MISSOURI
STATE REPORT
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Taking Action for Tomorrow's Resources

A fundamental tenet of the Missouri Department of Conservation (Department) for more than 75 years has been: "The hope of wildlife restoration and conservation in Missouri lies in the three-way cooperation of the state, the landowner, and the public, based on adequate information and mutual understanding." Following this tenet continues to serve Missourians well, and it has resulted in many significant conservation advancements. Missouri's forest, fish, and wildlife resources enhance our quality of life and connect us to our outdoor heritage. These resources support approximately 90,000 Missouri jobs and provide a $12.4 billion annual boost to the state's economy. Conservation continues to be a wise investment.

One of the Department's five broad goals is to ensure healthy and sustainable forest, fish, and wildlife resources throughout the state. Monitoring wildlife diseases and minimizing their adverse effects is a Department priority. Examples include whirling disease in trout, thousand cankers disease in forests, and chronic wasting disease in deer. Wildlife resources we enjoy today could be lost if we fail to take preventive actions. It is essential for the Department to focus on all species, and their varying needs in different habitats, to ensure sustainable populations. For example, ensuring healthy fish populations requires attention to our rivers, streams, and lakes, as well as commercial facilities. Ensuring healthy forests requires management considerations for forests in rural and urban areas, as well as in commercial nurseries. The same holds true for one of our state's most popular wildlife species—white-tailed deer. Missouri's deer herd includes both free-ranging and captive animals.

Latest Tests Find "No Chronic Wasting Disease-Positive Deer"

The latest tests on 3,666 free-ranging deer harvested during and after the 2013 deer hunting season found no evidence of chronic wasting disease (CWD). The total number of confirmed cases in Missouri's free-ranging deer herd remains limited to 10 found in 2012 and early 2013. All were from a small area of northwest Macon County near where CWD was confirmed in 10 captive deer at a private hunting preserve in 2012. Missouri's first case of CWD was discovered in 2010 in a captive deer at a private hunting facility in southeast Linn County.

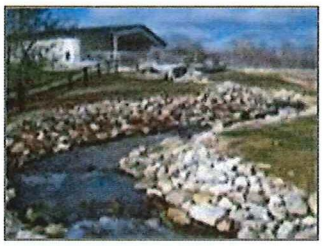
The Department has been working with hunters, landowners, conservation partners, and businesses to detect cases of this disease and limit its spread. Regulation changes associated with managing the free-ranging deer herd have been implemented in six north Missouri counties, and restrictions have been placed on bringing hunter-harvested deer, elk, and moose carcasses into the state. In addition, the Department has been working with the captive deer industry, landowners, and citizens to review existing management practices and regulations for captive deer. These efforts have identified portions of Wildlife Code regulations that need to be enhanced.

With or without the threat of CWD, areas of the Wildlife Code need to be enhanced to address risks associated with captive deer. Existing fence standards for captive deer need to be enhanced. For example, captive animals can become free-ranging when trees fall on single

fences or when streams wash out crossing fences. The Department is considering a double fence requirement. There is a need for real-time information on all captive deer herds. Inventory information should be up to date on each deer and clearly document where a specific animal came from and when it was removed (shot or sold) from the herd. Without this level of detail, the ability to complete "trace back" and "trace forward" herd checks, it would not be possible to address a wildlife health issue, such as a new outbreak of CWD.

Shepherd of the Hills Brown Trout

Shepherd of the Hills Hatchery (SOH) is responsible for spawning, rearing, and supplying all of Missouri's regulated streams and lakes with brown trout. Brown trout broodstock are not held on site, instead they are collected from Lake Taneycomo every fall during the brown trout spawning migration. To make this process more efficient, the SOH brown trout ladder was established in 2007. The ladder allows brown trout to swim into holding pools where they can be easily sorted and spawned when the time is right. It is comprised of concrete structures with weirs for a "stair-step" effect and a meandering man-made stream.



Meandering stream portion of fish ladder leading to broodstock holding pools

Beginning of fish ladder (concrete weir structure) at Lake Taneycomo

The brown trout ladder has witnessed good years and bad years in terms of broodstock "turn out". The limiting water quality factors were closer to "normal" in 2013, which resulted in the hatchery receiving numerous brown trout for spawning (over 900). The majority of the fish ascending the ladder was healthy, large, and assumed to be four-year-old fish based on yearly observations. Two successful brown trout egg harvests were taken in late October and early November, providing the hatchery with over 300,000 eggs.

Turkey—A Restoration Success Story

All 114 Missouri counties now have a huntable turkey population, the result of restoration efforts in the 1960s. Missouri has made important contributions to restoration programs in other states, as well, by swapping Missouri wild turkeys for ruffed grouse, otters, pheasants, prairie chickens, and various kinds of fish.

