



Butterfly - Mariposa - Papillion - Bee - Abeja - Abeille

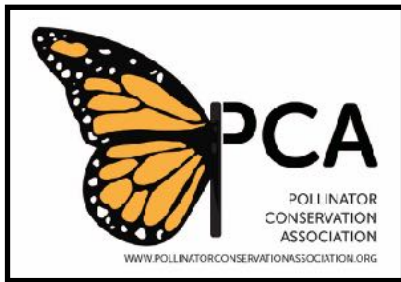
the POLLINATOR

The Native Pollinator Conservation Magazine
Fall/Winter 2018-19 Volume 1 Issue 1

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**Monarch Butterflies on native Blue Vervain (*Verbena hastata*)
at Times Beach Nature Preserve, Buffalo, New York**



Welcome to **the POLLINATOR**
The Native Pollinator Conservation Magazine
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Table of Contents

Welcome	Page 1
The Pollinator Conservation Association (PCA) The Niagara Greenway Pollinator Partnership	
Cover Story	Page 2
“Monarchy Rising: A Butterfly Odyssey” <i>by Jay Burney</i>	
A Master Naturalist’s Minute	Page 3
“Native Plants are Critical for Pollinator Conservation” <i>by Michelle Frederick Vanstrom</i>	
Meet Our Conservation Leaders	Pages 6-10
Melissa Fratello Buffalo Audubon Ken Parker PUSH BLUE David O’Donnell Eastern Monarch Butterfly Farm Steve and Megan Olson Grazing Buffalo	
Best Practices for Pollinator Conservation?	Page 11
Back Page	A photographic appreciation of native fall flowers

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Welcome

The Pollinator Conservation Association was established in 2016 as a New York State Registered 501,C,3 not for profit conservation organization.

The purpose of the organization is to advocate for and promote environmental conservation through the lens of native pollinators and native plants. The organization engages in educational programming, promotes local and regional conservation strategies, site development and protection, and provides consultation services for both public and private sector clients.

The initial service area of the Buffalo-based organization has been the Niagara River Greenway and its associated watersheds. This includes urban and rural areas, and specific habitat design, development and long term conservation planning. The organization promotes Connectivity through evaluations of natural history, human development, and the profound interactions between nature and people.

For more information visit our website: www.pollinatorconservationassociation.org, or email us at greenwatch100@gmail.com.

The Niagara Greenway Pollinator Partnership

The Niagara Greenway Commission was established to create a network of public greenspaces and multiuse trails extending from Lake Erie to Lake Ontario along the Niagara River.

In 2018 the PCA and the Greenway Commission partnered to create the Greenway Pollinator Partnership. The conceptual basis of the partnership is to create an information and advocacy network of interested partners in the public and private sector of the Niagara River Greenway and its associated watersheds. The group is organizing a blueprint of sites and potential sites, and designing short and long term planning and conservation strategies for the sites, the region, and the partnership.

Members of the partnership include The Pollinator Conservation Association, The Niagara River Greenway Commission, New York State Department of Environmental Conservation, New York State Parks, Recreation and Historic Preservation, SUNY Buffalo State, The Olmsted Conservancy, Buffalo Niagara Waterkeeper, Western New York Land Conservancy, Western New York Environmental Alliance, The Buffalo Museum of Science, Buffalo Audubon, Erie County, and the Town of Grand Island. If you would like more information or represent an entity that would like to join this partnership email: greenwatch100@gmail.com



Figure 1



Monarchy Rising

A butterfly odyssey

by Jay Burney

The Story of the Monarch Butterfly is historical, iconic, and for a while now, sadly typical of the decline of nature, pollinators, and the condition of the natural world. According to the Center for Biological Diversity, the North American population of *Danaus plexippus* has declined by 80% during the past two decades. Habitat loss, use of pesticides, and severe storms have contributed to the decline. In 2014, the CBD, the Xerces Society, the Center for Food Safety, and renowned monarch researcher Lincoln Brower petitioned the U.S. Fish and Wildlife Service to protect the species under the Endangered Species Act. USFWS “is now conducting a review of it’s status and must decide on protection by 2019. In Canada, the Committee on the Status of Endangered Wildlife has recommended that the Canadian government list the monarch as an endangered species. Monarch butterfly migration is now recognized as a “threatened process” by the International Union for the Conservation of Nature.”

The decline of the Monarchs has lit a fire under conservation activists including the Pollinator Conservation Association. Since 2014 many organizations have been pulling together to recognize the threats, and are working to save this iconic species. The good news is that during the autumn of 2018, and throughout the Great Lakes, the Monarch butterfly is making a strong comeback. This butterfly migrates from the north to a small mountainous area in central Mexico. This fall, it has appeared in numbers not seen in decades. Great Lakes areas including Western New York and Southern Ontario played host to hundreds of thousands if not millions of these orange natural jewels. They have been flying, feeding, and roosting in local habitats such as the Times Beach Nature Preserve on the Lake Erie shoreline. And then they were off on in their long 2,000 mile migration. They began arriving in the Mexican overwintering areas on November 6.

