

SECTION FIVE: OUTDOOR RECREATION

GOAL: MINNESOTA WILL HAVE A HIGH-QUALITY AND DIVERSE OUTDOOR RECREATION SYSTEM THAT MEETS THE NEEDS OF MINNESOTANS

DNR and our partners will work for a future where Minnesotans' deep affection for nature-based recreation cultivates a stewardship ethic that supports a high-quality, healthy outdoor recreation system. Enthusiasts abound and have ready access to public lands and waters. Healthy lands and waters support hiking, ATVing, fishing, swimming, spending time with friends and family, and other activities. This goal envisions:



• **Minnesotans have increased connections with the outdoors, particularly families, young adults, and children.** Our longstanding constituents continue to

participate in outdoor recreation, while there is increased participation among those who have not traditionally used our facilities and resources.

• **Natural resources provide a diverse, sustainable range of outdoor recreation opportunities.** Recreation landscapes span the spectrum from primitive areas to heavily used urban trails. Natural features are celebrated and protected. Fish, wildlife, and plants are conserved.

• **A comprehensive outdoor recreation system serves all Minnesotans.** People of all backgrounds, interests, abilities, and geographic settings have access to high-quality recreational opportunities. They can easily find the information needed to access these opportunities, as well as the knowledge and skills to enjoy them.



Gooseberry Falls State Park, on Lake Superior, is known for its spectacular waterfalls and scenic views, north woods wildlife, and historic Civilian Conservation Corps structures. The visitor center is a popular attraction year round.

• **Recreational facilities and settings provide safe, high-quality visitor experiences.** Programs, signs, and other resources help users become aware of, understand, and enjoy outdoor recreation opportunities. Educational programs promote safe behaviors that lead to increased participation and memorable experiences.

• **Minnesotans have a lifelong stewardship ethic.** Conservation education is woven through formal and informal education. DNR, informed citizens, and community leaders work together to care for Minnesota's natural resources.

DNR - WHAT WE DO

Manage an outdoor recreation system established by the Minnesota Legislature:

- state parks
- state recreation areas
- state trails
- state scientific and natural areas
- state wilderness areas
- state forests
- state wild and scenic rivers
- state water access sites
- state wildlife management areas
- state aquatic management areas
- other units, including small craft harbors

POSITIONING DNR FOR THE FUTURE

- DNR's new Parks and Trails Division focuses on connecting people to the outdoors, leveraging partnerships, and garnering support for environmental stewardship while promoting economic vitality.
- DNR is using market research to develop new products and modify existing products to increase per-capita and next generation engagement in outdoor recreation.
- DNR is leveraging partnerships with the private sector such as REI, the Minnesota Twins, Best Buy, and Minnesota Public Radio.
- A 10 year Strategic Parks and Trails Plan and a 10-25 year state and regional outdoor recreation plan will guide future investments in developing and improving state and regional parks and trails to meet the changing needs and expectations of Minnesotans.

CRITICAL TRENDS

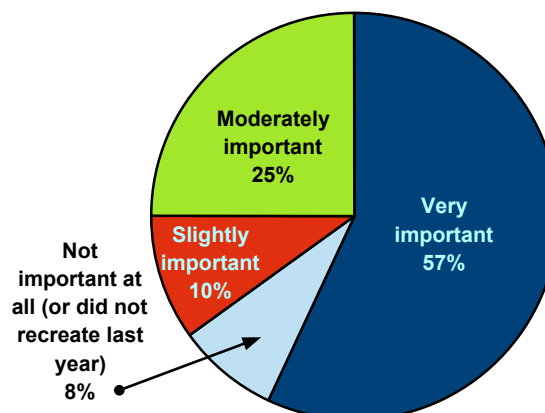
Outdoor recreation today is experiencing a number of trends that will affect our ability to turn this vision into reality.

First is a **change in participation** in certain traditional activities. After some 50 years of growth, nature-based recreation turned a corner in the 1990s and is now declining on a per-capita basis in Minnesota and nationally. Per-capita visits to state and national parks, use of state trails, hunting, fishing, boating, wildlife watching, and wilderness use are all down. The primary contributing trend is a drop in participation by young adults (ages 20 to 40) and their children. This trend is fully explored in *A Strategic Conservation Agenda 2009-2013 Part I: Strategic Directions*.

However, there are some signs that this trend has improved in the last few years. For instance, the number of state park annual vehicle permits sold increased by 15% between 2008 and 2010. The number of overnight guests at state parks has increased 9% in the same time period. It is unclear if these increases will be sustained as larger demographic changes continue. What is clear is DNR's focus on increasing the effectiveness of its efforts to meet the needs of Minnesotans, helping them connect to the outdoors and ensuring that Minnesota's children become the natural resource stewards of tomorrow.

Increasing types of recreational uses will also affect future needs and the strategies we develop to manage them. For example, all-terrain vehicle (ATV) has grown from 12,235 ATVs registered in 1984 to 267,727 registered in 2009. Additionally, kayak registrations increased 56% during the 5 year period of 2005-2009. As demand for various recreational opportunities changes and diversifies, so must DNR efforts to provide recreational opportunities while conserving the quality of Minnesota's lands and water. Through our various planning efforts we aim to proactively provide the recreational opportunities Minnesotans seek while ensuring that their activities sustain and enhance the natural resources that support them.

Personal Importance in Regards to Outdoor Recreation



STATE PARK VISITATION

INDICATOR: Number of visitors and overnight guests at state parks and recreation areas

WHY IS THIS INDICATOR IMPORTANT?

Minnesota state parks and trails connect people to the outdoors, serve as a gateway to quality outdoor experiences, and form a vital part of the state's tourism base. The number of visitors and overnight guests at state parks and recreation areas indicate the success of efforts to attract more visitors.

WHAT IS DNR DOING?

DNR uses market research to understand barriers to and motivations for participating in outdoor recreation. Guided by 2007 research, we modified some products and increased advertising and media efforts. For instance, we initiated the "I Can Camp!" program with partners to introduce families to camping. A partnership with the Minnesota Twins, "Break a Bat, Plant a Tree," leveraged nearly \$300,000 in promotion benefits for a DNR investment of around \$40,000. A cooperative agreement with Minnesota Public Radio resulted in the sale of almost 5,000 annual permits and an estimated \$130,000 in promotional value.

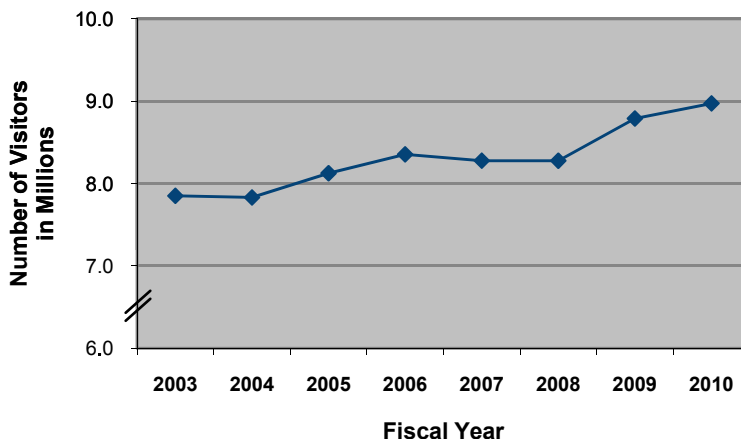
DNR monitors many indicators of state park and trail use and effectiveness of outreach. For instance see the Outdoor Education indicator (p. 109).

