THE MONITOR

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 23 Number 3 **March 2012**

Notice

Our next **four** meetings will be held in **room #202** of the Pharmacy Building (not #150)

President's message

I would like to say thanks to Will Brown, Pat Hammond, and Brian Bernadine for their help at the Reptile Expo in Noblesville. These HHS members manned the HHS table selling shirts, books, and getting the HHS message out.

Another *thank you* goes out to those who attended the HHS exhibit at Garfield Park. They had one of the largest programs at the conservancy that they had seen in a while. We hope to be back again later this year.

Again, if you are interested in displaying your animals for public education, there are many opportunities coming up. We are seeking volunteers for several HHS sponsored shows in the coming months. See the Events section for more information.

Don't for get to mark your calendars for June 2nd. Our 12th annual Hoosier Herpout takes place at Harding Ridge on Lake Monroe. It's a weekend of herping fun! See the Events section for more info.

Last month was is our Annual Photo Contest. We all had a good time but with the judging was (as Pat Hammond put it) a *trainwreck*. Not to mention my videos didn't work out either. We already have a plan in place for next year in order for things to run more smoothly.

The meeting for this month features one of our more popular guests. Mr. Mike Pingleton will review his herping trip to Mexico. His knowledge of field herpetology is incredible his and photography is amazing!

Don't forget that our next four meetings (through June) will be held upstairs in room **#202.**

See you at the meeting, Jim

Welcome Members

Renewals:

Kurt and Carter Ball (Sustaining Membership)
Mark and Sue Henderson (Sustaining Membership)
John Mason (Sustaining Membership)
Mike Thorpe
Gene Holmes
Paul Gessner

New Members:

Erin Wagner
Douglas Stemke
Megyn Ruffage
Von Cowper

Reptile day at Garfield Park

Jim Horton

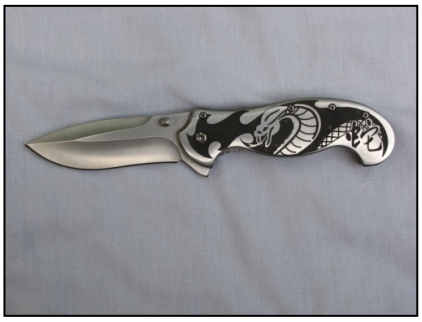
Our first educational live herp exhibit was a huge success! HHS members displayed a wide-range of amphibians and reptiles at the Conservatory at the park on March 3rd. Visitors were see, touch, and learn about the habits of these fascinating animals. Staff members reported that over 370 people came through the doors!

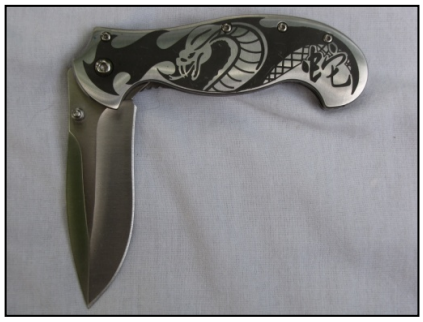
HHS members in attendance were: Roger Carter, Rick Marrs, Angela Thomas, Dave and Laurie Mitchell, Mary Hylton, and myself.

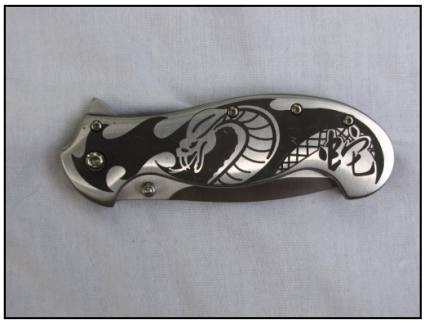
KNIVES AND HERP ART (Part 15)

Photos & text by Roger Carter

This is a very nice folding knife with the image of a cobra engraved on the handle with the blade and handle a silver color and a darker background around the cobra. It has a thumb stud for one handed opening and a belt/pocket clip on the reverse side. The reverse side of the blade has engraved text “Hand Made Surgical Steel Crafted in China”. The knife is seven and eleven-sixteenths of an inch long with the blade three and three-sixteenths of an inch long and razor sharp. This is a little heavier than most of the folding knives that I have.







2012 HHS photo contest

Our photo contest was a bit (as Pat Hammond described it) a bit of a *train-wreck.*
We had a tough time deciding on how to judge the contest correctly. We already have a plan in place for next year to correct this problem. Thanks for your patience.

The winners!

