



**U. S. Fish and Wildlife Service**

# **Inside Region 3**

*May 2014*



## RD Corner

### Happy Spring!

It was an honor at the end of April to host and celebrate all of the excellent work that's done by our employees with our Regional Employee Excellence Awards celebration. Your fine efforts and passion for our work continues to amaze me. This year we received more than 160 award nominations for our eight categories, which is the largest number that we've had since we began this program five years ago. Congratulations to all of the nominees and winners and thank you for the work that you do!

This month, the Region hosted Rowan Gould, our Deputy Director, who participated in several activities. First, Rowan met in the Regional Office with the Science Applications - Assistant Regional Directors from throughout the Service and also took some time to visit with staff in the Regional Office as part of an informal town hall meeting. Rowan then travelled to see our Whitney Genetics Lab and Fisheries office in La Crosse, and also stopped in at the Upper Mississippi River Wildlife and Fish Refuge Visitors Center in Onalaska where Refuge district managers were meeting along with their biologists to discuss upcoming resource activities for this summer. You can read about diving duck distribution and abundance in the Upper Mississippi River and Great Lakes Joint Venture Region on page 11.

May is a time when we start getting into the field in earnest. I would like to remind you that new employees or employees starting to use new techniques and tools should be both



Regional Director Tom Melius/USFWS.

trained properly and follow safe procedures. As such, please be sure to complete all of your training. May is also the beginning of boating season. I invite you to find out what Wildlife and Sport Fish Restoration funding does for conservation in your state on page 3.

Finally, I was thrilled that the Migratory Bird Conservation Commission recently approved \$61 million to conserve North American wetlands and specifically awarded \$6.5 million to support projects in the Midwest. Read more on page 9.

I wish everyone the best for the beginning of Spring and hopefully Summer will follow soon.

T.O.M.

# Find Out What Wildlife and Sport Fish Restoration Funding Does for Conservation in Your State

Each year, the Wildlife and Sport Fish Restoration Program provides funding to each state in the Midwest to support localized conservation efforts. This year, the Midwest Region is receiving over \$210 million dollars in grant funding. In the past, conservation efforts including native plant restoration, deer population research, elk restoration, fish stocking, and other state-specific conservation needs have been realized with the help of this funding.

Across the nation, more than \$1.1 billion will be distributed to state and territorial fish and wildlife agencies to fund fish and wildlife conservation and recreation projects across the nation. The funding for the Wildlife and Sport Fish Restoration grants comes from a user-pay, user-benefit system. Revenues come from excise taxes generated by the sale of sporting firearms, ammunition, archery equipment, fishing equipment and tackle, and electric outboard motors. Recreational boaters also contribute to the program through fuel taxes on motorboats and small engines.



Several states in the Midwest Region use Wildlife Restoration funds to study white-tailed deer population dynamics/USFWS.



The Lake Char is one of the Michigan Department of Natural Resources' research vessels. It works in the waters of Lake Superior and is in part supported by Sport Fish Restoration funding/Courtesy of Michigan Department of Natural Resources.

The Wildlife and Sport Fish Restoration Programs have generated a total of more than \$15.3 billion since their inception to conserve fish and wildlife resources. The origination of this program began in 1937 with the Pittman-Robertson Wildlife Restoration Program and in 1950 with the Dingell-Johnson Sport Fish Restoration Program. The recipient fish and wildlife agencies have matched these program funds with more than \$5.1 billion.

These dollars are critical in sustaining healthy fish and wildlife populations and providing opportunities for people to connect with nature. The introduction of the Wildlife and Sport Fish Restoration excise tax has truly made for one of the most successful

and unrivaled conservation stories in history!

Learn more about each state here:  
<http://www.fws.gov/midwest/news/WSFRfunding.html>

By Joanna Gilkeson

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# Inspiration

## Be Inspired

To our staff who work and live in the Great Lakes states, we wanted to let you know that the work you do is inspiring. With the support of the Great Lakes Restoration Initiative and our partners, you are making tremendous gains for conservation.

So as you dust off your boots and start to plan for another field season, take a moment to watch our video salute to your ongoing accomplishments. Please feel free to share this video with your friends and family as well. We want the American public to know that each day you work on their behalf to restore, conserve and protect one of the country's most important freshwater resources.

The video can be viewed at: <http://youtu.be/wEiWBmUoDpI>

Thank you for all that you do every day.

By Kaitlin Steiger-Meister

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## Endangered Species Day Celebrated May 16

In 2006, Congress recognized the first Endangered Species Day, an opportunity to learn about the importance of endangered species and everyday actions people can take to help protect them. In the Twin Cities area, Ecological Services hosted a display at the Minnesota Zoo with information about threatened and endangered plants and animals in Wisconsin and Minnesota. Check back next month for a look at the display and activities.

By Georgia Parham



The U.S. Fish and Wildlife Service continues to be committed to Great Lakes restoration. Photo courtesy of myheimu/Creative Commons. Below: Iowa Pleistocene snails are among the endangered and threatened species in the Midwest/USFWS.



# Lake Michigan Wild Egg Collections Lead to the Return of Deepwater Cisco in Lake Ontario!

For the fifth consecutive winter, Service biologists collected bloater eggs (*Coregonus hoyi*), a species of deepwater cisco, from Lake Michigan to assist with efforts to restore this species in Lake Ontario. To date, 24,000 bloater juveniles have been stocked into Lake Ontario that originated from the Service's egg collection efforts in 2010 through 2012, and another 67,000 are scheduled to be stocked this fall from 2013 egg collections.

