WELCOME

Thank you for picking up a copy of our annual report. DNR Wildlife Division staff members are honored to be the public trust managers of one of Michigan’s most vital natural resources – wildlife! We are proud of the work we’ve done, and are excited to share our stories. Inside are highlights of some of the work we did during fiscal year 2017, which ran from October 1, 2016 – September 30, 2017.

This year, the report focuses on our major strategic plan goals: one (wildlife populations), two (wildlife habitat), three (land stewardship), four (wildlife recreation), five (public outreach and partnerships), six (business practices), and seven (work systems). Financial tables outlining money spent per goal and per fund source are also included. Thank you for your interest in Michigan’s wildlife. Happy reading!

DEDICATION

To the memory of Mark MacKay — DNR Wildlife employee, colleague, and friend.
Dear Reader,

Anyone following the news this past year knows the challenges facing Michigan’s wildlife. Chronic wasting disease and bovine tuberculosis threaten deer health. We discovered West Nile virus in ruffed grouse. We continue to combat white-nose syndrome in northern long-eared bats. As always, we are proud that the Department of Natural Resources Wildlife Division has brought the latest science and the best professionals to the task of maintaining healthy wildlife in Michigan.

At the same time, we have seen several significant, even historic, advances on behalf of wildlife and natural resources conservation. The DNR has asked the U.S. Fish and Wildlife Service to remove the Kirtland’s warbler from the federal list of threatened and endangered species. If that happens, the warbler will become the first passerine -- the largest order of birds, including more than half of all bird species -- and the first conservation-reliant species ever to come off the federal endangered species list. In addition, we are pleased to report that the Pheasant Restoration Initiative has restored thousands of grassland acres on both public and private land, new Grouse Enhanced Management Sites (GEMS) and Turkey Tract areas were dedicated, and there’s a new and strategic partnership (MI Birds) co-led and funded by the DNR Wildlife Division and the National Audubon Society. The Wildlife Division is taking concrete steps to broaden the conservation community and nurture real dialogue among consumptive and non-consumptive users of the resource.

Two other areas worthy of mention include important advances in the Wildlife Division’s outreach capacities to share our knowledge of Michigan wildlife. Chief among these efforts was the initiation of a large-scale bear/human conflict public awareness campaign, and the development of several classroom modules that last year brought wildlife and natural resources conservation to more than 38,000 students throughout the state.

Some people will say that wildlife management never changes and that the issues we confront today are the same ones that challenged our predecessors. To some extent, this is true. At the same time, we would assert that Wildlife Division has emerged as a national leader in the response to new threats and in working with stakeholders of all interests to ensure that Michigan’s wildlife and natural resources thrive and remain a true treasure to be enjoyed by the next generation of hunters and outdoor enthusiasts.

Yours in conservation,

Keith Creagh, Director
Department of Natural Resources

Russ Mason, Chief
Wildlife Division
WILDLIFE POPULATIONS
Manage for healthy and sustainable populations of wildlife
pg. 6

WILDLIFE HABITAT
Manage habitat for sustainable wildlife populations and wildlife-based recreation
pg. 12

LAND STEWARDSHIP
Administer and promote effective stewardship of lands for wildlife habitats and wildlife-based recreation
pg. 20

WILDLIFE RECREATION
Enhance sustainable wildlife-based recreation use and enjoyment
pg. 22

PUBLIC OUTREACH & PARTNERSHIPS
Improve and maintain public communication, strong relationships, and partnerships
pg. 28

BUSINESS PRACTICES
Foster and adopt effective business practices
pg. 32

WORK SYSTEMS
Develop and implement systems that lead to continuous improvement in how we work
pg. 34

FINANCIALS
pg. 36

APPENDIX A: WILDLIFE DIVISION FUNDING SOURCES
pg. 39
WILDLIFE POPULATIONS

SETTING REGULATIONS AND ENGAGING STAKEHOLDERS

WILD TURKEYS

The division conducted structured decision-making (SDM) workshops to clarify wild turkey management objectives. A newly formed stakeholder group consisting of 12 organizations with an interest in turkey hunting, management, conservation, or research within Michigan — including division staff, outside stakeholder groups, and a team of researchers from Michigan State University (MSU) — focused on turkey population assessment and harvest management. MSU researchers then facilitated four SDM workshops where the stakeholder group discussed turkey population dynamics and management, including management objectives, management options, and simulating the consequences of different management options. Through these partnership activities, the division gathered stakeholder input to address future management options. Also, the division worked with stakeholders to host the 11th Woodcock Symposium, which included people from Europe, Canada, and the United States.
DEER
FY 2017 was a productive year for the deer program. Staff attended over 30 individual meetings with stakeholders around the state, including local conservation clubs, Quality Deer Management Association groups, co-ops, community groups, and sportspersons, and agricultural organizations. Additionally, the deer program was involved in speaking at three public meetings on chronic wasting disease (CWD) in newly defined areas in Mecosta and Montcalm counties, as well as putting on a nationally renowned CWD Symposium that was attended by more than 200 individuals in-person and more than 200 individuals online. Furthermore, deer regulations were drafted and proposed to the Natural Resources Commission (NRC) for the next three years, including the setting of antlerless quotas on both public and private land.

FURBEARERS
FY 2017 has been “gear up time” for furbearer regulation changes. Upcoming recommendations for change will be assessed by the NRC in FY 2018. The DNR is reviewing marten and fisher regulations as well as a number of potential bobcat regulation changes, mostly related to the Upper Peninsula. The DNR met with the Furtaker User Group in September to get input on these changes. The September furtaker meeting was unique in that it served as “real-world” facilitation training for staff. This was a pilot meeting to evaluate the use of long-running stakeholder engagement meetings as a tool to provide experience to DNR staff members who have not had much facilitation experience.

WATERFOWL
After staff participated in Mississippi Flyway Council Technical Section meetings, the Waterfowl Workgroup met with the Citizens Waterfowl Advisory Committee in January 2017 to develop recommendations for 2017-18 waterfowl hunting season regulations. There were minimal changes from the previous year. New aggregate dark goose bag limits were set to allow hunters to take white-fronted geese and brant while hunting Canada geese.

DNR hosted the August 2017 summer Mississippi Flyway Council meeting in Traverse City where negotiations took place with the U.S. Fish and Wildlife Service for migratory bird hunting regulations for the 2018-19 seasons.

COMMON MERMANSERS AND SWIMMER’S ITCH
For several years, lakeshore residents and lake associations from several northern Michigan lakes have expressed interest in controlling common merganser populations on their waterbodies because the mergansers appear to carry a high load of the parasite that causes swimmer’s itch. The division met with stakeholders from five lakes, including lake associations, lake residents, nuisance animal control contractors, and the Tip of the Mitt Watershed Council, throughout 2017 to understand and address their concerns and to get input and recommendations for a Common Merganser Control Policy. A pilot control program was completed in 2017 on five lakes, and the final policy and program is slated for implementation in early 2018.
BEAR

More than 100 participants attended a bear forum in December 2017. The meeting served as a venue to review harvest statistics, indices, and bear hunter survey results. Regulation changes included alterations to the target harvest and associated license quotas, a ban on chocolate, and a nonresident license cap increase. A tribal consultation meeting, Natural Resources Commission presentations, media interviews, and public presentations with U.S. Forest Service, conservation districts, and stakeholder conventions have kept bear communications accessible. In addition, weekly communications with division staff, bear work group members, and individual forum members, has helped assess and evaluate data, nuisance complaints, and new developments or conflicts.

BEAR/HUMAN CONFLICT COMMUNICATIONS CAMPAIGN

The black bear is an “up-north” Michigan icon. Bear are found in over half of the state and bring a great deal of interest. People live, work, and recreate in bear country daily, and the division is a resource for individuals, business owners and communities who are looking for advice. Bear communication is a priority for certain areas of the state. This includes explaining how wild animal populations and distributions are managed through regulated hunting as well as helping people feel comfortable when outdoors.