Adult **"***Captive Herps"*

1st place – Brittany Davis (*Green Sea Turtles*)
2nd place – Jim Horton (*Alligator Snapper*)
3rd place – Erin Wagner (*Western Hognose*)

Adult *"In the Wild"*
1st place – Jim Horton (Cottonmouth)
2nd place – Brittany Davis (Sea Turtles)
3rd place – Doug Stemke (Green Basilisk)

Kids Category
1st place – Emma Hicks (*Mermaid Water dragon*)
2nd place – Any Hicks (*Harry Potter Beardy*)
3rd place – Cameron F. (*Leopard Gecko*)

Captive Category

Wild Category

Kid's Category

The first time I ...

By Rick Marrs

The first time I was bitten by a snapping turtle was in April of 2010. The first time I ever caught on e was April of 1969. That is over forty years that I have handled these temperamental beasts without incident.

All my life I have head tales about how a snapper can bite a broomstick in two (false!) and how once they have bitten someone they will not let go until (1) sundown, or (2) it thunders, or (3) a mule or donkey brays.

After an hour and a half of intense discomfort due to an irate and tenacious Chelydra serpentine affixed to my left forearem, I can add (4), when an exhausted, suffering herper holds a flaming Bic lighter to its chin. (Hey, I know it sounds cruel, but it beat any other alternatives at my disposal.)

Incredible Geckos

By Angela Thomas

With hundreds of species, the gecko family contains an incredible variety of fascinating animals, and it is no wonder they have always been among the most popular lizards. Some geckos are beautifully colored, while others are so cryptic in appearance that they can become practically invisible. While most species are moderately sized, a few are impressively large, and some are incredibly tiny. There are geckos that live in deserts, caves, mountains, and forests, on the ground and in the tops of trees. Many other lizards can climb, but none climb like the geckos- on everything from rainforest trees and cliffs, to walls, ceilings, and even glass windows! In honor of the Year of the lizard, let's take a closer look at the incredible geckos.

Probably the thing that fascinates many people most about geckos is their amazing clinging feet. This includes scientists, and the clinging mechanisms of geckos have been extensively studied. Geckos cling to surfaces using lamellar toe pads, composed of millions of tiny, hairlike structures called setae arranged in rows. Based on the measurement of the force of attraction of a single seta, it is estimated that if a gecko engages all its setae at once, the force holding it to the substrate would equal approximately 600 pounds per square inch! Watching a gecko walk or climb quickly reveals that geckos need to use great care when exercising this clinging power. The gecko's toes curl as it steps, so that the lamellae engage or disengage one at a time, rather than all at once. Geckos that leap may first curl their toes upward, holding the clinging pads clear of the surface. While most climbing geckos cling using the same mechanism, their feet and toes vary wildly in shape and size. These features are so distinctive that many genera of geckos are named for characteristics of their digits. (Look at all the gecko genus names ending in 'dactylus', meaning 'toe.') The climbing geckos are not the only ones with specialized feet, however. The geckos in the genus *Palmatogecko* have webbed feet, which they use to 'snowshoe' across very soft, shifting sands.

Gecko tails are also very variable in shape, size, and function. One important function of gecko tails is helping to avoid predators. Many species have displays in which they wave their tails or otherwise call attention to them. If the gecko's tail is grabbed, in breaks at one of the many fracture planes. While growing a new tail is a common trick among geckos, the fat-tailed gecko and a few others have really perfected it: rather than being tail-shaped, they grow back rounded, blobby tails shaped more like a second head. This may be even more effective at fooling predators, and still serves the tail's other main purpose of storing fat. Adaptations for climbing include prehensile tails to grip branches and clinging pads at the tip of the tail. A few species have glandular tails, which secrete a noxious, sticky fluid to deter predators. A number of geckos have tails which are highly flattened and leaf-like. This type of tail helps camouflage the gecko by presenting a less 'lizard-shaped' outline. The geckos of the Madagascan genus *Uroplatus* not only have leaf-shaped tails, but fringes along the sides of the body and limbs, and markings that mimic moss, bark, or leaves. At rest, these geckos can be very hard to detect! Another gecko that has similar body flaps and a wide tail uses them for a very different purpose – flying! The Asian flying geckos actually 'parachute' or glide from tree to tree by spreading the flaps of skin on their body, limbs, and tail. Some of the oddest tails of all belong to the Australian knob-tailed geckos. As yet, no one knows what function the knob on the end of these geckos' stubby tails may have.

Scientists classify geckos into the family Gekkonidae, based on a number of characteristics. Geckos have small, granular scales, and most species are distinctly limbed. Geckos lay small clutches – typically two eggs, though some very small species lay only one at a time – but may lay multiple clutches during the breeding season. The geckos are also distinguished from other lizards by less externally obvious characteristics, such as structures of the pectoral girdle and skull, and smaller, thinner, and more numerous teeth than most other lizards. There are four subfamilies of geckos: The Eublepharinae, the Diplodactylinae, Gekkoninae, and Pygopodinae.

