**Timber cruising update**
DNR Forest Resources Division staff have been working for a number of years to update and modernize the ways that timber is cruised and volumes are estimated. While the current system works, it was developed in the '70s and '80s. With the use of computers and newer methods of volume calculation, such as taper models, an improvement in efficiency and volume accuracy is anticipated. DNR staffers are diligently working on key components of the process, which includes a complete software change, new methods of collecting field data, a new method of check-cruising, and communication with DNR customers and contractors. The forecast for implementing is as early as fiscal year 2020, but more details and discussion regarding the new cruising methods and outcomes will be had before then.

**Heterobasidion root disease - What you need to know**
Training sessions were held in 2018 regarding Heterobasidion root disease, a disease that affects pines and is found primarily in the western Lower Peninsula. The training was geared towards loggers and mill owners that produce or process red pine. This training focused on the different facets of implementing treatments. Stump treatments are common in other states that have HRD. Michigan Department of Agriculture and Rural Development (MDARD) licensing and training is required to chemically treat freshly cut red pine stumps to prevent the spread of HRD, and this training fulfilled a portion of that requirement.

The DNR is taking a risk-based approach in implementing a timber sale contract specification that requires stump treatments or winter logging. There are three stands identified for this year that may need the new timber sale specification. As of Oct. 1, 2018, stump treatments or winter operations are required for all U.S. Forest Service red pine timber sale contracts, including those under the Good Neighbor Authority.

Another training session on HRD will be offered at the Evergreen Resort in Cadillac in May 2019 for producers who missed the 2018 sessions. Additional information regarding this training opportunity will be distributed soon.

Find more information and report any suspected incidence of HRD by using the DNR HRD Viewer at [Michigan.gov/ForestHealth](http://Michigan.gov/ForestHealth).

**Wood energy feasibility assessments**
Wood-fired heat systems can be a good fit for some companies, and the Michigan DNR can help you evaluate your options. Wood-chip and wood manufacturing residue-fired heat systems can be competitive with natural gas-fired systems. In some cases, electrical power generation may also be cost-effective. The DNR can conduct wood energy feasibility analyses in partnership with the USDA Forest Service and MDARD. The Wood Energy Technical Assistance Team will work with you to evaluate your heat and power needs, utility costs, residue production and objectives. Companies will receive a report summarizing the proposed capital and equipment investments, the amount that could be saved annually using a wood-fired system and a simple payback period for the cost/value scenarios evaluated. For more information, contact Dave Neumann at neumannnd@michigan.gov or 517-284-5887.
2018 DNR timber sale preparation
In fiscal year 2018, the DNR prepared 60,091 acres of timber totaling about 1,180,755 cords and sold about $54,360,000 in timber sale contracts. Through Good Neighbor Authority, an additional 2,418 acres were prepared for sale in Michigan's three national forests, resulting in about 39,000 cords of wood.

Fun state forest timber sale facts:
- Less than 3 percent of all DNR prepared timber sales go unsold.
- Less than 5 percent of all sold timber sales go uncompleted.
- Less than 2 percent of sold timber sales are uncompleted with no harvesting.

Good Neighbor Authority Update
Under agreements between the DNR and the U.S. Forest Service, the DNR continued to assist the state's three national forests with preparation, advertising and administration of timber sales. The DNR prepared 2,418 acres (39,013 cords) in 2018. GNA will ramp up significantly in 2019 with 7,484 acres of planned timber sales. The complexity of GNA will also grow in 2019 as the DNR helps with writing prescriptions, the use of contract timber sale preparation, land line survey and timber salvage. An oak savannah restoration project in the Huron-Manistee National Forest and forest inventory in the Ottawa National Forest also are planned. GNA work is anticipated to continue to grow in 2020 to more than 9,400 acres of timber sales.

![GNA Acres by Fiscal Year](image)

New forestry Best Management Practices manual
Michigan's Forestry Best Management Practices for Soil and Water Quality has been updated and published. The new edition can be accessed under "management strategies" at [Michigan.gov/Forestry](http://Michigan.gov/Forestry). Printed guidelines may be obtained by contacting Margaret Spagnuolo at spagnuolom2@michigan.gov or 517-284-5903.

Many thanks to the team that helped to update the manual including Amy Lounds (DEQ), Ben Schram (MDARD), David Price (DNR), Charlie Becker (Weyerhaeuser), Scott Robbins (Michigan Forest Products Council), Warren Suchovsky (Suchovsky Logging) and Bernie Hubbard (Michigan Association of Timbermen).
Sawmill efficiency evaluations
How can your mill increase lumber yield, minimize volume losses and achieve greater value for the wood you buy? A sawmill efficiency evaluation can help you find the answers. The Michigan Wood Innovation Team and the DNR can provide a free sawmill efficiency evaluation to assess machine center accuracy and lumber recovery from mill-specific log grades, identify where yield losses are occurring, estimate profitability of processing different log grades, and evaluate other issues that affect mill efficiency and profitability. These studies can also help mills to reduce waste. Evaluations are tailored to the needs of the company and are confidential. For more information, contact Dave Neumann, neumannd@michigan.gov, Brenda Haskill, haskillb@michigan.gov, or Don Peterson with MWIT at don@renewableresourcesolutions.com.

