



U. S. Fish and Wildlife Service

Inside Region 3

April 2014



RD Corner

Safety Is Imperative

We are at that time of the year when we start gearing up for the field season. The Midwest Region is committed to a culture of safety and April is Safety Month. We began April with a region-wide reminder of the need for all employees to operate safely. To that end, I asked everyone to take some time during that first week of April to participate in some training activities that focus on safety.

We have much to be proud of. We have been very successful in reducing the number of Occupational Safety & Health Administration (OSHA) recordable injuries and the severity of the injuries to our staff. It is critical to report all injuries as the injury data, even for minor injuries, helps the Safety staff to identify trends requiring attention. To help you train employees, volunteers, and (Youth Conservation Corps) YCC workers, the Safety Division has job hazard assessments (JHAs) that can be used to inform staff of the hazards associated with work tasks. If they don't have the JHA that you need, they will assist you in developing the JHA to meet your needs. Another tool is a daily safety briefing. This can be a five-minute talk to discuss the work for the day, recognized hazards, and controls. Employees should be encouraged to ask questions and discuss any issues that have come up.

Again, I want to stress the importance of keeping our employees, volunteers, YCC workers and visitors safe. Our people are our most important asset, without which we could not protect and preserve our natural environment. I encourage you to take some time to read the safety stories (pages 15-16) that we have in this month's issue.



Regional Director Tom Melius/USFWS.

April is also a time when we start seeing not only the arrival of migratory birds but the annual cycle of life for many of those migrants in establishing territories and nests. A good indicator of our bird community is our eagles as they return to a homing site. These birds have given us an excellent opportunity to educate the public on the needs of migrants. There are many cameras set up to show their nesting activities and we use them to track migration and learn more about their needs. I encourage you to read the articles (pages 4-5).

At present, I'm at our National Conservation Training Center (NCTC) training facility in West Virginia with our Directorate Team looking at a number of issues from surrogate species

to Strategic Habitat Conservation (SHC). We are also discussing workforce planning and budget issues. Secretary Jewell is also planning to attend the Directorate meeting. It's been great to interact with her and I am in high hopes that she will have the opportunity to come back to the Midwest sometime soon to enjoy the resources that we are managing.

Thank you for your fine work. Be safe!

T.O.M.

Tracking Bald Eagles



Cathy Henry, manager of Port Louisa National Wildlife Refuge, releases a bald eagle fitted with a GPS unit/Courtesy of Trish Miller, West Virginia University.

Biologists at the Rock Island Ecological Services Field Office are working with researchers from West Virginia University to get a better understanding of how eagles move through the landscape and what risks they face. The partners recently attached several GPS units to eagles wintering on the Mississippi River. These Global Positioning System-Global System for Mobile Communications (GPS-GSM) telemetry units are the newest, highest quality and most cost-effective way to track eagles, using the cell tower network to download data. They also provide highly detailed information about movements and allow for customized duty cycles. The units will gather information on location, altitude, speed, heading, and fix quality. For the first nine days, we will collect data at 15-minute intervals from dawn

to dusk. Every tenth day, the duty cycle will switch to 30-second intervals so that we can better understand specific flight behaviors. Such high frequency data provides exceptional insight into eagle flight behavior and allows detailed interpretation of the potential impacts of wind farms and power lines on eagles.

This data will be vitally important as eagle populations increase and wind energy development increases. Together, these increases may result in a greater potential for take, resulting in more application for take permits issued under the Bald and Golden Eagle Protection Act. Providing more accurate information about eagle movements across the landscape and during different times of the year is essential for the Service to make informed decisions during the permitting process.

This project will contribute to a better understanding of how eagles move throughout the Midwestern landscape and what environmental conditions put them at greatest risk.

By Drew Becker

Hunter Outreach Campaign Reduces Lead Exposure in Bald Eagles

U.S. Fish and Wildlife Service researchers documented in 2012 that lead exposure is a significant mortality factor in bald eagles that inhabit the Upper Midwest Region, including Upper Mississippi River National Wildlife and Fish Refuge (Refuge). Investigation into the sources of lead showed that hunting ammunition, especially deer hunting, was an exposure pathway. A hunter outreach campaign was initiated by staffs from the Refuge and Ecological Services offices in Rock Island, Illinois and Madison, Wisconsin, to reduce the potential for lead exposure in bald eagles and other wildlife.

During winter, bald eagles congregate in high numbers along the Upper Mississippi River. Thousands of bald eagles winter and hundreds of eagles nest on the Refuge annually. On December 11, a record 1,100 bald eagles were present at one location there. Deer hunting also occurs during the peak concentration of eagles, with thousands of hunters utilizing the 200,000 acres that are open to public hunting on the Refuge.

We examined 58 bald eagles that were found dead in the Upper Midwest Region. Liver lead analysis showed that 60% had detectable concentrations of lead and 38% had concentrations within the lethal range for lead poisoning. Lead ammunition is used by most hunters and often fragments, especially if bone is hit. Offal (gut piles) that would have been discarded on the Refuge was collected from 25 deer that were shot with lead ammunition. Radiographs showed that 36% of the offal piles contained lead ranging from 1-107 fragments per specimen. These results show that bullet fragments embedded in deer offal are a pathway for lead exposure in bald eagles and other wildlife.



