

*Wildlife Division*  
*Annual Report*

*Fiscal Year 2011*

*Oct. 1, 2010 - Sept. 30, 2011*



Michigan Department of Natural Resources  
[www.michigan.gov/dnr](http://www.michigan.gov/dnr)

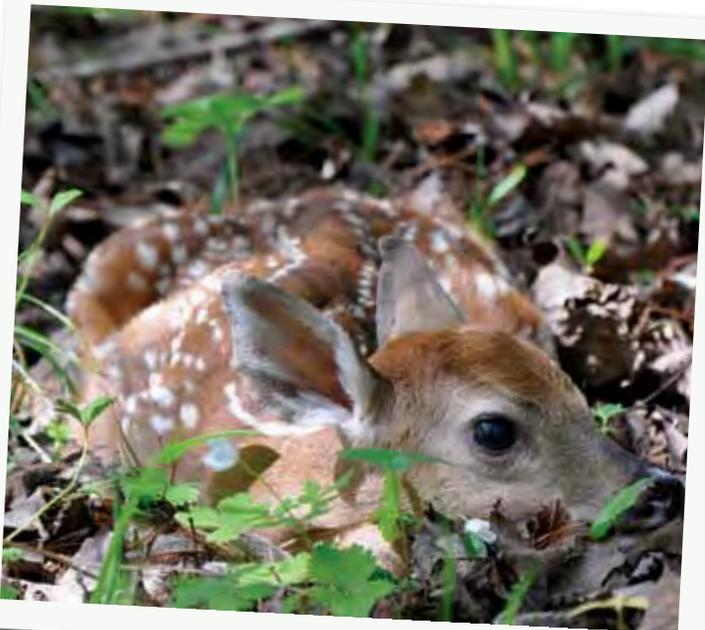


# *Wildlife Division Mission*

*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.*

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March 2012

Dear Michigan citizens,

From graceful white-tailed deer to the majestic bald eagle, Michigan boasts some of the most varied and fascinating wildlife in the nation. We at the Department of Natural Resources have the responsibility to manage on your behalf these animals and the fields and forests they inhabit. We consider that responsibility a solemn trust.

This past year brought new challenge and change to the Wildlife Division. Revenue declined, affecting available resources and staff, but the dedicated, passionate and hard-working professionals in the Wildlife Division are meeting this challenge head-on. With the implementation of a new strategic plan, the reorganization of staff, and a commitment to adapting the way it does business to ensure success, the division has its sights set on turning adversity into innovation.

Banding together with partners of all kinds – from large conservation organizations to hunters – the Wildlife Division continues, despite these lean times, to work tirelessly to manage Michigan’s wildlife and habitat resources for all our state’s citizens to enjoy.

This annual report offers just a glimpse at the broad scope of the Wildlife Division’s work and accomplishments in the past year. I hope it provides some insight into the resources available for wildlife management, how the DNR uses those resources, and how animals and their habitats benefit from this important work. As we move forward in coalition, I ask that you share your thoughts with us. We are listening.

Sincerely,



Rodney Stokes  
Director, Department of  
Natural Resources

March 2012

Dear Michigan citizens,

All in all, the Wildlife Division has had a remarkable year. Among other developments, the Pheasant Restoration Initiative is off and running; pheasant cooperatives are being established and there have been significant changes to benefit pheasant habitat at Maple River, Verona and Lake Hudson. A coalition including Wildlife Division has kicked off Michigan’s Waterfowl Legacy for 2012 to focus attention and resources on Michigan’s waterfowl heritage, habitats and managed waterfowl areas. Deer Advisory Teams are meeting in the Upper Peninsula, northern Lower Peninsula, and southern Lower Peninsula. Staff is spending significant time developing community-based conservation initiatives on Drummond Island and Beaver Island. The division, in partnership with the DNR’s Forest Resources and Fisheries divisions, is close to completing a point-and-click map of Michigan so that the public can explore all of the projects and habitat work ongoing in Michigan on a county-by-county basis. Finally, the authority to manage wolves has been returned to the state of Michigan from the U.S. Fish and Wildlife Service.

Together, the DNR and the conservation community have done much to conserve Michigan’s wildlife resources. But we can – and need – to do more. Every Michigan resident should understand how wildlife, habitat, fisheries and law enforcement work is funded. Taxes have nothing to do with it: less than 5 percent of the DNR budget comes from the state General Fund. Hunting and fishing license dollars and federal excise taxes on hunting and fishing equipment are what pay the bills. A \$15 deer license becomes a \$60 investment in wildlife and habitat when added to the federal match. This is a 300-percent guaranteed return on investment, and it’s how we continue to manage what makes Michigan special.

The Wildlife Division continues to pledge our commitment to natural resources; I hope you will join us. “I give my pledge as an American to save and faithfully defend from waste the natural resources of my country: its air, soil and minerals; its forests, waters, and wildlife.” Join us and add your voice to the conservation of Michigan’s natural resources.

Yours in conservation,



Russ Mason, Ph.D.  
Chief, Wildlife Division

# Welcome

As the public trust managers for Michigan's wildlife, the Wildlife Division is responsible for ensuring that wildlife populations are sustained into the future. This report is a snapshot of the Wildlife Division activities and accomplishments during Fiscal Year 2011. Though no publication can fully convey the Wildlife Division's diverse work over the course of a year, this report highlights the division's accomplishments, challenges and expenditures throughout the 2011 fiscal year (Oct. 1, 2010, through Sept. 30, 2011). Detailed information outlining the division's work that was planned compared to what was accomplished can be found in Appendix B. We are excited to share our story with you. We hope you find this information enlightening and useful.

The Wildlife Division would be unable to do much of its work – and, with the change in its work priorities, could not fulfill its mission – without the help of numerous partners. The division is very thankful for the dedication of these partners, which are listed starting on page 35.

## Division Structure Changes

As part of the Wildlife Division strategic plan, which was approved in November 2010, the division restructured staff to better align with its priorities. In 2011, the Wildlife Division organized its field structure into four regions – Upper Peninsula (U.P.), northern Lower Peninsula (L.P.), southeastern L.P. and southwestern L.P. A field operations supervisor oversees all the regions, and a regional supervisor leads each region. Regional staff also includes regional managers, administrative staff, wildlife habitat biologists, wildlife technicians, wildlife assistants and land surveyors, as well as limited-term, non-career and short-term workers.

In the central Wildlife Division office, the staff is organized into the following sections and units: the Research and Management Section; the Planning and Adaptation Section; the Wildlife Health Section (located at Michigan State University); the Wildlife Program Support Section; the Policy and Regulations Unit; and the Public Outreach and Engagement Unit. The staff within these sections and units includes section and unit supervisors, wildlife and research specialists, veterinarians, laboratory technicians, wildlife outreach technicians, program and research analysts, administrative specialists, technicians, coordinators and support staff. A number of these individuals are housed in field locations across the state.

## Natural Resources Commission

The Michigan Natural Resources Commission (NRC) is a seven-member public body whose members are appointed by the governor and subject to the advice and consent of the Senate. The NRC conducts monthly public meetings throughout Michigan, and residents are encouraged to actively engage in these public forums.

In 1996, adoption of Proposal G by Michigan citizens provided exclusive authority to the NRC in regulating the method and manner of take of Michigan game species. As such, it is the decision-making body with regard to these matters. Most months, the Wildlife Division provides recommendations to the NRC related to harvest quotas, species management unit boundaries and season dates along with any other necessary changes within the Wildlife Conservation Order. Orders can be located online at [www.michigan.gov/dnr/laws](http://www.michigan.gov/dnr/laws).

## Managing Habitat for Michigan's Wildlife

**In FY 2011, the Wildlife Division invested 57,634 hours on public-land habitat management and 9,371 hours on private-land habitat management.**



## Public-Land Management

Habitat management is the foundation of wildlife management in Michigan. The Wildlife Division is exclusively responsible for managing state game and wildlife management areas and facilities, which includes 111 state game and wildlife areas, located mainly in the southern half of the Lower Peninsula, on over 400,000 acres. The Wildlife Division is also jointly responsible, with the DNR Forest Resources Division, for planning and managing 3.9 million acres of state forest.

Habitat management activities focus on enhancing or sustaining populations of featured species (see featured species information on pg. 27). In general, habitat management is directed towards providing for the needs of featured species. Specific practices such as providing food, water and nesting sites are implemented to address limiting factors in a given area. Habitat management activities usually occur within forests, wetlands, grasslands or savannas.

Most management of forest openings and savannas is aimed at setting back succession, minimizing encroachment by woody vegetation, controlling growth of undesired plants, and planting grasses and forbs to achieve a desired plant-species composition. The Wildlife Division enhances or manages savannas through practices such as mechanical vegetation control (mowing, bulldozing, etc.), prescribed burning, and chemical treatment for invasive species and timber removal.

Activities to establish and/or maintain wildlife food plots or cover include planting and spraying, plus developing and implementing contracts for sharecrop planting. Food plot establishment occurs primarily on the southern Michigan game areas, but also takes place in state forests and may be conducted or funded by the Wildlife Division on certain private lands as the division expands its private-lands program. Some food plot plantings are provided by partner organizations.

To meet specific forest health and wildlife management objectives on state game and wildlife management areas, the division also conducts forest management activities. Those activities involve prescribed burning, planting trees and/or shrubs, or initiating timber harvest within specific parameters intended to achieve defined habitat objectives. Other aspects of forest management include marking a forest stand for treatment and preparing timber-sale specifications and contracts for completing the treatment. On state forests, the Forest Resources Division conducts land and timber management activities according to plans that are jointly created with the Wildlife Division.

The Wildlife Division has a strong wetlands/waterfowl habitat management program. Many state game and state wildlife areas contain complex wetlands systems managed by an array of dikes, ditches, dams, pumps and water-control structures. The division also manages numerous wildlife floodings throughout the state. To achieve or maintain desired conditions of existing wetlands, division staff members conduct planting, chemical and mechanical vegetation control, water-level manipulation and maintenance of water-control structures used to alter water levels.

The information below highlights the different habitat-management activities that occurred in FY 2011 and the hours of personnel time the division invested in these activities.

Habitat Activity	Accomplishments (Acres)	Planned (Acres)	Hours invested
Brush management	121	279	1,033
Herbaceous planting	15,604	15,629	11,850
Forest management	81,149	100,148	10,165
Openings maintenance	13,877	13,556	14,780
Creating wildlife openings	20	16	130
Wetland maintenance	38,330	28,964	4,022
Wetland creation	1	1	122
Prescribed burning	4,113	2,934	4,269
Habitat evaluation	10,533	4,828	599
Native grassland management	580	757	1,390

## Private-Land Management

Seventy-nine percent of Michigan's land is privately owned. Important vegetation types such as cropland, emergent wetlands and oak forest are found mainly on private lands. These cover types are valued for their importance in providing habitat for many wildlife species such as deer, turkey, waterfowl and pheasants. Additionally, more than three-quarters of the occurrences of threatened and endangered species in Michigan are located on private land. Though hunter access to private lands is often very limited, especially in the southern Lower Peninsula, 83 percent of Michigan hunters hunt on private lands.

The Landowner Incentive Program (LIP) was established to create partnerships between the DNR and private landowners, to identify common habitat-management goals for species in greatest conservation need, and to provide financial and technical assistance to help landowners achieve those goals. Private landowners may apply to this cost-sharing program with specific projects to manage targeted wildlife habitats.

Private-lands wildlife management activities fall under two major categories that assist landowners: technical and financial assistance. Technical assistance includes providing landowners with resource-management aids such as written information, specification sheets or a habitat management plan. Financial assistance involves providing funding for the implementation of habitat projects so landowners can plant desired vegetation, spray herbicides or contract habitat management services from private companies.

Michigan's Hunting Access Program (HAP) was created in 1977 to increase public hunting opportunities in southern Michigan, where 97 percent of the land base is privately owned. Utilizing funds from a USDA grant, the Wildlife Division is working to expand HAP enrollment from 47 farms and 7,500 acres in 2010 to 100 farms and 15,000 acres by 2013. The division has partnered with 20 local conservation districts to handle local HAP promotion, enroll new farms and provide landowner support. In 2011, 28 new farms, totaling more than 3,000 acres, were added to HAP.

The table below outlines the positive impact of the Landowner Incentive Program on Michigan's private land wildlife habitat.

Habitat Activity	Technical Assistance			Financial Assistance		
	Number of landowners	Accomplishments (acres)	Planned (acres)	Number of landowners	Accomplishments (acres)	Planned (acres)
Mesic conifer forests	56	15,066	600	11	639	400
Grassland bird habitat	4	750	500	8	458	200
Prairies, fens and savannas	47	3,873	1,300	25	986	500
Woodcock habitat	15	358	700	20	173	300
Turkey habitat	16	1,565	200	N/A	N/A	N/A
Deer habitat	62	1,558	300	3	40	100
<b>Total</b>	<b>200</b>	<b>23,170</b>	<b>3,600</b>	<b>67</b>	<b>2,296</b>	<b>1,500</b>

## Private-Land Partnership Programs

**Pheasant Restoration Initiative** – Joining with Pheasants Forever, MUCC, state and federal departments of agriculture and the U.S. Fish and Wildlife Service, the Wildlife Division is working to revitalize Michigan’s pheasant-hunting heritage. The Pheasant Restoration Initiative is targeting public and private lands within focus areas where existing habitat can be improved, and habitat deficiencies can be corrected. Three, three-county pilot areas were identified: Huron, Sanilac and Tuscola counties; Hillsdale, Lenawee and Monroe counties; and Gratiot, Saginaw and Clinton counties. In Lenawee County, the initiative’s first pheasant cooperative has been formed, surrounding Lake Hudson Recreation Area, where the Parks and Recreation Division developed a plan to create over 500 acres of quality grasslands that will provide a nucleus around which private landowners can manage for pheasant habitat. Other pheasant cooperative areas related to public lands include Maple River State Game Area in Gratiot County, where over 100 acres of habitat were planted last year, with more to come, and a project in Bay County at Fish Point Wildlife Area, which has just been initiated. Additional work is also occurring on private lands in these priority areas. To follow the latest developments, visit [www.michigan.gov/pheasant](http://www.michigan.gov/pheasant).



**Woodcock and Young Forest Initiative** – Michigan joined Wisconsin, Minnesota, the U.S. Fish and Wildlife Service, the Wildlife Management Institute, and other agencies and organizations in the Upper Great Lakes Woodcock and Young Forest Initiative, which is part of the North American Woodcock Conservation Plan. The plan identifies woodcock as a species of greatest conservation need, aims to reverse woodcock population declines, and establishes goals for the development and restoration of early succession forest habitat to invigorate woodcock populations continent-wide. Last year on state forest lands in Michigan, over 11,000 acres were planned and 10,000 acres implemented to restore for early succession habitat beneficial to woodcock. On private lands, technical assistance was provided to 15 landowners covering 700 acres, and financial incentives were provided for 20 projects creating 170 acres of habitat.

# Highlighting Regional Accomplishments

## Upper Peninsula

The Upper Peninsula (U.P.) region workforce was composed of 15 field staff members, with vacancies occurring in biologist positions in Baraga, Crystal Falls and Escanaba. The region experienced a major organizational realignment that merged the eastern U.P. management unit with the western U.P. management unit to form the U.P. region, which was to improve lines of communication as well as the ability for staff to assist each other on projects. A private-lands biologist position was added for the western portion of the peninsula.

The Deer Habitat Improvement Partnership Initiative is a cooperative grant program available in the U.P., designed to foster cooperative projects between the DNR and non-governmental organizations that will enhance deer habitat on private lands while educating the public about the importance and scientific principles of the work. In 2011 the Wildlife Division awarded \$31,152.24 in grant monies to eligible applicants, of which \$26,500 was actually expended.

Habitat improvements in the U.P. included various plantings, opening creation and maintenance, prescribed burns and construction projects. Over 186,000 tree seedlings were planted as food, seed and cover sources to benefit a variety of wildlife including deer, snowshoe hare, and various other game and non-game species. An additional 1,000 red oak saplings were planted to provide an eventual food source for bear, deer, squirrel and other species as American beech trees are lost to beech bark disease. Three hundred and fifty soft mast-producing trees were also planted as a long-term food source for wild turkey and other wildlife.

