



# CENTER LINE

A Publication of Waukesha County's Retzer Nature Center

Summer 2013

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## Upcoming Events:

- \*Fall Plant Sale  
August 24
- \* Apple Harvest Festival  
September 21
- \* Bird Seed Ordering  
October 1-25
- \* Bird Seed Pick up  
November 2 & 6
- \* Friends Photo Contest  
November 3

Log on to  
[waukeshacountyparks.com](http://waukeshacountyparks.com)  
for more information.

## How To Be Cool On The Trail Of Global Warming

Year 2012 finally clamored to the finish line leaving track records of destruction. Wisconsin had record breaking seasons, as multiple tornadoes, lasting drought, higher than normal temperatures, even forest fires, ripped through areas of our state. Nature seemed to be in an agitated mood. The new year will be a time to sort out past records. Find out what's going on. Global warming is forming an agenda.

It may be of interest to note that early in United States history many land owners became participating phenologists. Phenology is a branch of science dealing with climate and periodic biological phenomena. Phenologists are people who study this relationship in nature's seasons. Thomas Jefferson, our third president, became a phenologist, and kept seasonal records at his Monticello home. Closer to home, Increase Lapham worked with the Federal Signal Service Division of Telegrams and Reports to establish a signal station at Lapham peak to receive meteorological observations from Pike's Peak, Colorado. He collected this weather data and relayed it all to Great Lakes ports – advance warning of storms. This advance info gave birth to the National Weather Bureau. My favorite ecologist and author must be mentioned, Aldo Leopold. Leopold recorded Wisconsin's nature activity from 1936 to 1947.

Today's nature lovers probably don't realize what phenology is, but most journalize their interests with intensity and purpose. All you bird watchers, who are out and about for the seasonal bird counts, contribute to this valuable information. Lepidopterists, those who choose the study of butterflies, record how these beautiful creatures are affected by drought, local plant life, and climate conditions, especially for certain species that do not migrate.

Herpetologists, those who have an interest in frog and toad study, have noted that frogs are being killed by a fungus that thrives in a warm climate. Those that are not croaking sometimes have abnormal numbers of body parts. Caught riding the winds, meteorologists (God bless em, along with their up-to-date contraptions), record and study daily temperatures, rainfall, humidity, plus wind speed and their direction. How incredible – all that information. Wisconsinites will always have tons of weather to talk about. How many inches were reported in Waukesha, really?

With over 100 years of record keeping, scientists have come to the conclusion that there is a connection between the temperature of the earth and the carbon dioxide (CO<sub>2</sub> in the air). In the 1970's, James Lovelock and Lynn Margulis, two scientists who were exploring the dilemma of the earth's situation, introduced the "Gaia Hypothesis" (pronounced "Guy-ah"). Their hypothesis suggested that all living things on earth, and oceans, rivers, lakes, rocks, soil, and air, are interconnected, and act as one living system.

Biomes of our earth are regions with certain types of plants and animals, which give those plants and animals existing in their areas everything that is needed for survival. Through the process of photosynthesis, plants of these regions use sunlight and carbon dioxide to grow their biome. The carbon dioxide is absorbed from the air (by the plants, in this rhythm of nature) and in return, the plants provide the animal life with their food and oxygen. Methane and water vapor along with carbon dioxide warm the atmosphere by trapping the sun's heat. Natural amounts of the gases in the natural process, have worked for the biome for millions of years; now system appears to be in jeopardy.

After intense study, scientists have come to the conclusion that there is a connection between temperatures of the earth and carbon dioxide amounts found in air. Hard core evidence was found in the ice cores taken from Antarctica and Polar cores. Their conclusion– temperatures and carbon dioxide levels were rising and falling together perfectly, in long age ice age cycles. Recent core sampling found more CO<sub>2</sub> in the air than had ever been recorded previously. A span of 800,000 years of melting, and a rotten fish was caught in the icy cubes. Temperatures in the earth, and CO<sub>2</sub> in the air– all increasing. Scientists named this phenomena Global Warming.

Closer to home, in Wisconsin's biome, scientists and concerned nature groups reported in "Wisconsin's Changing Climate, Impacts, and Adaptations" studies of climate impacts in Wisconsin. Some of their concerns (there were many):

- \* Summer heat waves will become more frequent and last longer.
- \* Smog and ground-level ozone will pose air– quality hazards.
- \* Diminishing ice cover, changing water levels, and higher winds over the Great Lakes, will increase shoreline erosion.
- \* Heavy rains will wash polluted runoff into lakes.
- \* Earlier onset of spring will alter relationships between plants and pollinators.
- \* Some wildlife, fish and tree species, now living at the edge of their biological ranges in Wisconsin, may move out of the state.