These stockings have returned bloater to Lake Ontario, where they disappeared in the 1950s from the combined effects of invasive species, poor water quality and commercial exploitation. Their disappearance disrupted the historical foodweb structure in the lake as bloater were the primary link between deepwater invertebrates and top predator species including lake trout. Lake Ontario managers hope to restore self-sustaining bloater populations through large-scale annual restocking efforts of 500,000 bloater juveniles. This will increase the diversity among forage fish populations, reestablish the historical foodweb structure and ultimately increase lake trout production. The Midwest Region Fisheries Program egg collection work is making a major contribution to the advancement of fish culture methods for bloater and is paving the way to achieve these large-scale stocking efforts needed for bloater restoration in Lake Ontario.

Accessing bloater eggs in the wild is extremely challenging as Lake Michigan bloater spawn at depths in excess of 300 feet in the heart of winter (January through March). Service crews, led by Dale Hanson (Green Bay FWCO) and Roger Gordon (Jordan River NFH), logged 24 trips in 2014 aboard two commercial bottom trawling



The vessel, Peter Paul, in the midst of a bottom trawl. Surface ice was common this winter and finding open water pockets was a necessity to avoid filling the net with ice when the trawl was deployed and lifted to the surface/USFWS.

vessels based out of Two Rivers, Wis. located on the western shore of Lake Michigan. Despite one of the coldest winters on record, the boats broke through several miles of ice to reach the spawning grounds where bottom trawls caught roughly 25,000 bloater adults.

Bloater spawn over a protracted period and only 394 "ripe" females contained fully developed eggs suitable for spawning. These ripe females yielded 500,000 eggs that were fertilized and shipped via overnight delivery to the White Lake Fish Culture Station in Ontario, and the USGS Tunison Lab in New York. Half of these eggs successfully reached the eyed-egg stage and by mid-April these eggs will have hatched to produce over 180,000 bloater fry to be reared in these hatcheries for the next 18 months. Managers anticipate the 2014 egg collections will produce 60,000 bloater juveniles that will be

available for stocking into Lake Ontario in the Fall of 2015.

Since their inception in 2010, the egg collection surveys have made substantial progress toward meeting the annual stocking targets of 500,000 juveniles. Most notably, Service hatchery personnel have been on all surveys since 2012 to ensure only fully developed eggs are collected, and since 2013 surveys have employed bottom trawl gear, instead of gillnets, which has resulted in higher catches and markedly better fish condition. These changes have more than doubled the survival from egg to fry stages compared to that observed in 2010 to 2012. Despite these improvements we are still far short of meeting annual stocking target goals, but the future looks

Continued on page 12.

# Making Polluters Pay in Missouri

Staff at the Columbia Ecological Services Field Office and their co-trustees at the Missouri Department of Natural Resources and the U.S. Forest Service have settled with the owners of a former metals mining operation in southeast Missouri for injury to natural resources. The trustees for Natural Resource Damage Assessment and Restoration have negotiated a settlement agreement for \$1.4 million with Teck American, Inc. and DII Industries, LLC, to resolve the two companies' liabilities for releases of hazardous substances from the Magmont Mine and Mill site near Bixby, Missouri.

The Magmont Mine and Mill were opened in 1968. The mine and mill produced lead, zinc and copper concentrates using a fully mechanized room and pillar mining technique. Waste products from the milling process were stored in a valley fill tailings impoundment onsite covering more than 300 acres. The impoundments permanently covered portions of Neals Creek, a tributary of the Black River. The mine and mill were closed in 1994, and initial reclamation of the tailings impoundment occurred in the late 1990s.

The trustees have gathered data and completed studies to assess impacts of contaminants on vegetation, riparian and stream sediments, benthic organisms and avian species in the mining district known as the Viburnum Trend. Overall, the southeast Missouri lead mining district remains the largest lead production area in the United States, and for parts of its history, the leader world-wide. Approximately 100 miles southwest of St. Louis, mining in the Viburnum Trend Mining Sub-District began in the 1950s and is expected to continue into the future

for decades to come. The legacy of the heavy-metal mining and smelting in the district is large-scale ecological injury to thousands of acres of terrestrial habitat and dozens of miles of streams.

The Natural Resource Damage and Restoration trustees will use the recovered funds to compensate the public, through environmental restoration, for the loss of natural

resources injured at the Magmont site. The trustees are currently finalizing a restoration plan for southeast Missouri which will include the resources and area affected by the Magmont site. The restoration plan should be completed in 2014.

By John Weber



Above: A 1993 image of the Magmont Mine in its full operational capacity. Site facilities seen here no longer exist/Courtesy of Bureau of Land Management. Below: The Magmont Mine site following the closure of the tailings impoundment and revegetation/USFWS.



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# Wildfire Blackens Research Natural Area But Spares Homes

It was closing time at the refuge office for what had been a quiet last day of March when the phone rang. A very excited voice on the phone yelled “Hello, Ed! This is Dave, down at the corps ranger station. Are you guys burning at Thomson Prairie!?” In the background I heard a frantic voice yell, “It’s really gettin’ close. Let’s get outta here!”

“No Dave,” I replied. “Call 911.” An uneventful day was suddenly catapulted into chaos.

Forty-mile an hour winds were sweeping a raging wildfire through the Thomson Natural Research Area toward the Village of Thomson, Illinois located along the boundary of Upper Mississippi River National Wildlife and Fish Refuge. I was about to experience the true meaning of the fire acronym WUI, i.e., Wildland Urban Interface.

By the time I arrived on site, three volunteer fire departments were on scene with two more en route. The gray, billowing smoke from the burning prairie filled the sky and cluttered the radar screen of television weather stations in the Quad Cities. The Village was on high alert as the rolling thunder of fire with 30 foot high flames was headed directly for a residential neighborhood.

