

Badger ButterFlyer

The e-Newsletter of the Southern Wisconsin Butterfly Association JAN-FEB, 2014

WEB SITE: <http://www.naba.org/chapters/nabawba/>

1 NEXT SWBA MEETING: Wednesday, April 2, 2014.

SWBA's next meeting will be held at 7:00 p.m. at the Fitchburg Public Library on Wednesday, April 2, 2014. Our speaker, **Sean Schoville**, an assistant professor of entomology at UW-Madison, will give a presentation on **Past and future climate change impacts on alpine butterflies in the Sierra Nevada, California.** We will also have election of Officers, and Photo Show and Tell. Details will be in the March issue of the Badger ButterFlyer.

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2 FIELD TRIP SCHEDULE FOR 2014

DAY	DATE	TRIP TITLE	LEADER(S)
Saturday	May 17	Butterflies of Bauer Brockway Barrens (Jackson Co.)	Mike Reese
Saturday	June 21	Butterflies and Wildflowers at Pleasant Valley Conservancy	Ann Thering Kathie and Tom Brock
Saturday	June 28	Butterflies of Cherokee Marsh	Dr. Douglas Buege
Friday	July 4	Butterflies and Dragonflies of Swamp Lovers Preserve	Tod Highsmith Karl and Dorothy Legler
Saturday	July 5	Madison Butterfly Count	Karl and Dorothy Legler
Sunday	July 6	Butterflies & Dragonflies of Riveredge and Cedarburg Bog State Natural Area	Kate Redmond Mike Reese
Saturday	July 12	Butterflies of Page Creek Marsh and John Muir Park	Dan Sonnenberg
Sunday	July 13	Pretty Things with Wings (Birds, Butterflies and Dragonflies of Lakeshore Nature Preserve)	Edgar Spalding
Saturday	July 19	Flowers and Butterflies of Shea Prairie	Rich Henderson Karl & Dorothy Legler
Saturday	August 9	Butterflies of Avoca/Blue River Area	Mike Reese
Saturday	August 23	Butterflies and Blossoms at Pheasant Branch Conservancy	Dreux Watermolen

3 NEWS NOTES:

Paradoxes of Poweshiek Skipperling: Abundance Patterns and Management of a Highly Imperiled Prairie Species (by Ann Swengel and Scott Swengel)

This a Research Article on the Endangered Poweshiek Skipperling, published in 2014 in the online journal *ISRN Entomology*. Conclusions are on pages 6-7.

<http://www.hindawi.com/isrn/entomology/2014/216427/>



Charismatic Mini-fauna: The Mad Hatterpillar

This is a short article, with photos, about the very bizarre caterpillar of an Australian moth. (Thanks to Stan Rehm for bringing it to our attention.)

<http://www.wired.com/wiredscience/2013/12/the-mad-hatterpillar/>

4 SWBA WILL HAVE BOOTH DISPLAY AND SALES AT GARDEN EXPO, Friday through Sunday, FEBRUARY 7-9 !



SWBA display booth at Garden Expo '08

Wisconsin Public Television's 21st-Annual Garden Expo will be held at the Alliant Energy Center on:

Friday, Feb. 7; 3-9 p.m.

Saturday, Feb. 8; 9 a.m. - 6 p.m.

Sunday, Feb. 9; 10 a.m. - 4 p.m.

Look for us in section 1129. Some 20,000 visitors are expected!! SWBA will have a display booth and items for sale, including Dragonflies of Wisconsin, Field Checklists, Butterfly Guide Quick-Indexes, and various packets of seeds for select butterfly host plants for your butterfly garden. Stop by to chat, and check out the **displays, handouts, and items for sale**. All profits will be earmarked 100% for butterfly and habitat conservation.

See you there!

5 HOW DID MONARCHS DO THIS YEAR?

MONARCH POPULATION CONTINUES ALARMING DECLINE.