Global warming is gradually pushing higher temperatures everywhere on the earth. The list above mentions only a few developing problems found in Wisconsin's steamy brew. Solutions need to be found, and brought to our table.

In the meantime, how can the average naturalist or interested conservationist be of help? We all try to conserve energy and recycle waste. What more can be done?

Needless to say, today may be the perfect time to begin following an old science — phenology. 2013 could be the year to become a phenologist, and begin a journal of seasonal changes. If searching for the perfect ground to start the new hobby, look no further. All amenities for nature journaling, can be found along Retzer Nature Center trails. Trails wander through forest and prairie, fen and farmland. Others circle round pond and brook. The land supports an abundance of plant life, wildflowers, and grasses. Look up and one will spot bird life—robins to raptors. Look down, one can follow deer and occasional coyote, track the rabbit, or scare up a tiny field mouse. No matter in which direction observations are noted, you will always look forward to many enjoyable hours spent on the trail.

Note: maps are available at the trailhead and all amenities are free.

See you on the trail,

*Shirley Blanchard*

References:

Lynn Cherry and Gary Broasch, How We Know What We Know About Our Changing Climate, 2008 Dawn Publications, Nevada City, CA

Laurie David and Cambria Gordon, The Dawn To Earth Guide to Global Warming, 2007, Orchard Books, New York  
Wisconsin 's Changing Weather Challenges Communities, 2012.

Contact: David S. Liebl, 608-256-2360, [david.liebl@ces.uwex.edu](mailto:david.liebl@ces.uwex.edu) or Elaine Andrews, 608-262-0142, [eandrews@wisc.edu](mailto:eandrews@wisc.edu)



Special Thanks to ....

Jim Maas - donated 40 bird house kits, which will be used by the Education group through the year.

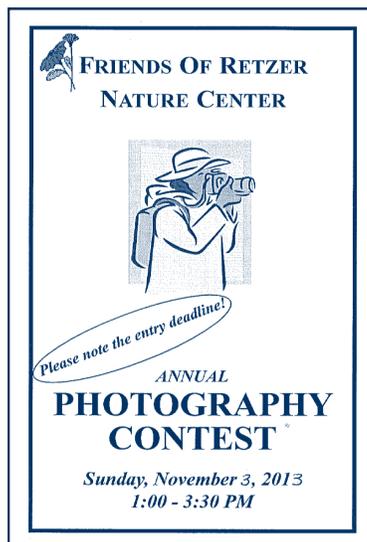
## NEWS FROM THE FRIENDS OF RETZER



*The Friends are planning to again run a trip to Costa Rica. They will also be adding a trip to Belize. The first informational meeting on both of these trips will be held on Monday, August 26, 2013 at 6:30 PM at Retzer Nature Center. The second meeting will be on Sept. 24, 2013.*

*If you cannot make the first meeting but know you are interested in going on either of these trips, please call Retzer Nature Center at 262-896-8007 and leave a message or email your interest to: [retzer@waukeshacounty.gov](mailto:retzer@waukeshacounty.gov)*

*The Friends are planning another slightly used book sale to be held in conjunction with the Apple Harvest Festival. We are primarily interested in books about plant life, flowers, gardens, birds, geology, etc., especially as related to Wisconsin. We are also in need of children's books on similar subjects. If you have any books you would like to donate, please drop them off at the front desk at Retzer.*



*The Friends are looking for someone who would like to assist Lyle Drier, Friends Board Member, in running the Annual Photo Contest which is held the first weekend of November. This person would need to help on a number of days. If you are interested in getting more involved in Retzer, this would be a good opportunity.*

*Please call Retzer Nature Center and leave you name and number, and Lyle will get back to you with the specific duties.*

*If you would like to become a member of the Friends of Retzer Nature Center or find out more information about us you can check our web site at [www.FriendsofRetzer.org](http://www.FriendsofRetzer.org).*

*Jerry Strom  
President— Friends of Retzer*

## HEART-WOOD



### The Sapphire Canary

As spring slides into summer, the trees are in full leaf. The summer prairie is waking up, the hayfield grasses are growing tall, the dragonflies patrol the paths, and the days start to remind you there's a hot summer just ahead. The Woodchuck munches placidly at the entrance to his burrow, the Eastern Kingbird keeps pugnacious watch over the boundaries of his domain, and the new-born fawn follows her mother on shaky legs. I make my way through this Garden of Eden that is June, a mini-season I always love because of its sense of strength and vigor—the fragility of early spring is gone, replaced now by a green and growing and new vitality, un-wilted and expanding, everywhere you look.

