



# Southern Illinois Audubon Society

August 2017 – Vol. 24, No. 4

P.O. Box 222  
Carbondale, IL 62903-0222

## NEWSLETTER

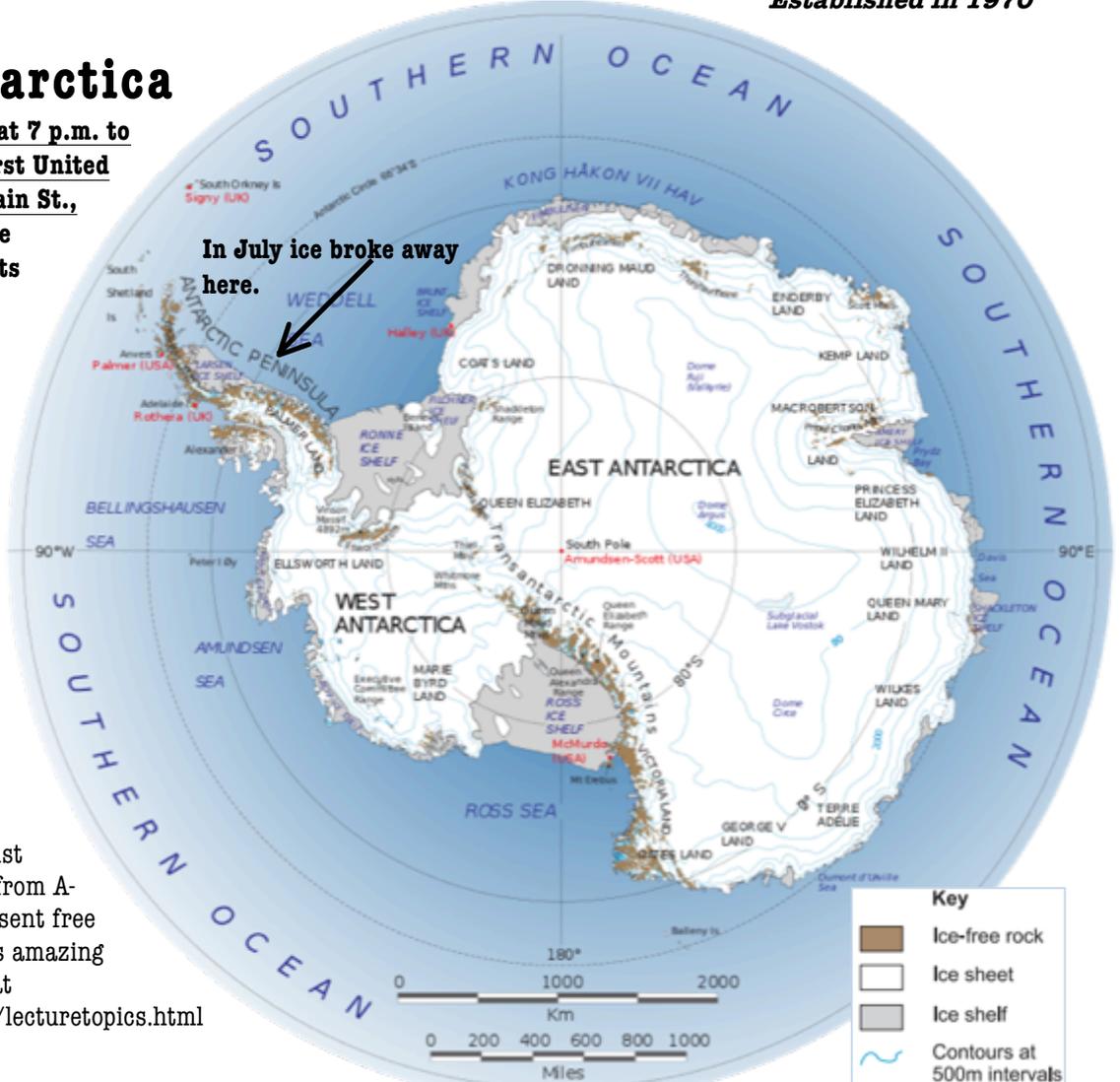
Established in 1970

### Awesome Antarctica

Come on **Friday, August 25<sup>th</sup>** at 7 p.m. to the Fellowship Hall of the First United Methodist Church, 214 W. Main St., Carbondale, to learn about the continent of Antarctica and its outstanding beauty!

