# River Talk

Newsletter of the Carantouan Greenway



# **Focus on Nature**

One of our missions is to educate the public about science and nature through various platforms including guided hikes, field studies, and programs presented by knowledgeable volunteers and experts. To that end we highlight below some of the informative and delightful presentations that have been delivered recently by the Greenway.

# Macroinvertebrates and Water Sampling

Crawling, squiggly, microscopic creatures were the focus of attention September 18 as the Carantouan Greenway scooped water samples from Shepard Creek in Lockwood in search of macroinvertebrates. Many



including hellgrammites (larvae of the Dobson fly), water snipe, water pennies, mayflies, and caddisflies just to name a few. Microscopes were set up by Marty Borko who described the creatures propelling themselves through the water to nature-loving visitors. He stated that all the tiny creatures discovered are harbingers of good

water quality; one

would not want to see

specimens were identified



A minnow shares the specimen tray with multiple macroinvertebrates (above). Marty describes to visitors what organisms they are observing under the microscope (below).

a lot of fly larvae/maggots. A variety of different types of invertebrates were collected and sent to Albany to assist the Department of Environmental Conservation in ascertaining water quality in New York State's streams.

#### **Pollinators**

How did we get from a barren landscape of volcanoes to our modern day verdant world? If you missed this

presentation hosted by the Universalist Unitarian Church you missed a good one. Marty Borko, with the assistance of John Palmer, mesmerized the audience by unlocking the mystery



From moss to ferns to flowers.

of the transformation of a volcanic landscape to one with a plethora of plants. In a word - pollination. The journey of millions of years was nothing less than amazing, evolving from moss to ferns to colorful flowers.

#### Climate Change

There are many unknowns about how the changing climate will impact our lives and our land here in the Valley, but we do know some basic science about weather patterns and their impact on the land and water. It's an important moment in the evolution of our ecosystem to take the long view, and envision together what changes we might want to prepare for here in our fertile Valley.

In a cooperative venture
Marty Borko and Mike
Lovegreen, stream team
leader for Upper Susquehanna
Coalition and recently
appointed chair of the EPA
Chesapeake Bay Stream
Health Workgroup, and
advisory member of The
Nature Conservancy (NY)

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### Fall Color and the Ash Borer



A small sample of fall color.

It is mid October and the fall color is in full bloom. The shorter day length has caused the green chlorophylls to break down revealing the yellows of the carotenes and xanthophylls, which dominate the woodlands in the hickories, walnuts, and oaks. The fire orange of the sugar maples are mixed in with the crimson reds wherever Virginia creeper climbs. The dominant red due to anthocyanins are found in the many clones of stag-horn sumac clutching their pyramidal fruiting clusters awaiting winter

The emerald ash borer visitation from the chickadees and titmice. What was missing on this mid-October day though was the deep burgundy found in the white ash. The reason was simple — the white ash are gone. The introduced, exotic, iridescent emerald ash borer has followed our highways and destroyed the cambiums, or growth layers, of our native ash

trees. The dead tree skeletons you will see next spring are most probably the ashes, which will now join the American elm and chestnut in the extinguished category. Gone will be the ash baseball bats, snowshoe frames, quality ash furniture, even firewood, which was the best, is gone.

#### **Focus on Nature** (continued from page 1)

Climate Change model project, presented information about our ecosystem here in the Valley, and projected scenarios of climate change impacts from a variety of sources. Margaret McCasland, a science and environmental educator currently working with NYS Quaker Earthcare and a faith-based presenter for The Climate Project, joined Borko and Lovegreen in a panel discussion. The forum was a collaboration between Carantouan Greenway, a Valley-Vision not-for-profit Land Trust working to educate and connect our communities to their natural resources, and the Green Sanctuary Team of the Unitarian Universalist Church of Athens and Sheshequin.

#### Fern Walk

A rainy October day didn't deter a group of nature lovers from exploring the trails at the Greenway. Distinctive features employed to identify a variety of woodland ferns were highlighted as well as reproductive mechanisms.



A sampling of ferns collected during hike. From top to bottom: Remains of an ebony spleenwort; the lacy spinulose wood fern; Christmas fern; and marginal fern.

#### Kindred Groups Explore Wildwood

The Sierra Club of Owego and the Chemung Valley Audubon Society were led on guided tours of the trails at Wildwood late this summer with plenty of opportunities to observe and photograph the vast array of birds and other flora and fauna along with insightful facts provided by

Marty Borko. "Fascinating tour on Saturday!" writes Gerri Wiley from the Sierra Club. Groups including Scouts, home schoolers, or any with a thirst to learn more about nature may request similar tours by contacting the Greenway. \* August day at Wildwood.



