Field Trips are free and open to the public. (Mark your calendar!)

1 NEW FIELD TRIPS

BUTTERFLIES AND DRAGONFLIES OF SWAMP-LOVERS PRESERVE

Tuesday, July 4, 2023
9:30 a.m. to 1:00 p.m.

Celebrate July 4th at this beautiful private preserve that consists of remnant and restored wetlands, remnant bluff prairie, restored tall grass prairie, and dry hilly oak-hickory woodland. In past years, we have observed an impressive variety of dragonflies and butterflies as we explored the different habitats. Bring binoculars (close-focusing ones work best). (We will have a few extra binoculars.) Bring your own lunch and beverages to enjoy when we finish the trip by driving up to the bluff-top picnic shelter. Leaders are Edgar Spalding and Tod Highsmith.

DIRECTIONS: Meet at 9:30 a.m. Travel west from Cross Plains on Hwy 14. Just outside town take County KP to the right (north), go about 1.3 miles and turn left at the Swamp Lovers sign. When the road turns to the RIGHT park on the left near the tree. Email Tod at todhighsmith@me.com only if you have a question about the trip or if the weather is questionable.

BUTTERFLIES OF COLUMBIA COUNTY

Thursday, July 6, 2023 (This trip was postponed from June 30 because of high smoke pollution from Canadian wildfires.)
9:00 a.m. – Noon

In this issue:

1. Next Field Trips:
   - Butterflies and Dragonflies of Swamp-Lovers Preserve. 4th of July.
   - Butterflies of Columbia County.
   - UW Arboretum: Grady Tract.
   - Northern Kettle Moraine State Forest.
   - Butterflies and Wildflowers of Walking Iron County Park.
   - Lower Wisconsin Riverway (Avoca and Blue River Units)

2. Highlight of Pleasant Valley Field Trip.
3. Results of Cherokee Marsh Field Trip.
4. Effect of smoke on butterflies.
5. 2022 Publication on NABA Counts.
6. Full List of 2023 Butterfly Field Trips.
We will visit Rocky Run Fishery Area and Oak Savanna State Natural Area. The State Natural Area was designated in 1988, and the following year Karl and Dorothy Legler began an annual NABA butterfly survey here for the past 34 years. This will be the 35th annual survey. We will stay mostly on trails and expect to find American Coppers, Banded Hairstreaks, Delaware Skippers, Mulberry Wing, and many others. Leaders are Karl Legler and Fred Dike. Long pants, a hat, water, and hiking shoes are recommended. Bring binoculars—the closer they focus, the better! (We have a few extra binoculars.) Call Karl at (608) 643-4926 only if you have a question about the trip or if the weather is questionable.

DIRECTIONS: Meet at 9:00 a.m. Taking Hwy 51 north from Madison, continue straight north on Hwy 22. Go 1.3 miles past the intersection of Hwy 22 with County B. The parking lot for Rocky Run is on the left.

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UW ARBORETUM: GRADY TRACT
Saturday, July 8, 2023
9:00 a.m. – Noon
This is our 33rd annual Madison butterfly survey at UW Arboretum! Each year, butterfly enthusiasts all over North America participate in more than 330 censuses of butterfly species. Each count is similar to a Christmas Bird Count. These censuses help to monitor the health of our butterfly populations and the results are published in an annual report for North America. This walk is just one of many taking place in the Madison area, all contained within a 15-mile diameter circle. If you can identify butterflies, or can help spot butterflies, or just want to see and learn about butterflies, join us on this 2 to 3-hour field trip. Bring binoculars, the closer they focus the better. (We have a few extra binoculars.) Dress for protection from the heat and sun, a hat is recommended. Bring water. Leaders are Donna Williams-Richter and Fred Dike. Meet at 9 a.m. at the parking lot for the Grady Tract in the UW Arboretum.

DIRECTIONS: Heading west on the Beltline (Hwy 12), take the Seminole Hwy exit and then turn left (south) on Seminole Hwy driving across the bridge over the Beltline, turning immediately into the parking lot for the Grady Tract. Contact Karl Legler at (608) 643-4926 only if you have a question about the butterfly walk, or if the weather is questionable.

