The forests in Pennsylvania provide the citizens of the Commonwealth with a vast array of benefits. The forests provide a source of a variety of recreational opportunities. Forests provide habitat for a diverse range of plants, animals, birds and fish. Forests help to purify the water we drink.

The forests of Pennsylvania also produce a renewable forest products resource that supports a keystone to the state’s economy. Pennsylvania’s forest products industry generates $5.5 billion in sales annually and employs nearly 90,000 individuals at over 3,000 facilities across the state.

This publication describes the forest resource in the state and how it supports the state’s forest products industry.

Pennsylvania’s Forest Resource

The current success of Pennsylvania’s hardwood is a continuation of the state’s industrial heritage and its relationship with the forest.

This has been the case since European settlers first settled in Pennsylvania. From colonial times to the early 1900’s, Pennsylvania’s forests were harvested to provide land for agriculture and wood products to support the growth and development of the nation.

By the early 1900’s, much of Pennsylvania’s forests were cut over and forest cover amounted to only about 30 percent of the state’s land area. Since that time, the forests have recovered and developed into the beautiful and bountiful resource that we now have in Pennsylvania.

Today, Pennsylvania has 16.7 million acres of hardwood forest, which covers 58 percent of the state’s land mass. Pennsylvania has essentially the same number of forested acres as it did in 1989 and more than in 1955.
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Pennsylvania has one of the nation's largest concentrations of hardwood growing stock, with species such as Red Maple, Black Cherry, Northern Red Oak and Sugar Maple being the most prevalent trees in the state. The volume of live trees in the state is 33.7 billion cubic feet, an increase of 23 percent since 1989.

As a result of its industrial past, Pennsylvania's forests are generally even-aged and now reaching a point of maturity. Much of the state's forests containing large, high quality, commercially valuable trees that are 80 to 120 years old. Over 9 million acres, or 58 percent of the forest in the state consist of stands that are predominantly sawtimber-sized trees. Overall, the volume of sawtimber in the state in 2002 was 86.3 billion board feet, an 18 percent increase in volume since 1989.

Hardwoods account for about 90 percent of the sawtimber volume. Softwood species, including eastern hemlock, white pine and red pine, account for about ten percent of the sawtimber volume in Pennsylvania. Between 1989 and 2002, sawtimber volume increased for all of the most prominent species in the state, with the exception of sugar maple.

The volume of poletimber in the state is 8,575 million cubic feet. Red Maple, Black Cherry, Sugar Maple, Chestnut, Oak and Birch are among the most prevalent species for trees of this size.

Pennsylvania is a national leader in the implementation and promotion of sustainable forestry practices that support a thriving forest products industry, while ensuring that the forests in the state are available to provide renewable forest products and other benefits for future generations.

Approximately 2.4 million acres of forestland in Pennsylvania have been independently certified as sustainably managed under the criteria of the Forest Stewardship Council (FSC). This includes over 2.1 million acres of state forestland managed by the Pennsylvania Bureau of Forestry. More than 30 Pennsylvania sawmills and value-added processors are chain of custody certified to manufacture and provide FSC certified product from these forests.

Pennsylvania also has been a leader in the Sustainable Forestry Initiative (SFI). SFI is a voluntary industry-sponsored program that promotes sustainable forest management decisions and harvesting practices by landowners, loggers and forestry professionals. Over 5,000 loggers have participated in SFI training and more than 20,000 landowner information packets have been distributed.

Private forest landowners can receive additional education and technical assistance to manage their woodland from a variety of sources, including the American Tree Farm System, the Pennsylvania Bureau of Forestry, Penn State cooperatives extension, Pennsylvania Forest Stewardship Program, local forest landowner groups and other organizations.