The 340-acre Thomson Natural Research Area stretches two miles in length and is one of the largest sand prairies in Illinois. It is home to one of the few remaining populations of ornate box turtles and western hognose snakes, both state threatened species that are dependent upon sand prairie habitat. Fortunately, the extended harsh winter conditions had kept both the turtles and snakes in brumation and out of harm’s way from the raging wildfire.



After four hours of battling the wildfire, it was extinguished as it encroached into the mowed yards of adjacent residences/USFWS.

The volunteer fire departments attacked the head fire as it advanced along the west side of the prairie. A disked fire break surrounded the prairie and slowed down the head fire, but two storage buildings and some wooden fencing were damaged before the west flank of fire was stopped.

As the firefighters slowly gained control of small sections of the head fire, they moved their brush trucks as briskly as possible to adjoining flames. The swirling unpredictable winds caused embers to reignite in areas thought to be under control causing head fires to quickly recover behind the brush trucks that were moving forward.

Refuge staff members John Kilburg, Bill Davison, Darryn Witt, Russ Engelke and myself, assisted the fire departments in a support role. We are not wildland firefighter certified thus could not participate in firefighting activities. Our duties included going house to house alerting residents of the fire and the potential need to evacuate and restricting the area from onlookers to stop them from getting too close. We also acted as roadside lookouts for the advancing fire.

Three houses were in the direct path of the raging head fire that was now racing

toward the east flank of the prairie. Residents in these homes were required to evacuate while the fire departments hosed down the exterior as best they could. Neighbors across the street were watering down their homes with garden hoses.

After four hours of battling the wildfire, firefighters doused the blazing flames that had now reached the mowed yards around the houses. Their heroic efforts were rewarded as the blaze was reduced to smoldering ash. A great sigh of relief permeated the blackened prairie as the gale force winds blew charred debris into the Village.

A total 265 acres of Thomson Natural Research Area burned. It was the largest grassland fire these volunteer fire departments had ever worked on. Being primarily structural firefighters, many lessons were learned during this harrowing wildfire. We, at the refuge, are grateful for our volunteer fire departments and that this incident didn’t result in loss of life or significant property damage.

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## Free the Prairie with Partners

Sometimes remnant prairie restoration can be as simple as cutting a few trees, but it takes a real team effort to get 23 acres of dense cedars removed. This winter the U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program teamed up with the Ice Age Trail Alliance to release a suppressed rare mesic prairie. Partners biologist Greg Hamilton lead a collaborative effort to use multiple work parties involving private contractors, volunteers, Service staff, and Alliance staff to clear invasive cedar trees along The Ice Age Trail Gibraltar Segment in southern Wisconsin.

In Wisconsin, mesic prairies once covered nearly one million acres; in 1995 the Wisconsin Department of Natural Resources estimated that less than 100 acres remained. Since mesic prairies have become rare, many of the species they support are becoming endangered due to habitat loss. This once open prairie parcel was now dominated by large cedar trees and invasive brush which had caused prairie plants to go dormant as seed in the soil. Hamilton found some scattered prairie plants here and there in almost complete shade, so he knew efforts would yield true

remnant prairie. Two things were certain; there was a need to free the prairie and it would take a massive effort to remove the tons of invasive biomass on this fragile site.

After learning that several small remaining openings of prairie remnant had yielded over one hundred prairie species back in the late 90s, Hamilton thought it was time for a big effort to free some rare habitat. He pulled a team together, developed a plan, and implemented it. Forestry mowing and some grueling hand saw work on the steep slopes were used to open up about 23 acres. It felt good to know that each tree pulled would result in diverse prairie; this put some extra motivation into our team.

This site will harbor many rare plants and insects. We are expecting some rare grassland birds and herpetiles to call this project site home too. There have been some promising wildlife observations on an adjacent property. Hikers and school groups will enjoy exploring the great outdoors with an improved diversity of flora and fauna. Our team can't wait to see what pops up!

By Greg Hamilton



A snow day!./Courtesy of Ice Age Trail Alliance.

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# Migratory Bird Conservation Commission Approves \$61 Million to Conserve North American Wetlands; \$6.5 Million To Midwest Projects

Migratory Bird Conservation Commission Approves \$61 Million to Conserve North American Wetlands; \$6.5 Million To Midwest Projects

On March 26, the Migratory Bird Conservation Commission approved \$61.3 million in funding to protect, restore and enhance more than 205,000 acres of wetlands and associated uplands in the United States, Canada and Mexico. Of that, approximately \$6.5 million will go toward projects in the Midwest Region.

“Conservation of our nation’s wetlands is critical to protecting our wildlife, watersheds, coastal communities and important economic activities,” said Secretary of the Interior Sally Jewell, Chair of the Commission. “Wetlands not only are home to hundreds of species of migratory birds, but they also provide us with clean water, act as buffers against storms, support our vibrant coastal fishing industries, and provide unique opportunities for outdoor recreation.”

The commission approved \$54.7 million in grants through the North American Wetlands Conservation Act to protect, restore and enhance 200,069 acres of habitat for migratory birds in the United States, Mexico and Canada, leveraging an additional \$92.6 million in matching funds. This includes 24 Midwest Region projects for a total of \$6.5 million and matching funds of \$15 million.

The commission also approved nearly \$6.6 million for fee and easement land acquisitions of 5,072 acres on five national wildlife refuges. The funds were raised largely through the sale of Duck Stamps.

“These grants are critical to maintaining the health and vitality of America’s wetlands and the abundance and variety of wildlife they support,” said Fish and Wildlife Service Director Dan Ashe. “Wetlands are particularly crucial to migratory birds all along their flyways. These grants will enable our partners in Canada, Mexico and the United States to protect and improve the quality of these habitats.”



