FOREST RESOURCES DIVISION

ACCOMPLISHMENTS REPORT

FISCAL YEAR 2014

DEPARTMENT OF NATURAL RESOURCES · MICHIGAN · DNR

THE MISSION of the Forest Resources Division is to manage, protect and provide for the sustainable use of Michigan's forest resources.

CONTENTS

2 A Welcome from Keith Creagh and Bill O'Neill

3 Partnerships

4 Managing Your State Forests

9 The Fire Program

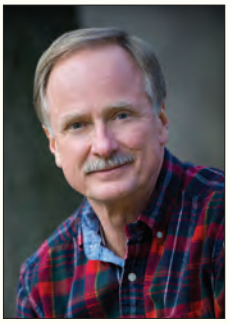
12 Private Lands Forestry

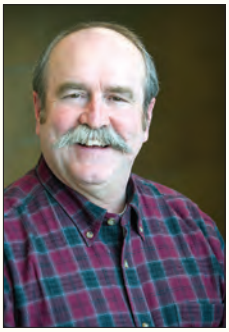
16 Ensuring Access to State Forest Land

WELCOME

Dear Michigan Citizens,

From the shade trees that line the streets of Detroit to the northern hardwoods of the western Upper Peninsula, Michigan is blessed with a rich diversity of forests. The Department of Natural Resources Forest Resources Division is equally diverse in its mission to sustainably manage this Pure Michigan resource.





Michigan's 4 million acres of state-managed forest land are part of a 20-million-acre statewide forest resource. Professional management of this system provides real societal benefits that include meeting the demands of a bustling forest products industry; providing the backdrop to world-class forest recreation opportunities; and helping to keep clean the watersheds of the largest system of fresh surface water on earth.

There are many facets to keeping Michigan's forest resources among the best of the best. Forest Resources Division responsibilities include urban forestry programs, forest health, wildlife habitat enhancement, wildfire suppression and prevention, and the management of one of the nation's largest state forest systems.

At the Governor's 2013 Forest Products Summit, Gov. Rick Snyder tasked this division – and our many partners – with four goals to grow the forest products economy in Michigan. We're pleased to report that we're on track to hit the goal of moving the annual forest products economy from $14 billion to $20 billion. The timber industry now contributes more than $16 billion per year to Michigan's economy.

Sustainable forest management not only focuses on industry, it also includes science-based decision-making that protects our world-class resources while making them accessible for the public's enjoyment.

This report highlights our work during fiscal year 2014 (Oct. 1, 2013-Sept. 30, 2014). It serves as a guide for each program's major accomplishments and positive influence on Michigan's natural and cultural resources. We're proud of the work we do every day and we hope you see and enjoy the results of that work in the communities where you live, work and explore the outdoors.

Thank you for taking the time to learn about how the DNR protects and manages Michigan's world-class forests.

Keith Creagh
Director
Michigan Department of Natural Resources

Bill O'Neill
Chief and State Forester
Forest Resources Division
Michigan Department of Natural Resources

PARTNERSHIPS

Forest Resources Division would not be able to accomplish its forest management goals without the support, expertise and dedication of internal and external partners. Their support is invaluable. Special thanks to:

- The citizens of Michigan
- The forest products industry
- State, local, tribal and federal governments
- Sporting clubs and conservation organizations
- Universities and researchers
- Local and state firefighting associations
- Recreation interests
- Metallic, nonmetallic and oil and gas industries
- Fellow state agencies
- Partner federal agencies
- Department of Natural Resources leadership and staff

Two bodies – the Timber Advisory Council (TAC) and the Forest Management Advisory Committee (FMAC) – are among the many partners giving their time and talent to help Michigan sustainably manage its public forest land. The TAC provides advice and counsel to the governor, the DNR, the Michigan Economic Development Corporation and the Michigan Department of Agriculture & Rural Development on policies, procedures, issues and concerns related to state timber management.

TAC Members

- J.R. Richardson, Chair
- Jerry Grossman
- Charlie Becker
- Margaret Minerick
- Jon Lamy
- Gary Melow
- Rich Bowman
- Mike McCuistion
- Larry Leefers
- Jessica Turino-Kernohan
- Brad Homeier

Members of the FMAC – ranging from timber producers to university representatives to environmental interests – are appointed by the DNR director to assist the department in evaluating and sustainably balancing the environmental, social and economic opportunities and challenges surrounding forest management.