Projects to create openings included over 150 acres in cooperation with private landowners, as well as openings made as a result of invasive species control through removal of Scotch pine on state land. Additionally, more than 900 acres of prescribed burns and another 950 acres of grassland creation added to openings in the U.P. In cooperation with the DNR Forest Resources Division, construction of a new parking lot in the eastern U.P. will provide access to state lands for recreationists. A dam repair and stabilization occurred on a 50-acre flooding in the same region.

In summation, the U.P. saw improvements for wildlife on 5,555 acres of state land and 1,205 acres of private land.

Upper Peninsula division staff also spent time working in cooperation with the Forest Resources Division to develop Regional State Forest Management Plans for both the eastern and western U.P. as well as to review and make wildlife-based recommendations on approximately 200,000 acres of state land. With the vast amount of state-owned acreage in the U.P., this required a substantial amount of the U.P. region's staff time.



## Other U.P. Activities

*Formed seven sportsmen's coalitions across the region for the purpose of increasing communications and developing partnerships with the sporting community.*

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*Developed a partnership with Plum Creek Timber Company to enhance deer winter habitat management on Commercial Forest lands in Baraga County.*

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*Conducted population surveys for sharp-tailed grouse, ruffed grouse and woodcock. Also conducted, analyzed and reported the annual Deer Camp Survey across the region.*

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*Banded 255 geese and 258 ducks as part of the national waterfowl banding effort that provides data on harvest rates for waterfowl species and informs decisions about season lengths and bag limits.*

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*Conducted a small deer-tagging operation to study deer winter movements from Delta County wintering complexes. In partnership with U.P. Whitetails, three of the 23 tagged deer also were collared with GPS technology for much more specific data collection.*

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*Cost-shared fencing materials for seven farms and delivered 25 donkeys to 14 farms as part of Michigan's Wolf Livestock Demonstration Project Grant Program.*

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*Examined 2,837 deer at 12 check stations across the U.P. The Escanaba field office was the busiest station (748 deer examined).*

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*Assisted in the coordination, planning and creation of the Drummond Island Comprehensive Resource Plan. With assistance from many stakeholders on the island and important partners, division staff members are working to create a five-year plan that provides resource guidance related to public lands management on the island. The plan should be completed in FY 2013.*



## Northern Lower Peninsula

The 2011 work season was very productive for the northern Lower Peninsula (NLP). The NLP region work force had 19 full-time field staff in 2011, compared to 24 available staff in 2010.

Staff at the seven NLP DNR offices completed 6,843 acres of habitat treatments, including habitat cuts, shrub and tree plantings, prescribed burns, herbaceous food and cover plantings, and mowing. An additional 1,460 acres of herbaceous food and cover plantings were completed in the NLP; both NLP staff and hired contractors performed the work.

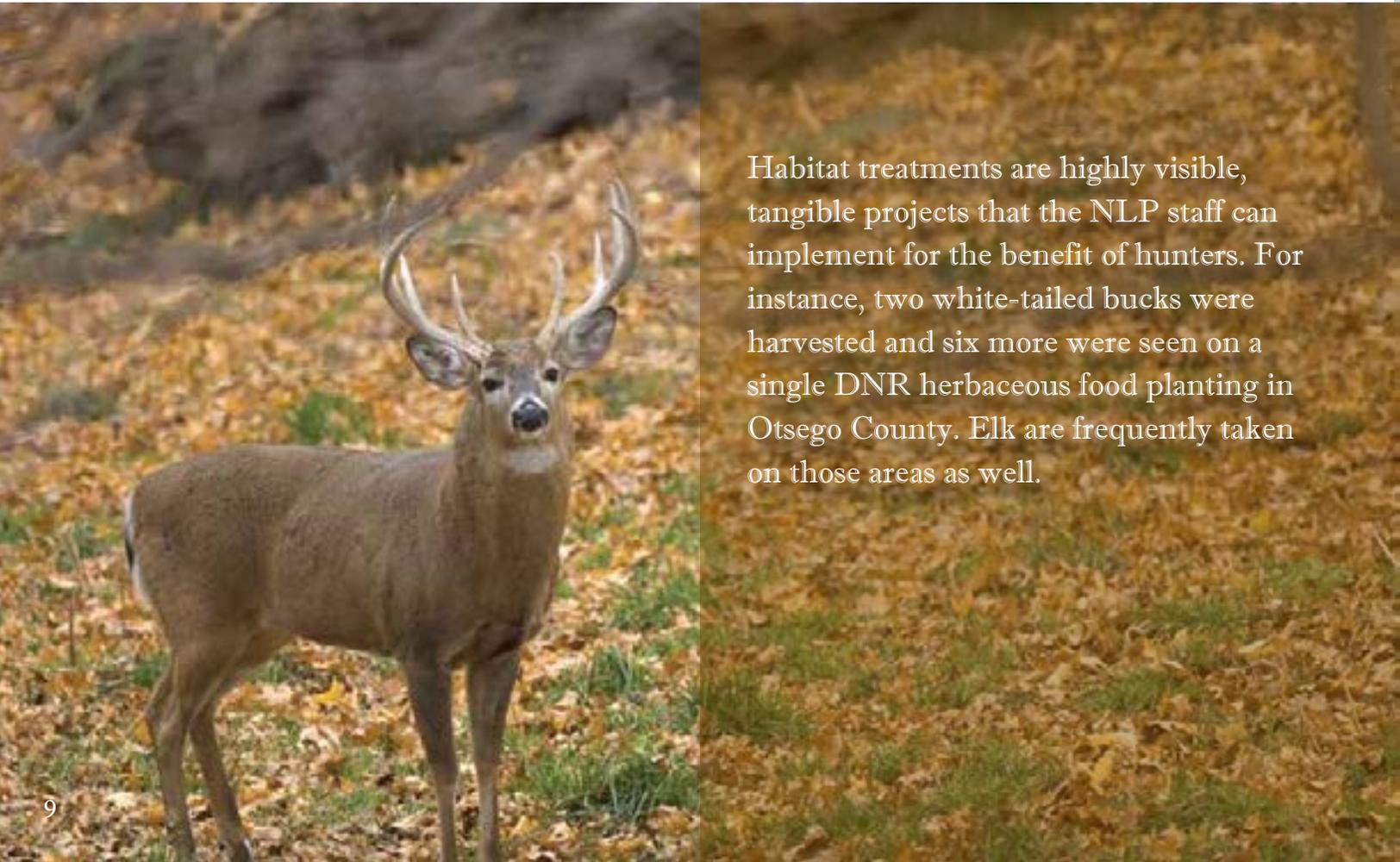
The NLP staff, along with partners from the U.S. Forest Service, National Wild Turkey Federation and Michigan Wild Turkey Hunters Association, and private land cooperators, planted 81 food plots to increase winter survival for turkeys and to provide brood-rearing cover for poults.

Hydro-ax mowing was used to clear brush, which provides critical open areas for numerous wildlife species, especially elk and woodcock in the Gaylord area and deer in the Mio area.

Prescribed burns were conducted with both Wildlife and Forest Resources Division staff. A total of 2,334 acres were burned to set back succession for numerous featured species. These large openings were typically expanded by burning between 200 and 300 acres a day.

Both the Rocky Mountain Elk Foundation and the Ruffed Grouse Society partnered with the NLP staff to fund projects (\$10,000).

Biologists and technicians spent a considerable amount of time reviewing and making recommendations with field foresters to ensure wildlife values were fully considered when making other land-management decisions. These treatments were primarily implemented to benefit a wide variety of wildlife species, including those on the Wildlife Division's featured species list.



Habitat treatments are highly visible, tangible projects that the NLP staff can implement for the benefit of hunters. For instance, two white-tailed bucks were harvested and six more were seen on a single DNR herbaceous food planting in Otsego County. Elk are frequently taken on those areas as well.

## Other NLP Activities

*Completed the draft version of the Elk Management Plan. The plan is expected to be approved in FY 2012. The last Elk Management Plan was written in 1984.*

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*Initiated a comprehensive planning effort on Beaver Island involving a collaborative group of highly motivated and interested citizens who care deeply for sustainable natural resources management on the island.*

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*In April 2011, the old culvert on the Wraco property in Roscommon County (which the DNR acquired in August of 2010, and which has a large impoundment with a dike and culvert) failed. Coordination between several divisions – Forest Resources, Law Enforcement, Wildlife and Fisheries – stopped a potential disaster that could have affected US-127 as well as private property owners downstream. A permanent management strategy is still being determined at this time.*

## Southeastern Lower Peninsula

Permanent staff in the southeastern Lower Peninsula (SELP) region totaled 26 in 2011, compared to 31 in 2010. Between 2010 and 2011, parts of three units – Saginaw Bay, South Central and Southeast – were combined to form the Southeast region. The new Southeast region consists of 51 Wildlife Division-managed areas.

Habitat management efforts across the region totaled over 18,000 acres, much of which occurred on the five managed waterfowl areas. Over 9,400 acres of water impoundments and 28 pump stations were maintained on the waterfowl areas. In addition, approximately 1,820 acres of herbaceous plantings were established to draw deer out of the waterfowl marsh refuges to be accessible to hunters. Two hundred sixteen miles of ditches and dikes were maintained. Other habitat work on these areas, including brush management, prescribed burning, forest operations, openings development, mowing and invasive species treatment, totaled 2,198 acres.

Some of this work included native lakeplain prairie restoration at Crow Island, Fish Point, Nayanquing Point, Pointe Mouillee and Harsens Island waterfowl areas. These efforts provide habitat for nesting waterfowl as well as pheasant and other grassland species.

The 2011 waterfowl season was very successful, with a total harvest of 28,302 ducks and 2,336 Canada geese across the five Managed Waterfowl Areas. It was a record year for Pointe Mouillee State Game Area, with 1,191 ducks harvested, topping the previous record of 1,095 in 2006. Wetland restoration and maintenance on these waterfowl areas are having the desired effect on waterfowl abundance during the hunting season.

Upland habitat work on state land other than the managed waterfowl areas in the region totaled 1,222 acres. This included 179 acres of restored grassland, 142 acres of which were established at Verona State Game Area as part of the Michigan Pheasant Restoration Initiative. Timber cuts were conducted to create habitat for ruffed grouse and American woodcock. Food plots and openings maintenance benefit a number of featured species, including deer and turkey. Sharecropping across the entire region totaled over 3,000 acres.



## Other SELP Activities



Due to heavy spring rains and the confluence of seven rivers at the Shiawassee River State Game Area (SGA), heavy flooding caused three major dike blowouts and erosion throughout the entire dike system. This also caused a 30-day delay in crop planting. Thanks to diligent work by game area staff and other DNR staff from around the state working 1,200 hours in a three-week period, repairs were made in time to successfully plant crops in all but two units.

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At Shiawassee River SGA, a radial gate water control structure was repaired that will protect over 3,700 acres of emergent, moist soil, forested wetland and seasonally flooded crops by reducing erosion and siltation. This was made possible by a Great Lakes Fish and Wildlife Restoration grant.

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Pointe Mouillee SGA hosted the 64th annual Michigan Duck Hunters Tournament, with an estimated 8,000 people attending over two days.

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Nayanquing Point State Wildlife Area welcomed the installation of a new pump station. This pump will allow wetland managers to effectively manipulate water levels within the 298-acre East Marsh and the adjacent 162-acre C field. These units provide critical stopover habitat for waterfowl and other migratory birds and create high-quality public waterfowl hunting opportunities. This was made possible through successful partnerships between the DNR, Michigan Duck Hunters Association Saginaw Bay Chapter and Ducks Unlimited, who together secured a \$192,862 Great Lakes Restoration Initiative grant.

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Two land parcels totaling 120 acres were added to the Shiawassee River SGA.

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Staff banded 677 birds, including Canada geese, mallards, wood ducks, ospreys and common terns as part of the national waterfowl banding program. In addition, staff worked to secure nesting locations for peregrine falcons and osprey, and banded them when possible.

## Southwestern Lower Peninsula

The number of permanent field staff members in 2011 was 19, compared to 18 in 2010. As part of the Wildlife Division's major reorganization, the current southwestern Lower Peninsula (SWLP) region was formed by combining parts of what were the southwestern, northwestern and South Central management units.

The SWLP region concentrated on improving small game habitat and hunting opportunities on DNR public lands in 2011.

Habitat improvements for the region included various timber cuttings, plantings, prescribed burns and creation of wetlands and openings. Partnerships included several projects with Pheasants Forever, brush pile creation with Wolverine Electric and plantings with the National Wild Turkey Foundation.

Over 318 acres of timber cuttings in the region provided habitat that will benefit grouse, woodcock, cottontail rabbits and various bird species. More than 112 brush piles created during habitat management will benefit primarily cottontail rabbits, but also pheasant, ruffed grouse, nesting wild turkey, various small mammals and other ground-nesting birds.

Over 183 acres of timber sales and additional aspen cuttings will benefit wild turkeys, ruffed grouse, woodcock, cottontail rabbits, squirrels and deer. Prescribed burns conducted on 41 acres in the region will benefit waterfowl, pheasants and non-game bird species.

Both warm- and cool-season grasses were planted on over 150 acres, and fences were removed to produce larger grassland complexes throughout the region. Additionally, a one-acre, shallow-water wetland was created as the first step in developing additional suitable waterfowl nesting habitat at the Fennville Farm Unit within the Allegan State Game Area.

## Other SWLP Activities

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*The staff at the Rose Lake Field Office concentrated on developing and beginning implementation of a Pheasant Restoration Initiative Habitat project at the Maple River State Game Area. The goal of this project is to partner with Pheasants Forever on a five-year plan to improve habitat for pheasants and other grassland wildlife species and to increase pheasant hunting opportunities. The plan calls for 400 acres of grasslands to be restored on the game area; 100 acres were planted in 2011.*



In FY 2011, the Wildlife Division built more than 100 brush piles to create escape/nesting habitat for cottontail rabbits - "rabbitat," as staffers have taken to calling it.

"Brush piles will provide warm dry places where the rabbits can nest. We looked for our best spots and improved what we had there - grass and low-lying shrubs, brushy wetlands and idle fields that are converting to brush," said John Niewoonder, a wildlife biologist who works out of Flat River State Game Area in Ionia County. "We want small game hunters to have success - we want to create places for them to go where there are rabbits. All over southern Michigan there are rabbits. All it takes is a little cover. They reproduce quickly - they can have three or four litters a year - so we could start seeing an impact maybe by next year."

# Achieving Sound Species Management

## Species Regulations

The Wildlife Division accomplishes species management through 1) data analysis and evaluation; 2) dissemination of information to wildlife managers, the public, other agencies and decision-makers; and 3) management recommendations to the NRC based on science and public desires. After the research staff performs the initial analysis, data goes to field managers for further evaluation and comparison with local observations. In addition to the data collected by formal surveys, field managers employ their extensive knowledge of the specific areas they manage and ensure that public opinion is included. Habitat condition and population trends also are considered when developing specific management recommendations and alternatives. Data is disseminated to division staff, decision-makers and the public.

Management meetings throughout the year bring together professional staff to discuss and further refine data analysis and evaluation. All aspects of the data are examined to ensure a full, objective evaluation.

Program specialists and field staff worked cooperatively with other agencies, such as the U.S. Forest Service and U.S. Fish and Wildlife Service, to formulate management recommendations for migratory birds and species of special interest, such as the black bear, bald eagle and gray wolf. Some of this collaborative work resulted in development of improved modeling and data analysis, as in the case of the mute swan. Wildlife Division staff also attended and made presentations at professional seminars and flyway meetings.



Habitat biologists worked closely with local constituent groups and other DNR divisions, and across Wildlife Division regions, to develop annual recommendations for hunting regulations. Regulation recommendations include those related to boundary development (deer, elk, bear and turkey management units), bag limits and license quotas (antlerless deer, elk, bear and turkey), season dates and method of take (e.g. snaring, baiting).

The Wildlife Division takes a yearlong, sometimes multi-year, approach to developing its recommendations for regulations. Once regulations are formulated by the division and approved by the DNR, the Wildlife Conservation Order (WCO) amendment recommendation is submitted for information to the NRC, the public is given 60 days to provide comment, and then the NRC votes on whether to adopt the recommendation.



In FY 2011, the Wildlife Division invested 30,293 hours on species management and regulations; 27,140 hours on wildlife population surveys; and 2,933 hours on wildlife harvest/opinion surveys (11 surveys were planned and 15 were accomplished).

