



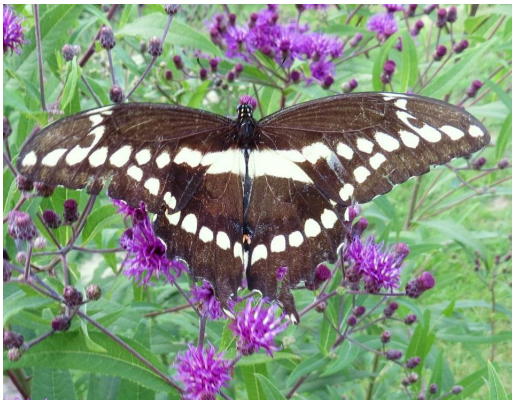
September, 2013

## Kettles, Kames, and Various Names: INPAWS-North Members Trek Into the Pleistocene at Glacial Esker Nature Preserve

Submitted by Tony Fleming [lonswantony@cs.com](mailto:lonswantony@cs.com)

Nine INPAWS members took advantage of a perfect summer evening on August 24, 2013 to explore the flora and geology at Glacial Esker Nature Preserve in Chain O'Lakes State Park. Dedicated in May, 2012, this is one of the newest state-owned NP's, and at 700 acres, one of the largest in northern Indiana. It is among a small group of nature preserves that specifically protect outstanding examples of geologic features, as well as the natural communities endemic to them (why does this plant grow here but not there? It's the geology!). So, after a short introduction to the natural and human history of the preserve, the group set off on a 2-mile hike through some of the most striking glacial terrain the state has to offer in a portion of the preserve forest that was already at an advanced age back in 1938, when the first aerial photos were taken.

Leading a wildflower walk in August requires a certain amount of creativity; after all this isn't April or May with their verdant and ever-changing carpets of spring ephemerals. Happily, the variety of elevation, terrain, and natural communities this preserve has to offer eased the task, and we ended up seeing about 60 different species in flower and many others in fruit. Our group was also mindful of the "plants" part of the INPAWS name, and took time to observe the many interesting shrubs and vines showcased in different landscape positions here, from witch hazel, mountain honeysuckle, and snowberry on dry, slightly acidic summits, to bladdernut, running strawberry bush, and leatherwood on moist, rich terraces.



One memorable moment came early on, while traversing the summit of a kame that separates three lake basins. One of the dominant shrubs beneath the old oaks and hickories on this dry narrow ridge is prickly ash: *Xanthoxylum americanum*; a well-known host for giant swallowtail pictured above on ironweed. True to form, we were treated to a display by one of these large, attractive butterflies.

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### Calendar of Events

September Saturday 14 Eagle Marsh near Fort Wayne IN see page 8

September Saturday 28 Hoosier Prairie Nature Preserve Highland IN see page 6

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Aquatic and lake border communities that fringe the pristine waters of Finster and Little Finster Lakes were at the peak of growth and provided some of the most interesting and colorful plant displays; the blue and white blooms of pickerelweed, sagitaria, and water lily contrasted with the reddish hues of swamp loosestrife also known as water willow, *Decodon verticillatus*; and the ubiquitous cardinal flower along the water's edge. Unlike the other lakes in the chain, these deep kettle lakes have no inlet streams and are chiefly spring fed, resulting in the clear, cold, moderate-nutrient water that supports high-quality aquatic plant communities.



A variety of viney scrambling plants were also on display in the lake border forests. Here, wild cucumber and poison ivy duke it out with prickly ash for a place in the sun. What's that composite? As expected, we had fun scratching our collective heads over the sunflower-like species found in several habitats. Tall coreopsis *Coreopsis tripteris*; woodland sunflower *H. divaricatus*; wild golden glow *R. laciniata*; sawtooth sunflower *H. grosseratus*; and thin-leafed sunflower *H. decapetalus* pictured at right were among those we probably identified correctly.



Observing the landforms and plants on the main hike proved sufficiently engaging that it was getting to be a bit late by the time we returned, so we decided not to venture to Kreiger Lake for the optional trip extension; maybe next time. In the meantime, consider making a visit to Glacial Esker Nature Preserve: with its varied terrain, wide variety of natural communities, and accessibility by foot, canoe, or ski, this natural area is worth a visit in any season.



