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Badger ButterFlyer

The e-Newsletter of the Southern Wisconsin Butterfly Association **MARCH, 2017**
WEB SITE: http://www.naba.org/chapters/nabawba/

1 NEXT MEETING ON WEDNESDAY, APRIL 26, 2017

The next SWBA meeting will be held on **Wednesday, April 26,** at **7:00 p.m.,** in the meeting room of the **Fitchburg Public Library, 5530 Lacy Road, Fitchburg, WI.** (**Mark your calendar!)**

West  East

IN THIS ISSUE:

Public Program:

Northern Blue. Photo by Mike Reese.

The Endangered Northern Blue

The Northern Blue is one of the most endangered butterflies in Wisconsin. Situated in the extreme northeastern portion of our state, it lies at the southern edge of its range. Global warming could force the butterfly northwards, out of Wisconsin. Even its caterpillar food plant, Dwarf Bilberry, is endangered in Wisconsin! What can be done to prevent the loss of this iconic butterfly from Wisconsin's fauna?

Our speaker will be **Chelsea Gunther** of the Bureau of Natural Heritage Conservation, WDNR. She is the Karner Blue Butterfly Recovery Coordinator.

Also a brief Election of Officers

If you are interested in serving as an officer of SWBA for the next year, or would like to nominate someone else, contact the Nominating Committee Chairperson Tod Highsmith at (608) 242-1168 or at todhighsmith@me.com

Everyone is invited to attend this free program. The meeting will last from 7:00 p.m. to 8:30 p.m. We will have displays, books, handouts and plenty of time afterwards to enjoy *delicious* snacks and refreshments, and talk with our speaker and other butterfly enthusiasts.

DIRECTIONS TO MEETING:
From the Beltline, take Fish Hatchery Road (= County D) south for about 2.4 miles and turn left (east) at Lacy Rd. After 1 block the library is on the left, at the intersection of Lacey Rd. and Research Park Rd. Continue on Lacy and take the entrance road around the far (east) end of the library to access parking near the entrance, (behind the library). **OR** if you prefer to park underground, turn left (north) onto Research Park Rd and then turn right into the ramp leading to the underground parking lot.

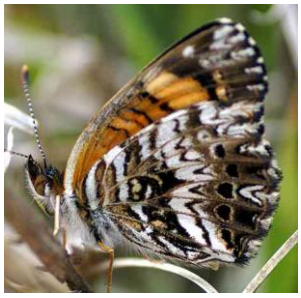
2 NEXT FIELD TRIP

Mark your calendar!

Butterflies of Bauer-Brockway Barrens (Jackson Co.)

Saturday, May 20

10:30 a.m. - 3:00 p.m.



Gorgone Checkerspot

The best place in the state to look for early butterflies in May is Jackson County. Butterfly expert **Mike Reese** will lead us in finding and observing many scarce and unusual species, many that only fly in May! We expect to find all 5 of the state's Elfins, including the very rare (and State Threatened) Frosted Elfin. We should find Olympia Marble, Gorgone Checkerspot, Cobweb Skipper, Dreamy and Sleepy Duskywings, etc. Over the past 9 years we have averaged 21 species. Bring binoculars if you have them, close-focusing ones work best. (A few extra pairs of binoculars are available.) Also, bring a bag lunch and water. A hat, long pants and long sleeves are recommended.

Meet in Jackson Co. at 10:30 a.m. at the corner of West Bauer Road and Brockway Road. We will butterfly until 3:00 p.m. DIRECTIONS: From the intersection of I-94 and Hwy 54 in Black River Falls, go east on Hwy 54 approximately 3.8 miles to Brockway Road. Turn right on West Bauer Road and drive 3.8 miles to the intersection with North Brockway Road. (This area is about 2 1/4 hours northwest of Madison via I-94.)