In early 2017, a bear/human conflict campaign was initiated in the northwest Lower Peninsula, where the majority of complaints and incidents were occurring. Commercials were aired on local radio for four weeks; 14 billboards were placed in high-traffic locations; statewide Secretary of State offices and WCMU TV aired a bear public service announcement; and information was available to nontraditional groups through targeted social media. Awareness cards and posters also were created for DNR offices and state parks. The increased messaging resulted in an increase in media coverage, which helped to spread the message “bear are smart, be smarter.” 2017 also brought an increased number of bear hunting licenses in many areas of the state, with the most significant quota increase in the Baldwin Bear Management Unit. Press releases were used to prompt a discussion on bear management, a video was used to explain the drawing process, and media interest followed. Bear application purchases increased by 9 percent.
UPDATE ON CHRONIC WASTING DISEASE

On May 20, 2015, through targeted surveillance, the state confirmed its first chronic wasting disease (CWD)-positive free-ranging white-tailed deer from Meridian Township in Ingham County. In January 2017, after response to two CWD-positive deer being found in a privately owned facility in Mecosta County, testing of free-ranging white-tailed deer in a nine township area in Mecosta and Montcalm counties surrounding the facility began. A deer harvested in late September 2017 from Montcalm County tested positive for CWD, leading to an increase in testing in this area. To date, 57 deer have been confirmed positive or suspect for CWD, ten from Clinton and Ingham counties and 47 from Kent and Montcalm counties. Since the discovery of the initial case, more than 30,000 deer have been tested statewide, with more than half of the testing occurring in 2017. Surveillance of hunter-harvested animals, collection of road-killed deer, issuance of disease control permits, and culling by sharpshooters continue to be important avenues for obtaining samples. Testing for CWD continues year-round.

RESEARCH

POPULATION DYNAMICS AND MANAGEMENT OF WILD TURKEYS IN MICHIGAN: LINKING MONITORING, ASSESSMENT, AND HARVEST-POLICY EVALUATION

A research project related to wild turkey populations and management was conducted through a partnership between the DNR and the Boone and Crockett Quantitative Wildlife Center at Michigan State University. Additional support was provided through a federal Pittman-Robertson Wildlife Restoration Act grant administered by the U.S. Fish and Wildlife Service.

Harvest and monitoring data evaluated the sustainability of management decisions regarding wild turkey population and harvest objectives. Harvests observed throughout the study period (2002-2015) were biologically sustainable for turkeys in southern Michigan. By modeling population outcomes, researchers found that the current management strategy of a one-bird spring bag limit combined with the ability to close fall hunting if male populations decline to undesirable levels is scientifically defensible. This harvest strategy consistently ranked higher than other management options regardless of changes to future hunter effort. Therefore, increasing hunter effort under the current management system should not jeopardize sustainable turkey harvests in the future. Integrating population assessment and models into current decision-making processes for turkeys resulted in reliable outcomes while making best use of existing monitoring data. This research provides a sound foundation for the use of adaptive management, where models are updated as more is learned about the dynamics of turkey populations and hunter behavior.
## WILDLIFE PERMITS

Permit totals are based on calendar year. In June 2017, the Natural Resources Commission signed a new order requiring any commercial processor who accepts wild game for processing and storage to register for a free permit. Using a web-based program allowed this permit process to be successfully implemented; processors could register online and receive an email copy of their permit. Individuals wishing to pick up road-killed animals can also apply online for a salvage permit. This has streamlined the process, making it easier to generate reports and allowing the public to get a permit at any time of day.

<table>
<thead>
<tr>
<th>PERMIT TYPE</th>
<th>TOTAL NEW</th>
<th>2017 RENEWALS</th>
<th>TOTAL CURRENT</th>
<th>COMMERCIAL BREEDERS</th>
<th>RENEWAL CYCLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERMITS TO HOLD WILDLIFE IN CAPTIVITY</td>
<td>38</td>
<td>47</td>
<td>337</td>
<td>72</td>
<td>3 yrs.</td>
</tr>
<tr>
<td>WILDLIFE DAMAGE AND NUISANCE CONTROL BUSINESS</td>
<td>66</td>
<td>168</td>
<td>622</td>
<td></td>
<td>3 yrs.</td>
</tr>
<tr>
<td>GAME BIRD HUNTING PRESERVES</td>
<td>9</td>
<td>148</td>
<td>240</td>
<td></td>
<td>3 yrs.</td>
</tr>
<tr>
<td>SCIENTIFIC COLLECTOR’S</td>
<td>18</td>
<td>88</td>
<td>346</td>
<td></td>
<td>3 yrs.</td>
</tr>
<tr>
<td>FALCONRY</td>
<td>7</td>
<td>30</td>
<td>127</td>
<td></td>
<td>3 yrs.</td>
</tr>
<tr>
<td>WILDLIFE REHABILITATION</td>
<td>5</td>
<td>13</td>
<td>129</td>
<td></td>
<td>5 yrs.</td>
</tr>
<tr>
<td>SPECIAL DOG TRAINING AREA</td>
<td>19</td>
<td>36</td>
<td>214</td>
<td></td>
<td>3 yrs.</td>
</tr>
<tr>
<td>FOX HOUND TRAINING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>PROJECT CONTROL PERMITS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>120 days</td>
</tr>
<tr>
<td>FIELD TRIALS ON STATE LAND</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>PRIVATE LAND FIELD TRIALS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>OUT OF STATE DOG BEAR PERMITS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>GOOSE CONTRACTOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>CANADA GOOSE ROUND-UP (USDA-ISSUED)</td>
<td>10</td>
<td>1</td>
<td>10</td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>CANADA GOOSE NEST/EGG (USDA-ISSUED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>TEMPORARY HOLDING OF DEER</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMERCIAL HUNTING GUIDE PERMITS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>COMMERCIAL MEAT PROCESSOR PERMITS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 yrs.</td>
</tr>
<tr>
<td>FALCONRY-TRAPPING PERMITS FROM BELOW</td>
<td>75</td>
<td>1</td>
<td>75</td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>ROAD-KILLED SALVAGE PERMITS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>WILDLIFE DAMAGE AND NUISANCE CONTROL (FIELD- ISSUED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>MIGRATORY BIRD DEPREDATION PERMITS (USFWS-ISSUED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 yrs.</td>
</tr>
<tr>
<td>TOTAL</td>
<td>163</td>
<td>531</td>
<td>6088</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
During the last 12 months, 21 reports have been prepared by division staff.

2013 Small Game Harvest Survey
2014 Waterfowl Harvest Survey
2014 Marten and Fisher Harvest Survey
2015 Marten and Fisher Harvest Survey
2014 Otter And Beaver Harvest Survey
2015 Otter And Beaver Harvest Survey
2014 Michigan Furbearer Harvest Survey
2015 Michigan Furbearer Harvest Survey
2014 Bobcat Hunter and Trapper Harvest in Michigan
2015 Bobcat Hunter and Trapper Harvest in Michigan
2015 Michigan Elk Hunter Survey
2016 Michigan Elk Hunter Survey
2015 Fall Turkey Survey
2016 Spring Turkey Survey
2015 Sharp-tailed Grouse Harvest Survey
2016 Sharp-tailed Grouse Harvest Survey
2016 Michigan Black Bear Report
2016 Hunting Access Program (HAP) Survey Report
2016 Michigan Deer Harvest Survey Report
Evaluation of Antler Point Restrictions in Deer Management Units in The Northwest lower peninsula
Survey of Waterfowl Hunters Using Managed Waterfowl Hunt Areas in Michigan

During the last 12 months, 21 reports have been prepared by division staff.

