

Forest Resources Division

ACCOMPLISHMENTS REPORT

Fiscal Year 2012



Contents



- 1 Letters from Director Creagh and Chief O'Neill
- 3 Welcome
- 5 Cooperatively Managing Michigan's State Forests

Forest Inventory

Regional Forest Planning

Reforestation Efforts

Regeneration Research

Timber Management

Timber Harvesting

Fuelwood

Forest Certification

Forest Health

Resource Assessment

Minerals Management Section

- 13 The Fire Program

- 19 Private Lands Forestry

Forest Management Incentives

Urban and Community Forestry

Land Surveying

- 24 Ensuring Access to State Forest Land

Keeping Public Land Public

Transactions on State Forest Land

Land Use Activities

- 27 Support Staff

- 28 Funding Forest Resources Division

Mission

Forest Resources Division provides for the protection, integrated management and responsible use of a healthy, productive forest and mineral resource base for the social, recreational, environmental and economic benefit of the people of the state of Michigan.

*Photo by Tom Haxby,
Forest Resources Division
inventory and planning specialist*





Letter from Director Creagh

Greetings,

With nearly 4 million acres of state forest land (one of the largest dedicated acreages in the nation), Michigan is home to a majestic and enviable natural resource that is key to our state's recreation, economic and environmental health. The Department of Natural Resources' Forest Resources Division (FRD) and our many public and private partners work effectively to protect and promote these vital Pure Michigan treasures for many uses and opportunities. These collaborations grow stronger every year.

The forest products industry annually generates \$14 billion and directly employs 26,000 people in Michigan, and the livelihood of communities and individuals throughout the state depends on the strength and growth of this industry.

Safe, public outdoor recreation in Michigan's rugged, open spaces – back-country camping, hiking, fishing, hunting and more – depends on a healthy, abundant forest system.

Keeping our forests healthy and accessible for the people who enjoy them and the wildlife, habitat and industry that depend on them is no small task, and one we simply could not complete without the dedication and expertise of the dedicated staff in FRD.

Whether conducting prescribed burns to achieve habitat goals, containing wildfires to keep people and property safe, battling exotic forest pests, marking timber for harvest, or any of the other vital duties, these individuals consistently do excellent work on behalf of the people of Michigan – and 2012 was full of great examples.

Michigan's forests – in addition to being integral to our state's land-based industries and regional and place-based economies – are part of Michigan's very identity and natural heritage. Under the care and management of FRD, our state forests are in very good hands.

Sincerely,

A handwritten signature in black ink that reads "Keith Creagh". The signature is written in a cursive, flowing style.

Keith Creagh
Director, Michigan Department of Natural Resources

Letter from Chief O'Neill



Dear Michigan citizens,

Thank you for your interest in learning about the Forest Resources Division (FRD) and the diverse, important work our dedicated staff – working with our many partners – accomplished in fiscal year 2012.

The past year was one of transition for FRD. Responsibility for the care and maintenance of the state forest campground and trail system transferred from FRD to Parks & Recreation Division; the division changed leadership; and budget challenges had employees doing much more with fewer resources. I'm pleased to say that FRD staff went above and beyond to exceed expectations while faced with these challenges.

In addition to these internal changes, we found ourselves facing an unusual fire season with high fire dangers starting in mid-March. Escalating drought heightened fire danger throughout much of the state as abnormally hot and dry conditions were experienced on Memorial Day that were more characteristic of July or August. While contending with the Duck Lake Fire, Michigan's third-largest fire in recent times, there were nearly 500 other wildfires we worked to suppress. The final count for 2012, 496 wildfires, exceeded annual totals from each of the past seven years.

Also in the last fiscal year, FRD worked cooperatively with other divisions to complete our draft Regional State Forest Management Plans. After years of work, along with internal and external discussion, we rolled out our draft plans for public review. This is an exciting time for forestry in Michigan and these plans will help set the direction for the management of our state forest land for years to come.

It doesn't stop there. There was great work going on in all areas of the division with staff in Forest Stewardship, Commercial Forest, Urban and Community Forestry, Forest Health, Resource Assessment, Land Use and Trespass programs working to preserve and protect the natural resources that make our state unique.

As we move further into 2013 and beyond, FRD is committed to working internally with our fellow divisions as well as externally with our stakeholders to ensure that Michigan's world-class state forests are sustainably managed and offer adventure and enjoyment, provide critical habitat for wildlife, and fuel a vital forest products economy for current and future generations.

We hope you'll join us in that mission.

Sincerely,

A handwritten signature in black ink that reads "Bill O'Neill". The signature is written in a cursive, flowing style.

Bill O'Neill
Chief and State Forester, Forest Resources Division



Welcome

Forest Resources Division is responsible for ensuring that Michigan's nearly 4 million acres of state forest land are sustainably managed and protected. This report highlights FRD's diverse accomplishments during fiscal year 2012 (Oct. 1, 2011-Sept. 30, 2012). While it is detailed, there was no way we could fit every one of our achievements in this publication; what is included is a snapshot of each program's major accomplishments. We are excited to share our story and these successes with you. We hope you find this information interesting and useful.

Division Transitions

In January 2012, FRD was reorganized to include a new chief/state forester, assistant chief, field coordinator and section manager for the Resource Protection and Cooperative programs. The Forest Recreation section and the district recreation specialists were transferred to the DNR's Parks & Recreation Division (PRD). The Minerals Management Section, with the exception of the land use specialist position, was transferred to the deputy director's office.

The goal of the FRD reorganization was to better focus on providing statewide leadership to both the forestry and wildfire programs. Division leadership has been working more closely with outside organizations to help encourage efficiency and success. To improve dialogue and communication, several outreach sessions with DNR stakeholders and the general public were held around the state in 2012.