* Sapling/Seedlings are trees less than 5.0 inches diameter at breast height (DBH)
* Poletimber are trees 5.0 to 11.0 DBH (5.0 to 9.0 DBH for softwood)
* Sawtimber are trees greater than 11.0 inches DBH (greater than 9.0 inches for softwood)
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Forest Sustainability

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Private forest landowners can receive additional education and technical assistance to manage their woodlot from a variety of sources, including the American Tree Farm System, the Pennsylvania Bureau of Forestry, Penn State cooperatives extension, Pennsylvania Forest Stewardship Program, local forest landowner groups and other organizations.
The largest share of Pennsylvania's forest is owned by private individuals and organizations, accounting for almost 70 percent of the forest acreage in the state. It is estimated that the forest products industry accounts for about five percent of this acreage. There are over 500,000 private owners of forest in the state. These private lands provide the bulk of the resource needs for the state's forest products companies. It is legal to harvest timber on private forestland throughout the state. Forestry and timber harvesting operations are subject to regulation addressing issues related to stream crossing, wetland disturbance, and soil erosion and sedimentation control. Some local municipalities also have regulations regarding forestry, timber harvesting operations and transportation issues. Over 30 percent of Pennsylvania's forests are owned and managed by a government entity– either a federal or state agency, or a local unit of government. The largest government land managers in Pennsylvania include the Pennsylvania Bureau of Forestry (2.1 million acres), the Pennsylvania Game Commission (1.1 million acres) and the United States Forest Service (513,000 acres).

Despite accounting for nearly a third of the forest ownership, government-owned lands provide less than ten percent of the annual resource needs of the state's forest products companies. Federal and state managed forests in Pennsylvania sell about 70 million board feet of sawtimber and roughly 80,000–100,000 hundred cubic feet of pulpwood each year. Access to timber and pulpwood on the U.S. Forest Service Allegheny National Forest has been greatly reduced over the past decade by litigation from environmental activists.

The state Bureau of Forestry recently revised its forest management plan, which calls for annual sawtimber sales of 56 million board feet and pulpwood sales of 43 million board feet (approximately 66,000 Hcf). In 2004, the U.S. Forest Service was in the process of revising its forest management plan, which includes an anticipated revision to its allowable cut.
Ownership and access

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The vast, high quality forest resource in Pennsylvania supports a diverse and dynamic forest products industry that is a driving force in the economy of the Commonwealth.

Pennsylvania produces $5.5 billion in forest products annually.

The state's forest products industry includes foresters and loggers, sawmills, wood concentration and distribution facilities veneer producers, paper companies, pallet companies, value-added manufacturers.

Pennsylvania is recognized as the nation's leader in the production of hardwood lumber, accounting for about ten percent of the total amount of the total annual U.S. output.

Pennsylvania is also a leading manufacturer of many value-added wood products, including cabinets and furniture, flooring, interior millwork products and pallets.

Pennsylvania companies manufacture and distribute a variety of products including,

- lumber
- residential, office and institutional furniture
- kitchen cabinets
- paper and consumer paper products
- veneer
- furniture parts and other wood components
- flooring
- moldings and millwork
- doors and windows
- pallets and boxes
- railroad, mine and landscape ties
- housing timbers
- engineered wood products, such as particleboard and medium density fiberboard
- household furnishing
- tool handles
- sports equipment
- musical instruments
- firewood and wood fuel pellets
- playground surfaces
- landscape mulch

In 2002, there were 3,047 forest product establishments in Pennsylvania, employing 86,736 individuals. This accounts for over eleven percent of the state's manufacturing workforce.

Additionally, Pennsylvania is home to over 48,000 self-employed individuals and other non-employer business involved in the production of forest products.

Combined, approximately 135,000 individuals derive income from working in the forest products industry.

The forest products industry has a presence in every county of the Commonwealth. Lancaster County has the most establishments (206) and employees (6,048).