One hundred people from the deer farm industry attended the fifth annual DNR-MDARD-Cervid Industry meeting in August 2017 at the Big Rapids Holiday Inn. The sixth annual meeting is set for Thursday, August 16, 2018, at Tree Tops Resort in Gaylord. Thirty-five people attended the first annual meeting, which was held in 2013.

**Total Number of Facilities Permitted: 333**

4 License Types
Class I – Hobby: 8
Class II – Exhibition: 32
Class III – Ranch: 132
Class IV – Full: 161 (Only license type that can sell live animals)

**Number of Facilities by Wildlife Region**
Upper Peninsula: 26
Northern Lower Peninsula: 120
Southwestern Lower Peninsula: 103
Southeastern Lower Peninsula: 84

**Total Acreage Fenced: 62,526 Acres**
Class I – Hobby: 19.85 acres
Class II – Exhibition: 96.15 acres
Class III – Ranch: 58,460.72 acres
Class IV – Full: 3,949.37 acres
Average Size of Class III – Ranch: 442.8 acres
Average Size of Class IV – Fully: 24.53 acres

**WRITTEN REPORTS**
IN 2017, THE DIVISION DEDICATED $910,000 TO 11 WILDLIFE HABITAT GRANT PROGRAM PROJECTS ACROSS THE STATE. THE PRIMARY GOAL OF THE PROGRAM IS TO ENHANCE THE QUALITY OF GAME SPECIES HABITAT IN SUPPORT OF SPECIFIC GOALS FROM THE DIVISION’S STRATEGIC PLAN.
WILDLIFE HABITAT GRANTS

CAMP GRAYLING
A Wildlife Habitat Grant (WHG) involving the division, National Wild Turkey Federation, and the Michigan Army National Guard – Camp Grayling started the first year of a long-term partnership project in 2017. The goal of this multi-year project is to enhance habitat for wildlife within close to 500 acres of openings managed and maintained by Camp Grayling for its military operations. Currently, these openings are filled with cool-season grasses that Camp Grayling staff mow annually to maintain and set back encroaching brush. WHG funding was acquired for the first two years of this project and will pay for the planting of 250 acres of openings to a rye or buckwheat and clover mixture. More than 100 crabapple trees are also being planted along the edges of each opening to provide additional food for wildlife such as deer, turkeys, and grouse. Eventually, these openings all will be planted to a clover mixture. This mixture will be easier to maintain, which will decrease Camp Grayling’s maintenance costs and increase wildlife use. All openings are open for public hunting and wildlife viewing.

MAPLE RIVER STATE GAME AREA
Since 2011, the division has worked with partners to improve grassland habitat at the Maple River SGA as part of the Pheasant Restoration Initiative. Since then, nearly 500 acres of habitat have been improved to benefit pheasants along with other grassland birds and wildlife. In 2016-17, Pheasants Forever used a WHG to continue work on approximately 60 acres that had previously been cleared of brush and stumps. The 60 acres were planted to a combination of switchgrass, winter food plots, and a mix of warm-season grasses. The improved habitat will result in additional winter, nesting, and brood-rearing cover for pheasants.
DEER HABITAT IMPROVEMENT PARTNERSHIP INITIATIVE | DICKINSON CONSERVATION DISTRICT

The Dickinson Conservation District was the recipient of a division 2017 Deer Habitat Improvement Partnership Initiative grant (DHIPI) for $12,000. This habitat project focused on enhancing winter deer shelter on privately-owned lands near existing deer wintering complexes. The Dickinson County Forestry Assistance Program forester identified six cooperating landowners and trained a specialized contractor to carry out the work. Five of the sites, totaling 51 acres, were scarified using a bulldozer equipped with a rock rake. This specialized equipment is designed to expose bare mineral soil, thereby preparing a good seed bed for natural pine seed to grow without competition. The sixth site was underplanted by hand with 9,525 long-lived white pine seedlings across 35 acres. This was the first of more than 60 DHIPI projects funded to date to use scarification as the primary means to manage winter shelter on private lands in the Upper Peninsula.

ROBINSON CREEK AND BACKUS CREEK STATE GAME AREAS

Both Robinson and Backus Creek state game areas (SGA) saw new habitat management activities in 2017. Both Roscommon County locations had their first water-level draw-downs in decades, successfully lowering water levels enough to make habitat changes.

The Robinson Creek Flooding was treated with prescribed fire to reduce the amount of brush that was encroaching the flooding.

Backus Creek SGA underwent several upland habitat changes. This site was the only new Grouse Enhanced Management Sites location for 2017. It was developed within the SGA, taking advantage of the young, thick and diverse timber that has been created through recent management. Nearly 60 percent of the upland areas are actively managed aspen. In addition, nearby lowland conifer and tag alder offer year-round cover for use by ruffed grouse and woodcock. Backus Creek and 1,830 acres of managed wetlands divide the area, offering the opportunity to view migrating and breeding water birds throughout the year. This abundance of wet edge offers additional opportunities for hunting grouse and woodcock along creeks and tag alder swamps. Other hunting and wildlife viewing opportunities also exist; hunter walking trails pass through numerous native prairies, wildlife openings of perennial clover, and annual food plots of corn and millet.

FLAT RIVER STATE GAME AREA

The Flat River SGA consists of over 11,000 acres of public land in Montcalm and Ionia counties. The area is dominated by closed-canopy second-growth oak and aspen forests. Before roads, trails, and fire suppression activities were common, much of the area consisted of wild lupine, and Karner blue butterflies (KBB) thrived. Over the years, KBB populations have diminished as openings slowly converted to more densely forested stands where little sunshine penetrated the canopy. Currently, KBB populations are limited to areas that are maintained open for unrelated reasons, including railroad and utility corridors, or areas maintained open specifically to help lupine and KBB populations.

One area that has been a stronghold for lupine and KBB has been labeled the “mega-site” due to its robust KBB population. It is a relatively small area consisting of an overhead transmission line right-of-way and adjacent forest openings maintained by prescribed fire, herbicide, and mowing. In 2017, six adjacent stands of red pine totaling 12 acres were clear-cut to provide additional openings where lupine and KBB should thrive.

WINTER RANGE FOR DEER IN THE UPPER PENINSULA

During May 2017, division staff from Newberry planted 800 red osier dogwood seedlings to improve deer winter food supplies. Deer depend heavily on woody browse for winter survival, and this shrub is an excellent food source because it can survive heavy browsing. These seedlings were strategically planted along old logging roads that serve as deer travel corridors.
RESEARCH

IMPROVING SNOWSHOE HARE HABITAT IN NORTHERN MICHIGAN

Snowshoe hare populations have declined in Michigan. In the 1970s, hunters harvested nearly 800,000 hares annually, compared to the 20,000 that are harvested today. Hares are an important prey of carnivores, like bobcats. The division partnered with researchers from Michigan State University, Sault Saint Marie Tribe of Chippewa Indians, and hare hunters to conduct research to understand the cause of hare declines. This research included interviews with hunters and biologists as well as the sampling of 134 sites in northern Michigan. The researchers investigated the presence or absence of hares, vegetation types, understory vegetation structure and historical weather data.

Over the past few decades, the range of snowshoe hares has shifted northward about 30 miles. Sites with fewer days of snow on the ground and warmer maximum summer temperatures tended to be “hareless.” The research suggests that habitat for hares can be improved through increased forest edge, increased vertical cover, and increased stem density.

The division and its partners developed hare habitat management guidelines for use in timber harvest operations to increase hare habitat. These guidelines were introduced to foresters and wildlife biologists in a workshop in September, with additional workshops planned for next year.