FMAC Members

- Bill Botti, Chair
- Daniel Keathley
- Bill Manson
- Gary Melow
- Scott Robbins
- Marvin Roberson
- Terry Sharik
- Stephen Shine
- Amy Trotter
- Warren Suchovsky
- Andy Henriksen
- Leslie Auriemmo

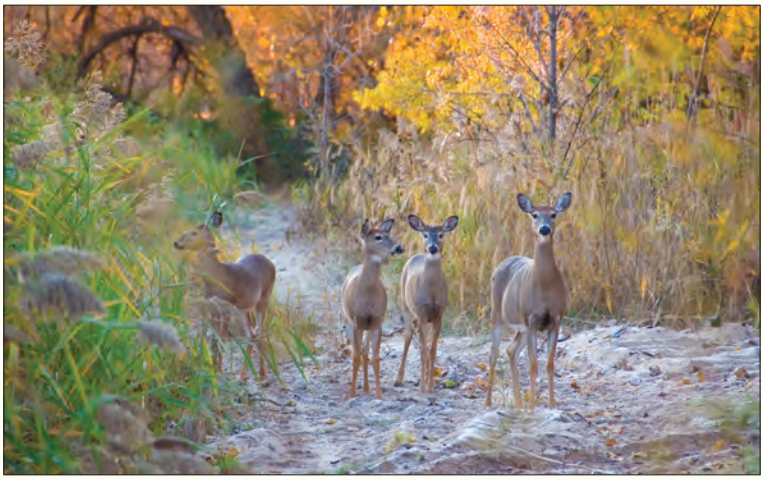
MANAGING YOUR STATE FORESTS

Public lands in Michigan benefit the economy by supporting the forest products, oil and gas, and mining industries; providing wildlife habitat; offering outlets for a multitude of outdoor recreation opportunities; and many other uses.

The Forest Resources Division works to ensure the 4 million acres of state forest land are sustainably managed to meet the needs of present and future generations.

Forest Inventory

Forest inventory is an important function in the sustainable management of Michigan's state forest resources and provides important information for decision-making. Each year, DNR staff collects forest data on one-tenth of the state forest, which is divided into compartments. In 2014, 220 compartments (totaling 405,340 acres) were inventoried. Using the forestry data, and other information, forest treatments such as timber harvests and maintenance of wildlife habitat are proposed.



To improve the inventory process, the Forest Resources Division completed development and implementation of the first phase of its new forest inventory system, Michigan Forest Inventory (MiFI). The technology is an intuitively designed application that requires fewer steps to accomplish common tasks. An additional enhancement is that it requires less time for training and support.

Following inventory, each forest management unit conducts an "open house" to present the information to the public, addressing questions and taking comments about compartment plans and proposed forest treatments. In fiscal year 2014, nearly 70,200 acres were prescribed for timber harvest.

Forest Certification

In 2014, Michigan's state forest land again was certified by Sustainable Forestry Initiative® and Forest Stewardship Council® standards. What does that mean for you? Forest certification means more than good forest management. It provides confidence that the wood-based products you purchase – anything from toilet paper to the lumber used to frame your home – originate from well-managed forests and have been manufactured responsibly. This is accomplished by tracking wood all the way from the forest, during harvesting, and through mills and secondary manufacturers.

Timber Management

Michigan's state forests provide a consistent supply of wood to help support and maintain a diverse forest products industry that contributes $16.3 billion per year to Michigan's economy.

Michigan's forest products industry is comprised of:

- Over 800 logging and trucking firms.
- About 300 primary manufacturers – sawmills, veneer mills, pulp and paper mills, and engineered board manufacturers.
- More than 1,000 secondary manufacturers – companies that use lumber or products made by a primary manufacturer to make finished goods (e.g., furniture and kitchen cabinets).

The state forest system provides about 20 percent of the raw material for these operations.

Timber Harvesting

Timber harvesting provides wood fiber for the forest products industry and presents an opportunity to manage land for specific wildlife habitat. The DNR works with many contractors, consultants and other stakeholders to manage a stable forest land base.

In fiscal year 2014, Forest Resources Division staff prepared over 62,000 acres of timber sales on state-managed land for more than 993,000 cords of wood.

