

NEWSLETTER OF THE HOOSIER HERPETOLOGICAL SOCIETY

A non-profit organization dedicated to the education of its membership and the conservation of all amphibians and reptiles

Volume 26 Number 3 March 2015

March HHS meeting
Wednesday, March 18, 7:00 p.m.
Holliday Park Nature Center (Auditorium)

Guest Speaker: Sarabeth Klueh-Mundy

Topic: Evaluation of a Restoration Technique: Relocation of Eastern Box Turtles to Reclaimed Mineland at the Patoka River National Wildlife Refuge.

Sarabeth Klueh-Mundy received her B.S. in biology from St. Mary of the Woods College and M.S in biological sciences from Eastern Illinois University. In 2008, she became the nongame herpetologist for the Indiana Department of Natural Resources.

HHS members will bring a few native Indiana species to tie in with this 'local' talk.

February meeting cancelled

It was with great displeasure that we felt the need to cancel the meeting last month. The weather was dangerously cold with gusting winds and bone-chilling temps in the single digits. We regret to have inconvenienced anyone who might have traveled to the nature center. We posted it on Facebook and had called those members who had provided an email or phone information.

President's message

Jim Horton

Looks like spring is finally here!

Breeding salamanders and calling frogs should be active anytime now. I'll post on our Facebook page if and when conditions are good for a possible impromptu amphibian field trip.

Last month we decided to cancel the meeting due to the winter weather. We rarely due this but it is always best to check our facebook page or you can call or email me (as a few members had). We regret any inconveniences this may have caused anyone.

This month, Indiana State Herpetologist, Sarah Klueh Mundy will be our guest speaker. We haven't heard a talk from her since she has been in this position. It should be an interesting presentation. I'm sure she'll be available to answer your questions regarding our local *Indiana* herps.

Thanks to our members who had taken their Saturday off to show animals at the Eagle Library. Another *thank you* to Mary Hylton for setting up this event. Eagle Library donated \$150 to the HHS!

The HHS also has a surplus of the classic (out of print) 1972 edition of Amphibians and Reptiles of Indiana field guide for only 10 bucks! Get yours now!

March is a great time to get outside! Join us for the *Amphibian Outing*, at McCormick's Creek State Park, March 21st. This event includes a live amphibian display, kid's triathlon, and an amphibian presentation by *yours truly*. Hikes to the creeks to look for amphibians will follow the talk. Later that night, we'll have dinner at the lodge and visit a vernal pond in search of more amphibians.

Thank You's

Below are replies from our donation recipients from last year.

Thank you for supporting the Indiana Forest Alliance! We rely on member contributions like yours to continue our efforts to protect Indiana's public forests from excessive logging and road building, and to preserve native biodiversity well into the future. Thanks to you, we are one step closer to meeting our fundraising goals for the year. We give our sincere thanks to you as a donor: know that it is your generosity that truly fuels your work.

For the forests, always, Audrey Moore Coordinator, IFA We appreciate your help and expertise and the fun we had in Ecoblitz 2014. On behalf of Indiana Forest Alliance and other member organizations, we look forward to seeing you again at Ecoblitz 2015!

Thank you, Mary Bookwalter

Dear Hoosier Herpers,
Your very generous contribution to Indiana Turtle Care
is so appreciated. With rehabilitators, dwindling
donations are the contributing factor to help us
continue our care. Dave Mitchell was also a supporter
to us – so – Thank you from the bottom of our hearts.

Marty and John La Prees. Indiana Turtle Care

WECOME NEW AND RETURNING MEMBERS!

Renewal - Laurie Mitchell

KNIVES AND HERP ART (Part 38)

Photos & text by Roger Carter

This folding knife has the image of a coiled up rattlesnake that was popular around the time of the American Revolution with the words "DON'T TREAD ON ME" and, in Latin, "NEMO ME IMPUNE LACESSET". I checked the Latin phrase in Google translate and got the following: "nemo me impune lacesset means nobody worried me with impunity."