**Dr. George Waring** had the good fortune to spend several days in Antarctica in 1996. He will give an overview of the continent and nearby islands as well as its wildlife and flora.

Dr. Waring is Professor Emeritus of Zoology from Southern Illinois University Carbondale. His research spans from ethology and vertebrate natural history to biological impacts of human activities on wild vertebrate populations. This program is just one of a list of lectures topics from A-Z that Dr. Waring offers to present free of charge. To view Dr. Waring's amazing list of topics visit his website at <http://mypage.siu.edu/waring/lecturetopics.html>



*This map shows the major geographical features on the Antarctic continent and the USA and UK research stations. (The British Antarctic Survey)*

#### SIAS Meetings Calendar for Fall 2017

- Sept. 22nd:** Program speaker: John Schwegman on Antarctica and Patagonia
- Oct. 27th:** Program speaker: Mark Glenshaw on the Forest Park Great Horned Owls
- Nov./Dec. on Dec. 1st:** Program: Local school groups will present on the native gardens developed through donations from SIAS.
- Jan. 26th :** Lyle White on the Nebraska Platte River & Rowe Sanctuary

#### Total Solar Eclipse - Not An Ordinary Stamp

The Postal Service didn't want to be left out of the unique eclipse experience so they came up with a magical way to celebrate the event. Turn to the last page of the newsletter. Place you finger on the stamp. After a few seconds, remove your finger to reveal a surprise!

#### Another Author In Our Midst Releases Book: *Finding Birds in Jackson County, Illinois* by Henry D. Detwiler

SIASer Henry Detwiler of Yuma, Arizona, formally of Carbondale, just released his new book *Finding Birds in Jackson County, Illinois*. This is his 5<sup>th</sup> in a series of birding guides that include finding birds in Yuma County, AZ, San Diego County, CA, and at the Salton Sea, CA. Henry's *Finding Birds in Jackson County* is selling for \$15 but he's making it available to SIAS members for only \$11. A copy can be purchased from Rhonda Rothrock at the August SIAS meeting. Henry's other guides books can be purchased at [www.lulu.com/spotlight/southwestbirders](http://www.lulu.com/spotlight/southwestbirders)

Henry grew up in Carbondale and was a member of SIAS prior to his leaving the area after graduation. He landed in Yuma, AZ but has returned regularly to visit his parents who remained in the Carbondale area. As retirement approached, Henry returned to the area more often to both assist his father but also search for birds in Jackson Co. and throughout southernmost IL. The great birding in our area inspired Henry to write a birding finding guide for Jackson County. His guide covers over 16 areas, providing maps and lists of species expected and other related tips.

## Upcoming Events & Activities

### Aug. 21 > Total Solar Eclipse...

...turning southernmost Illinois into the center of the universe!

### Aug. 21 > The Eclipse Megamovie Project

The Eclipse Megamovie Project, a first-of-its-kind citizen science project, gathering scientifically valuable data from the total solar eclipse that will traverse North America on August 21. They will gather images of the eclipse from over 1,000 volunteer photographers and amateur astronomers, as well as many more members of the general public. They'll then stitch these media assets together to create an expanded and continuous view of the total eclipse as it crosses the U.S.A. For details about how you too can contribute, visit <https://eclipsemega.movie/>

### Aug. 17 > Mark Gutersloh on Cache River Restoration

Mark Gutersloh, Heritage Biologist with the IL Dept. of Natural Resources will give a presentation on the Cache River Restoration at the Cache River Wetlands Center, 8885 IL Rt. 37, Cypress, starting at 6:30 p.m. This program, sponsored by the IL Native Plant Society Southern Chapter, is open to the public!