The state received $46 million in timber sale revenue in fiscal year 2014.

Reforestation Efforts

Reforestation is a vital part of the DNR's mission. When natural regeneration is not adequate, staff will plant seedlings to help ensure healthy forests for the future. Reforestation efforts in fiscal year 2014 included:

- Planting a total of 3.8 million seedlings on nearly 4,500 acres of state forest land. An additional 2 million seedlings were planted on 1,473 acres of state forest land to maintain critical habitat for the federally endangered Kirtland's warbler.
- Growing (by the DNR's Wyman Nursery staff) 5 million seedlings that were used in the spring 2014 planting effort.
- Preparing nearly 6,000 acres for planting in 2015.
- Donors contributing over $89,000 in support of state forest reforestation efforts, including funds received from the National Arbor Day Foundation, A. Finkl & Sons, the Treecycler Program and four private donors to the State Forest Family Memorial program.

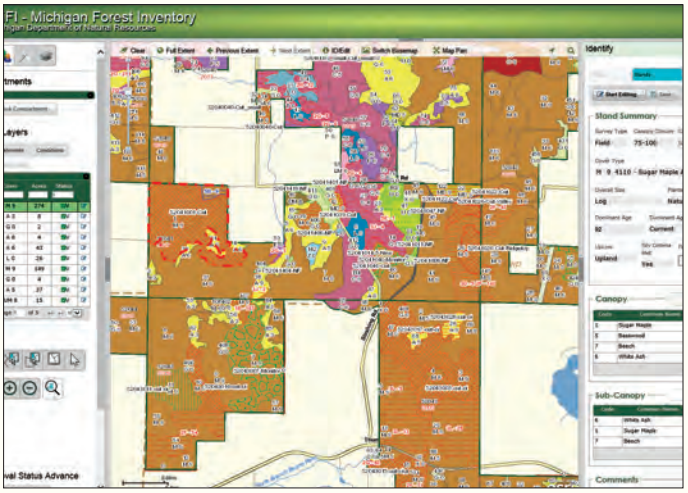
Forest Health

The DNR's Forest Health Program works in collaboration with DNR Wildlife and Parks & Recreation divisions, Michigan Department of Agriculture & Rural Development, Michigan State University, Michigan Technological University and the U.S. Forest Service's Northeastern Area State & Private Forestry Unit.

In fiscal year 2014, the Forest Health Program:

- Detected and evaluated forest health issues by flying more than 30 million acres of aerial surveys.
- Provided training and technical support to volunteers and Parks & Recreation staff to assist in facilitating an ongoing survey to detect the Asian longhorned beetle (ALB) – a destructive wood-boring pest threatening maple and other hardwoods.

- Surveyed state forest lands containing beech and ash to identify stands for salvage harvests. Following the survey, staff prepared more than 10,000 acres of new salvage harvests, and reviewed more than 16,000 acres of existing sales to include salvage of additional ash and beech trees.
- Continued to work with Michigan Technological University and Michigan State University to confirm oak wilt pockets in Menominee and Iron counties. Using a vibratory plow *(see photo above)*, Forest Resources Division staff plowed more than 58,000 feet, isolating 200 acres of infected oaks by cutting root grafts to prevent the spread of oak wilt to adjacent stands.
- Continued to monitor hemlock woolly adelgid (HWA). Healthy trees in the immediate vicinity of an initial infestation at New Buffalo received treatments with an insecticide to ensure eradication of HWA in the affected area.



Resource Assessment

The Resource Assessment Section (RAS) provides geographic information systems (GIS) and digital mapping support to the DNR and others in state government. A robust network of natural resources data gives DNR land managers access to information which enables science-based natural resources management decisions that benefit all citizens.

Fiscal year 2014 accomplishments include:

- Maintaining more than 850 data and GIS layers and maps.
- Providing maps of areas open to fuelwood collection for the 2014 season for all forest management units in the northern Lower Peninsula. Maps were available via the DNR website and printed copies were made available to the public at field offices.
- Producing over 200 maps, covering more than 400,000 acres of state forest land that included forest data and timber harvest areas. Harvest areas will be prepared in fall 2015.
- Mapping infrastructure on Belle Isle for the DNR Parks & Recreation Division. Additionally, RAS aided with mapping many recreational trails across the state.