Collaborations and Partnerships

FRD would be unable to complete its mission and accomplish its goals without the help and input from its many partners. The division would like to acknowledge its two advisory bodies, the Timber Advisory Council (TAC) and the Forest Management Advisory Committee (FMAC). Members of both of these groups give their time and talent to sustainably managing Michigan's public forest land.

The TAC provides advice and counsel to the Governor, the Department of Natural Resources, the Michigan Economic Development Corporation and the Michigan Department of Agriculture & Rural Development on policies, procedures, issues and concerns related to timber management in Michigan.

TAC Members

- J.R. Richardson, Chair
- Jerry Grossman
- Charlie Becker
- Margaret Minerick
- Jon Lamy
- Jessica Turino
- Gary Melow
- Rich Bowman
- Mike McCuiston

Members of the FMAC are appointed by the DNR Director. The committee's role is to assist the DNR in balancing the environmental, social and economic issues surrounding forest management. The committee members range from timber producers to university representatives to environmental interests, and assist the DNR in evaluating management issues, opportunities and challenges related to the sustainable management of Michigan's state forests.

FMAC Members

- Bill Botti, Chair
- Lauri Kay Elbing
- Daniel Keathley
- Donna M. LaCourt
- William Manson Jr.
- Gary Melow
- Scott Robbins
- Marvin Roberson
- Terry Sharik
- Stephen Shine
- Amy Trotter
- Erin McDonough
- Warren Suchovsky
- Barry Paulson
- Andy Henriksen



Cooperatively Managing Michigan's State Forests

Public lands in Michigan benefit the economy in many ways by supporting the forest products industry, a multitude of outdoor recreation opportunities and many other uses.

The Forest Resources Division is dedicated to ensuring the nearly 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 forest resources. Each year, DNR personnel evaluate one-tenth of the state forest, which is divided into compartments. In 2012, 221 compartments were inventoried with data collected on 395,084 acres. The data provides key decision-making information for foresters, wildlife and fisheries biologists and other resource managers. The age, health, quality and quantity of the forest, operability, and other resource values are assessed. Timber management, wildlife and fisheries habitat, minerals, archeological sites, recreational use, wildfire potential and social concerns are some of the values taken into consideration during this review.

Treatments, including harvests, plantings, wildlife openings and prescribed burns, on state land are proposed to improve wildlife habitat, timber quality, recreation and forest health. Forest treatments are designed to ensure the sustainability of all forest resources. Each Forest Management Unit conducts an "open house" to present information and to solicit public comments regarding proposed treatments. A compartment review follows in which DNR staff make a final review and approval of treatments.

Because the forest is inventoried nine to 16 months in advance, a year-of-entry is assigned to indicate the year in which treatments will be prepared. In fiscal year 2012, of the acres that were inventoried for the 2014 year-of-entry, 61,231 acres were prescribed for treatment, with work to begin Oct. 1, 2013.

Regional Forest Planning

Forest Resources Division, using input from government organizations, outdoor enthusiasts, the forest products industry, conservation agencies and everyday citizens, completed three draft Regional State Forest Management Plans and initiated the public review process to ensure that state forest land is sustainably managed for present and future needs. The draft plans covered state forest land in the eastern Upper Peninsula, the western Upper Peninsula and the northern Lower Peninsula. These plans will provide landscape-level guidance to foresters, biologists and other natural resources professionals making forest treatment prescriptions for stands inventoried during the compartment review process.





DNR foresters collect pinecones and acorns each year that are used to grow new trees on state forest land.

Reforestation Efforts

Each year about 53,000 acres of timber harvests are completed on state forest land. Most of these sites regenerate naturally and quickly. As part of sustainable forest management, Forest Resources Division strives to regenerate about 10 percent of the harvest sites through planting of seedlings or direct seeding.

In fiscal year 2012, reforestation efforts included planting a total of 6,674,350 seedlings on 6,238 acres of state forest land. The DNR's Wyman Nursery staff grew nearly 5.2 million seedlings that were planted on 5,087 acres of state forest land in spring 2012. As part of the spring planting work, close to 2 million seedlings were planted for federally endangered Kirtland's warbler habitat on 1,266 acres. Site preparation was completed on another 6,479 acres for future plantings.

Wyman staff also purchased and extracted seed from 633 bushels of red pine and 29 bushels of jack pine. The seed is used to grow the next batch of seedlings.

Partners in FRD's reforestation efforts include Finkl & Sons Inc. (a Chicago-based steel company), the National Arbor Day Foundation and Treecycler. In fiscal year 2012, Finkl & Sons donated \$21,000 for planting 100,000 seedlings. Ongoing grant assistance from the National Arbor Day Foundation contributed \$67,500 for planting 250,000 seedlings, and Treecycler contributed \$2,424 for planting 11,017 seedlings.

Regeneration Research

FRD continued to support research on regeneration of northern hardwood forests by Dr. Michael Walters, a Michigan State University Department of Forestry forest ecologist. Fiscal year 2012 was the second year of the six-year study titled: "Effects of EAB, Harvest Pattern and Deer Browse on the Diversity and Structure of Northern Hardwood Forest; Implications for Sustainable Timber Production." The project should provide valuable information on strategies for successfully regenerating northern hardwood forests in areas impacted by emerald ash borer (EAB) and deer browse pressure.

Timber Management

Forest Resources Division is an important supplier of pulpwood, sawlogs, chips, residues and wood fiber to mills that manufacture paper, cardboard, oriented strand board, paneling, construction lumber, hardwood lumber, pallets and fuelwood for energy plants. Michigan's state forests provide a consistent supply of wood to help support and maintain a diverse forest products industry comprised of 274 mills, 1,207 manufacturers and 590 loggers. Together, the forest products industry contributes approximately \$14 billion annually to Michigan's economy. The state forest provides more than 20 percent of the raw material for these operations.