Olympia Marble

Participants must PRE-REGISTER for this trip by either calling Mike at (920) 647-0196, or include your phone number in an email to mikereese@wisconsinbutterflies.org (so we can contact you in case of postponement or cancellation due to weather).

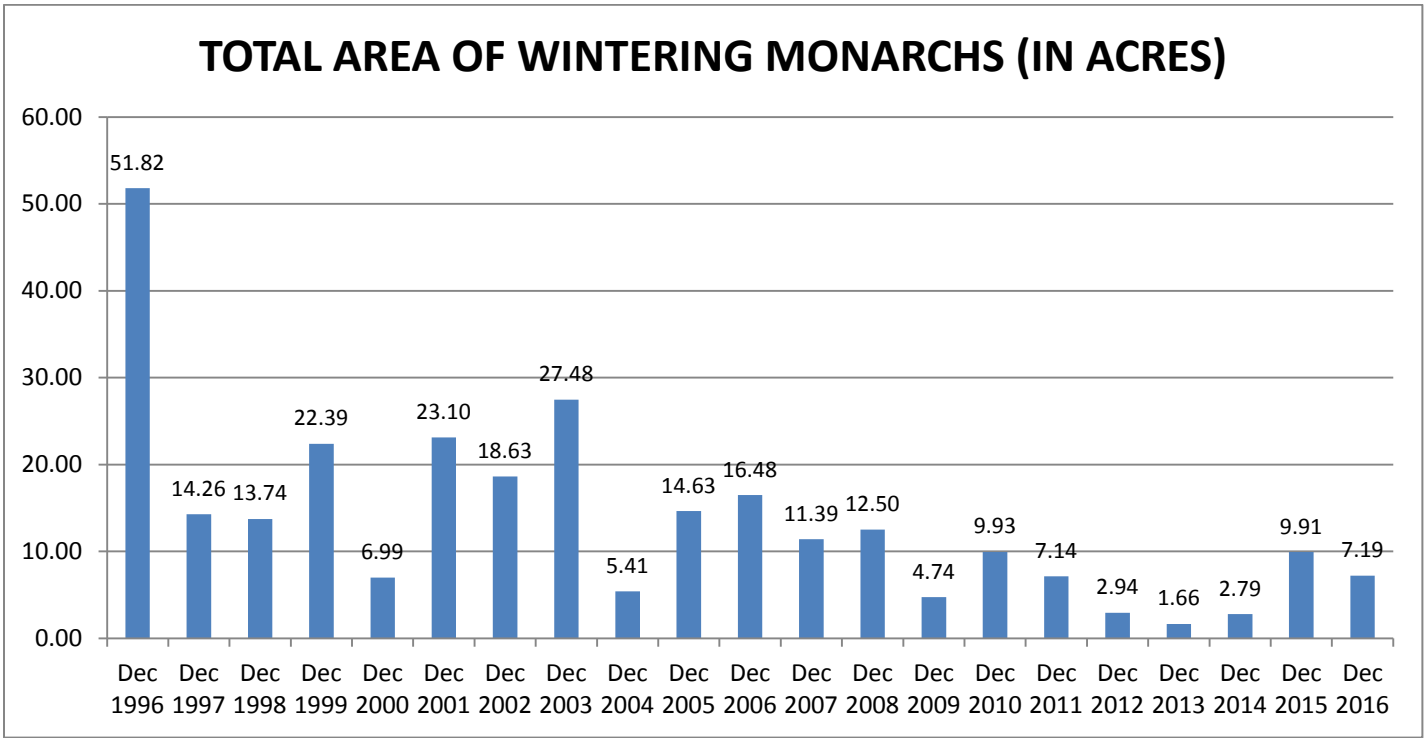
3 MONARCH POPULATION AT THE BEGINNING OF 2017

The Monarch population, which is counted by the area Monarchs occupy in their mountain wintering grounds in central Mexico, has been at historic lows, particularly in 2012 - 2014. The severe decline is statistically significant and has persisted over the past 15 years. There are four causes of this decline: 1) Huge loss of the Monarch's host plant, milkweed, due to crops that are genetically engineered to tolerate extensive use of herbicide, 2) decline of nectar sources needed during migration due to extreme roadside mowing, etc. 3) Although illegal logging at the Mexican sanctuary has currently been greatly reduced, past logging has decreased the needed protection, from winter storms, that Monarch's get from the forest canopy; 4) Unfortunately, global warming tends to produce more extreme weather! Just in the past 14 years the monarch's reserve in Mexico has been hit by three major storms the likes of which had never been recorded before!