THE FIRE PROGRAM

The DNR has a nationally recognized wildfire program that is charged with protecting state forest resources and private land. Forest Resources Division staff responds yearly to an average of 500 wildfires.

In fiscal year 2014, the DNR Fire Program:

- Helped save 121 structures through suppression action on 167 fires totaling 550 acres.
- Sent 34 staff trained in wildfire suppression on out-of-state fire assignments in California, Idaho, Oregon and Washington.
- Provided wildfire training to 1,125 local firefighters and cooperators, instruction that will better prepare them to respond to wildfire threats throughout their communities.
- Awarded 111 grants worth more than $274,900 to help volunteer fire departments purchase safety, communications and suppression equipment through the federal Volunteer Fire Assistance grant program.
- Obtained excess federal equipment – including fire trucks, road graders, and various vehicles – worth nearly $3.3 million through the Federal Excess Personal Property program and the Department of Defense Firefighter Property Program, for use within the DNR and by local fire departments.
- Shared important safety information with more than a million people through wildfire prevention messaging and outreach.
- Constructed – in cooperation with the U.S. Forest Service and the Michigan Department of Transportation – two electronic Smokey Bear fire danger signs in high-traffic fire-prone areas: northbound U.S. 131 at the Cadillac rest area and northbound I-75 just across the Mackinac Bridge.

Last year the DNR performed 105 prescribed burns on 10,488 acres – a record high – which benefited wildlife habitat, controlled invasive species, reduced hazardous fuels and promoted forest regeneration.

100 Years of Fire Protection

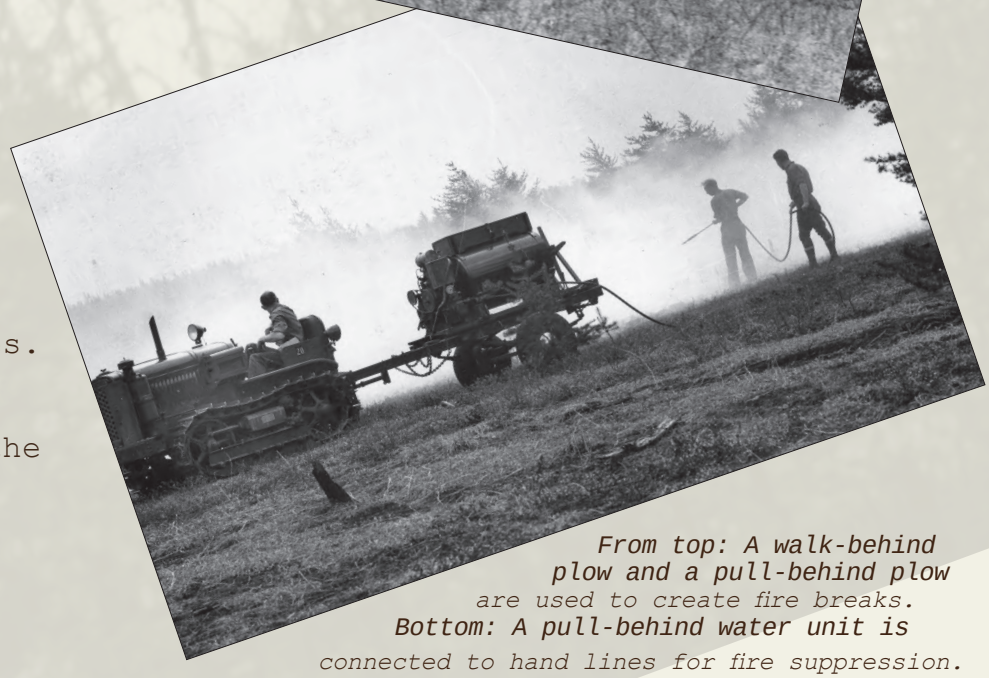
Historically, it's the years with the large wildfires that garner the most public attention. For example, in 2012 – the year of the Duck Lake fire – 497 fires burned 23,814 acres.

In 2014, Michigan set a new record when it came to wildfires – a record low. This past fire season, 167 fires burned 550 acres across the state.

The historic low number of wildfires can, in part, be credited to another milestone in Michigan: 2014 marked the 100th anniversary of William J. Pearson being appointed as the state's first full-time forest fire officer.

Pearson developed the state's fire control organization, starting with the aid of a few game, fish and forest wardens and some part-time assistance from a handful of temporary patrolmen, lookouts and fire wardens.