State forest land management also provides for a diversity of wildlife habitat necessary for meeting the needs of both game and non-game species. One of many management objectives is to provide diverse tree age and size classes as well as forest openings for the habitat needs of wildlife in Michigan.

Timber Harvesting

Timber harvesting provides wood fiber for the forest products industry and presents an opportunity to also manage for specific aspects of wildlife habitat. One goal of the Michigan State Forest Management Plan is to prepare for harvest a minimum of 53,000 acres a year. The DNR works with many contractors, consultants and other stakeholders to manage a stable forest land base.

The DNR issues approximately 700 timber sale contracts per year that have a term of one to three years. In the 2012 fiscal year, 56,609 acres were prepared for timber sale auction by the department, with an estimated volume of 773,400 cords. In 2012, loggers harvested 696,900 cords on 45,444 acres – with a value to the state of almost \$33 million.

In 2012, loggers
harvested
696,900 cords on
45,444 acres – with a
value to the state of
almost \$33 million.

Presently, there are more than 1,400 open sale contracts held by timber producers. The timber on these contracts will be cut within the one-to-three-year contract period depending on the producers' needs and market conditions. If each 8-foot-long pulpwood stick and sawlog from those contracts was laid end to end, the 1.2 million cords would be 726 miles long.

Fuelwood

In fiscal year 2012, Forest Resources Division sold 2,756 fuelwood permits from 29 offices around the state. A permit costs \$20 and allows the permittee to collect up to five standard cords of dead and down wood from state forest land between April 1 and Dec. 30. For many people, fuelwood collection provides an important source for home heating.



A DNR forester oversees a timber harvest on state forest land.



An active timber harvest.

Forest Certification

Forest certification was part of a strategy to retain forest-based jobs and assure forest sustainability. In 2004, the Michigan Legislature passed the Sustainable Forestry Act, which required certification of state forest land.

In 2005, almost 4 million acres of state forest lands became “certified” under both the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI). At that time, Michigan was one of the first states – which also had the largest amount of forest land – receiving dual certification.

Forest certification is a program to identify and recognize well-managed forests and to verify sustainable forest management practices. Certification involves independent, third-party review of on-the-ground forest practices against standards that address environmental, social and economic benefits. Michigan undergoes annual surveillance and periodic recertification audits.

The most recent audit was conducted in October 2012, and it not only resulted in a recommendation for continued certification, but also demonstrated outstanding performance as evidenced by the fact that no corrective action requests were issued by the certifying bodies. Such positive audit results are a rare occurrence for such a large state forest system and serve as verification of sustainable forest management practices.

In 2005, Michigan was one of the first states – which also had the largest amount of forest land – receiving dual certification.



A DNR forester marks the boundary for a future timber sale in Iron County.



Some highlights of the Forest Health Program's work in fiscal year 2012 include:

Emerald Ash Borer (EAB) and Beech Bark Disease (BBD)

FRD staff, along with a contract with Michigan Technological University, worked to find, assess and prescribe for the harvest of viable ash and beech from more than 26,000 acres of upland hardwoods on state forest land. The work is supported, in part, by grant funding. Due to impacts of EAB and BBD, FRD has undertaken an initiative to salvage upland ash and beech from state forest lands. This work will continue into 2013.

Oak Wilt Disease

Working in cooperation with Michigan Technological University and Michigan State University, Forest Health Program specialists confirmed oak wilt pockets in Menominee and Iron counties and flagged the boundaries. FRD staff plowed approximately 20,000 feet of ground in order to cut root grafts to prevent spread of oak wilt.

Forest Health

The DNR's Forest Health Program (FHP) is a collaboration of Michigan State University, Michigan Technological University, the U.S. Forest Service's Northeastern Area State & Private Forestry Unit, and the Forest Resources Division. FHP is partially funded through various federal grants and partnerships.

Beginning in the early 1990s, Michigan's FHP became increasingly involved in multistate and national forest health issues. These efforts were, in part, a response to a new era of exotic forest pest challenges and ever-increasing demands and needs for high-quality information about the health of Michigan's forests. In 2012, a forest health technician was added to the team to assist with field activities statewide, including conducting ground and aerial surveys, collecting and processing survey data and assisting with forest health outreach.

Additional FHP highlights:

- Performed forest health aerial surveys to cover nearly 17.5 million acres of forested lands.
- Developed a forest health and invasive plant reporting application for field data recorders to simplify reporting of forest health problems.
- Confirmed a report of hemlock woolly adelgid (HWA) through the Michigan Department of Agriculture & Rural Development. Healthy trees in the immediate vicinity of the infestation received treatment with an insecticide to ensure HWA eradication of the affected area.
- Cooperated with DNR Parks & Recreation Division employees and volunteers to provide training and technical support to survey for Asian longhorned beetle (ALB) – a destructive wood-boring pest of maple and other hardwoods – in 35 state parks and recreation areas. In addition to the visual surveys, the DNR instituted a pheromone trapping program that specifically targeted campgrounds known to have been visited by residents of documented ALB areas.