TARGET: Targets are being established for **FY 2011 and 2012.** Between 2008 and 2010 we increased numbers of overnight guests 9%, surpassing our 2% target. To continue to increase the connection of Minnesotans to the outdoors, we will continue to innovate as we increase our understanding of recreational needs and motivations, advertise, build partnerships, and expand successful programs.

LEARN MORE ABOUT:

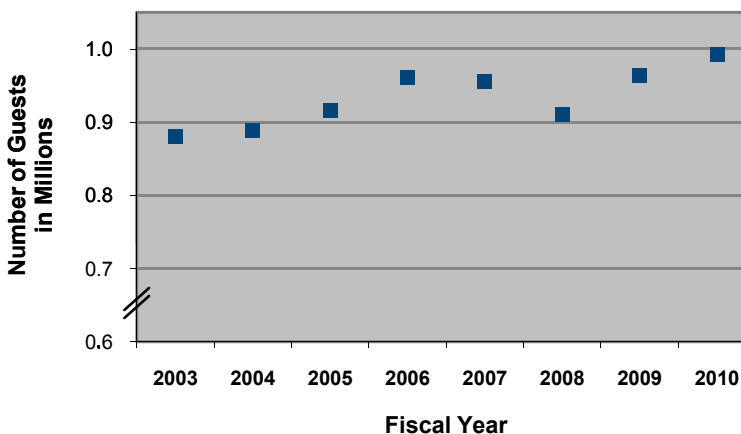
- State Parks and Trails: www.mndnr.gov/parksandtrails
- "I Can Camp": www.mndnr.gov/state_parks/can_camp.html
- "Break a Bat, Plant a Tree": www.mndnr.gov/state_parks/breakabat.html

Number of Visitors at State Parks and Recreation Areas



State park visitation increased by 8%, over 695,000 people, between FY 2008 and 2010. This increase was accompanied by a 14% increase in state parks revenue.

Number of Overnight Guests at State Parks and Recreation Areas



The number of overnight guests at state parks increased by 9%, over 81,000 people, between FY 2008 and 2010.



DNR and partners offered 30 "I Can Camp!" workshops in 33 state parks. These workshops reached nearly 600 people in 2010, successfully introducing young families and others to safe, fun outdoor experiences.

STATE PARK AND TRAIL WEBSITE VISITS

INDICATOR: Number of website page views by state park and trail customers and potential customers

WHY IS THIS INDICATOR IMPORTANT?

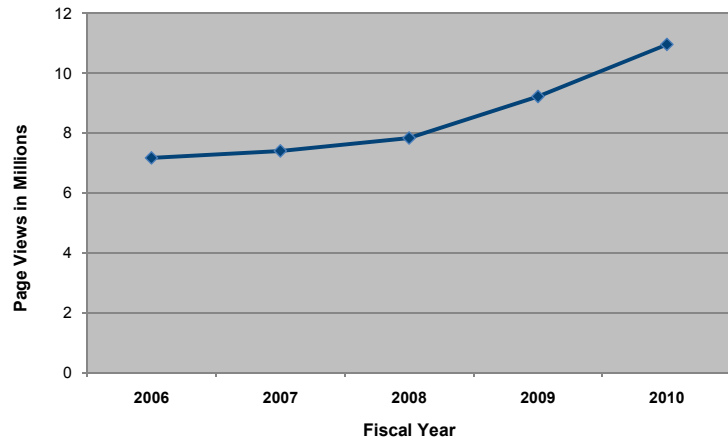
State parks and trails are an important part of Minnesota's high quality of life. They contribute to the state's economic health, with snowmobiling and state park use generating \$373 million in direct spending annually. They also provide excellent experiences for connecting people to the outdoors. Increasingly, the public is using DNR's website for gathering information as they plan outdoor recreation activities. Based on website use and visitation data, website use is a valuable indicator of public engagement in outdoor recreation.

WHAT IS DNR DOING?

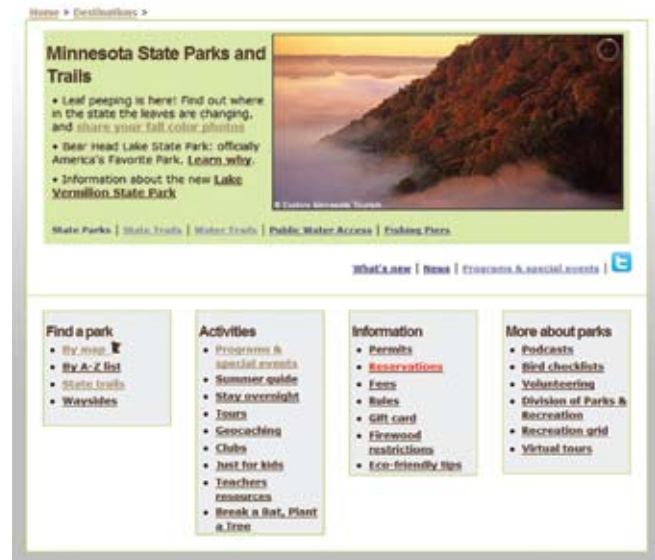
We are developing a more user-driven website to better engage customers and provide an improved online experience that compels people to get outdoors. DNR's Division of Parks and Trails hired its first full-time web coordinator in January 2010. The division has increased public information efforts and paid advertising, both of which often direct the public to the DNR website for information and trip planning. The website is becoming more ADA accessible and more user-friendly, with more content designed for users of mobile devices.

TARGET: Increase website page views by 5 percent per year. We expect that increased public outreach and marketing will drive additional traffic to the DNR website for trip planning, which in turn will result in more state park and trail use. DNR's Division of Parks and Trails is exploring the use of other measures of website use, such as the number of unique website visitors and the number of website visits.

State Parks & Trails Website Page Views



People use DNR's website to help plan outdoor recreation activities. There were nearly 11 million page views of the state parks and trails website in FY 2010, a 40% increase since 2008.



DNR's Parks and Trails Division is improving its website to better engage customers and provide an enhanced online experience that compels people to get outdoors.

LEARN MORE ABOUT:

- State Parks and Trails: www.mndnr.gov/parksandtrails

STATE TRAIL ACQUISITION AND DEVELOPMENT

INDICATORS: Number of state trail miles acquired; number of state trail miles developed

WHY IS THIS INDICATOR IMPORTANT?