### Sept. 2 > Shrub Hike at Giant City State Park

Join Extension Forester Chris Evans for a fun and informative hike on the 2-mile Trillium Trail to learn native shrubs. This will be a moderately difficult hike. Starting at 1 p.m. Phone the Park at 618.457.4836 for complete details including meeting location.

### Sept. 9 > Cache River Days

This year, for the first time ever, NATURE FEST and CACHE RIVER DAYS will be joining forces! Festivities will be headquartered at the Ullin Ball Park, but will also include special displays at the Cache River Wetlands Center and guided tours at various points of interest throughout the Cache River Wetlands. Celebrate the Cache with live wildlife exhibits, nature activities, arts & crafts, live music, food and more. Cypress Creek NW Refuge will provide free canoe tours throughout the day. Limited space on tours. For more info or to register in advance, phone Cypress Creek at 618.634.2231.

**The Antarctic Ice Sheet** A chunk of floating ice the size of Delaware, weighing more than a trillion metric tons, broke away from the Antarctic Peninsula in July, producing one of the largest icebergs ever recorded and providing a glimpse of how the Antarctic ice sheet might ultimately start to fall apart.

There is so much ice on the continent of Antarctica that if it all melted into the ocean, average sea level around the entire world would rise about 200 feet, roughly the height of a 20-story building.

The Antarctic Ice Sheet covers about 98% of the Antarctic continent and is the largest single mass of ice on Earth. The ice sheet spreads under its own weight forming glaciers and ice streams that flow slowly downhill towards the ocean. Once they lift off the bedrock and begin to float, they become ice shelves. To stay in balance, ice shelves have to shed the ice they gained from glacier flow and local snowfall. Chunks break off to form icebergs and ice is also lost from the bottom by melting as warm ocean water flows under it.

The schematic diagram below of an Antarctic ice shelf shows the processes causing the volume changes measured by satellites. As stated, ice is added to the ice shelf by glaciers flowing off the continent and by snowfall that compresses to form ice. Ice is lost when icebergs break off the ice front, and by melting in some regions as warm water flows into the ocean cavity under the ice shelf. Under some ice shelves, cold and fresh meltwater rises to a point where it refreezes onto the ice shelf.