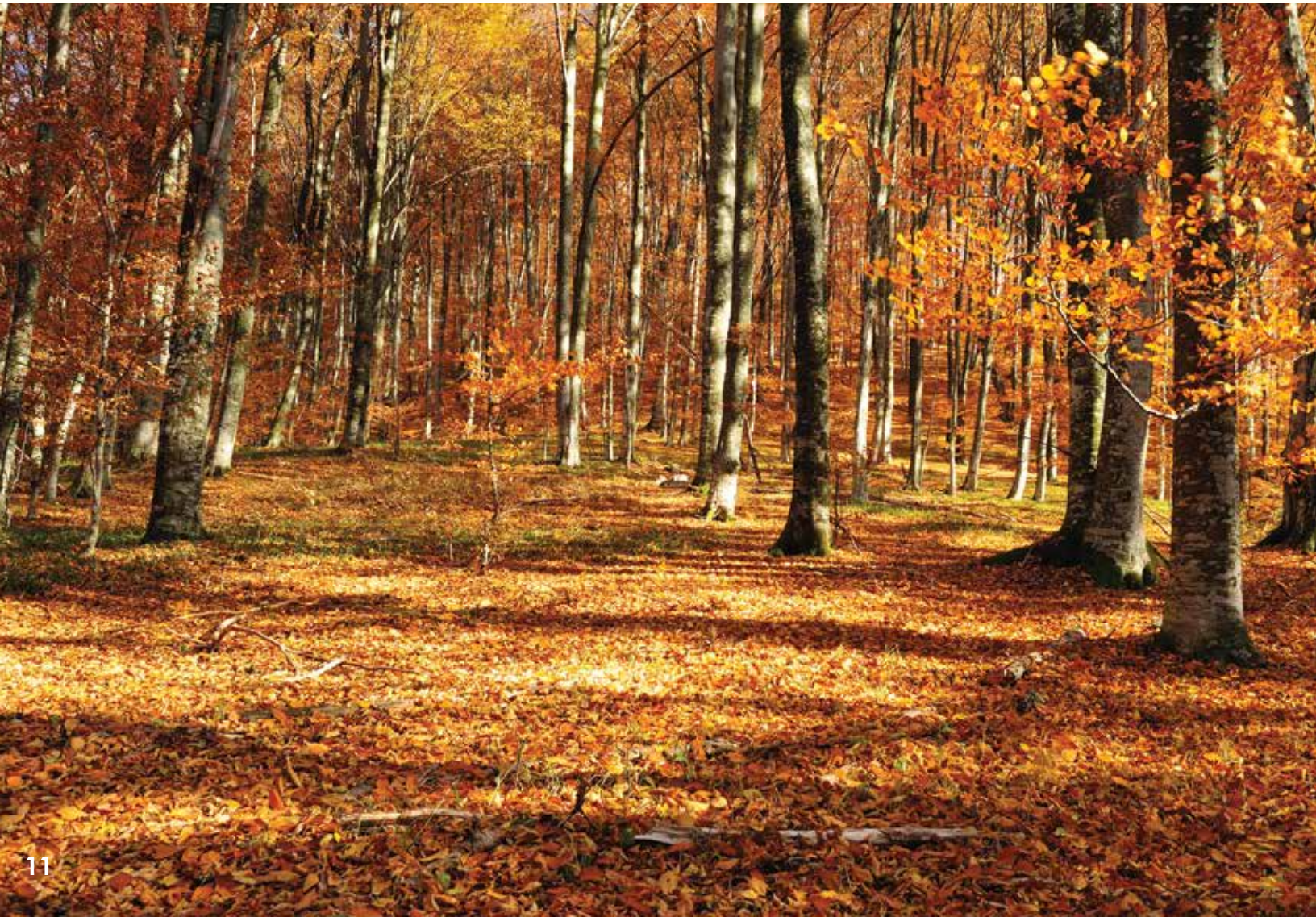
For a complete look at FHP's 2012 accomplishments, visit www.michigan.gov/foresthealth to view the program's Forest Health Highlights Report.

Resource Assessment

The Resource Assessment Unit (RAU) is housed within the Forest Resources Division, but it is responsible for providing geographic information systems (GIS) and digital mapping support to the entire DNR. One of the critical responsibilities is overseeing and managing the department's GIS Enterprise Environment. This robust network of natural resources information is made available to all DNR staff, as well as other subscribers throughout state government. This data gives DNR land managers access to critical information which enables sound decisions that benefit all citizens.

The following are a few highlights of what the RAU accomplished during fiscal year 2012:

- Planned major system upgrades to the DNR's Integrated Forest Monitoring, Assessment and Prescription (IFMAP) program, an inventory protocol and database used for monitoring and sustainably managing the state forest system. All state forest inventory was conducted using IFMAP for the first time in 2012.
- Completed major upgrades and enhancements to the DNR's Mi-HUNT website, including the ability to download GPS data points, Hunter Access Program land maps and new cover type maps.
- Provided GIS and mapping support for the DNR's Recreation Trail Program.
- Assisted in the development of a trail plan to connect the city of Detroit to the town of Ironwood in the western Upper Peninsula.
- Provided map support for land use and mineral lease activity submitted to the Natural Resources Commission.
- Provided mapping support for the Farmland Conservation Easement program at Michigan Department of Agriculture & Rural Development.
- Developed a series of map products for the Governor to aid in improving recreational opportunities in Michigan.
- Provided GIS analyses and mapping support to fire personnel during the Duck Lake Fire.



Minerals Management Section

Forest Resources Division field staff conduct work for the DNR's Minerals Management Section (MMS). MMS is responsible for administering the leasing of the state's metallic, nonmetallic and oil and gas mineral rights, as well as its underground natural gas storage rights.

One of the key functions completed by FRD field staff is the coordination of parcel classification for mineral leasing purposes. This process entails foresters working with wildlife and fisheries biologists, as well as others, to determine the best use of the surface and how the parcel will be classified for leasing.