Native prairie habitat/USFWS.

The North American Wetlands Conservation Act is the only federal grants program dedicated to the conservation of wetland habitats for migratory birds. Since 1990, approximately 5,000 partners in more than 2,000 projects have received more than \$1.2 billion in grants. The grants have leveraged another \$2.6 billion in matching funds to help improve more than 27 million acres of habitat.

More information about the NAWCA standard grants nationwide is available at: [http://www.fws.gov/birdhabitat/Grants/NAWCA/Standard/US/2014\\_March.shtm](http://www.fws.gov/birdhabitat/Grants/NAWCA/Standard/US/2014_March.shtm)

NAWCA Standard Grant Awards: (5 projects totaling \$5 million, \$11 million matching funds)

## Indiana

Patoka River NWR Expansion - \$1 million (\$2.1 million matching)

This project focuses on wetland and upland habitat protection, restoration and enhancement within Patoka River National Wildlife Refuge. Project activities will provide important migration, wintering and breeding areas for waterfowl, benefit rare and endangered species of wildlife and fish associated with large river ecosystems, improve water quality, and help stimulate local economies through recreation on project lands.

## Michigan

Michigan Upper Peninsula Coastal Wetland Project III - \$1 million (\$2.1 million matching)

This project targets habitat gaps and addresses specific habitat management limitations to maintain long-term management at the two most productive examples of intensively managed wetland complexes in the Upper Peninsula. Partners will protect 2,272 acres and enhance 1,455 acres, including 2,143 acres of wetlands. This project will also secure approximately 13 miles of riparian waterways and protect an additional 8 miles of migration and breeding habitats along beaches, lakeshores, islands and Great Lakes shorelines

## Michigan and Wisconsin

Door to Garden Peninsula Coastal - \$1 million (\$3.4 million matching)

This project begins a multi-year initiative to protect, restore and enhance coastal wetlands and

Continued on page 14.

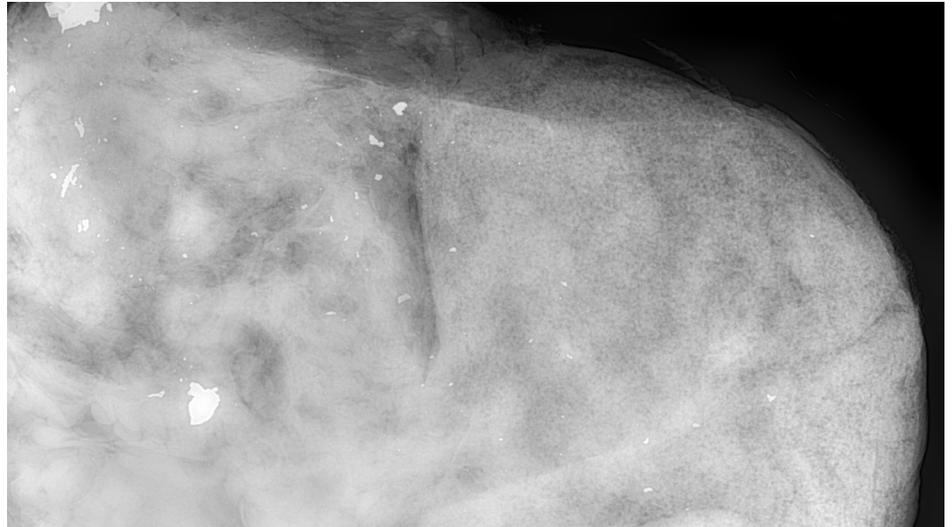
# Prevalence of Lead Ammunition Creates An Exposure Pathway Into Bald Eagles

Traditionally, lead ammunition is preferred by white-tailed deer hunters in the Upper Midwest. Managed deer hunts conducted on the U.S. Fish and Wildlife Service's Upper Mississippi River National Wildlife and Fish Refuge provided an opportunity for Refuge staff to quantify the amount of lead ammunition potentially available as an exposure pathway in bald eagles after a hunting event.

The Refuge is an important bald eagle concentration area with thousands of wintering eagles and hundreds of nests. In 2012, 58 bald eagles that were found dead in various areas throughout the Midwest (MN, WI, IA, IL) and on the Refuge were necropsied. Liver lead analysis conducted by the National Wildlife Health Center showed that 60% of eagles had lead exposure and 38% had lethal levels of lead. The high incidence of lethal lead spurred an investigation into hunting ammunition as a pathway to exposure.

Managed deer hunts on the Refuge's Lost Mound Unit provide a quality hunting experience for a special group of hunters that includes youth and disabled adults (quadriplegics, paraplegics, and amputees). The hunts are conducted in areas closed to public access due to environmental cleanup at this former military installation. Special hunt regulations are in effect that include: an application process; random drawing for hunt sites; hunter orientation; controlled access into/out of the hunt area; and a mandatory deer check station.

A non-toxic (copper) ammunition program was implemented during the 2012 and 2013 managed hunts. This program provided Refuge staff with an opportunity to talk with hunters about lead ammunition being an exposure



X-ray of a deer gut pile containing 107 lead fragments. This deer was shot during the managed hunt on Lost Mound Unit/Photo courtesy of Saving Our Avian Resources/USFWS.

pathway in bald eagles and to encourage hunters to voluntarily reduce lead on the Refuge. Partners like American Bird Conservancy and Saving Our Avian Resources provided funding to purchase 200 boxes (5 shells per box) of non-toxic ammunition (shotgun slugs) that was provided free to hunters. Every shotgun hunter (160 total) accepted the free non-toxic ammunition.