Researchers examined 58 dead bald eagles and identified lead exposure as a significant mortality factor/USFWS.

It was important to tell this intriguing story to hunters so they would be aware that lead ammunition is an exposure pathway related to bald eagle mortality. Our outreach message was designed to instill in hunters a sense of responsibility as conservationists to reduce lead in the environment through voluntary use of non-toxic ammunition. The outreach campaign was expanded to include the general public, other researchers, organizations, and state DNR partners in Minnesota, Wisconsin, Iowa and Illinois.

Outreach activities varied depending upon the opportunity. Activities ranged from a 30-minute program attended by 10 individuals to a 4-day exhibit at an Outdoors Show attended by 14,000 hunting and fishing enthusiasts with over 700 personal contacts made. We used three primary images in each

activity to convey the lead exposure pathway relationship, these included: 58 dead bald eagles lying side-by-side during examination; eagles eating deer offal; and an x-ray of deer offal containing 107 lead fragments. A total of 645,317 deer were killed with firearms in 2012-2013 in the four states with a corresponding number of offal piles discarded on the landscape.

Each presentation varied depending upon the audience. For hunters, we focused on the Refuge deer hunts held for youth and disabled hunters (quadriplegics, paraplegics and amputees) and progressed into the offal analysis and exposure pathway. Public presentations used

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The Breeding Bird Survey Needs You

Each spring more than 2,500 skilled amateur birders and professional biologists volunteer to participate in the North American Breeding Bird Survey (BBS). Since 1965, these volunteers have contributed to one of the most widely used bird monitoring datasets in North America.

In 2009, the Midwest Coordinated Bird Monitoring Partnership began a campaign to fill all vacant BBS routes in our region. Each year, the number of vacant routes has decreased, and I challenge us all to work to cut this number in half by June 1, 2014.

To that end, I ask all of you to consider adopting a vacant route near you, adding a route if you already run one, and getting the word out to your friends and neighbors.

As of today, we have 73 vacant routes in our region. I have broken these out by state and provided a point of contact below:

- Illinois: 13 Vacant Routes (contact Matt Mckim-Louder; email: mckimlou@illinois.edu; phone: 660-441-7509)
- Indiana: 6 Vacant Routes (contact John Castrale; email: jcastrale@dnr.in.gov; phone: 812-849-4586)
- Iowa: 15 Vacant Routes (contact Doug Harr; email: dharr@netins.net; phone: 515-275-4818)
- Michigan: 9 Vacant Routes (contact Katie Koch; email: katie_koch@fws.gov; phone: 906-226-1249)
- Minnesota: ONLY 3 Vacant Routes (contact Tony Hertzelt; email: axhertzelt@gmail.com; phone: 763-780-7149)



The Breeding Bird Survey consists of 50 stops along a driven route. At each stop, an observer counts all birds seen or heard within a quarter-mile radius for three minutes/USFWS.

- Missouri: 20 Vacant Routes (contact Janet Haslerig; email: janet.haslerig@mdc.mo.gov; phone: 573-522-4115 x3198)
- Ohio: 6 Vacant Routes (contact Nathan Stricker; email: Nathan.Stricker@dnr.state.oh.us; phone: 740-747-2525 ext. 22)
- Wisconsin: ONLY 1 Vacant Route (contact Mark Korducki ; email: Korducki@earthlink.net; phone: 262-784-2712)

Requirements for participation are:

- Access to suitable transportation to complete a survey
- Good hearing and eyesight
- The ability to identify all breeding birds in the area by sight and sound.

Knowledge of bird songs is extremely important, because most birds counted on these surveys are singing males

- New BBS participants must also successfully complete the BBS Methodology Training Program before their data will be used in any BBS analyses. The training program is available from the national BBS offices and the state, provincial, and territorial coordinators

- The intention to run a route for at least 4-5 years. Data from routes run only once or twice by an observer are not nearly as useful as longer consecutive surveys by the same observer

By Katie Koch

Grounded in Science: Connecting Ecological Systems, Landscapes and People in the Prairie Pothole Region

Robust fish and wildlife populations and intact natural systems support and enhance local communities and their economies - communities that also depend on food production, clean air and water, storm protection and recreation. The natural systems of the Prairie Pothole Region of the U.S., which stretch from portions of Minnesota and Iowa to the Dakotas, Montana and Wyoming, face mounting threats due to growing energy development, shifting agricultural practices and other land-use changes.

“Today we have loss rates for prairie grasslands and wetlands that we have not seen since the Dust Bowl days,” said Ducks Unlimited, Inc., Regional Director Steve Adair. “We must work together to conserve this habitat that is vital not only to the production of wildlife, but also to our clean water and our nation’s recreational economy.” Adair is one of more than 30 natural resources professionals that make up the Plains and Prairie Potholes Landscape Conservation Cooperative (LCC) leadership team.