The amount of "parcel classification" reviews completed depends largely upon the nominations submitted by industry, which can vary greatly. In recent years, the number of reviews increased significantly as a result of industry interest in exploration. The following chart reflects the number of parcel reviews completed by FRD staff over the past seven years:

| 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------|-------|--------|--------|--------|--------|--------|
| 8,081 | 4,130 | 16,485 | 10,741 | 22,774 | 10,535 | 15,907 |

Parcel classification reviews are just one of the many functions where field staff assist the MMS program. Field staff also help by working with industry to locate well placement on state forest land, taking into consideration the environmental sensitivity of the forest resource; reviewing and approving pipeline easement requests; approving site reclamation efforts; and other similar activities.

Surface Development of Oil and Gas Resources

State forest land is an important provider of our state's oil and gas resources. Forest Resources Division staff assists in the coordinated development of these resources to both optimize revenue and ensure resource protection and natural resource values. During the review and approval process, land use staff strives to keep surface disturbances to a minimum while meeting necessary industry and safety standards.

In fiscal year 2012, land use staff issued 23 new well site permits to provide extraction sites for state oil and gas reserves. Additionally, staff reviewed and authorized 23 utility easements necessary to deliver these products to market. Staff also coordinates unique uses of state forest land through the issuance of surface use leases. Oil and gas activities authorized by this process included site development on state-managed lands where the mineral ownership is severed from the surface, brine disposal wells and surface equipment necessary for the safe operation of pipelines.

In addition to development activities, land use staff play an active role in the site stabilization of producing well sites and site restoration after wells are abandoned. In fiscal year 2012, staff coordinated these activities with industry and regulatory staff from the Department of Environmental Quality.

Forest Resources Division staff assists in the coordinated development of oil and gas resources to both optimize revenue and ensure resource protection and natural resource values.



The Fire Program



Fire Season Overview

The 2012 fire season began earlier than normal with the first fire occurring in mid-March in Menominee County. During the months of April and May, there was minimal rainfall reported for most locations. The combination of dry fuels, high winds, warm temperatures and low humidity produced a very active fire season. Michigan experienced 54 “high fire danger” days, and 58 “very high” or “extreme” fire danger days – much higher than other recent fire seasons.



Duck Lake Fire

On May 21, 2012, lightning strikes caused four fires in the Upper Peninsula within 20 square miles north of Newberry in Luce County. While crews worked to suppress those fires, one north of Newberry escaped and resulted in 21,069 blackened acres and the largest fire Michigan has seen in the past 32 years. The department first responded to a DNR wildfire detection aircraft's report of a fire on the afternoon of May 23. Suppression continued until dark when the initial spread of the fire was stopped at about 8:45 p.m. On May 24, 40 mph wind gusts caused the fire to escape control lines and make an 11-mile run to Lake Superior. Before the day was over, more than 200 residences and 100 outbuildings had been saved by suppression efforts, while 41 dwellings, 61 outbuildings and eight commercial structures were destroyed by the fire.

At the peak of the suppression efforts, 27 engines, 13 dozers, three hand crews, five helicopters, and two air tankers were working on the fire. Firefighting resources came from Wisconsin and Minnesota, as well as from across Michigan, with a total of 232 personnel assigned. Suppression costs were in excess of \$3.5 million.

While the fire was still smoking, FRD foresters began work to prepare 16 timber sales totaling 9,600 acres in an effort to salvage the burned wood and make the wood fiber available to the forest products industry.



Destruction caused by the Duck Lake Fire. While some property was lost, suppression efforts saved 200 residences and 100 outbuildings.



Residents line the street to welcome fire staff as they return to town after a day on the fire line.

Additional Large and Complex Fires in Fiscal Year 2012:

April 14

Power line fire, Ogemaw County, 75 acres. This fire required extra caution as it involved a hydrogen sulfide oil field.

April 18

County Line fire, Tuscola County, 350 acres. This marsh fire along the southeast portion of Saginaw Bay threatened homes and burned into the night. Access was difficult due to the wetlands and fire intensity was extreme at times. FRD staff worked with local fire departments and specialized fire equipment to suppress the fire.

May 13

Clear Lake Complex, Ogemaw County, two fires 125 and 311 acres. These fires occurred the same day approximately 10 miles apart. The Clear Lake Fire was in a residential and forested area. A local campground and several homes were protected by FRD staff and local fire department staff. The second fire threatened a major power line and several homes. The homes were saved, but several power poles were burned causing power outages.

May 19

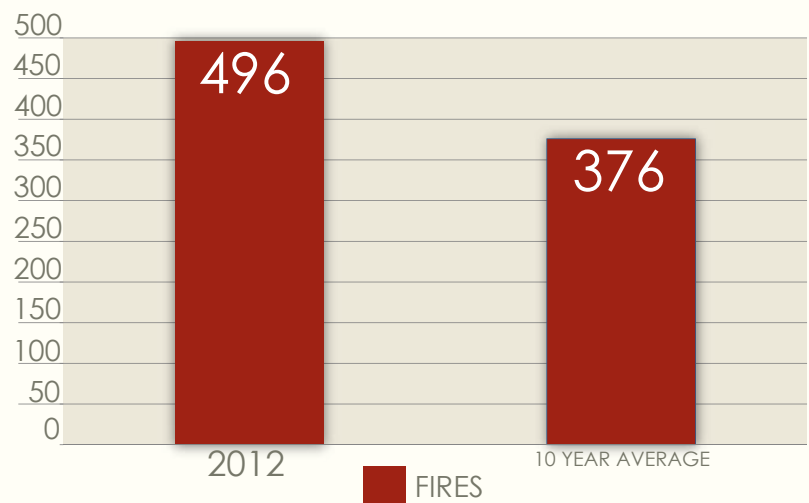
Range 8 Fire, Crawford County, 96 acres. This fire was on Michigan National Guard Camp Grayling Firing Range 8. The fire burned through grass and into young jack pine and a large lowland area around a creek. Access in the lowland area was difficult due to soft ground. Support was received from the National Guard by way of helicopters for intelligence, suppression and keeping engines supplied with water.

