

# in the mainstream

## A Small Victory for a Rare Butterfly

By Cathy Smith

On a couple of isolated limestone outcroppings in western Connecticut, a diminutive butterfly struggles for survival – threatened by invasive plants, development, habitat fragmentation, and pesticide spraying. The Northern Metalmark (*Calephelis borealis*) is very, very particular about its habitat, only taking up residence on these limestone ledges that are remnants of a time when continents collided and an ancient coastline cut deep into the present-day Northeast.

There are only two known Northern Metalmark populations in Connecticut, both in the western part of the state. One of these is located in a town in the Norwalk River watershed. Because this site is on private property and this butterfly population is so precarious, the exact location is kept secret. But a crew of dedicated volunteers and scientists has been at work here to restore and protect the habitat and – it is hoped – help to save the Northern Metalmark.

While this species' range is quite broad - from Connecticut into New Jersey, Pennsylvania, and West Virginia and westward to Ohio and Indiana – they exist only in very small, vulnerable groups of fewer than 20 individuals. These are referred to as meta-populations – groups of the

same species which may interact with each other but are separated geographically. In the case of the Northern Metalmark, however, group interactions are severely limited by its disinclination to travel far, especially over uncongenial habitats. It is likely that these local butterflies don't disperse as far as the only other Connecticut population, near Kent.



Photo courtesy of Faith Novella

*The Northern Metalmark.*

At this Fairfield County site, like other Northern Metalmark locales, the limestone bedrock creates alkaline soil conditions very different from the acidic soils that dominate most of Connecticut. And on this little limestone island a rare plant community has arisen. These are the plants the Northern Metalmark evolved to feed on and where it can reliably find the one plant that is known to serve as host to its eggs and caterpillars – Roundleaf Ragwort (*Packera obovata*).

*continued on page 2...*



*South Norwalk students learning about pollinators from our partners at the Westchester Land Trust Pollinator Pop-Up.*

## Climate Resiliency Grant a Success in South Norwalk

The Pollinator Pathway and NRWA received a grant from UConn's Connecticut Institute for Climate Resilience and Adaptation (CIRCA) to plant native trees, shrubs and wildflowers along the Norwalk River Valley Trail (NRVT) in Norwalk with students interning at Stepping Stones Museum. The habitat restoration plantings took place in August and were planted between the Super 7 Highway and the Norwalk Y. This project will help shade the NRVT, slow stormwater runoff, reduce flooding, and improve air quality and wildlife habitat. During the planting events, student volunteers learned why native plants are key to the survival of local pollinators and other wildlife and how trees help improve the city's climate resiliency.



## How to Buy Plants Native to Our Ecoregion

While you may not have a Northern Metalmark habitat in your yard, it's good to know which plants best suit your property's conditions. First, get to know your land by testing the soil and watching for what plants occur naturally there, and then add native plants that will thrive there, especially local ecotype plants – those that are native to and well-adapted to growing in this ecoregion. Here's where you can purchase them:

- Eco59 - a farmer-led seed collective - [eco59.com](http://eco59.com)
- Hilltop Hanover Farm - [hilltophanoverfarm.org](http://hilltophanoverfarm.org)
- Ask your local nursery to carry Ecotype Project plants, available to them through Planters Choice Wholesale Nursery

### *Metalmark continued...*

Over the years the rare plant life on this spot has been infiltrated by other native plants and threatened by invasive species like Asiatic Bittersweet, Russian Olive, Phragmites and Winged Euonymus. Since the site was identified decades ago, volunteers have been removing the invasives and replacing them with nectar and host plants critical to the Metalmark's survival.



*Photo courtesy of Faith Novella*

*The host plant of the Metalmark, Round-leaf Ragwort (Packera obovata).*

One key nectar source, Black-eyed Susan (*Rudbeckia hirta*), had been reduced to only six plants in 2016. "But thanks to a great effort to plant local ecotype Black-eyed Susans by Highstead Foundation in Redding," says Redding lepidopterist Victor DeMasi, "there are about 175 flowering plants on the site now. It is probable that abundant nectar is the driving force behind a mini Northern Metalmark population boom we are seeing here."