To contribute to the conservation and restoration of prairie wetlands, grasslands and associated natural systems, the [Plains and Prairie Potholes LCC](#) is leveraging partnership resources to better understand critical uncertainties associated with prairie habitats while drawing linkages between terrestrial and aquatic systems. These key connections are a building block necessary for effective landscape conservation design by federal, state and non-governmental agencies and organizations vested in prairie conservation.

“Our greatest conservation contribution is not what we achieve within our own boundaries; it is our collective ability to conserve functioning landscapes



The Missouri Coteau is part of the Dakota’s Great Plains region, home to remnant glacial lakes, wetlands and grasslands, valuable to a diverse range of wildlife/Courtesy of Ducks Unlimited, Inc.

that support fish, wildlife and plant populations at scales that allow them to thrive in the face of regional, national and even global challenges,” said Tom Melius, Regional Director of the U.S. Fish and Wildlife Service Midwest Region, and chair of the Plains and Prairie Potholes LCC.

“Our partnership connects not only the ecological systems, but the people and ideas necessary to move conservation forward across entire landscapes,” said Terry Steinwand, LCC co-chair and Director of the North Dakota Fish and Game Department. “We’re putting greater emphasis on uncertainties associated with social and economic questions - including a greater understanding of the importance of production and protection - the people piece of ecology.”

With a firm grounding in science, LCC partners are providing the

tools necessary to make informed on-the-ground conservation and management decisions in the face of these threats. The LCC is committed to partnership-driven conservation and management for the Prairie Pothole Region and the terrestrial and aquatic systems the region supports. Learn more about just a few partnership projects informing landscape conservation design below:

Iowa Wetland Assessment and Restorable Wetland Inventory

In partnership with the Iowa Department of Natural Resources, the LCC contributed to the successful completion of data sets that map drained wetland basins in the Prairie Pothole Region of Iowa. Combined with completed data sets mapping the Prairie Pothole Region of Minnesota, this data is being

Grounded in Science: Connecting Ecological Systems, Landscapes and People in the Prairie Pothole Region

used to design conservation actions to restore wetlands across landscape-scale watersheds, taking into account migratory bird habitat, water quality, agriculture and flooding. [Learn more.](#)

Land-use Change, Economics and Rural Well-being in the Prairie Pothole Region of the United States

U.S. Geological Survey economists released a comprehensive analysis of the Prairie Pothole Region highlighting the relationship between the farm economy and off-farm economy and labor market, including the contributions of wildlife-dependent recreation opportunities. This LCC-supported study helps to quantify how an investment of time and resources in strengthening the non-farm rural economy may greatly assist local governing officials as they work to support agriculture in the community. [Learn more.](#)

Predicting Effects of Climate Change on Native Fishes in Northern Great Plains Streams

Prairie streams provide critical “green lines” of habitat for both aquatic and terrestrial wildlife in the northern Great Plains and portions of the Prairie Pothole Region. Changes in water quantity and quality associated with global climate change may transform prairie streams from essential refuges to habitats no longer capable of supporting fishes. This project is examining these changes and developing tools to assist managers in predicting the effects of climate change on prairie stream ecosystems. [Learn more.](#)



Common merganser/Courtesy of Stan Bousson.

Carbon Sequestration Research to Benefit Grassland Conservation

Ducks Unlimited, Inc., is leading research on the benefits of grassland conservation in the context of carbon sequestration, as part of a new pilot program to protect at-risk grasslands from conversion to cropland in the northern Great Plains and portions of the Prairie Pothole Region. The program aims to encourage private landowners to conserve Conservation Reserve Program grasslands through the financial incentives of carbon credits. [Learn more.](#)

Regional Assessment of Fish Habitat Conditions and Groundtruthing Aquatic Habitat Models

Fish Habitat Partnerships are collectively working to assess the status of priority aquatic habitats. The LCC is collaborating with the Midwest and Great Plains National Fish Habitat

Partnerships to assemble and serve data layers that will allow biologists and researchers to conduct fish habitat assessments on streams and rivers across the Great Plains including portions of the Prairie Pothole Region. This in turn will allow agencies to target restoration and protection efforts where they are needed most. [Learn more.](#)

To learn more about the science behind natural resource conservation and management in other parts of the Northern Great Plains, visit <http://plainsandprairiepotholeslcc.org>.

By Ashley Spratt

Informing Landscape Conservation through Climate Science

Working together, Landscape Conservation Cooperatives and Climate Science Centers across the country are providing scientific information, tools and support for natural resource managers to conserve large, connected areas that sustain fish, wildlife, habitat and people.

These non-regulatory conservation partnerships were established to help respond to environmental stressors that transcend state lines and are beyond the organizational ability of any one agency. By connecting science with on-the-ground management, scientists and staff work with resource managers to develop tools and knowledge that supports decisions to improve natural systems faced with a range of landscape-scale stressors magnified by a changing climate.