## The Six-lined Racerunner Lizard (*Cnemidophorus sexlineatus*) & Me Submitted by Tisha Farris

*Tisha attended the University of Pittsburgh and earned a Bachelor's Degree studying the environment and focusing on hydrological processes and sustainability. Tisha hopes to work within the larger community to enhance people's understanding and relationship with water and other resources.*

Six months ago, I began an internship with The Nature Conservancy's Kankakee Sands Project in Newton County, Indiana. I had been living in New Mexico at the time, and I did not know what to expect of the climate and ecology of the new area. Much to my pleasant surprise, both locations have flora and fauna I recognize, including the prickly pear cactus and the six-lined racerunner lizard. As it turns out, the three of us all enjoy living in sunny and low-humidity places.

Six-lined racerunners can be found throughout most of the United States. Racerunners in the Midwest are called prairie racerunners, and they have green-colored heads, as opposed to those in the Southwest, which have blue-green heads. I have sighted a few prairie racerunners at Kankakee Sands, and they seem to act similarly to those I am used to seeing in New Mexico.

A six-lined racerunner is especially difficult to view up-close because they are incredibly fast. Luckily, it has six pale blue or yellow horizontal lines running down its back. These lines run along the entire length of its 6"-10" body, making the lizard easier to identify as it races away from the observer. The racerunner will be out in the early hours of the day on the hottest days of summer, basking in the sun as all lizards do. They are not active during cool or cloudy days and are not seen at night because they are fast asleep in their burrows.

This little lizard has to be quick to grab dinner as well as escape being eaten by certain snakes and birds. Their normal diet includes grasshoppers, crickets, spiders, ants, flies, small moths, and moth or butterfly larvae. The racerunner is known to be very wary by nature, so they make an early departure from any remotely threatening situation. At work we typically see them as they scurry out from beneath one plant on their way to another hiding place.

Although skittish, the six-lined racerunner does inhabit near and around man-made structures. In fact, they are great for pest control. Having one live on your property is a mutually beneficial relationship, especially if you do not care for ants or spiders around your home. I have seen racerunners at my family home in New Mexico while sitting on my deck. I would sit with my morning coffee most Saturdays and watch the lizards with pale stripes and a slightly blue-gray tinged tail grab their breakfast from the ant hill and dart back under the cover of my porch. Now, I see them at work out in the field or around the outside of the office at the Kankakee Sands Restoration Project Site, and I smile every time.

If you are hoping to see one, first start by finding a dry and sandy place to explore and plan to be there all morning on a sunny summer day. In addition, you might bring binoculars to see the details of this illusive lizard up close. Once they start running, they can reach up to 18 miles per hour and are efficient burrowers and feel no guilt in heading into another animal's abandoned burrow. The picture with this article is of a prairie racerunner found in 2009 living at the Indiana Dunes National Lakeshore Project. Since the six-lined racerunner is thought to live up to six years, there is a chance this little guy is still scurrying around their project site in northwest Indiana! Come on out to Kankakee Sands and see if you can see a six-lined racerunner for yourself!

*The Nature Conservancy's Kankakee Sands of Indiana and Illinois is 10,000 acres of prairie and savanna habitat in Northwest Indiana and Northeast Illinois, open every day of the year for public enjoyment. For more information visit [www.nature.org/KankakeeSands](http://www.nature.org/KankakeeSands) or call the office at 219-285-2184.*

### References:

- McFarlane, B. 1999. "Cnemidophorus sexlineatus" (On-line), Animal Diversity Web. Accessed July 27, 2013 at [http://animaldiversity.ummz.umich.edu/accounts/Cnemidophorus\\_sexlineatus/](http://animaldiversity.ummz.umich.edu/accounts/Cnemidophorus_sexlineatus/)
- Michigan Natural Features Inventory. 2007. Rare Species Explorer (Web Application). Accessed Jul 27, 2013 at <http://mnfi.anr.msu.edu/explorer>
- Photo Credit: Photographer Goldfarb, Jack . Supplied by Flickr - EOL Images. 2005. "Prairie Racerunner", Accessed July 28, 2013 at <http://eol.org/pages/1286048/details#overview>



## Yet-to-be-identified Flying Objects Submitted by Sarah Fuller C/O Alyssa A. Nyberg anyberg@TNC.ORG

*Sarah is a Restoration Management Assistant at Kankakee sands and has enjoyed her first season on the prairie. With help from all of the Kankakee Sands staff, she has been able to transform many unidentifiable flora and fauna into identifiable ones.*

The prairie is, among many things, mysterious to me. As far as I know, it is teeming with unidentified flying objects. For instance the gravel and sandy areas of Kankakee Sands had an abundance of UFOs that seemed to disappear upon landing. Their distinct black wings with a light cream or yellow border resembled nothing on the ground. Unaware of any dragonfly or butterfly able to hide their wings, I knew these excellent camouflagers had to be something else. And luckily, after a strategic search of the landing site, I did find something else on the ground – grasshoppers!