Over the past three decades the Northern Metalmark population numbers at this location have been relatively consistent, averaging

between 6 to 8, but this year they more than doubled with 20 individuals putting in an appearance. While that's great news, this population remains imperiled. Scientists describe a species population that's under 60 individuals as on the brink.

To help sustain these Northern Metalmarks, volunteers have been planting other nectar plants such as Butterfly Weed and Yarrow in addition to Black-eyed Susans. Staff from Highstead wild-collect local seeds and grow them before planting them back into the site. While these plants are regionally native they may not be native to this exact location, according to Highstead Executive Director Geordie Elkins; however, they all do well in the site's alkaline soil conditions and are serving a vital role by supplying the Northern Metalmark with nectar until scientists can determine which plant

species might have been the butterfly's original food sources. Once these are identified, scientists will attempt to reconstruct the original limestone-loving plant community.

Habitat restoration specialist Faith Novella is eager to point out that all of this effort isn't just about the Northern Metalmark. This little butterfly serves as an umbrella species for the entire community here. "This site is unique and it is critical to protect it all," says Faith. "By protecting this site we are helping to preserve the biodiversity of the region. And by protecting this plant community, we are protecting the Northern Metalmark too."

Long-time local conservationist Bob Eckenrode had this to say, "The joy of looking after the Metalmarks has been a 30-plus-year project for me with many people joining in over the years. It's just an honor to work along with all the other people who have a passion for taking care of this special place and home to this little butterfly. It's wonderful to see our combined efforts are having a positive effect on the colony."

*Thanks to the organizations, volunteers and scientists who have worked to preserve and restore this unique Northern Metalmark habitat, including Highstead, the Connecticut Butterfly Association, the Connecticut Botanical Society and David Wagner, Professor of Ecology and Evolutionary Biology at the University of Connecticut.*

### **NRWA President Louise Washer to Receive the CT League of Conservation Voters Environmental Leader Award**

Join Us at the 2023 Environmental Achievement Award Breakfast

October 3rd, 8:30-10AM

Glastonbury Boathouse, 252 Welles Street, Glastonbury

**REGISTER** and learn about the CT League of Conservation Voters and their important Scorecard at [CTLCV.org](http://CTLCV.org).

Check your state representatives' scores to see how consistently they vote to support bills that protect clean air and water.

## Dam Removals: The Momentum is Growing!

It was a talk sponsored by NRWA and Trout Unlimited at the Wilton Library in 2020\* that inspired a Wilton couple to take action. The Comstock Brook, a tributary of the Norwalk River, runs through their backyard in North Wilton, but until this June, it was obstructed there by a dam. Though small, the dam presented a barrier to the free flow of the stream and the movement of aquatic creatures, including native Brook Trout. Shockingly – given that Comstock Brook is only about 5 miles long – this dam was just one of over 25 on the stream and its tributaries, most of which serve no purpose. And in the Comstock Brook, the last remaining population of Brook Trout in the Norwalk River watershed is barely hanging on.

The Wilton couple contacted Trout Unlimited about their dam. TU seized the opportunity, and this June pulled the dam down. “Volunteers planted 100 native trees, shrubs and perennials to restore the streamside buffer zone, which is critical to reducing stormwater runoff, filtering out pollutants, and mitigating thermal pollution,” says Gerald Berrafati, Chapter Coordinator of the Mianus Chapter of Trout Unlimited. Norwalk River Watershed Association and Pollinator Pathway volunteers worked alongside the Trout Unlimited crew on the streamside restoration effort.



Photo courtesy of Gerald Berrafati  
Construction along the Comstock Brook to remove the dam.

But dam removal isn’t just about one species of fish. “Brook Trout are an important indicator species,” says Gerald. “Their presence in the Comstock Brook means it’s a healthy stream.” Which is good for all of the wildlife and plants that depend on it. And for its human neighbors.