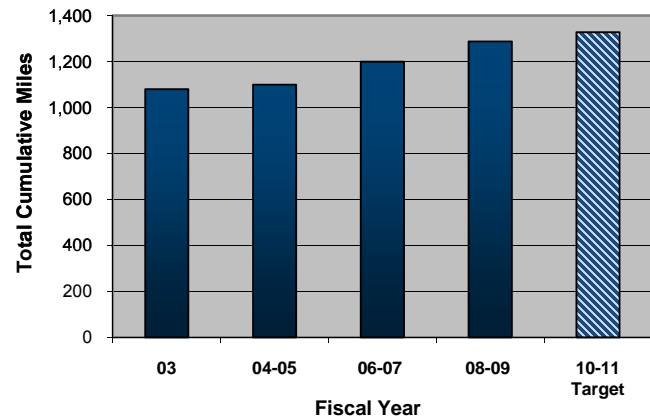
State trails provide numerous and diverse benefits. They offer recreation opportunities for bicyclists, hikers, in-line skaters, horseback riders, cross-country skiers, and snowmobilers. State trails are located throughout Minnesota in urban and rural areas. They are a key element to improving the health of Minnesotans because they provide convenient and inexpensive places to exercise. They provide economic benefits to communities and enhance tourism. They serve as transportation and conservation corridors. Trails can yield environmental benefits too—for example, providing a buffer adjacent to streams.

WHAT IS DNR DOING?

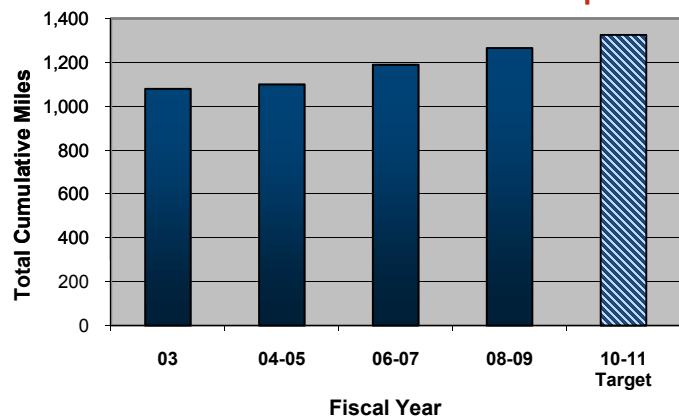
DNR works with local trail associations, trail user groups, and communities to plan, acquire, develop, and manage the state trail system. Most trails in the system have an asphalt surface for bicycling and in-line skating. Other trails have a natural surface and are used predominately for snowmobiling in the winter and hiking in the summer. Some trails have a parallel treadway for other uses such as horseback riding.

TARGET: Acquire 40 new state trail miles by the end of FY 2011; develop 60 miles of state trails by the end of FY 2011. These targets will be adjusted as new opportunities arise for trail acquisition and development. Trail stakeholders are currently working to secure funds for acquisition and development of state trails.

Number of State Trail Miles Acquired



Number of State Trail Miles Developed



DNR works with partners to acquire and develop state trails.

LEARN MORE ABOUT:

- State trails at: www.mndnr.gov/state_trails

PUBLIC ACCESS TO LAKES AND RIVERS

INDICATOR: Number of access sites acquired and/or developed along high-priority lakes and rivers

WHY IS THIS INDICATOR IMPORTANT?

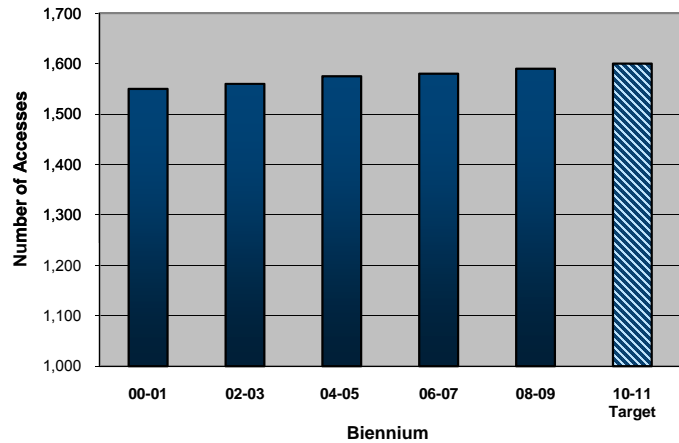
Minnesota ranks third in the nation in number of licensed boats (812,000) and first in boats per capita, with one for every six people. DNR provides and maintains a statewide system of free public water access facilities which give the public the means to enter and enjoy the state's lakes and rivers. Public accesses are essential for Minnesotans to access public waters. Boaters, anglers, lakeshore owners, resort users and hunters all create demand for professionally developed facilities. Opportunities to acquire new sites are becoming scarce due to fully developed lots and the high cost of lake shore property. Partnerships with local governments to acquire, develop and maintain access sites are essential to the continued success of the program.

WHAT IS DNR DOING?

Throughout the state, DNR field managers are actively seeking to acquire land. DNR is creating partnerships with local governments, lake associations, angling clubs, and others to improve and increase the quantity and quality of public access for boaters. The DNR is continuously improving site design with the objective of environmentally sustainable development.

Target: Acquire 8-10 new or expanded access sites and rehabilitate 30-35 existing sites in FY 2010 - 2011. In FY 2008-2009 the DNR acquired 10 new Public Water Access Sites including sites on Lake Vermilion, Strawberry Lake and Middle Lake. DNR also completed significant rehabilitation of 16 public water access sites and constructed 7 new sites including the McQuade Public Access and Small Craft harbor on Lake Superior and cooperative projects with Beltrami, Freeborn, Halstead and Washington Counties and the City of Coleraine.

Cumulative Number of New Accesses Developed Along Lakes or Rivers



Number of accesses developed along lakes and rivers.



Walleye fishing on the Rainy River in Lake of the Woods County. View is from the overflowing Wheeler's Point Public Water Access.

LEARN MORE ABOUT:

- Public water access maps and information at: www.mndnr.gov/wateraccess

FISHING PIERS AND SHORE FISHING SITES

INDICATOR: Number of sites developed and maintained on lakes and rivers in partnership with local units of government

WHY IS THIS INDICATOR IMPORTANT?

Fishing piers expand angling opportunities for all people, especially persons with disabilities, the elderly, and children. Fishing is one of the top activities enjoyed by Minnesotans, yet many water bodies lack shore-fishing facilities for the general public. These facilities provide a safe and convenient place to fish, instead of from bridges, steep/rocky embankments or fragile shoreland areas.

Fishing piers and shore-fishing sites are great locations for holding clinics and introducing fishing to new participants. Fishing is a life-long activity that connects participants with the outdoors. This connection encourages environmental stewardship and support of Minnesota's natural resource programs.

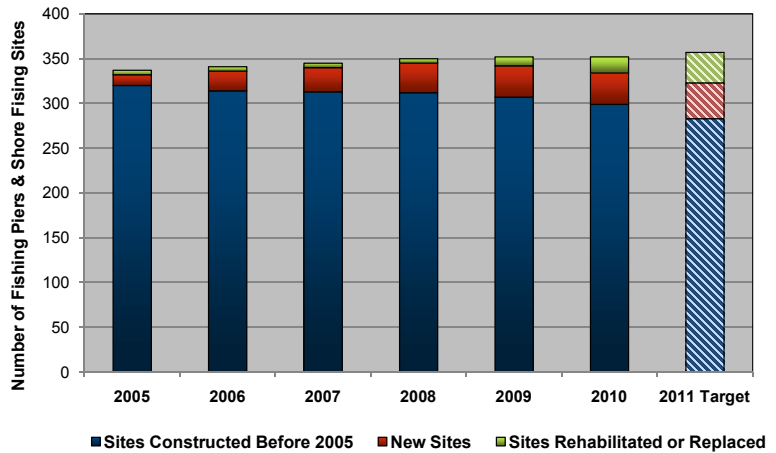
WHAT IS DNR DOING?