PLANNING

STATE GAME AREA MASTER PLANNING

2017 saw an impressive output of division master plans statewide. These plans set strategic direction for Wildlife Division-administered lands by establishing goals and objectives for wildlife species management, habitat management, and public use. They receive public review prior to finalization, and are revised and updated every 10 years. In total, 19 plans were completed, and another was in public review at the close of the fiscal year. The Southwest Region completed plans for Cannonsburg, Gourdneck, Muskrat Lake and Vestaburg state game areas, and Boyle Lake State Wildlife Area. The Southeast Region completed plans for Vassar, Shiawassee River, Adams Township, Lost Nation, Horseshoe Lake, Erie, and Port Huron state game areas, and the Holly Wildlife Unit of the Holly State Recreation Area. In the Northern Lower Peninsula Region, Petobego, Osceola-Missaukee Grasslands, Backus Creek state game areas and Beaver Island State Wildlife Research Area had plans finalized. Also in the Northern Lower Peninsula Region, Hubbard Lake State Game Area was undergoing public review at the close of the fiscal year. The Au Train State Waterfowl/Wildlife Management Area master plan was finished for the Upper Peninsula. Completed master plans can be found on the DNR website at mi.gov/wildlife.
HABITAT STATISTICS

NUMBER OF ACRES OF INTENSIVE HABITAT MANAGEMENT BY TYPE

YEAR

'17  '16  '15

33%  36%  35%

15,841 GRASSLANDS 11,604 FORESTS 15,272 WETLANDS

2016

37%  27%  36%

15,086 GRASSLANDS 9,677 FORESTS 17,760 WETLANDS

2015

35%  23%  42%

15,960 GRASSLANDS 10,548 FORESTS 13,979 WETLANDS

2017

33%  29%  38%

11,960 GRASSLANDS 10,548 FORESTS 13,979 WETLANDS

NUMBER OF ACRES OF INTENSIVE HABITAT MANAGEMENT BY REGION

2017

4,452
13,695
12,559
4,081
1,700
10,390
15,784
10,682
3,519
5,871
9,434
14,456
13,856
3,646
1,133

2016

11,086 GRASSLANDS 9,677 FORESTS 13,979 WETLANDS

2015

11,960 GRASSLANDS 10,548 FORESTS 13,979 WETLANDS

PUBLIC LANDS

SW  SE  NLP  UP

PRIVATE LANDS
LAKE LEVASSEUR FLOODING (2D)
Lake LeVasseur Flooding is a State Wildlife Management Area east of Marquette in the Upper Peninsula. It is home to many types of wetland wildlife and provides a location for hunting, trapping, and wildlife viewing. During September 2017, division staff from Marquette and a crew from Timberland Forestry Services, Inc. moved 30 tons of crushed mine rock by hand to stabilize multiple areas of erosion along the Lake LeVasseur Dam. Staff used a conveyor and buckets to move the rock, including many trips walking over a narrow bridge to the far side of the dam.

RAINY RIVER DAM (2E)
The Rainy River Dam was built in 1960. Its construction was intended to imitate a natural northern Michigan flooding in an area with a low beaver population. Over the past six decades, even with regular maintenance, the dam had deteriorated to the point where it required constant attention to keep it in working order. In 2016, the decision was made to remove the dam and allow the flooding to return to its natural state. High local beaver numbers, the dam’s degraded condition, the extremely difficult access, numerous maintenance needs, and local stakeholder support for removal made this an easy decision. In 2017, funding was secured to self-perform the work of removing the dam using partners in the DNR Parks and Recreation Division construction crew. While the Michigan Department of Environmental Quality permit application (including design plans) awaited approval, the two divisions worked together to schedule equipment and manpower. In August of 2017, the dam was removed, allowing the river to return to a natural flow. Today, the wetland is home to a multitude of wetland species, including a healthy beaver population.

INFRASTRUCTURE PROJECTS
DR. GORDON GUYER DEDICATION

On June 28, 2017, the DNR dedicated the Augusta Creek State Wildlife Area in Kalamazoo County in honor of Dr. Gordon Guyer, a tireless advocate for Michigan’s natural resources who passed away last year at the age of 89.

The area was renamed the Dr. Gordon Guyer Augusta Creek State Wildlife Area as a tribute to Guyer, who served as the director of the DNR from 1986 to 1988 and was involved in the discussions and evaluation of dedicating the Augusta Creek State Fish and Wildlife Area. Dr. Guyer was raised in Augusta and was an enthusiastic hunter, angler and conservationist.

Nearly 90 people attended the dedication, including Dr. Guyer’s wife, Mary Guyer; son and daughter-in-law Dan and Anne Guyer; daughter Dawn Todd; and great-grandson, Gregory. In honor of Dr. Guyer’s dedication, special speakers at the event included DNR Director Keith Creagh; Wildlife Division Chief Russ Mason; past MDARD and DEQ Director Dan Wyant; Natural Resources Commissioner, Chris Tracy and DNR Wildlife biologist Al Stewart.

The area was purchased with assistance from the Michigan Natural Resources Trust Fund, comprises approximately 386 acres, and is dedicated to providing wildlife habitat and opportunities for hunting and fishing.
Purchasing Public Land for Wildlife

In 2017, the division closed on five properties (745 acres) purchased for wildlife conservation and wildlife-related recreation opportunity. This included 39 acres in the northern Lower Peninsula and 706 acres in the southern Lower Peninsula, totaling more than a square mile dedicated to wildlife habitat and hunter access in perpetuity.

The division land strategy focuses attention on southern Michigan, particularly on properties near population centers. The division negotiated with an Oakland County landowner over a period of four years, working out the terms of sale. After completing the purchase this year, Michigan’s citizens have 290 acres of prime wildlife habitat in Michigan’s second-most populated county. It is now part of the Holly State Recreation Area Wildlife Unit. The parcel is mostly forested with some meadows, lowland shrub, and marsh and includes approximately half of the 9-acre Young Lake. The land is known to support abundant white-tailed deer and wild turkey, offering increased public hunting opportunity. It may also support the rare, federally listed eastern massasauga rattlesnake.

Over 700 acres were incorporated into the Wildlife Division-administered land portfolio last year.

Public Engagement

With every potential land transaction (acquisition, trade, or disposal) division staff engages local community leaders to ask for input and gauge their level of support for proposals. Depending on the complexity of the proposed transaction, staff may work via phone and e-mail or prepare presentations for local meetings. Through these interactions, local officials are made aware of the reason(s) for the transaction, planned/expected land use, partners involved, estimated Payment In Lieu of Taxes (PILT – regarding acquisitions), and any other pertinent information.

The department also solicits public input regarding land use and area management. In 2017, the Parks and Recreation Division (PRD) proposed changing the name of the Bay City State Recreation Area to Bay City State Park. Along with the change in nomenclature, an increase in the areas open to hunting was also proposed. Division staff provided input regarding Pittman-Robertson funds and assisted PRD with the second public meeting in September, which had nearly 150 locals in attendance.
WILDLIFE RECREATION

RECRUITMENT EVENTS

ROSCOMMON ARCHERY PROGRAM

With the help of division staff, the Roscommon Archery Club annually conducts a spring archery program for third-through fifth-grade students at the Roscommon Elementary School. This program teaches students about archery safety, equipment, technique, mental concentration, focus, and self-improvement. Forty-one students attended this six-week program in 2017. The students learned how to safely use compound bows and crossbows that are specifically designed for youth.

Several partners wanting to get youth involved in outdoor activities and/or hunting provided donations for archery equipment. These donors include the Michigan DNR, Safari Club International’s Mid-Michigan Chapter, the Roscommon Area Youth Booster Club, Whitetails Unlimited, the Quality Deer Management Association’s (QDMA) Northern Jack Pine Branch, Roscommon County Community Foundation, Rocky Mountain Elk Foundation, and the National Wild Turkey Federation.