These insects, along with crickets and katydids, are in the order Orthoptera. Of the three, grasshoppers are the ones with antennae shorter than their bodies. As a defining characteristic, insects within this order have a set of straight (ortho) wings (pter) which are not used for flying and serve as rigid covers for the second pair of wings. The second pair of wings, such as the black and cream colored pair I saw in flight, is membranous and is able to fold like a fan to fit underneath the firm front wings. As shown in the pictures, the top wing provides excellent camouflage. And the second pair of wings, only visible during flight, offers a contrasting image which can serve to confuse predators.

With the satisfaction of knowing I was looking at flying grasshoppers, I further identified this species as a Carolina Locust: *Dissosteira carolina*. One prairie mystery was solved. Within the subfamily of Band-winged Grasshoppers and in the family of Short-horned Grasshoppers, these locusts mostly eat grasses and herbaceous plants and are not considered pests. Common throughout North America, these grayish tan to brown grasshoppers generally match the color of dry soil. They grow up to 2 inches long and are among the largest in the nation.

You're likely to notice adult grasshoppers in late summer and early fall. In the spring, grasshoppers emerge from buried eggs. Once hatched, they are called nymphs and are capable of hopping. At this stage, they cannot yet fly but will molt about 5 times throughout the summer as their bodies grow and their wing pads develop into wings. In the fall, with fully developed wings and reproductively mature adults mate, and females deposit clusters of eggs in the soil. The eggs will not hatch until the soil is warm ensuring that the next generation is protected from inclement winter weather.

In the sunny prairie, grasshoppers are often the most abundant insect and serve as important herbivores eating up to their body weight in plant material every day. Grasshoppers are, in turn, eaten by opportunistic animals such as reptiles, birds, raccoons, and coyotes.

It is very likely that you could identify your own Carolina Locust in sandy and gravelly areas, such as a roadside, near you. But don't let the edge of the prairie be your limit in searching for UFOs. There are species of grasshoppers that you will only find within the prairie. One such sighting in tall bunchgrasses could be the rare brown colored Short-Winged Toothpick Grasshopper: *Pseudopomala brachyptera*. With its slanted face and sword shaped antennae, you may even feel as if you've found something extraterrestrial. The mystery of where it landed is waiting to be solved.

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Short-Winged Toothpick Grasshopper photo taken by Werner Eigelsreiter for <http://www.geog.ubc.ca/biodiversity/efauna/OrthopteraofBC.html>



## Guided hike at Hoosier Prairie Nature Preserve

Jointly sponsored by Indiana Department of Natural Resources and INPAWS North Chapter.

When 2-4 p. m. Eastern time, 1-3 p.m. Central time, Saturday Sept. 28, 2013

Where: Hoosier Prairie Nature Preserve, [http://www.in.gov/dnr/naturepreserve/files/Hoosier\\_Prairie-color.pdf](http://www.in.gov/dnr/naturepreserve/files/Hoosier_Prairie-color.pdf). Hoosier Prairie is a large complex mosaic of prairie, wetlands and oak savanna. We will be observing fall blooming grasses and wildflowers associated with these plant communities.

Directions: Hoosier Prairie can be reached from I-80/94 by exiting south at the Kennedy Avenue exit. Proceed about 3.5 miles south on Kennedy Avenue to the intersection with Main Street. Turn east on Main Street and proceed about 0.25 miles to the parking lot on the south side of the road. The preserve can also be reached by proceeding north about 3 miles on US 41 from its intersection with US 30. At the intersection of US 41 and Main Street turn east and go about 0.75 miles to the parking lot on the south side of the road.

GPS Coordinates: N 41° 31.365' W 087° 27.451

For those needing an address to put into their GPS system—The Mobil On the Run Gas Station is located at 2735 Main St. Highland IN. 46322.

If upon arriving the parking lot is already full, you will need to park at or near this gas station and walk to the Hoosier Prairie parking lot which will take 5-10 minutes. This is a popular place for locals to walk their dogs so others may not know of the organized walk here. We suggest you arrive early, and carpool if possible. We have a cut-off number of participants, and will try to stick to that. RSVP too late and we won't be able to accommodate you wish to attend.

Leaders: Tom Post (Regional Ecologist and Preserve Manager) and Scott Namestnik (INPAWS North Chapter and Cardno JFNew).

Hike: We will traverse a 0.75 mile loop trail over flat ground.