DNR works with communities across the state to provide the public with access to shore-fishing and fishing pier sites on lakes and rivers. The partnerships created between the State, local units of government and community organizations make this program successful. DNR provides funding and technical expertise for site location and fishing potential, while the local unit of government and community organizations provide the land, additional funding and a commitment to ongoing maintenance.

DNR is balancing the need for replacement piers and the requests for new piers with available funding. There are 349 fishing pier and shore-fishing sites in Minnesota. Seventy-seven piers were installed prior to 1990; they are aging beyond repair and becoming unsafe. An increasing need for replacement and rehabilitation of aging piers exists.

TARGET: In FY 2011 DNR will work with partners to replace sixteen aging fishing piers and maintain existing facilities to provide continued access to Minnesota's lakes and rivers. There is a large demand for new fishing pier and shore fishing sites, as well as a growing need to replace aging piers. Rehabilitation and replacement of existing piers is becoming a higher priority than introducing new facilities.

Cumulative Number of Fishing Piers & Shore Fishing Sites



There are a total of 349 sites; 321 are fishing piers and 28 are developed shore fishing areas. As of 2010, eighteen piers have been completely rehabilitated or replaced, another sixteen are planned for 2011. A shift from new facilities to replacements over the next few years will show a leveling off of total facilities.



DNR forms partnerships with local units of government to provide fishing opportunities for the public.

LEARN MORE ABOUT:

- Statewide fishing pier map at: www.mndnr.gov/fishing_piers

WATER TRAILS

INDICATOR: Development of reliable information enhancing water trail opportunity, safety, and satisfaction

WHY IS THIS INDICATOR IMPORTANT?

Recreational boating is one of the largest outdoor activities in Minnesota, with more than 175,000 registered canoes and kayaks in the state. Contrary to a general downward trend in outdoor recreation participation, kayak registrations increased 56% from 2005-2009. The Water Trails system includes 31 rivers statewide and the North Shore of Lake Superior – totaling 4,397 miles. These Water Trails offer unparalleled canoeing, kayaking and camping opportunities. State, national, and international visitors enjoy outstanding maps, river level reporting and trip-planning resources. Maintaining high visitor satisfaction benefits visitors, communities, and local economies. Developing and providing reliable river level information helps boaters stay safe and enjoy the state's Water Trails system.



WHAT IS DNR DOING?

DNR will improve the recreational interpretation of automated river level gages on Water Trails. DNR will complete a comprehensive update of all Water Trails maps, and will utilize GPS data to provide users with maps in electronic formats for mobile technology. DNR will increase its outreach and interaction with recreational user groups.

TARGET: In FY 2010-2011, interpret ten additional automated river level gages, and provide all recreational interpretation in a new consistent graphing format. Other targets include: development of a virtual tour of Water Trails, with geospatial maps that can be downloaded to mobile devices, and tools to submit photos and conditions reports online (FY 2010-2011); completion of a series of three capacity building seminars to Water Trail user groups (FY 2011-2012); and completion of a user survey to measure satisfaction and demographics of Water Trail users (FY 2012).

LEARN MORE ABOUT:

- State water trails at: www.mndnr.gov/watertrails

STATE PARKS AND TRAILS HISTORIC FEATURES

INDICATOR: Maintenance and restoration of historic buildings, structures, and features within state parks and along state trails

WHY IS THIS INDICATOR IMPORTANT?

State parks and state trails contain over 620 designated historic buildings, structures, and objects; 34 National Register Historic Districts; and five National Historic Landmarks. Many are rustic-style log and stone structures built by the Civilian Conservation Corps and Works Progress Administration and treasured by visitors. Historic features require extensive maintenance and in some cases significant restoration to preserve them and to keep them safe for public use and enjoyment.

DNR has a statutory responsibility to protect historic properties listed on the national register and state register. State law requires state parks to preserve, perpetuate and interpret historic features, such as historic state park buildings, structures, and districts.



Douglas Lodge, Itasca State Park. Minnesota state parks preserve, perpetuate, and interpret historic features. Successful historic building restorations have been completed in recent years at St. Croix State Park, Itasca State Park, Scenic State Park, and Tettegouche State Park.

WHAT IS DNR DOING?

DNR regularly reviews the condition of state park and trail buildings and structures to make sure they are safe. DNR consults frequently with the State Historic Preservation Office of the Minnesota Historical Society to ensure proper treatment of historic buildings and structures. Successful historic building restorations have been completed in recent years at St. Croix State Park, Itasca State Park, Scenic State Park, and Tettegouche State Park. At least 24 interpretive programs are provided to visitors each year emphasizing the value of historic features and building public support for their continued care.

TARGET: Direct 10 percent of the facility maintenance and improvement projects for state parks and trails in each biennium to National Register buildings, structures, and districts within state parks, state recreation areas, and along state trails. To meet its goal for preservation and effective use of historic buildings, structures, and districts in state parks and trails, DNR will require strong support for 1) continued assessment of the condition of historic buildings and structures; 2) enhanced effort for maintaining the large number of historic buildings, structures, and districts; and 3) restoration of selected historic buildings, structures, and districts.

LEARN MORE ABOUT:

- Minnesota state parks at: www.mndnr.gov/state_parks
- State park history at: www.mndnr.gov/state_parks/logstonebook.html

RECREATIONAL SAFETY AND ENFORCEMENT

INDICATORS: Number of students completing safety training classes; number of fatalities per 100,000 registrations (watercraft, ATV, snowmobile)

WHY IS THIS INDICATOR IMPORTANT?

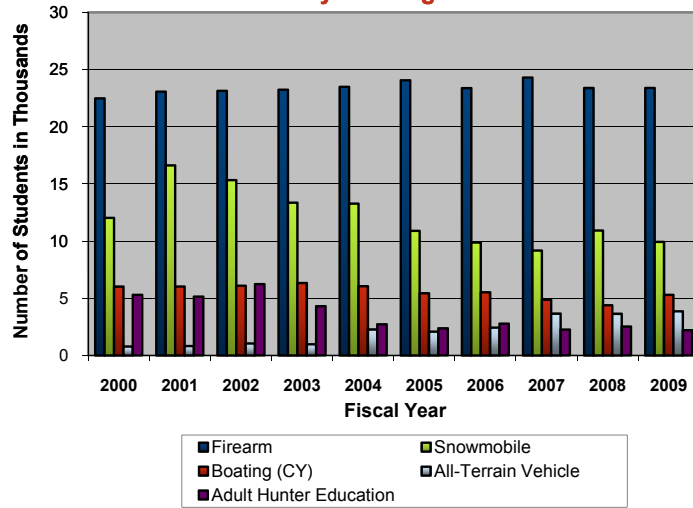
Recreational use of Minnesota's natural resources must be safe and responsible if we are to continue to offer opportunities for future generations. Government has a role in ensuring public health and safety, as well as protecting property.