Trout Unlimited is committed to taking out as many dams as possible and is working on eliminating other local dams, most notably the Dana Dam at Merwin Meadows Park in Wilton, which also came down this summer under the direction of Save the Sound. The Dana Dam is much larger and has required much more expansive – and expensive – planning, demolition and rehabilitation of the stream banks. But if all goes according to plan, work on the Dana Dam will be complete this fall. Which means species like river herring and sea lampreys will be able to navigate the Norwalk River as far as Factory Pond in Georgetown for the first time in over a century.

Says Gerald, “Momentum is really growing behind dam removals in the watershed – it’s awesome!” We couldn’t agree more.

Says Gerald, “Momentum is really growing behind dam removals in the watershed – it’s awesome!” We couldn’t agree more.

### Thank You to Our Interns!

A huge thank you to Andres Palmer (far left), an Environmental Science student at UConn and Norwalk resident, and Kate Hogan (far right), a Ridgefield High School senior, for their tremendous help this summer!



\* At [NorwalkRiver.org](http://NorwalkRiver.org) (Newsletter and Webinar page) you can read more about dam removal in our Spring and Fall 2018 newsletters and listen to the library talk by TU’s Jeff Yates. Jeff’s talk was part of a series sponsored by NRWA, Wilton Library, Trout Unlimited, and the Wilton Land Conservation Trust.

## Membership Form

Becoming a member helps NRWA continue to protect local water quality, hiking trails, and wildlife habitats.

### Riparian Society

Steward	\$1000+
Protector	\$500 – \$999
Patron	\$100 – \$499

### Membership

Supporter	\$50 – \$99
Friend	\$30 – \$49
Other	\$_____

☐ My company has a matching gift program  
(company name) \_\_\_\_\_

### Donate Online at [NorwalkRiver.org](http://NorwalkRiver.org)

Or mail your tax-deductible Annual Membership gift of \$\_\_\_\_\_ to  
NRWA, Inc. PO Box 7114, Wilton, CT 06897. Please make check payable to NRWA, Inc.

Name \_\_\_\_\_ Phone \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

I would like to receive updates and events info. My email is: \_\_\_\_\_



## Ridgefield & Norwalk Propose Gas Leaf Blower Restrictions

Ridgefield and Norwalk are considering joining Westport, 12 New York towns, the state of California, and roughly 200 other communities in restricting or banning gas leaf blowers because of the noise and extreme air pollution they emit, including greenhouse gases, and carcinogens such as formaldehyde, benzene, and fine particulate matter. Blowing clippings from lawns also desiccates the ground harming soil health, insect habitat, and requiring more watering, which means more water out of our rivers. For all of these reasons, NRWA supports both Ridgefield and Norwalk's proposed ordinances.

- Learn more and sign Ridgefield CALM's petition at [Ridgefield-CALM.org/petition](http://Ridgefield-CALM.org/petition).
- Read Norwalk's draft ordinance and more info at [NorwalkRiver.org/news](http://NorwalkRiver.org/news). Sign Norwalk's Change.org petition and let your Common Council representative know you support this petition. The Council is slated to vote in September.

## A Big Thank You to The Highstead Foundation & Hilltop Hanover Farm!

Thanks to Highstead Foundation in Redding and Hilltop Hanover Farm in Westchester for donating over 3000 wildflower seedlings to NRWA and Pollinator Pathway to be planted in our Watershed and beyond! Volunteers in our watershed planted these local, native Ecotype Project plants, grown for habitat restoration projects, along the Norwalk River Valley Trail in Norwalk and Wilton, at Old Town Hall in Wilton, and at Barlow Mountain School in Ridgefield!



*Volunteers planting ecotype plugs from Highstead and Hilltop Hanover along the Norwalk River Valley Trail during the CIRCA grant-funded planting in Norwalk.*



*Lauren Mattison-Crossley, NRWA board member and organizer of the NRWA-affiliated Barlow Mountain School Green Team, with her daughter Evie planting donated wildflowers at the school gardens in Ridgefield.*

**Order your own Ecotype plants at [Eco59.com](http://Eco59.com)**

**eco59**   
a farmer-led seed collective

NONPROFIT  
U.S. POSTAGE  
PAID  
Permit # 1203  
Norwalk, CT

**NRWA**  
Norwalk River Watershed Association, Inc.  
PO Box 7114, Wilton, CT 06897