The Nectar News Official Newsletter of the Southeast Michigan Butterfly Association



Mission Statement: It is our mission to share our knowledge to educate people about Lepidoptera and their habitats, to instill and foster a passion for nature in others, and to establish and preserve the environment for butterflies, skippers, and moths.

Board Members for 2024: President:

Brenda Sattler Vice President: Mark Bourn Treasurer: Mark Bourn Secretary: Diana McCormick Communications Director: Lisa Northey Membership Committee Chair:

Cheryl Furlong

SEMBA Email: sembabutterfly@yahoo.com

SEMBA Website: <u>https://www.sembabutterfly</u> .org

SUMMER EDITION

SEMBA BOARD MEMBER POSITIONS OPEN:



Brenda, Mark and Diana have decided to step down from their positions beginning in 2025. Therefore, we are looking for people to fill the positions of President, Vice-President, Treasurer and Secretary. There are several other vacant positions that we would like to fill as well. Here is a brief description of each position.

***President** – Shall preside at all meetings. The President will appoint all standing committee chairman, subject to the approval of the executive committee. They shall service as an ex-officio member of all committees

*Secretary - shall keep a record of the proceedings of all meetings (general and board) and shall handle all correspondence and keep an accurate file of the same.

*Treasurer - —shall receive and bank all funds and handle all financial transactions with the approval of the Board of Directors and shall submit a financial statement at the close of the term of office. The books may be audited at any time by request of the board or by demand of the membership.

* Event Committee Chair—shall arrange the meeting schedule for the year including scheduling and confirming outside speakers. The Event Committee Chair will also schedule any special events including arranging volunteers to work at the events.

* Habitat Committee Chair— shall review garden certification applications based on the agreed criteria and issue the certificates and signage. They shall retain current records of the certification certificates. Shall head the SEMBA grant program and review applications for the grants and make recommendations to the board on potential recipients.

*Program Coordinator – shall work with SEMBA board to find speakers for meetings and arrange summer garden tours.

*Teacup Raffle Coordinator – shall coordinate the yearly teacup raffle in October.

Please join me in passing along a huge heartfelt thank you to Brenda, Mark, and Diana, for their years of tireless work and dedication to making SEMBA a great organization and for spreading the word on the importance of helping butterflies survive and thrive. They will remain important members of SEMBA and we will see them at the monthly meetings. Please email us at sembabutterfly@vahoo.com if





you are interested. Elections will be held at the September meeting.

We will not have a SEMBA meeting in July. Instead, please check out the July Garden walks, details in the "Calendar of Events" section below.

SEMBA Grant Recipients

Announced: Each recipient will receive \$200 to help establish or expand a community butterfly garden. Congratulations to: Trillium Academy, Taylor 3 B's Native Plant Garden, Westland Bryant Middle School, Dearborn Awkard Island, Ypsilanti

BEATING THE SUMMER HEAT IN THE GARDEN:



I asked you all, the experts, to share your **Tips**, **Tricks** and **Hacks** to keep your summer nectar and host plant gardens fresh for the late season butterfly broods and over-winterers. Here is some of the great advice you shared:

*Deadhead! – "It's not my favorite chore, but it is an important one. By deadheading the spent flowers, many of my plants, like my Pincushion flower, will have a second or third bloom. Instead of the plant putting its energy into making seeds, they use the energy to produce new flowers. I even cut off the spent flowers on my common milkweed. No new flowers appear but I have gotten new sprouts of tender leaves that the late Monarchs love."

*Establish a Watering Routine -

"I try to establish a consistent watering routine and stick to it! I like to water first thing in the morning. I make sure to water the soil and roots, not the blooms. This keeps my plants from looking burnt. I also water my pots daily and sometimes twice a day if it's really hot."

*Mulch, Mulch, and Mulch -

"My summer routine begins in the spring. I take a walk around my garden and inspect my mulch. When I'm sure that there are no overwintering critters in there, I will remove any old or degraded mulch and replace it with new fresh mulch. Mulching keeps the soil moist and cool, plus it makes the garden look neat and tidy, which makes my OCD very happy! 😳 . I always use natural mulch that has not been treated with pesticides or dyes that will harm plants and pollinators."