In fiscal year 2011, the Wildlife Division made 15 WCO recommendations and/or presentations to the NRC (all WCO orders can be located at [www.michigan.gov/dnr/laws](http://www.michigan.gov/dnr/laws)):

- 1) Management of bats
- 2) Mute swan management
- 3) Field dog trials
- 4) Bear regulations
- 5) Elk regulations and license quotas
- 6) Deer regulations
- 7) Fall turkey license quotas, Unit M
- 8) Proposed 2011 antlerless deer management units
- 9) Baiting and feeding of deer in the Lower Peninsula (L.P.)
- 10) Furbearer regulations
- 11) Beaver Island deer antler point restriction
- 12) Waterfowl hunting regulations, early season
- 13) Antlerless deer license quotas
- 14) Waterfowl and other migratory bird hunting regulations
- 15) Amendment to deer baiting ban area in the L.P.



### Specific Hunting Regulations Changes

A notable change in deer baiting and feeding regulations occurred in 2011. For the previous three years, baiting and feeding had been prohibited in the L.P., a measure adopted pursuant to the DNR's Surveillance and Response Plan for Chronic Wasting Disease of Free-Ranging and Privately-Owned Cervids (CWD Plan). After considerable work on the part of the Wildlife Division and discussion with various parties throughout the winter and spring of 2011, the NRC passed a WCO amendment that allowed baiting and feeding in the L.P. in all areas except portions of the special TB regulations unit.

Regulations governing field dog trials were changed. Permits now are required only for dog training that takes place when the dog training season is closed (mid-April through July).

### Specific Non-game Management Changes

Mute swans are an invasive species in Michigan, and the DNR has implemented management efforts to reduce the mute swan population over time. The ultimate goal is to reduce the negative impacts of this invasive species on native plant and animal communities. In 2011, the requirement for designated partners to obtain written approval when assisting the DNR in mute swan removal to protect natural resources was lifted. Verbal permission is still required. Releasing mute swans into the wild is now prohibited, regardless of their origin, because returning any mute swans to a wild habitat is counter to the overall need to reduce the population of these non-native birds.

White-Nose Syndrome is a disease that only recently appeared in North America. It is a fatal disease to hibernating bats and has nearly eliminated some species of bats from large portions of their range in the last five years. In anticipation of this disease reaching Michigan's bats, an amendment was passed to allow sampling for the disease and to permit biologists, conservation officers or others to humanely dispatch suffering bats ethically and legally.



## Species Management

**All-Bird Program** – The Wildlife Division’s all-bird biologist has spent considerable time over the last two years assisting in the development of a new cormorant Environmental Assessment (EA) for Michigan. The U.S. Department of Agriculture-Wildlife Services authored the EA, which was approved by U.S. Fish and Wildlife Service. The previous EA capped annual cormorant take at 10,500 birds, and stated that no colony could be reduced to less than 100 nests (even on man-made sites). The new EA recognizes that goals should be set using an adaptive management approach rather than arbitrarily set numeric goals.

The All-Bird Program focused efforts on the peregrine nesting in Michigan. There were 18 successful nests recorded in 2011, with at least another six active pairs documented in the state. Considering that only about 13 aeries were documented historically, Michigan’s peregrines are doing well.



The Wildlife Division worked with staff at the University of Michigan Medical Center to identify a suitable location to mount a nest box and provided a peregrine nest box donated by Eagle Scout Maxwell Strong. The box was installed and played host to Ann Arbor’s first successful peregrine nesting in 2011.



**Bear/Furbearer Program** – In 2011 the Bear and Furbearer Program reviewed changes to furbearer regulations. The program is in the process of moving to a two-year cycle in which furbearer regulation changes are made in odd years and bear regulation changes are made in even years. This alternate-year cycle allows for more time to gather, discuss and analyze potential regulation changes and allows for some consistency in regulations. The two-year cycle has been functioning well for both aspects of the program area.



Multiple changes were made to furbearer regulations in 2011. Most notable was the reduction in bag limits for marten and fisher in response to a new, cutting-edge population estimation technique. The technique termed “statistical reconstruction” is one of the first tools able to estimate broad-scale population sizes for furbearing animals. This technique utilizes existing information collected through mandatory registration and fur-harvester surveys to estimate population sizes. Unfortunately, the tool found a significant decline in both marten and fisher populations. The bag limit was reduced to allow a harvest of one animal (either a marten or fisher) in an effort to increase both populations. Preliminary harvest results show a significant decline in harvest of both species, which should help accomplish the intended goal.

Other changes were made to furbearer regulations to increase recreational opportunity. These included expanding muskrat and mink trapping season to include February; an increase in the L.P. otter bag limit (from one to two); expansion of the number of species that may be taken at night with the aid of a call; and changing requirements for the registration of marten, fisher, otter and bobcat. The final change was made to increase the accuracy and efficiency of the Wildlife Division’s registration information and to allow for future use of statistical reconstruction as a tool for monitoring populations.

**Deer and Elk Program** – Deer and elk are incredibly valued public-trust resources in Michigan that affect – and are affected by – a diverse set of partners and stakeholders. As a consequence, the top priority for the Deer and Elk Program in Fiscal Year 2011 was continuing to build and expand on public

engagement and partnership efforts. Initial meetings were held with the U.P. Deer Advisory Team (DAT), and positions were filled on both the northern L.P. and southern L.P. DATs. A new deer biologist position was created and filled, with the intent to provide support to the statewide Deer and Elk Program leader to ensure deer management policies and regulations are as consistent as possible while accounting for important regional variation in terms of deer interactions with and impacts on human populations, habitat and other wildlife species. A key duty for this position includes serving as liaison to the DAT in the U.P. and northern regions, as well as improving communications and collaboration among various DNR divisions and employees involved in programs that impact the management of deer and deer habitat in those regions.

Wildlife managers from around the Midwest gathered together as Michigan hosted the 2011 Midwest Deer and Wild Turkey Study Group meeting to share and discuss experiences pertaining to the theme of “Planning, Partnerships and Public Engagement.” An updated draft of Michigan’s Elk Management Plan was also completed, aided substantially by prior work with the Elk Management Advisory Team. The plan was finalized and presented for the DNR Director’s approval in early 2012, following a final period of public review and comment.

**Upland Game Bird Program** – In the fall of 2010, Michigan bird hunters had an opportunity to hunt sharp-tailed grouse for the first time in 12 years. Hunters could hunt this species in portions of two counties in the U.P. (Chippewa and Mackinac counties) during Oct. 10-31. In 2010, 2,571 hunters obtained a free stamp allowing them to hunt sharp-tailed grouse. About 15 percent of these people (398 hunters) hunted this species, spending 1,429 days afield and harvesting 217 sharp-tailed grouse. About 25 percent of the hunters harvested at least one sharp-tailed grouse, and about 52 percent were either satisfied or somewhat satisfied with their hunting experience. Moreover, 89 percent of hunters reported that they are very likely or somewhat likely to continue hunting sharp-tailed grouse during the next two years.

The Wildlife Division worked in partnership with many organizations on upland game bird projects. An example of this is a hands-on habitat project with the Michigan chapter of the National Wild Turkey Federation to grow 5,000 fruit-producing crabapple trees. The trees, being grown in pots at the Rose Lake Wildlife Research Area, are transplanted on state game and wildlife areas around the state to provide food sources and habitat for wild turkey. As part of a plan to revitalize wild turkey populations in northern Michigan, 28 wild turkeys (mostly hens) were captured in Barry County and relocated in Oscoda County near Fairview, the “Wild Turkey Capital of Michigan.” Michigan ranks sixth in the nation for turkey harvest and is acknowledged as having some of the highest-quality turkey hunting in the country.

Among its accomplishments in FY 2011, Upland Game Bird Program helped expand the Michigan Pheasant Restoration Initiative (MPRI), a collaborative conservation initiative bringing together a diverse group of partners to facilitate a revitalization of Michigan pheasants. The Wildlife Division also participated in developing a framework for the national pheasant plan, while focusing on improving Michigan's pheasant habitat and working with Pheasants Forever on establishing food and cover plots. The MPRI was recognized by Michigan United Conservation Clubs as the Conservation Project of the Year.

As part of its work on American woodcock and grouse habitat, emphasizing aspen and alders, the division utilized the Ruffed Grouse Society's (RGS) forest habitat Hydro-ax. Staff also worked with RGS to expand habitat on both private and public lands. The Upland Game Bird Program staff worked to obtain federal grants for Michigan as part of the nationwide Woodcock and Young Forest Initiative, helped monitor woodcock populations nationally and continued to oversee the state's volunteer woodcock banding program. The division's woodcock banding program uses well-trained volunteers in what is considered the most successful cooperative effort of its kind in the country. Volunteers banded 786 woodcock in 2011.

**Waterfowl/Wetland Program** – The Waterfowl and Wetland Program continued its update of the Mute Swan Program throughout 2011. Most noteworthy is the development of outreach materials such as a mute swan information page on the DNR website ([www.michigan.gov/muteswans](http://www.michigan.gov/muteswans)) and an informational brochure. These materials will be used to inform citizens about the need to significantly reduce populations of this non-native invasive species. The Waterfowl and Wetland Program continues to use the mute swan population model to achieve population-reduction goals.

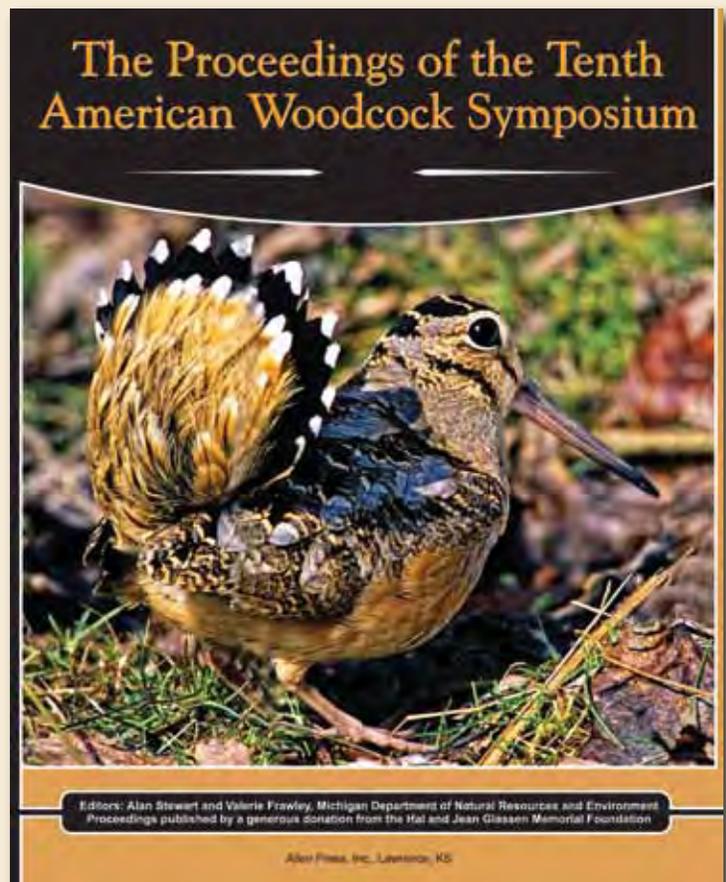
In 2011, the program began efforts to form and develop the Michigan Waterfowl Legacy (MWL), a cooperative partnership to restore, conserve and celebrate Michigan's waterfowl, wetlands and waterfowl hunting heritage. This initiative will kick off in 2012 with partners such as the Michigan Duck Hunters Association, Ducks Unlimited, Michigan United Conservation Clubs, the U.S. Fish and Wildlife Service, the Citizens Waterfowl Advisory Committee (CWAC) and Knutson's Sporting Goods. The MWL has three focus areas: Waterfowl Populations and Wetland Habitat, Waterfowl Hunting Heritage, and Marketing and Policy of Michigan's Waterfowl Legacy.

The Waterfowl and Wetland Program held an informal wetland management seminar at Pointe Mouillee State Game Area in May with staff and students from Long Point Waterfowl (LPW) in Ontario. The seminar provided an opportunity for wetland managers to discuss current projects, issues and research and to form contacts and collaborations. The feedback from attendees – including Wildlife Division managed waterfowl area staff members as well as wetland managers from Ohio's Division of Wildlife, Winous Point Shooting Club and Winous Point Marsh Conservancy, and the Erie Shooting Club – was so positive, this seminar will become an annual event that rotates between Michigan, Ohio and Ontario.

The Waterfowl and Wetland Program participated in setting waterfowl regulations regionally as part of the Mississippi Flyway Council Technical Section (MFCTS). Michigan waterfowl hunters once again enjoyed a liberal waterfowl hunting season under federal frameworks. The program continues to advocate for Michigan's waterfowl hunters and provide more opportunities. In 2011, a process began to gather public input on potential changes to Michigan's waterfowl hunting zones, which included soliciting proposals from the CWAC.

The Waterfowl and Wetland Program continued to write grant proposals in 2011 to secure funds for wetland habitat projects. With assistance from Ducks Unlimited, \$208,000 was successfully awarded from a U.S. Fish and Wildlife Service Great Lakes Restoration Initiative Joint Venture to enhance approximately 350 acres of wetland habitat at the Maple River State Game Area (SGA) in Gratiot County. U.S. Fish and Wildlife Service Great Lakes Fish and Wildlife Restoration Act proposals also were submitted in 2011 for wetland projects at Crow Island SGA, Shiawassee River SGA and Allegan SGA.

The Wildlife Division's bird-banding efforts are also important to the Waterfowl and Wetland Program. Waterfowl banding is an activity done in cooperation with the U.S. Fish and Wildlife Service to provide information on mortality rates of waterfowl so that season lengths and bag limits can be set in keeping with species population levels. In 2011, there were 5,088 birds banded by field staff under the division's federal banding permit, including 3,178 Canada geese, 607 mallards and 472 wood ducks. Staff also recaptured 395 previously banded birds.



# Protecting Threatened and Endangered Species

The DNR has the statutory responsibility to protect species included on the state threatened and endangered lists, and the Wildlife Division reviews activities that could affect these species. Personnel involved in those reviews included Wildlife Division staff, plus consultation with the Michigan Natural Features Inventory (MNFI), which specializes in the biology and needs of "at risk" species. Organizations and individuals use this expertise and the recommendations resulting from these reviews to modify their activities or project designs to limit impacts on rare species populations. Department of Natural Resources staff in other divisions also use that endangered species knowledge when developing strategic and operational plans for species and habitats. The Wildlife Division, together with experts in related fields, periodically reviews the state list of threatened and endangered species. The division also issues permits that allow for the take of state-listed species in rare situations. Currently, more than 400 species of plants and animals, the large majority of which are plants, are listed as threatened or endangered in Michigan.

## Kirtland's Warbler Spotlight

After much management success, the Michigan-breeding Kirtland's warbler continues to thrive. During the last year nearly two million jack pine seedlings were planted, over 1,000 acres were prepared for future planting, and over 1,800 singing Kirtland's warbler were counted. The species depends on this work for its survival. Every year this work is accomplished despite fluctuating budgets, staff retirements and other challenging developments. This intensive management program decreases wildfire risk for neighbors and also benefits many other animals such as deer, turkey, grouse and snowshoe hare. Kirtland's warbler conservation is changing. Some recovery goals have been surpassed, and it is time to reconsider the listing of the Kirtland's warbler on the federal endangered species list. Michigan is leading the way in

forging an innovative public-private partnership to ensure that residents and visitors can continue to enjoy all the positive impacts of the Kirtland's warbler and its habitat management program. There is much more to be done in this area.

## Other Notable Developments

The piping plover population was down by almost 30 percent in the summer of 2011. The main culprits appear to be poor protection on the beaches of the Gulf and south Atlantic coasts during the winter, as well as predation by a recovering population of state-threatened merlins (a type of falcon) in the spring.

The connection between two important populations of the endangered Karner blue butterfly was preserved. After consulting with Wildlife Division staff, the Michigan Department of Transportation (MDOT) moved construction of a cross-over in the median of a major highway a quarter of a mile to avoid impacts to the butterfly. Preventative measures such as this avoid prolonged deliberations about the need for "take," mitigation and increased costs. The value of early coordination between MDOT and Wildlife Division is clearly evident in situations like this.

The Poweshiek skipperling, a small butterfly found in Michigan prairie fens, was added to the federal endangered species list as a candidate. This means it meets the criteria to be listed, but other species listings are a higher priority. This listing will require additional attention on the part of the Wildlife Division in the future.