After completion of the course, the Roscommon Archery Club links students up with hunter safety classes in the region if they are interested in using their new skills to start hunting.
THE TWO-DAY PROGRAM WAS DESIGNED TO PROVIDE MENTORSHIP AND EDUCATION TO WOMEN, ESPECIALLY THOSE WHO MAY HAVE NEVER HAD THE CHANCE TO LEARN ABOUT TURKEY HUNTING.

BOW TURKEY HUNT (4A)

The DNR’s Becoming an Outdoors-Woman (BOW) program offered a turkey-hunting workshop for women in the Cass City area for the first time in May 2017. Eleven women (three of whom were under 18) and nine mentors participated. The two-day program was designed to provide mentorship and education to Michigan women, especially those who may have never had the chance to learn about turkey hunting. The first day began with a classroom portion that discussed turkey biology, hunting tools/equipment, hunting techniques, hunting ethics/safety, and calls/calling. The rest of the day was open for practice shooting and mentored evening hunting. The second day consisted of a morning hunt accompanied by the mentors and a bird-cleaning demonstration in the afternoon. A prize-filled hunting tote was gifted to each participant at the end of the weekend. Two turkeys were harvested, and all women rated the overall experience as a 10 out of 10. The program was successful in providing turkey hunting opportunities to women, some of who had never hunted before!

STUDENTS LEARN ABOUT TRAPPING AND FURBEARERS (4B)

Division staff partnered with the DNR Law Enforcement Division for the third straight year to engage fifth-graders in Marquette and Alger counties on wildlife research, management, and enforcement at Michigan State University’s Experiment Station in Chatham during their “Agri-palooza” event. Approximately 400 students attended the event at the end of September. Division staff presented information on fur-bearing wildlife species, trapping, radio-collaring, sealing pelts, and regulations. The students were able to see and handle furs, fur products, and a radio collar, use track makers, and watch a wolf trap being set and sprung. The goal of this outreach was to teach students about lesser-known wildlife species, explain how trapping is an important management tool, and demonstrate how trapping equipment and regulations ensure it is humane. In previous years, live ducks were used to demonstrate duck banding and discuss waterfowl management.

APPROXIMATELY 400 STUDENTS ATTENDED THE EVENT AT THE END OF SEPTEMBER
HAP

HUNTING ACCESS PROGRAM
The DNR Hunting Access Program (HAP) celebrated its 40th year of creating hunting opportunities on private lands. Recently expanded to the northern Lower Peninsula, HAP now offers increased diversity of hunting lands and new hunting options. With support from U.S. Department of Agriculture Voluntary Public Access and Habitat Incentive Program federal grant awards, HAP provides access to more than 200 properties and 25,000 acres of quality hunting lands to Michigan hunters.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL ACRES OF HAP AVAILABLE</th>
<th>NEW ACRES OF HAP BY YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>7,400</td>
<td>7,400</td>
</tr>
<tr>
<td>2012</td>
<td>10,428</td>
<td>3,028</td>
</tr>
<tr>
<td>2013</td>
<td>17,619</td>
<td>7,191</td>
</tr>
<tr>
<td>2014</td>
<td>17,151</td>
<td>(468)</td>
</tr>
<tr>
<td>2015</td>
<td>21,071</td>
<td>3,920</td>
</tr>
<tr>
<td>2016</td>
<td>22,534</td>
<td>1,463</td>
</tr>
<tr>
<td>2017</td>
<td>25,000</td>
<td>2,466</td>
</tr>
</tbody>
</table>

2017 LICENSES

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>LICENSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEER &amp; DEER COMBO</td>
<td>968,049</td>
</tr>
<tr>
<td>SMALL GAME/ BASE</td>
<td>682,850</td>
</tr>
<tr>
<td>ANTLERLESS</td>
<td>333,536</td>
</tr>
<tr>
<td>SPRING TURKEY</td>
<td>88,758</td>
</tr>
<tr>
<td>FUR HARVESTER</td>
<td>33,257</td>
</tr>
<tr>
<td>WATERFOWL</td>
<td>55,483</td>
</tr>
<tr>
<td>FALL TURKEY</td>
<td>30,306</td>
</tr>
<tr>
<td>BEAR</td>
<td>5,758</td>
</tr>
<tr>
<td>ELK</td>
<td>199</td>
</tr>
</tbody>
</table>
UNDERSTANDING THE BARRIERS TO HUNTER RETENTION IN MICHIGAN: RESULTS OF FOCUS GROUPS AND ONLINE SURVEY RESEARCH

Focus groups and online surveying helped assess whether changes in hunting regulations could increase growth and/or retention among young adult male hunters and female hunters of any age.

Six focus groups were held with target audiences around the state. Preliminary results were used to refine an online survey for Michigan residents who had purchased deer hunting licenses in the past five years. Approximately 32,000 respondents answered questions about where and when they hunt deer, their experiences with regulations, and their suggestions for changing regulations.

The results illustrated a large majority of participants felt deer hunting regulations in Michigan do not prevent them from hunting more than they would like. In addition, most of the barriers to deer hunting are societal factors beyond the DNR’s control. Still, there were many conclusions and recommendations in the final report that were presented to the Natural Resources Commission.

This research was conducted through a partnership with Michigan State University’s Department of Fisheries and Wildlife along with DJ Case & Associates. Additional support came from a federal Pittman-Robertson Wildlife Restoration Act grant administered by the U.S. Fish and Wildlife Service.

ASSESSING THE VIABILITY OF GAME MEAT SHARING AS A STRATEGY TO INCREASE SUPPORT FOR HUNTING AND WILDLIFE CONSERVATION

Sharing and consuming wild harvest links people and natural systems worldwide. Hunters are the primary legal providers of this commodity in Michigan. The 2013-2014 hunting season yielded 27-33 million pounds of processed venison (over three pounds of venison per person in Michigan) worth $250-$600 million.

Eighty-five percent of hunters who harvested a deer in 2013-2014 shared wild-harvested venison. Most of all telephone respondents (74 percent) and non-hunters (59 percent) reported having consumed wild-harvested meat during the previous year. Thirty three wildlife species were identified as having been consumed, with wild-harvested venison consumed most frequently (96 percent). The following factors best predict non-hunter attitudes toward hunters: knowing a hunter, frequency of venison consumption, concerns about venison consumption, and childhood residence. Nearly 86 percent of the sample expressed positive attitudes toward hunters while 96 percent expressed positive attitudes toward hunting.

Despite a lack of legal markets in wild-harvested meat, venison is widely shared and distributed through society beyond the hunter population. Receiving and consuming wild-harvested meat has a positive effect on attitudes toward the relevancy of hunters in society. Sharing wild-harvested meat was reported to create positive sociocultural values categorized as social, self-sufficient, healthy lifestyle, need assistance, and reciprocity.

This research was conducted through a partnership with Michigan State University’s Department of Fisheries and Wildlife and a federal Pittman-Robertson Wildlife Restoration Act grant administered by the U.S. Fish and Wildlife Service.
MI Birds’ BIGGEST PRESENCE IS ON FACEBOOK WITH NEARLY 5000 FOLLOWERS
MICHIGAN PHEASANT RESTORATION INITIATIVE (4C)

The Michigan Pheasant Restoration Initiative (MPRI) is a 10-year project, which celebrated its seventh season in 2017. This multi-partner conservation initiative developed a document outlining goals for upcoming years. Work outlined in the The MPRI Goals for 2016-2020 is already underway.