*Go easy on the fertilizer -

"When it gets really hot and dry and we've not had rain in a few weeks, I stop fertilizing altogether. Fertilizing when it's too dry can cause your plants to be overstressed which can kill your plants, a lesson I learned the hard way 😕 . I always wait until the weather cools down before adding fertilizer."

*Add shade -

"In the past I have used a shade cloth structure to protect my vegetable and herb garden. I was worried about doing this at first thinking that the cloth would keep the butterflies from being able to get to my dill, fennel, and rue. It didn't stop them at all. I still had tons of Black and Giant Swallowtail eggs and cats!"

One Small Change can save thousands!



Who doesn't love a beautifully lit landscape at night with white lights along the path to your lighted front porch and door? Moths! If you leave your outdoor lights on at night, this can cause a lot of moth deaths, but luckily, it's easy to fix. Moths evolved to navigate at nighttime by tilting their backs towards the brightest source of light. For millions of vears that of course was the moon. Now there are millions of artificial lights all around to confuse them and essentially trap them. This often leads to moth death via exhaustion from flying in circles, collisions with glass, incineration on hot lamps, dehydration, and increased predation, among other things. Even if we have a landscape full of native, ecologically valuable plants that attract all sorts of native pollinators, it doesn't make much sense to then kill them with our outdoor lighting. If you still want to keep some lights on outside at night, simply install yellow LED





light bulbs like the Ecosmart ™ Bug Light Bulb, for example.



This one is available at Home Depot for \$4.98. Yellow light is invisible to moths. The yellow wavelengths of light attract by far the least number of moths. Better yet consider installing a motion-activated lighting system that will only turn the light on if movement is detected outside.

SEMBA GEAR: We are offering SEMBA merchandise such as T-shirts, pullover hoodies, and quarter zip pullovers for purchase. An email was sent out in June with details. If you didn't place an order but would like to, depending on the response, we will look to place more orders in the future.

Membership Dues: Time to renew your membership. Dues are \$15 per person. If a family member wants to join, their membership is \$7.50. This family discount can be used for up to four additional family members. Dues can be paid at the monthly meeting or mail to: SEMBA P.O. Box 851301 Westland, MI 48185 We are always looking to add new members, so if you know someone who might be interested, please talk to them about our organization and what we do. Bring a friend to a meeting. Guest attendance is only \$3.00. Meetings are the third Thursday of each month.

Also, a great big thank you to those of you who have brought goodies to the meetings to share! They are greatly appreciated!

Did you Know! That SEMBA will certify your garden as a native butterfly garden? You can choose from a paper certificate with your name on it or a yard sign, or both!



Please use the link below https://www.sembabutterfly.org/ calendars to access the requirements and certification application.

Teacup Raffle and Potluck October 17th Don't forget to collect your items for the Teacup Raffle and bring them to the September meeting. Featured Article: An interesting theory on why only 30% of Monarchs survive the annual trek to Mexico

The Secret is in the Spots on Monarch Butterflies' Wings

The wings of monarchs that survive a 2,000-mile-long migration tend to be spottier, suggesting that feature may aid the insects' ability to fly.

By Kate Golembiewski June 21, 2023

Every fall, monarch butterflies embark on one of nature's greatest journeys. These insects flap more than 2,000 miles from their summer homes in Canada down to the mountains of central Mexico. Only about 30 percent survive the trip. Researchers have found a shared trait in the butterflies that make it: The edges of their wings tend to be slightly spottier.

"No one even knew what these spots were for in monarchs," said Andy Davis, a biologist at the University of Georgia and an author of a <u>study published on</u> <u>Wednesday in the journal PLOS</u> <u>ONE</u>. He added, "All of a sudden, it seems like they're really important."

Monarch wings are mostly orange, but their edges are black, punctuated with tiny white spots. Dr. Davis was curious if those black edges contributed to monarchs' migratory capabilities.





Dark colors absorb more heat, and <u>studies of seabirds</u> have suggested that the temperature difference between dark and light feathers can change air flow patterns, enabling birds with blacktopped wings to "enhance their flight efficiency — basically increasing the lift and decreasing the drag," said Mostafa Hassanalian, a mechanical engineer at the New Mexico Institute of Mining and Technology.