2018 DNR Utilization and Marketing Program
Accomplishments
This year the DNR Utilization and Marketing program expanded its efforts to provide outreach, education and technical assistance to loggers, mills and manufacturers. Accomplishments this year include:
- Hosted workshops on log grading and scaling, veneer log specifications and manufacturing, and railroad crosstie specifications and grading for mills and loggers. Also hosted three workshops on mass timber construction for architects and engineers.
- Assisted Michigan State University Forestry Department in hosting the National Firewood Workshop for commercial firewood producers
- Completed five sawmill efficiency evaluations and assisted with seven wood energy evaluations for mills and manufacturers
- Published the 2016 Primary Mill Survey Report
- Published a dashboard summarizing county-level economic contributions of the forest products industry
- Published the 2016 Active Primary Mill Map in PDF form and as an interactive online map
- Continued development of the redesigned Michigan Forest Products Industry Directory, slated for release this spring
- Sponsored partnership initiatives including the Michigan Wood Innovation Team, the Michigan State Wood Energy Team, the Michigan Registered Forester Program, and the Michigan Forest Biomaterials Initiative. The Division also contributed financial support to MIFBI's Wood Recycling workshop in October.
- Related to workforce development for the industry, staff promoted industry careers at the Michigan Industrial and Technological Education Society conference in Lansing that draws more than 1,000 students and several hundred teachers each year.
- Represented the 20 Northeast and Midwestern states at the USDA Forest Service's National Wood Innovation Team meeting.
- Launched a new regional project to assess the economic contributions of the forest products industry in the 20 Northeast and Midwestern states – a three-year federal grant-funded project that will help the northern states document the importance of the forest products industry in the north.

Looking ahead in 2019, the program is considering offering workshops on log grading and scaling, veneer log production, railroad tie production, business management and marketing or quality control for sawmills, and sawing, edging and trimming. During December 2018, surveys of sawmills and manufacturers were under way to help identify the best topics for future workshops of interest to the industry. We welcome suggestions for training topics. Please forward them to program staff. Contact information can be found at the end of the newsletter.

Arauco Update
"Headed for completion in early 2019, ARAUCO's Grayling particleboard operation will be the most modern particleboard plant in North America and the largest of its kind globally. Once completed, the plant will feature North America's largest single continuous particleboard press (170 ft.) and will be one of the most productive in the world."

In their latest published update, Arauco states that as of October 31, 2018, 1.8 million project hours have been spent, 186 employees have been hired, 837 contractors are employed, and 603 of those are Michigan contractors. The facility's main building is 820,000 square feet. The company has begun stockpiling FSC logs, completed two rail spur to the facility and started the paving for the security area and truck dump. Managers hope to be producing finished product early in 2019.

Interactive 2016 Active Primary Mill Map
Check out our new interactive Primary Mill Map on the web at Michigan.gov/ForestProducts. The Division has published an interactive version of the 2016 Active
Primary Mill Map, showing the locations, type, primary products, and contact information for active sawmills and other roundwood-using manufacturers identified in the 2016 primary mill survey. The interactive map provides a quick and easy way to find the type of mill you’re looking for, and contact info. Note that the map shows mills and manufacturers that were active in 2016 and used wood directly from the forest as raw material (sawlogs, pulpwood, or chips). Contact Brenda Haskill or David Neumann with any questions or comments about the map.

2015 county-level forest products industry economic contributions dashboard
See how much the forest products industry contributes to your local economy with the DNR’s new county-level dashboard. Visit Michigan.gov/ForestProducts and click on “Economics of Forestry” to view the dashboard.

Michigan’s forest products industries contribute substantially to local economies in terms of jobs, labor income and output or sales. The dashboard summarizes direct contributions estimates for each of Michigan’s 83 counties, using 2015 IMPLAN data. Statewide- and region-level reports also are available. A few highlights:

- Statewide, the forest products industry supported more than 99,000 jobs and contributed $21.2 billion to Michigan’s economy in 2016.
- The forest products industry supported more than one-third of all manufacturing jobs in the Upper Peninsula in 2015.
- The top five counties for forest products industries employment were Kent, Ottawa, Wayne, Kalamazoo and Macomb. The top five for output or sales were Kent, Ottawa, Kalamazoo, Wayne and Delta.
- The top five counties for forestry and logging sector employment were Macomb, Houghton, Delta, Gladwin and Presque Isle.
- The top five counties for the wood furniture sector employment were Ottawa, Kent, Wayne, Oakland and Macomb.