Fifty-seven white-tailed deer were harvested during the combined 2012 and 2013 managed hunts. Twenty-five of these deer were shot with lead ammunition that accounted for 44% of the total harvest. Despite the provision of free non-toxic ammunition and outreach to hunters (most of the same individuals hunted both years) on the relationship of lead ammunition to exposure in eagles, the use of lead increased from 42% of the deer harvest in 2012 to 46% in 2013.

Harvest information was collected from hunters that included firearm and bullet type, number of shots taken, distance of shots, and location of bullet entrance and exit wounds. Spent shotgun shells were collected to quantify the amount

of lead that was shot. The lead weight for each ammunition type was determined from specifications provided at the manufacturers' websites.

The approximate total weight of lead shot to harvest 25 deer during the 2012 and 2013 managed deer hunts at Lost Mound was 644,000 milligrams. Laboratory studies show that 82.5 milligrams of lead is a lethal dose for a bald eagle. The 644,000 milligrams of lead contained an equivalent 7,806 lethal doses. The amount of lead contained in a single shot showed: 20 gauge shotgun slugs ranged in size from 2.75-3.00 inch shells, weighed between 16,200-28,380 milligrams, and had an average equivalent weight to 270 lethal doses per slug; 12 gauge shotgun slugs ranged in size from 2.75-3.00 inch shells, weighed between 19,220-35,380 milligrams, and had an average equivalent weight to 331 lethal doses per slug; and .50 caliber muzzleloader bullets weighed 21,250 milligrams with each bullet equal to 258 lethal doses.

Continued on page 12.

# Understanding Diving Duck Distribution and Abundance in the Upper Mississippi River and Great Lakes Joint Venture Region

The Upper Mississippi River and Great Lakes region is important to continental waterfowl populations, especially migrating diving ducks and sea ducks. Abundant high-energy food resources, coupled with warmer weather and the adaptability of some species, has resulted in increasing lengths of stay during migration periods and growing numbers of waterfowl spending the winter.

Estimated annual “duck-use days” (number of ducks multiplied by number of days in area) for the Midwest region now total about 800 million for winter and spring periods combined, according to the Upper Mississippi River and Great Lakes Region Joint Venture (JV) Waterfowl Habitat Conservation Strategy.

Toward the eastern side of the Great Lakes region, where the St. Clair River empties into Lake St. Clair, lays one of the world’s largest freshwater deltas, a wetland and open-water system shared by Canada and the United States. Historically, the Lake St. Clair complex and nearby western Lake Erie have hosted peak numbers of 750,000 diving ducks during fall, with canvasbacks, redheads, lesser scaup, and greater scaup being prominent species. Associated with high duck use is a long tradition of diver hunting in U.S. waters of Lake St. Clair, but hunter success declined in the early 2000s while populations of diving ducks using the lake appeared to be increasing, prompting research to better understand the system.

Using historic (1983-2009) and current (2010-2012) diving duck aerial survey data, researchers (Michigan DNR and Michigan State University) compared scaup, canvasback, and redhead abundance and distribution on U.S. and



Many diving duck aerial-survey transects were established by Michigan waterfowl researchers on Lake St. Clair/USFWS.

Canadian waters of Lake St. Clair. GPS locations were recorded for all diving duck flocks and for human activity on the lake, allowing development of spatial models to investigate the effects of past and current environmental and anthropogenic variables on diving duck distribution.

This effort uncovered a relationship between colonization by exotic Dreissenid (zebra and quagga) mussels, increased water clarity, and human disturbance (e.g., pleasure boating, anglers, and waterfowl hunting via open-water layout boats), but with some species-specific differences. For example, although continental scaup populations declined during the assessment period, fall-staging scaup numbers increased at the study area, likely related to an abundant new food source (Dreissenid mussels) available to the largely carnivorous scaup. In addition, increased water clarity of the

lake associated with mussel invasion resulted in expansion of submerged aquatic plants and increased canvasback (largely a vegetarian) use of new and deeper vegetation zones.

Unfortunately, U.S. hunters enjoyed only limited benefits from these lake-wide increases in diving duck populations. High disturbance from boating activity (always in U.S. waters) resulted in diving ducks shifting from U.S. to Canadian locations for a majority of their activity during daylight hours.

Decreased use of U.S. waters by diving ducks in the past 10-15 years was likely a result of system-wide changes on Lake St. Clair initiated by Dreissenid mussels. The entire lake appears to have transitioned to a food-rich system, and consequently, diving ducks no longer tolerate the level of disturbance and hunter-

Continued on next page.

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# Understanding Diving Duck Distribution and Abundance in the Upper Mississippi River and Great Lakes Joint Venture Region

related risk they did historically to exploit available forage. Rather than exclusively using the relatively shallow but highly disturbed U.S. portion of Lake St. Clair, expanded food resources and higher water clarity have allowed diving ducks to 1) feed more efficiently, 2) loaf in secluded, offshore Canadian waters during the day and forage in the U.S. nocturnally, and or 3) simply forgo using U.S. waters entirely because of increased food abundance in the relatively deeper Canadian waters of the lake.

Although food availability undoubtedly plays the primary role in distribution and abundance of migrating waterfowl, researchers in the Great Lakes region found negative correlations between boats counted (disturbance) and abundances of diving ducks. Diving ducks had options at this study location, but obviously disturbance must be an important management consideration at most waterfowl stopover sites. Like other regions important during the non-breeding period, waterfowl conservation planners in the Upper Mississippi River and Great Lakes region assumed food energy was the factor most limiting duck use during migration and winter. Great Lakes diving duck researchers supported by the Joint Venture identified considerations and pitfalls of this simple assumption. The Lake St. Clair research team pieced together a much better understanding of the complexity and dynamics of a system critical to non-breeding waterfowl.