The previous winter (2015-2016) showed an encouraging increase in the population. But in March of 2016 a severe storm hit just as the Monarchs were beginning their migration north. Rain, cold and high winds downed more than 100 acres of trees and killed at least 7.4% of the Monarch population. (This was the worst storm since 2010 when 262 acres of trees were downed.) The mortality caused by the March storm was confirmed by dismal reports of Monarchs throughout the breeding range in the spring and summer. But in summer and fall we had persistent warm weather so that many species of butterfly were seen into early November. The Monarchs were able to recover some of their population but this winter (2016-2017) the population was disappointingly down to 7.19 acres, a reduction of 27%. However, here's the way I look at it: This winter's population is greater or equal to 4 out of the 5 past winters! So Monarch's are still in position to try to gain ground this year.

The strategy is to plant 1.6 billion milkweeds in order to eventually get the Monarch population up to 15 acres. That would greatly reduce the chance of a winter storm fatally destroying the Monarch's migration. So keep planting milkweed and nectar sources, and encourage others to do the same!

The graph below shows the winter population for the past 21 winters.



❖ Monarch Butterfly Conference Report

A collaboration of the Natural Resources Conservation Service and the U.S. Fish and Wildlife Service
December 2016 http://monarchwatch.org/blog/2017/01/17/fwsnrcs-conservation-plan/

"Restoring habitat for any species is complicated and requires a great deal of thought and lots of research to establish best practices. The following "plan" and set of guidelines was issued 13 January, 2017 under the title

Monarch Butterfly Conference Report

This report is long and complicated. It's 107 pages! The message is mostly tailored to agency personnel and land managers rather than the general public. That said, it is intended to show what the respective agencies are committed to doing to sustain the monarch migration."

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4 BUTTERFLY REPORTS SEPTEMBER TO NOVEMBER 2016

wisconsinbutterflies.org

2016 was the 11th year of Mike Reese's award-winning citizen science website. Over this period people have submitted a grand total of 12,200 reports! Each report contains date, county, site, photos, comments and numbers for multiple species so the actual data collection involves information about 10's of thousands of Wisconsin butterflies. This is a tremendous resource for investigation into changes in butterfly populations with weather and over the years. The information is archived on the site. In 2016 Mike's site received a record 1,920 reports. Typically an increased number of reports testifies to the year being favorable for butterflies: the more butterflies people see, the more they want to be out looking for them with binoculars and camera!

The fall was exceptionally mild so that butterflies were found even into November. Here is a brief summary of some butterflies from September through November, 2016.

1. COMMON BUTTERFLIES

Monarchs had a good flight with 3 reports of 100 - 150 Monarchs on September 15-18.

Clouded Sulphurs were seen in numbers up to 200 or more on September 15.

And 75 **Silver-spotted Skippers** found on September 17.

2. OTHER RESIDENTS

Purplish Copper peaked at 44 on September 14. But some were seen until November 5.

Milbert's Tortoiseshell on Sept 17 and 22.

3. STRAYS FROM THE SOUTH

The Butterfly of the Year in Wisconsin was the very rare **Reakirt's B**lue which was not only seen repeatedly earlier in the year, but even showed up in Central Wisconsin, seen by Ron Arnold on September 11. (You will recall Ron led last year's trip to Sandhill Wildlife Area.)

