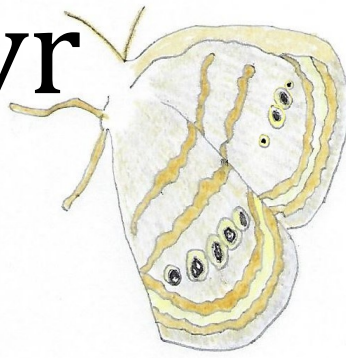


The Lonely Satyr

For Butterfly Enthusiasts
of Indiana, Michigan, Ohio



July 1, 2025

Summary of United States butterfly decline from 2000 - 2020

The entirety of this research was first published in *Science*, March 7, 2025, entitled “Rapid butterfly declines across the United States during the 21st century.” While the findings are upsetting, I wanted to share it with all of you since the data used came from the very monitoring programs many of us participate in. I have tried to paraphrase the interesting percentages and talking points here for us for easier digestion. Reference information is provided on the second page of the newsletter. Much kudos to Professor Nick Haddad of Michigan State University, who is a co-author. Be sure to check out the Nick Haddad Lab online for some really cool landscape and butterfly research. I would like to express my sincere gratitude to all of the authors, researchers, and monitors who helped make this critical information come to fruition. It is an incredible feeling to see NABA, Michigan Butterfly Network, and the Ohio Lepidopterists listed in the acknowledgements.

While the decline of any plants and animals is “distressing,” the loss of insects may be more so because of the various roles they play. They are pollinators, recyclers, and food. They are diverse and large in numbers, yet understudied. Butterflies, of all the insect groups, are the most monitored. They have been the focus of monitoring groups at all levels since 1975. Analyzing the data of the monitoring programs is the first step in understanding decline. (1)

The data sources included every multi-species and individual species monitoring program, totaling 35 different programs. The data consisted of “12.6 million individual butterflies comprising 554 species (accumulated) from 76,957 surveys of 2478 unique locations.” (1)

“Total butterfly abundance (all individuals of all species) decreased across the contiguous US at a rate of 1.3% annually for a cumulative 22% decline in overall abundance between 2000 - 2020.” (1)

The declines “were prevalent across all regions” of the United States. The regions used in the research were the same geographic regions defined by the US Fish & Wildlife Service. Therefore, Indiana, Michigan, and Ohio are in the Midwest region. But, the declines were “most severe” in the Southwest region. It appears butterflies are declining faster in dry, hot climates. Especially as those areas become drier and hotter. (3)

“Between 2000 and 2020, butterfly species richness fell in every region by as much as 28% or 30 species.” (3)

It is possible that butterflies are finding the southern ends of their ranges becoming too warm, and so the northern states will become the place to be. This may hint at why the Pacific Northwest region shows the least percentage of loss of species, least percentage of annual change, and least loss of species richness. It is important to remember though that even the Pacific Northwest still declined in total abundance. (3, 4)

The two regions with the “most negative median species trends - the Southwest and the Mountain-Prairie regions - contain 8 of the 10 driest states and many of the most rapidly warming climate divisions.” (4)

This decline across the contiguous United States shows there are many “threats, including habitat loss, climate change, and pesticide use.” (4)

Butterfly Decline cont'd.

What can be done for the future?

The creation of more monitoring programs, especially in regions not as well represented like the Mountain-Prairie and Southeast regions.

The digitization of historical butterfly records, as “more than 90% of insect collections have yet to be made available for analysis.” (4)

Strengthen your voice for regulatory action reducing and/or outlawing pesticides.

Support local land protection and restoration agencies and programs.

Support conservation actions like habitat restoration, diversified land management, and “genetic rescue.” (4)

Remember just how resilient butterflies can be and continue to hope. Continue to love them, raise them, feed them, monitor them, and tell others just how amazing they truly are.

Reference

Edwards et al., *Science* 387, 1090-1094 (2025) 7 March 2025

To read the article, visit the North American Butterfly Associate website, at naba.org, then scroll down to the “Butterflies Need You” section, click on the “Science-Driven” tab, then click on the underlined word “study”. This will open the pdf of the article referenced here (including page numbers).

The paper is also available on the *Science* website but only if you are a member, otherwise it is locked for a fee.