Monarch Butterfly Resources

Journey South Migration News Fall 2018

-[Map of Monarch Winter Sanctuaries](#)

-[September 13, 2018 “A Grand Exodus”](#) In a spectacular flow at least 500 miles wide, millions of monarchs made a grand exodus from the Great Lakes region-A once in a lifetime event.

-[November 1, 2018 Waiting for the First Arrivals](#)

-[November 7, 2018 “They’re here”](#)

[Center for Biological Diversity](#)

[Xerces Society](#)

[Pollinator Conservation Association Monarch Page](#)

PCA Youtube VIDEO [“Times Beach Monarch Migration 9/2/18”](#)





Native Plants are Critical for Pollinator Conservation

by

**Michelle Vanstrom,
NYS Master Naturalist**

“For a moment, try to put yourself into the wings of a pollinator. You need to feed on [insects, berries] or nectar throughout the day in order to survive. You need to draw that nectar from flowers that offer openings for your wings. We think of [English] garden flowerbeds when we begin discussing pollinators. Our initial [gardening] plans, [however], often travel no higher than our waists. Native plants—trees, shrubs, vines, wildflowers, and native grasses— are important species that co-evolved with pollinators over thousands of years.”

—Marcus Schneck, [Creating a Butterfly Garden](#)

The PCA defines a native plant as *one that occurs naturally in a particular region, ecosystem, and/or habitat, and was present prior to European Settlement*. Studies note regional species have become genetically adapted to local conditions. It is also possible insects may navigate distances based on genetic markers found at the native plants’ cellular level.

Local ecotype regions have ecological boundaries, not human designated borders. In Niagara and Erie Counties, a rare ecological zone exists. The Carolinian Forest Zone, a life zone in eastern North America, is characterized primarily by a predominance of deciduous (broad-leaf) trees with keystone species —Sassafras, Cucumber, Magnolia, Tulip Tree, Paw Paw. It sweeps from Toronto, to Lake Erie, and south to the Carolinas. Many species of birds, fish, amphibians, reptiles, invertebrates, and mammals more typical to the south find a home in this region, our region.

In managing for insect pollinators, the first step is to understand the habitat needs of bees, butterflies, moths, and other species. These needs can be divided into two main categories: a diversity of native flowers available throughout three seasons and nesting sites, host plants.

Pollinators perform such a range of ecological services in natural ecosystems that they are clearly a keystone group in nearly all terrestrial ecosystems, necessary for plant reproduction, and in forming the basis of an energy-rich food web [Kearns, et al 1998].

It’s estimated that 60-80 percent of the world’s flowering plants depend on animals—mostly insects—for pollination. Many colorful, migratory songbirds require a diet of berries, fruits, and seeds from insect pollinated plants. In North America, most pollinators are insects: butterflies, moths, bees, flies, beetles, wasps; bugs that coevolved in a specialized relationship with regional native plants. Hummingbirds and a couple of species of bats can be added to the pollinator list.



Pollinating creatures are in crisis, with populations plummeting. The National Research Council reported significant losses of both managed (honeybees) and wild pollinators, citing habitat loss, pesticide use, and the spread of invasive species as three of the major causes of decline.

The “bottom line” can be a strong motivation for installing and maintaining pollinator habitats and natural landscaping, instead of conventional lawn. The savings that can be realized for municipalities, park districts, school districts, corporations, and institution campuses are dramatically illustrated with examples, where approximately nine-tenths of the cost of conventional landscape maintenance was avoided. Some typical economic benefits are:

- creation of a distinctive community image that strengthens real estate markets,
- reduced expense for storm water management facilities,
- soil erosion control
- support of the natural landscaping component of the green industry (United States EPA)
- Pollinators in natural areas support diverse plant communities, wildlife food webs, and adjacent farmland.

Strengthening this small, but critical piece to the environmental puzzle has a ripple effect. The increased presence of pollinators will provide an ample source of nutrition for internationally significant migrating bird populations that will attract birdwatchers, photographers, and eco-tourists to our region. The diverse colors, shapes, sounds, textures, odors and tastes found in the natural pollinator environment provide the observer with sensory experiences not found in more sterile, traditional landscapes. It offers children the opportunity to experience and learn from nature in their own yard and community. A sustainable landscape preserves and protects nature’s balance. Plants are an integral part of the sustainable landscape as long as the species used are well suited to the existing light, moisture, and soil conditions. Such plant choices require low input of labor, fertilizers, herbicides, insecticides, and fungicides to thrive. [Ecological Landscaping Association].

