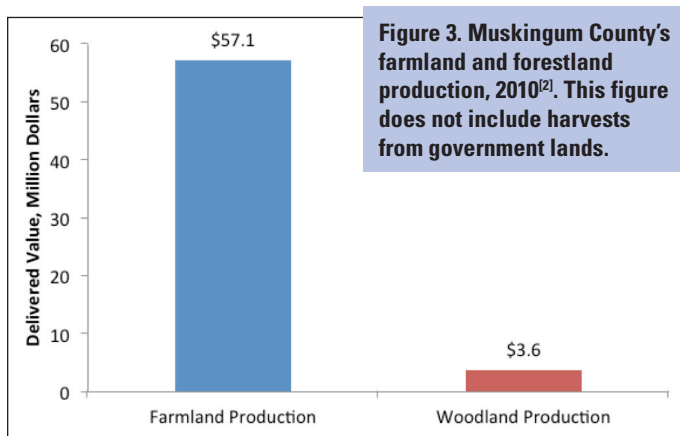
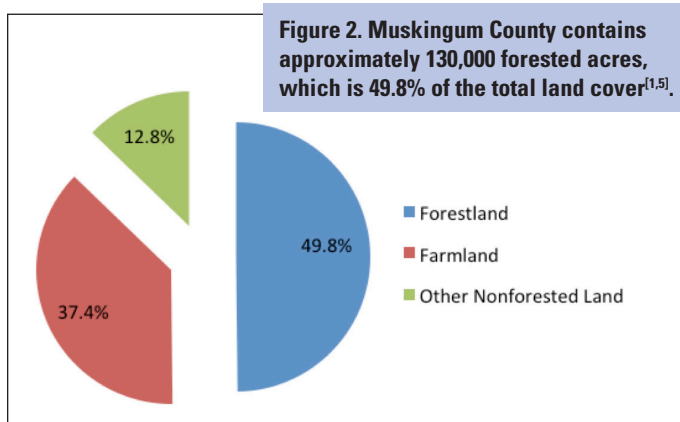
industries. These businesses generate \$78.9 million in industrial output and \$5.29 million in taxes^[2].

Some of the many contributions Muskingum County's forests and forest industries provide to the local economy are illustrated in this fact sheet using key figures and statistics. The figures describing Muskingum 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. Those explaining the county's forest industries were developed from data analyzed using IMPLAN[®]. Table 1 summarizes the IMPLAN[®] model for Muskingum County's economy^a.

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.

^aFor more information regarding IMPLAN[®] and the economic impact analyses for Muskingum 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 Road

Columbus, OH 43210

Phone: (614) 688-3421

Web: <http://www.ohiowood.osu.edu/>

<http://woodlandstewards.osu.edu/>

Ohio State University Extension, Muskingum County

225 Underwood St., Room 6

Zanesville, OH 43701

Phone: (740) 454-0144

Fax: (740) 454-0154

Web: <http://muskingum.osu.edu/>

Ohio Division of Forestry

10517 Canal Rd.

Hebron, OH 43025

Phone: (740) 928-7034

Fax: (740) 928-6039

Web: [http://www.ohiodnr.com/Home/landowner/](http://www.ohiodnr.com/Home/landowner/LandownerAssistance/tabid/5279/Default.aspx)

[LandownerAssistance/tabid/5279/Default.aspx](http://www.ohiodnr.com/Home/landowner/LandownerAssistance/tabid/5279/Default.aspx)

Muskingum County Soil and Water Conservation District

225 Underwood St., Suite 10

Zanesville, OH 43701

Phone: (740) 454-2027

Fax: (740) 454-1451

Web: <http://www.muskingumswcd.org/>

Ohio Society of American Foresters

www.osafdirectory.com

Ohio Forestry Association

Master Logging Company Program
 Office: 746 Morrison Road, Columbus, OH 43230
 Mail: 1100-H Brandywine Boulevard,
 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^[4,6]

Acres: 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 Muskingum County's forest industries, 2010^[2]. 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. Muskingum County's forest industry employers by sector, 2010^[2].