By Gregory Soulliere

## Lead Ammunition Continued.

Offal (gut piles) was collected from the 25 deer shot with lead ammunition. Radiography was conducted at veterinary clinics and showed that lead fragments were present in 36% (9/25) of the offal having between 1 and 107 fragments per offal pile. Most hunters discard deer offal on the landscape that becomes available to bald eagles and other wildlife. During the 2012 to 2013 hunt season, the total deer harvest in the states of Minnesota, Wisconsin, Iowa and Illinois was 645,317 with a corresponding number of offal piles discarded on the landscape.

Bald eagles were frequently observed circling above the hunt area. Their inland search for prey was due to the river typically being frozen during deer hunting season. Road killed deer and offal were placed in the hunt area to simulate fatally wounded but not retrieved deer and discarded offal. Motion sensor cameras documented that bald eagles quickly find and feed on deer carcasses and parts. In 2013, three deer shot with lead were wounded but not retrieved. Blood trails indicated the deer were injured but it is not known to what extent.

Thirty-two of the 57 deer harvested during the combined 2012 and 2013 hunts were shot with non-toxic ammunition. These included 18 deer shot by hunters that would have used lead if the Refuge not provided free non-toxic ammunition. The provision of free non-toxic ammunition to hunters reduced the amount of lead being shot by a minimum 166,940 milligrams, an equivalent weight for 2,024 lethal doses. A quarter of the deer (14) were shot by hunters that brought their own non-toxic ammunition.

By Ed Britton

## Lake Michigan Continued.

bright! Next year, collection methods will also include a captive broodstock program whereby pre-spawn wild caught bloater will be retained in a lab and spawned once the eggs become fully developed. Also, conventional bloater broodstock lines are beginning to mature.

Since 2011, a small portion of bloater fry from each year-class, currently 15,000 in total, were retained at the White Lake Fish Culture Station and raised as broodstock. The 2011 year-class of broodstock is just starting to mature and managers are hopeful that these broodstock fish will supplement the wild egg collections next year. With each year enthusiasm grows for bloater restoration and the growing success is a tribute to the hard work that the Service, Ontario Ministry of Natural Resources, New York Department of Environmental Conservation, Great Lakes Fishery Commission, and the USGS Tunison Laboratory have put forth to pave the way for deepwater cisco restoration.

By Dale Hanson

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## Wildfire Continued

The cause of the wildfire is undetermined, but is believed to have started on railroad right of way property and was possibly caused by a spark from a passing train or a carelessly tossed cigarette. In fall 2013, there were several arson related fires on private property located adjacent the Thomson Natural Research Area.

By Ed Britton

# Midwest Region Excellence Awards 2014

The Midwest Region celebrated its 2014 Employee Excellence Awards on April 24 with the theme, One Service: Celebrating our Commitment to Conservation Excellence. The event marks five consecutive years of recognition. Regional Director Tom Melius and Deputy Regional Director Charles Wooley spoke eloquently to a packed house in the 7th floor conference room of the regional office.

The Regional Directorate Team joined Melius and Wooley in presenting the winners with their awards. Among stiff competition emerged the following winners (individual members of teams presented with awards are listed on page 17) and their associated categories:

## Customer Service – Internal

Dan Lovdahl, Regional Office,  
Contracting and Facilities Management

## Customer Service – External

Cathy Pollack, Chicago Field Office

## Fostering Partnerships

Federal Duck Stamp Contest Team  
(team members listed below)

## Outreach Excellence

Bat Facts Team (team members listed below)

## Safety Improvement

Heavy Equipment Trainers Team

## Safety Improvement

Adam McDaniel Columbia Fish and  
Wildlife Conservation Office



Lisa Williams received the Science Leadership Award/USFWS.

## Science Excellence

Merlin Avian Radar Team

## Teamwork

Operation Roadhouse Law Enforcement  
Team

## Workplace Improvement

Regional Office Social Committee

Other awards included the:

## Sense of Wonder Award

Sara Giles

## USFWS Science Leadership Award

Dr. Lisa Williams

## DOI Superior Service Award

Karen Schul

## DOI Superior Service Award

NiSource Teams



Dale Pittman received the Safety Improvement Award/USFWS.

In addition to the ceremony, employees from around the region also participated in an online FWS trivia game as part of Employee Appreciation Day.

In closing, Melius thanked the region for their commitment to excellence.

By Valerie Redmond

## Note:

See all team members on page 17.

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# Migratory Bird Conservation Commission Approves \$61 Million to Conserve North American Wetlands; \$6.5 Million To Midwest Projects

associated upland habitats in the Lake Michigan Basin, from the northern tip of the Door Peninsula of Wisconsin to the Garden Peninsula of Michigan. Partners will protect 1,319 acres through fee title acquisition and enhance 553 acres by removing non-native vegetation. Activities will occur within a significant bird migration corridor, near- and off- shore waterfowl overwintering area, and high quality Great Lakes coastal wetlands that provide stopover areas for many migrant landbirds, waterbirds, waterfowl and shorebirds.

## Minnesota

Border Prairie Wetlands III - \$1 million (\$2.3 million matching)

This project brings partners together to accelerate protection and restoration of prairie wetlands and associated wildlife in the Prairie Pothole Region. Partners will protect 338 acres of wetlands and 995 acres of adjacent uplands critical for nesting waterfowl and other wildlife. By protecting those acres and restoring 44 acres of wetlands and 250 acres of uplands on permanently protected lands, partners will optimize waterfowl production and enhance grassland bird habitats, benefitting species such as mallards, teal, American wigeon, northern shovelers and other waterfowl and water-dependent birds.