Monarchs cannot survive winter's freezing temperatures. So each year the Monarch population in the eastern U.S. and southern Canada fly south for up to a *phenomenal* 3,000 miles, ending up in a dense concentration high in the cool mountain forests, west of Mexico City. Each year biologists determine the Monarch population size by measuring the extent of the forest area they roost in. Their numbers have been declining in the past decade due to extreme weather, major loss of Milkweeds (the caterpillar food plant) and previous illegal logging at the overwintering sanctuary in Mexico. Last winter they were at the lowest population ever.



and *Monarchs were at their lowest density in Wisconsin in the 25 years of these surveys!*

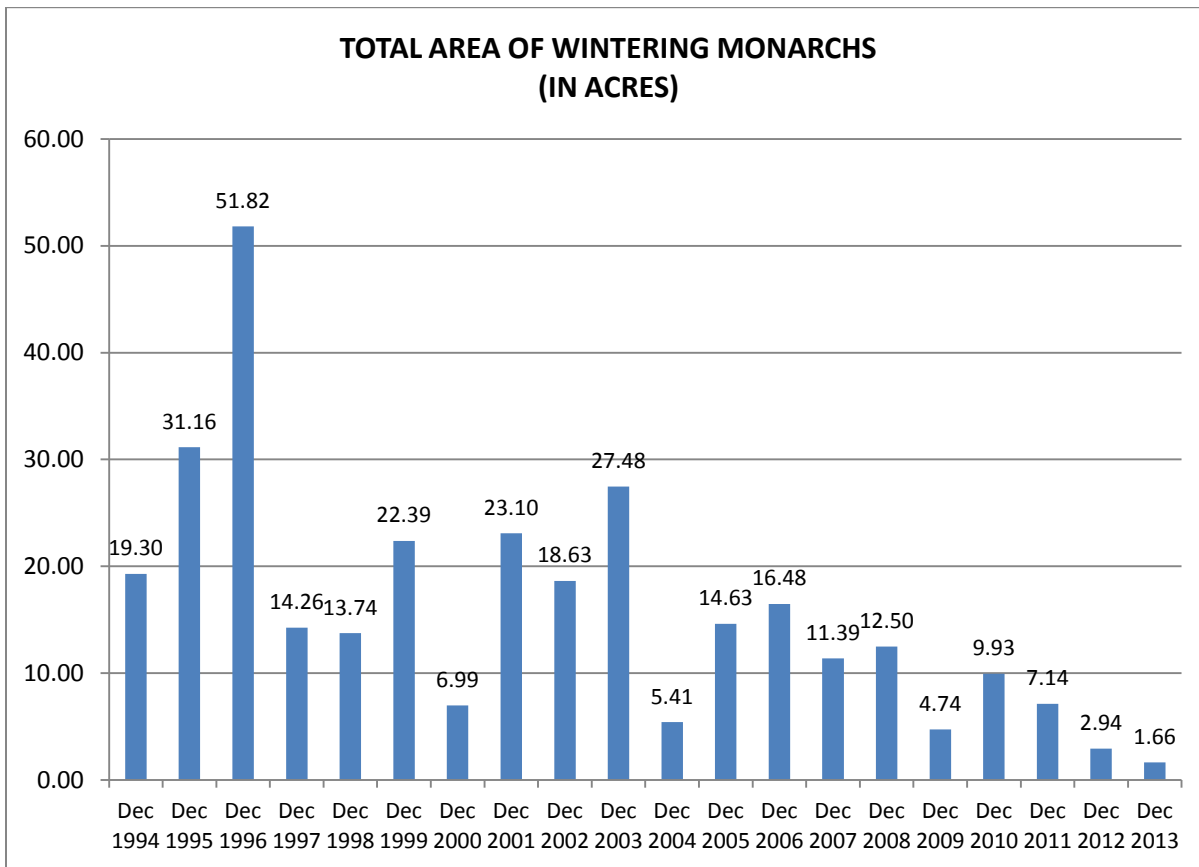
Now the annual report from Mexico is out, with the winter Monarch census even lower than last year's poor levels. At the peak of the population in 1996, Monarchs occupied nearly 52 acres of forest (= 1 billion Monarchs), but have declined since. Last winter they were down to only 2.94 acres (= 59 million), and this winter they have declined another 44% to a record low 1.66 acres (= 33 million). These results are increasingly alarming. In 2002 a record winter storm killed at least 75% of the population, but that was when they had a high population. If

another such storm hit the Monarch's current very low population, they might not survive.

There is no danger of the Monarch becoming extinct like the Passenger Pigeon, because there are populations of Monarchs in California and in Florida. However, if the Monarch migration were to ever collapse, Wisconsin would no longer have any Monarchs.

Once again, 2013 was not a good year for Monarchs in Wisconsin. There may well have been residual effects of the severe drought of 2012. The spring was cold, so butterflies got a late start on the season, and rains came in record amounts. (Excessive rain can cause mortality in caterpillars due to fungal diseases.) The 6 all-day butterfly surveys NABA does each summer in southern Wisconsin showed generally below normal numbers of butterflies,

The last 20 years of counts on the Mexican wintering grounds is shown in detail below on the chart. **CAUTION:** The forest areas are typically listed in hectares but in this chart I have converted them to acres (1 hectare = 2.471 acres.)