Figure 8. Direct tax impact of Muskingum County's forest industries, 2010^[2].

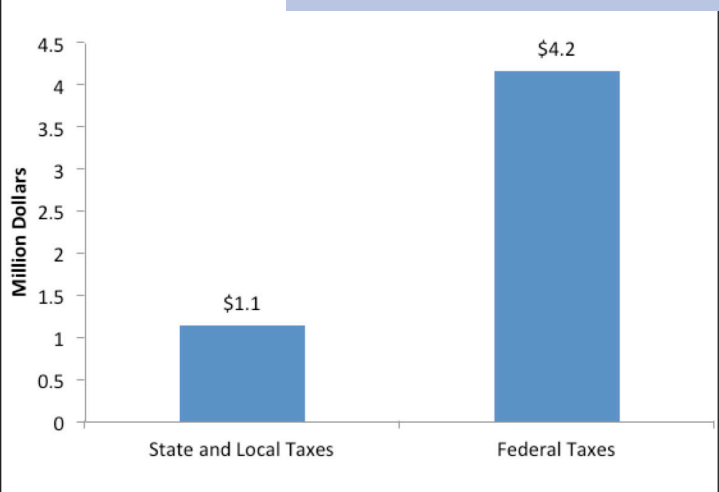


Table 1. Direct industrial contributions within Muskingum County's economy, 2010^[2]. The IMPLAN® model's 440 sectors were aggregated into 12 industries by each sector's 2-digit North American Industry Classification System (NAICS) code number.

NAICS Industry Description	Employment	Labor Income	Value Added	Industrial Output
11 Agriculture, Forestry, Fishing, and Hunting	1,234	\$11,659,501	\$19,712,153	\$62,161,681
113 Forestry and Logging	21	\$538,991	\$1,844,948	\$3,044,063
21 Mining	519	\$33,407,255	\$56,394,779	\$88,528,724
22 Utilities	207	\$22,312,128	\$83,058,909	\$127,051,991
23 Construction	1,761	\$48,623,223	\$65,311,071	\$185,632,648
31–33 Manufacturing	3,177	\$182,435,221	\$355,975,178	\$1,118,636,224
321 Wood Products Manufacturing	365	\$14,817,942	\$22,379,571	\$55,271,685
322 Paper Manufacturing	37	\$2,478,760	\$3,170,692	\$13,703,917
337 Wood Furniture Manufacturing	58	\$24,455,155	\$2,440,433	\$6,866,649
42 Wholesale Trade	1,830	\$101,318,557	\$198,835,456	\$262,301,208
44–45 Retail Trade	5,597	\$145,066,395	\$211,984,982	\$325,476,768
48–49 Transportation and Warehousing	1,281	\$56,782,508	\$72,920,788	\$131,450,219
51–56 Professional Services	6,099	\$180,162,457	\$679,636,317	\$1,065,612,448
61–72 Education, Health, and Recreation Services	11,837	\$426,984,601	\$491,701,058	\$883,793,340
81 Other Services	2,479	\$79,825,889	\$83,434,488	\$164,961,967
92 Government and non-NAICS Industries	5,497	\$264,607,615	\$298,363,052	\$354,593,849
Forest Industries	481	\$20,280,848	\$29,835,644	\$78,886,314
Total	41,518	\$1,553,185,350	\$2,617,328,230	\$4,770,201,066

References

- [1] United States Census. 2010. United States Census state and county quick facts. <http://quickfacts.census.gov/qfd/states/39/39119.html>.
- [2] Minnesota IMPLAN Group. 2013. 2010 Ohio state and national package database. MIG, Inc., Hudson, WI.
- [3] United States Department of Agriculture National Agricultural Statistics Service. 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. 2013. 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 Database. 2010. <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.