



Nature, News & Notes

Wabash Valley Audubon Society

Reminder

Please do not forget
Chapter Only
Membership Dues

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Nature, News & Notes

February/March 2014

Save the Date!

53rd WVAS Annual Banquet “The Migratory Birds of Goose Pond FWA: Global Conservation Significance”



Whooping Cranes by Jim Sullivan

**Wednesday, April 16, 2014
6pm-9pm MCL Restaurant**

Dr. Lee Sterrenburg, a retired IU English Department professor, and Travis Stoelting, an IDNR property manager for Goose Pond FWA, will be sharing with us about what's been happening at Goose Pond in recent years. Mr. Stoelting will talk about some of the progress made as well as current challenges in managing this 8,064 acre property. Dr. Sterrenburg, an avid birder and expert of Goose Pond FWA, will be highlighting how important this successful conservation effort has been by showing its positive impacts on both

resident and migratory birds. Goose Pond FWA is truly one of our state's, and country's, greatest conservation achievements and a wonderful place to observe and enjoy the riches of our natural world. And the best part is that it's right in our backyard! So don't miss this amazing opportunity to learn about Goose Pond FWA and its diversity of birds from two of the most knowledgeable people involved with its success.

Make Your Reservations Now!

The cost of the banquet of \$25.00 per person. Please send your reservations to Helen Vermillion at the address below by April 11th. If you have questions, please call Helen at 812-235-2901.

Helen Vermillion
423 S. Lakeview Pl.
West Terre Haute, IN 47885

Please note: there will be no auction this year.

Dr. James H. Mason Award

Nominate someone for the James Mason Award. Nominations may be sent to any board member by April 2nd. The winner will be presented a plaque during the April 16th banquet.

The James Mason Award was named after Dr. James H. Mason, an English Professor at Indiana State University. He worked tirelessly lobbying at the State House in Indianapolis to pass laws to improve the environment in the State of Indiana. He served on the Board of the Wabash Valley Audubon Society (WVAS) many years in numerous positions, including President. He also served for decades as the Conservation Chairman for the Indiana Audubon Society. Each year the WVAS selects an individual(s) who has shown the same type of dedication to stewardship of the environment that was exhibited by Dr. Mason.



Presenting the 2013 James Mason Award to Clint Murray (third from left) are Peter Scott, Alan Bruner & Phil Cox.

Past winners of the award (and their affiliations) include:

- | | |
|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 1990 Jack Munsee, WVAS, ISU Life Sciences | 2005 John Whitaker, ISU Center for NA Bat Research and Conservation |
| 1991 H. Samuel Phipps, Indiana DNR | 2006 James McDonald, Indiana landowner practicing conservation and stewardship of his land |
| 1992 Keith Ruble, Vigo County Parks Dept. | 2007 no award given |
| 1993 Terri Moore, Indiana Natural Resource Commission | 2008 TREES Inc., Terre Haute, Indiana |
| 1994 Marion Jackson, WVAS, ISU Life Sciences | 2009 Peter Scott, WVAS, ISU Biology |
| 1995 Paul Carmony, The Nature Conservancy | 2010 Susie Dewey, WVAS |
| 1996 Amy Mason, WVAS, Indiana Audubon Society, Indiana Garden Club | 2011 Max Miller, Riverscape |
| 1997 James Gammon, DePauw University | 2012 Phil and Brenda Milliren, WVAS |
| 1998 Marshall Parks, WVAS, ISU Life Sciences | 2013 Clint Murray, protected a unique natural area, "The Burn" in Montgomery County |
| 1999 John Bacone, Indiana Dept of Natural Resources | |
| 2000 "Six from the Sixties", WVAS founders: Ruth Erickson, Betty Munsee, Ken & Pearl Eslinger, Henry & Margaret Tamar | |
| 2001 no award given | |
| 2002 Charles Keller, co-author of Birds of Indiana | |
| 2003 Alan Bruner, WVAS, Indiana Audubon Society | |
| 2004 Gene Muench, WVAS | |



Upcoming Events

Check us out! You do not have to be a member to enjoy our member meetings. They are free and open to the public.