Looking at our chart reveals the alarming, stark 10-year march, toward record low population and serious vulnerability, that risks the collapse of the most spectacular butterfly migration in the world.

ARTICLE: Why are the Monarch Butterflies Disappearing?

Lincoln Brower has studied Monarch migration for decades. He was interviewed in December in this Washington Post blog. Click on the link below to read this interesting interview.

<http://www.washingtonpost.com/blogs/wonkblog/wp/2013/12/03/why-are-the-monarch-butterflies-disappearing/>

ARTICLE: Monarch Population Status (Monarch Watch)

Here is an extended analysis of the plight of the Monarchs.

The author indicates what can be done: "Let's hope there are favorable conditions for monarchs over the next several years. While waiting for conditions to improve, let's **plant milkweed – lots and lots of it.**"

Click on the link to read this article.

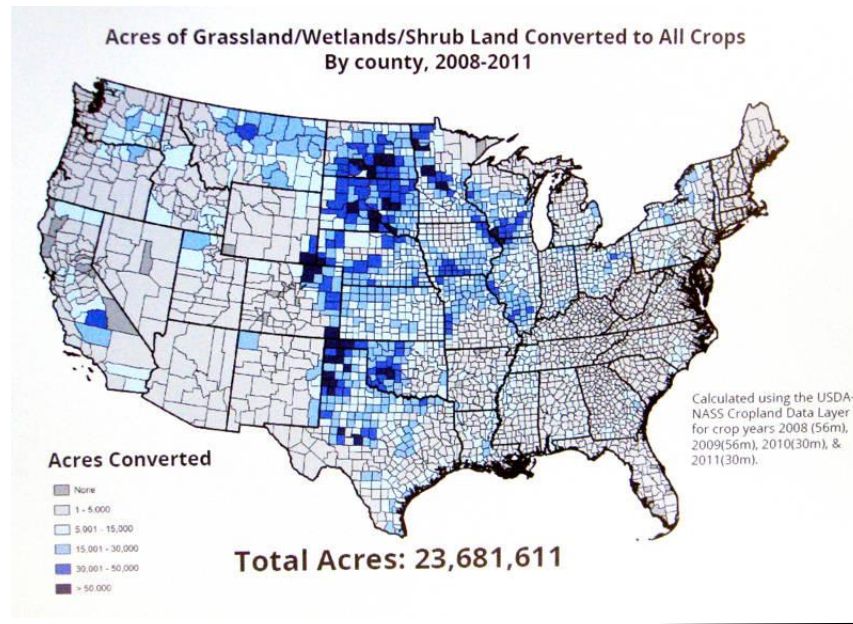
<http://monarchwatch.org/blog/2014/01/monarch-population-status-20/>

ARTICLE: Plowed Under (How Crop Subsidies Contribute to Massive Habitat Losses)

By Environmental Working Group (a nonprofit organization)

Besides the extensive loss of milkweed due to planting of corn and soybeans that are genetically -modified to tolerate herbicide with attendant extensive use of herbicide, there is another cause of the loss of milkweed and wildlife in general: the replacement of wildlife habitat with corn and soybeans, and other crops, especially when encouraged by government subsidies. "High crop prices and unlimited crop insurance subsidies contributed to the loss of more than 23 million acres of grassland, shrub land and wetlands between 2008 and 2011, wiping out habitat that sustains many species of birds and other animals and threatening the diversity of North America's wildlife . . ."

This article is of interest primarily for the **detailed maps showing the amount of wildlife habitat loss for all the counties in the U.S.**



The maps reveal the striking fact that some of the top hot-spots of habitat loss are in southern Wisconsin!

Grant Co. is the worst case, with more than 50,000 acres of wildlife habitat loss. Counties not far behind with between 30,000 and 50,000 acres of habitat loss are Lafayette, Iowa, Sauk, Dane, Dodge, Fond du Lac and St. Croix counties. Click on the link to look at this article, in PDF format:

http://static.ewg.org/pdf/plowed_under.pdf

6 WETLAND WINGED WONDER: The Baltimore Checkerspot

By Douglas J. Buege

By many reports, 2013 was not a great year for butterflies in the Badger state, a shock for many butterfly enthusiasts after the remarkable year preceding. Mainstays such as Monarchs and Red Admirals seemed to have all but avoided the state and region. Given Wisconsin's diversity of butterflies--with more than 160 species reported as visiting at least once since records have been kept--somebody was bound to have a good year. Indeed, one of our more colorful wetland species, the Baltimore Checkerspot (*Euphydryas phaeton*), had an exceptional presence across the state.



