

ACCOMPLISHMENTS REPORT



Michigan.gov/Forestry

2020 HIGHLIGHTS

When Michigan's fiscal year 2020 began, no one could foresee the massive changes and challenges that the coming COVID-19 pandemic would create.

But the Michigan Department of Natural Resources Forest Resources Division's nearly 300 employees working across the state welcomed a new chief, adapted to telework, mastered the "mute" button in online meetings, procured personal protection equipment and established safety protocols to get back out in the woods to mark timber, conduct forest health surveys, fight wildfire and serve the public in many ways.

We often measure success from year-to-year in numbers: acres planted, timber marked, work completed through the Good Neighbor Authority, dollars invested and cords of timber harvested.

This year, our most important measures of success involved ingenuity, problem-solving and dedication. FRD staff met the challenges presented by the pandemic and even sent incident management teams to Detroit to help with COVID-19 medical efforts.

In 2020, FRD was again certified by two outside agencies for responsible forest management practices. Staff members created a new, 10-year statewide Forest Action Plan and are working on a new management plan for 3.9 million acres of state-managed forest.

As we move into 2021, FRD employees are ready to meet new challenges and support innovations including the sale of carbon offset credits, a new mass timber DNR building in Newberry and more.

Here's a look at some of 2020's unique highlights.



Forest Resources Division Chief and State Forester Jeff Stampfly previously served as acting division chief.

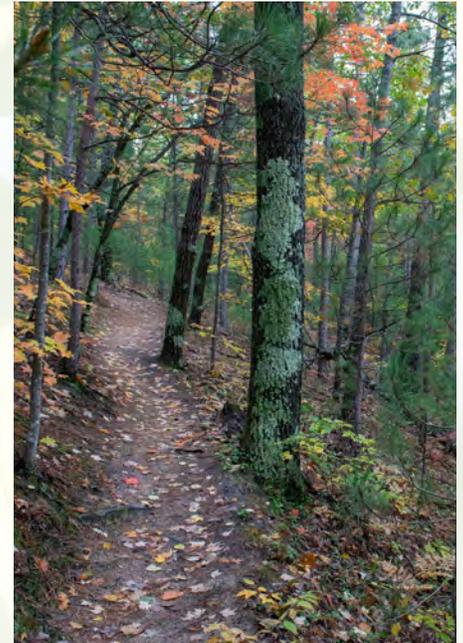


PILOT PROJECTS TEST NEW INITIATIVES

The DNR organized a multidivision Climate Sprint Team tasked with identifying and implementing programs that will help Michigan reach economic carbon neutrality by 2050 and fulfill Michigan's commitment to action as part of the U.S. Climate Alliance.

One program underway is the Bluesource-DNR Big Wild Forest Carbon project, a pilot effort that will leverage the carbon storage capacity of state forests through the sale of carbon offset credits generated from sustainable forest management actions.

The DNR also is exploring opportunities to place power-generating solar arrays on state lands unsuitable for timber production, such as old mining sites, to put these public lands back into use and produce green energy.



Pigeon River Country State Forest

GROWING MASS TIMBER CONSTRUCTION IN MICHIGAN

FRD is investing in mass timber, a growing building technique that allows construction of tall and large buildings using engineered wood.

The DNR plans to build a \$5 million Upper Peninsula field office and customer service center in Newberry to showcase this sustainable way of building; it's in the design stages now.



MSU's new mass timber STEM facility.

The DNR also cosponsored a virtual Mass Timber Summit at the start of FY2020 attended by 200 people from the construction and timber industries and stakeholders to discuss current issues related to using mass timber in Michigan.

Those stakeholders include Michigan State University, which built the wings of its new STEM Teaching and Learning Facility using mass timber, and the Michigan Forest Biomaterials Institute.

Going into 2021, monthly webinars are maintaining the momentum of the summit and sharing information about this up-and-coming, renewable building technique.

Why **mass** timber?