Purdue to work with 3 zoos to save hellbender salamanders

By Associated Press Published: February 17, 2015, WEST LAFAYETTE, Ind. (AP) — Purdue University is working with three zoos and the state Department of Natural Resources on a program to breed hellbender salamander in captivity and release them to their southern Indiana habitat.

North America's largest salamander is in decline nationally and is most vulnerable when young.

Associate professor of wildlife science Rod Williams says mortality for the hellbenders can be as high as 99 percent in the wild. He says by rearing them in captivity, the hellbenders have a much better survival rate.

The Fort Wayne Children's Zoo will receive 20 on Tuesday. The transfer of another 20 to Mesker Park Zoo in Evansville and 10 to Columbian Park Zoo in Lafayette will be scheduled soon.

The hellbenders will not be incorporated into public exhibits at the zoos.



Amphibian Outing at McCormick's Creek State Park-March 21st Join fellow HHS members at this celebration of Amphibians!





10:30 -11:30 A.M. - kids triathlon (Canyon Inn front lawn)

1:00-2:00PM – HHS presentation (Nature Center program room)

2:30-4:00PM – from Canyon Inn lodge hike to creek to search for amphibians.

4:30-5:30PM – Beady Salamander Craft. Making *kids* key chains. (Canyon Inn lobby)

5:00-8:00PM – Dinner available at Hickory Dining Room at Canyon Inn

After dinner (8:00PM) drive to vernal pool for more amphibians (the best part!)

Live Amphibian/Reptile Display at Eagle Library

Lizards & Turtles & Snakes Return!

By Mary Hylton

What better way to usher in Spring and the advent of the herping season than hosting a program featuring herps? 124 "children of all ages" ventured out to the Eagle Branch Library (Indianapolis) on Saturday, March 7th, in the Spring-like weather to participate in the program," Lizards & Turtles & Snakes, Oh Mv!" The event provided an opportunity to get up close and personal with live herps which, for many attendees, was very possibly their very first time. Many thanks to HHS members Angela Thomas, Dale and Lori Schoentrup, Ed Ferrer, Holly and Roger Carter, and Neill Jones for their time and for providing animals for the exhibit. Attendees were treated to a variety of critters that included but were not limited to: a bluetongued skink, a legless lizard, a Sulcata tortoise, a rosy boa, an albino Burmese python, a red-tailed boa and even a tarantula! As I said, variety!



Everyone attending appeared to be enjoying their visit. From the brave and excited individuals who couldn't



wait to see and get their hands on the critters to the timid and somewhat reluctant ones who were quite happy to view the animals from a safe distance, thank you very much. It's always a joy to watch children engage with herps. You can't help but wonder if this particular experience will shape their future career choices.

Libraries are all about helping children explore their interests. It was especially fun to observe their expressions on this occasion because many of the children were familiar to me. They live in the community that Eagle Library serves and many do not have the advantages that others their age do. It was so worth it just to see their faces light up not only at seeing the critters but actually being able to touch and to hold them. Those were some excited and happy kids who left the library that day!



Excitement was in the air even before the program began. Several parents arrived early and asked if the program was still on. It was nice to hear how much they were anticipating the event. Several brought the fliers with them that they had received at their schools. One dad really made my day. After thanking him for coming to the program with his children he commented how excited they had been ever since they brought the flier home from the library. The day couldn't get here fast enough! It's sort of like the way I'm feeling now as Spring draws near and herping season is upon us. It can't arrive quickly enough!

The HHS now has online subscription! You can now join or renew your membership at the click of a mouse.

www.hoosierherpsoc.org

The Monitor is printed courtesy of: Harding Poorman



Indiana Department of Natural Resources 2014 WILDLIFE SCIENCE REPORT

REPTILES AND AMPHIBIANS

Green Salamander

The green salamander (Aneides aeneus), with its green lichen-like markings, slender body and rounded head, is one of Indiana's most distinct salamanders. The species has long toes that are squared on the tip. This trait al-lows them to climb freely on vertical cliff faces or trees. Indiana's population is isolated from the species' prima-ry range, which is more Appalachian.