Baltimore Checkerspots can be easily recognized with their orange, white, and black checkerboard display both above and below that quickly grabs the eye. No other species in the state has a similar appearance. The butterfly earns its name from Lord Baltimore, founder of Maryland, who also arrayed himself in memorable orange and black. Consequently, the checkerspot was chosen as Maryland's state butterfly.

Adult Baltimores regularly fly in late June through July, and some years, into early

August. After mating, the female lays hundreds of eggs on turtlehead (*Chelone glabra*), the newly-hatched caterpillars' only food source as far as we know. In August and September, the caterpillars go through four instars before entering diapause as cold weather moves in.

A non-migratory species, the Baltimore overwinters as a caterpillar hidden down in the relative protection of the leaf litter. April warmth gets the black-and-red cats moving, feeding on turtlehead or alternate species. At full size, the caterpillar forms a very striking chrysalis, arising as an adult two weeks later.

Turtlehead may be the best predictor of Baltimore Checkerspots, but the plant's white flowers don't appear until late summer and fall, long after the butterflies have ended activity. So one must learn to identify non-flowering turtlehead, a tricky prospect as it is often hidden amongst dense beds of sedges and rushes, or find it flowering and then return to the location the following year. Plantings of turtlehead may draw Baltimores to the backyard garden, particularly if a pond or wet meadow is present.

Adults nectar on flowers throughout wet meadows and surrounding areas, often opting for the milkweeds, dogbane, and thistles favored by many butterfly species. Butterfly expert Jeffrey Glassberg reports that Baltimores in New England have been using English plantain (*Plantago lanceolata*) as a host plant for their caterpillars,



Turtlehead is the caterpillar food plant.

behavior not yet seen in the Midwest. The butterfly may have adapted this behavior due to the scarcity of turtlehead in the region. This summer, Baltimores were reported in 16 counties throughout the state with new records for Price and Barron Counties. I reported the first on June 20th, evidence supporting the contention that 2013's phenology ran later than average. The Barron County sighting at Loon Lake Wildlife Area on August 8th



proved the last for the season. The northernmost sighting was in Bayfield County, the southernmost in Dane; Baltimores were also seen in our westernmost and easternmost counties, attesting to the species state-wide presence. Yet several counties have no records of the insect, suggesting a shortage of observers rather than an absence of Baltimores. If you venture out to find this dazzling denizen of the wetlands, please report your findings to wisconsinbutterflies.org, the citizen science website developed by master butterflyer Mike Reese and his son, David.

As development conquers quality wetlands, turtlehead and Baltimores lose the habitat they require--a lesson that Marylanders are learning as their state butterfly's populations decline. Here in Wisconsin, our concern for marshes, creeks, and swampy areas allows us the luxury of annually seeing a most beautiful butterfly.

Douglas Buege is the President of SWBA.

This article also appeared in the newsletter of the Wisconsin Wetlands Association.

7 NABA BIENNIAL MEETING THIS SUMMER

11th NABA Biennial Meeting to be in Chattanooga, Tennessee: June 12-15, 2014

MARK YOUR CALENDAR! Every other year SWBA's parent organization, the North American Butterfly Association (NABA), holds a 4-day get-together somewhere in North America for daily field trips, educational programs and nightly banquets. We hobnob with NABA members from all over the country, get to see a different part of the country and encounter different species of butterflies led by butterfly experts. Details will appear in a later newsletter.

The Badger ButterFlyer flits to you every month (every other month in winter). The next issue will be in MARCH.

<p>Officers of SWBA: President: Dr. Douglas Buege djbuege@gmail.com Vice-President: Karl Legler karlndot@charter.net Secretary: Dorothy Legler Treasurer: Ginny Nelson *****</p> <p>Other SWBA contributors: e-Newsletter Editor: Karl Legler karlndot@charter.net Webmaster: Dan Sonnenberg Butterfly Reporting: Mike Reese at www.wisconsinbutterflies.org Speaker's Bureau: Dorothy Legler Dr. Douglas Buege NABA Liaison: Joan Braune</p>