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NORTHERN KETTLE MORAINE STATE FOREST
(Fond du Lac County)
Wednesday, July 12, 2023
9:00 a.m. – 3:00 p.m.

The Northern unit of Kettle Moraine, located in Fond du Lac County, is the first and largest unit of the Kettle Moraine State Forest. Twenty-two miles long, it has world-famous glacial landforms and 30,000 acres of rolling, wooded hills and prairies. We will spend the day observing a variety of butterflies such as Northern Pearl-eye, Appalachian Brown, Gorgone Checkerspot, etc. averaging 30 to 40 species. We will be led by butterfly expert Mike Reese.

Bring binoculars for butterfly viewing (the closer they can focus the better). We have a few extra binoculars. Wear
long pants and a hat for protection from the sun. Wear sturdy walking shoes and bring water. You are free to leave whenever you wish. Email Mike Reese at mikereese@wisconsinbutterflies.org only if you have a question about the trip, or if the weather is questionable.

A State Park vehicle admission sticker is required. If you do not have a Year Park Sticker you can buy a Day Sticker $8 (Senior $3) at the Ice Age Center where we meet.

Meet at 9:00 a.m. at the Ice Age Visitor Center at N2875 Hwy 67, 0.8 miles southwest of the village of Dundee in Fond du Lac County.

DIRECTIONS: From Madison, take Hwy 151 to Waupun. Take Hwy 49 to the right (east). After about 10 miles, turn left (north) onto YY. After 1 ½ miles turn right on Y (east) and go 4 ½ miles. Turn left (north) on Hwy 175 and go 1 ½ mile then turn right (east) on F. When F reaches Hwy 45 turn right (south) and drive ½ mile then turn left on F again. Continue on F until you enter the small village of Dundee and stop at Hwy 67. Turn right (south) and continue on Hwy 67 for a total of 0.8 miles. Turn left at the entrance to the Ice Age Center. Allow about 1 ¾ hour for travel.

*********BUTTERFLIES OF WALKING IRON COUNTY PARK (Dane County) Sunday, July 23, 2023 9:30 a.m. – 11:30 a.m.*********

Butterfly enthusiasts Skye Bruce and Pam Skaar will lead this two-hour morning walk at Walking Iron County Park. Walking Iron has 288 acres and is owned by Dane County. We will observe a variety of butterflies in prairies and oak savanna, as they take nectar from wildflowers, and learn about their identification, behavior, and lifestyle. We will walk about 1-2 miles. Bring binoculars--the closer they focus, the better. (We have a few extra binoculars.) Wear long pants and a hat for protection from the sun. Wear sturdy walking shoes and bring water.

DIRECTIONS: Meet at west entrance to Walking Iron at 9:30 a.m. (about 20 miles west of Middleton). From Madison drive west on Hwy 14. About one-mile past Mazomanie turn right (north) on Mahocker Rd. Go 3/4 of a mile and turn left (west) on Hudson Road for 1/4 mile. Turn right (north) onto Beckman Road. Go 3/4 mile and look for the parking lot on the right. Call Karl Legler at (608) 643-4926, only if you have a question about the trip or the weather is questionable.

*********BUTTERFLIES OF THE LOWER WISCONSIN RIVERWAY (AVOCA UNIT AND BLUE RIVER UNIT) Saturday, August 12, 2023 10:30 a.m. – 3:00 p.m.*********

In good years this can be the best butterfly trip of the year! This trip will highlight several areas in the Lower Wisconsin State Riverway, including Avoca Prairie and Savanna State Natural Area in Iowa.
County, and Blue River unit in Grant County. Leader is butterfly expert, Mike Reese, who runs the award-winning citizen science website, wisconsinbutterflies.org. We expect to see late butterflies and several unusual southern immigrants. A hat and long pants are recommended. Bring water, a lunch, and binoculars (the closer they focus the better). A few extra binoculars are available. (Call Karl Legler at (608) 643-4926 only if you have a question about the trip, or if the weather is questionable.)