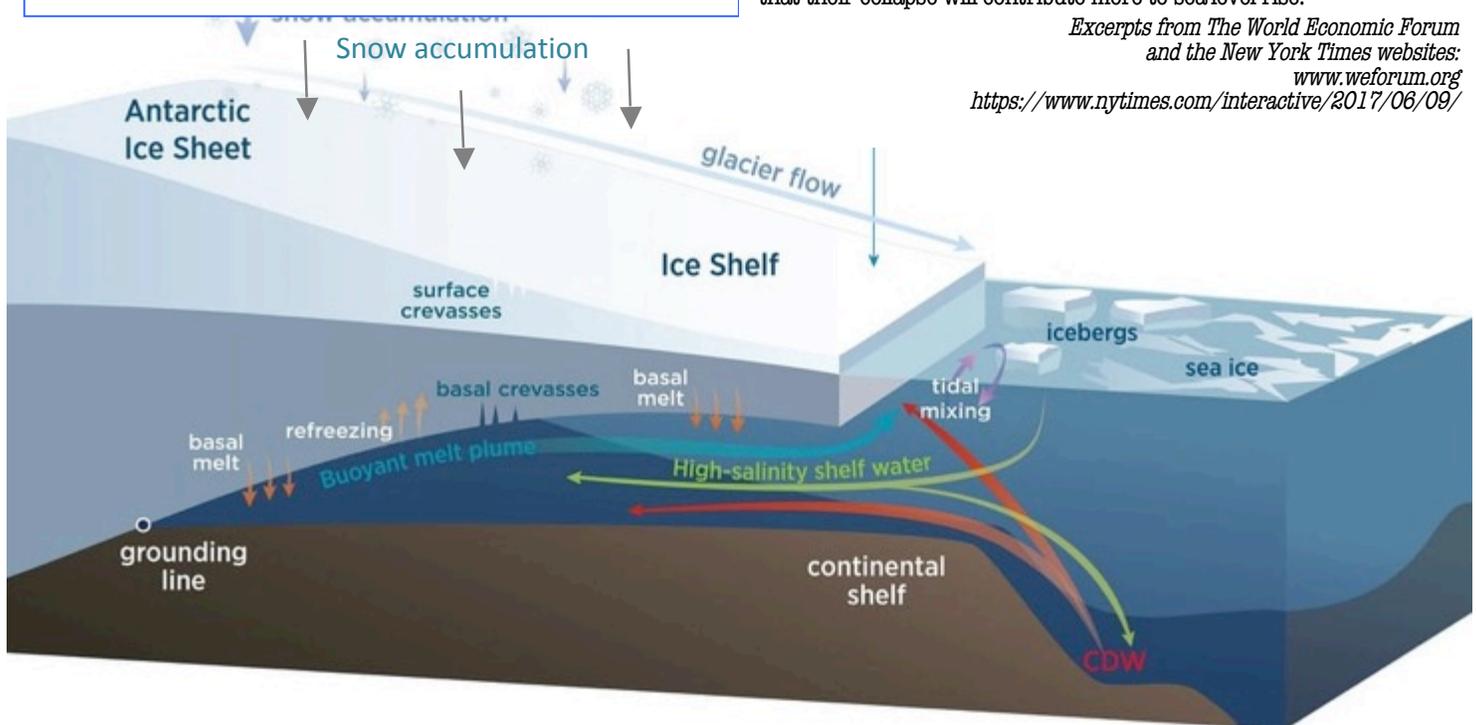
The collapse of the peninsula's ice shelves can be interpreted as fulfilling a prophecy made in 1978 by a renowned geologist named John H. Mercer of Ohio State University. In a classic paper, Dr. Mercer warned that the western part of Antarctica was so vulnerable to human-induced climate warming as to pose a "threat of disaster" from rising seas. He said that humanity would know the calamity had begun when ice shelves started breaking up along the peninsula, with the breakups moving progressively southward.

"As climate warming progresses farther south," said Dr. Eric Rignot, a climate scientist at the University of California, Irvine, who has done extensive research on polar ice, "it will affect larger and larger ice shelves, (those) holding back bigger and bigger glaciers, so that their collapse will contribute more to sea-level rise."

*Excerpts from The World Economic Forum and the New York Times websites:*

[www.weforum.org](http://www.weforum.org)

<https://www.nytimes.com/interactive/2017/06/09/>



## Criminal minds & other Hollywood Bird Crimes

Countless times I've heard a red-tailed hawk vocalization placed with bald eagles on TV and movies. Seems eagle voice aren't film worthy. Also, the tremolo calls of common loons regularly fill the scenes of deep woods on dark and stormy nights. For others like me that are distracted by improperly placed bird sounds on TV shows and movies, "The birds of Hollywood: An unnatural history" is an article written in 2002 about the topic, at: [www.salon.com/2002/06/13/ornithology/](http://www.salon.com/2002/06/13/ornithology/)

There are other such articles but this was the first I came across some years back and I shared it with the then faculty of the Dept. of Cinema and Photography at SIUC where I work. One grad student has regularly checked back with me regarding the appropriate birds for film footage he shoots.

But I recently found this interesting article: "The surprising reason Hollywood gets birds all wrong" [https://www.washingtonpost.com/news/animalia/wp/2016/03/14/the-surprising-reason-hollywood-gets-birds-all-wrong/?utm\\_term=.522e5be19e1d](https://www.washingtonpost.com/news/animalia/wp/2016/03/14/the-surprising-reason-hollywood-gets-birds-all-wrong/?utm_term=.522e5be19e1d)

The writer explains that native species cannot be used in films and TV shows because they are protected under the Migratory Bird Treaty Act. "They'll (filmmakers) come in and ask for a blue jay, but we'll tell them we can't use blue jays. They might end up with a black-throated magpie-jay, which looks like a blue jay but isn't protected under the Migratory Bird Treaty Act. It's a native of Mexico, a heritage that won it a spot on "The Big Bang Theory."