2012 Fire Statistics

| | |
|--------------------------------|--------|
| Number of fires | 496 |
| Total acres burned | 23,795 |
| State land | 17,272 |
| Private land | 6,265 |
| Federal land | 210 |
| Other public | 48 |
| Residences destroyed | 48 |
| Residences saved | 534 |
| Outbuildings destroyed | 82 |
| Outbuildings saved | 337 |
| Commercial buildings destroyed | 9 |
| Commercial buildings saved | 29 |

It is worth noting that fiscal year 2012, was an unusual year for fires caused by lightning. Those fires were responsible for burning more than 21,250 acres, including the 21,069 acres burned in the Duck Lake Fire.

Forest Resources Division Wildfire Occurrence



The Michigan National Guard provided four helicopters and 38 staff to assist with the Duck Lake Fire.



Incident Management Teams

Forest Resources Division maintains four incident management teams to manage and oversee large and complex incidents. These teams are made up of eight to 10 people and are designed to expand with the complexity of the incident.

Teams are primarily comprised of FRD staff, but also include individuals from other DNR divisions. The teams are put on standby during extreme fire days. In 2012, teams were on standby for 14 days and were put into service on two fires in the Lower Peninsula as well as the Duck Lake Fire from May 24 through June 12.

Five department pilots and aircraft are supplemented by three contract aircraft to fly fire detection across the state. In 2012, DNR pilots flew more than 643 fire detection hours, providing intelligence for fire resources on the ground. The contract pilots flew an additional 327 hours to help cover higher fire danger days. The pilots' mission is to detect smoke and relay dispatch information to fire suppression crews. They also provide invaluable information to the DNR's fire management teams during suppression efforts.

Prescribed Burning

Prescribed fire plays an important role in the sustainable management of forested lands, wildlife habitat and the restoration of natural communities on state forests, state parks and state game areas. FRD staff provides leadership and expertise for the prescribed burning program on all state-managed lands. In fiscal year 2012, FRD successfully completed 46 burns totaling 4,295 acres.

Out-of-State Fire Support

Most of FRD's fire-trained staff are qualified to assist with national fire emergencies. In 2012, FRD Incident Coordination Centers sent incident management supervision staff and equipment to aid with fire emergencies in several states, including Minnesota, Montana, Oregon, Idaho and Colorado. The opportunity to assist other states and federal agencies allows FRD staff to improve their skills and maintain high-level qualifications, which are then utilized in managing Michigan fires. When sent on out-of-state assignments, the DNR is fully reimbursed for all costs associated with this support. In fiscal year 2012, FRD dispatched 37 people to assist other agencies.

Forest Fire Experiment Station

The DNR's Forest Fire Experiment Station (FFES) in Roscommon was created to investigate how wildfires behave and improve the mechanized equipment to fight fires. Its development of equipment is where the FFES has had its greatest impact. In 2012, the FFES built a new fire skidder and engine for DNR use.

Fire Prevention

Forest Resources Division fire program staff work just as hard to prevent fires as they do to suppress them. Burn permits are required for openly burning yard debris any time the ground isn't snow-covered. In 2012, the DNR launched its interactive voice response (IVR) burn permit phone system – this cost-saving system allows users to identify their burning location through speech or touch-tone entries. Each year, an average of 55,000 callers request burn permits by phone.

Each FRD office owns a Smokey Bear suit that is used to deliver fire safety messages at various events throughout the state.





In fiscal year 2012, FRD obtained and loaned to local fire departments:

40
vehicles
(including three
fire engines)

Three
forklifts

Two
equipment
trailers

16
generators
and light sets

Numerous
miscellaneous
items

Cooperating with Local Fire Departments

Forest Resources Division administers two programs through which it obtains excess federal equipment. The Federal Excess Personal Property (FEPP) program allows the division to receive equipment on loan from the U.S. Forest Service, which FRD loans to local fire departments or uses within its fire program. The Department of Defense Firefighter Program (DoD-FFP) allows FRD to receive and take ownership of equipment from the Department of Defense, and then issue it to local fire departments.

In fiscal year 2012:

- The total acquisition value of all FEPP and DoD-FFP equipment was more than \$3.5 million.
- 14 trucks and 11 miscellaneous items (e.g., pumps, generators) were placed with volunteer fire departments; and 15 trucks and 18 miscellaneous items were put into service within FRD.
- FRD awarded grants to 116 fire departments for a total of \$271,443 through the Federal Volunteer Fire Assistance grant program, which it administers.

Training

FRD provides fire suppression training for both staff and cooperators throughout the year; in fiscal year 2012, 1,259 local firefighters received training from FRD.



The Hiawatha Township Fire Department was given this vehicle, which they modified and updated to meet their needs, as a part of the DNR's federal excess property program.



Private Lands Forestry

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

Forest Stewardship Program

The DNR's Forest Stewardship program serves as the primary tool for promoting sustainable forest management on family forest land. Nationally, the U.S. Forest Service State and Private Forestry Program funds the Forest Stewardship Program. The DNR administers the program with guidance from the Stewardship Advisory Committee and provides technical, financial and educational assistance to landowners so they can achieve their objectives in an environmentally beneficial way. In 2012, DNR staff provided tools and expertise to almost 3,000 landowners.

Also in 2012, the DNR participated in more than 20 events designed to engage private woodland owners and others through training opportunities, workshops and short courses.

In 2012, 35 certified plan writers developed 184 Forest Stewardship plans for 31,722 acres and facilitated landowner access to other cost-share programs and tax-incentive programs to continue their stewardship activities. Each year, about 5 percent of current stewardship plans are monitored to see if landowners are implementing recommended practices. In 2012, the compliance rate was 94 percent.

