

Native Plant Society of Northeastern Ohio

North Kingsville Sand Barrens, Ashtabula County

Monarch Tagging



By Amy Goletz



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On Saturday, September 23, 2017, eight lucky individuals of the Native Plant Society were guided by Judy Semroc and Larry Rosche through the North Kingsville Sand Barrens in Ashtabula County, with the intent of tagging monarch butterflies. According to the website of the Cleveland Museum of Natural History (CMNH), North Kingsville Sand Barrens is the only high-quality fossil dune ridge that has been

preserved within northeastern Ohio. It is one of three CMNH natural areas open to the public and totals 174 acres.

The afternoon of September 23rd was a tropical 88 degrees with 73% humidity, but the heat and humidity did not dampen the enthusiasm of the group. Lisa Schlag started the program by distributing milkweed seeds to everyone, which were beautifully packaged in a little card, already cold-stratified and ready to plant. As we all (hopefully) know, milkweed is the host plant for the monarch butterfly, and is crucial to its survival. Our group walked through the preserve in the front of the property off Poore Road, and attracted a healthy amount of beggar-tick seeds on our pants, our



boots, our socks and even shoelaces! Judy and Larry expertly wielded their nets, and we found and tagged four beautiful monarch butterflies.

Tagging was very interesting. The tag is a round, all-weather, polypropylene sticker, and is imprinted with waterproof ink. The special 3M adhesive does not harm the butterfly. The tag is placed over the discal cell on the underside of the hindwing. Tagging is done to determine the pathways of migration of the monarch butterfly, the influence of weather on the migration, the survival rate of the monarchs, etc. Each tag has a specific alpha-numeric code that Judy recorded, along with the location of the catch, the date, the gender of the butterfly, and whether the butterfly was wild or reared.

We also found four monarch caterpillars on their host plant of milkweed. Judy opined due to the number of predators which enjoy monarch



caterpillars, it is now considered beneficial to capture the cats and rear them. So, three of the four cats were taken home by members of our group, with high hopes of becoming monarch butterfly parents.

Judy explained the butterflies we are seeing in Ohio in the fall are members of the super generation of monarchs: those hardy individuals that live six to eight months (an unusually long life compared to the two-week life span of the summer generations of monarchs). Members of the super generation fly thousands of miles to overwinter in the oyamel fir, *Abies religiosa*, trees of Mexico. This is one of nature's mysteries, which is not yet understood by man (or woman!). How do these butterflies, the great-great-grandchildren of the butterflies that left Mexico the previous spring, know where to overwinter and how to get there?

Our tag data will be turned in to Monarch Watch, (monarchwatch.org). All butterflies



monarch, *Danaus plexippus*, with tag #195,

were recorded as wild. According to Judy, tag #195 was a female which had just emerged from her chrysalis that morning. (The gender of a monarch butterfly can be determined by looking at the hindwings. Males have a thin vein pigmentation with a swollen pouch on each wing that looks like a spot or a smudge. Females have a thicker vein pigmentation and lack the swollen pouches.) Tag #196 was a female which flew

away immediately once we released her. According to Judy, this was a good sign. Tags #197 and #198 were both males. Judy tagged #198 with a group of enthusiastic

young naturalists who arrived at the sand barrens as part of a CMNH program. We left the fourth caterpillar found earlier for them to observe.

Butterflies discovered, or “recovered,” in Mexico with a tag are also reported to Monarch Watch. Monarch enthusiasts who tag butterflies can log onto the website

<http://www.monarchwatch.org> to see if their butterfly has been found. Of all the butterflies Judy has tagged, 8% of hers have been recovered.



Nicholas with monarch he just tagged (#195)

Although the intent of the outing was to tag monarchs, we soon realized that an outing with Judy and Larry was in no way limited to any one thing! It is amazing what you can see in nature if you take the time to stand still and observe:

a praying mantis, a brown-hooded owlet caterpillar, American copper butterflies, and



brown-hooded owlet moth caterpillar,
Cucullias convexipennis



American copper butterfly,
Lycaena phlaeas

two hickory tussock moth caterpillars (which we did not handle, as their hairy bodies can cause a rash in sensitive individuals).



pearly everlasting, *Anaphalis margaritacea*

Pearly everlasting was growing among the milkweeds and goldenrods. We learned it is a host plant for the American lady, *Vanessa virginiensis*, butterfly.