Rescuing Our Reptiles

Wednesday, March 19, 2014

7pm Vigo County Public Library

Mr. Justin Guyer, co-host of the radio show Herpin' Time Radio, will be presenting an exciting topic related to Indiana area reptiles and amphibians as well as responsible pet ownership. As a boy growing up in southern Illinois, Mr. Guyer spent much of his youth chasing and learning about these wonderful and interesting animals around the family farm.

Since then, Mr. Guyer's love for reptiles and amphibians has literally grown to become his life's passion. Justin operates his own reptile breeding business called Guyer Genetics, where he currently manages over 32 species of snakes, tortoises, and boids. Justin's passion for reptiles is quickly evident in hearing him talk about them. He loves giving presentations on reptiles and amphibians. He says it affords him the opportunity to dispel common fears and misunderstanding, while also promoting conservation through education. I truly hope that you and your family will be able to attend this insightful and entertaining presentation on our amazing reptiles and amphibians. Live snakes will be in attendance! Will you?!

Boa Constrictor
By Joel Sartori - National Geographic



53rd Annual WVAS Banquet

Wednesday, April 16, 2014 See details on Page 1.

Big May Day Bird Count

Saturday, May 10, 2014 - All day

The objective of the BMDBC is to count the number of birds of each species occurring in a participating county area from midnight to midnight on the second Saturday in May. This data snapshot provides a valuable scientific record of the bird populations occurring each year in Indiana. The results will be compiled, analyzed, and published in the Indiana Audubon Quarterly. Contact Peter Scott if you would like to participate at peter.scott@indstate.edu.

Luna Moth by Stephanie Taylor



Spring Picnic

Wednesday, May 21, 2014

5:30pm Forest Park

You don't have to be a member to bring a dish and enjoy fellowship with Wabash Audubon members in beautiful Forest Park in Vigo County.

No reservations needed. Forest Park is located in North Terre Haute, near Markle Mill and Old Mill Dam on Mill Dam Road before the railroad tracks, between Haythorne Ave. and Park Ave.

Questions? Call 812-877-1095 or Carissa.lovett@terrehaute.in.gov

Hope to see you there!

Recently Completed Event

“Honey Bees: Endangered Species?” Wednesday, February 19, 2014



Photo by Carissa Lovett

Pictured at left is Andy Lohrman, his passion to save the honey bee first began simply as an interest in supplying his family with honey. He has taken care of as many as 23 hives in four apiaries.

Pictured below Andy Lohrman and his daughter show Audubon members the equipment it takes to raise a healthy bee colony.



Photo by Carissa Lovett

Andy Lohrman, President of the Clay County Beekeepers Club, presented at the Vigo County Public Library on February 19th. The honey bee is a very important pollinator of plants and thus plays a critical role in the health of both nature and man. Without the honey bee we would lose approximately 80% of our food supply due to lack of pollination to produce fruit. Honey bee propolis has been used for centuries as a strong antiviral, antimicrobial and antifungal substance. Everyone enjoyed this informational and entertaining presentation.

Darwin Keynote Speaker Series

“Echoes of Their Wings: The Passenger Pigeon and Its Legacy”

Tuesday, April 22, 2014 - 7pm at University Hall, Indiana State University



Joel Greenberg is a research associate of the Chicago Academy of Sciences Peggy Notebaert Nature Museum and the Field Museum. Author of three books, including [A Natural History of the Chicago Region](#), Greenberg has taught natural history courses for the Morton Arboretum, Brookfield Zoo, and Chicago Botanic Garden. He helped spearhead Project Passenger Pigeon to focus attention on human-caused extinctions. Greenberg lives in Westmont, Illinois.

For more information, visit Mr. Greenberg's website at <http://www.birdzilla.com/blog/>

The Power of V: Conserving Energy

By FLORA LICHTMAN, JAN. 15, 2014

Article taken from the *New York Times*

Birds of a feather may flock together, but why they fly together in V formations has never been known for certain.