Swengels found a maximum of 43 **Common Buckeyes** on September 14. The last one was reported as late as November 7.

An extreme count of 53 **Fiery Skippers** on September 17, last on Nov 7.

Dainty Sulphurs were seen in small numbers throughout September (high of 12 on the 20th), last seen on October 5.

Sachems were noted until November 6.

Painted Lady was seen throughout the fall until November 6.

Little Yellow was only reported on September 8 and 12.

Common Checkered-Skipper had 5 reports including one on November 4 by Tod Highsmith.

American Snout seen once on Sept. 24.

Cloudless Sulphur, a very rare stray, on October 2 and 3.

Variegated Fritillary: found on Oct. 8 and 16.

Pipevine Swallowtail: found only on October 19 by Jim Ebner.

Common Buckeye

5 UNUSUALLY EARLY BUTTERFLIES REPORTED TO wisconsinbutterflies.org

In February 2016, for the first time in the 12 year history of wisconsinbutterflies.org, a report was received of a butterfly sighting in February. In 2017 reports were received even *earlier!* Four reports on February 17 to 19 found early **Eastern Comma.** What does this tell us?

Eastern Comma

1.) Instead of overwintering as an egg, caterpillar or chrysalis, Eastern Commas (and 7 other species) overwinter as adult butterflies, in tree hollows, logs, nooks and crannies, garages and outbuildings. Therefore they are "ready to go" when the weather gets warm enough.

2.) Eastern Comma continues to have good populations in the state. That's not always the case; in some years their population can "crash" so they become harder to find.

3.) Here are the trends we have been seeing in recent years:

MONTH	YEAR	REPORTS	SIGNIFICANCE
March	2012	114	Very warm. Best butterfly year. But ended in severe drought!
March	2013	1	Poor!
March	2014	1	Poor!
March	2015	17	Recovery!
Feb.	2016	2	First February reports! A good butterfly year--overall.
Feb.	2017	6	Even more and earlier reports. Will this year's weather be naughty or nice? Stay tuned!

4). With such early warmth comes the risk of subsequent freezing that can damage plants that butterflies depend on. Each year and season has its own effect on butterflies.

Keep sending reports to wisconsinbutterflies.org

6 FIELD TRIP SCHEDULE FOR 2017 (mark these on your calendar!)

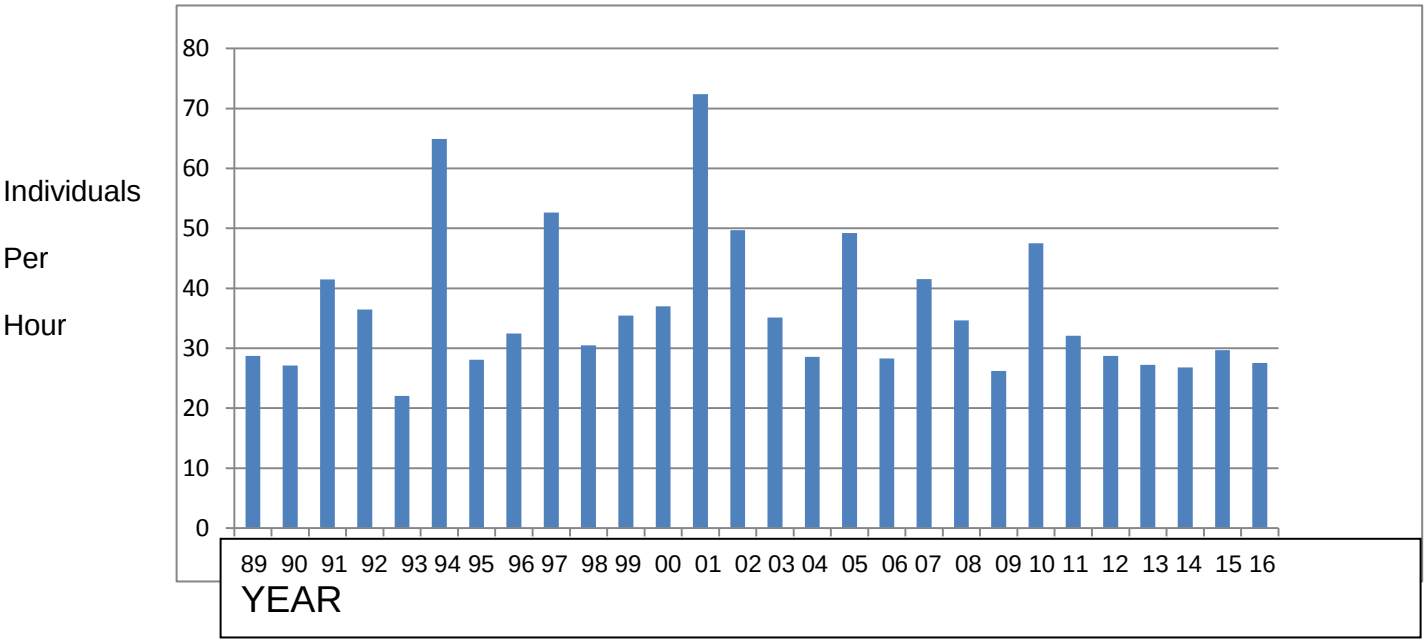
These field trips are free and open to the public.