While Climate Science Centers seek to understand climate-related ecosystem vulnerabilities and adaptation issues, Landscape Conservation Cooperatives (LCCs) address a broader suite of conservation challenges specific to their regions, including climate and land use change. This collaboration aims to ensure strong communications between scientists and managers across the landscape. [The Upper Midwest and Great Lakes LCC](#) and [Eastern Tallgrass Prairie and Big Rivers LCC](#) are working alongside the [Northeast Climate Science Center](#) to generate the best science for natural resource managers. Learn about two partnership projects that are advancing science in the Midwest:

Stream Temperature Mapping in the Great Lakes Basin and Northeast

Climate change has the potential to impact both sport and non-game aquatic resources across the Great Lakes basin, thus impacting both



Angler releases a brook trout, a popular sport fish throughout the Upper Midwest and Great Lakes/ Courtesy of Matt Mitro, Wisconsin Department of Natural Resources.

ecological diversity and economic contributions of recreational and commercial angling opportunities. In partnership with the [Northeast Climate Science Center](#), the [Upper Midwest and Great Lakes LCC](#) and North Atlantic LCC are building a coordinated, multi-agency framework to map and store continuous stream temperature locations and data for Great Lakes, Mid Atlantic and New England states. The NorEaST portal will provide access to the best available data and tools on freshwater stream temperatures so that natural resource managers from federal, state and non-governmental agencies and organizations will have a better understanding of temperature change impacts on the distribution of aquatic species. Through the NorEaST project, additional stream temperature data have been acquired to develop and inform stream temperature models and fish predictive models for an Upper Midwest and Great Lakes LCC supported project on [fish vulnerability to climate change](#) in the Great Lakes basin. [Learn more.](#)

Fitting the Climate Lens to Grassland Bird Conservation

The [Northeast Climate Science Center](#) and Eastern Tallgrass Prairie and Big Rivers LCC are working together to support a University of Wisconsin-led project to measure, understand and predict how grassland birds will be affected by future changes in our climate. A team of managers and scientists are developing a unique assessment tool identifying which species and regions are most vulnerable. By fitting the “climate lens” to grassland bird management, this science will provide a clearer picture of prairie and grassland bird conservation in an uncertain future. [Learn more.](#)

For more information on climate change and landscape level research visit: [Upper Midwest and Great Lakes LCC](#), [Eastern Tallgrass Prairie and Big Rivers LCC](#), [Northeast Climate Science Center](#).

By Ashley Spratt

Into the Wild! Nature Camp for Kids in Columbia, Mo.

Kids in Columbia, Mo., have a great opportunity to get out and enjoy nature, especially those children with little experience in the outdoors. In July 2013, a nature camp for inner-city youth was hosted by Fish and Wildlife Service biologists, Paul McKenzie and Anna Clark as part of the Club Connect Kid summer camp. The nature camp, held at various sites near Columbia, Missouri, was part of a four-week Club Kid Connect

summer camp, which provides recreational and outdoor activities during summer to

African American children who attend Columbia area schools. During the nature camp part of Club Kid Connect, children from ages 4 to 15 had fun outside while learning a little something about their natural world.

Club Kid Connect was conducted in partnership with the United Community Cathedral Church, United Way of Central Missouri and United Community Builders Community Development Corporation. Other partners helping during the four days of the nature camp were Big Muddy National Fish and Wildlife Refuge, Missouri Department of Conservation, and Missouri Department of Natural Resources' Division of State Parks.

The first day of Nature Camp found staff guiding participants on a tour of Conner's Cave at Rock Bridge State Park. During their tour they searched for fish, crayfish and frogs in Devil's Icebox Cave Stream. Later in the day they learned how to identify dragonflies, damselflies, butterflies and wildflowers and had a fun quiz on types



Paul McKenzie, USFWS biologist and Nature Camp instructor, uses a cartoon painting to quiz camp kids on wildlife they may see in the Park/USFWS.

of wildlife found in the Park.

A week later, during the second day of Nature Camp, the kids took part in a nature trivia quiz game before hiking to Shooting Star Bluff scenic overlook in Rock Bridge State Park. Biologists helped the kids use binoculars and playback bird songs on an iPod to learn how to identify birds and their songs. In addition to bird identification, Paul provided instruction on a few plants, especially those that should be avoided, like poison ivy and stinging nettle. He also showed everyone the types of trees under which morel mushrooms are often found.

The next Nature Camp day was spent along Gan's Creek at Rock Bridge State Park, where the boys and girls caught crayfish, frogs and butterflies. A highlight of the day was the discovery of the trunk of a very large, old tree in Gan's Creek. The tree, probably unearthed during flash floods earlier in the spring, was tentatively identified as a black walnut. Steps are now underway by Missouri DNR and Rock

Bridge State Park, in cooperation with dendrochronologists at the University of Missouri, to determine the age and size of the tree.

During their last day of camp, Nature Camp attendees got to be part of a turtle mark/recapture study. Hosted by Vic Bogosian of Eagle Bluffs Conservation Area, the kids had a great time holding and releasing marked turtles back into their wetland habitats. After helping with the turtle project, camp members took a trip to the banks of the Missouri River and visited McBaine, Missouri's grand champion bur oak, which is 90 feet tall and estimated to be over 350 years

old.