Now, with the help of 14 northern bald ibises fitted with lightweight sensors on a 600-mile migration from Austria to Tuscany, researchers are suggesting that the explanation is one that was long suspected but never proved: The formation helps the birds conserve energy.

Reporting in the journal *Nature*, the scientists write that the ibises positioned themselves in spots that were aerodynamically optimal — allowing them to take advantage of swirls of upward-moving air generated by the wings of the bird ahead. (The lead bird gets no lift advantage; the ibises regularly switched leaders.)

“We’ve been wondering for years whether flapping birds can save energy by following each other in the right way,” said Geoffrey Spedding, chairman of the aerospace and mechanical engineering department at the University of Southern California, who was not involved in the study. “This work answers that question, and the answer is yes.”

The scientists, led by Jim Usherwood of the Royal Veterinary College in England, said a major challenge was obtaining the data. The ibises, given fetching names like Amadeus, Archimedes, Balthasar and Emma, were hatched at Zoo Vienna in March 2011 and raised as part of a conservation project aimed at reintroducing the critically endangered species to its natural range in Europe.

Some of the study’s authors served as human foster parents, taking the young birds on training flights in Salzburg, Austria. The humans rode in a paraglider, a lightweight aircraft that looks like a dune buggy attached to a parachute, and the birds followed.

“They definitely got better at flying in a V as their training flights went on,” said one of the authors, Steven J. Portugal, a postdoctoral researcher at Royal Veterinary College.

Eventually, the foster parents taught the birds their 600-mile migration route from Salzburg to Orbetello, Italy, by flying alongside them. The birds wore custom-made data loggers that allowed the researchers to track flapping, speed and direction. Weighing less than an ounce, the devices included an accelerometer, a gyroscope, a magnetometer, a memory card, a battery, a microcontroller and a GPS unit “much better than on your iPhone,” Dr. Usherwood said. It is accurate to about one foot and refreshes five times per second — the resolution necessary to track the birds’ positions in relation to one another.

“Ten years ago this wouldn’t have been possible, in terms of size and sampling frequency,” Dr. Portugal said.

The hardware and software to analyze the data sets are “the big advances, allowing us to observe behaviors of animals under natural conditions,” said Andrew A. Biewener, a director of Harvard’s Concord Field Station and a professor of organismic and evolutionary biology, who was not involved in the study.

The researchers analyzed the birds’ positions over seven minutes of flight, and compared those observations with theoretical predictions generated by aerodynamic models. The upward-moving swirls of air, called tip vortices, are a byproduct of winged flight, said Kenny Breuer, a professor in the school of engineering and a professor of ecology



“Conserving Energy” continued on page 7



Red-eared Slider by Ellen Lunsford

Turtle Rescue - Volunteers Needed

Do you love turtles and want to help save them? The Wabashiki Turtle Rescue group is looking for volunteers. Every late spring, summer, and early fall hundreds of turtles move around the Wabashiki wetlands near West Terre Haute to find adequate water and food sources. Many of them are killed by the traffic they encounter on Hwy 40 and other areas, and need help getting safely to their destination. We have already saved thousands of

turtles, and we need help rescuing more until a permanent solution for their safe crossing is found. If you are interested, please e-mail Ellen Lunsford at Mabel819@aol.com. You can also find the Wabashiki Turtle Rescue page on Facebook.

The rescuing starts soon – come help us make a difference!

Bucket -O'-Red-eared Sliders
by Ellen LunsfordEastern Box Turtle
by Ellen Lunsford

Rusty Blackbird Spring Migration Blitz

Rusty Blackbird
by Jim Sullivan

Over the past half-century, the historically abundant Rusty Blackbird has endured one of the steepest population declines among North American birds. But you can help! Scientists need information about these birds during their migration north to their breeding grounds. The Rusty Blackbird Spring Migration Blitz will help with future research and conservation efforts.

