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THIS ISSUE

Coffee Break, June 6 Sunday, June 8 / Giant Silk Moths Around the State in June Raise Giant Silk Moths this Summer Thank you CCR – "The Economy" Argument Fails

A Moth in the Face Ignites a Lifetime Liaison



Abruptly, giant silk moths entered my life in June of 1970. Who was to know that a chance collision with a twelve-year-old kid would act as a catalyst to a lifetime connection, and, ultimately, to the utilization of impressive specimens and case studies for teaching about insect life cycles and ecology?

Back in the day, a parent couldn't keep a kid indoors, especially in the summer. Outside is where we wanted to be. In the age of baby boomers, the steamy summer streets on the northwest side of Chicago were crawling with us. We made our own fun.

After a game of whiffle ball in the street or alley (in which, btw, the girls were formidable and respected competitors), a group of us would drift up the block in fits and starts amid random clowning and physical interaction, then cross busy Pulaski Avenue to buy a round of cold RC Colas at the liquor store. We'd drift back to our home base in the same fashion, but in a bit more composed manner as each of us swilled from a 16-ounce glass bottle. As dusk turned to darkness we would often find ourselves loitering under the alley light behind the apartment building next to Goose's yard, smacking an occasional mosquito off a sweat-glistened neck or cheek, on the heels of some form of competitive exertion. Above us, various moths, beetles and generic, smaller, winged nocturnal things orbited the light fixture. Some crawled on the brick wall a few feet behind it. Others would flutter down or drop to the ground and skitter across the cracked asphalt around us.

On this particular night around this particular alley light, a much larger living satellite made a dramatic appearance. A fleeting, flickering shadow criss-crossed our faces. All eyes instinctively gazed upward. It was huge. Everyone, I think, assumed it was one of the few neighborhood bats we'd occasionally see meandering over the rooftops after sunset.

No one had a chance to voice any reaction. It suddenly slammed head-on into the light. The impact appeared to stun it. Its wing beats became sporadic and it quickly lost altitude. A heartbeat later it was among us. Then, just before it hit the ground, it appeared to regain its balance. Its wing beats regained coordinated rhythm. It whizzed in a rapid, wavering circle around us. We could not turn our heads quickly enough to follow it and our heads in unison flipped from left to right and back again.

I couldn't react quickly enough. My head swiveled one way as it flew behind my back, spun a 180 to catch up to it on my other side, then it hit me... right between the eyes. The sudden shock of wings flapping wildly against my face elicited a scream of panic from an unfamiliar voice – a primordial pitch from deep within my lungs - as I slapped it away. The force of the swing drove it to the pavement. A circle of cautious heads gathered over it.

Our eyes surveyed a huge golden moth. The splayed wings quivered, then convulsed over the pavement. Had I injured it? A pair of large, feline eyespots stared back, one on each hind wing. The body was downright tarantula-like: thick and hairy, as were the legs. Was this thing dangerous?

It suddenly burst into a fit of flapping. Our heads snapped out of the way as it went airborne once more. However, now it flew away from the light and into the darkness down the center of the alley. Goose and I had to catch this thing and find out more about it, so we took off after it. (Other than me, Goose was the only one among our neighborhood gang who exhibited a strong affinity to non-human life. The others tolerated our eccentricity.) Luckily, it was slow to gain altitude. We chased and jumped and swung and missed in an effort to knock it to the ground. Finally, Goose's hand made contact and down it went. I was still shaken from the too-close encounter, but he carefully pinned its wings together between his thumb and fingers and carried it under the light for continued inspection. The other kids soon lost



The St. Martins Press Golden Field Guide to Butterflies & Moths, by Mitchell & Zim and others in the series were staples for any serious young naturalist in the 60s and 70s. We still use them today!

interest, but we marveled at its golden, hairy bulk and huge, light-bulb-shaped abdomen. Six furry legs waved fruitlessly in the air. We took the moth to a cage in his yard and returned to our friends.

Goose phoned me the next morning. He had just gone outside to check on the moth and found hundreds of eggs stuck to the wires of the cage. I ran over to check it out. Some were laid singly on the cage wires, but most adhered in lines and clusters. The moth lay on the floor of the cage. She looked dead. Her wings - so perfectly complete the night before - had been battered to bits. Her abdomen was much thinner after having voided all those eggs. However weakly, she did move a bit when poked. We felt badly about contributing to such an impressive creature's demise.

The female moth lasted another day in the cage. She was too weak to fly. A couple of her legs had snapped off. One of her antennae was gone, too. She was, literally, disintegrating before our eyes. On the third day, we looked in the cage and were only mildly surprised at what we saw. We were very familiar with the stark ways of nature. The moth's dead body was engulfed by ants. Within a day there was little left but fragments of wings.

In the mean time we had discovered more about the moth. Goose owned a number of the little paperbacks from the Golden Field Guides series by St. Martins Press, including *Butterflies & Moths*. It was a Polyphemus Moth. I was unaware that my first perusal of this short paragraph and accompanying color reproductions of the moth, its larva and cocoon was, in fact, a critical springboard about to launch me into a lifetime bond with this and other colorful, impressive species in the giant silk moth family.

Ten days after the incident I received another phone call from Goose. I met him in his yard. The eggs had hatched. It must have happened the day before, but we hadn't thought to look into the cage. Every one was now an empty shell. A number of tiny yellow larvae with brown heads still crawled on the cage wire, but many more had shriveled and died in the heat with nothing to eat. Others had probably wandered on to the surrounding lawn. The field guide listed some tree leaves on which they commonly

feed. We promptly picked some maple leaves in front of his house, carefully placed the caterpillars on them and slipped them into a jar, but it was too late. They were very weak. By the following day the last of them had died.