In 2012,
DNR staff provided
tools and expertise
to almost 3,000 forest
landowners.

Family Forests for the Future

This is a program partnership between the DNR and Michigan State University Cooperative Extension that provides workshops to help landowners learn about keeping their land intact for future generations

Emerald Ash Borer Mitigation

DNR forest health and stewardship staff is working to help Michigan private woodland owners and communities manage their ash resources by helping prepare for the infestation of emerald ash borer (EAB) and working to slow ash mortality. Qualifying landowners receive a free site evaluation by a professional forester to learn about the health of their ash trees. Landowners can potentially qualify for up to 50 percent cost share for a Forest Stewardship Plan that helps their forest stay healthy and productive.

Conservation District Partnership, the Forestry Assistance Program

The DNR entered into a partnership with the Michigan Department of Agriculture & Rural Development and the Michigan Association of Conservation Districts in 31 counties across Michigan. Under this partnership, the DNR provided training, funding and technical assistance to foresters hired by the districts to provide a local source of forestry assistance that supports both the landowners and the private consulting foresters.





Commercial Forest Program

The Commercial Forest (CF) program has been in existence since 1925. The intent of the CF program is to provide a property tax incentive for private landowners to retain and manage forest land for long-term timber production. Instead of paying the ad valorem property taxes, the CF landowner pays a specific tax, currently set at \$1.25/acre/year.

Requirements include:

- A minimum of 40 contiguous acres; and
- A forest management plan and certification that the plan is in effect and that the landowner is allowing public access for hunting and fishing.

In fiscal year 2012, the DNR approved an additional 8,296 acres to the CF program. Approximately 1,800 landowners own a total of 2,225,202 acres that are currently listed in the program. This program provides the public with an additional 2.2 million-plus acres for hunting and fishing.

Qualified Forest Program

The Qualified Forest (QF) program was created in 2006 to provide a property tax incentive for non-industrial private forest landowners to retain and manage forest land for long-term timber production. Requirements include that the property owner has 20 contiguous acres, a forest management plan, and a certification that the plan is in effect. Public access to the land is not required. In fiscal year 2012, the DNR processed 128 applications, with 10,804 acres approved by the assessors.

In fiscal year 2012, the DNR approved an additional 8,296 acres to the Commercial Forest program.

Urban and Community Forestry

The Urban and Community Forestry (UCF) program is administered by one full-time Forest Resources Division employee who works to promote management of urban forest resources through technical, educational and financial assistance from the U.S. Forest Service. During fiscal year 2012, this program reached more than 5 million people living in participating communities throughout the state.

The DNR's UCF program provides critical assistance at the local level through grants, partnerships and agreements with communities, community-based organizations and others. Outcomes are focused on building local capacity to manage urban forests to ensure their health and sustainability while enhancing the livability of communities where most Michiganders live.

To address goals of the state and federal UCF programs and state forest action plans, the state has focused assistance on helping communities build local capacity to better manage their urban forests. In fiscal year 2012, UCF issued 57 grants worth \$280,000 of U.S. Forest Service funds.

Partnerships are key to the success of both state and local UCF programs as evidenced by the donation of more than 11,000 volunteer hours in fiscal year 2012. The state continues to leverage partnerships with several nonprofit organizations (The Greening of Detroit, ReLeaf Michigan and the Michigan Arbor Day Alliance) to extend the scope and impact of its work.



In fiscal year 2012, the Urban and Community Forestry program utilized federal funding to provide communities with financial and technical assistance, achieving the following outcomes:

The cities of Birmingham, East Lansing, Rochester, and Suttons Bay are using tree inventory/plan results to improve management and build support/engagement in their UCF programs both internally (city officials) and externally (public) through outreach and education.

The city of Detroit's ongoing tree inventory project is helping Michigan's largest city to better manage risk/liability issues related to dead and hazardous trees and more efficiently plan reforestation efforts in high-priority areas for storm water management.

The cities of Adrian, Ann Arbor and Grand Rapids have recently completed i-Tree Eco assessments through a partnership with the DNR and private contractor, Davey Tree. In combination with recently completed tree inventories and urban tree canopy assessments, each community now has a clear picture of the extent, condition, value and composition of urban forests across the public-private continuum.

Tree City USA Programs in Michigan

In fiscal year 2012, 121 communities, three utilities and two campuses were certified through the Arbor Day Foundation's respective Tree City, Tree Line and Tree Campus USA programs. Detroit remains the state's largest certified community while Richland is the smallest. Additionally, nine communities were honored with the Growth Award status.

Land Surveying

Forest Resources Division's survey staff is responsible for establishing boundary surveys that benefit timber sales, protecting public land from trespassing, and for performing other survey work needed by divisions within the DNR. The department's land survey work is an important supplement to the Survey Remonumentation Programs conducted by Michigan counties and consequently benefits all private landowners while supporting the management of the state's natural resources.

Some examples of other survey staff duties include:

- Retracing the original U.S. Public Land Survey to recover and remonument the section and quarter section corners that form the framework for the property descriptions of public and private lands;
- Surveying and monumenting boundaries of state forest land, DNR facilities, access sites and state parks;
- Creating parcel descriptions for conveyance of real property;
- Researching titles to resolve property boundary and land title discrepancies;
- Documenting encroachments on state-managed lands;
- Conducting topographic surveys for engineering design of state facilities;
- Delineating hazardous waste sites and creating descriptions for deed restrictions;
- Providing land boundary and corner information to local land owners and surveyors in private practice;
- Performing control surveys for support of aerial photographic mapping; and
- Representing the department as an expert witness in court cases.