Spring 2014 kicks off the first year of this three-year effort. The Blitz window will span from March 1 through mid-April. If you'd like to help, just bird as you normally do, and record ALL of your observations to eBird during this time span. Remember to report ALL your observations as it's just as

important to know where the Rusty Blackbirds are as it is where they're not.

Check out the website of the International Rusty Blackbird Working Group for more information as well as on Facebook, where you can find up-to-the-minute information about the Blitz!

Rusty Blackbird Working Group: <http://rustyblackbird.org/outreach/migration-blitz/>

Rusty Blackbird Spring Blitz on Facebook <https://facebook.com/rustyblackbirdspringblitz>

eBird <http://ebird.org/>



4th ANNUAL OPERATION: WABASHIKI

Wetland Clean-Up Volunteers Needed

Saturday, April 12, 2014 9am - 1pm

Meeting Place: Dewey Point

Wabashiki Fish & Wildlife Area - located on Hwy 40, West Terre Haute

Rain Date: Sunday, April 13 at the same time

Let's all get together to preserve the wetlands that many call home.

Safety glasses and other protective ware are suggested.

Please wear appropriate working shoes.

Coffee and snacks provided.

For more information email sustainabilityclub@smwc.edu

Conserving Energy - continued from page 5

and evolutionary biology at Brown University, who with David Willis and other colleagues, developed the predictions. As wings push air down to generate lift, other air rises to the right and left of the wings, forming the vortices. Airplane wings also shed them; they are sometimes visible as vapor trails.

But a bird's wake is more complicated than an airplane's. "The strength of those tip vortices varies throughout the phase of the wing-beat," Dr. Breuer said. "There's a favored position you want to fly in and a favored phase you want to flap in to take advantage of the leading bird."

An analysis of 24,000 flaps showed that the ibises on average adjusted their position and wing phase to optimize the lift from the vortices, and readjusted their phasing when they changed positions within the V. The new study does not say how much energy the ibises saved by these maneuvers, but small gains could be useful over long migrations, experts say.

Another open question is how the birds know to fly in these optimal spots. Dr. Usherwood said that they might have evolved "rules of thumb" for flying, or that "they have good sensors" and adjust to find spots that feel good.

"Splitting apart those possibilities would be possible with cunning experiments we have planned," he said.

As for the ibises, they made it to Tuscany in September 2011. They are expected to spend a few years there and then, if all goes well, migrate back to Salzburg. "This spring would be the first they would think of returning," Dr. Portugal said. "This will be a telling year."

Events at a Glance

March 19th	7pm - 9pm	Member meeting at Vigo County Public Library "Rescuing Our Reptiles" - Speaker Justin Guyer
April 3rd	7pm	Board Meeting at Grand Traverse Pie Company
April 5th	10am - 12pm	Birding with WVAS at Dobbs Park Nature Center Members of the WVAS will be identifying birds and answering questions during this time.
April 16th	11am - 2pm 6pm	Earth Day at ISU WVAS 53rd Annual Meeting and Banquet at MCL Restaurant "The Migratory Birds of Goose Pond FWA: Global Conservation Significance" - Speakers Lee Sterrenburg and Travis Stoelting
April 26th	11am - 3pm	Earth Day at the White Violet Center for Eco-Justice at St. Mary of the Woods
May 1st	7pm	Board Meeting at Grand Traverse Pie Company
May 10th	All Day	Big May-Day Bird Count - see page 3
May 21st	5:30pm	Spring Picnic at Forest Park - see page 3
May 31st	10am - 12pm	Birding with WVAS at Dobbs Park Nature Center
June 21st	10am - 12pm	Birding with WVAS at Dobbs Park Nature Center
July 19th	10am - 12pm	Birding with WVAS at Dobbs Park Nature Center
August 16th	10am - 12pm	Birding with WVAS at Dobbs Park Nature Center
September 4th	7pm	Board Meeting at Grand Traverse Pie Company
September 6th	9am - 1pm	Clay County Nature Day at Clay County Fairgrounds
September 17th	5:30pm	Fall Picnic at Hawthorne Park
September 20th	10am - 12pm	Birding with WVAS at Dobbs Park Nature Center



16th Annual Earth Day Celebration

Saturday, April 26, 2014

11am - 3pm at Saint Mary-of-the-Woods, IN

White Violet Center for Eco-Justice, a ministry of the Sisters of Providence continues to host West Central Indiana's largest and longest-running Earth Day celebration.