After returning to our cars for a much-needed drink, we then wandered farther back into the barrens. It was shaded and woody, not the right habitat for monarch butterflies, but many other fascinating creatures were seen and heard.

Larry caught a clamp-tipped emerald dragonfly, appropriately named for its bright green eyes and metallic green patches on its back. Larry believed that this was the first clamp-tipped emerald seen at the barrens! We found an American dagger moth caterpillar (which is another caterpillar whose hairs can cause skin irritation).



clamped-tipped emerald dragonfly, *Somatochlora tenebrosa*



And, Doug, one of the participants, found what Judy believed might be a new species of walking stick! This walking stick was smaller with white horizontal striping on its legs. We watched a great spreadwing damselfly

characteristically fly away and return again and again to the same perching spot.

Judy pointed out beech leaf disease. She also drew our attention to a not yet named disease from which hemlock trees are suffering. Inner needles closest to the stem are first affected, turning shades of yellow and orange. The long-term consequence is not yet known.

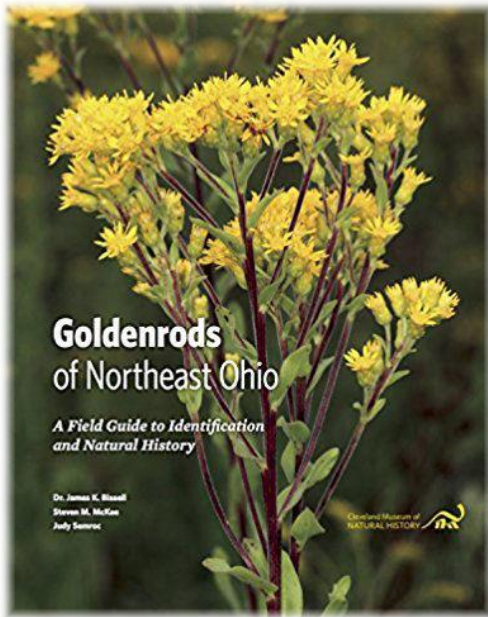


beech leaves showing symptoms of darkened banding or striping



hemlock needles showing symptoms of yellow/orange coloring

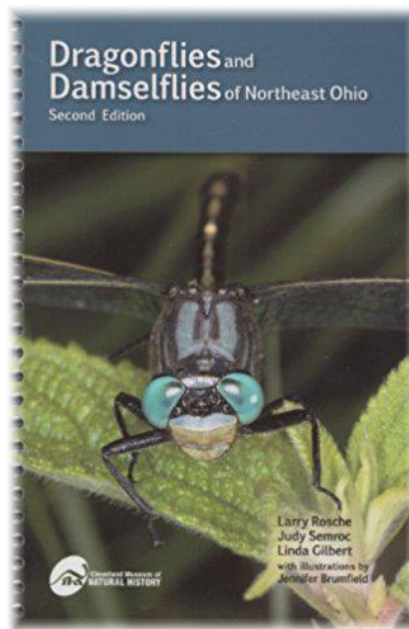
Before heading back, we heard a pileated woodpecker and Larry “warbled” to another bird, which sang back to him. It was truly a treat to walk with such good company in such a beautiful preserve. Thank you to Judy and Larry for sharing their time and knowledge with us! And thank you to the Native Plant Society for hosting this informative and enjoyable program!



Judy Semroc is a conservation specialist in the Natural Areas Division for CMNH and the founder of Chrysalis in Time, the first Ohio chapter of the North American Butterfly Association. Judy is one of the authors of the recently published (copyright 2017) *Goldenrods of Northeast Ohio*.

Larry Rosche is a field researcher for the Conservation Outreach Program of the CMNH. Both Larry and Judy are authors of *Dragonflies and Damselflies of Northeast Ohio, Second Edition* (copyright 2008).

Both of these books are excellent field guides published by the CMNH. I would highly recommend their purchase! For those interested in caterpillar identification, Judy recommended *Caterpillars of Eastern North America* by David L. Wagner.



~~ Amy Goletz