WHAT IS DNR DOING?

DNR is encouraging the safe use of Minnesota's natural resources by providing educational programs and law enforcement services for the protection of resources, property, and public safety. These programs and services are designed to introduce new and existing users to recreational opportunities and to limit or prevent personal injury accidents and fatalities while encouraging the safe and responsible use of Minnesota's resources.

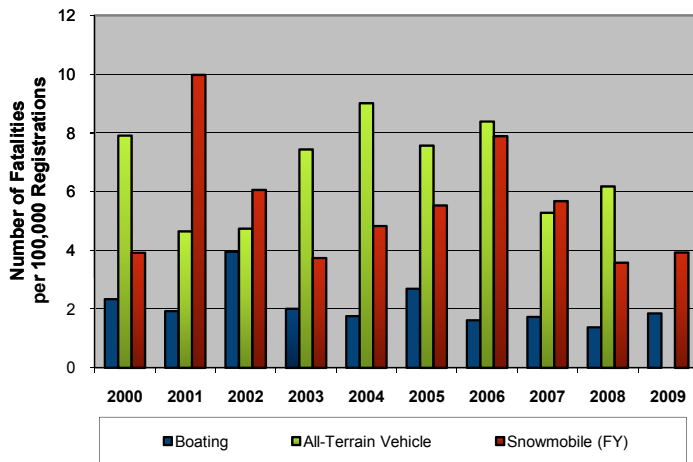
TARGET: Annually train 24,000 students in the firearm safety/hunter education program; 3,000 in the adult hunter education program; 3,500 in the all-terrain vehicle (ATV) program; 14,900 in the snowmobile safety program; and 5,300 in the boating safety program. Though factors such as weather and personal behavior greatly influence accidents, through educational programs and law enforcement efforts, DNR will work to reduce fatal accident rates below the Minnesota long-term annual average in the following areas: snowmobiling (7.53/100,000 registered snowmobiles); ATV use (8.26/100,000 registered ATVs); and boating (2.13/100,000 registered watercraft).

Number of Students Completing Safety Training Classes



Number of students completing safety training classes.

Recreational Fatalities



Recreational fatalities per 100,000 registrations.

LEARN MORE ABOUT:

- Enforcement at: www.mndnr.gov/enforcement/index.html
- Hunter safety at: www.mndnr.gov/safety/index.html
- Boat and water safety at: www.mndnr.gov/safety/boatwater/index.html
- Recreational vehicle safety at: www.mndnr.gov/safety/vehicle/index.html

FOREST SOCIOECONOMIC STUDIES: FOREST RECREATION USER SATISFACTION

INDICATOR: Satisfaction levels of Minnesota state forest recreation users

WHY IS THIS INDICATOR IMPORTANT?

Minnesota state forests provide multiple benefits for a variety of forest users. Recreation users visit state forests to pursue a diversity of activities including hunting, snowmobiling, off-highway vehicle riding, nature observation, horseback riding, hiking, mountain biking, fishing, camping, and cross country skiing. Users participate in these activities for reasons such as escaping a hectic lifestyle, experiencing adventure, and being with family and friends. Satisfaction levels of recreation enthusiasts is an important indicator of state forest management.

WHAT IS DNR DOING?

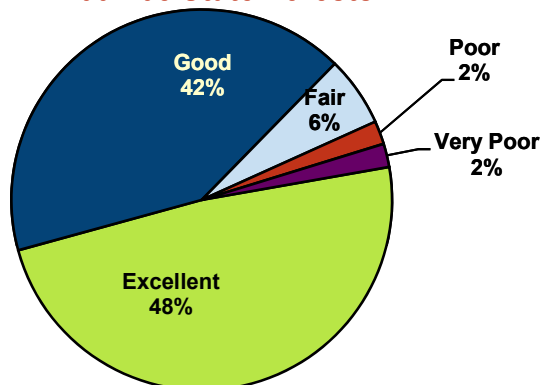
DNR uses surveys and other social science methods to better understand people's use and enjoyment of natural resources and how this varies based on such factors as age, race, and income. This information helps DNR improve users' experiences while protecting natural resources. DNR has completed three forest-area studies, The Foot Hills area in 2004, and the Finland and Land O'Lakes areas in 2007-2008. These studies are important for better understanding and engaging our longstanding forest recreational users, as well as increasing participation among those who have not traditionally used state forests or participated in outdoor recreation activities.

TARGET: Target to be defined in 2011. Before DNR can set and measure progress towards user satisfaction targets, more recreation use studies must be completed in state forests. Progress needs to be evaluated carefully because some recreation users may exhibit higher or lower satisfaction levels based on activity or whether they are tourist or local visitors. Average satisfaction levels reported in this indicator may mask these differences. DNR analyzes more detailed measures from its studies to understand these relationships.



People enjoy Minnesota state forests through a variety of recreational activities.

Quality of Experience Rating in Foot Hills, 2004; Land O'Lakes and Finland, 2007-08 State Forests



■ Excellent ■ Good ■ Fair ■ Poor ■ Very Poor

Quality of experience rating for users that entered the Foothills, Finland, and Land O' Lakes State Forests through a public entry.

LEARN MORE ABOUT:

- Forest recreation studies and other DNR surveys at: www.mndnr.gov/aboutdnr/reports/

HUNTER RECRUITMENT

INDICATORS: Number of youth license sales; number of participants in special youth hunts

WHY IS THIS INDICATOR IMPORTANT?

Hunting is an important part of Minnesota's outdoor heritage and culture. The right to hunt has been preserved in the state constitution. According to the U.S. Fish and Wildlife Service, in 2006 Minnesota was seventh among states in hunter participation rate with 13.6 percent of Minnesotans participating. Hunting generates more than \$637 million per year in direct expenditures in the state, according to the Association of Fish and Wildlife Agencies. Hunters fund more than 75 percent of DNR's wildlife management operating budget through license fees and federal excise taxes on hunting equipment.

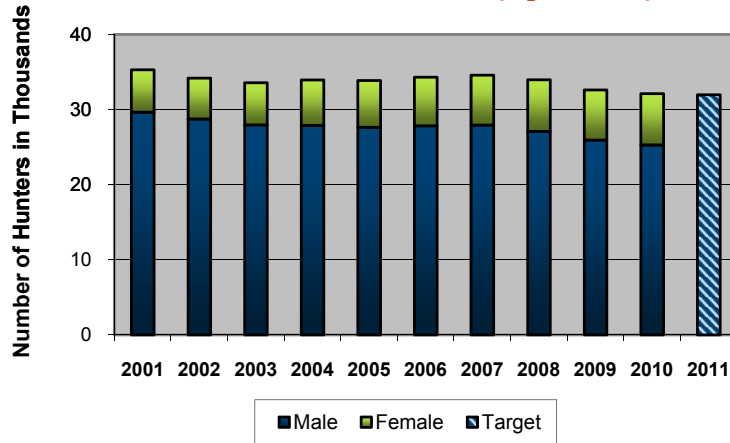
WHAT IS DNR DOING?