Sierra Club members enjoy an

## **Upcoming Events**

#### St. Paddy's 4K Run

Ready, set, go mark your calender for our annual springtime trail run. Set this coming March 19 at 10 a.m. at the Wildwood Nature Reserve on Shepard Road in Waverly. Sign up online now by visiting carantoungreenway.org.

# All About Butterflies and Plants

The Greenway has been working closely with the Waverly Central School District's Lincoln Street Elementary and Elm Street Elementary schools, as well as the Waverly Little League, to provide resources designed to enrich butterfly-lifecycle curriculums for students. The project included the procurement of classroom educational supplies, custom monarch cages, pollinator and butterfly online resources, development of an outdoor butterfly and wildlife habitat garden, and certification of the garden by the National Wildlife Federation as an Official Wildlife Habitat. Additionally, the project supported presenters from Cornell's Agrawal Lab to present to the Lincoln St. first grade class, specific to butterflies and their host plants. Cornell presenters were Amy Picard Hastings and Katalin Boroczky.

This project addresses a community need to invest in our youth's continued understanding of the importance of Tioga County's natural surroundings. This community shares a vision that our youth will continue to grow strong, healthy and well rounded; and better prepared to manage the environment that their ancestors have left to their care. A grant from the Floyd Hooker Foundation, combined with Carantouan Greenway contributions, would support that vision and hundreds of Tioga County's youth, for many years to come.



Young learners listen attentively as Cornell expert describes the important role of the butterfly in sustaining a healthy environment.

# **Membership Renewal**

Dear members and friends,

Thanks to your generous support, our dedicated Board and volunteers, and many great partners, Carantouan Greenway has provided quality environmental programs and recreational opportunities for 20 years! Your donations are vital to our success, so we hope you will start us on another 20 years by renewing your membership today. Those renewing by January 15 will have a chance to win one of two handmade bird houses by Ralph Geiger or an instructional DVD about simple and sustainable projects for landowners.

2016 has been a great year! We completed three grants: to create a Senior Wildlife Habitat at Muldoon Gardens; to conduct a Pollinator Lifecycle Curriculum and garden for students at Lincoln and Elm Street Elementary Schools; and to bring awareness to ticks and Lyme disease by placing informational signs at four local parks. We added some outstanding resources on ticks and pollinators to our website, planted 85 apple trees at Wildwood Nature Reserve, held our 3rd annual Cloverleaf 4K, held two events to sample and identify macroinvertebrates in Cayuta Creek, led many informative naturalist-led outdoor programs, and much more!

Please consider joining our Board, or volunteering to lead an outing, or adding your name to our contact list for when we do our trail, river, and highway cleanups.

### **Wildwood Nature Reserve Updates**

Thanks to the Town of Barton for removing cattails and other unwanted vegetation, and deepening the vernal pool next to the parking lot. They also hauled away some unsightly debris from around the pool. We hope this work will make the pool more attractive for breeding amphibians next spring. They also plan to fill and level a large dip in the driveway at the entrance off Shepard Road. The Greenway is fortunate to have such a wonderful partner!

Thanks to Destiny Kinal for arranging a three-person community service work crew who recently cleared a large quantity of invasive Japanese honeysuckle from the Pine Woods. We are planning to replace the fast-growing honeysuckle with more appropriate native shrubs next spring.

# Friends of the Carantouan Greenway

Yes! Count me in! I believe in protecting farm and forestland, wildlife habitat and watersheds in the Penn-York Valley. I want to become a member of Carantouan Greenway! ☐ Mighty Oak ......\$500/year ☐ Trailblazer .....\$25/year ☐ Golden Eagle......\$75/year □ Other .....\$ □ Stargazer .....\$50/year ☐ Renewing member ☐ New member ☐ I would like to receive the newsletter via email. Email address\_ ☐ I prefer to receive the newsletter in the mail. ☐ I prefer not to receive the newsletter. Name\_\_\_\_ Address \_\_\_\_\_ Town, State, and Zip\_\_\_\_\_ E-mail Address Telephone Gifts to Carantouan Greenway are fully tax deductible! (Tax ID Number 23-2750872) Please send all contributions to Carantouan Greenway, P.O. Box 441, Sayre, PA 18840-0441 Land Trust Alliance or P.O. Box 827, Waverly, NY 14892-0827 or on-line at carantouangreenway.org/joinonline

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