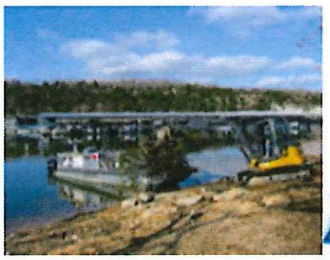

A new turkey research project funded through the Wildlife Restoration Program will increase our understanding of wild turkeys in Missouri and improve our decision-making process. For example, the ideas regarding optimal habitat have changed greatly. Highest turkey densities now occur in agricultural regions of the state where crop fields, old fields, and timber are well interspersed. High turkey populations even exist in counties with less than 20 percent timber. Obviously, the wild turkey is much more adaptable than previously thought and prospects for continued high populations of wild turkeys in Missouri are excellent.

Asset Management

The Department's infrastructure asset (roads, buildings, levees, towers, etc.) replacement value is currently valued at approximately $1.6 billion. The objective of an asset management system is to assign a level of service (useful life) for every asset and track the total cost, using industry and accounting standards to arrive at the most cost-effective manner, for present and future customers. Currently, the Department doesn't have all the information readily available for decision makers to know pertinent facts, location, and condition of assets to effectively allocate construction and maintenance dollars and labor time between competing infrastructure needs statewide.

The Department has embarked on modernizing its asset management program to better manage the infrastructure lifecycles and make better informed decisions regarding future investments in infrastructure and operational expenditures to have the greatest impact on service delivery. The implementation of this computerized asset management system will be phased in over a minimum of 5 years and will allow improvements to the existing Department management discussion and financial analysis. This modernized approach will improve the Department's ability to inform and demonstrate its financial position to citizens and meet audit requirements.

Successful Partnership—Table Rock Lake Habitat Restoration Project




The Department partnered with Bass Pro Shops, National Fish and Wildlife Foundation, and the Arkansas Game and Fish Commission to complete a five year project to maintain and enhance fish habitat in Table Rock Lake. This pilot project will serve in a broader national program focusing on habitat restoration within reservoirs. The primary project objectives were to improve fish habitat on Table Rock Lake. Over 2,000 fish habitat structures comprised of stumps, rocks, pine, cedar, and hardwood trees have been installed in Table Rock Lake since 2007. The

Department is using electrofishing, SCUBA surveys, radio telemetry, and angler creel surveys to evaluate the effectiveness of these habitat structures. In adjacent Lake Taneycomo, 71 boulder clusters were installed to improve trout habitat. This project has proven to be an excellent opportunity to proactively maintain and enhance fish habitat in and around two of the Midwest's most popular sport fisheries and is providing a national example for sustaining and improving reservoir sportfish populations through large-scale habitat improvements.

State Wildlife Action Plan Revision

The Department has initiated its revision of the Comprehensive Wildlife Conservation Strategy (CWCS). The conservation community is increasingly focused on broader habitat systems and their watershed context; in other words, landscape conservation. In the coming months, the Department, with active support from Missouri's broad conservation community, will improve the implementation of habitat and species conservation in the state. We will integrate guidance from landscape-level assessments and priority setting exercises (i.e. CWS, Forest Action Plan, Fisheries Watershed Priorities) as well as species plans, area plans, recovery plans, etc., to describe a common blueprint for the priority lands and waters (habitats) which conserve forest, fish, and wildlife resources in Missouri. This planning process now being termed **Comprehensive Conservation Strategy (CCS)** and could be the first in the nation to fully integrate the Forest Action Plan, Fisheries Watershed Priorities, and the Comprehensive Wildlife Conservation Strategy into a common framework for conservation action; a practical application of Strategic Habitat Conservation. The target date for completing the CWCS revision through the CCS process for Missouri is June 30, 2015.

This work will result in developing 4 conservation strategies, representing the ecological regions represented in Missouri: Ozark Highlands, Mississippi Alluvial Basin, Osage Plains, and the Central Dissected Till Plains. Each CCS strategy in an ecoregion will meet the expectations from the 8 required elements of CWCS. Each strategy will help guide conservation planning and implementation with our conservation partners in Missouri. Each strategy will be designed to facilitate conservation across state lines, particularly where other states describe their future conservation plans through the same ecological framework. By selecting priority geographies through this deliberate CCS process, Missouri is achieving success in restoring grassland habitat for the greater prairie chicken, increasing the opportunity for the restoration of elk and alligator gar, identifying the best places for the reintroduction of the American burying beetle, and considering the effects of climate on forest, fish, and wildlife, including adaptation needs.

Celebrate 25 Years of Stream Team

In 1989, a small group of anglers got fed up with trash marring the beauty of Roubidoux Creek. They decided to clean a section of the stream in Pulaski County. In doing so, they formed the first Missouri Stream Team. Twenty-five years later, the Roubidoux Fly Fishers Association — Stream Team 1 — is still going strong, and the movement they launched has exceeded even their most ambitious early goals.