DNR has initiated efforts to promote and sustain hunting by identifying barriers to participation and enacting programs and policies that reduce or remove them. DNR has reduced youth hunting license fees, created an Apprentice Hunter Validation, created a mentoring program, eliminated age restrictions for turkey hunters, initiated special youth hunts, and is working with hunting organizations to provide educational and introductory experiences.

TARGET: Maintain youth hunter participation as measured by license sales and increase special youth hunt opportunities by 5% in 2011.

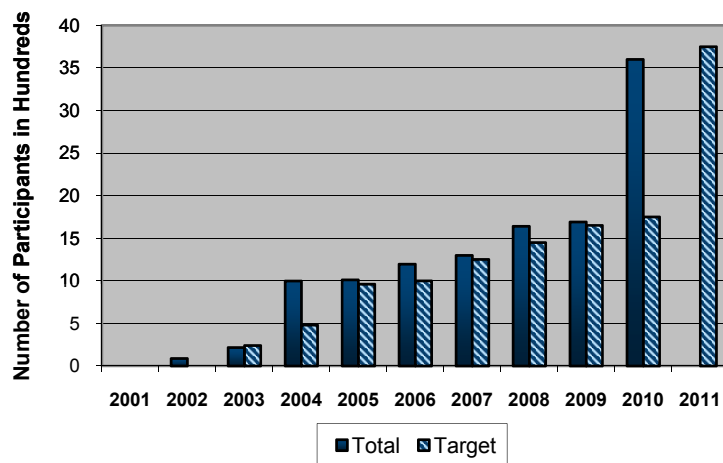
We exceeded our 2010 target by 105% due to the expansion of the SE/NW 4-day youth deer season. Our target represents a systematic strategy to maintain and increase hunter participation rates. Using Electronic Licensing System (ELS) data, DNR can track how many hunters participate by age and sex. These data help DNR determine recruitment and retention rates and make decisions about resource allocation. License sales provide a valuable general indicator of interest, satisfaction, and participation trends.

Youth License Sales for Firearms Deer Hunters (age 12-15)



Number of youth license sales. DNR's target is to maintain youth hunter participation.

DNR Special Youth Hunt Participation



Number of participants in special youth hunts. DNR's target is to increase special youth hunt opportunities by 5% in 2011.

LEARN MORE ABOUT:

- DNR's hunter and angler recruitment and retention program at: www.mndnr.gov/harr
- The International Hunter Education Association at: www.ihea.com

ANGLING PARTICIPATION AND EDUCATION

INDICATOR: Number of participants involved in MinnAqua fisheries aquatic and angling education program

WHY IS THIS INDICATOR IMPORTANT?

Minnesotans must work to maintain, enhance, and restore the health of our ecosystems so they can continue to serve recreational, environmental, social, and economic purposes. However, not all citizens know how to be effective stewards, and some simply don't appreciate the outdoors because they haven't had opportunities to enjoy activities such as fishing and hunting. The MinnAqua program works to create a citizenry that is aware of and active in natural resource conservation, by expanding opportunities to fish and creating a network of outdoor education.

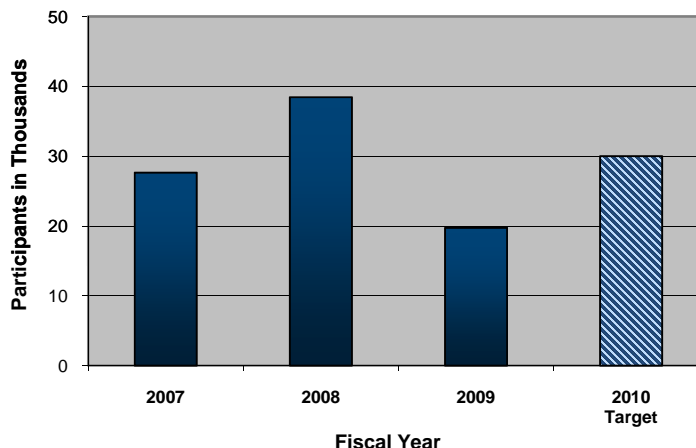
WHAT IS DNR DOING?

Partnerships are vital to the sustainability of education efforts. The MinnAqua program partners with teachers and community leaders because through them they can reach a larger audience. MinnAqua provides educators in-depth training and supportive materials on fishing and aquatic ecosystems, so they can lead efforts with their classrooms or youth groups. These "core educators" are able to spend more time with participants, solidifying the message of stewardship and creating a lasting effect.

The MinnAqua program is just one fish and wildlife education program DNR offers. DNR is currently developing a strategic direction for all fish and wildlife education programs. Creating connections between programs will help us streamline efforts and identify new outdoor opportunities. It is our goal that via these programs, new and novice outdoor participants will have a "pipeline" to learn skills and gain a lifelong appreciation for Minnesota's great outdoors.

TARGET: To be defined with new indicator(s) that will reflect the work of all fish and wildlife education programs. It is DNR's belief that learning is a collaborative process. In the future we hope to measure the effect of all fish and wildlife education programs together, instead of in isolation. Part of the development of the new strategic direction will focus on creating these measures.

Number of Participants Involved in Aquatic Education Programs



Number of participants involved in aquatic education programs since 2006.



MinnAqua programs provide in-depth training and supportive materials for educators.

LEARN MORE ABOUT:

- MinnAqua at: www.mndnr.gov/minnaqua
- Fisheries information and education at: www.mndnr.gov/fisheries/management/inform.html
- Other DNR natural resources education programs at: www.mndnr.gov/education

WATER EDUCATION

INDICATOR: Number of participants reached by the Minnesota Project WET Water Education Program

WHY IS THIS INDICATOR IMPORTANT?

In Minnesota, citizens view healthy waters as an important quality-of-life indicator. Yet not all Minnesotans know how to be effective stewards of water resources. DNR offers Minnesota Project WET to help create a citizenry that is aware of and active in water conservation.

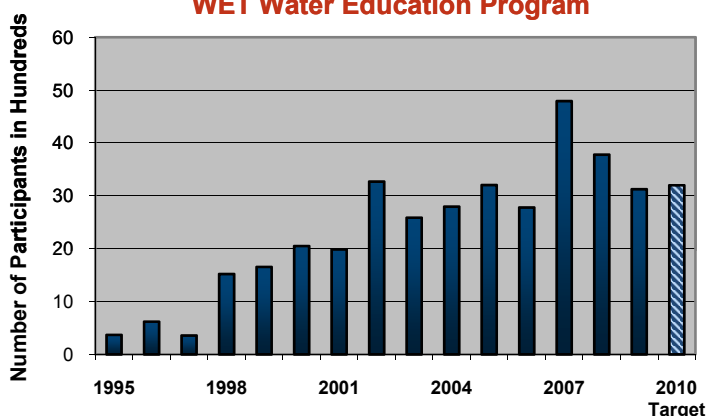
WHAT IS DNR DOING?

Minnesota Project WET (Water Education for Teachers) trains K-12 educators in hands-on, interactive lessons that encourage critical thinking. By providing training, materials, and support to these educators and collaborating on water festivals for students, Minnesota Project WET improves understanding of water resources. In the past decade, Minnesota Project WET has trained more than 5,500 educators and through them reached an estimated 357,500 students. In the past nine years, it also reached 25,180 students directly through its annual water festivals and field days.