Renewable forest materials

Proven fire and seismic resistance

Fast construction, 25% faster on average

Lighter than concrete and steel

Aesthetics of natural wood grain

Build multistory wood structures

Ability to prefabricate panels offsite

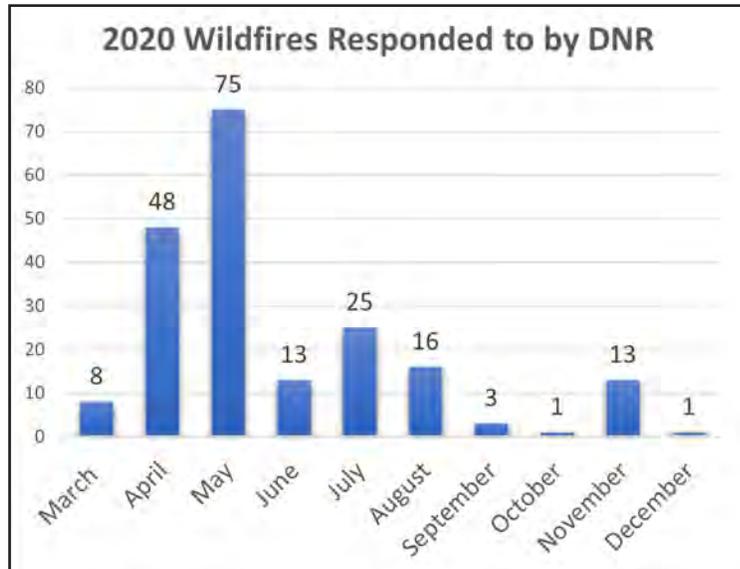
Less environmental impact



WILDFIRE PROTECTION AND PREVENTION

DNR firefighters responded to 203 fires in 2020, which burned a combined 960 acres of land.

Fires and acres burned were both down from previous years due to weather and the monthlong COVID-related moratorium on open burning. The most significant fire occurred near Grayling May 21, burning nearly 105 acres and forcing the evacuation of nearby homeowners. Of the 359 commercial, residential and outbuildings threatened by wildland fire, most were saved and 23 were destroyed.



Despite not being authorized to travel until Aug. 21, fire-trained DNR staffers filled 99 out-of-state assignments during the 2020 fire season, one of the worst fire seasons in California's history.

DNR individuals and teams took seven DNR engines west, worked on direct fire lines and played various leadership roles on fire management teams in California, Colorado, Oregon, Arizona, Utah and Wyoming. DNR staffers earn valuable firefighting experience on out-of-state assignments and Michigan is always fully reimbursed for sending aid.

Prescribed burns were put on hold for the year but returned in spring 2021 with highly trained DNR firefighters using fire to help control invasive species, create fuel breaks to prevent large wildfires and improve habitat for wildlife.



An incident management team assisting at Detroit TCF Center.

Incident management teams led by DNR fire staff were dispatched last spring to Detroit to help with COVID-19 medical efforts. They provided logistics support for setting up the TCF Care Center, an emergency facility to treat overflow patients from full hospitals.

In May, fire staff assisted with flood cleanup in the Midland area after local dams failed during unusually heavy rains. This was made possible by legislation passed in 2018 allowing firefighters to assist in nonfire emergency situations.

STATEWIDE FOREST ACTION PLAN

After two years of careful planning, consulting and collaboration with stakeholders, the [10-year Forest Action Plan](#) was completed and sent for federal sign-off.

The plan sets priorities and objectives for the collaborative management of Michigan's nearly 12.5 million acres of private forest under the five federal cooperative programs: Forest Stewardship, Forest Legacy, Community Wildfire Protection, Urban and Community Forestry, and Forest Health.

The associated landscape assessment provides a detailed analysis of current forest conditions and trends, including how Michiganders use them, threats from invasive species and developing issues such as climate change. The landscape assessment addresses the nearly 20 million acres of forest in Michigan and provides an incredible background document to inform any and all other forest management plans in the state. It's in an interactive story map format that lets users click through layers of data to explore what's important to them. These two plan components satisfy the requirements of the federal Farm Bill.



The Forest Action Plan was developed from conversations with the community and stakeholders.

TIMBER PLANTING AND HARVESTING

Despite an eight-week period without field work due to COVID-19 restrictions, the DNR's Forest Resources Division prepared 54,222 acres of state forest and national forest timber for sale, with the federal sales prepared through the Good Neighbor Authority.



Pine seedling

During this period, FRD also designed and delivered online training on new field timber measurement protocols and software for over 100 field staff and dozens of third-party contractors.

FRD staff coordinated with contractors to plant 1.8 million seedlings in the spring. Staff also completed site preparation on 4,000 acres in advance of tree planting in spring 2021.

Additionally, 2,000 acres of treatments were completed on the largest forestry research project in state forest history, focused upon northern hardwood regeneration.

FRD led this project with partners in the DNR Wildlife Division, The Rohatyn Group, Hancock Timber Resource Group and Michigan State University.

FOREST STEWARDSHIP

Michigan landowners developed 266 forest stewardship plans covering 40,264 acres in FY2020. This included 254 plans for landowners and 12 for school forests or Scout camps. There are now 6,865 landowners and 1,138,272 acres with forest stewardship plans, which is 12% of Michigan's 9 million acres of family forests. Hunter Fodor of Hunter's Land Management in Coleman was named the 2020 Stewardship Forester of the Year for his service to landowners, local schools and fellow foresters.

Wheels to Woods, a program that connects kids with forests, served 3,168 people at a cost of \$8,643, or \$3.07 per student.



Students explore the forest.

This included 2,820 students, 124 teachers, 16 outdoor educators and 208 parents on 24 trips. This was a sharp decline from previous years because the pandemic closed Michigan schools in March. Wheels to Woods has helped 45,000 students, teachers and parents go on 400 field trips to visit a forest in the last five years.