## Minnesota and North Dakota

Glaciated Wetlands and Prairies of North Dakota and Minnesota – IV - \$1 million (\$1.1 million matching)

This is phase four of a project designed to protect wetland and grassland communities using a landscape-level approach to planning. It is also the third project to span the borders

of North Dakota and Minnesota in the Prairie Pothole Joint Venture to protect critical habitat for migratory birds. Through this project, 3,456 acres of native grassland and 594 acres of wetland habitat will be secured by perpetual easements, resulting in significant benefits for grassland birds. Protection of native prairie surrounding the important prairie wetland habitats in the project area will provide nesting habitat for waterfowl and other species, and will minimize the influx of sediments, herbicides and pesticides into these wetlands.

Small Grant Awards: (19 projects totaling \$1,514,988 and \$4,124,810 in matching funds )

For detailed information about NAWCA small grant projects nationwide, visit <http://www.fws.gov/birdhabitat/Grants/NAWCA/Small/2014.shtm>

## Illinois

Oak Ridge Wetland Restoration at Hennepin & Hopper Lakes - \$50,000 (\$76,000 matching)

## Michigan

Arcadia Marsh Expansion Project - \$69,791 (\$104,000 matching)

## Minnesota

- Detroit Lakes, WPA - \$75,000 (\$88,000 matching)
- Glacial Ridge National Wildlife Refuge Lee Wetland Restoration 2013 - \$75,000 (\$300,000 matching)
- Glacial Ridge National Wildlife Refuge Wetland Enhancements 2013 - \$75,000 (\$153,537 matching)
- Litchfield Wetland Management District Waterfowl Production Area Enhancement - \$75,000 (\$77,000 matching)
- Whitney Waterfowl Production Area Addition - \$55,425 (\$55,425 matching)

- Mud Lake Waterfowl Production Area Addition - \$75,000 (\$177,500 matching)
- Selk Wildlife Management Area Addition - \$75,000 (\$86,000 matching)
- Swift County Wetland Conservation - \$75,000 (\$228,000 matching)
- Tiger Marsh Wildlife Management Area Addition - \$75,000 (\$757,500 matching)

## Ohio

- Big Darby Creek Corridor Protection - \$75,000 (\$75,000 matching)
- Burton Swamp Project - \$75,000 (\$419,500 matching)
- Eagle Creek Wetlands Project - \$75,000 (\$426,000 matching)

## Wisconsin

- Dobbs Landing Land Acquisition - \$75,000 (\$175,000 matching)
- H&L Farms Acquisition - \$75,000 (\$746,100 matching)
- Sylvan Road Conservation Area - \$75,000 (\$171,000 matching)
- Star Prairie Wetlands - \$75,000 (\$77,855 matching)
- Southern WI State Natural Area - \$75,000 (\$82,000 matching).

By Larry Dean

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# Nature and the Urban Environment: Urban Planners and Wildlife Conservation Experts Convene to Connect Cities with Nature

Less than an hour's drive through the scenic Mississippi River towns north of St. Louis sits Two Rivers National Wildlife Refuge (NWR), home to one of the largest concentrations of wintering bald eagles in the U.S., and thousands of birds as they rest and refuel during spring and fall migrations. Many refuge visitors come from the St. Louis metro area to hike, bird-watch and simply connect with their natural world.

Like Two Rivers NWR, many national wildlife refuges are within just an hour's drive of one or more major metropolitan areas. In the Midwest, Detroit River International Wildlife Refuge offers citizens of the Detroit area birding and wildlife-viewing opportunities, while Minnesota Valley National Wildlife Refuge offers outdoor education opportunities for inner city school groups from Minneapolis and St. Paul, Minn.

“More than three-quarters of people in the Midwestern United States live in urban areas. As a natural resource professional for more than 30 years, I have seen a recent trend in the conservation community towards an increased focus on our urban landscapes,” said Tom Worthington, Deputy Regional Chief of the National Wildlife Refuge System. “We have to make sure that people living in and near cities have opportunities to enjoy and learn and help care for our fish and wildlife heritage.”

That's why both the U.S. Department of the Interior and the U.S. Fish and Wildlife Service are committed to enhancing existing and creating new urban refuge partnerships in demographically and geographically varied cities across the country.

As part of the effort to connect with



Kids playing outdoors near St. Louis/USFWS.

urban audiences, Worthington and other Service staff met with urban planners and state, federal, private and nonprofit organizations from across the Midwest in a first of its kind movement to connect and integrate landscape-scale conservation efforts in and around urban areas. The effort kicked off with a Midwest Urban Conservation Workshop at the Missouri Botanical Gardens in the heart of St. Louis this May.

The workshop provided a venue to discuss challenges facing urban communities as they continue to expand, and established a platform for conversation about the future of urban conservation in the Midwest. The workshop was organized by the Eastern Tallgrass Prairie and Big Rivers Landscape Conservation Cooperative (LCC), Upper Midwest and Great Lakes LCC and other local and regional stakeholders vested in landscape-level conservation and management in urban areas.

Natural resource experts and city leaders discussed the adoption of green infrastructure to improve water quality, quantity and flood control, and the value of connecting people to nature through management initiatives that improve continuity of wildlife habitat.

Paul Botts, Executive Director of The Wetlands Initiative and one of more than 40 workshop participants said, “I came away with a clear sense of how much the awareness of and interest in urban conservation has grown among conservation professionals. Twenty, or even ten, years ago a new network of people and organizations pursuing restoration and/or land protection in Midwest cities would have been a smaller gathering both in numbers and in collective vision; the change is striking and exciting.”

Event organizers with the Eastern Tallgrass Prairie and Big Rivers LCC say the workshop was inspired

Continued on next page.