The U.S. Fish and Wildlife Service issued a report concluding that the federally endangered eastern subpopulation of cougars no longer exists. The Lower Peninsula of Michigan is within the historical range of this subpopulation. The DNR continues to document individual cougars dispersing into the Upper Peninsula from a subpopulation of cougars in the Dakotas. The cougar is on the state list of threatened and endangered species.

The DNR continued to provide input on construction plans for the proposed FERMI III nuclear power plant near Monroe. DTE Energy has drafted conservation plans to minimize impacts to state-threatened fox snakes on the property.



**The Wildlife Division's threatened and endangered species staff handled 1,779 environmental review requests, 103 of which determined that the projects reviewed have potential impacts, in FY 2011.**

# Fostering Enjoyment of Michigan's Wildlife

## Hunting and Trapping Information

Michigan ranks among the top states in the nation in number of hunters, with 750,000 hunters contributing \$1.3 billion annually to the state's economy. And although hunting participation has gradually declined in recent years, reversing this trend – getting more hunters in the field enjoying Michigan's abundant natural resources, which will support the wildlife and habitat management that helps keep our state's rich hunting heritage going strong – is one of the DNR's top priorities.

Hunting and trapping license sales during the 2011 seasons show that overall participation declined about 2 percent from 2010 levels, while the number of youth hunters increased by nearly 3 percent. Among the noteworthy trends in license sales are the continued declines in small game and deer hunting licenses purchased, a continuing increase in fur harvester license sales, a significant decline in turkey hunting licenses sold and a significant increase in Pure Michigan Hunt applications sold.



	2011	2010	% Change
Total Hunters	762,539	772,508	-1.3%
Total Deer Hunters	691,203	697,489	-0.9%
Antlerless Deer Licenses	452,917	472,069	-4.1%
Spring Turkey Hunters	106,888	115,109	-7.1%
Fall Turkey Hunters	20,905	27,309	-23.5%
<i>Fall Turkey Licenses</i>	22,385	30,021	-25.4%
Bear Hunters	9,017	8,974	0.5%
<i>Bear Applications</i>	52,233	55,476	-5.8%
Small Game Hunters*	254,490	263,144	-3.3%
Fur Harvesters*	24,321	23,500	3.5%
Waterfowl Hunters	57,816	58,954	-1.9%
Elk Hunters	151	224	-32.6%
<i>Elk Applications</i>	35,183	38,708	-9.1%
Pure Michigan Hunt Applications	29,409	23,439	25.5%
Total Licenses	1,941,101	1,985,917	-2.3%
Youth Hunters	84,545	82,210	2.8%

\* Based on 2011 license sales through Jan. 31, 2012. Fur harvester and small game licenses remain on sale through Feb. 29.

## Limited-License Hunting Opportunities

Limited-license hunts are a valuable component of sustainable wildlife management because they provide special recreational opportunities for Michigan citizens and visitors. Wildlife Division staff provided administrative support for limited-license hunts, including selection of hunters through an application and drawing process. Day-to-day work included:

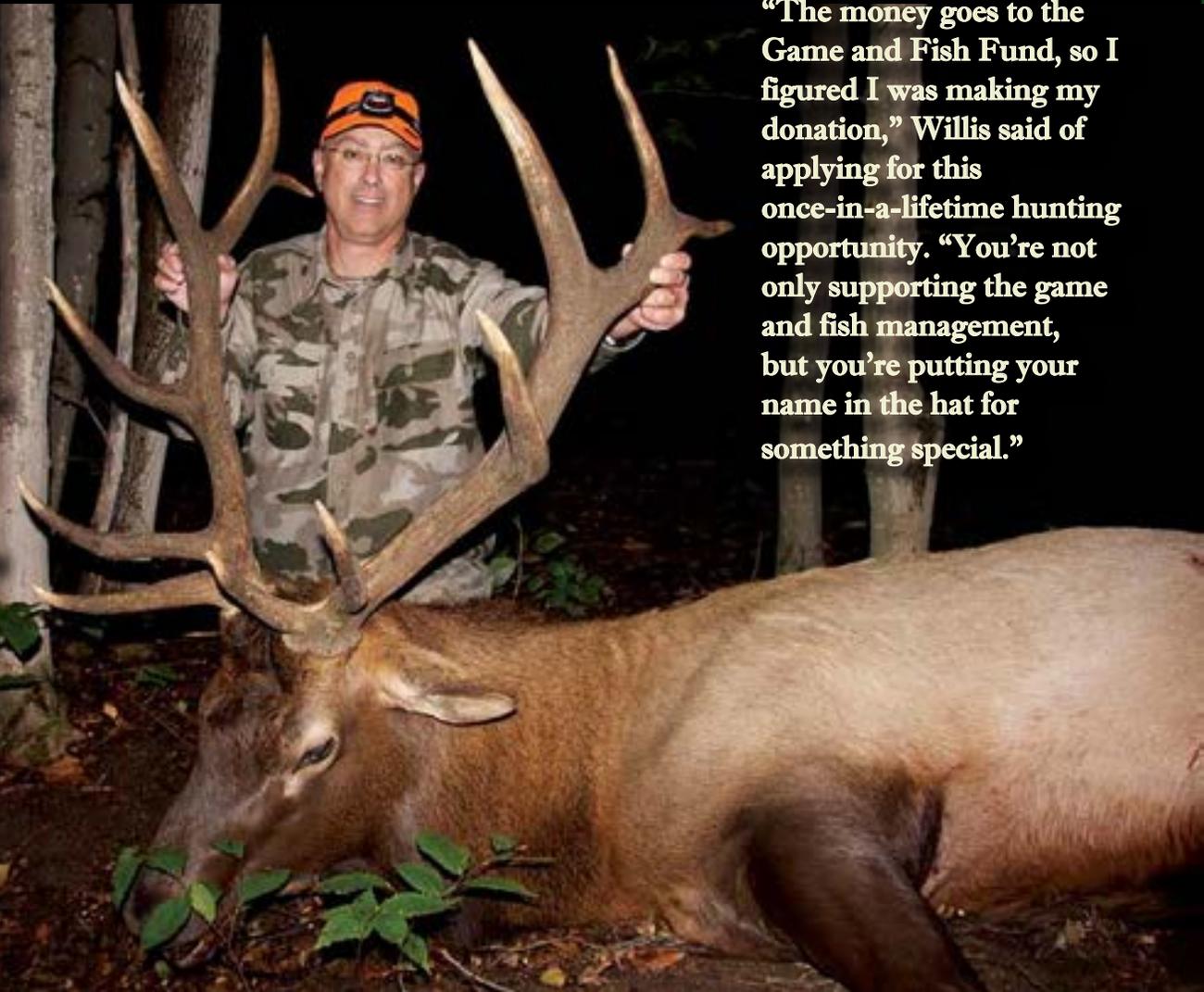
- Customer service - answered hunter questions, solving application and licensing problems. Division staff handles thousands of calls annually.
- Planned and implemented limited-license hunt drawings for turkey, antlerless deer, bear, elk, waterfowl and the Pure Michigan Hunt. This activity involved coordination with staff in other divisions as well.
- Facilitated bear and elk hunt transfers to youth hunters and those with advanced illness. In 2011, 91 bear hunts and seven elk hunts were transferred to eligible individuals.
- Communicated with hunters – printed digests with current hunting regulations, e-mail reminders, Web content and news releases.
- Collaborated with other DNR staff to develop licensing strategies for emerging regulatory requirements.
- Prepared license sales reports and analyzed data for effective evaluation of wildlife management programs and public requests for information.
- Participated in the DNR's multi-year, cross-divisional project to modernize its retail licensing system, utilizing new technologies to create an enhanced customer experience.

### Pure Michigan Hunt

The Pure Michigan Hunt, created in 2009, is a unique hunting opportunity that gives hunters the chance to purchase as many \$4 applications as they like for three multi-species, limited-entry hunts. The second annual drawing was held in January 2011, and three lucky winners captured the chance to hunt one any-sex elk, one bear, one spring turkey, one fall turkey and one antlerless deer. In addition, the winners received first selection at a managed waterfowl area during the reserved hunt period. In license year 2011 (March 1 – Dec. 31), there were 29,409 Pure Michigan Hunt applications sold, raising just under \$120,000 for the DNR's Game and Fish Protection Fund.

**Pure Michigan Hunt 2011 winner Randy Willis of Augusta, who had been applying for an elk license since 1984, got to harvest both a 6-by-6 bull elk and a bear and had “a blast” during a memorable first-time waterfowl hunting experience at a managed waterfowl area.**

**“The money goes to the Game and Fish Fund, so I figured I was making my donation,” Willis said of applying for this once-in-a-lifetime hunting opportunity. “You’re not only supporting the game and fish management, but you’re putting your name in the hat for something special.”**



In FY 2011, the Wildlife Division invested:

- 10,778 hours maintaining 151 dams, 177 dike miles, 139 ditch miles, 35 pumps and 239 water-control structures (150 dams, 145 dike miles, 142 ditch miles, 35 pumps and 239 water-control structures were planned);
- 9,522 hours maintaining/repairing 320 pieces of equipment (277 were planned);
- 5,583 hours maintaining 1,264 parking lots (1,245 were planned);

## Game-Area Maintenance

The Wildlife Division manages over 400,000 acres on 111 state game and wildlife areas, most in southern Michigan, where land available for public hunting is at a premium. The division invests a significant amount of staff time maintaining these areas for hunters to enjoy.

Much of the game-area maintenance was highlighted in the regional reports outlined earlier in this document. Statewide in FY 2011, game-area maintenance included dike repairs, replacement of water-control structures, grading and surfacing of parking lots and trails, equipment repair, vehicle barriers, sign replacement and building maintenance. Although an evaluation of maintenance needs of the entire infrastructure is conducted every year, some maintenance may be limited to inspection to ensure that no further upkeep or preventative work is required. Highlights included maintenance of:

- Game area and research buildings – routine building repairs involving plumbing, heating and roofing were conducted as needed.
- Parking lots, roads and trails, through mowing, grading, snowplowing and replacing gravel surface materials and culverts as needed. Brush and overhanging limbs were removed to prevent vehicle damage, and blow-downs were removed.
- Boundary and information signs, which help area users identify public hunting land and help neighbors understand the boundaries. Posting of signs is a continuous and major task at many game areas because of vandalism, storm damage, etc. Informational signs identify various habitat projects, provide a list of area use rules, and credit the Pittman-Robertson Wildlife Restoration Program. Directional and warning signs are also placed and repaired when necessary.
- Vehicle barriers, to prevent damage to habitat management projects and disturbance to wildlife. Natural materials available near the site are used whenever possible. Gates and other barriers are repaired, painted and replaced as needed.

Additionally:

- Routine maintenance, cleaning and general inspections are done on several water-control structures and ditches, all dams are regularly inspected, and all debris is removed. Banks are stabilized on-site before erosion becomes a serious problem. Routine dike maintenance – including spot repairs, mowing, seeding, burning, and brush and tree removal – is completed on numerous sites annually. Pumps used to manipulate water levels for wetland management are routinely inspected and maintained.
- Regular preventative maintenance and repairs are accomplished annually to keep aging equipment operational.
- Nest structures for geese, osprey, eagles, wood ducks, bluebirds and squirrels are maintained by volunteers and state personnel. Hunting clubs and service groups continue to perform much of this work.
- Repairs to observation towers, boardwalks, docks, boat launches, hunting blinds, accessibility enhancements, and small boat and canoe accesses are completed as needed.
- Regularly scheduled trash removal (often assisted by local groups) is occurring at most game areas. Tires and appliances continue to be dumped on public land in increasing amounts since the advent of additional disposal fees for recycling tires due to greenhouse gases.

# Promoting Healthy Wildlife

## Wildlife Disease

**Avian Influenza** – The Wildlife Division tested 567 samples from wild waterfowl during FY 2011. Although a low-pathogenic strain of avian influenza (AI) has been found in waterfowl every year since intensive surveillance has occurred, it has been detected at low levels. Sampling for AI ended in FY 2011 due to lack of federal funding. From this point on, only large die-offs of waterfowl with an unexplained cause of death will be examined for AI. Sampling during recent years indicates that the risk of an outbreak of high-pathogenic-strain AI is low.

**Botulism** – Both Type C botulism (found largely in puddle ducks) and Type E botulism (found in fish-eating birds such as grebes, loons and some diving ducks) have occurred historically in Michigan. In 2010, thousands of waterfowl died due to Type E botulism, the highest total since 2007. During 2011, hundreds of waterfowl were reported to have died due to Type E botulism.

**Bovine Tuberculosis (TB)** – Michigan is the only state in the nation where TB has been established in the wild deer population. The DNR coordinates TB response efforts with the Michigan Department of Agriculture and Rural Development (MDARD) and the United States Department of Agriculture (USDA). Although the apparent prevalence of TB has decreased over the last 15 years, it has leveled off, with about a 2-percent prevalence rate in the deer in the core area of infection – Deer Management Unit 452 in the northeastern L.P. However, in 2011 there was an unexpected decline in the prevalence rate to 1.2 percent. Whether this lower level of infection persists, or the rate goes back up, remains to be seen. Of the 5,138 deer, elk and moose tested for TB in FY 2011, 19 deer tested positive for the disease. Since 1995, the Wildlife Disease Lab has tested 199,306 wild white-tailed deer, elk, moose and numerous carnivore species for bovine TB; with 703 deer, five elk and 43 carnivores testing positive.

**Chronic Wasting Disease (CWD)** – The Wildlife Division has extensively tested deer and elk for chronic wasting disease (CWD) since 1998. The discovery of a single deer with the disease in a privately owned cervid facility in Kent County in 2008 concentrated these efforts in Kent County and the surrounding counties. During FY 2011, 1,030 deer, elk and moose were tested for CWD, with no cases discovered in free-ranging animals. Since 1998, the Wildlife Disease Lab has tested 35,758 wild white-tailed deer, elk and moose; and all have tested negative for CWD.

After 10 years of extensive statewide surveillance, and over three years of surveillance in Kent County, the DNR will focus CWD testing for 2012 only on those animals displaying signs of a neurological disorder, consistent with CWD. Although other diseases or injuries can cause similar signs, the DNR will perform a full necropsy and submit samples for CWD testing from any animal displaying these signs.

**Epizootic Hemorrhagic Disease (EHD)** – A viral disease transmitted by midge bites and originally identified in deer in Michigan in 1955, EHD has been detected during five of the last six years in Michigan. EHD was more widespread in 2010 than ever before, with an estimated mortality of over 1,000 cases identified in six counties in the southwest Lower Peninsula (L.P.). An estimated 300 deer were identified with the disease in FY 2011 in the southwest L.P. Public reports of deer die-offs, especially with dead animals in or near water, alert the Wildlife Division to the presence of EHD. There is no preventative action or treatment for EHD.

**Feral Swine** – Free-ranging pigs of wild heritage are considered an exotic, invasive and nuisance species. They carry a number of diseases that can be transferred to humans, domestic animals and wildlife. The DNR works with USDA Wildlife Services and MDARD to monitor feral swine sightings, maintain reports of feral swine killed and test specimens for disease. Of 16 animals tested in FY 2011, one was positive for pseudorabies (a viral disease most prevalent in swine, often causing newborn piglets to die). Testing for classical swine fever, brucellosis, trichinosis, swine influenza, hepatitis E and tuberculosis was also conducted on available specimens. None of these diseases were found in the samples tested.

**Rabies** – Rabies has been recorded by the Michigan Department of Community Health in wildlife species in Michigan at a rate of 60 to 70 cases annually during the last four years. The most commonly infected species are big brown bats in the southern part of the state and little brown bats in the northern part of the state. A total of 64 cases were detected in 2011, mostly in bats, but five skunks, one fox and one woodchuck also tested positive.





**White-nose Syndrome in Bats** – During 2011, cooperative development of the Michigan White-nose Syndrome (WNS) Response Plan, led by the Wildlife Division, was completed. Its purpose is to mitigate, as much as possible, the effects of WNS on Michigan bats by 1) preventing introduction of WNS into Michigan by humans; 2) providing an organizational framework by which WNS control measures can be implemented in the future, if the disease is identified; and 3) purposefully conserving bat populations (and their habitat) remaining after WNS has arrived. Winter surveillance (in cooperation with Eastern Michigan University) in 2011 was focused at bat hibernacula, including tourist mines and active iron and copper mines, as well as sites along the northwest shores of Lake Huron. These latter sites lie closest to confirmed WNS-infected sites in Ontario. There was no evidence of bat mortality or unusual behavior consistent with WNS at any of the sites surveyed. All five bats considered suspects for WNS and submitted to the DNR Wildlife Disease Lab for diagnosis were negative.