During the Club Kid Connect nature camp, inner city children visited natural areas close to where they live. Hopefully, they connected with nature while having fun and will consider natural areas, like state parks, places they want to visit as they grow older. The Nature Camp has become such a popular program that plans for 2014 are currently underway to involve more children who have had little exposure to nature. This program continues to make a significant contribution to the Service's goal of getting kids outside.

By Paul McKenzie and Anna Clark

Partners Begin New Prairie Restoration and Outdoor Classroom in Fergus Falls

More than 20 youth and adults joined forces in Fergus Falls, Minn. to restore 1.5 acres of prairie and create an outdoor classroom at Kennedy Secondary School for all to enjoy. On March 13, 2014, these outdoor enthusiasts seeded the site, kicking-off a Partners for Fish and Wildlife Voluntary Habitat Improvement Project which will be available to 6th-12th graders and their teachers to use, as well as anyone passing by who wishes to explore.

These snow seed sowers included a home school family, two parents, students of the Prairie Science Class, members of Jr. Friends of the Prairie Wetlands Learning Center, Student Conservation Association interns, staff from the U.S. Fish and Wildlife Service Habitat and Population Evaluation Team, and employees of the Prairie Wetlands Learning Center. Fergus Falls Wetland Management District Partners for Fish and Wildlife biologist Shawn Papon spearheaded the effort. Parking was provided courtesy of Grace United Methodist Church.

In less than one hour, participants hand-sowed more than 12 pounds of seed representing more than nine species of native grasses and at least 15 forb species mixed into 120 pounds of saw dust which was collected from nest box building in the District shop. The weather and snow conditions were perfect and worth the wait from the earlier cold and windy fall season.

Late winter / early spring is a perfect time to plant prairie seeds in snow. As the snow melts, it carries the seeds down to the soil. The seeds make excellent contact with the wet, warming



We sowed at least nine species of native grasses and at least 15 species of native forbs. The seeds were purchased in advance and mixed with saw dust saved from building bird houses/USFWS.

soil, which are ideal conditions for germination. Fewer seeds are lost to hungry songbirds compared to a fall seeding.

After seeding was completed, everyone helped refurbish two mallard hen houses on the larger wetland downhill from the prairie site. In cleaning them out, we discovered one hen house pulled off a successful hatch because we found egg membranes inside the nest.

Current Prairie Science Class students look forward to simply stepping out the school door as middle and high school students to take a short walk to their school prairie. They won't need to take the bus. The school district will provide continued maintenance that will take less time and money than weekly

mowing. Service staff will continue to monitor the site and provide technical expertise and curriculum support as needed.

By Molly Stoddard

Battling a Common Enemy: The Service Works with Canadian Researchers to Improve Sea Lamprey Management in the Great Lakes

For the past few summers, personnel from the U.S. Fish and Wildlife Service's Sea Lamprey Control Program based at the Ludington Biological Station have partnered with researchers from Canada's Wilfrid Laurier University in Waterloo, Ontario to work on an ongoing research project on lampricide resistance. Lampricide (3-trifluoromethyl-4-nitrophenol, abbreviated TFM) is a selective pesticide that has been used since the 1960's to control sea lamprey, an invasive species in the Great Lakes. The project's objective is to determine if the ability of larval sea lamprey to resist lampricide varies by season.

In the 2013 field season, graduate students Benjamin Hlina and Alexandra Muhametsafina conducted laboratory trials utilizing the facilities at the U.S. Geological Survey's Hammond Bay Biological Station in Millersburg, Michigan. Service staff assisted with the on-going project by identifying streams with an abundance of larval sea lampreys and led the collection of lamprey, which provided thousands of larvae for the study.

The results of the study have confirmed what some researchers thought to be true, "we have observed increases in lampricide tolerance as stream water temperatures increase. We believe these trends may be caused by increases in larval sea lampreys' capability to detoxify lampricide. Larger energy stores and increased metabolic rates could be contributing factors to seasonal changes to tolerance", Hlina explained.



Jason Krebill, USFWS employee, collects sea lamprey larvae on the Au Sable River, near Oscoda, Mich./USFWS

"We are currently assessing if the larval sea lampreys' metabolism and detoxification of lampricide really does increase with increases in water temperature," continued Hlina. Muhametsafina's research builds upon this theme, examining both how TFM sensitivity varies seasonally and how and if larval sea lampreys recover after lampricide exposure at a wide range of water temperatures. "There is evidence to show that recovery after exposure to low concentrations of TFM is faster in warmer water," said Muhametsafina.

Larval sea lampreys burrow into the stream bottom where they filter feed for 3-7 years before they metamorphose into a fish-eating parasite and migrate downstream to the Great Lakes. Similar to other fish species, sea lampreys are called poikilotherms in Greek which means ("cold-blooded", and

their activity level and metabolism are linked to water temperature. Researchers want to find out how this relationship works in order to improve sea lamprey management techniques.