One goal is to hire an Adopt-A-Game-Area Program Coordinator to facilitate habitat restoration on MPRI state lands. Another goal involves enhancing and restoring 5,000 acres of grassland and wetland habitat on MPRI priority state lands, 1,400 acres of wetlands through the wetland mitigation bank, 10,000 acres of Conservation Reserve Program (CRP) lands, 1,500 acres of State Acres for Wildlife Enhancement (CRP SAFE) diverse grasslands and 500 acres of CRP SAFE pollinator lands, 500 acres of HAP lands, and over 100,000 more acres on public and private lands through Pheasants Forever, U.S. Fish and Wildlife Service, Partners for Wildlife, Ducks Unlimited and other partnering programs. Yearly workshops and open houses at DNR grassland management properties will aid in public and legislative support. The document also includes a goal to apply for another Voluntary Public Access and Habitat Incentive Program federal grant for two million dollars to grow the Hunting Access Program. A final goal is to advocate MPRI Pheasant Plan priorities to continue beyond ten years.

GROUSE ENHANCED MANAGEMENT SITES (4E)

Grouse Enhanced Management Sites (GEMS) were developed to link communities with public-land hunters. GEMS also serve as prime locations for nonresidents or new-to-the-area hunters. In their fourth season, GEMS continue to see increased use, positive feedback, and new hunters! Eighteen GEMS can be found across the northern Lower and Upper Peninsulas. They range in size from a few hundred acres to several thousand acres, and are positioned on state and federal forest land, private land, and even county-owned land. Hunters can find information on site or online with an interactive mapping system. Maps are available to print, download, or even to take a photograph when standing in the parking lot.

Several new developments occurred with GEMS this year, including updated maps, a kiosk overhaul, and discounts from 35 different businesses.

MICHIGAN OPERATION FREEDOM OUTDOORS (4D)

The Union Sportsmen’s Alliance (USA) volunteers from United Auto Workers (UAW) Ford Michigan Ramp Team in Michigan built three accessible hunting/wildlife viewing blinds for the Sharonville State Game Area in Grass Lake, Michigan.

The USA’s Work Boots on the Ground program brings together union members willing to volunteer their time and expertise to tackle community-based conservation projects. This project was developed in partnership with Michigan Operation Freedom Outdoors (MiOFO) and the DNR. The project was completed using funds raised at the USA’s Greater Lansing Labor Council Conservation Dinner along with materials donated by UAW-Ford under the direction of Vice President Jimmy Settles and Bill Dirksen.

Materials for the project topped $3,000, and it took more than 45 hours of skilled labor to complete. In August three 8 foot x 8 foot box blinds with custom features, including window ledges at wheelchair height and a 4-foot door for track chair entry, were delivered and the blinds were used by guests recreating through MiOFO events on the state game area this fall. A dedication for the project took place on August 24, 2017 at the Sharonville State Game Area.

MI Birds (4F)

The division now shares an employee with Audubon Great Lakes: Michigan Bird Conservation Coordinator Caleb Putnam. Putnam oversees a communications program called MI Birds, which is focused on bridging gaps between the hunting and birding communities and increasing understanding of the value of public lands and the need for strong funding of conservation in Michigan.

MI Birds began one year ago with the formation of a steering committee consisting of 12 partner organizations: Ducks Unlimited, Ruffed Grouse Society, Pheasants Forever, National Wild Turkey Federation, The Nature Conservancy, Michigan Audubon, Detroit Audubon, Kalamazoo Nature Center, Michigan State University Extension, and the U.S. Fish and Wildlife Service. This group helps to develop the messaging communicated by MiBirds.

MI Birds’ biggest presence is on a Facebook page with nearly 5,000 followers. The page features real-time information about Michigan’s birds and their migrations in a fun and engaging way.

MI Birds is also publicizing the DNR’s in important habitat work statewide by leading tours to key state game areas and other public lands and engaging the public in a conversation with biologists about what work is being done, what species it benefits, and how conservation is
In FY 2017 the division created a new education program: Deer Camp. It is a one-day adventure designed to educate second-through fourth-graders about the importance of Michigan’s white-tailed deer. Over 600,000 deer hunters take to the field each year in Michigan, contributing over $1.9 billion dollars to Michigan’s economy and paying for most of the wildlife conservation and management work conducted by the Michigan DNR. The goal of Deer Camp is to share these important facts and traditions. Educators participating in Deer Camp receive educational materials and fun activities for all school subjects; some examples include a gym game to demonstrate the spread of a potential disease, antler art activities, math activities, and various discussion prompts to use throughout the school day. Deer Camp reached nearly 4,000 students with over 90 participating educators in FY 2017.
EDUCATION/OUTREACH

186 EDUCATION/OUTREACH PRESENTATIONS REACHED APPROXIMATELY

9000 ATTENDEES

BEAR PROGRAM
2016 - 2017 SCHOOL YEAR

43 EDUCATORS REACHED APPROXIMATELY 2,994 STUDENTS.

APPROXIMATE PERCENTAGE OF STUDENTS BY GRADE:

62 19 19%

6th 7th 8th

GO WILD FOR WILDLIFE PROGRAM
2016 - 2017 SCHOOL YEAR

465 EDUCATORS REACHED APPROXIMATELY 26,000 STUDENTS.

ELK UNIVERSITY PROGRAM
FISCAL YEAR 2017

160 EDUCATORS REACHED 10,000+ STUDENTS.

WEB AND SOCIAL MEDIA

GOVDELIVERY
GovDelivery
231 bulletins sent
5,887,242 unique email opens
569,596 unique link clicks

FACEBOOK
88 posts
43,692 likes
7,889 comments
14,132 shares
7,461,828 post impressions

TWITTER
360,700 tweet impressions
1,093 link clicks
969 likes

YOUTUBE
384,926 video views
423,969 minutes watched
40+ videos released

WEB
Top 3 Visited Hunting & Trapping Pages:
• Big Game – 649,375 views
• Hunting and Trapping – 472,217 views
• Season Calendar – 344,864 views

Top 3 Visited Wildlife & Habitat Pages:
• Snakes – 93,524 views
• Wildlife Species – 91,946 views
• Amphibians and Reptiles – 81,756 views
INVASIVE SPECIES SURVEILLANCE ON DRUMMOND ISLAND ALVAR (UPPER PENINSULA)

Division staff worked with the Three Shores Cooperative Invasive Species Management Association (CISMA) to coordinate an invasive species survey in the Maxton Plains on Drummond Island during July 2017. Alvar is a globally rare natural community characterized by thin soils over limestone bedrock, sometimes appearing like paved concrete pads, and is home to many rare species. The Maxton Plains supports one of the largest examples of alvar in the world, and much of the alvar is located on state-owned land. The survey served to gather baseline information to evaluate treatment possibilities and resource needs after an invasive plant, spotted knapweed, was found in the alvar during a forest inventory. The cooperative survey involved staff from the DNR Wildlife Division and Forest Resources Division, Three Shores CISMA, and The Nature Conservancy. A total of 17 surveyors worked in small groups over two days to conduct an initial survey. During the effort, over 600 acres of alvar were assessed. Results of the survey will be used to evaluate and identify resources needed to maintain this unique ecosystem and the rare species supported by it.

KALAMAZOO RIVER

Division staff partnered with contractors completing a poly-chlorinated biphenyl (PCB) remediation project at Allegan State Game Area, along the Kalamazoo River, within the Kalamazoo River Superfund Site. The remediation was ordered by the United States Environmental Protection Agency and includes the removal of a structure built during the winter of 2015-2016 to facilitate removal of the Otsego Township Dam (owned by the state). Staff partnered with the contractor to locate stumps and logs on state property that were used to stabilize restored riverbanks with natural materials to improve habitat quality for fish, amphibians, and other wildlife species. The stumps and logs were procured from Gourdneck and Allegan state game areas, where it was beneficial to remove trees. At Allegan SGA, an opportunistic partnership was formed between the remediation contractor and a timber operation to clear hazardous trees toppled by a tornado in August 2016. Work on this site will be ongoing in FY 2018.
UPPER PENINSULA WILD TURKEY PARTNERS

In February 2017, the division hosted the annual UP Turkey Partners meeting in Escanaba. The purpose of the meeting was to discuss turkey population status, hunting season results, hunting regulations, and habitat management efforts. The meeting was attended by 15 individuals, including representatives of turkey and wildlife organizations and division staff. This partnership meeting has been held every year since 2000 resulting in productive discussions regarding management of turkeys and future hunting regulations.