RSVP requested: [tacyflet@iun.edu](mailto:tacyflet@iun.edu)

<http://www.flickr.com/photos/99675662@N04/9416495238/in/photolist-fm6ZYb-bETSLj-cVCS9A-aAV7aB-7E58op-fyaBrM-9SeTwV-9ShLz3-9SeTxv-9QuGrc-9QuGxV-9Qxx8w-ekiiSc-ekire2-fm8b2Vv-9QuGve-9Qxx4q-9QuGkD-9QxwNW-9QxwFd-9QxwQ7-9QuGbr-9QuGEx-epaQHU-eIEgGT-eIEhvr-9QxwXj-ccLpE9>



## HOOSIER ROADSIDE HERITAGE PROGRAM

When letters of praise began pouring in about the planting of wildflowers along Indiana roadsides, the Indiana Department of Transportation (INDOT) knew it was doing something right.

In the late nineties, INDOT began an innovative program aimed at beautifying Indiana's roadways, saving taxpayer dollars, lessening the effects of erosion and improving safety -- since workers were not along roadsides mowing as often. The Hoosier Roadside Heritage Program was developed in cooperation with the Federal Highway Administration, the Department of Natural Resources and the Department of Environmental Management.

The primary goal of the Roadside Heritage Program is promoting and incorporating native plants and wildflowers into Indiana's roadside landscape. This provides benefits such as:

- Enhancing the beauty of the environment
- Reducing erosion
- Minimizing costs associated with mowing
- Lessening storm runoff
- Controlling invasive plant species
- Improving soil quality

If you have questions about mowing native plantings or questions about the Hoosier Heritage Program plantings, please contact your local INDOT district office.

### Native Plants Emphasized

The definition of native plants and wildflowers varies, but native plants are generally considered plants present before settlers arrived in the Hoosier state. Plants settlers brought along with them are considered wildflowers. Both plant types are capable of surviving climate extremes in their growing areas. The list of native plants and wildflowers is long and varies from the northern to the southern sections of Indiana. Many books and publications are available to everyone interested in wildflowers and native plants. This information may be found in local libraries, book stores or on the Internet.

Some of the most popular plants used in the program include New England Aster, Butterfly Weed, Gayfeather, Perennial Lupine, Planis Coreopsis and Purple Coneflower. Prairie grasses are also part of the program, and include Little Bluestem, Big Bluestem, Blue Grama and Sideoats Grama.

### Sowing Our Own Seed Source

Farming isn't typically a challenge state transportation agencies take on – but it's exactly what the Indiana Department of Transportation (INDOT) is doing. To grow wildflowers and native plants along our roadways, we needed seeds. To solve the problem, INDOT established three seed farms located across the Hoosier State.

Creating the seed sites was a unique opportunity and challenge for INDOT employees. A small group of experienced staff members guide the projects. District and subdistrict employees plant, water and weed the seed sites in addition to their existing duties. Many INDOT employees even go above and beyond the call of duty by educating themselves on the plants in their off-duty time. Department of Correction crews also help maintain the seed farms – allowing inmates to gain skills they can use to pursue a horticulture career. With the effort and dedication of everyone involved with the program, the future of Indiana's Roadside Heritage Program looks bright!

### Related Links

[Seed Packet List](#)

[Roadside Heritage Program Public Survey](#)

[INDOT District Offices](#)

### Contact Information

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On September 14<sup>th</sup> head on down to Fort Wayne and join us while we visit the **Little River Wetlands Project**.

**Eagle Marsh** as the property is called, is a 716-acre wetland preserve located on the southwest border of Fort Wayne. The hike will be led by director, Betsy Yankowiak. She will give us some general information about Eagle Marsh, and then will show us some of the restoration successes as well as those areas that have struggled. Typically at this time of year the blooming wildflowers include boneset, tall sunflower, New England aster, goldenrods and other asters. The tall sunflowers create a tunnel of yellow along trail 8 that is breath-taking. We will then travel to trail 6 that leads along a wetland edge. Many species will be through blooming, but the color of the stalks and seed heads is worth checking out. The hike will be from 11AM until 1PM. Carry water, as none will be available. A port-a-potty is on the premises. Wear mud boots as we may have muddy conditions and rough trails.

To get to Little River Wetlands, travel south on I69 to Exit 302. Take the ramp and turn left onto Jefferson Blvd. Go 1 mile and turn right onto Engle Rd. After 1/10<sup>th</sup> of a mile, you will arrive at 7209 Engle Rd. Ste 200., Fort Wayne, IN 46804. We will meet however, at the barn about 1/2 mile further down Engle Rd. Go past the light, turn right at the "Eagle Marsh" wood sign, and follow the dirt drive to the red and tan barn.

For more information, call member Cindy Loos at 260-637-8736.



<http://michiganradio.org/post/asian-carp-great-lakes-other-pathways-carp-part-3>