Larval sea lamprey collection efforts for this project in 2013 focused on the Au Sable River, near Oscoda, Michigan. Service staff worked alongside researchers to collect larvae with backpack electrofishing units. The captured larvae were held in aerated tanks and transported to Hammond Bay Biological Station where they were placed in aquariums containing water that was the same temperature as their natal stream. After acclimating to the aquarium for a few days, the laboratory trials were conducted.

Continued on page 17.

The Battle Against Ivory Trafficking Continues in The Midwest

Thanks to some scrutiny of online auction sites and on the ground package inspections, an ivory trafficker and self-proclaimed 20-year antiques dealer from Ohio has been put out of business. Together, our federal wildlife inspectors and special agents connected the dots to stop a long-running operation that channeled illegal ivory sales through an online auction and shopping website.

Even though African elephants have been protected internationally for decades, more than 30,000 elephants are poached annually for the illegal ivory trade. In 25 years of enforcement, the U.S. Fish and Wildlife Service has seized more than six tons of illegal ivory. That tonnage is built upon cases, large and small over the years. This latest case stems from a two-year investigation that began when Chicago-based wildlife inspectors discovered a series of illegal shipments destined for China, all mislabeled and without the required permits.

The investigation, and following court proceedings, culminated in Mark St. John, 53, of Northwood, Ohio paying an \$8,000 fine, forfeiting an ivory collection valued at up to \$250,000 and being ordered to complete two years of community service for violating the Lacey Act.

“Elephant ivory trafficking is devastating Africa’s elephant populations. Illegal exports from the U.S. only fuel the demand and further imperil elephants,” said Special Agent in Charge Gregory Jackson.

The investigation revealed that St. John was a frequent international importer and exporter of elephant



Seized ivory collection valued at up to \$250,000 ends ivory trafficking in Ohio/USFWS.

ivory and other animal products; however, there was no record of him acquiring the appropriate license, permits or paying the appropriate inspection or other fees for the lawful dealings of these items.

During the investigation, wildlife inspectors intercepted four illegal exports. In all instances, St. John completed the international shipping documents and U.S. Postal Service and Dispatch Notice, Form 2976-A that falsely listed both the value and the contents of the contraband in the packages. In addition to falsifying shipping documents, and failing to obtain related licenses and permits, St. John knowingly misrepresented what he was selling online.

One such violation was documented on May 4, 2011, when St. John claimed to be shipping a wooden handcraft child’s

toy valued of \$45. The shipment was intercepted by a U.S. Fish and Wildlife Service wildlife inspector in Chicago who discovered that the shipment contained an elephant ivory carving. St. John had earlier sold this ivory carving online to a Chinese purchaser and described the carving as “EXC 19C Chinese Ox Bone Stick and Ball game bilboquette.” Ox Bone is commonly used and understood to mean elephant ivory in such online auctions. The item sold for \$635.

On June 13, 2011, wildlife inspectors intercepted another illegal shipment from St. John. His international shipping documents claimed that the package contained two antique wooden handcraft desk ornaments and two wooden antique stands valued at \$300. The package actually contained two Hippopotamus tusks,

Continued on next page.

The Battle Against Ivory Trafficking Continues in The Midwest

a species protected under Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

CITES is an international agreement between governments that aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. CITES regulates the international commercial and noncommercial movement of both African and Asian elephants, including their ivory and ivory products. The African elephant was first listed by Ghana in CITES Appendix III in 1976. Hippopotamus were first listed in CITES Appendix II in 1995.

On July 27, 2011, U.S. Fish and Wildlife Service Law Enforcement officers executed a federal search warrant in Wood County, Ohio at St. John's residence. Several elephant ivory carvings, sea turtle products and mother of pearl carvings were seized and were valued at up to \$250,000.

On April 24, 2013, St. John pled guilty to one count of violating the Lacey Act, where he admitted to knowingly making a false record, account or label for, or any false identification of, any covered fish, wildlife or plant which has been, or is intended to be imported or exported. As per the terms of the plea agreement, St. John signed a U.S. Fish and Wildlife Service Abandonment form, abandoning a majority of his previously seized wildlife products.

On August 20, 2013, St. John was sentenced to probation for two years and was ordered to perform 80 hours of community service, as directed by the Probation Officer. St. John also

was fined \$8,000 through the Clerk of the U.S. District Court.

Learn more about African elephant conservation: <http://www.fws.gov/international/wildlife-without-borders/african-elephant-conservation-fund.html>

Learn more about the U.S. Fish and Wildlife Service ivory crush: <http://www.fws.gov/le/elephant-ivory-crush.html>

By Tina Shaw

Bald Eagles Continued

several themes, such as "Return of the Bald Eagle", that included a discussion on management challenges to reduce lead exposure. Presentations given at conferences and to state DNR partners identified the scientific research aspect.

Partnerships were developed to accomplish activities that otherwise would not have been possible. The National Wildlife Health Center conducted liver lead analysis and is currently necropsying an additional 115 bald eagles. Saving Our Avian Resources and American Bird Conservancy funded the purchase of non-toxic ammunition that was provided free to hunters participating in our managed deer hunts. Through partnership with local instructors, we presented at Illinois DNR's Hunter Safety Education course that is required for youth. Public shooting events are planned for summer 2014 through partnership with the Izaak Walton League to familiarize hunters with non-toxic ammunition and show its performance effectiveness in a casual outdoor atmosphere.