The article also references something I hadn't noticed but do now want to follow up on, "Listen for the tundra-dwelling willow ptarmigan in the South American jungle during the opening scene of "Raiders of the Lost Ark." A willow ptarmigan in the South American Jungle, I must hear that! -Rhonda R.

## An Inconvenient Sequel: Truth to Power

A decade after An Inconvenient Truth brought climate change into the heart of popular culture now comes the follow-up that shows just how close we are to a real energy revolution.

An Inconvenient Sequel, the follow-up documentary, addresses the progress made to tackle the problem of climate change and Al Gore's global efforts to persuade governmental leaders to invest in renewable energy, culminating in the landmark signing of 2016's Paris Climate Agreement.

FIGHT LIKE YOUR WORLD DEPENDS ON IT



an inconvenient sequel  
TRUTH TO POWER

IN THEATRES JULY 28

## Migratory Birds Bumped off Schedule as Climate Change Shifts Spring

15-May-2017

New research shows climate change is altering the delicate seasonal clock that North American migratory songbirds rely on to successfully mate and raise healthy offspring, setting in motion a domino effect that could threaten the survival of many familiar backyard bird species.

A growing shift in the onset of spring has left nine of 48 species of songbirds studied unable to reach their northern breeding grounds at the calendar marks critical for producing the next generation of fledglings, according to a paper published in *Scientific Reports*.

That's because in many regions, warming temperatures are triggering plants to begin their growth earlier or later than normal, skewing biological cycles that have long been in sync.

A multi-institutional team led by Stephen Mayor, a postdoctoral researcher with the Florida Museum of Natural History at the University of Florida, used data from satellites and citizen scientists to study how quickly the interval between spring plant growth and the arrival of 48 songbird species across North America changed from 2001 to 2012. The researchers found the gap lengthened by over half a day per year across all species on average, a rate of five days per decade—but for some species, the mismatch is growing at double or triple that rate.

While the majority of species studied adjusted their arrival dates, the study suggests the rate of change could be outpacing their efforts. Nine species were clearly unable to keep up with the shift (see graphic on front of newsletter).

The study is the first to investigate the increasing mismatch between songbirds' springtime arrival and plant growth at the continental scale and across dozens of species, said Mayor. Previous studies have predicted climate change will drive hundreds of bird species to extinction and greatly reduce the ranges of others. But some are shifting the timing of their major life events, such as reproduction and laying eggs, in an attempt to keep up with the changes. The key question, Mayor said, is whether this strategy will work long term.

Excerpts from: [https://www.eurekalert.org/pub\\_releases/2017/05/fmon-mbb051217.php](https://www.eurekalert.org/pub_releases/2017/05/fmon-mbb051217.php)



The Total Eclipse of the Sun stamp is the first U.S. stamp to use thermochromic ink, which reacts to the heat of your touch. Placing your finger over the black disc on the stamp causes the ink to change from black to clear to reveal an underlying image of the moon. The image reverts back to the black disc once it cools.

## Hummingbirds: Transit for Flower Mites

Unless you have dozens of hummingbirds visiting your feeders you might not be aware of a unique symbiotic relationship hummingbirds share with even smaller critters. How many folks are familiar with hummingbirds as flower mite taxicabs?

Flower mites feed and reproduce in flowers of host plants pollinated by hummingbirds. As the hummers flitter from one flower to the next in search of nectar they provide a taxi service to the mites. Flower mites stay on a flower until it dies. They then climb onto the next visiting hummingbird's beak for a free ride to the next nectar flower. The mites run off the beaks onto the flowers. And they run so fast for their relative, near microscopic, size that the speed they run as been compared to that of a Cheetah. This I've witnessed when I attempted to wipe them off with my finger. The mites have no doubt been on my feeders in previous years. But, without my reading classes, they just resembled specks of dust.

I first noticed these little micro critters just a few weeks ago. They were collecting around the hole ports on Dr. JB's style feeders, one of two types of hummer feeders I use. I have modified these feeders by drilling six additional hole ports so to accommodate twelve hummingbirds at a time. The other feeder style I use accommodate up to 16 birds at a time.