Lower Peninsula staff completed 29 survey requests for FRD involving 72 sections, setting 248 new corners and upgrading an additional 361 corners for re-recording. Upper Peninsula staff completed 95 land survey requests involving 126 sections, establishing and monumenting 398 new corners and re-witnessing an additional 114 existing corners for re-recording at county courthouses. Of the 95 project requests, 93 were for FRD.



A DNR surveying technician surveys a state property line.



Ensuring Access to State Forest Land

State forest lands are a major part of the recreation equation for residents and visitors alike. The Forest Resources Division manages Michigan's land to ensure public access is available for hunting, fishing, hiking, camping, birding and other forest uses.

Additionally, FRD will facilitate the restoration of six former Campuses Energy Lease Sites that are now fully managed public land that has been restored to public use. These properties were given to



Keeping Public Land Public

Forest Resources Division currently has almost 500 pending encroachments on public land that keep this land from public use. In 2012, the DNR created an opportunity (the Encroachment Resolution Initiative or ERI) for people with homes, cabins, barns or other buildings on state-managed public land to acquire the land they encroached upon, resolving almost 200 long-standing trespasses statewide.

In addition to its work with the ERI, FRD was involved in a federal audit completed by the U.S. Fish and Wildlife Service (USFWS). The USFWS oversees the DNR management of certain parcels of public land that were acquired with federal assistance or license fees. This work is important to ensuring the DNR continues to get the large amount of acquisition funding that it has received in the past from the federal government to purchase hunting/fishing properties.

In fiscal year 2012, FRD staff also facilitated the restoration of six former Consumers Energy lease sites that are now DNR-managed public land that has been restored to public use. Because of this work, additional river frontage on the AuSable and Manistee rivers is available for the public to enjoy.



Key acquisitions for fiscal year 2012 included:

The Manistee River deeryard and bog complex, a 280-acre parcel surrounded by state forest land in Wexford County. This property contains over 1,000 feet of Manistee River frontage, deeryard, a 90-acre bog complex and excellent ruffed grouse habitat.

The purchase of the Sturgeon River Corridor parcel in Dickinson County. This property contains more than two miles of Sturgeon River frontage. It is surrounded by state forest land and the river corridor. The property also contains excellent ruffed grouse and woodcock habitat.

The Upper Black River property. At 517 acres, this parcel was the second-largest privately owned in-holding in the Pigeon River Country State Forest and contains extensive Black River frontage. The property is excellent elk habitat and offers trout fishing opportunities along both the Black River and Saunders Creek. All of these key purchases were funded through the Michigan Natural Resources Trust Fund.

Transactions on State Forest Land

Land consolidation is a key goal for the DNR as an agency and is an especially critical goal for Forest Resources Division. Consolidated public ownership benefits both public users and FRD land management staff. 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 provide for significant efficiencies in land management. In fact, in fiscal year 2012, FRD (with assistance from the DNR's Real Estate Services) worked toward better consolidation through 40 land disposals, 15 land exchanges and 15 acquisitions.

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 2012, staff issued more than 240 use permits for a variety of activities, including military training exercises, wedding ceremonies, dog sled races, cross country running races and equestrian rides. One notable permit issued in April 2012 authorized the use of state land for the filming of an episode of the Animal Planet series "Finding Bigfoot."

Land use staff authorizes activities that can be more intrusive or of a longer duration through the Surface Use Lease process. In 2012, staff reviewed and issued lease agreements for activities including cooperative agreements to develop recreational facilities on state land, to establish forestry demonstration projects, and to construct and operate facilities necessary to control the spread of invasive species.

A unique amendment coordinated by staff in 2012 included an agreement to establish a 50-caliber machine gun range at Camp Grayling in Crawford County, which is an asset to national security and an enormous benefit to local economies.

For fiscal year 2012, staff issued more than 240 use permits for a variety of activities, including military training, weddings and more.



Forest Resources Support Staff

The Program Services Section (PSS) staff in Lansing provides program support functions to all Forest Resources Division units statewide, as well as the DNR's Minerals Management Section (MMS). In addition to handling bond administration and technology, PSS consists of three units:

Budget, Grants and Procurement

- Budget control and development
- Coordination of all federal grant applications
- Purchase and acquisition of equipment
- Facilities coordination
- Vehicle management

Employee Services

- Directs and oversees division personnel transactions
- Marketing
- Training
- Safety

Accounting Support

- Ensures adherence to Generally Accepted Accounting Principles
- Oversees FRD's year-end close process
- Procurement and fuel card administration

The role of PSS staff is to serve and support FRD programs and the MMS so they can focus on continuing FRD's mission of maintaining healthy and productive forests and a strong mineral resource base.



Forest Resources Division Funding

The Forest Resources Division's fiscal year 2012 financial operating disposition was as follows:

| | |
|--------------|---------------|
| Revenue | \$40,229,022 |
| Expenditures | \$41,454,223 |
| Balance | (\$1,225,201) |

These numbers include the DNR's Minerals Management Section. However, the Parks and Recreation Division has been excluded since it is no longer part of FRD.

The fiscal year 2012 deficit in FRD was primarily absorbed by using a portion of the Forest Development Fund (FDF) balance that is near depletion. FRD is primarily funded by the FDF (the division only receives 15 percent of its annual budget from the General Fund). This fund is dependent on timber sale revenue, which can be unpredictable.

FRD also depends on outside grant funding for support. In 2012, FRD received and managed \$2,575,252 in grants.

In order to continue FRD's mission of ensuring that state forest land remains healthy and productive for current and future generations, it is important that stakeholder support and partnerships remain strong.

Learn more about Forest Resources Division and Michigan's forests by visiting:
www.michigan.gov/forestplan



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/midnr.
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.