A total of 243 volunteers reported cleaning more than 80,640 acres of public land in 2020 through the Adopt-A-Forest campaign. They removed 899 cubic yards of trash, including 1,763 scrap tires. More than half of the cleanups occurred between June 15 and Sept. 22 during a "100 Cleanups in 100 Days" campaign. Volunteers cleaned over 150 illegal dumpsites to commemorate 100 years of the National Association of State Foresters.



Starting a stewardship tradition.

COMMERCIAL FORESTS

The Commercial Forest Program helps private forest landowners reduce their local tax burden in exchange for long-term timber production and public use for hunting, fishing and trapping. It includes lands in the entire Upper Peninsula and 38 counties in the Lower Peninsula. A new database for the program was completed in April, replacing a database in use since 1995.

The program continued its partnership with BS&A, which provides tax software to local units of government. Last year BS&A built an export tool for counties/townships to provide tax parcel information to the DNR for data verification purposes. This year BS&A agreed to provide DNR with the ability to use the municipal database for free to verify commercial forest ownership and delinquent taxes.





FOREST HEALTH

To complete important aerial surveys for gypsy moth damage, FRD's forest health specialists worked with aviation managers to develop virus safety protocols to allow the DNR to fly forest health surveys. Taking to the air in late July, they logged 20 hours of flight time and captured the extent of damage from a gypsy moth outbreak across the Lower Peninsula. The total area flown amounted to approximately 40% of a normal survey season.

The DNR and partners surveyed more than 22,000 acres in 28 counties for signs of the hemlock woolly adelgid and treated more than 30,000 trees.

Ongoing survey activities have confirmed Heterobasidion root disease, a fungus that kills red pine, in 19 Lower Peninsula counties and two eastern Upper Peninsula counties. In 2020, detections occurred in Emmet and Mackinac counties for the first time, north of most previous detections. The Forest Health Response Team's investigation of a report in Emmet County in late October led to the discovery of a significant area of infection spreading across nearly 50 square miles. Nineteen new stands and just under 600 acres have been found to be infected in Emmet County. An [interactive, online Heterobasidion root disease map](#) shows current confirmed locations of the fungus.



Oak leaves from a diseased tree.

Oak wilt is widespread in the southern Lower Peninsula, with spotty distribution in the northern Lower Peninsula. In the western Upper Peninsula, oak wilt is common along the border with Wisconsin from Iron County south. See the [interactive online oak wilt map](#) for confirmed and suspected locations.

The disease can kill red oaks within weeks and damage white oak trees. It can often be avoided by not wounding or pruning oak trees from April 15 to July 15.

In two separate incidents, dead spotted lanternfly adults were found in Michigan. This invasive pest infests hardwood trees and grape vines. Follow up investigations found no other evidence of spotted lanternfly in the state.

MAPPING AND GIS

Need an interactive map with layers of information? The Resource Assessment Section can create it.

Besides creating a suite of interactive maps to provide the public with information related to the Forest Action Plan's landscape assessment, RAS worked with the DNR Law Enforcement Division to produce a collector application, operations dashboards and surveys to collect data related to commercial fishing nets in the Great Lakes.

In response to growing numbers of trail and park users, RAS developed a new [interactive map of nonmotorized trails](#) that people can use and print. Users can search for a trail by name, toggle on aerial imagery and add additional data to the map from ArcGIS Online. Additionally, the Great Lakes Stream Crossing Protocol was updated and now being used in Michigan and by other Great Lakes states.

This work requires a smoothly functioning database. RAS made great strides in its 2020 move into the new DNR Enterprise GIS Portal environment. This involved migrating the current geodatabase from one server to another. In this migration, the team identified datasets components that could be retired, resulting in a data footprint reduction of more than 40%. This streamlining translates to less storage space, less maintenance and increased data integrity and performance.

URBAN AND COMMUNITY FORESTRY

This program provides technical, educational and financial assistance to help manage trees in urban areas across the state. During fiscal year 2020, this assistance, made possible through the U.S. Department of Agriculture Forest Service, helped:

- Award 46 cost-share grants to communities and partners.
- Reach more than 5 million people living in 266 communities.
- Plant 3,834 trees in urban and community areas.
- Facilitate 19,428 hours of volunteer contribution valued at nearly \$428,000.
- Develop four new community forestry management plans.
- Adopt or update 17 community tree ordinances.
- Update and launch a virtual weekly e-newsletter highlighting events, professional development and volunteer opportunities around community trees.

A record 126 Michigan communities were certified through the Arbor Day Foundation's Tree City USA program in 2020, including three for the first time: Kentwood, Madison Heights and Orion Charter Township. Communities range in size from Detroit, with 672,000 residents, to Mackinaw City, with 875 residents. Currently, 38% of Michigan residents live in a Tree City USA community.

North Central Michigan College joined eight other colleges certified as a Tree Campus USA. ITC Michigan and Spectrum Healthcare-Blodgett Hospital recertified as the state's only representatives for their respective programs, Tree Line USA and Tree Campus-Healthcare.



Kids enjoy a tree planting event.