Minnesota Project WET collaborates with other water education initiatives. By working with groups such as the Minnesota Water Sustainability Framework Education Team and the Metro WaterShed Partners, Minnesota Project WET reaches even more citizens. This program complements other DNR education efforts, such as the MinnAqua program (see Angling Participation and Education and River Ecology and Management indicators). Together, all of these initiatives help Minnesotans understand the importance of aquatic stewardship.

TARGET: Train a minimum of 500 formal and nonformal educators and reach a minimum of 2,700 students at water festivals and field days annually.

Number of Participants Involved in Project WET Water Education Program



Number of participants involved in Minnesota Project WET Education Programs. The target is to maintain participation levels of at least 3200 people per year (2,700 students and 500 educators).



Teachers participate at a Project WET teacher workshop.

LEARN MORE ABOUT:

- Project WET at: www.mndnr.gov/projectwet
- Water management at: www.mndnr.gov/waters
- Other DNR natural resources education programs at: www.mndnr.gov/education

RIVER ECOLOGY AND MANAGEMENT

INDICATOR: Number of individuals educated about river and stream systems

WHY IS THIS INDICATOR IMPORTANT?

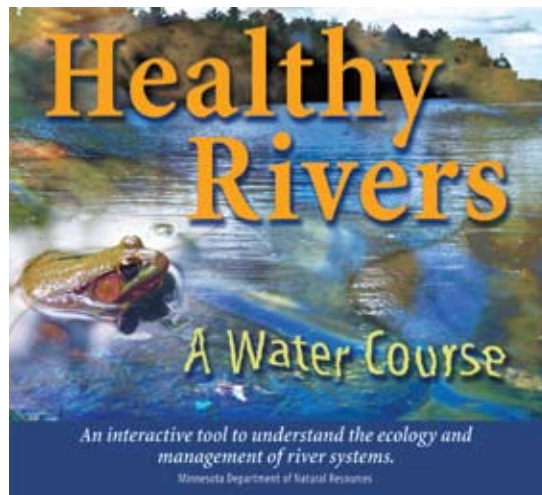
The science of managing rivers and streams in ways that maintain their natural ecological structure and function is not widely understood. DNR professionals are international leaders in stream ecology and restoration, and have developed a framework for understanding the science behind their work. All streams and rivers can be characterized by an interplay of five components: hydrology, geomorphology, connectivity, water quality, and biology. Past management of rivers without consideration of all five components has resulted in diminished resources. Use of this framework forms the basis for effective natural resource management, land-use planning, and policy development. It also informs day-to-day lifestyle choices and activities by an educated citizenry, whose cumulative actions impact watershed condition.

WHAT IS DNR DOING?

We are developing a GIS-based watershed assessment tool (WAT) designed to: 1) provide managers with a robust, comprehensive view of watershed ecological status; 2) assess watershed health based on five resource components: hydrology, geomorphology, connectivity, water quality, and biology; and 3) monitor watershed health based on repeated long-term tracking of these resource components. A successful WAT will enable natural resource managers to fully understand and effectively use important watershed information in their decision-making process.

DNR is also teaching river ecology to technical and nontechnical audiences in formal and nonformal settings. The Stream Habitat Program continues to offer the three-part series of technical workshops for natural resource professionals. It covers fluvial geomorphology and stream classification, stream assessment and monitoring, and stream restoration. Since 1998, approximately 515 professionals have participated in the workshops. In addition, the interactive CD-ROM *Healthy Rivers: A Water Course* continues to be distributed.

TARGET: Continue outreach to key audiences and increase understanding of river systems. To achieve this target DNR will: 1) complete development of Phase 2 of the watershed assessment tool and publish it on DNR's website by the end of 2010; 2) begin delivering the tool to select experts for feedback and recommendations, and potentially to specific watershed professionals for through targeted application; 3) continue offering the series of technical workshops for professionals; and 4) continue delivering key messages of river ecology and management through our technical series brochures and at upcoming conferences.



DNR delivers the science of river ecology to nontechnical audiences with a popular interactive CD-ROM entitled *Healthy Rivers: A Water Course*.



DNR professionals are international leaders in stream ecology and restoration. They offer technical workshops to help others understand the science behind this work.

LEARN MORE ABOUT:

- *Healthy Rivers: A Water Course* CD-ROM at: www.mndnr.gov/healthyivers
- Stream health and restoration workshops for professionals at: www.mndnr.gov/eco/streamhab

OUTDOOR EDUCATION

INDICATOR: Percentage of park visitors participating in outdoor education activities

WHY IS THIS INDICATOR IMPORTANT?

Outdoor education creates a sense of stewardship for Minnesota's natural and cultural heritage. It promotes recreation through experiential programs on camping, hiking, biking, canoeing, cross-country skiing, snowshoeing, fishing, wildlife watching, hunter education, and snowmobile safety. They also promote understanding of and support for DNR programs, key messages, and management decisions, reducing management costs and enhancing outcomes.

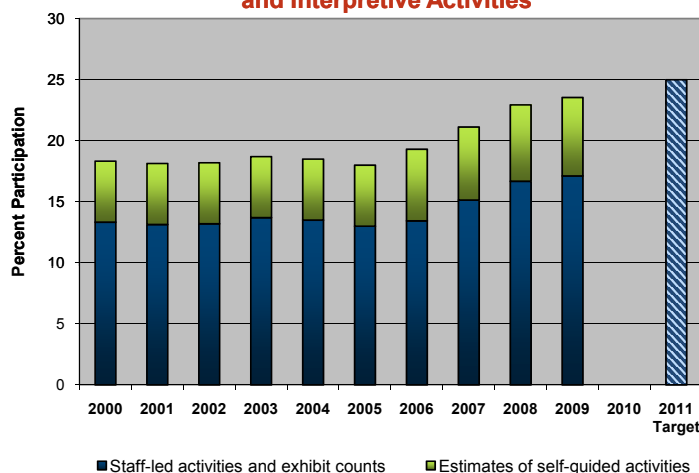
WHAT IS DNR DOING?

Educational programs have been integral to DNR's mission for more than 60 years. Approximately 8.5 million people visit state parks each year, of these over 2 million participate in outdoor education activities. In July 2009, the Parks and Trails Legacy Fund began providing financial support to expand outreach and education. It established a Naturalist Corps internship program to conduct programming in state parks, funding 30 positions for 2010. We upgraded park and trail exhibits and displays and expanded the use of technology-based educational resources such as touch screen computers, MP3 trail guides, and geocaching programs. We held 30 workshops for beginning campers in summer 2010. We offered fishing poles for free checkout at 30 state parks. Several parks have expanded visitor center hours.

TARGET: Increase park visitor participation in outdoor education and interpretive opportunities to 25% by the end of FY 2011. This target represents a significant increase from our 2007 goal of 18% participation.

We will seek to reach our target by strategically delivering educational resources and documenting participation in interpretive services.

Percent Participation in Parks Education and Interpretive Activities



Each year, educational activities in Minnesota state parks reach more than 2 million visitors.



Outdoor education in Minnesota state parks creates a sense of stewardship for Minnesota's natural and cultural heritage.