As I prepared to write this article, I was tickled to find a story on these wonder mites and their symbiotic relationship on the Audubon.org website written just 2 days ago: <http://www.audubon.org/news/mites-take-flight-hummingbird-beaks>

The article states that hungry mites scramble up a hummer's beak and latch on to its nostrils. "That's where the olfactory information is," says Robert Colwell, an evolutionary ecologist with the University of Colorado Museum of Natural History. When they smell their preferred blossom, they sprint down the bird's beak and dig into the sugary buffet. Included in the article are brilliant, intensely colored macro images of the mites on their hummingbird taxis. Wildlife researcher and photographer Sean Graesser used a Canon MP-E 65mm 1-5x macro lens to capture the detailed shots of mites on hummer beaks during a research trip to Costa Rica this past winter.

-Rhonda R.

## 11 Pounds of Coins Removed From Sea Turtle

This past March, veterinarians in Thailand removed 915 coins, weighing 11 pounds, from the stomach of a sea turtle. Nicknamed Omsin meaning "piggy bank," the turtle had been living in a pond in a state park where people threw coins in for good luck.

After being moved to a conservation center, she showed signs of distress and was taken to a veterinary clinic. The coins were successfully removed during a four-hour-long procedure, and she seemed to be doing better. However, a week later she died after a second surgery was done to try and repair intestinal damage.

Nickel toxicity is thought to have damaged her immune system. Green sea turtles are endangered, and some of their biggest threats are created by humans. Video of Omsin is at:

<http://video.nationalgeographic.com/video/news/170321-thailand-turtle-dies-eating-coins-vin>



## Santa Ana National Wildlife Refuge – Ground Zero for Border Wall Expansion

*Excerpts from the*

*National Wildlife Refuge Association website: <http://refugeassociation.org/2017/07/santa-ana-national-wildlife-refuge-ground-zero-for-border-wall-expansion/>*

Santa Ana National Wildlife Refuge, located along the Rio Grande River on the U.S. border with Mexico in south Texas, is one of the most ecologically important areas in the nation and unfortunately is at the forefront of the Trump Administration's proposed expansion of the border wall. The Army Corps of Engineers, Customs and Border Control, and private contractors have been working in secrecy for months on the refuge in preparation for building the wall. Only within the past two weeks has the public learned of the Administration's plans.

South Texas along the Rio Grande River has some of the greatest biological diversity of anywhere in the world – mainly because four distinct climates converge here: Subtropical, Temperate, Coastal, and Desert. This, in turn, fuels one of the biggest eco-tourism hotspots on the planet, supporting the economy and thousands of jobs.

Santa Ana NWR is one of three refuges in the South Texas Refuge Complex and is the heart of this biological hotspot. As one of the top birding destinations in the United States, the refuge attracts more than 165,000 visitors each year and generates an estimated \$462 million to the local economy. Home to over 400 species of birds, 450 types of native plants, half of the U.S. species of butterflies, and many endangered, threatened or candidate species to be listed under the Endangered Species Act, Santa Ana NWR and surrounding landscapes provide critical habitat susceptible to disturbance if the wall is constructed in the fragile habitat.

The proposed wall could span three miles through the refuge and consist of a concrete base, acting as a levee, and 18-foot high fencing on top, permanently altering the landscape to the detriment of iconic wildlife. If the wall were constructed as described it would eliminate migratory movements of mammals, which could include endangered ocelots, mountain lions, Sonoran pronghorn, foxes, and deer that cross the Rio Grande for food or shelter, and lead to genetic inbreeding and eventually species extinction. The concrete levee wall could also lead to increased flooding within the refuge, trapping and drowning wildlife that would be unable to escape.

Some reports conclude that the wall could block access to the refuge, cutting off the visitor's center, located on the north side of the refuge, to the south side of the refuge, limiting public access and undermining efforts underway to connect people to nature and the great public-private partnerships facilitated by the U.S. Fish and Wildlife Service.

