When wildlife biologist Andrew Rutter, who studied river otters at Southern Illinois University, came to Lake County in 2016 he did not expect to see much action. Nearly wiped out from trapping, habitat destruction, and poor water quality in the early 1900s, River otters were listed as endangered in Illinois in 1989. At that time, only about 100 otters existed in Illinois. After a three-year reintroduction effort began in 1994, where 346 otters were released in central and southern Illinois, the otter population rebounded. Delisted by 2004, their population was estimated to be 30,000 in 2014 according to the Illinois Department of Natural Resources.

According to Rutter, river otters have been able to adapt to the urban landscape including Lake County as well as Cook County where otters have been spotted in the Chicago River near downtown Chicago. For more information, find the original article from Lake County News-Sun.
Do Wildlife Killing Contests Really Protect livestock? Many Hunters Argue They Don’t.

“Varmints”, a term which includes coyotes, bobcats, foxes, raccoons, crows, wolves and rodents such as prairie dogs, may be legally killed whenever and in whatever quantity desired by the hunter and are not subject to “wanton waste” hunting regulations since they are not game. According to an article from Yale Environment 360 By Ted Williams, “Hundreds of varmint-killing competitions take place across the country with names like Southern Illinois Predator Challenge, Oklahoma’s Cast & Bang State Predator Championship...Idaho Varmint Hunters Blast from the Past...” These contests are legal in all US states except California. However, there is controversy over the role of these contests in the hunting community. Where varmint killers declare they are providing a valuable public service, helping to prevent coyotes from taking livestock and deer, traditional hunters like Carter Niemeyer, former employee of the U.S. Department of Agriculture’s Wildlife Services where he implemented “corrective” and “preventative” control of varmints, says these contests are “disgusting.” Niemeyer argues that “preventative” control, such as shooting any coyote from a helicopter because it might eat a sheep someday, only serves to remove the good coyotes and create a void to be filled by undesirable coyotes with interest in eating sheep. An excellent example is Georgia, where the state Department of Natural Resources sponsors the “Georgia Coyote Challenge”. The contest is intended to benefit deer; however deer are so overpopulated in that state that the hunting season limit is 12 and hunters are allowed to use dogs.

In reality, having coyotes around can be beneficial to livestock and game. “When you have coyotes eating rodents and rabbits around sheep, that’s desirable,” states Niemeyer. Avid Pheasant hunter Rich Patterson published an article in 2017 where he stated that coyotes improve the pheasant population by driving off major pheasant predators such as raccoons, foxes, weasels etc. The Hunter’s Institute founder Jim Posewits had this to say about varmint contests, “I don’t think any form of hunting should be competitive. I think we need to encourage a more sensitive relationship with the animals we hunt.” To read the full article from Yale Environment 360 follow this link.

Illinois’ Environmental Protection System Deteriorates after 50 Years

In 1970, the Illinois state legislature passed one of the country’s first Environmental Protection Acts. It established three offices, the Pollution Control Board to legislate, the Institute for Environmental Quality for independent environmental research, and the Environmental Protection Agency as the enforcement arm conducting inspections and finding violations.
In the last 15 years the EPA’s staff has been cut in half, the Institute for Environmental Quality has been eliminated, and the budget for the Pollution Control Board has been combined with the EPA’s budget. According to Brian Urbaszewski, director of environmental health at the Respiratory Health Association of Metropolitan Chicago, the EPA is proposing rules and changes through the Pollution Control Board that will decrease the air quality in Illinois leading to increased risk of asthma and stroke. For more information read the full article from CU-CitizenAssess.org by Johnathan Hettinger.

Bird Justice – Migratory birds and the laws that protect them

In April of this year, five men were indicted by a federal grand jury for alleged baiting and luring of migratory birds on guided hunting trips through their company Show Me Your Snows. The men were charged with two felonies: violation of the Lacey act and allowing the unlawful sale of wildlife, as well as misdemeanors for baiting wildlife and using an electronic calling device to lure geese or ducks to be killed. Read the full article here.

The Migratory Bird Treaty Act of 1918 is a U.S. federal law to protect birds that migrate between the U.S. and Canada. Later amendments included Mexico, Japan, and Russia. The Act makes it unlawful, without a waiver, to pursue, hunt, take, capture, kill or sell birds listed within the act as migratory birds, live or dead, as well as any parts of the birds such as feathers, eggs, and nests. Some notable exceptions are the eagle feather law, which regulates the taking, possession and transport of bald and golden eagles and their parts for scientific, educational, and depredation control purposes, or for religious purposes of American Indian tribes.