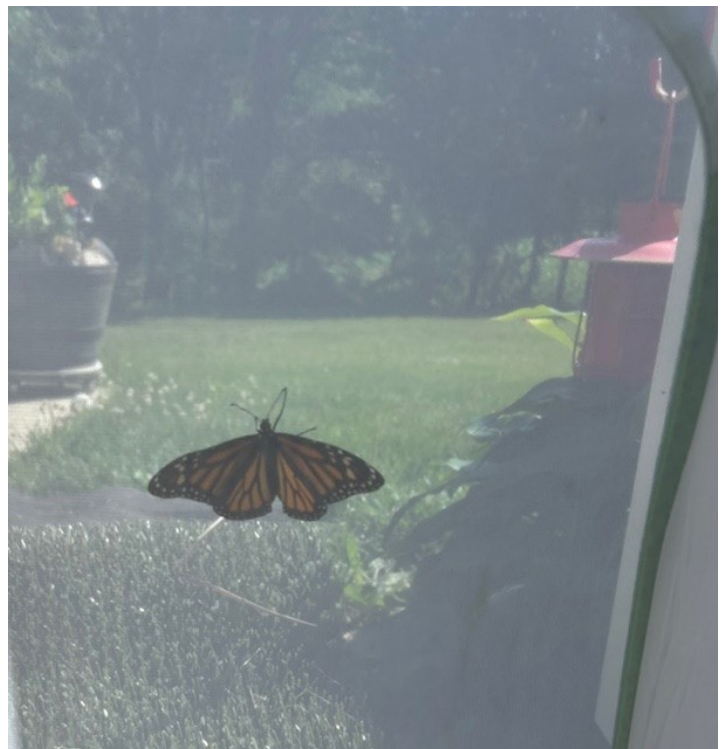
Butterfly Sightings

Right: Female Monarch released (1 of 2)

Credit: Dareen McClelland

Angola, IN

7/1/2025



Butterfly Sightings

Right: Great Spangled Fritillary
Credit: Jan McGowan
St. Patrick's County Park
South Bend, IN
6/21/2025



Right: Little Wood-Satyr
Credit: John Michael Durback
Lucas Co., OH
6/15/2025



Other Sightings to Report:

Leslie Arnold

June 2: Tiger Swallowtail, Lake City Bank, Kendallville, IN

June 20 - 2 Hackberry Emperors, Lake City Bank, Kendallville, IN

June 21 - Cabbage White, Lake City Bank, Kendallville, IN

June 25 - Monarch (female), LaGrange Co., IN

Butterfly Sightings

Right: Summer Azure
Credit: Mary Durand
LaGrange Co., IN
6/18/2025



Right: Baltimore Checkerspot
Credit: Dawn Pietrykowski
Oak Openings Metropark
Lucas Co., OH
6/15 & 6/17/2025



Community Calendar

Contact the event host prior to traveling to make sure it's not cancelled.

Sunday, July 6

1:00 - 2:30pm

The Mysterious Mitchell's Satyr Butterfly Walk

Sarett Nature Center, Benton Center, MI

Join Director, Nate Fuller, to learn about this federally endangered butterfly. Learn about their special habitat needs and take a walk to try to see them in flight. Call 269-927-4832 to register. Program has fees.

Saturday, July 12

10:00 am - 1:00 pm

Pollinator Promenade

Elkhart Environmental Center

1717 E Lusher Ave., Elkhart, IN 46516

Free family event featuring pollinator themed activities and local vendors with pollinator-related products. Visit <https://elkhartindiana.org/pollinator-promenade/> for more information.

Sunday, July 20

1:00 - 3:00 pm

Guided Butterfly Walk

Emma Pitcher Prairie at Kalamazoo Nature Center Camp

Join Michigan Butterfly Network staff for walks around the prairie.

Program fee and registration required. To sign up, visit:

<https://naturecenter.org/michiganbutterfly/> or call 269-381-1574



(No endorsement or discrimination of specific events or vendors on this community calendar is intended or implied.)

NABA 4th of July Counts

Tuesday, July 8

Chain O' Lakes State Park, Albion, IN

Volunteers welcome! Free park entry if you pre-register as a volunteer with Leslie Arnold at leslie@forestteacher.org. Rain day is Thursday, July 10. Start time and meeting place to be determined closer to event.

Saturday, July 12

Allegan, Michigan

For more information about joining this count, contact Dennis Dunlap at dunlapmd@charter.net

Saturday, July 19

Kalamazoo, Michigan

For more information about joining this count, contact John Brenneman at jbrenneman@naturecenter.org

Wednesday, July 30

East LaGrange County, IN

For more information about joining this count, contact the LaGrange County Park Office at 260-854-2225.

If you'd like your event information to be in July's newsletter, please turn it in by July 25. Local sightings are my favorite part of the newsletter, so please report what you're seeing. Don't be shy! Photos are great!

To subscribe and submit, contact:

Leslie A. Arnold, Volunteer Naturalist

leslie@forestteacher.org

260-854-2225

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