The Polyphemus Moth is the second largest moth on our continent. The Cecropia, the largest, can attain a wingspan of up to seven inches! Now that we knew their names we located books in the library that had more information about these and others in the family, like Luna and Promethea Moths. However, the Polyphemus and Cecropia were the two we found regularly around Chicago neighborhoods.

Goose and I became proficient at searching for and finding their cocoons in the winter, and, in late summer, finding their huge larvae camouflaged perfectly among the leaves of tree branches over our heads on residential streets. We also became proficient – mostly by trial and error – at successfully



These 4th-instar Cecropia larvae grew nearly 3x larger before spinning cocoons. Caterpillars grow rapidly on the leaves of abundant Boxelder.

rearing them from larvae to adults. By the age of fifteen we basked in a self-aggrandizing image as possibly the most knowledgeable fifteen-year-olds on the topic of finding and rearing Polyphemus and Cecropia Moths.

A slew of wonderful and unusual, moth-related adventures accumulated over those years – the stuff of, perhaps, an entertaining, enlightening and educational publication some day...

Giant silk moth populations have declined dramatically since the early seventies. In fact, a visit today to these same neighborhoods in Chicago with the same trees will will not yield a single Polyphemus or Cecropia cocoon, caterpillar or adult. They appear to have become locally extinct there.

If you've followed our newsletters for more than a year, you may already be aware that Nature Discovery is actually "farming" several species of the giant silk moths at our home-based facility. We deliver a presentation (including next Sunday's program here) entitled *Finding and Rearing Giant Silk Moths* to groups of adults, gatherings of children, and mixed audiences at nature centers, parks, libraries and other venues. At presentations in June and early July we offer fertile eggs or young larvae for participants to take home and attempt to rear to adulthood, with detailed care instructions. Upon emergence from the cocoon the following June, the successfully reared moth can be released out your back door to contribute to a local wild population that could definitely use the help. For a reasonable fee (By contrast, check the prices in a Carolina Math & Science Catalog. Ouch!) we will also make eggs or larvae and care instructions available to anyone who contacts us about it in the coming month.

-Jim McGrath

Catch Us on Coffee Break Friday, June 6

Jim is scheduled to appear on Friday, June 6 at 9:45am, discussing invasive Dame's Rocket and giant silk moths. The show airs weekdays from 9 to 10am on 89.7 FM. Listen live online at lcc.edu/radio/onair/ or watch it live (or later in the day at 6pm) online at lcc.edu/tv/watch. We'll post a reminder on our Facebook fan page.







Doors open from 1 to 5pm. Admission \$5/person.



5th-Instar Promethea larva.

At 2pm, attend our presentation, **Finding & Rearing Giant Silk Moths.** The largest, most impressive moths on the continent can be found right here in Michigan, yet, their numbers have declined dramatically over the past few decades. Beautiful photographs enhance this lively Powerpoint presentation featuring the life cycle and ecology of Cecropia, Polyphemus, Promethea and Luna Moths. Over the past week, females have begun emerging from cocoons, attracting mates, and laying eggs. See and hold cocoons of all four species. See huge newly-emerged live moths in the "mating cage," and more!

Then, take advantage of this unique opportunity. All paying participants are welcome to take home a few fertile eggs (due to hatch within days) along with detailed care instructions at a reduced rate of only \$5. This is an AWESOME summer project for enthusiasts of any age. Extra fertile eggs are available at 3/\$5 while supplies last.

Come early or stay late to take a guided walk on our trails or to interact with the largest collection of live Michigan reptiles and amphibians in the state, including two unprecedented "grand slams" – all 10 turtles and all 13 frogs found in Michigan!

Knowledgeable staff is on hand to help visitors of all ages make the most of their visit.

Around the State in June

- Saturday, June 7: 12pm. Live Garden Critters Presentation; Leila Arboretum, Battle Creek.
- Saturday, June 14: 10am-2pm. MI Frogs & Snakes Exhibit; Get Outdoors Day, Baldwin.
- Sunday, June 22: 10am-2pm. Giant Silk Moths Exhibit & Guided Birding; Williamston Farmer's Market, Williamston.
- Saturday, June 28: 2pm. Giant Silk Moths Presentation; DeGraaf Nature Center, Holland.





With wings closed, this freshly-emerged Polyphemus melts into a background of dead leaves.

Raise Giant Silk Moths this Summer

A Fantastic Summer Hobby! A Unique Gift!

Eggs and young larvae are available for sale now thru early July.

Polyphemus, Cecropia, Promethea, and possibly Luna Moths!

Inquire about availability of each species.



A huge, late 5th-instar Polyphemus larva eats around 10 whole leaves a day!

4 eggs/larvae (per species): \$10. Additional eggs/larvae 6/\$10, while supplies last. Includes detailed care instructions. Contact us to make purchase arrangements.

Thank You...

To Barb Paff, for her thoughtful donation to Nature Discovery. To Cedar Creek Vet Clinic, for emergency treatment in a case of "turtle trauma" this past month.

CCR – "The Economy" Argument Falls Flat

Common sense rules over big money's slight-of-hand rhetoric in Paul Krugman's May 29 New York Times op-ed piece, Cutting Back on Carbon:

http://www.nytimes.com/2014/05/30/opinion/krugman-cutting-back-on-carbon.html

The relentless "Economy" and "Jobs" arguments, denier constants against acting now on fossil fueldriven climate change, aren't adding up. The thoughtful commentary from concerned readers is worth a gander, too.

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NATURE DISCOVERY 5900 N. Williamston Road Williamston, MI 48895

(517) 655-5349 naturedisc87@gmail.com www.naturediscovery.net