He also developed a system of lookout towers and telephone lines for spotting and reporting fires. These tools and techniques evolved into the fire suppression organization the DNR has today.



From top: A walk-behind plow and a pull-behind plow are used to create fire breaks. Bottom: A pull-behind water unit is connected to hand lines for fire suppression.

PRIVATE LANDS FORESTRY

Families and individuals own the largest portion of Michigan's forests – 62 percent or approximately 12 million acres. These lands provide public benefits like clean air and water, wildlife habitat, outdoor recreation and a large portion of the state's wood supply.

Commercial Forest Program

The Commercial Forest (CF) program provides a property tax incentive for private landowners to retain and manage forest land for long-term timber production. In 2014, the DNR approved an additional 7,109 acres for the CF program.

About 1,800 landowners have more than 2.2 million acres currently listed in the program. That's 2.2 million acres open to the public for foot access for hunting, fishing and trapping.

"The Commercial Forest program is a crucial program for large timber management companies doing business in Michigan. The CF program provides an attractive alternative that helps forest industry and timber investors remain competitive in the state."

Charlie Becker,
senior resource manager of Plum Creek

Plum Creek, a timber producer and wood products manufacturer, is the state's largest Commercial Forest landowner with more than a half-million acres in the Upper Peninsula.

Forest Stewardship Program

The Forest Stewardship Program encourages private landowners to manage, protect and enjoy their forests. In fiscal year 2014, the program provided technical assistance and a partial cost-share to help 265 landowners develop Forest Stewardship Plans covering more than 57,000 acres. This program is a partnership between the U.S. Forest Service, DNR Forest Resources Division, 80 private sector foresters and wildlife biologists, and Michigan landowners who want to sustainably manage their forests.

Last year, the U.S. Forest Service provided over $183,000 in funding to the Forest Stewardship Program.

The Heuvelmans: A Forest Stewardship Success Story

Rick and Kim Heuvelman, along with Rick's brother Randy, own a 160-acre forest in Newaygo County. They bought 80 acres 11 years ago and added another 80 acres three years ago. While they have been actively managing land on their own, this year they decided some professional help was in order. The Heuvelmans were interested in the Michigan Department of Agriculture & Rural Development's Qualified Forest program to help lower their property taxes and they knew a forest management plan was needed for enrollment.

"The reduced property taxes are nice, but we really want to be able to pass on a healthy forest to our children and grandchildren," Rick said. "Wood is a renewable resource and I want to manage it well, even if I don't see all of the results in my lifetime."

Rick contacted Jack Boss, a wildlife biologist at Ecosystems Management LLC near Grand Rapids. Jack is one of about 85 certified plan writers in the Forest Stewardship Program. Jack recommended a Forest Stewardship Plan to Rick because of its simple and comprehensive design.

Another selling point for Rick was that the program offers a partial cost-share to lower the total cost of writing the plan. Most plan writers in the Forest Stewardship Program are professional foresters, but Rick enjoyed working with a wildlife biologist because, for him, wildlife viewing and hunting are important reasons to own the land.

"We figured the best way to ensure a healthy forest is to have a plan written by a professional," he said.

Jack visited the Heuvelman property and did an assessment of the forest. When he had a draft of the plan ready, he sent it to Rick, Randy and Kim for their review.

After meeting with the landowners, he sent the plan to a Department of Natural Resources service forester who reviewed and quickly approved it under the Forest Stewardship Program standards.

"I enjoyed learning new things about my forest – the plan even mentioned frogs and huckleberries," he said. "Having a Forest Stewardship Plan has given me confidence that my forest management, based on professional advice, will achieve my goals for sustainable forestry and better wildlife habitat."

Urban and Community Forestry

This program provides technical, educational and financial assistance for the management of trees and forests in urban areas. During fiscal year 2014, this assistance, made possible through the U.S. Forest Service, helped:

- Award 38 cost-share grants to communities and partners.
- Plant 4,400 trees in urban and community areas.
- Facilitate 10,121 hours of volunteer contribution valued at over $202,000.
- Adopt 26 community tree ordinances.
- Certify 125 communities through the Arbor Day Foundation's Tree City USA program. Currently, 39 percent of Michigan residents live in a Tree City USA community.