In 2014 we are expanding outreach to furbearer trappers after learning that a Refuge neighbor feeds bald eagles during the raccoon trapping season. He

dispatches the live-trapped raccoons by shooting them in the head with a lead bullet, removes the fur, and places the carcasses in a field located adjacent the Refuge. As many as 30 eagles feed on the carcasses daily which are picked clean. After being advised that lead exposure from ammunition is a significant mortality factor in bald eagles, the neighbor stated he will remove and dispose of the raccoon heads before placing the carcasses in the field. Thousands of furbearer trappers in the Upper Midwest Region similarly dispose of animal carcasses on the landscape that are scavenged by many wildlife species.

The success of our outreach campaign is gauged by the comments and actions of those we have interacted with. We have presented to over 2,500 people at 40 venues in addition to several newsletters and newspaper articles. In nearly every presentation, hunters advised they were not aware that lead ammunition could poison bald eagles and stated they would never use lead again. Non-hunting family members stated they would be talking with relatives that hunt and encourage them to use non-toxic ammunition. Landowners stated they would no longer allow lead ammunition for hunting on their property. The provision of free non-toxic ammunition during managed deer hunts in 2012 and 2013 resulted in 25% of hunters not shooting lead. Collaboration with Region 3 Zone Law Enforcement Officer Mary Blasing resulted in non-toxic ammunition being provided to Refuge Officers in Wisconsin and on Refuge Districts in IA, IL and MN to dispatch animals.

By Ed Britton

Bill McCoy Recognized with Hoosier Wildlife Award

Refuge Manager Bill McCoy was honored with the 2014 Hoosier Wildlife Award at the Indiana Chapter of The Wildlife Society's spring meeting. McCoy has worked at Crab Orchard National Wildlife Refuge, Sherburne National Wildlife Refuge, Prime Hook National Wildlife Refuge, Erie National Wildlife Refuge, and Wichita Mountains National Wildlife Refuge. McCoy is currently the Refuge Manager at Patoka River National Wildlife Refuge and Management Area and was instrumental in its establishment in 1994.

McCoy is the force that built the Patoka River from the idea of a potential wildlife haven to the reality of an 8,500 acre (and growing) refuge that contains some of the last remaining bottomland hardwoods in Indiana. He shows the local community that the habitats along Patoka River are indeed important, interesting, and above all worth saving. McCoy is very creative when tackling a problem, and if something does not work, he will try another approach. He continues to build trust and garner support from once adamant critics of the refuge. This may be due to his eternal optimism and McCoy's undying belief that he can accomplish whatever needs to be done in spite of all the obstacles that stand in the way.

McCoy is the master of partnerships and has forged countless relationships with a variety of organizations ranging from government to non-profits to international corporations to help add land to the refuge. Some of the most significant partnerships are with Ducks Unlimited, Duke Energy,



Indiana Chapter of The Wildlife Society President Budd Veverka presenting Hoosier Wildlife Award to Bill McCoy/USFWS.

Sycamore Land Trust, Izaak Walton League, Purdue University, McCormick Farms, Indiana Department of Natural Resources, and the Natural Resources Conservation Service. Each partnership is unique; Ducks Unlimited has helped add thousands of acres to the refuge through awards from the North American Wetlands Conservation Act grant proposals. McCoy's partnership with Duke Energy helped with the establishment of Cane Ridge Wildlife Management Area near Duke's Gibson Power Plant, even though the property is more than 20 miles outside of the original refuge acquisition boundary. Now Duke Energy is the foremost partner in the protection of the federally endangered interior least tern that nests there. The partnership that McCoy has created with Sycamore Land Trust allowed the fast acting non-

profit to quickly purchase 1500 acres that were in danger of being sold and developed.

McCoy does not stop once the land is purchased; typically 50% of the acreage needs active restoration of habitat. Bill develops innovative partnerships for funding to restore forests, wetlands and prairie restorations, from North American Wetlands Conservation Act grants and partnerships with Duke Energy for carbon credits to plant trees on the refuge.

McCoy's conservation ethic is not limited to Patoka River; it spans well beyond the refuge boundaries. He was one of the true believers that kept pushing until Goose Pond

Continued on next page.

Know Before You Go: Recreational Safety – Best Practices



Seney hiking/USFWS.

Whether you and your family are out in winter or summer conditions, it is important to stay safe while you are out adventuring. Keep these best practices in mind as you plan your next outing:



Bear in a tree/USFWS.

- Check the weather forecast and dress appropriately
- Dress in layers regardless of the time of the year
- Plan your route and be comfortable reading your map
- Share your route and travel plans with someone, along with a timeline for when you plan on returning
- Go with a friend or group
- Bring a rescue whistle
- Use extra caution if traveling on frozen rivers, especially during spring breakup

By Tina Shaw

Bill McCoy Recognized Continued

Fish and Wildlife Area, now Indiana Department of Natural Resources owned, became a reality. McCoy also was influential in the project that has become Tern Bar Slough Wildlife Management Area, a 1,000 acre mosaic of wetland, forest, and prairie restoration, along with a tern nesting island.