Green salamanders were discovered in Indiana in 1993, when researchers were seeking Allegheny woodrat habitat. Green salamanders prefer wooded sandstone outcrops with deep crevices that are moist but not wet. These crevices serve as protective hiding places as well as areas where females will suspend their eggs from the overhead rock surface.

The species is state-endangered due to its habitat requirements and limited distribution. Its only known locations are Crawford and Perry counties. After 1993, no additional green salamander populations were located until 2007. Intensive surveys in fall 2010 and again in 2012 turned up six more sites (three each year) for a total of eight different sites. One new location from 2012 had hatchling green salamanders in both 2012 and 2013. In both years the clutches were being guarded by an adult female. Only adults were observed on a return visit in 2014. Visits to other historic sites also resulted in observations of adult green salamanders. A new site discovered north of I-64 in 2014 represents the northernmost locale in Indiana.

Eastern Hellbender

The Eastern hellbender (Cryptobranchus alleganien-sis alleganiensis), Indiana's largest salamander, once occurred in a handful of rivers and streams in southern Indiana. An indicator of water quality, this state-endangered species requires cool, highly oxygenated, fast-flowing rivers and streams with large rocks that offer protection. This giant salamander, which can grow 2 feet or longer, is now found only in the Blue River.

The DNR started long-term monitoring of the hellbender in 1996. In 1998, 12 sites were identified based on the availability of suitable habitat. Those sites were surveyed semi-annually until 2008. In 1999 a total of 49 hellbenders were found, the most during any DNR survey. Individuals were recorded at nine out of the 12 sites. Numbers have decreased dramatically since the record-setting survey.

Some of the original 12 sites are no longer being surveyed, either due to habitat degradation or lack of hell-bender observations over an extended period of time. In addition, Indiana has discontinued annual surveys of these 12 sites. Recent research indicates that traditional survey methods can destroy habitat. Many states have opted to survey on a biennial basis. In 2014, six of the original sites were surveyed. Only one individual was recorded.

It is important to note that even though the hellbender exudes a slimy substance from its skin and may look menacing, it is neither poisonous nor venomous. Note also that hellbenders feed primarily on crayfish, not fish, and therefore do not affect sport fish populations.

Eastern Box Turtle

Box turtles are identified by the hinge on the under-side, or plastron, of their shell. This hinge allows them to fold in their head and limbs for protection. In Indiana, there are two species of box turtles, the state-endangered ornate (Terrapene ornata) and the Eastern (Terra-pene carolina), which is listed as special concern.

The closely related species live the majority of their lives on land but prefer different habitats. Ornate box turtles are a sand-loving species that exist only in the northwestern part of the state. They are smaller than the Eastern box turtle. The domed part of the ornate's shell, the carapace, features a pattern of radiating lines. Eastern box turtles are a woodland species. They occur more prominently in southern Indiana, with a spotty distribution in the central and northern parts of the state. While Eastern box turtles can have radiating lines on their carapace, they are mostly known for their varied and vibrant color patterns. Males often have brightly colored yellow or orange heads.

Eastern box turtles are most active during the first few weeks of warm spring weather and after heavy rains. Unfortunately, many end up on the road and get hit by vehicles. If you encounter a turtle in the road, the best thing to do is place it on the side of the road in which it was facing. Box turtles have a home range in which they make all of their movements for finding food, shelter and mating. They instinctively will try to return to their home area if moved. This trait makes them more susceptible to getting hit on the road if placed far from their original location.

In 2004, Indiana declared Eastern box turtles a special protected species. This makes it illegal to possess an Eastern box turtle or any of its body parts without a permit. In response to growing concerns about box turtle declines across the country and about how building a new interstate in Indiana would affect local populations, Wildlife Diversity biologists rescued more than 200 Eastern box turtles from the proposed I-69 alignment in southern Indiana during 2010, 2011 and 2012. Each turtle was weighed, measured and given a unique identification number before being placed in a secure, seminatural environment.