DAY	DATE	TRIP TITLE	LEADER(S)
Saturday	May 20	Butterflies of Bauer Brockway Barrens (Jackson Co.)	Mike Reese
Sunday	June 4 **NEW**	Late Spring Butterflies of Page Creek Marsh	Dan Sonnenberg

Saturday	June 17	Butterflies and Wildflowers at Pleasant Valley Conservancy	Dr. Douglas Buege Kathie and Tom Brock
Saturday	June 24	Butterflies of Cherokee Marsh	Karl & Dorothy Legler and Jan Axelson
Saturday	July 1 **NEW**	Butterflies of Rocky Run Wildlife Area	Karl & Dorothy Legler
Tuesday	July 4	Butterflies and Dragonflies of Swamp Lovers Preserve	Tod Highsmith Karl and Dorothy Legler
Saturday	July 15	Butterflies and Flowers of Schurch-Thomson	Dr. Douglas Buege Rich Henderson
Saturday	July 29 **NEW**	Butterflies of Kalscheur Oak Savanna	Dan Sonnenberg Rich Henderson
Saturday	August 5	Butterflies of Avoca/Blue River Area	TBA

7 28 YEARS OF NABA COUNTS IN WISCONSIN

AVERAGE NUMBER OF BUTTERFLIES PER HOUR OF OBSERVATION



This graph shows the total number of butterflies seen per hour of observation during up to 8 all-day NABA Counts conducted around Wisconsin in each of the past 28 years. This represents a large amount of observing, from a minimum of 2 work-days per year, up to a maximum of 12 work-days. The average was 6 1/2 work-days. Each count is confined within a circle 15 miles in diameter. The 8 counts we and others have done are:

COUNT	COUNTY	COUNT	COUNTY
Mud Lake	Columbia County	Sister Bay	Door County
Trempealeau	Trempealeau County	Dubuque (Wis. portion)	Grant County
Madison	Dane County	Wazee (Spring)	Jackson County
Northern Kettle Moraine	Fond du Lac County	Avoca (Fall)	Iowa County