As a citizen, McCoy has been a part of numerous groups to raise awareness about topics ranging from acid mine drainage to air quality. McCoy's efforts encouraged the Abandoned Minelands Program to focus their efforts on cleaning up acid water leaching from the headwaters of the South Fork Patoka River. The South Fork had been completely devoid of life for more than 50 years, within the past 15 years life has returned and it now contains a viable fishery and river otters.

McCoy continues to share his conservation ethic with others and is always there to listen and to offer advice on how to make other people's conservation dreams become reality.

By Dr. Joe Robb

Midwest Region Enters Safety Week

Safety is a U.S. Fish and Wildlife Service top priority. The first week of April, the Midwest region celebrated Safety Week with activities designed to stress the importance of safety, both on and off duty.

Midwest Region employees perform many potentially dangerous or hazardous jobs, from rocket netting to dam removal, electrofishing, operating ATV's and watercraft, and heavy equipment use, just to name a few. During Safety Week, field station staff were asked to review safety procedures and conduct training to remind employees and volunteers of the hazards that they could be exposed to while accomplishing the Service mission.

“Field season is drawing nearer and nearer, and Safety Week provides a great time to refresh ourselves on the good, often common sense, things we need to do both on the job and off, to keep ourselves and others safe,” Regional Director Tom Melius said. “We are committed to providing a safe work environment for the benefit of our employees, volunteers and members of the public who enjoy visiting our facilities. Let’s continue onward toward success, and keep safety in the forefront. Not just Safety Week, but every week.”

By Larry Dean



Instructor Dave Wedan prepares Regional Director Tom Melius for using the extinguisher to put out the fire/USFWS.



Above: Regional Director Tom Melius extinguishes the fire/USFWS. Left: Wendy Woyczik, Upper Mississippi NF&WR, pilots an airboat past obstacles, during the recent Air Boat Safety course hosted in LaCrosse, Wis. The course, developed by the Midwest Region is now a part of the Motorboat Operation Certification Course. In the background is Brenda Kelly, Wisconsin DNR/USFWS.



Wendy Woyczik, Upper Mississippi NF&WR, pilots an airboat past obstacles, during the recent Air Boat Safety course hosted in LaCrosse, Wisconsin. The course, developed by the Midwest Region is now a part of the Motorboat Operation Certification Course. In the background is Brenda Kelly, Wisconsin DNR/USFWS.

Baby Brookies are Ready for Spring!



Newly hatched brook trout fry, note the orange yolk sacs the fry will use for nutrition for their first couple weeks /USFWS.

Genoa National Fish Hatchery in Genoa, Wisconsin has received its annual shipment of coaster brook trout eggs from the Iron River National Fish Hatchery in Iron River, Wisconsin.

The eggs arrived on station January 28, 2014 and started hatching on February 9, 2014. Genoa received 200,000 eggs to ensure enough fish for 67,000 spring fingerlings and 10,000 yearlings for restoration efforts in Lake Superior and native waters around Grand Portage, Minnesota. Iron River NFH and Genoa NFH have worked with the Grand Portage Tribe for several years to preserve the population and bring it back to historic levels.

The hatchery has traditionally requested larger numbers of eggs to ensure the needed stocking

amounts. Over the last three years maintenance staff at Genoa installed new tanks, improved plumbing and added monitoring and alarm systems. These improvements increase survival dramatically at the early life stages of the baby brookies, causing a new issue of over-crowding.

The problem is easily remedied at Genoa by using the fish as a forage base for catfish infested with endangered winged mapleleaf mussels. This clean, high energy food source helps to keep the catfish well fed and reduces their chances of diseases from other forage sources. At each stage of development, once the needed numbers of fish are obtained, the lot of fish will be reduced to prevent overcrowding. With 120,000 spring fingerlings as of April, the catfish are guaranteed a great lunch!

By Angela Baran

Battling the Enemy Continued

The research, which is funded by the Great Lakes Fishery Commission, could have management implications for TFM applications and sea lamprey management throughout the Great Lakes. “We hope our findings assist the Service and the Department of Fisheries and Oceans Canada in applying TFM during the most optimal times depending on seasonal differences,” said Hlina. “By understanding when the optimal application periods are, financial costs associated with TFM applications will potentially be reduced, local abundance of larval sea lamprey will be reduced resulting in adult sea lamprey population reduction, and the potential affects to non-target aquatic organisms will be reduced.” The hope is that this research will help the Sea Lamprey Control Program become more efficient and effective in lampricide application aimed at controlling this devastating invasive species.

Established in 1955, the Commission coordinates fisheries research, controls the invasive sea lamprey, and facilitates cooperative fishery management among the state, provincial, tribal, and federal management agencies in the Great Lakes. The Service delivers an integrated Sea Lamprey Control Program which works in partnership with the GLFC to restore and protect the Great Lakes ecosystem and a fishery with an estimated annual economic impact of \$7 billion.

By Aaron Jubar



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/>.