CHRONIC WASTING DISEASE PUBLIC MEETINGS

The division helped coordinate and lead four informational meetings to discuss the presence of chronic wasting disease (CWD) in Mecosta and Montcalm counties. One meeting was held for captive deer farmers at the Big Rapids Holiday Inn on February 1, 2017 in response to two captive deer found positive with CWD. The second meeting was held at the Morley Middle School on February 22, 2017. A third informational meeting was held at Lakeview High School on April 27, 2017 in conjunction with the Montcalm County Conservation District. A fourth meeting regarding CWD in wild deer was held in Montcalm Township in Montcalm County on October 25, 2017.

The meetings represented significant coordination between DNR Wildlife and Law Enforcement divisions, Michigan Department of Agriculture & Rural Development (MDARD), Conservation Districts, U.S. Department of Agriculture Wildlife Services, and many other local shareholders and sporting groups who have an interest in deer and deer hunting. The meetings consisted of presentations from deer specialists and veterinarians from DNR and MDARD, and all meetings provided an opportunity for public input. They were well-attended, with a combined total of well over 1,000 people present. 2017 was the first year that CWD was identified in wild deer in Montcalm and Kent counties.

SPRING AND FALL TREE PLANTING WITH GRAND TRAVERSE ACADEMY (NLP)

In the spring of 2017, 16 fifth and sixth-graders from the Grand Traverse Academy planted a total of 91 trees at the Little Betsie Grouse Enhanced Management Site. This was part of the On-the-Ground (OTG) Junior program, which is coordinated through the Michigan United Conservation Clubs and supported through the division Wildlife Habitat Grant Program. The day involved three hours of habitat work in the morning, lunch on site, and an activity for the students in the afternoon before heading back to school. The group planted 30 balsam fir, 42 white spruce, 10 staghorn sumac, 6 black cherry and 3 white oak to provide both thermal cover and browse for whitetail deer, black bear, turkey, and grouse.

The kids had a blast planting trees and learning about the wildlife and ecology of the area. The students learned which wildlife species would benefit from their hard work and installed protective structures around the newlyplanted young oaks. The second half of the day involved an archery lesson; many of the students had never shot before and walked away with proud smiles and dirty hands.

More than 60 students from the Grand Traverse Academy planted crabapple trees in the Traverse City State Forest, near Copemish, on October 23, 2017. This was another OTG Jr. event and included third-through sixth-grade students. Including chaperones, the group totaled 82 people who planted 50 crabapple trees along the edges of an opening. For many of the students, this was their first tree-planting experience. The students worked in groups of four to dig the large holes, plant the trees, place mulch around the base of the trees, and put fencing structures around some of the trees to protect them from being browsed too soon. Although it was too rainy for archery at this event, the students learned about the wildlife that lives in the area.
BUSINESS PRACTICES

BUSINESS TOOLS

WildMobile

Facing a shortage of functioning hardware for the aging WildMobile wildlife registration system, the division worked with the Department of Technology, Management and Budget (DTMB) to develop a new system that debuted with the 2017 bear season. The WildMobile 2.0 system combines a mobile application, a database, and a website to allow division staff to record, transmit, store, manage, and analyze data collected from harvested deer, bear, fisher, marten, otter, and bobcat. The new system provides the division with greater flexibility and efficiency than the old system. WildMobile 2.0 can be installed on any standard smartphone, reducing the division’s reliance on expensive and specialized hardware. The website gives the division’s WildMobile system administrators full control over the system, eliminating the reliance on DTMB for annual updates and system management. The website also includes a new lab data module, improving the efficiency of data management. The new tools gives the division the ability to collect more new data, so it can respond to short-term or intermittent information needs. Staff has declared the new system a success!
POWER BUSINESS INTELLIGENCE (POWER BI)

Microsoft Power BI is a tool that allows the user to visually interact with data. The division used this application to create a new online tool for hunters visiting one of the DNR managed waterfowl hunt areas. In previous years, a spreadsheet was available online for each location, showing the waterfowl counts by week for that specific area. This year, a new interactive dashboard allowed hunters to see count comparisons by species across individual areas, multiple areas, or all areas collectively. The dashboard also provided hunters with a visual representation of species and their abundance by location that adjusted based on selections made by the hunter.

HARVEST AND EFFORT REPORTING

Division staff collected important wildlife information through a new tool called Feedback Server. Staff created online data collection forms, which were used to conduct five online harvest surveys (fisher/marten, deer, spring and fall turkey, and bear). Feedback Server also was used to distribute wildlife salvage permits that were needed to possess roadkill wildlife, and to register all wild game meat processors.
AN EVALUATION OF MOVING TO A LEARNING ORGANIZATION IN THE WILDLIFE DIVISION: MEASURING COLLABORATION, TRUST, PERFORMANCE AND EFFECTIVENESS OF DECISIONS

A research project was conducted through a partnership with Michigan State University’s (MSU) Department of Psychology – Organizational Psychology and Department of Fisheries and Wildlife. The project measured trust, performance, and effectiveness of decisions of the Wildlife Division and found that procedural fairness matters the most to stakeholders in regards to developing trust. The division’s ability to provide opportunities for stakeholder involvement in management decisions is far more important to stakeholders’ trust in our agency than its technical competence. Behaviors within the division and the individuals within it that treat stakeholders fairly and with benevolence are most likely to build trust between stakeholders and the division.

Another research project with MSU assessed employee attitudes, perceptions and responses to changes in the division with respect to the strategic planning process initiated in 2011. Changes in perceptions of management support from the first and second surveys predicted the high level of personal commitment to implementing our strategic plan, which was reported in the third survey. These results will be used to strengthen adaptive management and strategic planning processes.
Most of the Wildlife Division’s funds come from a user-pay system—hunting and trapping license fees. In addition, the Wildlife Division seeks additional funding through competitive grants. These grants come with additional monitoring and reporting requirements. See a complete list of the division’s funding sources in Appendix A.

## FINANCIALS

### STATEWIDE

<table>
<thead>
<tr>
<th>Source</th>
<th>Appropriations</th>
<th>Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>$896,800</td>
<td>$24,452</td>
</tr>
<tr>
<td>Nongame</td>
<td>$429,000</td>
<td>$12,483,505</td>
</tr>
<tr>
<td>Game &amp; Fish</td>
<td>$13,370,000</td>
<td>$20,137,383</td>
</tr>
<tr>
<td>General Fund</td>
<td>$7,163,100</td>
<td>$5,073,452</td>
</tr>
<tr>
<td>Federal</td>
<td>$25,034,600</td>
<td>$25,034,600</td>
</tr>
<tr>
<td>Other State Funds</td>
<td>$594,400</td>
<td>$580,555</td>
</tr>
<tr>
<td>DEER RANGE IMPROVEMENT PROGRAM</td>
<td>$1,910,100</td>
<td>$1,999,500</td>
</tr>
<tr>
<td>REVENUE FROM PITTMAN-ROBERTSON LANDS</td>
<td>$0</td>
<td>$71,680</td>
</tr>
</tbody>
</table>