He and Dr. Davis teamed up to see if the same held true in monarchs, with darker-winged butterflies having an aerodynamic advantage, making them more likely to survive the long migration than spottier peers.

To test this hypothesis, Dr. Davis enlisted Tina Vu, then an undergraduate at the University of Georgia, to undertake a potentially tedious task: going through photographs of 400 monarch butterflies and measuring the amount of black and white on the edges of their wings.



Poring through photographs of 400 monarch butterflies led to the discovery that the monarchs that

survived the trip to Mexico tended to have more white spots on their wings. Credit...Davis et al., PLOS ONE, 2023

The hours Ms. Vu spent tracing the white spots in Photoshop while listening to true-crime podcasts paid off in a startling discovery: The monarchs that survived the trip to Mexico tended to have more white spots, rather than the extradark wings the researchers had predicted. Additionally, she analyzed some of the butterflies' nonmigratory relatives, which also had fewer spots than the ones making the big migration.

"When we saw that there were more white spots, we were like, 'OK, so those have to have a function," said Ms. Vu, who plans to pursue graduate studies in biology.

The researchers' working theory is that the spots reduce drag by creating pockets of heating and cooling on the wing edge, which could create tiny eddies of rising air. The difference is subtle: The butterflies that completed the migration were only about 3 percent spottier than the ones at the starting line. But the scientists suspect that even a small reduction of drag could make a tangible difference in flight capabilities.

The next step for the researchers will be testing their hypothesis with wind tunnel experiments on artificial monarch wings. Ayse Tenger-Trolander, a biologist at the University of Chicago who was not involved with the study, said that while a correlation between migratory success and spots is present, she is interested to see if these follow-up studies show that the spots actually help. "There's a little part of me that wonders if some of these differences are due just to the way that the wing physically develops," Dr. Tenger-Trolander said.

Micah Freedman, a biologist at the University of British Columbia who was also not involved with the study, agreed that follow-up studies were needed, but said, "I really like the idea that this paper involves both biologists and engineers."

Such a cross-disciplinary collaboration might yield not only a better understanding of monarchs' abilities to complete their migration in the face of habitat destruction and climate change, but also inspiration for more efficient aircraft. "If we're right, and if the monarchs really are utilizing this simple design technique, imagine how simple it would be to just get some paint and throw it on an airplane wing," Dr. Davis said. *PLOS ONE is a peer-reviewed open access scientific journal (Public Library of Science).





Calendar of Events

January 18, 2024

At Crosswalk Community Church, 7:00pm "Macheros Mexico and Overwintering Monarchs" by Brenda Sattler

February 15, 2024

At Crosswalk Community Church, 7:00pm "Butterflies, Ants, and Aphids" Brenda Sattler

March 21, 2024

At Crosswalk Community Church, 7:00pm Speaker – John DeLisle. – "Growing for Wildlife" CERP Principal Ecologist, from Natural Community Services, LLC

April 18, 2024

At Crosswalk Community Church, 7:00pm Speaker Cheryl English – Pollinator Preservation Strategies"

May 16, 2024

At Crosswalk Community Church, 7:00pm Moth Mating Cage Workshop

June 20, 2024 At Crosswalk Community Church, 7:00pm

O and A with Brenda

July 13, 2024 – Saturday

Brenda's Open Garden Walk – Westland 1-4pm 1263 Springer, Westland, MI

Elmer Grimm, Garden Walk 10am – 4pm 17462 Redwood St., Livonia, MI

July 20, 2024 – Saturday

John Blair's Open Garden Walk – 12:30pm 12249 Ladd Rd, Brooklyn, MI

Bugtopia, Westland

July 27, 2024 – Saturday

3 B's Nature Garden, Detroit Audubon/SEMBA Event 1pm, Corrado Park, 8500 Flamingo Blvd, Westland

August 15, 2024, ZOOM MEETING! –

Crosswalk Community Church, 7:00pm "Flying Jewels: Butterflies & Moths and the Home Garden Habitat" By Judy Semroc, NABA Ohio Division

SEMBA Gear will be distributed

September 19, 2024 At Crosswalk Community Church, 7:00pm *"Winter Clean Up", by Brenda Sattler Remember to bring Teacup Raffle items*

October 17, 2024 At Crosswalk Community Church, 7:00pm *Tea Cup Raffle and Pot Luck*