LEARN MORE ABOUT:

- Naturalist programs at: www.mndnr.gov/state_parks/kids.html
- State parks at: www.mndnr.gov/state_parks
- Other DNR natural resources education programs at: www.mndnr.gov/education

WILDLIFE OBSERVATION AND BIRDING

INDICATORS: Number of participants in wildlife observation; number of local birding events

WHY IS THIS INDICATOR IMPORTANT?

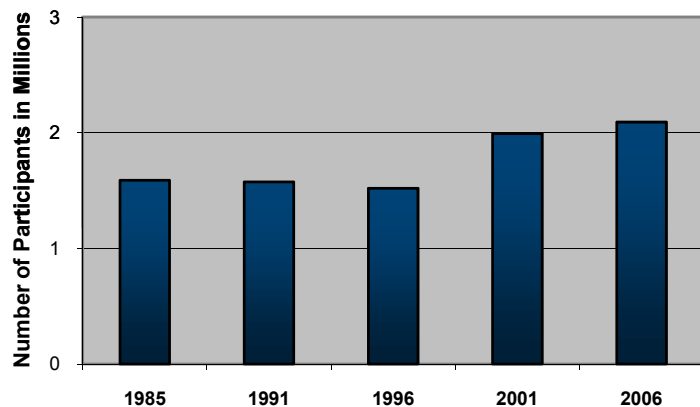
An increasing number of people are expressing their enjoyment of wildlife by bird watching, feeding birds, traveling to see birds and other wildlife, and photographing wildlife. Bird-watching and nature tourism activities are harder to track than hunting, and fishing because licenses are not required for participation. Information on nonconsumptive enjoyment of wildlife is important so participants are included in dialogue regarding conservation, legislative issues, and habitat-related wildlife initiatives. Wildlife photography has become the single most dramatic growth activity for all wildlife-related outdoor activities in the nation and wildlife observation provides an important connection to Minnesota's outdoors. Many local communities have also realized the importance of providing wildlife-related events to draw nature tourism visits to their communities.

WHAT IS DNR DOING?

DNR has been at the forefront of promoting wildlife tourism in Minnesota by helping publicize state birding trails and birding festivals. The number of such trails and festivals has grown from 9 in 2001, 21 in 2006 and 29 in 2009. Recent activities to provide information to birders have included: cooperation with the province of Manitoba to extend the Pine-to-Prairie Birding Trail into Manitoba, the promotion of wildlife tourism by posting information about 94 of Minnesota's best viewing sites at: www.wildlifeviewingareas.com, and the development of bird lists for State Parks and Scientific and Natural Areas. DNR is also developing a new initiative to promote nature photography in Minnesota among young people. It is called the Digital Photography Bridge to Nature project and will focus on training teachers about the use of digital cameras for nature photography and how to use their photos in a classroom setting.

TARGET: Assist with five wildlife festivals or wildlife tourism events per year; increase the number of locations featured on the www.wildlifeviewingareas.com website to 120.

Number of Minnesota Participants (over age 16) in Wildlife Observation



Participation data comes from the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, conducted every 5 years.



Nearly 2 million Minnesotans actively watch, feed, or photograph wildlife—a 54 percent participation rate. Minnesota ranks No. 2 in the nation.

LEARN MORE ABOUT:

- Wildlife observation and birding at: www.mndnr.gov/nature_viewing
- Wildlife Viewing Areas: www.wildlifeviewingareas.com

MASTER NATURALIST VOLUNTEERS

INDICATORS: Number of master naturalist volunteers trained in program; hours of volunteer work completed

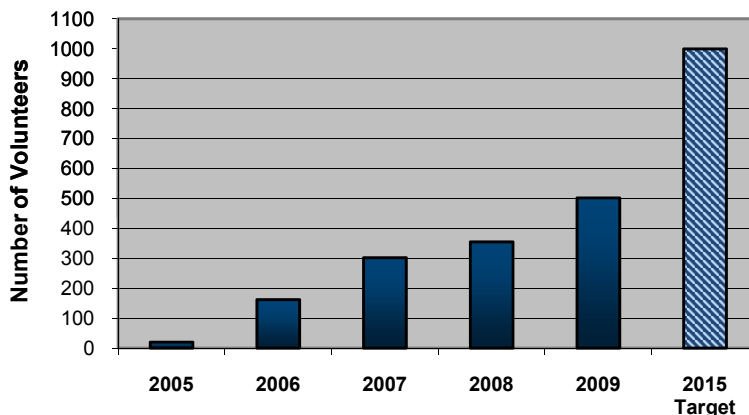
WHY IS THIS INDICATOR IMPORTANT?

With over 33,000 volunteers, DNR volunteer programs are an important part of helping us get our work done. The Master Naturalist Program is one of our newer volunteer programs that began with support from a National Science Foundation grant. It trains interested adults about natural resources, teaches how to educate others, and provides opportunities to do conservation projects. Master naturalist volunteers make up a network of skilled volunteers who engage in outreach and increase Minnesotans' understanding and appreciation of the natural world. Volunteers also make it possible to run low-cost programs and save taxpayer dollars.

WHAT IS DNR DOING?

DNR is working with the University of Minnesota Extension to develop and conduct the Master Naturalist Program. The program offers courses that correspond to Minnesota's three major biomes—the deciduous forest, prairie, and coniferous forest. To be certified as a master naturalist, volunteers must initially complete 40 hours of training and 40 hours of volunteer service on a supervised project. To maintain certification, they must complete eight hours of advanced training and 40 hours of volunteer service annually. Following training, these conservationists will assist DNR, the Extension Service, and other partners with public outreach and management of the state's natural resources.

Cumulative Number of Master Naturalist Volunteers



Master naturalist volunteers complete a 40-hour hands-on course. They study natural history, environmental interpretation, and conservation stewardship. This program is open to any adult who enjoys the outdoors.

TARGET: Train more than 1,000 master naturalist volunteers that provide 20,000 hours of service annually by 2015. To achieve this target, DNR and the University of Minnesota Extension will develop and conduct two main components: courses and curriculum for volunteer certification, and instructor training for resource professionals and professional naturalists to teach volunteer courses. The first course, Big Woods, Big Rivers, began in fall 2005. Prairies and Potholes began in 2006, and North Woods, Great Lakes started in 2009.

LEARN MORE ABOUT:

- Becoming a master naturalist volunteer at: www.minnesotamasternaturalist.org
- Other DNR natural resources education programs at: www.mndnr.gov/education

OUTDOOR RECREATION KEY INDICATOR GAPS

INDICATOR GAPS:

Although the indicators in this report have data of sufficient quality and coverage to support trend reporting, we recognize gaps in our ability to report on important natural resource and outdoor recreation trends. The following is a preliminary list of important indicators that require either additional data or new monitoring efforts. When baseline and trend data for new indicators are available, cooperative efforts will be needed to establish conservation targets.

A preliminary list of indicator gaps include:

Indicator to track diversity in trail users
Indicators to measure satisfaction of recreation user (surveys)
Indicators to measure trail density and distribution in state forests
Indicators to track trends in new forms of recreation and tourism
Indicator to measure recruitment and retention for multiple forms of recreation