Migratory Birds in Flight

The Lacey Act of 1900 is a conservation law that prohibits the trade of wildlife, fish and plants that have been taken, possessed, transported, or sold illegally. The law makes allowances for the Secretary of the Interior to aid in restoring game and birds in parts of the U.S. where they have become extinct or rare, as well as regulating the introduction of animals to places where they have not existed previously. Today, the Lacey act is primarily used to prevent the importation or spread of potentially dangerous non-native species.
**Invasive Species of the Month**

**European starling**

Originally introduced to countries like Australia, Russia, and South Africa because of their ability to control insect populations and thereby benefit agriculture, the European starling or common starling (*Sturnus Vulgaris*) is now included on the IUCN list of world’s 100 worst invasive species. Starling’s compete with native species for nest holes, can eat and damage fruit orchards, and can dig up newly sown grain and sprouting crops. In the U.S., agricultural damage is estimated to be $800 million annually. Due to their insectivore diet, Starlings are valuable for pest control in some areas.

**Midwest Endangered Species of the Month**

**Ozark Hellbender**

From the U.S. Fish & Wildlife Service Midwest Endangered Species Home: “The Ozark hellbender is a strictly aquatic amphibian found in Ozark streams of southern Missouri and northern Arkansas. This subspecies of hellbender is listed as endangered because a rapid decline in numbers and range have left only small, isolated populations. Also, the hellbenders (*Cryptobranchus alleganiensis*), including both the Ozark hellbender and the eastern hellbender, have been included in Appendix III of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to protect both subspecies from declines due to international trade.” See also the Ozark Hellbender fact sheet.

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**European Starling by Dan Vickers | Macaulay Library**

**Ozark Hellbender *Cryptobranchus alleganiensis* bishop. Brian Gratwicke**
World Conservation

Jaguar Cubs Help Youth Understand Conservation

In early April two female jaguar cubs were born at the Animal Kingdom wildlife park in San Juan Teotihuacan, just outside of Mexico City. Although initially bottle fed by caretakers and exploring their new enclosure, at 4 months they will be too large and dangerous to approach weighing about 110 pounds as adults. The largest cats in the Americas, and the third largest in the world, jaguars are classified as “near-threatened” by the International Union for Conservation of Nature, and they have seen a 25% population decline in the last 20 years. Said Jose Luis Gonzalez, a wildlife manager at the park, “Children are the ones who will inherit these species, and this planet.” For more cute pictures of jaguar cubs, see the original article By Jean Luis Arce.

Marine Life vs. Plastic

The photographer freed this stork from a plastic bag at a landfill in Spain. By JOHN CANCALOSI

“The really sad thing about this is that they’re eating plastic thinking it’s food,” says a marine biologist with the National Oceanic and Atmospheric Administration named Mathew Savoca, of seabirds and marine animals. For example, flesh-footed shearwaters are seabirds that nest near Australia and New Zealand. Researchers have found that they “Consume more plastic as a proportion of their body mass than any other marine animal.” As a result, these animals expend precious energy searching for food, often only to return with more plastic for their young. According to Savoca, “Single-use plastics are the worst. Period. Bar none,” such as straws, water
bottles, and plastic bags. To date, nearly 700 species of marine animals have been reported to have eaten or become entangled in plastic. To read the original article and others about the environmental effects of plastic, check out the June 2018 issue of National Geographic magazine.

**Student Conservation Spotlight: Kathleen Rafferty and her last straw**

At the beginning of this year, after learning that Americans use 500 million straws per day, Kathleen and a few friends made the decision to be environmentally conscious and reduce their plastic consumption by avoiding single-use plastic straws and switching to reusable stainless-steel straws. As it turned out, interest among her peers was high, and Kathleen distributed about 60 SS straws. With the average person using 1.6 straws per day, that equals over 35,000 straws saved per year or 81 pounds of plastic per year.

After seeing first-hand the effects of excessive plastic use while scuba diving in Florida, Kathleen became interested in conservation at a young age. She found Inspiration in the documentary *Sharkwater* by the late filmmaker and shark conservationist Rob Stewart where she learned that humans are responsible for the destruction of 99% of some shark species populations. Kathleen plans to use her DVM to contribute to the One Health initiative and wildlife conservation. “Which may include learning more about the harmful effects of plastic and human affiliated toxins in the environment,” says Kathleen, “At the end of the day, pollution not only negatively impacts our wildlife, but our human health as well.”--Know a student who incorporates conservation into their everyday lives? Let us know who they are, and they could be in our Student Conservation Spotlight.