The geckos in the subfamily Eublepharinae are sometimes referred to as the 'eyelid geckos', because unlike most geckos, which have permanently open eyes covered by a spectacle, like snakes, these species have fully functional eyelids. There are 6 genera of eyelid geckos scattered around the world – 2 in Africa, 1 in N and Central America, and 3 in Asia. In addition to the familiar leopard and fat-tailed geckos, this group contains the banded geckos of the Southwest. None of the Eublepharines have clinging lamellae, but despite this the cat gecko of Asia is an excellent climber, clinging to branches with its long toes. Some of the most beautiful Eublepharine geckos are the cave geckos – ground-dwelling Asian forest geckos with slender bodies and long limbs. Most species are some shade of brown patterned with bands or spots in yellows or oranges, and have vivid orange eyes. After one Chinese species was described, so many

collectors descended on the type locality that the gecko can no longer be found there. When additional species were discovered, scientists refused to name the type localities, or even publish photos of the geckos, for fear it would happen again!

Perhaps the strangest 'geckos' of all belong to the subfamily Pygopodidae. All of the species in this group are 'legless lizards', having either no limbs at all, or only tiny, vestigial flaps. The pygopods are found in Australia and some parts of Southeast Asia. The only outward sign of their relation to the geckos is their eyes: unlike our legless lizards, which have movable eyelids, pygopods have eyes covered by a spectacle – which must sometimes make it difficult to tell snakes from legless lizards in Australia.

The remaining two subfamilies, the Gekkoninae and Diplodactylinae, contain the vast majority of the world's geckos. These are the 'typical' geckos, easily recognized by their spectacle-covered eyes and the clinging lamellae used by most species for climbing. The subfamily Diplodactylinae is native to Australia, New Zealand, and New Caledonia. It contains 115 species, including the world's largest gecko species, *Rhacodactylus lechianus*, which can reach an SVL of 28cm. Oddly, the smallest gecko species, *Spaerodactylus parthenpion*, a miniscule gecko which lives in leaf litter on the rainforest floor and measures only 17mm SVL., belongs to the other major subfamily, the Gekkoninae. The Gekkoninae is the largest group of geckos, with over 900 species, and also has the widest distribution with species in all tropical regions of the world.

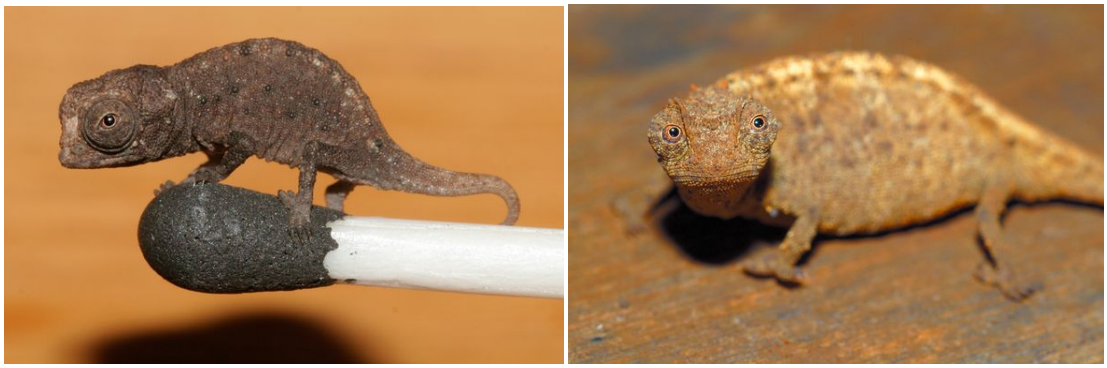
References:

Herpetology, Second Edition, by George R. Zug, Laurie J. Vitt, and Janalee P. Caldwell. ©2001, Academic Press.

Lizards: Windows to the Evolution of Diversity by Eric R. Pianka and Laurie J. Vitt. ©2003, University of California Press.

Unmatched Among Chameleons?

Photograph courtesy Frank Glaw unknown



Match-tip tiny, ***Brookesia micra*** (juvenile pictured) is the smallest of four new chameleon species found on the African island country of **Madagascar**. With an average adult length of just over an inch (2.9 centimeters) from snout to tail, ***B. micra*** is among the tiniest reptiles in the world.

Scientists think the diminutive new chameleon species might represent extreme cases of island dwarfism, whereby organisms shrink in size due to limited resources on islands.