Although no Michigan bats have been diagnosed with WNS, infected sites already exist in bordering states and provinces (Ohio, Indiana and Ontario), and the rapid westward spread of WNS makes it nearly certain that it will eventually arrive in Michigan. Consequently, future emphasis will remain on outreach and education to prepare the public for WNS outbreaks; surveillance to detect introduction of the disease quickly; and bat habitat exploration to document the locations of critical hibernacula to ensure their long-term conservation. Ongoing funding constraints will pose serious challenges to attainment of these goals.

#### **Wildlife Health Web shortcuts:**

[www.michigan.gov/wildlifedisease](http://www.michigan.gov/wildlifedisease)  
[www.michigan.gov/wdm](http://www.michigan.gov/wdm)  
[www.michigan.gov/wdl](http://www.michigan.gov/wdl)  
[www.michigan.gov/emergingdiseases](http://www.michigan.gov/emergingdiseases)  
[www.michigan.gov/dnrlab](http://www.michigan.gov/dnrlab)  
[www.michigan.gov/bovinetb](http://www.michigan.gov/bovinetb)  
[www.michigan.gov/chronicwastingdisease](http://www.michigan.gov/chronicwastingdisease)  
[www.michigan.gov/feralswine](http://www.michigan.gov/feralswine)

DNR wildlife disease site  
Wildlife Disease Manual  
Wildlife Disease Lab  
Emerging diseases  
Lab testing results  
Bovine tuberculosis  
Chronic wasting disease  
Feral swine

# Overseeing Privately Owned Cervids and Wildlife Permits

## Privately Owned Cervids

Michigan has 411 licensed privately owned cervid facilities, down from 434 facilities at the end of 2010. A total of 73 facilities are still on quarantine for non-compliance issues with tuberculosis and/or chronic wasting disease testing. In 2011, the Wildlife Division conducted 98 inspections of privately owned cervid facilities – 70 for registration renewals, 17 for facility expansions and 11 for new facilities. Nine administrative and five criminal cases were initiated.

Division staff members also conducted 33 baseline facility inspections to record the presence of *Sus scrofa* swine in an effort to begin the implementation of Invasive Species Order Amendment #1 of 2011, which prohibits the possession of this species.

The Wildlife Division  
invested 7,439 hours on  
permitting in FY 2011.

## Wildlife Permits

New this year, wildlife rehabilitation permits – formerly issued by the DNR Law Enforcement Division – were issued solely by the Wildlife Division. Canada Goose Nest Destruction and Round-Up permits were issued under a cooperative agreement with the U.S. Department of Agriculture Animal and Plant Health Inspection Service's Wildlife Services Office. Private-Land Field Trial permits were issued only during the closed season for dog training (April 16 - July 8). The rest of the year, field trials on private land can occur without a permit.

The Wildlife Permit Database was updated and now includes a history field that tracks all permit activity. Due to programming upgrades, almost all wildlife-related permit forms and information can now be found at on the DNR website by visiting [www.michigan.gov/wildlifepermits](http://www.michigan.gov/wildlifepermits). This has been an extremely useful tool for the public to access forms quickly and submit them via fax or email.

Permit Count 2011	Total New	2011 Renewals	Total Current	Renewal Cycle	Commercial Breeders	Non-Commercial Breeders
Permits to Hold Wildlife in Captivity	29	45	383	3 yr	119	264
Wildlife Damage and Nuisance Control	44	187	583	3 yr		
Game Bird Hunting Preserves	3	191	270	3 yr		
Scientific Collector's Falconry	16	108	343	3 yr		
Wildlife Rehabilitation	4	28	107	3 yr		
Wildlife Rehabilitation	8	61	128	5 yr		
Special Dog Training Area's	7	45	233	3 yr		
Fox Hound Training	261		261	1 yr		
Project Control Permits	161		161	120 days		
Field Trials on State Land	142		142	1 yr		
Private Land Field Trials	57		57	1 yr		
Out of State Dog Bear Permits	48		48	1 yr		
Goose Contractor	14		14	1yr		
<b>TOTAL</b>	<b>780</b>	<b>665</b>	<b>2716</b>			

## Falconry Trapping Permits

		Issued	Filled
General Raptor Capture	Total	57	26
Red-Tailed Hawk	19		
American Kestrel	3		
Coopers Hawk	4		
		Issued	Filled
Limited Capture	Total	6	3
Northern Goshawk	2		1 = non-resident
Great Horned Owl	1		
		Issued	Filled
Peregrine	Total	2	0
		TOTAL	TOTAL
		65	29

## Mapping a Strategy for Wildlife Management

Planning is a critical component of wildlife management. The most intensive FY 2011 Wildlife Division planning effort was the development of the Wildlife Division strategic plan: the GPS (Guiding Principles and Strategies). The Wildlife Division participates in numerous forest planning efforts including Regional State Forest Management Plans, forest certification and state forest compartment reviews. The Wildlife Division focuses planning efforts on state game and wildlife areas by writing master plans and operational plans.

### Implementation of the Strategic Plan

In June 2011, the Wildlife Division restructured staff and created a new Planning and Adaptation Section to promote effective planning and management and help craft strategic, tactical and operational plans so that the division can respond to emerging issues and unforeseen challenges without diverting the division from meeting long-term goals. The new section will help the Wildlife Division implement the goals and objectives from its strategic plan – the GPS – while learning, adapting and generating metrics that will allow the division and the public to judge the effectiveness of management efforts.

In the three months of July, August and September 2011, the section began work on a number of initiatives, including:

- Incorporation of the featured species approach into the Regional State Forest Management Plans;
- Development of habitat and silvicultural guidance documents for featured species;
- Streamlining the State Game Area Master Plan process;
- Review of National and Regional Wildlife Adaptation Plan in response to changing climate conditions that could impact wildlife (in partnership with the Association of Fish and Wildlife Agencies and regional adaptation groups);
- Revision of the Aquatic Invasive Species Management Plan;
- Revision of the Mi-HUNT Web application to include better mapping of huntable lands and information on management activities on those lands that promote huntable wildlife;
- Revision of the DNR Living Legacies initiative;
- Revision of the Wildlife Action Plan in collaboration with a host of partner organizations;
- Continued support of management programs by increasing capacity to collect harvest and effort data using internet-based surveys; and
- Evaluation of wind-power developments and potential impacts on wildlife.

## Showing Progress on the GPS

Next year's annual report will be structured around the goals and objectives of the Wildlife Division's strategic plan. Metrics or measurements developed by the Planning and Adaptation Section staff will be used to quantify and gauge progress toward objectives and to evaluate and communicate progress in implementing the GPS. To illustrate, if you think of an airplane cockpit, these metrics will help the division assess whether we are headed in the right direction, flying at the right altitude and traveling at the right speed.

### Example of Next Year's Reporting Format:

Objective 4.3 is: Increase the retention rate of hunting and trapping license purchasers by 25 percent. The metric is the number of license buyers that have purchased a license in each of the last two years, measured against the desired increase of 25 percent (see graph). Each year in this report, we will show new data on the graph to illustrate progress in reaching our objective. We will also report how much time and money we spent on each objective, and a summary of the work on the strategies used to meet the objectives.



These metrics and the details provided annually will help the Wildlife Division stay focused, be more transparent and become a more effective agency.

## Notable Planning Components

**Featured Species Approach** – Continuing its featured species approach to habitat management – focusing and aligning management towards the critical habitat needs of high-priority target species – the Wildlife Division has developed habitat management guidance for each of the 42 currently identified featured species. The division is incorporating this guidance into State Game Area Master Plans, Regional State Forest Management Plans, compartment reviews and private-lands programs.

To learn more about the featured species approach and view a list of Michigan's featured species, visit [www.michigan.gov/wildlife](http://www.michigan.gov/wildlife) and click on Featured Species in the left-hand navigation bar.

**Michigan's Wildlife Action Plan** – Michigan's Wildlife Action Plan (WAP) is part of a national conservation strategy for safeguarding and sustaining wildlife and their habitats for current and future generations. The WAP provides a status assessment of 404 species thought to be declining in Michigan and their habitats. The DNR is currently developing priorities for the WAP, which directs State Wildlife Grants funding. The brochure *Highlights of the first 5 years: State Wildlife Grants in Action* was produced this past year; to check it out go to [www.michigan.gov/wildlifeactionplan](http://www.michigan.gov/wildlifeactionplan).

# Gaining a Better Understanding of Michigan's Wildlife

The Wildlife Division researches and monitors Michigan's wildlife populations in a variety of ways in order to better understand and manage these populations. Highlights of the division's research and monitoring projects in FY 2011 include:

## Deer Hunting Cooperatives Study

The Wildlife Division continues its collaborative relationship with the Partnership for Ecosystem Research and Management (PERM) at Michigan State University (MSU) on several important projects. One notable PERM research project is to evaluate the effectiveness of incorporating private deer hunting cooperatives into Michigan's traditional deer-management practices. Results to date suggest that private deer cooperatives may be more effective at habitat management and reaching overall deer harvest goals than hunters not affiliated with such a group. The success of these groups may be influenced by social networks, group dynamics and social capital generated by the cooperative.

## Habitat and Retained Structures Study

Another collaborative research project with MSU is a study investigating how retained structures (wood left after cutting) in clear-cut forests affect the biodiversity of wildlife populations. The research, conducted with the assistance of the Forest Resources Division, involves aspen management in the Cadillac and Traverse City forest management units. Data was collected on over 270 harvested aspen sites. Researchers are surveying for red-eyed vireos, ovenbirds and Nashville warblers as indicators of how differing management prescriptions affect wildlife populations. Work planned in 2012 includes workshops for Wildlife and Forest Resources Division staff to start incorporating research results in habitat prescriptions.

## Diving Duck Study

The Wildlife Division – in partnership with the Upper Mississippi River and Great Lakes Joint Venture, MSU, the Michigan State Police Aviation Section, Safari Club International (SCI) Michigan Involvement Committee and Winous Point Marsh Conservancy – is conducting a research project investigating factors affecting distribution and abundance of diving ducks on Lake St. Clair, the Detroit River and western Lake Erie. The project is designed to improve conservation planning by identifying factors affecting temporal and spatial dynamics of diving duck populations during migration. Recreational boating, commercial shipping, and near-shore and off-shore wind energy development are just a few of the factors that can influence diving duck populations.

The study is analyzing data collected during historical spring aerial surveys and developing new aerial survey protocols to improve understanding of diving duck distribution and abundance on both U.S. and Canadian waters. New survey methodologies have improved abundance and distribution data, resulting in a clearer understanding of the factors influencing diving ducks.

## Southern Michigan Black Bear Population Study



In collaboration with the University of Wisconsin and SCI's Michigan Involvement Committee, the Wildlife Division is continuing a five-year study of black bear expansion into southern Michigan (generally, south of a line from Bay City to Muskegon). So far, six bears have been collared with Global Positioning System transmitters, providing a wealth of information on movement patterns, dispersal directions and fine-scale habitat use. A similar project has been completed in agricultural areas of Wisconsin, where 19 yearling bears were radio-collared from 2006 to 2010. When completed, Michigan and Wisconsin data will be combined to further examine the important factors that influence the southern expansion of this species in the Great Lakes region.

## Black Bear Source/Sink Population Study

The division continues to work with MSU to use genetic techniques to help understand the northern Lower Peninsula (NLP) bear population. Using DNA from teeth extracted from harvested bears, as well as DNA taken from fur samples collected from barbed wire at baiting stations, the current project involves a large-scale mark-and-recapture analysis. Using many years of data, this study is designed to identify source areas (places from which bears expand their range) and

sink areas (places where mortality exceeds production, mostly from harvest) in a heavily hunted bear population. Preliminary results are identifying areas thought to be sources for the NLP population as well as some additional source areas previously unknown to biologists. This project will be completed in FY 2012.

## Predator/Prey Study

Upper Peninsula deer populations took a big hit in the mid-1990s after back-to-back severe winters, and they have not yet responded in the way many had hoped. As a result, the Wildlife Division, in conjunction with Mississippi State University, has begun a major research project designed to find out why. The project entitled "Role of Predators, Winter Weather and Habitat on White-Tailed Deer Fawn Survival" is studying fawn mortality and the role that four predators – bears, wolves, coyotes and bobcats – play in the equation. Winter weather can strongly affect deer populations, and the severity of winter weather varies considerably across the U.P. So it is important to examine the relationships among deer, weather, habitat and predators across this gradient of winter conditions. The project began in the low-snowfall zone, and researchers completed the fieldwork for this phase of the study in December. Researchers are analyzing the data and planning the second phase of the study that will take place in the mid-snowfall zone.



The research involves electronic collaring of both deer fawns and predators. Researchers monitor collared fawns to determine their survival and investigate mortality signals to determine the cause of death. They use Global Positioning System collars on predators to intensively monitor their movements and investigate locations where they spend significant time to determine if they have killed a fawn. The researchers also are conducting vegetative studies at fawn birth and mortality sites and collecting weather data to determine how these factors interact with predation. The research is being funded by SCI Foundation, SCI's Michigan

Involvement Committee and SCI's Northwoods Chapter. Additional funding is provided by U.P. Whitetails of Menominee County and Wildlife Unlimited of Delta County, as well as federal funds matched with state funds. Follow the study's progress on the project website at <http://www.fwrc.msstate.edu/carnivore/predatorprey/index.asp>.



## Wildlife Monitoring

Monitoring the abundance, distribution and composition of Michigan's game and non-game wildlife populations requires the efforts of virtually every Wildlife Division employee. Division staff members participate in survey activities to monitor wolves, upland game birds, elk, moose, deer, furbearers, bear, waterfowl, Karner blue butterflies, Kirtland's warbler, and frogs and toads throughout the state. Among other notable accomplishments in FY 2011, the Wildlife Division collected biological data on 31,388 harvested deer brought to check stations; counted 219 moose on 46 aerial survey plots for an estimate of 433 individuals in the winter herd; banded 4,270 waterfowl in cooperation with national efforts to monitor waterfowl harvest rates and movement patterns; received reports from 740 rural mail carriers on their observations of pheasant and turkey broods; and conducted necropsies on 517 birds and mammals to determine cause of death and identify potential wildlife health concerns. Results from field surveys helped inform the Moose Hunting Advisory Council, documented the continued recovery of Michigan's wolf population, documented the significance of ingested lead as a contributing factor to bald eagle mortality, and were used in conjunction with population modeling to support bear license quotas designed to result in a slight increase in the bear population in the U.P. The Wildlife Division also continues to evaluate data collection and analysis techniques.

## Sharp-tailed Grouse Monitoring Spotlight

The sharp-tailed grouse hunting season was reopened during fall 2010 after being closed for many years. The newly implemented Sharp-tailed Grouse Occupancy Survey will play a key role in assessing whether the population can continue to support a season by quantifying how much of the study area sharp-tailed grouse occupy. In FY 2011, four DNR staff members and one tribal cooperator completed three surveys for each of 37 one-square-mile sections. Observers followed standard protocols to identify (through visual or aural observation) whether each section was occupied by sharp-tailed grouse. Sharp-tailed grouse were detected within the boundaries of 22 (59 percent) of the 37 sections surveyed in 2011. Analysis of survey results to date supported maintaining the hunting season for 2011. The Wildlife Division is also managing habitat to benefit sharp-tailed grouse in the U.P. on an ongoing basis, and will be evaluating the adequacy of this survey as feedback within an adaptive management process that can inform future harvest and habitat-management decisions.

## Harvest and Opinion Surveys

The Wildlife Division's survey specialist initiated 17 surveys and completed 10 survey reports. Harvest survey reports completed include the 2009 and 2010 elk hunter surveys, 2010 spring turkey hunter survey, 2008 and 2009 otter and beaver harvest surveys, 2009 fisher and marten harvest survey, 2009 bobcat harvest survey, 2010 deer harvest survey, 2010 sharp-tailed grouse harvest survey and 2010 black bear hunter survey. Five additional reports are currently being finalized.