Meet at 10:30 a.m. Allow 50-minute travel time from Middleton. DIRECTIONS: Take Hwy 14 west to Lone Rock, south on Hwy 130 then turn right on Hwy 133. Go west about 5.0 miles, turn right onto Hay Road, and drive north to the first parking area.

2 HIGHLIGHTS OF THE PLEASANT VALLEY FIELD TRIP

On June 17 about 30 butterfly enthusiasts searched the wetland area for butterflies. We were led by Douglas Buege. I can remember at least 14 species seen:

- **Black Swallowtail**
- **Eastern Tiger Swallowtail**
- **Red-spotted Purple**
- **Silvery Checkerspot**
- **Long Dash**
- **Monarch**
- **Eastern Comma**
- **Baltimore Checkerspot**
- **Great Spangled Fritillary**
- **Red Admiral**
- **Silver-spotted Skipper**
- **Clouded Sulphur**
- **Cabbage White**
- **European Skipper**

3 HIGHLIGHTS OF THE CHEROKEE MARSH FIELD TRIP

On June 24, 16 butterfly enthusiasts searched Cherokee Marsh (North unit) for butterflies. It was sunny and 86°F. Using binoculars and cameras we found 16 species listed below. We thank Tod Highsmith and Dreux Watermolen for leading this butterfly walk.

- **Red-spotted Purple** 2
- **Viceroy** 3
- **Summer Azure** 3
- **Baltimore Checkerspot** 2
- **Pearl Crescent** 3
- **Hackberry Emperor** 1
- **Great Spangled Fritillary** 10+
- **Striped Hairstreak** 1
- **Red Admiral** 2
- **Monarch** 4
- **Least Skipper** 6
- **Long Dash** 1
- **Silver-spotted Skipper** 2
- **Clouded Sulphur** 1
- **Orange Sulphur** 2
- **Cabbage White** 3
The best sighting was the scarce (and beautiful) Striped Hairstreak. Bob Honig got a photograph of this gem. The hair-like tails at the end of the hindwing, eye-like spots, and the animating of these features by rubbing the back of the hindwings together, create the illusion of a false head that protects the hairstreaks from attacks by birds by misdirecting their attack to the rear of the hindwings instead of the head of the butterfly. Butterflies can still fly well with a chunk missing from the wing.

4 EFFECTS OF SMOKE ON BUTTERFLIES
Here are abstracts of studies on the effects of smoke.

1) From the internet: “Air pollution obscures the sweet smell of flowers, making it much harder for pollinators to find them. Research led by the University of Reading found that insects including bees, flies, moths and butterflies were being impaired by air pollution, reducing pollination rates by as much as 31%”. Jan 24, 2022

2) Smoke pollution disrupts the flight of Painted Lady butterflies

The longer the butterflies are exposed to smoke, the slower they fly

Read the full article here:
Smoke pollution disrupts the flight of painted lady butterflies (massivesci.com)

3) Abstract

“The Southeast Asian transboundary haze contains a mixture of gases and particles from forest fires and negatively impacts people’s health and local economies. However, the effect of the haze on organisms other than humans has not yet been sufficiently studied. Insects are important members of food webs and environmental disturbances that affect insects may impact whole ecosystems. Here we studied how haze directly and indirectly affects the survival, growth, and development of insects by rearing Bicyclus anynana butterflies under artificially generated smoke as well as reared in clean air but fed on plants previously exposed to smoke. Direct haze exposure significantly increased the mortality of caterpillars, increased larval development time, and decreased pupal weight, while indirect haze exposure, via ingestion of haze-exposed food plants, also affected development time and pupal weight. No smoke particles were found in the tracheae of subjects from the smoke treatment suggesting that the increase in development time and mortality of B. anynana under smoke conditions might be due to toxic smoke gases and toxic food, rather than particulate matter. These results document significant deleterious effect of haze smoke to the development, adult size, and survival of insects, key players in food-webs.”