"The extreme miniaturization of these dwarf reptiles might be accompanied by numerous specializations of the body plan, and this constitutes a promising field for future research," study leader Frank Glaw of Germany's Zoological State Collection said in a statement.

The new chameleon species study was published this week in the journal PLoS ONE.
—Ker Than Published February 15, 2012

Correction

The Monitor Vol. 23, no.2
USARK helped to keep 5 out of the 9 species of Boids from the Lacey Act (not all nine).

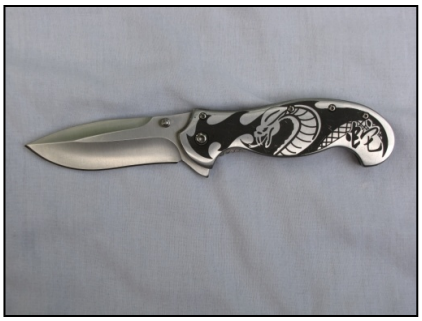
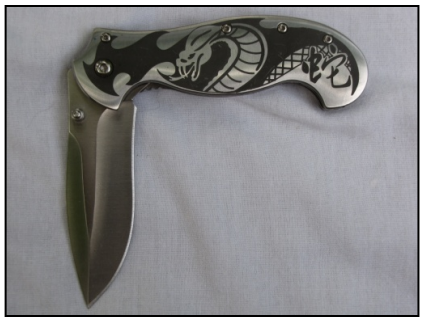
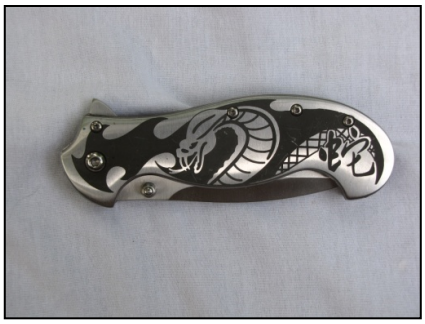
Cancellation

The *Day of The Salamander* event at McCormick's Creek State Park has been cancelled.

KNIVES AND HERP ART (Part 15)

Photos & text by Roger Carter

This is a very nice folding knife with the image of a cobra engraved on the handle with the blade and handle a silver color and a darker background around the cobra. It has a thumb stud for one handed opening and a belt/pocket clip on the reverse side. The reverse side of the blade has engraved text "Hand Made Surgical Steel Crafted in China". The knife is seven and eleven-sixteenths of an inch long with the blade three and three-sixteenths of an inch long and razor sharp. This is a little heavier than most of the folding knives that I have.

EVENTS

March 21, 2012 – HHS General Meeting – Guest Speaker: Mike Pingleton, University of Illinois, "*Herpetological Field Trip to Mexico*" **(Pharmacy Bldg. Room #202)**

April 3, 2012 - Indiana Reptile Expo, Hamilton County Fairgrounds, 10am-4pm, $6.00 admission
www.indianareptileexpo.com

April 15, 2012 - 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

April 18, 2012 – HHS General Meeting – Guest Speaker: Jim Harrison & Kristen Wiley, "*Sri Lanka Herping Adventure*" **(Room # 202 of the Pharmacy Bldg.)**

April 22, 2012 – *Z-GreenFest*, Earth/green festival of Zionsville, HHS exhibit of live Indiana native amphibians/reptiles, 2pm-5pm (volunteers with Indiana herps needed)

June 2, 2012 = 12th Annual Hoosier Herpout, HHS members enjoy a weekend of field herping, a cookout, and camping. Hardin Ridge Recreations Area, Monroe Reservoir, Bloomington.

The Monitor is printed courtesy of:

The Harding Poorman Group

HHS Selling Books

The Hoosier Herpetological Society has a wide variety of brand new herp-related books for sale to our membership. Sales from these items will fund the HHS. See the selection at the Midwest Reptile Shows, the Indiana Reptile Expo, and (or) General Meetings at Butler University. *Books are sold below retail pricing.*

Got Rodents?

Hoosier Mouse Supply can take your orders for rodents and they will deliver to the monthly meetings. (317) 831-1219

www.yearofthelizard.org

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 7:30 p.m. at Butler University, Pharmacy Building, Room #150. Membership is open to all interested individuals. **No venomous animals are allowed at the General Meetings.**

Your HHS Board of Directors for 2012

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Hoosier Herpetological Society

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__Corresponding Membership $12.00
__ Individual/Family Membership $15.00
__ Sustaining Membership $25.00 or more

Herpetological Interest(s)
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P.O. Box 40544
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____ If this area is checked, it's time to renew your membership!