In terms of percentage of overall manufacturing employees, the influence of the hardwoods industry is felt most in Sullivan County, where over 70 percent of its manufacturing jobs come from the forest products industry. It is one of four counties with more than half of its manufacturing employment contributed from the forest product industry in 2001. The others are Clarion, Perry and Union. In an additional thirteen counties – Adams, Blair, Bradford, Clearfield, Clinton, Forest, Juniata, Lycoming, McKean, Potter, Snyder, Susquehanna, and Wayne - the forest products industry accounts for between 25 percent and 50 percent of the total manufacturing employment for the county.

The economic impact of the industry goes beyond employment. As a driving force in the state's economy, the forest products industry also provides billions of dollars in secondary impacts through the purchasing of other equipment and material, taxes paid and employee income. The forest products industry pays forest landowners hundreds of millions of dollars annually in the purchase of timber. Government agencies and taxpayers also receive tens of millions of dollars annually from the sale of government owned timber.
Pennsylvania’s Hardwoods Industry

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Source: Pennsylvania Department of Labor
Pennsylvania provides an excellent opportunity for a hardwood manufacturer to locate or expand a business. Pennsylvania has one of the nation’s largest concentrations of high quality hardwood forest resources within its borders, which can be supplemented with additional timber resources from neighboring states. With a sizable forest product industry already in place, value-added processors of every size will find a variety of lumber, veneer and wood component suppliers are available to meet their material needs.

Pennsylvania’s location and the state’s extensive network of roads and rail ensure that most major markets in the eastern United States and Canada are within easy reach. Close proximity to major eastern seaports provides easy access to overseas markets.

Pennsylvania has a world-class workforce, including over 100,000 Pennsylvanians experienced and skilled in various aspects of forest product manufacturing.

Penn State University’s prestigious School of Forest Resources is a valuable resource for skilled employees, technical assistance programs and cutting edge research on resource and product development.

Pennsylvania is taking unprecedented steps to ensure the proper climate for business to locate and grow in the state. Pennsylvania has recently invested $2 billion, as part of a comprehensive economic stimulus package that will help manufacturers in making technology, environmental and energy investments needed to enhance productivity and competitiveness.

Pennsylvania has a comprehensive set of business assistance tools to assist hardwood manufacturers with their needs. State and local economic development agencies are ready to help manufacturers with the following services:

- Identification of appropriate business location options - including certified “ready to build” sites and Keystone Opportunity Zones, where businesses pay virtually no taxes for up to 10 years
- Coordination of the proper financial tools to meet the needs of manufacturers of all sizes
- Opportunities and assistance to develop domestic and export markets
- Access to technical assistance targeting the wood industry
- Help with regulatory compliance, pollution reduction and energy efficient practices
- Identification of suppliers of lumber and other components needed to support value-added wood processor
- Workforce development and customized job training.

Pennsylvania even has its own agency dedicated to supporting the expansion and development of the forest product industry. The Pennsylvania Hardwood Development Council is an office within the Pennsylvania Department of Agriculture, which coordinates its efforts among key state agencies, local economic development providers, educational and service providers and industry trade groups.

The objectives of the Hardwoods Development Council include:

- Promoting timber access on both public and private lands
- Developing domestic and international markets for Pennsylvania’s value-added wood products
- Supporting the development and expansion of value-added wood manufacturing
- Promoting public knowledge and understanding of the importance of the state’s forest products industry and the use of wood products in our daily lives.

The Hardwoods Development Council serves the forest products industry through marketing efforts, support for one-on-one wood products technical assistance, sponsorship of relevant resource and product development research, and the promotion of public and private business assistance resource. It also supports various public education initiatives, including the Pennsylvania Wood Mobile, a traveling exhibit and education program that teaches students and the general public about the state’s forest resource and Pennsylvania’s forest products industry.

For more information, contact:
Pennsylvania Hardwoods Development Council
Pennsylvania Department of Agriculture
2301 North Cameron Street, Room 308
Harrisburg, PA 17110-9408

Telephone: (717) 772-3715
Fax: (717) 705-0663

www.agriculture.state.pa.us
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