5 COMPARISON OF WISCONSIN NABA BUTTERFLY COUNTS WITH THE REST OF NORTH AMERICA --- FOR 2022

In 2022 there were 323 annual long-term NABA butterfly counts (within a 15-mile diameter circle – like a Christmas Bird Count). Some of these counts have been done for more than 40 years! Totals in 2022 for these counts were 3,742 observers, 6,426 party-hours of observing (that’s the equivalent of 8 hours of observation per day, every day, for 2.2 years) 3,920 miles traveled, 472 species reported, of 274,043 individual butterflies!
All these 2022 counts have their details printed in a summary publication. There is also a table that shows, for every species, which count had the highest number. We show that information below for Wisconsin counts. There were 12 annual NABA butterfly counts done in Wisconsin in 2022. For 10 butterfly species, a Wisconsin count had the highest number among the North American NABA counts. (The Wazee Count is in Jackson County at Bauer-Brockway Barrens and the Black River Forest in Jackson County.)

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>HIGH COUNT</th>
<th>WI COUNT</th>
<th>Number of counts reporting this species.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olympia Marble</td>
<td>94</td>
<td>Spring Wazee Count</td>
<td>3</td>
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<tr>
<td>Frosted Elfin</td>
<td>10</td>
<td>Spring Wazee Count</td>
<td>1</td>
</tr>
<tr>
<td>Columbine Duskywing</td>
<td>9</td>
<td>Spring Wazee Count</td>
<td>1</td>
</tr>
<tr>
<td>Melissa Blue</td>
<td>46</td>
<td>Summer Wazee Count</td>
<td>14</td>
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<tr>
<td>Aphrodite Fritillary</td>
<td>128</td>
<td>Summer Wazee Count</td>
<td>31</td>
</tr>
<tr>
<td>Swamp Metalmark</td>
<td>3</td>
<td>Northern Kettle Moraine Count</td>
<td>1</td>
</tr>
<tr>
<td>Gorgone Checkerspot</td>
<td>38</td>
<td>Northern Kettle Moraine Count</td>
<td>10</td>
</tr>
<tr>
<td>Coral Hairstreak</td>
<td>72</td>
<td>Crex Meadows Count</td>
<td>49</td>
</tr>
<tr>
<td>Banded Hairstreak</td>
<td>84</td>
<td>Gilmanton Count</td>
<td>69</td>
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<tr>
<td>Northern Pearly-eye</td>
<td>49</td>
<td>Northern Oconto County Count</td>
<td>99</td>
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(If you would like a copy of this 111-page yearly publication, it is $11 for NABA members or $16 for non-members. There is a $2 shipping charge for the first item, $1 for each additional item. Make check payable to NABA and send to NABA Butterfly Count, 4 Delaware Road, Morristown, NJ 07960)

6 FULL LIST OF 2023 BUTTERFLY FIELD TRIPS

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<td>June 17</td>
<td>Dr. Douglas Buege Kathy Brock</td>
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<td>Butterflies and Wildflowers of Cherokee Marsh</td>
<td>Saturday</td>
<td>June 24</td>
<td>Tod Highsmith Dreux Watermolen</td>
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<tr>
<td>Butterflies of Columbia County (Postponed to July 6 due to smoke.)</td>
<td>Friday</td>
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<td>Madison NABA Butterfly Count UW Arboretum: Grady Tract</td>
<td>Saturday</td>
<td>July 8</td>
<td>Fred Dike Donna Williams-Richter</td>
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<tr>
<td>Northern Kettle Moraine State Forest</td>
<td>Wednesday</td>
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<td>Mike Reese</td>
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The Southern Wisconsin Butterfly Association (SWBA) is a non-profit Wisconsin chapter of the North American Butterfly Association (NABA) which is the largest organization of people interested in butterflies. SWBA promotes public awareness, conservation and the enjoyment of butterflies through observation with close-focusing binoculars, chapter field trips, educational meetings, photography, butterfly gardening, monitoring and travel. SWBA’s events are open to the public.

To become a member of SWBA simply join NABA. Membership benefits include 2 color quarterly magazines “American Butterflies” and “Butterfly Gardening”. Please use the membership form on the SWBA Web site at http://www.naba.org/chapters/nabawba/

Our e-Newsletter, the Badger ButterFlyer, will be published monthly in summer. Send any news notes to the editor, Karl Legler, at karlndot@charter.net

To stop receiving this e-Newsletter simply send an email to the above editor's address saying “Unsubscribe”.

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