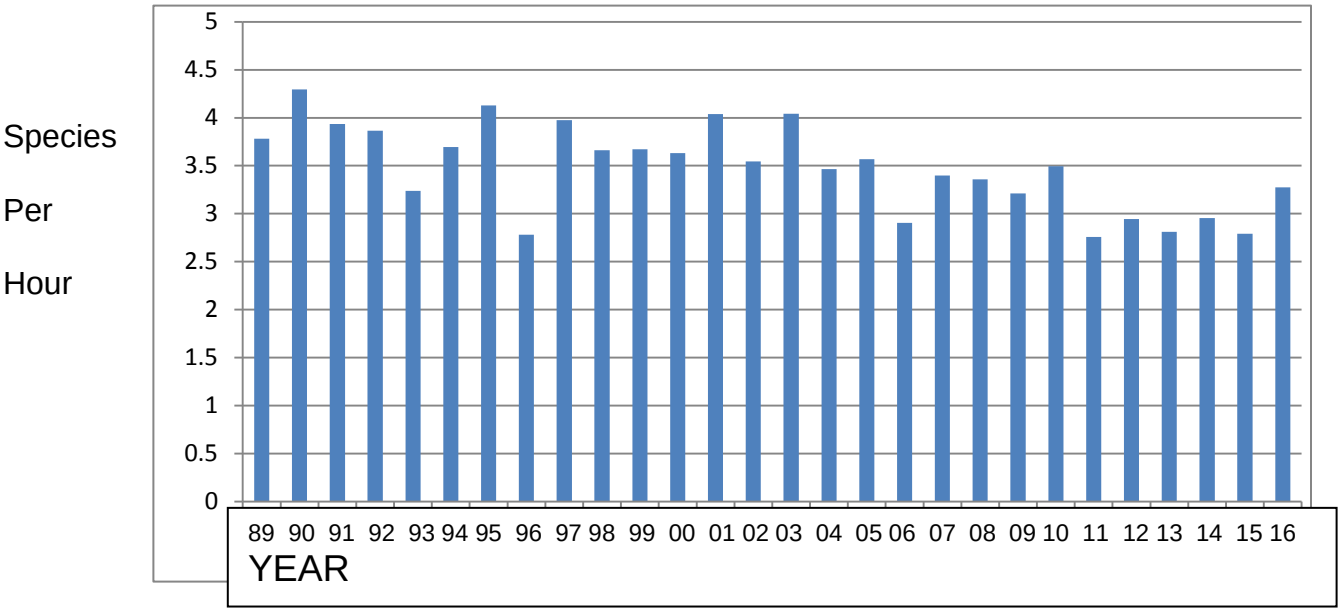
(Additional NABA counts are conducted in Wisconsin, 15 in all.)

The graph of number of butterflies is much more variable than the next graph. That is because in some years common butterflies such as Cabbage White or Clouded Sulphur or Common Wood Nymph or Great Spangled Fritillaries etc. become much more common. But overall there is a fairly good underlying stability. More stability than in the next graph.

28 YEARS OF NABA COUNTS: SPECIES PER HOUR

Unlike the graph of the number of butterflies per hour, the graph of number of species per hour of observation shows much less erratic fluctuation. This graph is not influenced by the large variability in the population of common species. Instead it detects variability in scarcer species that, as they decline or disappear from the area, eventually can no longer be detected. This measures a decline in biodiversity among our butterflies. Keep in mind that this applies only to conserved publicly accessible wildlife areas which is primarily what was surveyed. The loss of biodiversity outside these areas must be even steeper!

AVERAGE SPECIES PER HOUR OF OBSERVATION



Dan Sonnenberg did not find Southern Cloudywing, Byssus Skipper or Northern Blue on his "Wisconsin Butterfly Big Year" in 2016. But if he had done that search 10 years ago they would have been seen! Today they are very difficult or impossible to find!

The insidious aspect to this loss is that it is gradual (but accelerating) so that it is difficult to notice or measure. Wisconsinbutterflies.org is a tremendous resource with a high density of observations. But that only goes back about 11 years. The wintering grounds of the Monarch were found 22 years ago. What happened to their population before that? Fortunately Wisconsin NABA counts go back well over 30 years, providing the long-term data that sheds light on long-term butterfly history!

The ButterFlyer flits to you every month in summer. The next issue will be in April.

SWBA

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 spring to fall, and every other month in winter. 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.