For more information, contact Jagdish Poudel, Forest Economist, at 517-284-5845 or poudelj@michigan.gov.

Michigan Board of Foresters
After a much-anticipated launch, the newly formed Michigan Board of Foresters met on Nov. 1, 2018. Under PA116 of 2018, the Board will oversee all activities of the new registered forester program. The seven members appointed by State Forester and FRD Chief Debbie Begalle are: Joyce Angel, Jerry Grossman, Todd Penrose, Jim Schmierer, Brenda Haskill, Melinda Jones and Bill Botti. The Board tackled a long list of first-meeting business including the nomination of officers. Official minutes and other information can be found at Michigan.gov/DNR.

Hardwood and softwood markets in Michigan ebbing and flowing
Reports from industry contacts around the state reveal that the first half of 2018 was robust and business was good for both softwood and hardwood mills. However, the second half of the year has brought many challenges in pricing and sales. Price drops and reduced orders were reported for many products, in part due to seasonal dips in home construction, and in part due to the ongoing trade dispute with China. Wood producers and mills alike are looking to the start of 2019 with hopes of improvements in all areas.

Hardwood markets
From the Hardwood Review Express, Nov. 23, 2018, “hardwood industry sentiment turned sour in mid-summer as lumber and log exports fell to China. Some contacts said they saw the decline coming, but it blindsided the majority. Grade lumber prices peaked in July and have been falling since, however.” Kiln dried lumber and green lumber prices are 3 percent and 2 percent lower than 12 months ago, respectively.

Softwood markets
Softwood Lumber Price Decline Largest in Seven Years By David Logan on November 9, 2018: Softwood lumber prices fell 10.3 percent in October—the largest drop since May 2011—according to the latest Producer Price Index (PPI) release by the Bureau of Labor Statistics. The producer price index for softwood lumber has fallen 21.2 percent since setting the cycle and all-time high in June (see below). Even after the decrease, however, the index currently sits just 4.7 percent lower than the prior-cycle high set in 2004. Looking forward from Nov. 8, 2018 – U.S. softwood lumber demand is expected to continue its upward trajectory from the lows of the global financial crisis of 2008–2009, reaching an all-time high by mid 2020s, according to a newly released U.S. Lumber Outlook Study by ForestEdge LLC and Wood Resources International LLC (USLOS2018).

Hardwood Lumber Price Perspective from Hardwood Review Express
Hardwood lumber producers across the country have been struggling to grasp the continuous declines in red oak, white oak, cherry and ash since the summer of 2018 began. As reported in the November 2, 2018 article in the Hardwood Review Express, the “current average prevailing prices for all KD 4/4 grades of red oak, white oak, ash and cherry – even after some sharp summer declines—are still within the ranges seen during the four years from 2014–2017.” The troubling factor is that the summer decline ended a steady price growth period of 18-36 months. Looking ahead, the price shifts in these species are more closely tied to
export volumes. Those exports have been showing upward growth to European markets. The Chinese buyers are reportedly coming back after sorting through the trade issues which will improve pricing overall. According to Hardwood Review Express, the only species not showing growth or recovery is cherry but the outlook is somewhat positive for the new year.

Webinar: Forest-Climate Working Group Learning Exchange Series
February 6th, 2019: Speakers George Berghorn, Assistant Professor of Construction Management at MSU, and Elaine Oneil, Director of Science and Sustainability at CORRIM, will present "Getting Forest Management and Land Use Carbon Accounting Right for HWP’s". Register here: https://msu.zoom.us/webinar/register/WN_zSEs3JY2Qhe3L49KINKNrg.

See more details, new topics and speakers at canr.msu.edu/fccp/.

Grants
USDA Forest Service announces $8 million to expand wood products and wood energy markets in the US

The USDA Forest Service invites grant applications for projects that expand wood product and wood energy markets, reduce wildfire risk, and improve forest health. Applications will be accepted through Jan. 23, 2019.

Grants provided through the agency’s Wood Innovations Program simultaneously boost local economies while helping make communities safer through the reduction of hazardous fuels on the landscape.

In 2019 the program will invest up to $8 million in projects designed to have a long-term impact on both Forest Service and other forest lands. Funding is available to support a diverse range of activities, such as completing the engineering designs, cost analyses, and permitting necessary in the final stages of commercial construction projects that use wood as a primary building material; establishing Statewide Wood Utilization Teams and Statewide Wood Energy Teams; and developing clusters of wood energy projects in a geographic area.

The deadline for submitting grant applications is Jan. 23, 2019. Information on how to apply is available on the Wood Innovations homepage.

For more information regarding the DNR's Forest Utilization and Marketing Program, please contact Brenda Haskill at haskillb@michigan.gov or David Neumann at neumannd@michigan.gov.