Dozens of educational exhibits will be on display, food offered by local vendors, live music and children's activities. It's fun and educational for the entire family!

Admission is free. There are free-will offering opportunities at entrance gates to help with the cost of the event.

For more information, contact Robyn Morton at rmorton@spsmw.org or at 812-535-2932.

Want To Get Involved?

Wabash Valley Audubon Society Volunteer Opportunities

Would you like to be more involved with the Wabash valley Audubon Society? There are many easy ways you can help the organization. Here are a few:

Hospitality

- 1) The WVAS still needs a chair for this committee. To head this committee all you have to do is take care of the box of supplies used during our monthly member meetings and sign people up to bring snacks for each meeting.
- 2) Sign up to bring a snack to one of the monthly meetings. This does not have to be homemade, you can just pick something up from the store.

Dates for fall 2014: October 15th November 19th December 17th

Birding with Wabash Valley Audubon at Dobbs Park Nature Center

This is a program that helps people identify the birds that come to the feeders at Dobbs Park. We answer questions about which foods are best to attract the birds and which are good to stay away from. The program starts at 10am and runs until 12pm. People are welcome to stop in at any point during that 2 hour period to talk to a WVAS member.

You do not have to be a master birder to volunteer for this program. Most of the people who attend this informal program know very little about the birds that come to the feeders, but would like to know more.

Dates volunteers needed for 2014: May 31st June 21st July 19th August 16th
 September 20th October 18th November 15th December - no program

Outreach

WVAS attends many educational events. We man a table and pass out information about WVAS and wildlife. You can help.

2014 Events: Wednesday, April 16, 11am-2pm Earth Day at ISU
 Saturday, April 26, 11am-3pm Earth Day at White Violet Center at St. Mary's
 Saturday, September 6, 9am-1pm Clay County Nature Day at Clay Co. Fairgrounds

Board Meetings

You are welcome to sit in on board meetings, which is a great way to find out more about the organization and ways to help out. Board meetings are held on the first Thursday of the month at 7pm at the Grand Traverse Pie Company on 3rd and Cherry streets.

Dates for spring 2014: April 3rd and May 1st

To help out with any of the above or you have questions, please feel free to contact Carissa Lovett at 812-201-0400 or carissa.lovett@terrehaute.in.gov . I hope to hear from you soon.



Eastern Spadefoot Toad by Carissa Lovett

DNA sleuthing confirms chickadee 'hybrid zone' marching northward as climate warms



Black-capped Chickadee by Marty Jones

The zone of overlap between two popular, closely related backyard birds is moving northward at a rate that matches warming winter temperatures, according to a study by researchers from the Cornell Lab of Ornithology, Villanova University, and Cornell University. The research will be published online in *Current Biology* on Thursday, March 6, 2014. In a narrow strip that runs across the eastern U.S., Carolina Chickadees from the south meet and interbreed with Black-capped Chickadees from the north. The new study finds that this hybrid zone has moved northward at a rate of 0.7 mile per year over the last decade. That's fast enough that the researchers had to add an extra study site partway through their project in order to keep up.

"A lot of the time climate change doesn't really seem tangible," said lead author Scott Taylor, a postdoctoral researcher at the Cornell Lab of Ornithology. "But here are these common little backyard birds we all grew up with, and we're seeing them moving northward on relatively short time scales."

In Pennsylvania, where the study was conducted, the hybrid zone is just 21 miles across on average. Hybrid chickadees have lower breeding success and survival than either of the pure species. This keeps the contact zone small and well defined, making it a convenient reference point for scientists aiming to track environmental changes.