Harvest surveys provide biologists critical data to make wildlife management recommendations for the following years. To access the completed surveys, go to [www.michigan.gov/hunting](http://www.michigan.gov/hunting) and click on Wildlife Surveys and Reports. In addition, most surveys are available to be filled out online, and each year the DNR receives an increasing amount of information from internet responses.

## Harvest Survey Spotlight

The 2010 Black Bear Harvest Survey provides a good example of a harvest survey and the role these surveys play in management. The DNR provided all bear hunters the option to report information about their bear hunting activity voluntarily via the internet. Following the 2010 bear hunting season, a questionnaire was mailed to 3,915 randomly selected people that had purchased a bear hunting license and had not already voluntarily reported harvest information online. Hunters reported whether they hunted, number of days spent afield, whether they harvested a bear and their hunting methods. Hunters also reported on any interference they experienced and their satisfaction with the hunt. From survey responses, the Wildlife Division was able to estimate that 8,099 hunters spent nearly 55,127 days afield and harvested about 2,395 bears. Baiting was the most common hunting method used

to harvest bears, although hunters using dogs had greater hunting success than hunters using bait only. Statewide, about 54 percent of hunters rated their hunting experience as very good or good in 2010.

Estimates derived from harvest surveys and other surveys and indices are used to monitor population numbers and establish harvest regulation recommendations. Hunter satisfaction plays a role in determining desired bear populations. Changes in the average amount of effort a hunter must expend to harvest a single bear can indicate changes in the population. The average annual license success rate is used in a model to predict the number of licenses that should be issued in the future to achieve a desired level of harvest. Currently, a research project is underway to build a statistical reconstruction model to estimate bear population size over the past two decades; information from the harvest survey on hunter effort and hunting techniques will be used in that model. Bear regulations are adjusted every two years, and the harvest survey plays a critical role in that process.

## Frog and Toad Survey

Michigan is home to 13 native frog and toad species. In recent years, many observers have been concerned with the apparent rarity, decline and/or population die-offs of several of these species. Since 1996, when the annual frog and toad survey began, data has been submitted from all 83 Michigan counties, with an average of nearly 250 survey routes reporting each year. There are 42 routes that have submitted data all 16 years of the survey. The survey has confirmed that Michigan has stable populations for most species. Long-term trends require many years of data before significant and meaningful information can be calculated. Hundreds of volunteers help with this survey by doing the field work and recording their observations. The Wildlife Division coordinates the survey each year.



# Acquiring and Attending to Public Land

In FY 2011, the Wildlife Division acquired two parcels of land totaling 87 acres, using matching funds from the Michigan Natural Resources Trust Fund and Michigan waterfowl hunting licenses.

Providing critical coastal marsh protection for a wide variety of wildlife and fish species and access to great hunting and fishing opportunities, one 47-acre parcel includes half a mile of marshland frontage along Lake Huron's Saginaw Bay within the Wigwam Bay State Wildlife Area. Coastal marsh dominates the southerly two-thirds of the tract, and there is easy access to the land off of Big Creek Road. While the previous owner reserved a life estate on the house and surrounding area, the public is allowed to utilize an existing concrete boat ramp near the house.

Acquiring the other 40-acre parcel has been a long-time priority for the DNR, since it is completely surrounded by the Shiawassee River State Game Area in Saginaw County. Obtaining this land decreases by more than a mile the boundary area that the staff has to monitor and maintain. The site features 30 acres of former agricultural field and 10 acres of lowland hardwood forest. Plans are being developed to restore a portion of the site to native grassland, which will provide nesting cover for species like mallards, blue-winged teal and ring-necked pheasants.

Land-management efforts that required significant investments of time included reviews for: public land designated boundaries, the of use of horses on public land, land exchanges/disposals involving property on Beaver Island/Whiskey Island and Hillside Cemetery in the Minden City State Game Area, land-matter audits by the U. S. Fish and Wildlife Federal Aid Office and the Michigan Office of the Auditor General, and reorganization of acquisition processes within the Real Estate Division.

In FY 2011, the Public Lands Unit:

- coordinated the review of 27 field projects that required State Historic Preservation Office involvement;
- completed 42 boundary surveys that assisted field staff with trespass issues, timber sales or reestablishing property lines that had signs removed from vandalism. The crew also completed 10 topographic land surveys for engineering projects and another five surveys for other DNR divisions or state departments. Surveyors also provided consultation to field staff on dozens of survey issues;
- coordinated the removal of 11 building structures across the state;
- managed and issued eight statewide land use permits, mostly for research projects, and coordinated Wildlife Division response for numerous land-use permits issued by other DNR divisions;
- oversaw three field projects that required soil erosion and sedimentation control permits;
- provided guidance and assisted field staff through numerous cases of encroachment on Wildlife Division-administered land; and
- coordinated Wildlife Division response to four new easement requests on division-administered land, with another two in the process.



# Informing and Educating the Public

Public outreach has been identified as an important opportunity area with the Wildlife Division strategic plan. In 2011, the division wrote and distributed 75 press releases. Staff participated in many outdoor shows, organized and attended numerous public meetings, responded to media inquiries and attended many sportsmen's events. Staff also presented wildlife educational programs at schools, banquets, auxiliary clubs and other requested locations.

## Outdoor/Trade Shows

One way the Wildlife Division informs the public about its programs and initiatives is through informational and instructional booths at many hunting and outdoor-recreation tradeshows and expos. In 2011, division staff participated in 16 outdoor/trade shows:

- Huntin' Time Expo – January
- Deer and Turkey Spectacular – February
- Outdoorama – February
- Traverse City Hunting and Fishing Expo – March
- Earth Day celebration in the state capital – April
- Kirtland's Warbler Festival – May
- Au Sable River Expo – May
- Cerulean Warbler Festival – June
- Bird Day at Potter Park Zoo – June
- Osprey Fest – July
- Ag Expo – July
- 10th Annual Great Lakes Bat Festival – July
- U.P. State Fair – August
- Bay City Waterfowl Festival – August
- Woods 'N' Water – September
- Hawk Fest – September
- Pointe Mouillee Waterfowl Festival – September



## Wildlife Education Trailers

In FY 2011, each of the Wildlife Division's four educational trailers – mobile classrooms, housed in regional locations around the state, that help provide kids and adults the opportunity to experience Michigan's wildlife – got a face lift. The trailers were wrapped with bold colors and photos featuring a variety of Michigan species as well as kids discovering Michigan's wildlife treasures. Some new lesson plans, activities and supplies also were added to the trailers. Besides the 11 educational lesson plans (for K-12 students) and seven activity kits, there are also items like pelts, skulls, track replicas and scat replicas that kids can use to explore the different signs wildlife leaves behind for people to find.



Wildlife Division staff members spent 8,968 hours talking to the public one-on-one, amounting to 38,159 individual contacts, in FY 2011.

# Preparing Employees to Achieve

The Wildlife Division tailors employee training to individual and program needs. In 2011, the training coordinator prepared an annual training plan with input from staff, which included mandatory training requirements. After the Division Management Team reviewed and approved the plan, it was incorporated into the annual work planning process. The training plan emphasizes leadership skills, safety, professional development, compliance with state and federal regulations, use of technology, and continuing education in the evolving science of wildlife management.

The division's strategic plan specifies that a training program be developed by 2012 and fully implemented by 2015. A new training program called Career Development University (CDU) is in progress. Its goals include building and implementing a plan to provide training that helps the division address priorities in the GPS and increases capacity to provide all division training needs.

Desired outcomes include:

- division staff members understanding their training and career options;
- a retention program for new career employees;
- training focused on increasing capacity for employees to meet their job objectives;
- training to help staff increase skill to prepare them for advancement or transfer;
- events and programs that address succession planning;
- unique, structured opportunities (legacy track) for employees nearing retirement;
- a career-development portal that provides "one-stop shopping" for all career information; and
- an evaluation component for all portions of the CDU.

The new program will provide diverse training options for training methods that suit differing learning styles; effective instruction; continuous evaluation and adaptation for all division employees; and strategic training events and career development programs.

Wildlife Division staff members attended 178 unique training sessions, workshops and conferences in 2011, nearly all in the state of Michigan. The best-attended events included those covering firearms safety, the use of handheld computers for wildlife registration, waterfowl banding, wildfire response, furbearer ecology and management, invasive Phragmites, and Karner blue butterfly management. The safety-related training events included Commercial Drivers License training, MIOSHA safety training and first-aid/CPR/AED training.



# Equipping Staff for Effective Wildlife Management

In order to manage wildlife populations and habitat effectively, the Wildlife Division must provide certain business tools on an annual basis. One of the largest of these expenditures is division vehicles. A number of vehicles need to be replaced or serviced annually to keep the division fleet in safe and operable condition. Other necessary work items include computers (which also need replacement and upkeep), land-line phones, cell phones and internet connection services. In addition, field support staff members are responsible for inventorying and managing all these items.

Another support function relates to budget management and purchasing. Division staff members are responsible for projecting and monitoring budgets, reviewing purchase requests, making payments, reconciling accounts and auditing division transactions. Some additional costs that must be handled within this section are worker's compensation, unemployment payments and retirement pay-outs.

As the Wildlife Division prepared this report, it discovered instances where miscoding may have occurred. Many hours were coded to general administration that should have been coded directly to the project being conducted. For example, if staff prepared paperwork for a grass-planting habitat project, the hours spent working on forms to approve the purchase of seed, fertilizer, herbicide, etc. should be coded to habitat management and not general administration. This has been addressed through the division's strategic plan and new coding structure for 2012 will be reflected in the next annual report.

The hours tied to federal aid administration within this category relate to managing personnel in addition to grant administration. Within federal grants, there are funds available to cover human-resources activities such as hiring staff, performance evaluations, personnel matters and timekeeping. As the Wildlife Division has applied for and received additional competitive grants, the amount of effort spent on preparing applications and tracking accomplishments and expenditures on those grants has necessarily increased.



# Building and Sustaining Partnerships

Solid working relationships with partners are critical to the DNR developing and attaining its natural resources goals. The Wildlife Division continues to work with many state and federal agencies, universities and conservation organizations to cement that foundation. The Wildlife Division would like to thank all of its partners who provide such unbelievable support during a time of limited staff and resources. Please accept the division's apology (and let us know) if a partner was inadvertently left off the list.

- Abitibi Deer Management Cooperative
- Accessibility Advisory Council
- Adopt a Forest
- Alger County Fish and Game Alliance
- Allegan County Parks, Recreation, and Tourism
- Allegan County Road Commission
- Alpena County Conservation District
- Alpena County Sportsmen's Club
- American Tower Company, Crown Caste/ATT, and Skyline Services
- American Transmissions Co.
- Ameristep
- Archery Bear Hunters of Michigan
- Army Corps of Engineers
- Arthur Rylah Institute for Environmental Research
- Association of Fish and Wildlife Agencies
- Association of Fish and Wildlife Agencies - Technical Working Group on Trap Research
- Association of Fish and Wildlife Agencies - Climate Change Committee
- Au Sable Watershed Restoration Committee
- AuSable Institute of Environmental Science
- Baraga County UP Whitetails
- Bark River-Harris River High School
- Barry County Land Conservancy
- Bay Mills Indian Community
- Beaver Lake Club
- Belding Sportsman's Club
- Big Bay Sportsmen Club
- Black Swamp Conservancy
- Blandford Nature Center
- Boone and Crocket
- Boy Scouts of America
- Branch Area Career Center
- Brownstown Township
- Calumet-Keweenaw Sportsman Club
- Canada Creek Ranch
- Canada Goose Coalition
- Canadian Cooperative Wildlife Health Center
- Canadian Wildlife Service
- Central Lake Superior Land Conservancy
- Central Michigan University
- Chippewa County Shooting Association
- Chippewa Township
- Citizens Waterfowl Advisory Committee
- City of Big Rapids Department of Public Service
- City of Farmington Hills
- City of Fremont
- City of Hillsdale
- Clemson University
- Climate Change Collaboration with Wisconsin DNR
- Climate Change Collaborative
- Commemorative Bucks of Michigan
- Conservation Districts
- Conservation Fund
- Conservation Resource Alliance
- Consumers Energy
- Cooperative Weed Management Area
- Copperbelly Water Snake Working Group
- Croton Township, Newaygo County
- Crystal Falls Forest Park School Forest
- Dahlem Conservancy
- Darton Archery
- Delta County Conservation District
- Delta Waterfowl
- Department of Environmental Quality - Water Resources Division
- Detroit River International Wildlife Refuge
- Detroit Zoo
- Detroit Zoological Society
- Dickinson County Conservation District
- Dickinson County Road Commission
- Dow Chemical
- Drummond Island Sportsmen's Club
- DTE Energy
- Ducks Unlimited, Inc.
- East Dickinson Sportsmen's Club
- Eastern Michigan University
- Eastern Upper Peninsula Citizens' Advisory Council
- Eastern Upper Peninsula Cooperative Weed management association
- Eaton County Farm Bureau
- Ella Sharp Park
- Environmental Protection Agency
- Erie Shooting Club
- Escanaba High School
- Far East Sportsmen's Coalition
- Field Trial Association
- Finance and Operations Division
- Fire Resource Division
- Fish Point Wildlife Association
- Fisheries Division

- Flint River Watershed Coalition
- Forest Resources Division
- Frank's Sporting Goods, Morley, MI
- Friends of Gratiot-Saginaw State Game Area
- Friends of the Allegan County Equestrian Trail System
- Friends of the Detroit River
- Friends of the Maple River
- Friends of the Porkies
- Girl Scouts of America
- Gladstone High School
- Gladwin County Road Commission
- Gladwin Field Trial Area Grounds Committee
- Gogebic Community College
- Grand Haven Board of Light and Power
- Grand Rapids Peregrine
- Grand Traverse Band of Ottawa and Chippewa Indians
- Grand Traverse Conservation District
- Grand Traverse Regional Land Conservancy
- Grand Valley State University
- Gratiot Lake Conservancy
- Great Lakes Commission
- Great Lakes Energy and Wolverine Power Company
- Great Lakes Indian Fish & Wildlife Commission
- Great Lakes Lifeways Institute
- Habitat for Humanity
- Hannahville Indian Community
- Hannahville Indian School
- Harsens Island Waterfowl Association
- Hartwick HUNT
- Heinz Pfitzer
- Hiawatha Sportsman Club
- Hillman Sportsmen's Club
- Humane Society of the United States
- Huron Clinton Metropark Authority
- Huron Conservation District
- Huron Pines Conservation Association
- Huron Pines RC&D
- International Transmission Company
- International Wolf Center
- Iowa State University
- Iron County Conservation District
- Iron County Road Commission
- Kalamazoo Nature Center
- Karner Blue HCP Management Partners
- Karner Blue Recovery Team
- Keweenaw Bay Indian Community
- Keweenaw Land Trust
- Kirtland's Community College
- Kirtland's Warbler Recovery Team
- Knutson's Sporting Goods
- Lac Vieux Desert Band of Lake Superior Chippewa Indians
- Lake County Road Commission
- Lake Linden Hubbell Sportsman Club
- Lake Michigan Beachcombers group
- Lake St. Clair Advisory Committee
- Lake Superior Sportsman's Club
- Lake Superior State University
- Lapeer County Parks and Recreation
- Lapeer County Road Commission
- Lapeer Soil Conservation Service
- Law Enforcement Division
- Leelanau Whitetails
- Legacy Land Conservancy
- Leibniz Institute for Zoo and Wildlife Research, Berlin and Free University Berlin, Germany
- Little River Band of Ottawa Indians
- Little Traverse Bay Bands of Odawa Indians
- Long Point Waterfowl
- Louisiana State University
- Lovell's Hook and Trigger Club
- Mackinac Bridge Authority
- Marathon Pipeline
- Marketing and Outreach Division
- Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians (Gun Lake Band)
- Mecosta County Parks Department
- Mecosta County Rod and Gun Club
- Mecosta-Osceola Conservation District
- Meridian Township
- Michigan Animal Damage Control Association
- Michigan Association of Conservation Districts
- Michigan Association of Gamebird Breeders and Hunting Preserves
- Michigan Bat Working Group
- Michigan Bear Hunters Association
- Michigan Botanical Club
- Michigan Bow Hunters Association
- Michigan Building & Construction Trades Council
- Michigan Climate Coalition, formerly MSU Climate and Bioenergy Fellows
- Michigan Crossbow Federation
- Michigan Department of Agriculture & Rural Development
- Michigan Department of Environmental Quality
- Michigan Department of Transportation
- Michigan Duck Hunters Association and 7 Local Chapters
- Michigan Farm Bureau
- Michigan Field Dog Trial Association
- Michigan Gun Owners
- Michigan Hawking Club
- Michigan Humane Society
- Michigan Hunters Alliance
- Michigan Hunting Dog Federation
- Michigan Invasive Species Working Group
- Michigan Karner Blue Butterfly Working Group
- Michigan Mountain Biking Association
- Michigan Natural Features Inventory
- Michigan Nature Association
- Michigan Natural Resources Trust Fund
- Michigan Rabies Working Group
- Michigan Sharp-tail Grouse Association