When I feel the warm winds, and I see the leafy treetops swaying in the sun, I know it's time to find this season's emblematic crown jewel. I go to a certain corner of the sunny field, where the adjacent forest-edge of Black Walnut trees soars abruptly to a height of 40 feet. I listen for the merry jingle of repeated notes which the bird books report as "fire-fire-where-where-here-here!", but which I know should really be translated "sweet-sweet-free-free-beer-beer!". When I hear it, I know that all I need to do is find the tallest forest-edge tree, and look at its tallest tip-top branch. Though the poet Yeats wrote wistfully of a golden bird, this, this crown jewel, is nothing less than a Sapphire Canary.

The deep sapphire blue Indigo Bunting, *Passerina cyanea*, is a 5-inch member of the group known as the Cardinaline Buntings, in the family *Cardinalidae*. As such, it is cousin to the Cardinal, the Grosbeaks and the Dickcissel. Like them, it has a stout conical finch-like beak, adapted for cracking seeds, mashing fruit, or scooping up insects. But the beak is not what impresses you. It's the overwhelming take-you-by-surprise, sight-for-sore-eyes, incomparable blue color of the territorially singing tree-top male. The color just takes your breath away.

Of course it's not really blue, not really. As with all birds that appear blue, the color is derived not from blue-colored pigments, but from the feather structure itself. The tiny feather barbs contains fine lines that act like a diffraction grating, to split the sunlight into its colors, with only the blue wavelengths of color reflected—spectacularly—back to you!

But only on a sunny day. When it's cloudy, the light-splitting fails, and the bird becomes as well-camouflaged as any sparrow, blending into the tree top leaves.

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Arriving back from Central America, Mexico, and the West Indies in late May, the male Indigo Bunting sets up his territorial shop in a brushy wooded area; he commences his signature singing from the exposed tree-tops overhead, defending a territory of 2 to 6 acres (depending on the availability of brushy nesting cover and tasty bugs). He may test the boundaries with incursions into the territory of neighboring males (who do the same to him), and an uneasy understanding of neighborhood boundaries is eventually reached. This may be aided by the fact that each male sings his own individual version of the song—subtly distinct from that of his neighbors—allowing everybody to recognize everybody else.

Somewhere in all this, the females arrive without fanfare on the breeding grounds. A female Indigo Bunting is understated and elegant, a perfectly-proportioned medium-brown finch (with subtle blue highlights on the tail). Under the showy mantle of the male's song-and-show display overhead, the female quietly selects a safe nest location, low and deep within brushy cover, and builds her nest totally on her own. During the time of egg-laying, the male may come down to hang around near the female (protecting his genetic investment, perhaps), but she incubates the 3-4 blue-to-white eggs totally on her own. The Bunting babies hatch, feather-less and helpless, after about 12 days of incubation. Feeding of the nestlings now begins, with the female busily doing most (or all) of this, and the male standing guard nearby (no doubt to provide security and protection against intruders). Sometimes it happens that a Brown-headed Cowbird has laid its egg in the nest, when the female Bunting was away, complicating the job of parenthood. The Bunting may bury the Cowbird egg, by building a new floor in the nest—or she may (instinctively) do her best to raise the demanding baby Cowbird as her own, potentially losing one or more of her own babies in the process. Absent such calamities, after another twelve days or so, the young Buntings will leave the nest—and the male must finally start doing his part to feed them (if the female lays a second clutch of eggs, the male must take over feeding the first-brood youngsters all on his own—payback, no doubt, for his earlier lack of participation).



In late summer, parents and young undergo the first of their two yearly molts; the winter's feathers adopt the female's camouflaged pattern (the irrepressible males have a few blue feathers thrown in).

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During each early summer, the Indigo Bunting is one of our most common birds at Retzer Nature Center, with the males' insistent songs eventually ringing out from tree-tops near and far. Despite this abundance, it is a bird which our birdwatchers are always enthusiastically on the look-out for. Perhaps the Indigo Bunting is one way to reckon wealth—if so, we are rich indeed, especially during the mini-season of June!

A life lesson, I think. Something does not have to be rare, to be a crown jewel.

Larry

Sources include—

- Ehrlich, Paul, et al. 1988. The Birder's Handbook—A Field Guide to the Natural History of North American Birds. Simon and Schuster/Fireside.
- Peterson, Roger Tory. 1980. A Field Guide to the Birds of Eastern and Central North America. Houghton Mifflin Co.
- Robbins, Chandler S., et al. Birds of North America. Golden Press.
- Sibley, David Allen. 2006. The Sibley Guide to Birds. Alfred A. Knopf, Inc.
- Stokes, Donald and Lillian. A Guide to Bird Behavior, Volume II. Little, Brown, and Co.

...and personal experience of the author.

## Retzer Nature Center Plans Two Central America Natural History Tours in 2014

The Friends of Retzer Nature Center are planning two natural history trips to Central America early next year - one a third annual trip to Costa Rica and one a first time venture to Belize.