With the Department of Natural Resources' transition to managing Belle Isle in Detroit, the Urban Community Forestry program led the department's effort to assess and identify hazardous tree conditions *(see photo below)* on the island and facilitate the removal of over 300 diseased or dead trees.

Additionally, DNR staff worked with the Davey Resource Group to develop a comprehensive inventory and management plan of the trees within high-use, maintained areas of the park. This information will help guide the DNR's efforts to more proactively and efficiently manage the island's tree resources.

ENSURING ACCESS

State forest lands contribute to Michigan's overall recreation package for residents and visitors alike. The Forest Resources Division manages Michigan's land to ensure public access is available for hunting, fishing, hiking, camping, cross-country skiing, equestrian use, birding and many other forest uses.

Keeping Public Land Public

Sometimes people unintentionally encroach on state-managed land – land that is intended to be available for everyone's use and enjoyment. Forest Resources Division has staff dedicated to making sure public land stays public. The DNR currently has 338 pending encroachments on public land that keep this land from public use.

In fiscal year 2014, staff:

- Resolved 94 trespasses, returning those lands to public use and closed 32 additional structural trespass cases by working with private landowners to resolve their barn, garage, home and camp trespasses.
- Assisted in the resolution of trespasses on property acquired with federal assistance or license fees.
- Helped in the documentation and resolution of trespasses that encroach upon DNR-administered recreational trails, including rail trails.

Land Use Activities

Land use staff coordinates a variety of recreational and land use-related activities on state forest land each year. For fiscal year 2014, staff issued more than 181 use permits for a number of activities, including well-site development for oil and gas production, wedding ceremonies, dog sled races, cross-country running races and equestrian rides.

ENSURING ACCESS

Key Acquisitions for Fiscal Year 2014 Included:

Wheeler Creek Property: This property consists of 247 acres of northern hardwoods in Hanover Township, Wexford County. It is a critical in-holding as it is adjacent to existing state forest land on three sides. The property contains extensive Wheeler Creek frontage, a high-quality cold-water trout stream, and excellent habitat for both game and non-game species. A designated snowmobile trail traverses the property as well. It will be managed for its high-quality timber resource and will be open for public recreation opportunities.

Two Hearted River Property: This property is located in McMillan Township in northern Luce County. It is comprised of 200 acres of wetlands and adjacent upland forest and is nearly surrounded by existing state forest land. In addition, this property contains over 4,800 feet of Two Hearted River corridor. This body of water is a designated Natural River and is a high-quality trout stream. The property also will be managed for its timber resource and public outdoor recreation.

In addition to providing public access for all, the acquisition of these and other parcels will result in approximately 937-plus acres of timber that will now be managed for wildlife habitat enhancement and the timber resource to grow and sustain the forest products industry in Michigan.

Transactions on State Forest Land

Land consolidation is key for the DNR as an agency and is especially critical for Forest Resources Division. Consolidated public ownership benefits both public users and DNR land managers. Large blocks of public land allow for a range of recreation uses – off-road vehicle and snowmobile trails, hunting and trapping, hiking and wildlife viewing – and offer significant land-management efficiencies. In fiscal year 2014, staff (with assistance from the DNR Real Estate Services) completed 99 land disposals, four land exchanges and nine acquisitions.

Land Surveying

Forest Resources Division survey staff is responsible for establishing boundary lines between private and state-managed lands where a forest treatment is planned. Their work guides timber sales, protects public land from trespassing, and more. In fiscal year 2014, DNR survey staff completed 122 land projects, of which:

- 108 surveys were in support of timber harvests.
- Six surveys were completed under the Encroachment Resolution Initiative to positively resolve historic encroachments.
- Eight surveys were completed to facilitate construction design and road easements, or to support the work of other DNR divisions.