Despite strong opposition in border communities and continued debate in Congress, the Dept. of Homeland Security is expected to receive federal funding in Fiscal Year 2018 to pay for the construction of the wall, and construction could begin as early as January 2018. By starting the construction of the wall at Santa Ana NWR, the administration can avoid extended litigation with private landowners. Because the refuge is federal property, the Administration also has powerful legal loopholes at its disposal that would waive all compliance with standard environmental safeguards, including the National Environmental Policy Act and the Endangered Species Act.

**The National Wildlife Refuge Association opposes the construction and has provided a "sign on" petition opposing the boarder wall through the Santa Ana National Wildlife Refuge on their website at: <http://refugeassociation.org/action/> - /85**

**To Join SIAS or Renew Your Membership, please fill in this form and return it with payment. Thank You!**

Individual Member \$15  
 Family \$25  
 Student Voting Member \$ 5  
 Donation \_\_\_\_\_  
 Amount Enclosed \$ \_\_\_\_\_

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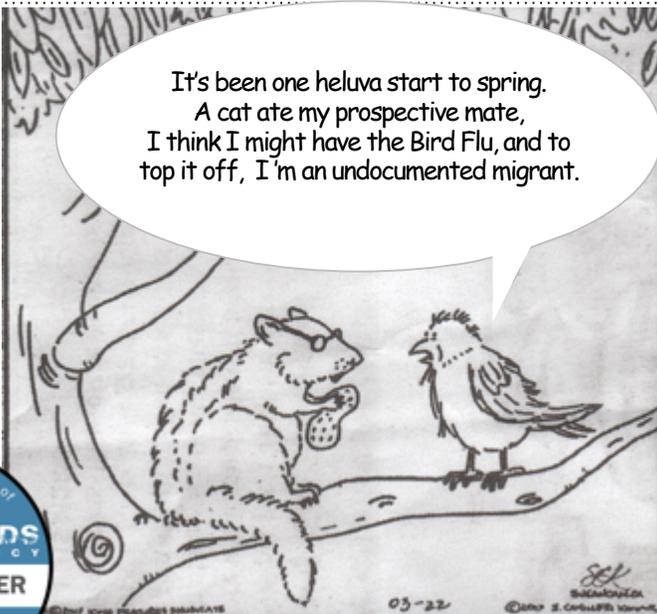
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**I/We would like to received our newsletter via email: YES / NO**  
 Member mailing labels reflect current dues status.  
 If you receive your newsletter electronically,  
 Contact Laraine W. or Rhonda R. to check your dues status.

**SIAS Welcomes New Members:** Beth Freeman of Carbondale and Gail and Mike Devilbiss of Centralia

**A Good Time Was Had By All at SIAS's May Picnic**

Reports are that over 30 folks attended SIAS's annual picnic on May 21<sup>st</sup> at Giant City State Park. The weather was cooperative and the location ideal. A big Thank You to the cooks Lew Hendrix and Cathie Hutcheson and to Laraine Wright and the SIAS board members for securing the location and working out all the details.



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**Southern Illinois Audubon Society**  
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*Affiliate of the Illinois Audubon Society,  
 the Illinois Environmental Council,  
 & the North American Bluebird Society*

9 songbirds unable to keep up with shift in spring



**Scarlet tanager**

Photograph: Ryan Terrell, Florida Museum of Natural History



**Indigo bunting**

Photograph: Greg Szymanski, Illinois Natural History Survey



**Great crested flycatcher**

Photograph: Michael Jeffords & Sue Post, Illinois Natural History Survey



**Eastern wood-pewee**

Photograph: Michael Jeffords & Sue Post, Illinois Natural History Survey



**Rose-breasted grosbeak**

Photograph: Michael Jeffords, Illinois Natural History Survey



**Blue-winged warbler**

Photograph: Ryan Terrell, Florida Museum of Natural History



**Northern parula**

Photograph: Ryan Terrell, Florida Museum of Natural History



**Yellow-billed cuckoo**

Photograph: Loren Merrill, Illinois Natural History Survey



**Townsend's warbler**

Photograph: Ryan Terrell, Florida Museum of Natural History