The **Missouri Stream Team Program** is a citizen-led effort to conserve Missouri streams and is celebrating its 25th Anniversary in 2014. Program goals are the same today as when they were established in 1989: education, stewardship, and advocacy. The Program is a partnership between the Department, the Missouri Department of Natural Resources, and the Conservation Federation of Missouri. The Missouri Stream Team Program now boasts more than 4,000 Stream Teams with more than 85,000 volunteers. To mark the Silver Anniversary, the Department will be featuring "25 Days of Stream Team". Between March and October 2014, 25 events will be highlighted that emphasize the diverse involvement and type of events taking

place on behalf of Missouri's aquatic resources. Examples of the Stream Teams' ongoing work include:

- Removing 20 million pounds of trash from Missouri waterways
- Planting 250,000 trees along streams
- Conducting 25,000 water-quality monitoring trips
- Stenciling more than 17,000 storm drains with the message, "Dump no Waste. Drains to Stream."

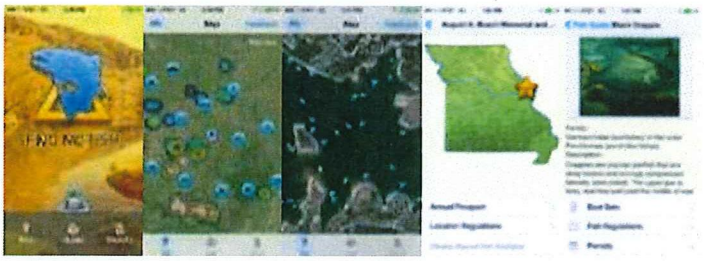
Focusing on Angler Recruitment and Retention in Missouri
Back in 2012, the Fisheries Division formed an Angler Recruitment and Retention Committee made up of Department staff and Missouri citizens. This group reviewed the current Department angler programs and materials to better target the key areas for angler recruitment and retention. Insight from the Recreational Boating and Fishing Foundation (RBFF) was obtained to understand recruitment efforts in other states, interpret the array of national trends and surveys, and review the available Missouri angler information. This lead to the formulation of a new plan and adopted by the Department in the fall of 2013 with 4 broad goals to be considered or carried out in the upcoming fiscal year. The goals are:

1) Introduction and recruitment of youth anglers to angling (grades K – 12)
2) Recruitment of families into angling
3) Modifying permitting for convenience and diverse opportunities for all types of anglers
4) Retention of existing anglers

Archery tournament was a record-breaker (*The contest saw the state record broken three times.)*

The sixth Missouri National Archery in the Schools Program (MoNASP) tournament at Tan-Tar-A Resort March 28 and 29 turned into a record-fest in which the state record score changed three times. The tournament brought together nearly 1,267 contestants in grades 4 through 12 from 81 schools to test their skills with bow and arrow. Going into this year's tournament, the record stood at 294 points. An 8th grader edged the record up to 295 on Friday afternoon and the following morning, a 12th grader nudged it up another notch to 296. But the tournament winner, a young, female 9th grader raised the final bar to 297 points, just two points short of the world record! MoNASP is coordinated by the Department and the Conservation Federation of Missouri in partnership with more than **300 participating schools** and numerous state and local supporting organizations.

Find MO Fish Mobile Application—*Revised and Improved*



The free **Find MO Fish** application provides a map of Missouri showing the locations of public boat ramps on the major lakes, rivers, and streams. The map also provides the exact location of underwater fish structures the Department has established over the years. These fish-attracting structures act as habitat for fish. With the geo-location feature, you can guide your boat right up to your favorite fish attractor and start fishing. To help anglers find the best locations, the application includes the annual prospects and weekly reports for select bodies of water. The annual prospects are updated by the beginning of the calendar year. The weekly fishing reports are updated every Thursday from the start of April to the end of September.

The latest **Find MO Fish** version has been rebuilt from the ground up for improved performance and updated with: 1) Optimized remote data fetching, 2) Added ability to view state and special regulations for each fish, 3) Added information on how to obtain fishing permits, 4) Updated "Fish Guide" and "Reports" workflow, and 5) Added ability to view "Conservation Area" and "Special Area" regulations where applicable.

Future of Conservation

The fundamental tenet of cooperative communication and partnership shared at the beginning of this document has served the Conservation Department for more than 75 years. Today, we stand on the shoulders of past conservationists who established a national framework of public trust responsibilities over natural resources (e.g. fisheries and wildlife species). This framework, the North American Model of Wildlife Conservation, is unique to United States and Canada and yet its success has often gone unnoticed by most Americans, including sportsmen whose forefathers championed for its main principles. Conservation leaders must be prepared to face the ever increasing range of challenges (natural, political, social, economics, etc.) attacking conservation today.

For those of us in the profession of natural resource conservation, the job of ensuring conservation success is more demanding and not something you can turn off easily at the end of the day! Conservation requires for us to be ready to sacrifice, to stand up with dedication and integrity and provide both vision and leadership to our staff in their tasks and to society as a whole. The actions we make today for conservation will only be truly judged by the next generation, so we have the opportunity now to be adaptable leaders, be persistent and remain on course, yet be open to fresh ideas and options which are appropriate in delivering conservation success in our respective states. I continually remind my Department staff, "In this profession, we don't **have** to make a decision…we **get to** make the decisions which will make us **the national leader in forest, fish, and wildlife management** by advancing our mission through understanding both the natural landscapes and the social landscapes.