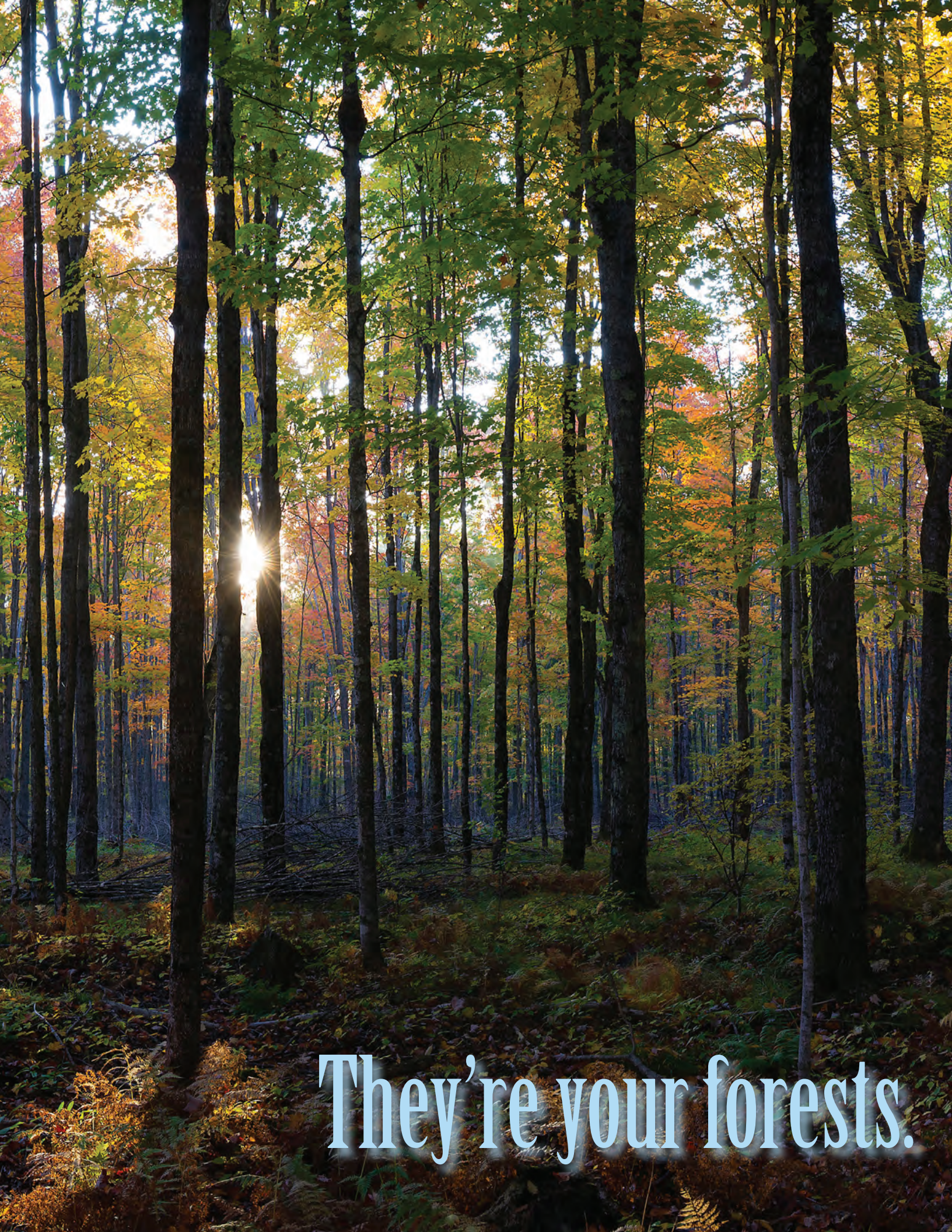
Additionally, survey staff established and monumented 490 property corners and rehabilitated an additional 444 existing property corners.

Adopt-a-Forest

In 2014, DNR staff worked with approximately 1,500 volunteers through the Adopt-a-Forest Program to keep public forest land free of illegal trash and debris dumping. Volunteers cleaned up more than 911 cubic yards of trash from public land. That equaled 304 truckloads of illegally dumped trash, of which 57 percent was recycled.

Project Learning Tree

In fiscal year 2014, the DNR worked with 2,600 Project Learning Tree instructors to reach kids from preschool to 12th grade across the state. The environmental education program provides instruction and materials to promote interactive and hands-on learning.


They're your forests.

Learn more about how we're working to manage your forests at
www.michigan.gov/forestry

Sign up for email from the DNR. Visit *www.michigan.gov/dnr* and click the red envelope.

Find the DNR on Facebook at *www.facebook.com/michigandnr*
Follow the DNR on Twitter at *www.twitter.com/michigandnr*

The Michigan Department of Natural Resources is committed to the conservation, protection, management, use and enjoyment of the state's natural and cultural resources for current and future generations.