- Michigan Sporting Dog Association
- Michigan State Extension
- Michigan State Fox Hunters
- Michigan State Police
- Michigan State United Coon Hunters
- Michigan State University
- Michigan State University - College of Veterinary Medicine
- Michigan State University - Department of Fish and Wildlife
- Michigan State University - Fish and Wildlife Club
- Michigan State University - Museum
- Michigan State University - Kellogg Biological Station
- Michigan State University - Partners in Ecosystem Research and Management
- Michigan Technological University
- Michigan Township Association
- Michigan Trappers and Predator Callers Association
- Michigan United Conservation Clubs
- Michigan United Coon Hunters Association
- Michigan Waterfowl Association
- Michigan Waterfowl Legacy
- Michigan Wetland Association
- Michigan Wild Turkey Hunters Association
- Michigan Wolf Forum
- Michigan's AIS Core Team
- Mid Michigan Independent Trappers
- Middleville Fire Department
- Mid-Forest Lodge
- Mid-Michigan Sportsmen's Alliance
- Mid-Michigan United Sportsmans' Alliance
- Midwest Association of Fish and Wildlife Agencies - Furbearer Technical Working Group
- Minnesota Department of Natural Resources
- Mississippi Flyway Council
- Mississippi State University
- Missouri Department of Conservation
- Mitchell's Satyr Butterfly Working Group
- Monroe Conservation District
- Montmorency County Conservation Club
- Montmorency County Conservation District
- MOR Archery
- Muskegon County
- Muskegon County Wastewater
- National Animal Disease Center, USDA-ARS
- National Oceanic and Atmospheric Administration
- National Wild Turkey Federation and 93 Local Chapters
- National Wildlife Control Operators Association
- National Wildlife Federation
- Natural Resources Conservation Service
- Negaunee Rod and Gun Club
- Newaygo County Conservation District
- North American Waterfowl Management Plan Steering Committee (Michigan)
- North Country Trail
- Northern Great Lakes Fur Harvesters
- Northern Illinois University
- Northern Michigan University
- Northland Sportsmen's Club
- Northwoods Collaborative
- Northwoods Wholesale Outlets
- Northwoods Wildlife Hospital and Rehabilitation Center
- Nottawaseppi Huron Band of Potawatomi Indians
- Nuisance Animal Control Training Club
- Nuisance Wildlife Control Operators Association
- Numerous Private Landowners
- Oakland County Parks
- Office of Legal Services
- Ohio Department of Natural Resources
- Ohio Division of Wildlife
- Ontario Ministry of Natural Resources and Trent University
- Ontonagon Valley Sportsman Club
- Oregon Dept Fish and Wildlife
- Organization for Bat Conservation
- Osprey Watch of Southeast Michigan
- Ottawa County Invasive Species Control Group
- Ottawa Sportsman Club
- Outdoor Discovery Center
- Parks and Recreation Division
- Parks Canada
- Pheasants Forever and 5 Local Chapters
- Pierce Cedar Creek
- Pigeon River Advisory Council
- Pigeon River Country Association
- Piping Plover Working Group
- Plum Creek
- Pokagon Band of Potawatomi Indians
- Portage Lake Sportsman Club
- Potter Park Zoo
- Presque Isle County Conservation District
- Presque Isle County Sportsmen's Club
- Pte. Mouillee Waterfowl Festival
- Purdue University
- Quail Forever
- Quality Deer Management Association and 6 Local Chapters
- Raber Area Sportsmen's Club
- Raptor Education Group, Inc
- Reese High School's "Out of door Club"
- Rocky Mountain Elk Foundation
- Roscommon County Corrections Department
- Ruffed Grouse Society and 2 Local Chapters
- Safari Club International and 2 Local Chapters
- Safari Club International Foundation
- Safari Club International Michigan Involvement Committee
- Saginaw Basin Land Conservancy
- Saginaw Bay Watershed Initiative Network
- Saginaw Chippewa Indian Tribe
- Saginaw Field & Stream Club

- Saginaw Valley State University
- Sagola Township Sportsmen's Club
- Sault Area Sportsmen's Club
- Sault Ste. Marie Tribe of Chippewa Indians
- Seney National Wildlife Refuge
- Shiawassee Flats
- Shiawassee Flats Citizens and Hunters Association
- Shiawassee National Wildlife Refuge
- Sierra Club
- Six Rivers Land Conservancy
- Society of American Foresters
- Soo Area Sportsmen Club
- South Carolina Flyway Foundation
- Southern Illinois University
- Southern Mecosta Whitetail Management Association
- Southwest Michigan Land Conservancy
- Sportsman's Forum Groups
- Sportsmen Against Hunger group
- Sportsmen of Michigan
- Sportspersons Ministries International
- Springfield Township Parks and Recreation
- St. Clair Flats Hunting and Retriever Club
- St. Clair Flats Waterfowlers, Inc
- Straits Area Sportsmen's Club
- Taquamenon Area Sportsman's Club
- The Audobon Society and 4 Local Chapters
- The Houghton Lake Association
- The Michigan Audubon Society
- The Nature Conservancy
- The Wildlife Recovery Association
- Timber Wolf Alliance
- Tip of the Mitt Watershed Council
- Tittabawassee River NRDA Trustees
- Toledo Zoo
- TransCanada ANR Pipeline
- Turtle Lake Club
- Tuscola Conservation District
- University of Michigan Flint
- U.P. Bear Houndsmen Association
- U.P. Bow Hunters
- U.P. Fish & Game Alliance
- U.P. Land Conservancy
- U.P. Resource Conservation District
- U.P. Sportsmen's Alliance
- U.P. Trappers Association
- U.P. Trappers District 2
- U.P. Trappers District 3
- U.P. Whitetails and 7 Local Chapters
- U.S. Department of Agriculture
- U.S. Department of Agriculture - APHIS - Wildlife Services
- U.S. Department of Agriculture – Conservation District
- U.S. Fish and Wildlife Service
- U.S. Fish and Wildlife Service Detroit International Wildlife Refuge
- U.S. Fish and Wildlife Service Landscape Conservation Cooperative
- U.S. Fish and Wildlife Service - Partners for Fish and Wildlife Program
- U.S. Fish and Wildlife Service Region 3
- U.S. Fish and Wildlife Service -Upper Mississippi River/ Great Lakes Region Joint Venture
- U.S. Forest Service
- U.S. Forest Service - Hiawatha National Forest
- U.S. Forest Service - Huron National Forest
- U.S. Forest Service - Manistee National Forest
- U.S. Forest Service - Ottawa National Forest
- U.S. Geological Survey - Great Lakes Science Center
- U.S. Geological Survey - National Wildlife Health Center
- U.S. Geological Survey - Arkansas Cooperative Wildlife Research Unit
- U.S. Geological Survey - Iowa Cooperative Wildlife Research Unit
- U.S. Park Service-Isle Royale
- U.S. Park Service - Pictured Rocks
- United Sportsmen's Alliance
- United Sportsmen's Club - Merriman
- University of Minnesota
- University of Notre Dame
- University of Washington
- University of Wisconsin
- Washtenaw Audubon Society
- Waterfowl USA
- Wayne County Road Commission
- Wayne State University
- We-energies
- West Branch Sportsmen Club
- West Michigan Land Conservancy
- Western Upper Peninsula Citizens' Advisory Council
- Wetland Working Group
- Whitetails Unlimited
- Whitetails Unlimited of Ontonagon County
- Wildlife Habitat Council / Stewardship Network
- Wildlife Mangement Insitute
- Wildlife Unlimited
- Wildlife Unlimited of Delta County
- Wildlife Unlimited of Dickinson County
- Wildlife Unlimited of Dickinson County
- Wildlife Unlimited of Iron County
- Wind Energy HCP
- Winous Point
- Winous Point Marsh Conservancy
- Wisconsin Department of Natural Resources
- Wolverine Sportsman Club
- Woodcock Unlimited
- Yankee Springs Trail Riders

# Funding the Wildlife Division – An Overview

Traditional funding for wildlife conservation continues to decline. Most of the Wildlife Division’s funds come from a user-pay system – hunters and trappers footing most of the bills. With no general hunting and trapping license increases since 1997, the Wildlife Division has found it necessary to seek competitive grant funding in order to continue delivering a high level of wildlife conservation. Sporadic in nature and not stable on an annual basis, competitive grant funding is unpredictable and the application processes and management of these grants can be complicated and time-consuming. The Wildlife Division has been quite successful in obtaining grants, but each grant comes with additional monitoring and reporting requirements and the unavoidable need to assign staff to these responsibilities. Currently, the division receives and manages funding from more than 40 federal grants. As recognized in the Wildlife Division strategic plan, it is critical that the division works closely with partners to secure stable, long-term funding in order to sustain wildlife populations into the future.

The following table outlines Wildlife Division expenditures for FY 2011.

Wildlife Expenditures by Fund		<b>Amount</b>
	Federal (annual)	\$10,644,067
	Federal (competitive)	\$1,819,082
	Revenue from Pittman Robertson Lands	\$456,669
	Game and Fish	\$8,308,240
	Other State Funds	\$685,461
	DRIP	\$2,142,302
	Turkey	\$1,384,397
	Nongame	\$435,302
	General Fund	\$1,613,617
	<b>Total Wildlife Expenditures</b>	<b>\$27,489,136</b>

# Appendix A: 2011 Financial Overview by Category and Funding Source

The financial information within this section is organized into specific categories. To better understand the work associated with each category refer to the page number listed by each category. In addition, Appendix B has very specific information that also relates to these categories and details the tasks that the Division conducted.

## Habitat Management Expenditures by Fund

*Refer to Page 4*

	<b>Amount</b>
Federal (annual)	\$1,262,329
Federal (competitive)	\$1,578,393
Game and Fish	\$902,645
Other State Funds	\$87,841
DRIP	\$1,012,586
Turkey	\$845,492
Nongame	\$140,349
<b>Total Expenditures</b>	<b>\$5,829,635</b>

## Species Management and Regulation Expenditures by Fund

*Refer to Page 14*

	<b>Amount</b>
Federal (annual)	\$2,308,537
Federal (competitive)	\$9,091
Revenue from Pittman Robertson Lands	\$2,106
Game and Fish	\$1,118,308
Other State Funds	\$54,398
DRIP	\$183,329
Turkey	\$150,289
Nongame	\$69,944
General Fund	\$429
<b>Total Species Expenditures</b>	<b>\$3,896,432</b>

## Endangered Species Expenditures by Fund

*Refer to Page 19*

	<b>Amount</b>
Federal (annual)	\$386,843
Federal (competitive)	\$40,100
Game and Fish	\$40,166
Nongame	\$42,795
General Fund	\$87,594
<b>Total Expenditures</b>	<b>\$597,498</b>

## Wildlife Recreation Expenditures by Fund

*Refer to Page 20*

	<b>Amount</b>
Federal (annual)	\$1,886,050
Federal (competitive)	\$87,832
Revenue from Pittman Robertson Lands	\$454,563
Game and Fish	\$888,994
Other State Funds	\$12,327
DRIP	\$48,403
Turkey	\$33,760
<b>Total Expenditures</b>	<b>\$3,411,928</b>

**Wildlife Health  
Expenditures by Fund**

*Refer to Page 23*

	<b>Amount</b>
Federal (annual)	\$331,434
Federal (competitive)	\$28,705
Game and Fish	\$74,607
General Fund	\$1,247,856
<b>Total Expenditures</b>	<b>\$1,682,603</b>

**Wildlife Permits  
and Privately Owned  
Cervid (POC)  
Expenditures by Fund**

*Refer to Page 25*

	<b>Amount</b>
Game and Fish (wildlife permits other than POC)	\$103,758
Other State Funds (POC)	\$52,410
General Fund (POC)	\$88,965
<b>Total Expenditures</b>	<b>\$245,133</b>

**Planning Expenditures  
by Fund**

*Refer to Page 26*

	<b>Amount</b>
Federal (annual)	\$677,639
Federal (competitive)	\$13,720
Game and Fish	\$631,884
Other State Funds	\$67,659
DRIP	\$433,339
Turkey	\$61,937
Nongame	\$13,368
General Fund	\$18,593
<b>Total Expenditures</b>	<b>\$1,918,138</b>

**Research Expenditures  
by Fund**

*Refer to Page 28*

	<b>Amount</b>
Federal (annual)	\$596,038
Game and Fish	\$622,292
DRIP	\$34,454
Turkey	\$22,789
Nongame	\$47,014
General Fund	\$14,245
<b>Total Expenditures</b>	<b>\$1,336,832</b>

**Land Acquisition  
and Administration  
Expenditures by Fund**

*Refer to Page 31*

	<b>Amount</b>
Federal (annual)	\$461,783
Federal (competitive)	\$61,241
Game and Fish	\$159,281
Other State Funds	\$400,242
DRIP	\$1,200
Nongame	\$65
<b>Total Expenditures</b>	<b>\$1,083,813</b>

**Public Outreach  
Expenditures by Fund**

*Refer to Page 32*

	<b>Amount</b>
Federal (annual)	\$508,360
Game and Fish	\$201,139
Other State Funds	\$100
Turkey	\$13,662
Nongame	\$7,356
<b>Total Expenditures</b>	<b>\$730,616</b>

**Training and  
Conferences  
Expenditures by Fund**

*Refer to Page 33*

	<b>Amount</b>
Federal (annual)	\$359,835
Game and Fish	\$353,176
Other State Funds	\$6,392
DRIP	\$14
Turkey	\$26,464
Nongame	\$1,202
<b>Total Expenditures</b>	<b>\$747,084</b>

**Business Tools &  
Support Expenditures  
by Fund**

*Refer to Page 34*

	<b>Amount</b>
Federal (annual)	\$1,865,219
Game and Fish	\$3,211,991
Other State Funds	\$4,091
DRIP	\$428,976
Turkey	\$230,005
Nongame	\$113,210
General Fund	\$155,934
<b>Total Expenditures</b>	<b>\$6,009,426</b>

# Appendix B: Planned and Accomplished Tasks

The Wildlife Division invested staff time in the following tasks:

## Habitat Management:

- 57,634 hours on public-land habitat management; and
- 9,371 hours on private-land habitat management.

## Species Management and Regulations:

- 30,293 hours working on species management and regulations;
- 27,140 hours on wildlife population;
- 3,965 hours banding waterfowl (the Wildlife Division planned to band 5,654 birds and banded only 3,772 due to difficulty finding birds);
- 2,933 hours on wildlife harvest/opinion surveys (the Wildlife Division planned to conduct 11 surveys and accomplished 15);
- 1,911 hours on animal relocation;
- 1,034 hours to produce five of the hunting information digests;
- 1,013 hours to maintain 368 wildlife structures (the Wildlife Division planned to maintain 399);
- 1,070 hours on the Woodcock and Young Forest Initiative;
- 856 hours on the Natural Heritage Program; and
- 894 hours on depredation investigations.

## Threatened and Endangered Species:

- 1,198 hours on threatened and endangered (T&E) species reviews;
- 415 hours on the piping plover project;
- 144 hours on reviewing the state list of T&E species;
- 1,779 T&E environmental requests, 103 of which determined that the projects have potential impacts; and
- 114 T&E permits issued, modified, and/or renewed.