Interest meetings for both 11-day trips are scheduled concurrently at Retzer Nature Center for **Monday, August 26<sup>th</sup>** and **Tuesday, September 24<sup>th</sup>** at **6:30pm**. Interested folks can hear much more about both trips at these meetings, and can seek additional information about schedules, itineraries, costs and accommodations at that time.



Back by popular demand, the third annual Costa Rica natural history tour will be led by Retzer Nature Center Director Larry Kascht, and is tentatively scheduled for early March. The trip features visits to three Costa Rican national parks (Poas, Arenal, and Manuel Antonio) and three biological reserves (Tirimina, Monteverde, and Carara), and includes daily programming with *Costa Rica Rainforest Experience* naturalists. Clean guest house accommodations, clean drinking water, and safe drivers are assured throughout.

The first time offering of a Belize natural history tour will be led by Friends of Retzer Board member David Block, and is tentatively scheduled for late January or early February. This trip focuses on the ecology of Belize's lowland tropical forests, and includes visits to three notable Mayan archaeological sites (including the famous Tikal site in neighboring Guatemala!) plus a canoe tour of a sacred Mayan cave. Participants will enjoy quiet bird watching mornings along the way, plus daily travel with *Programme for Belize* naturalists. The trip concludes with two days of snorkeling on Belize's renowned coral reef or just a few days of relaxing on the Caribbean island of Ambergris Caye. Once again, clean guest house accommodations, clean drinking water, and safe drivers are assured throughout.

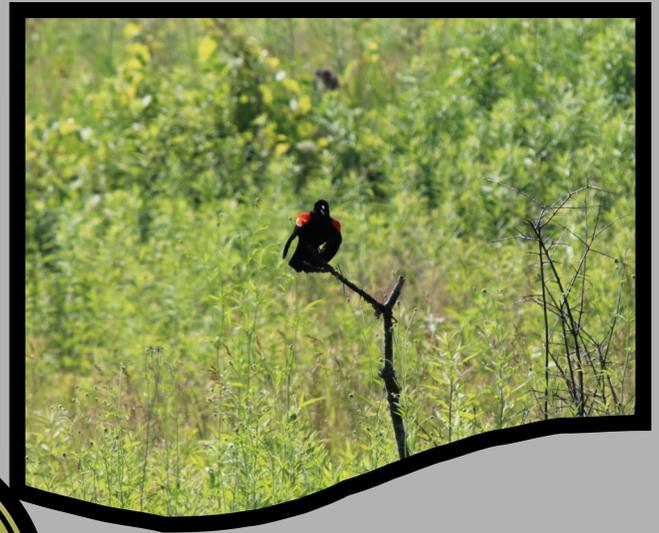
Much more information will be available at the upcoming interest meetings in August and September. Interested parties should plan on attending one of them. If neither meeting can be attended, please contact David Block (262-524-9111) for more information on the Belize trip or Larry Kascht (896-8007) for more information on the Costa Rica trip.

Late winter in the tropics - what could be better!

**Beyond The Lens!**  
Photos by: Travis







My name is Travis Allen and I am an intern this summer at Retzer Nature Center. One of my hobbies is photography, and these are some of the pictures I have taken while exploring the land surrounding Retzer.

# FALL PLANT SALE

Saturday, August 24th.  
9:00 am— Noon

Plants, Compost Bins & Rain Barrels



## Apple Harvest Festival

Saturday, September 21st.

9:00 am—5:00 pm

\$5.00 per car



Apple Market, Apple Pie, Children's Activities, Guided Hikes,  
Hayride, and much, much more.

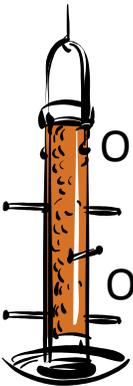
## Bird Seed Sale

October 1-25 Orders taken for seed

November 2 & 6 Retzer Pickup

Other locations available for pickup

More information to come



## Friends Photo Contest

### Reception

Sunday, November 3

1:00 – 3:00 pm





# RETZER NATURE CENTER

WAUKESHA COUNTY PARKS & LAND USE

S14W28167 MADISON STREET

WAUKESHA, WI 53188

**Return Service Requested**

## **Friends of Retzer Nature Center**

The Friends of Retzer Nature Center is a registered, 501 (c)3, organization dedicated to encouraging, perpetuating, and promoting the work of conservation and natural resource education.

The organization seeks the involvement of the community in the form of financial and volunteer support to work toward the continued growth and improvement of Retzer Nature Center. If you would like to become a member or view some of our projects and activities, please visit our web site at <http://FriendsOfRetzer.org>.