"Hybridization is kind of a brick wall between these two species," said Robert Curry, a professor of biology at Villanova University, who led the field component of the study. "Carolina Chickadees can't blithely disperse north without running into black-caps and creating hybrids. That makes it possible to keep an eye on the hybrid zone and see exactly how the ranges are shifting."

The researchers drew on field studies, genetic analyses, and crowd sourced bird sightings. First, detailed observations and banding data from sites arrayed across the hybrid zone provided a basic record of how quickly the zone moved. Next, genetic analyses revealed in unprecedented detail the degree to which hybrids shared the DNA of both parent species. And then crowd sourced data drawn from eBird, a citizen-science project run by the Cornell Lab, allowed the researchers to expand the scale of the study and match bird observations with winter temperatures.

The researchers analyzed blood samples from 167 chickadees—83 collected in 2000-2002 and 84 in 2010-2012. Using next generation genetic sequencing, they looked at more than 1,400 fragments of the birds' genomes to see how much was Black-capped Chickadee DNA and how much was Carolina.

The site that had been in the middle of the hybrid zone at the start of the study was almost pure Carolina Chickadees by the end. The next site to the north, which Curry and his students had originally picked as a stronghold of Black-capped Chickadees, had become dominated by hybrids.

Female Carolina Chickadees seem to be leading the charge, Curry said. Field observations show that females move on average about 0.6 mile between where they're born and where they settle down. That's about twice as far as males and almost exactly as fast as the hybrid zone is moving.

As a final step, the researchers overlaid temperature records on eBird sightings of hybrid chickadees. They found a very close match: hybrids occurred only in areas where the average winter low temperature was between 14 and 20 degrees Fahrenheit. They also used eBird records to estimate where the hybrid zone had been a decade earlier, and found the same relationship with temperature existed then, too. The only difference was that those temperatures had shifted to the north by about seven miles since 2000.

Chickadees—there are seven species in North America—are fixtures in most of the backyards of the continent. These tiny, fluffy birds with bold black-and-white faces are favorite year-round visitors to bird feeders, somehow surviving cold winters despite weighing less than half an ounce.

To the untrained eye the Carolina Chickadee of the southeastern U.S. is almost identical to the more northern Black-capped Chickadee—although the Carolina has a shorter tail, less white on its shoulders, and a song of four notes instead of two notes. Genetic research indicates the two have been distinct species for at least 2.5 million years.

"The rapidity with which these changes are happening is a big deal," Taylor said. "If we can see it happening with chickadees, which are pretty mobile, we should think more closely about what's happening to other species. Small mammals, insects, and definitely plants are probably feeling these same pressures—they're just not as able to move in response."

WVAS Mission

WVAS is involved in appropriate projects to conserve and restore natural ecosystems, interact with other local organizations and groups with similar concerns, and provide educational opportunities to the local community to increase their awareness, appreciation, and involvement in the natural world that surrounds them.



Carolina Chickadee by Carissa Lovett

The Wabash Valley Audubon Society (WVAS) is a chapter of the National Audubon Society serving Clay, Parke, Sullivan, Vermillion and Vigo counties. The public is welcome to attend our activities, including monthly meetings, field trips and conservation projects.

If you have a topic or photo you would like to share, please contact WVAS. All Wabash Valley Audubon Society events are open to the public.

WVAS Officers for 2013-2014

President & Programs:

Carissa Lovett
carissa.lovett@terrehaute.in.gov

Vice-President & Field Trips:

Nicholas Brown
nicholasmsu@yahoo.com

Secretary:

Ellen Lunsford
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Marty Jones
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WVAS Web site



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A Reminder to our readers:

The Nature News and Notes Newsletter can be read and enjoyed in color on our website, www.wabashvalleyaudubon.org. Just click on the word "Publications" in the top row of links on the homepage to visit our archives.

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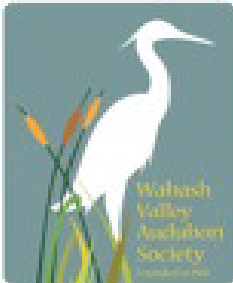
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