Scientific research determined it was unsafe to return these turtles where they came from after the interstate was completed because of high mortality rates of turtles near large, busy roads. Instead, these turtles will be released in 2015 on reclaimed mine land as part of a reintroduction program.

Due to the homing instinct of the turtles, successfully doing so will involve more than merely releasing the turtles in the new area. To reset the turtles' site fidelity instinct, they were moved to an enclosure in their new habitat in 2013. A minimum of two years will be required for them to adopt a new home area. A subset of box turtles in the remnant population on the reclaimed mine land is being tracked using radio telemetry. Locations, temperature and habitat use are recorded three times per week. Once the captive turtles are released, a subset of those turtles will be radio-tracked for two years. Data from the resident turtles will be compared to data from the post-release captive turtles.

In fall 2012, before being moved to the new enclosure, three captive box turtles died from Ranavirus, which causes mass die-offs in reptiles and amphibians. Testing confirmed the presence of Ranavirus in most of the captive turtles. The disease was also present in the free-ranging box turtle population, other species of turtles, and tadpoles from the reclaimed mine land. Once it was determined that the captive turtles did not threaten the residents, the captive turtles were moved to their new enclosure. Between spring 2013 and fall 2014, ap-proximately two-thirds of the captive colony died from Ranavirus. To learn about the disease, bi-weekly blood samples and swabs were taken from the captive colony in both years.

To get a better picture of Ranavirus in Indiana, state-wide testing began in 2013. Green frog and/or bullfrog tadpoles were collected from 15 different locations. Locations sampled in 2014 included: Shades and Po-kagon state parks; Pigeon River, Roush, Willow Slough, Winamac, Hillenbrand and Wilbur Wright FWAs; Moraine Nature Preserve; Big Oaks National Wildlife Refuge; and Hoosier National Forest. Sites sampled in 2013 included Avoca, Cikana, Driftwood and East Fork state fish hatch-eries. Results from those tests are pending.

2015 HERPETOLOGICAL EVENTS

March 18, 2015 – HHS Meeting, Holliday Park Nature Center, Guest Speaker – Sarabeth Klueh-Mundy (Indiana State Herpetologist), Topic – Evaluation of a Restoration Technique: Relocation of Eastern Box Turtles to Reclaimed Mineland at the Patoka River National Wildlife Refuge.

March 21, 2015 – *Amphibian Outing*, McCormick's Creek State Park, free with park admission. Herpetological presentations, field trips. Sponsored by the HHS and Friends of McCormick's Creek State Park.

April 5, 2015 - Indiana Reptile Expo in Noblesville, IN on the first Sunday of each month from 10 AM to 4 PM at the Hamilton County Exhibition Center & 4-H Grounds.

April 17-18, 2015 – Herpetology Weekend, (Red River Gorge), Slade, KY. Herpetology presentations (fri/sat day/nights), field trips all day Saturday.

May 3, 2015 - Midwest Reptile Show, 10:00 a.m. - 4:00 p.m. Southwest Pavilion, Indiana State Fairgrounds, Indianapolis. \$5.00 admission, reptiles, amphibians, books, cages, feeder animals, and other supplies. Sell your herps and dry goods free of charge at our H.H.S. information booth (HHS members only)

www.midwestreptile.com

Other dates: June 28, August 30, October 18

June 6, 2015 – 15th Annual Hoosier Herpout, Hardin Ridge Recreation Area, Lake Monroe, Bloomington, IN A weekend of field herping, camping, and a cookout. Free to all HHS members.

Your HHS Board of Directors for 2015

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The Hoosier Herpetological Society is a non-profit organization dedicated to the education of its membership and the conservation of all reptiles and amphibians. General monthly meetings are held on the third Wednesday of each month at 7:00 p.m. at Holliday Park Nature Center. Membership is open to all interested individuals. **No venomous animals are allowed at the General Meetings.**

NEW and improved HHS WEBSITE

www.hoosierherpsoc.org

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Dated Material Enclosed

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