In ecology, sustainability describes how biological systems remain diverse and productive over time. Long lived and healthy habitats are examples of sustainable biological systems. For humans, sustainability is the potential for long-term maintenance of well-being, which has environmental, economic, and social dimensions. Healthy ecosystems and environments provide vital goods and services to humans and other organisms. Distinctive native plant communities, and natural landscaping that preserves the unique characteristics of a community is a unique community asset.

Whether the goal is to beautify and to protect and preserve habitat, or to provide functional services or both, we know that green spaces with pollinators lift people’s hearts and are an essential part of human life.



Sources:

Creating A Butterfly Garden, Marcus Schneck
Wild Ones Niagara Pollinator Pathway Niagara Falls, A
Niagara River Greenway Project Submission,
Project Creator: M. Vanstrom
The Natural Treasures of Carolinian Canada, The
Carolinian Canada Coalition, Edited by Lorraine Johnson
Wild Ones Guidelines on the Selection of Native Plants



Forage for Pollinators			
Common Name	Latin	Bloom Time	Attracts
Willow	Salix	Spring	Orchard mason bees, Mourning cloak, Viceroy butterflies
Redbud	Cercis	Spring	Ochard mason bees
Maple	Acer	Early Spring	Cellophane bees
Black Cherry	Prunus	Spring	Columbia silkmoth
Sumac	Rhus	Late Spring	Bees, Beetles
Black Locust	Robinia	Late Spring	Bees
Paw Paw	Asimina	Spring	Zebra Swallowtail butterfly
Birch	Betula	Spring	Eastern Swallowtail butterfly
Hawthorn	Crataegus	Spring	Gray Hairstreak, Mourning Cloak, Azure Butterflies
Ash	Fraxinus	Spring	Eastern Tiger Swallowtail, Hickory Hairstreak, Mourning Cloak Butterflies
Elm	Ulmus	Spring	Mourning Cloak Butterfly, Columbia Silkmoth
Walnut	Juglans	Spring	Hickory Hairstreak Butterfly
Tulip Tree	Liriodendron	Late Spring	Eastern Tiger Swallowtail Butterfly
Cucumber Tree	Magnolia	Spring	Beetles, honeybee
Poplar	Populus	Spring	Viceroy Butterfly
Oak	Quercus	Spring	Edwards' Hairstreak, Hickory Hairstreak Butterflies
Hackberry	Celtis	Spring	Mourning Cloak, American Snout Butterflies
Serviceberry	Amelanchier	Spring	Bees
Basswood	Tilia	Summer	Bees
Currant	Ribes	Spring	Butterflies
Blueberries	Vaccinium	Spring	Bees, Butterflies
Dogwood	Cornus	Spring	Spring Azure Butterfly
			Source: <i>Pollination Guelph</i>



Meet Our Conservation Leaders

Melissa Fratello

-Buffalo Audubon-



This past year Melissa Fratello became the new executive director of Buffalo Audubon. We sat down with her and asked her about her new job.

Tell us about who you are, what brought you to this new job?

Well, it's safe to say I took a non-traditional route. My academic background is in urban planning, and I've worked in affordable housing and community development, federal government and urban agriculture over the last ten years. While my work in urban ag had a focus on native plants and conservation as it relates to urban land use, it was my personal/recreational interest in birding and nature that drew me to Buffalo Audubon as a board member 8 years ago. When the opportunity came to lead the organization at a really critical time in terms of distilling the focus of our work, and further defining our role in advocacy and conservation regionally as part of the National Audubon network, I couldn't let it pass me by. My predecessor, Loren Smith, laid the foundation for all of this, and I'm lucky to have been selected to build on it!

What is Audubon's role in WNY?

Our mission centers on education, advocacy and conservation efforts that create opportunities for people to connect with and steward the natural environment. Often, people associate Buffalo Audubon solely with our headquarters – Beaver Meadow Audubon Center in North Java. Beaver Meadow is a gem, with 400 acres of wetland and forest habitat, where we conduct educational programming and events, yet we're engaged in conservation work throughout the region that we have an opportunity to build on in terms of community awareness and engagement. We're currently working on a large-scale, long term invasives management plan at Buckhorn Island Marsh and State Park in partnership with NYS Parks and Audubon Great Lakes, and we have a super exciting habitat project funded by the Niagara Greenway to support Common Tern nesting habitat in the Niagara River near Strawberry Island.

What's distinct about Buffalo Audubon in relation to its environmental peers in WNY is that we connect people to nature primarily through birds, and that gives us an opportunity to reach anyone, anywhere. We also happen to be located in a region with an IBA (Globally Significant Important Bird

Area), giving us an opportunity to capitalize on the Niagara River Corridor to conduct innovative program and engage in collaborative efforts around the health of the river.