# Nature and the Urban Environment: Urban Planners and Wildlife Conservation Experts Convene to Connect Cities with Nature

by a collective-impact approach to conservation planning, an approach that leverages capacity across natural resource agencies and organizations, engages the public and decision makers in creative solutions, and builds upon already existing urban conservation efforts.

“We continue to learn how interactions with nature are important to quality of life - both from an economic perspective and in terms of human health and well-being,” Worthington said. “This workshop was a chance for Midwest conservation leaders and urban planners to start a dialogue on how we can work together at landscape scales to realize a world where humans, wildlife and natural processes can coexist in healthy and vibrant ways.”

The Eastern Tallgrass Prairie and Big Rivers LCC and partners will facilitate continued collaboration across agencies and organizations to identify effective urban planning techniques, and to find ways to draw connections between our growing cities and nature. To get involved, contact LCC Coordinator Glen Salmon at [glen\\_salmon@fws.gov](mailto:glen_salmon@fws.gov).

For more information about the Service’s Urban Refuge Initiative, visit <http://www.fws.gov/refuges/vision/urbanwildliferefugeinitiative.html>.

For more information about the Eastern Tallgrass Prairie and Big Rivers LCC visit <http://tallgrassprairieecc.org>

For more information about the Upper Midwest and Great Lakes LCC visit <http://greatlakeslcc.org>

By Ashley Spratt



The Lake Char is one of the Michigan Department of Natural Resources’ research vessels. It works in the waters of Lake Superior and is in part supported by Sport Fish Restoration funding/Courtesy of Michigan Department of Natural Resources.



Department of Interior Secretary Sally Jewell visits with Service staff at Minnesota Valley National Wildlife Refuge located in the heart of the Twin Cities/USFWS.

# Midwest Region Excellence Awards 2014

## Operation Roadhouse Law Enforcement Team

- Office of Law Enforcement
- St. Peters Office
- Office of Law Enforcement
- Digital Evidence Recovery and Technical Support Unit
- Neosho National Fish Hatchery
- Missouri Department of Conservation, Fisheries Division
- Missouri Department of Conservation, Protection Division
- Oklahoma Department of Wildlife Conservation
- Law Enforcement Division
- Columbia Fish and Wildlife Conservation Office

## Fostering Partnerships

### Federal Duck Stamp Contest Team

- Federal Duck Stamp Contest Team Dave Scott, Regional Office, Migratory Birds and State Programs
- Chuck Traxler, Regional Office, External Affairs
- Ashley Spratt, Columbia Field Office, External Affairs
- Tina Shaw, Regional Office, External Affairs
- Jason Lewis, Ottawa National Wildlife Refuge
- Maggie O'Connell, Regional Office Refuges
- Todd Haines, Ohio Division of Wildlife
- Vicki Ervin, Ohio Division of Wildlife
- Doug Gorby, Ducks Unlimited
- Cathy Allen, Ottawa National Wildlife Refuge Association
- Ottawa National Wildlife Refuge Association
- Staff of Ottawa National Wildlife Refuge

## Workplace Improvement

### Regional Office Social Committee

- Loyd Mitchell, Information Technology Management
- Holly Sawochka, Ecological Services
- Jaimie Carpenter, Human Resources
- Tony Samuelson, Finance
- Kasharn Gillard, Law Enforcement
- Ketti Spomer, Refuges
- Andrea Hilla-Custodio, Realty
- Aaron Woldt, Fisheries
- Katie Steiger-Meister, External Affairs
- Joanna Gilkeson, External Affairs
- Laurie Larson, Wildlife and Sport Fish Restoration

## Science Excellence

- Merlin Avian Radar Team
- Jeff Gosse, Regional Office, Ecological Services

- Tim Bowden, Regional Office, Ecological Services
- Rebecca Horton, Regional Office, Ecological Services
- David Larson, Regional Office, Ecological Services
- Daniel Nolfi, Regional Office, Ecological Services
- Erik Olson, Regional Office, Ecological Services
- Nathan Rathbun, Regional Office, Ecological Services

## Award for Outreach Excellence

### Bat Facts Team

- Lori Pruitt, Bloomington Field Office
- Courtney Celley, Regional Office, External Affairs
- Kim Mitchell, Regional Office Ecological Services
- Georgia Parham, Bloomington Field Office

## Safety Improvement, Heavy Equipment Trainers Team

- Alan Lagemann, Great River National Wildlife Refuge
- Clint DeMenge, Rice Lake National Wildlife Refuge
- Jacob "Chip" Lehmer, Squaw Creek National Wildlife Refuge
- Jeff Lockington, Genoa National Fish Hatchery
- John Nicely, Ottawa National Wildlife Refuge
- Matthew Fox, Mingo National Wildlife Refuge
- Mike Madel, Horicon National Wildlife Refuge
- Paul Nelson, Big Stone National Wildlife Refuge
- Richard D. Wilson, Seney National Wildlife Refuge
- Tom Marcouiller, St. Croix National Wildlife Refuge
- Walter Szelag, Union Slough National Wildlife Refuge
- Bill Davison, Upper Mississippi River National Wildlife & Fish Refuge
- William Strong, Sherburne National Wildlife Refuge
- Dale Pittman, Regional Office, Heavy Equipment Coordinator
- David Magno, Marquette Biological Station
- Aaron Eversman, Minnesota Valley National Wildlife Refuge
- Steve Erickson, Trempealeau National Wildlife Refuge
- Shane Miller, Swan Lake National Wildlife Refuge
- Philip Colsch, Upper Mississippi River National Wildlife & Fish Refuge
- Joshua Pittman, Morris Wildlife Management District



## U. S. Fish and Wildlife Service

<http://www.fws.gov/midwest/>

**Thank you for entering your journal reports and photographs  
in Field Notes at <http://www.fws.gov/FieldNotes/>.**