## Wildlife-Related Recreation

### Maintenance and construction:

- 10,778 hours maintaining 151 dams, 177 dike miles, 139 ditch miles, 35 pumps and 239 water-control structures (150 dams, 145 dike miles, 142 ditch miles, 35 pumps and 239 water-control structures were planned);
- 11,281 hours maintaining 130 buildings (195 were planned);
- 9,522 hours maintaining/repairing 320 pieces of equipment (277 were planned);
- 5,583 hours maintaining 1,264 parking lots (1,245 were planned);
- 3,134 hours maintaining 22,767 signs (22,315 signs were planned);
- 2,428 hours maintaining 192 miles of roads and 362 miles of trails (193 miles of roads and 361 miles of trails were planned);
- 5,352 hours on managed hunting and trapping;
- 1,837 hours maintaining 1,600 barriers/gates (1,585 barrier/gates were planned);
- 2,037 hours maintaining other types of structures;
- 958 hours on four shooting ranges;
- 997 hours removing refuse on 4,343 acres (8,284 acres were planned);
- 196 hours maintaining six bridges (six bridges were planned);
- 47 hours on field trials; 16 trials were accomplished (16 were planned);
- 104 hours constructing new parking lots; and
- 130 hours constructing signs;

### Limited-license hunting opportunities:

- 5,824 hours of work on customer service, communications and administration for limited-license hunts, serving 410,000 hunt participants; and
- 416 hours of work on license sales analysis and improvements to the department's retail licensing system.

**Wildlife Health:**

- 18,983 hours on bovine tuberculosis efforts;
- 9,296 hours on chronic wasting disease;
- 3,586 hours on avian influenza efforts; and
- 3,387 hours on wildlife health surveys.

**Privately Owned Cervids and Wildlife Permits:**

- 7,439 hours on permitting;
- 1,801 hours on privately owned cervid audit inspections (the Wildlife Division planned 191 inspections, and 166 were accomplished); and
- 1,034 hours of privately owned cervid audit training, reporting, planning, administration, inspections and data management.

**Planning:**

- 10,392 hours on northern forest planning, primarily related to planning management activities in state forest compartments;
- 2,569 hours on strategic planning to develop the GPS and provide long-range direction for division activities;
- 4,517 hours on regional statewide planning, mostly for ecoregional and regional state forest planning;
- 5,288 hours on state game area planning (the Wildlife Division planned to write nine master plans and completed four, while the rest are in progress);
- 2,345 hours on planning private-lands management, in addition to the Landowner Incentive Program;
- 1,514 hours on annual work plans to ensure that workloads are aligned with budgets and established priorities;
- 478 hours on Landowner Incentive Program planning;
- 975 hours on operational planning (the Wildlife Division planned to write 24 operational plans and accomplished writing 26 plans);
- 770 hours on invasive species program planning;
- 740 hours on developing private-land management plans;
- 390 hours on State Wildlife Grant implementation planning;
- 649 hours in Wildlife Action Plan review and revision; and
- 280 hours on Michigan's statewide Ecosystem Plan.

**Research:**

- 2,811 hours on design and implementation plans for research projects;
- 2,082 hours doing habitat inventory on 72,917 acres (105,494 acres were planned);
- 970 hours on biological surveys and community classifications by evaluating two models.

**Land Matters:**

- 11,902 hours on land matter issues.

**Public Outreach:**

- 8,968 hours talking to the public one-on-one, amounting to 38,159 individual contacts;
- 1,542 hours planning, organizing or attending major outreach events;
- 732 hours on media contacts;
- 200 hours developing outreach materials; and
- 159 hours on wildlife management outreach.

**Training and Conferences:**

- 8,669 hours on staff training and conferences.

**Business Tools and Support:**

- 49,480 hours administering federal aid;
- 21,673 hours on financial oversight and process administration;
- 7,749 hours on research administration;
- 3,384 hours on State Wildlife Grant administration; and
- \$1,135,433 to provide and maintain the Wildlife Division's vehicle fleet.

# Appendix C: 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 can count on the monies being available and can plan for funding staff and long-term projects, as the level of funding is relatively predictable.

**Pittman-Robertson Wildlife Restoration Act Grants (PR)** – The U.S. Fish and Wildlife Service administers this grant program that provides states with monies to manage wild birds and mammals. Funds for this program come from revenues collected by the U.S. Internal Revenue Service from an excise tax on the manufacture of certain types of sporting goods. The sporting goods covered by the Act are specified in the Internal Revenue Code, 26 U.S.C. §§ 4161(b) and 4181, and include most types of firearms, ammunition, and bows and arrows.

The monies in this fund are automatically apportioned to the 50 states based on a formula that considers both total land area and the number of certified license-buyers in each state. Additionally, funds are provided for the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands, American Samoa and the Northern Mariana Islands.

In order to spend these funds, states and territories must match the federal portion with non-federal funds on a ratio of 75 percent federal to 25 percent non-federal. Michigan, as with most states, uses fees collected from the sale of hunting licenses as the non-federal match for these grants.

**State Wildlife Grants (SWG)** – The State Wildlife Grant Program, administered by the U.S. Fish and Wildlife Service with funding from Outer Continental Shelf oil and gas royalty revenues, assists states by providing funding for the development and implementation of programs that benefit designated Species of Greatest Conservation Need. Each state develops its own list of these species, typically those that are not hunted or fished. The purpose of this program is to assist the states in keeping common species common and stopping the decline of rare species to prevent them from being listed as threatened or endangered.

Although these funds have been provided every year since 2002, they are appropriated through the annual federal budget process. Unlike Pittman-Robertson funds, SWG funds are not automatically appropriated; consequently, the Wildlife Division must wait for each year's federal budget to know if they will be available. These funds also require a non-federal match, with states required to provide 50 percent of the funds for implementation projects and 25 percent of the funds for planning projects.

## Federal Competitive Funds

These are funds 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 of them 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.

Following are all competitive fund sources that the Wildlife Division had expenditures from during FY 2011:

**Competitive State Wildlife Grants (cSWG)** – This is the competitive portion of the State Wildlife Grant Program, administered by the U.S. Fish and Wildlife Service for the development and implementation of programs that benefit designated Species of Greatest Conservation Need. Of the total amount of SWG funds appropriated each year by the federal government, a portion is reserved for a competitive program to encourage projects with regional or multi-state benefits. These grants require at least a 25 percent non-federal match, with preference given to those projects with an even higher non-federal match. Michigan and its partners received four grants from this program for work in 2010 and 2011.

**Landowner Incentive Program (LIP)** – This U.S. Fish and Wildlife Service-administered program assists states in establishing or supplementing programs that protect and restore habitats on private lands, which are to benefit species on the federal

endangered species list, those proposed or candidates to be listed, or other at-risk species. The program provides technical and financial assistance to private landowners for habitat protection and restoration. There is a minimum match requirement of 25 percent non-federal funds; however, to get the Wildlife Division's proposals ranked higher, the division agreed to match most of these grants with 35 percent non-federal funds. The federal government has not appropriated any funds to this program since 2008. As such, all funds for this program were exhausted by Dec. 31, 2010.

**Section 6 of the Endangered Species Act (ESA)** – This grant program is administered by the U.S. Fish and Wildlife Service, and in order to compete for these funds, states must have a cooperative program for the conservation of endangered and threatened species with the Secretary of the Interior. These funds can be used for the acquisition, enhancement and protection of habitat for federally listed species, recovery and conservation of federally listed species, and surveys and research. This fund requires a 25 percent non-federal match.

**National Coastal Wetlands Conservation (NCWC) Grants** – NCWC grants must be used to acquire, restore or enhance coastal wetlands and adjacent uplands to provide long-term conservation benefits to fish, wildlife and their habitat. Administered by the U.S. Fish and Wildlife Service, the grants require a 50 percent non-federal match. The Wildlife Division has used NCWC funds for land acquisition and management, and to fund partnership projects with other conservation organizations.

**Great Lakes Fish and Wildlife Restoration Act Grant (GLFWRA)** – This grant program is administered by the U.S. Fish and Wildlife Service to encourage cooperative conservation, restoration and management of fish and wildlife resources and their habitats in the Great Lakes basin. These grants have a minimum 25 percent non-federal match requirement, and projects may take multiple years to complete.

**U.S. Department of Agriculture (USDA) – Chronic Wasting Disease (CWD)** – These federal funds administered by USDA's Animal and Plant Health Inspection Services (APHIS) are made available to states based on the severity of threat of CWD occurrence. Through a cooperative agreement, states may receive a predetermined amount of funds for CWD surveillance based on the state's threat level. There are no non-federal match requirements; however, these funds do not cover the entire state cost of conducting CWD surveillance in free-ranging white-tailed deer, elk and moose.

**U.S. Department of Agriculture (USDA) – Avian Influenza (AI)** – These federal funds, administered by USDA's Animal and Plant Health Inspection Services (APHIS) have been available to states to monitor for the presence of avian influenza in wild birds. States have been eligible to apply for a predetermined portion of nationally available funds based on the severity of threat of avian influenza occurrence. Through a cooperative agreement, Michigan has used these funds primarily to monitor for the disease in waterfowl while banding ducks and geese and from hunter-harvested ducks and geese. There are no non-federal match requirements; however, 2010 was the last year of funding provided for these activities.

**U.S. Department of Agriculture (USDA) – Conservation Innovation Grant (CIG)** – These grants, administered by the National Fish and Wildlife Foundation for USDA, are intended to stimulate the development and adoption of innovative conservation approaches and technologies while leveraging federal investment in environmental enhancement and protection. In any given year, competition for these funds is open only to certain ecological areas and states based on priorities established by USDA. These grants require at least a 50 percent non-federal match, and recipients may have up to three years to complete approved projects.

**Michigan Department of Agriculture and Rural Development (MDARD) – Commerce Credit Corporation (CCC)** – This funding comes from MDARD for the additional monitoring efforts required following the discovery of bovine tuberculosis (TB) in white-tailed deer in Shiawassee and Iosco counties. These counties are outside the five-county TB zone; therefore, specific monitoring is required. The funding is not guaranteed each year.

## 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. By law, expenditures from this fund can only be used for fish and wildlife management programs. Management, research and enforcement of fishing and hunting laws and acquisition of lands to be used for hunting and fishing purposes are examples of ways this fund is used.

**Game and Fish Protection Fund – Deer Habitat (DRIP)** – This legislatively established fund comes from \$1.50 of each deer license sold. By law, expenditures from this fund can only be used for improving and maintaining habitat for deer and for the acquisition of lands for an effective program of deer habitat management.

**Game and Fish Protection Fund – Turkey Permit** – This legislatively established fund comes from a portion of each wild turkey license sold (\$9.50 resident, \$1 senior resident and \$58 non-resident). By law, expenditures from this fund can only be used for scientific research and survey work on wild turkeys and wild turkey management.

**Game and Fish Protection Fund – Managed Waterfowl Area Permits** – This legislatively established fund comes from the sale of daily (\$4) and seasonal (\$13) hunting permits issued for state-managed waterfowl areas. By law, expenditures from this fund can only be used to operate, maintain and develop managed waterfowl areas.

**Game and Fish Protection Fund – Waterfowl License** – Historically known as duck stamp revenue, this legislatively established fund comes from \$3.50 of each waterfowl license sold. By law, expenditures from this fund can only be used to acquire wetlands and other lands to be managed for the benefit of waterfowl.

**Game and Fish Protection Fund – Revenue from Pittman-Robertson-Acquired Land** – Under an agreement with the U.S. Fish and Wildlife Service, this fund is derived from program income earned from commercial activities that are incidental to wildlife management lands acquired with federal Pittman-Robertson grants. The source of this income is primarily through timber sales conducted to achieve particular habitat management objectives. Euphemistically referred to as 140-D funds by the Wildlife Division, after the original identifier of the federal grant where the disposition of these funds is described, they are used for emergency and non-routine maintenance needs of state game areas.

**Nongame Fish and Wildlife Fund/Non-game Fish and Wildlife Trust Fund** – This legislatively established fund comes primarily through Michigan’s Conserve Wildlife Habitat license plate and the sale of certain merchandise by the Wildlife Division. By law, expenditures from this fund can only be used for the research and management of non-game fish and wildlife and designated endangered animal and plant species. Non-game fish and wildlife means those free-ranging species not ordinarily taken for sport, fur or food.

**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 three programs – disease monitoring, privately owned cervidae oversight and the natural heritage program.

## **Additional Grants**

**National Shooting Sports Foundation (NSSF) Hunting Heritage Partnership** – Through its Hunting Heritage Partnership (HHP) program, the NSSF provides grants to state fish and wildlife agencies that support a variety of state-level recruitment and retention programs. These funds help states expand hunting opportunities, keep current hunters active and recruit new hunters with the goal of preserving the future of America’s hunting heritage. The grant dollars were used to upgrade and market the Mi-Hunt web-based application.

### **USDA Farm Service Agency – Voluntary Public Access and Habitat Incentive Program**

The Voluntary Public Access and Habitat Incentive Program (VPA-HIP) provides grants to state and tribal governments to encourage owners and operators of privately held farm, ranch and forest land to voluntarily make the land available for access by the public for wildlife-dependent recreation, including hunting, fishing, and other compatible recreation and to improve fish and wildlife habitat on their land. The DNR is utilizing VPA-HIP funds to expand its Hunting Access Program to provide more opportunities for hunting in southern Michigan.

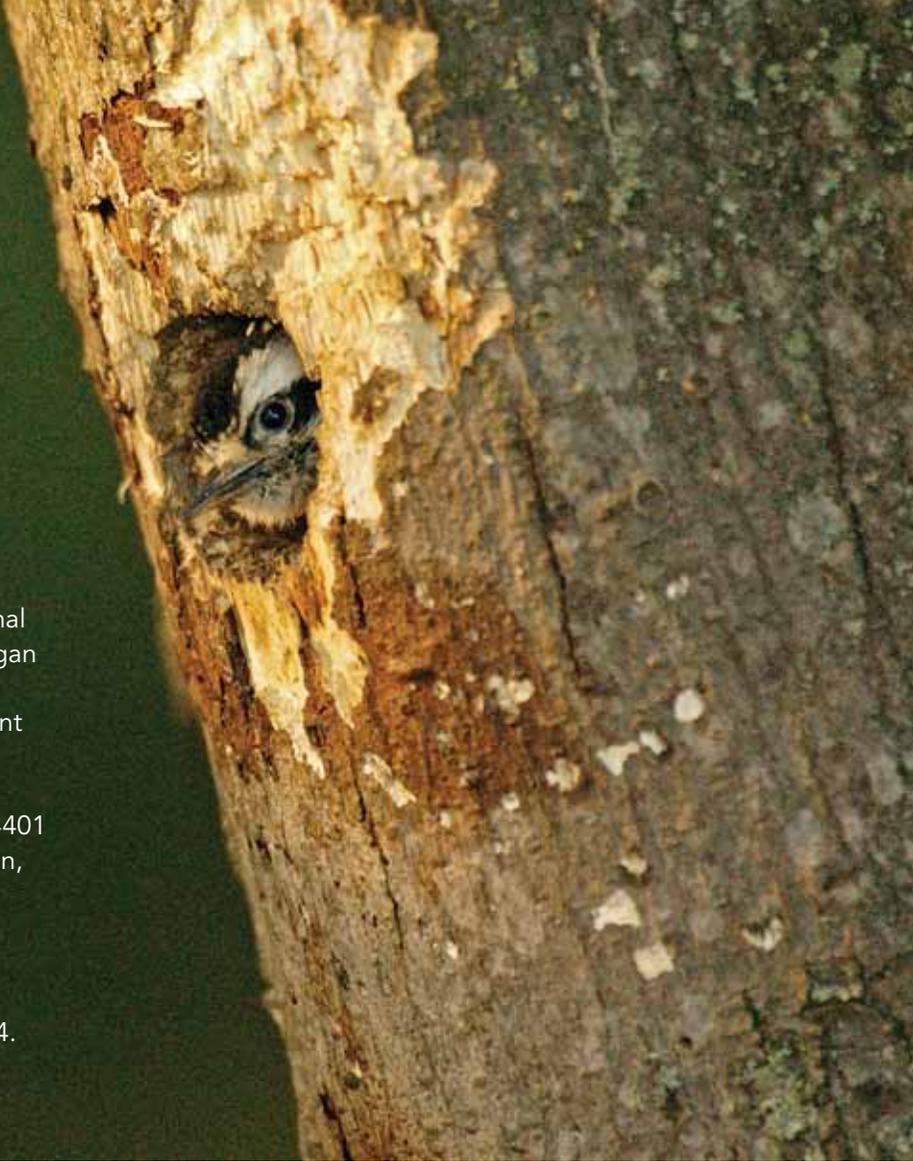




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