**Total Appropriations:** $49,398,200

**Total Expenditures:** $41,420,485

**Excess Appropriations:** $7,977,715

### WHAT THE WILDLIFE DIVISION DOES FOR GOAL 1:

- Improve planning by linking statewide and regional priorities
- Collaborate with other divisions to incorporate wildlife species plans into their priorities
- Monitor condition of wildlife through surveys and surveillance
- Assess stakeholder and citizen opinions
- Manage research and monitoring information
- Implement strategies to prevent and control disease
- Protect free-ranging wildlife by regulation of captive wildlife facilities
- Raise awareness about current wildlife health issues
- Recommend science-based hunting and trapping regulations to the Natural Resource Commission
- Fulfill regulatory responsibilities for migratory birds and for endangered wildlife
- Distribute high demand hunting opportunities
- Collaborate with public and private entities to resolve human-wildlife conflict
- Develop nuisance and invasive wildlife policies
### WHAT THE WILDLIFE DIVISION DOES FOR GOAL 2:

- Use a featured species approach to communicate habitat priorities at appropriate scales
- Describe desired future habitat conditions and management direction for DNR managed lands
- Work with partners on habitat planning
- Incorporate risk of positive or negative climate change impacts on habitat plans
- Implement statewide habitat priorities
- Address invasive species management needs
- Provide technical assistance and resources on private lands
- Prioritize information needs to focus research and marketing
- Identify and address emerging issues
- Maintain infrastructure supporting habitat projects
- Develop and revise procedures and policies guiding allowable infrastructure uses

### WHAT THE WILDLIFE DIVISION DOES FOR GOAL 3:

- Monitor legislation, regulation, and procedures that may impact department owned lands
- Implement policies and procedures to address allowable land uses, and species and habitat objectives
- Resolve land matters to protect land for their intended purposes
- Develop and implement a process to monitor wildlife project boundaries
- Implement and update Wildlife Division land acquisition strategy
- Disposal of land that does not meet future goals of the Department of Wildlife Division
- Obtain funds for strategic land acquisition
- Engage civil leaders for target partnerships
- Provide tools and information to land managers that are user friendly
- Develop and maintain a land using web presence

### WHAT THE WILDLIFE DIVISION DOES FOR GOAL 4:

- Enhance Hunter Access Program to increase enrollment to at least 24,000
- Work with partners to improve access to lands not managed by the Wildlife Division
- Develop a public access plan to improve wildlife based-recreational activities
- Engage citizens in the collection of scientific information as a recreational pursuit
- Enhance engagement in year-round wildlife based recreational activities
- Support research to identify ways to increase hunter and trapper retention and recruitment
- Remove obstacles to increase precipitation and purchasing licenses
- Explore incentives to encourage repeated license buying
- Support efforts to diversify the hunting and trapping community
- Increase the non-consumptive wildlife community
- Work with conservation partners to promote wildlife-based recreation
Implement Wildlife Division’s internal communication plan

- Increase personal methods of communication between staff
- Define and communicate roles and responsibilities between staff
- Provide annual opportunities for all Wildlife Division staff to meet in person
- Annually streamline and improve administrative processes
- Seek highly qualified applicants and hire through an open and competitive process
- Explore opportunities to attract a diverse workforce
- Implement professional development plans for each employee
- Set clear expectations of roles and responsibility
- Develop annual operational budget
- Identify and secure resources to fund priorities
- Better communicate opportunities for public engagement and prioritize public engagement needs
- Provide partnership opportunities
- Work with civil leaders to identify collaborations and partnerships
- Provide financial and technical resources to partners
- Develop shared visions of emerging issues and conservation opportunities
- Provide a work environment that fosters innovation and learning
- Incorporate after-action review for major projects
- Develop a system to monitor and respond to emerging issues and long-term trends
- Continually improve the work planning process
- Expand and improve the use of metrics as an assessment tool
- Annually report on accomplishments to staff and public

WHAT THE WILDLIFE DIVISION DOES FOR GOAL 5:
- Provide staff with public communication training and tools
- Continually update, prioritize, and evaluate wildlife communication strategies, crisis communication plans, and outreach and education needs
- Provide information and user-friendly materials to the public
- Use the latest social science to develop effective media and marketing materials
- Work with marketing team and Michigan Wildlife Council to increase public acceptance of hunting and trapping
- Better communicate opportunities for public engagement and prioritize public engagement needs
- Provide partnership opportunities
- Work with civil leaders to identify collaborations and partnerships
- Provide financial and technical resources to partners
- Develop shared visions of emerging issues and conservation opportunities

WHAT THE WILDLIFE DIVISION DOES FOR GOAL 6:
- Implement Wildlife Division’s internal communication plan
- Increase personal methods of communication between staff
- Define and communicate roles and responsibilities between staff
- Provide annual opportunities for all Wildlife Division staff to meet in person
- Annually streamline and improve administrative processes
- Seek highly qualified applicants and hire through an open and competitive process
- Explore opportunities to attract a diverse workforce
- Implement professional development plans for each employee
- Set clear expectations of roles and responsibility
- Develop annual operational budget
- Identify and secure resources to fund priorities
- Provide a work environment that fosters innovation and learning
- Incorporate after-action review for major projects
- Develop a system to monitor and respond to emerging issues and long-term trends
- Continually improve the work planning process
- Expand and improve the use of metrics as an assessment tool
- Annually report on accomplishments to staff and public

WHAT THE WILDLIFE DIVISION DOES FOR GOAL 7:
Appendix A: Wildlife Division Funding Sources

Federal Apportioned Funds
These funds are automatically apportioned to states, provided they meet certain eligibility requirements. Although transferred to the states in the form of grants, the states do not have to compete for these funds. These funds are particularly important because states count on the monies being available for funding staff and long-term projects.

Pittman-Robertson Wildlife Restoration Act Grants (PR)
State Wildlife Grants (SWG)
Cooperative Endangered Species Conservation Fund, Traditional Conservation Grants

Federal Competitive Funds
These are funds that certain federal agencies make available through a competitive application process. The types of funds and the funding programs available can vary from year to year. These opportunities pose planning and budgeting challenges because of the uncertainty in the Wildlife Division’s abilities to secure them; however, some have become very important to the division’s ability to accomplish certain aspects of its mission. Once successful in competing for these funds, most are available to be expended over multiple years so long-term projects can be supported. These funds, however, are difficult to use to assist in planning and supporting permanent staff positions and also add additional administrative and reporting responsibilities.

Competitive State Wildlife Grants (cSWG)
Cooperative Endangered Species Conservation Fund, Nontraditional Grants
National Coastal Wetlands Conservation (NCWC) Grants
Great Lakes Fish and Wildlife Restoration Act Grant (GLFWRA)
Great Lakes Restoration Initiative (GLRI)
U.S. Department of Agriculture (USDA) – Avian Influenza (AI)
USDA Natural Resources Conservation Service – Voluntary Public Access and Habitat Incentive Program (VPA-HIP)

State Funds
Game and Fish Protection Fund
This legislatively established fund is principally derived from the sale of hunting and fishing licenses; the cost of licenses is set legislatively.

Game and Fish Protection Fund – Deer (DRIP)
This legislatively established fund comes from $1.50 of each deer license sold.

Game and Fish Protection Fund – Turkey
This legislatively established fund comes from a portion of each wild turkey license and application sold ($9.50 resident, $1 senior resident and $3 application).

Game and Fish Protection Fund – Waterfowl
Historically known as duck stamp revenue, this legislatively established fund comes from the $12 for each waterfowl license sold.

Nongame Fish and Wildlife Fund/Non-game Fish and Wildlife Trust Fund
This legislatively established fund comes through Michigan’s Conserve Wildlife Habitat license plate, the sale of certain merchandise by the Wildlife Division, and donations.

General Fund-General Purpose (GF/GP)
General Fund-General Purpose revenues, collected in the main state operating fund, are not dedicated to a specific purpose by statute. The Wildlife Division’s GF/GP is used primarily for wildlife disease monitoring and privately-owned cervidae oversight.
DNR Mission
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.

Wildlife Division Mission
To enhance, restore, and conserve the state’s wildlife resources, natural communities, and ecosystems for the benefit of Michigan’s citizens, visitors, and future generations.