What do you see as Audubon's role and future from the perspective of the new Executive Director?

Buffalo Audubon is one of the oldest Audubon chapters in the country, and its focus has shifted back and forth over its lifespan from one of bird observation and protection to one of general appreciation and connection to the natural world. My goal is to draw on both, branding Buffalo Audubon as a bird-centric conservation organization and creating a framework for education, conservation and policy advocacy efforts that are intentional in addressing equity, diversity and inclusion. The environmental realm in WNY and across the country has historically been a space for middle class white folks, primarily men. We're serious about reaching new audiences in meaningful ways, and creating space for what connecting with and stewarding nature means and looks like for those audiences.

Beyond creating this framework, we're looking to build on the assets we have on staff, developing program to better utilize and share their wealth of knowledge – taking a new approach to educational opportunities that will help us build a pipeline of supporters and environmental stewards. A Master Birder program, mycology series, certified backyard habitats - programs geared toward adults that can be delivered throughout the region, beyond Beaver Meadow. I've also got a Birds and Brewers theme running around in my head - I have loads of ideas – the challenge is translating them from thought to action! I'm in the process of working with the board and staff to draft a roadmap for the next 3-5 years.

How can people become involved with Buffalo Audubon?

We're always in need of volunteer program leaders, and would love to engage college students in that capacity! Folks looking to check us out can sign up for our newsletter, follow us on facebook and/or instagram, attend a bird walk/field trip or a workshop, volunteer, donate, or just come out to Beaver Meadow and go for a hike!





Meet our Conservation Leaders



Ken Parker
PUSH BLUE

KEN PARKER is a passionate indigenous horticulturalist and member of the Seneca Nation of Indians. A New York State Certified Nursery Landscape Professional (CNLP), he has spent

decades of his life devoted to growing, installing, teaching and promoting indigenous plants of North America. Ken has proactively participated in various environmental projects, including conservation, restoration, corporate landscaping, education, marketing and consulting throughout the United States and Canada over the past twenty-five years.

His vast knowledge of native plants has made him an in-demand local speaker and national lecturer for numerous environmental groups and Native Nations including the Mohawks of St. Regis, NY; the Seminoles of FL; the Pueblos of NM and the Navajo Nation of AZ.

As an international instructor, Ken has taught *Fundamentals of Horticulture* and *Landscape and Horticulture* at the Six Nations of the Grand River Reserve in Ontario Canada and *Professional Development for Horticulture Associates* for the Landscape Ontario Horticultural Trades Association.

In recent years he has lectured at the National Seed Conference in New Mexico and in 2016 consulted for the Shinnecock tribe of Long Island; The Mohegan tribe of CT, the Intertribal Native Nursery Council and the U.S. Forestry Department. He was the founder and co-owner for over 17 years of *Sweet Grass Gardens* in Ontario, Canada, North America's first Native owned and operated indigenous plant nursery.

Ken authored the Seneca Nation of Indians Native Plant Landscaping Policy. This Native Plant policy was unanimously approved in March 2014 and the Seneca Nation became the first US tribe to ensure that new plantings in public spaces on Seneca lands will be exclusively comprised of local indigenous Western New York species.





Meet our Conservation Leaders

David O'Donnell

Eastern Monarch Butterfly Farm, Clarence New York

Dave O'Donnell is a long-time environmental activist and advocate for conservation with a huge focus on Monarch Butterflies. He raises and releases healthy butterflies, raises native plants including milkweeds (for sale), and makes entertaining and informational educational presentations for people of all ages. He advocates and works “boots on the ground” for Monarch recovery throughout the Western New York region. O'Donnell is a strong proponent of using local native stock to both create and restore monarch habitat and to build conservation

initiatives that are sustainable. During the summer months Dave can be found on most Saturdays at the Clarence Hollow Farmer's Market.



Links

Eastern Monarch Butterfly Farm
www.easternmonarchbutterflyfarm.com

FACEBOOK

email: Dave O'Donnell info@easternmonarchbutterflyfarm.com



David O'Donnell of the Eastern Monarch Butterfly Farm releases butterflies and meets the camera's with Erie County Executive Mark Poloncarz at Times Beach Nature Preserve in Buffalo, New York



Meet Our Conservation Leaders

Steve and Megan Olson

Grazing Buffalo - Eco-Landscape Design and Restoration

If you are lucky enough to come across Steve and Megan Olson you will probably notice right away that they are energetic, extremely knowledgeable about sustainable landscaping strategies, and are champions of all things local. Including and especially the landscaping possibilities of using native plants to enhance native ecological integrity.

During the last year the Pollinator Conservation Association has had the privilege of working with this dynamic couple and the team that they have assembled. Together we have been building native landscapes and pollinator conservation areas along some of our regions most critical areas, including Buffalo's Outer Harbor.

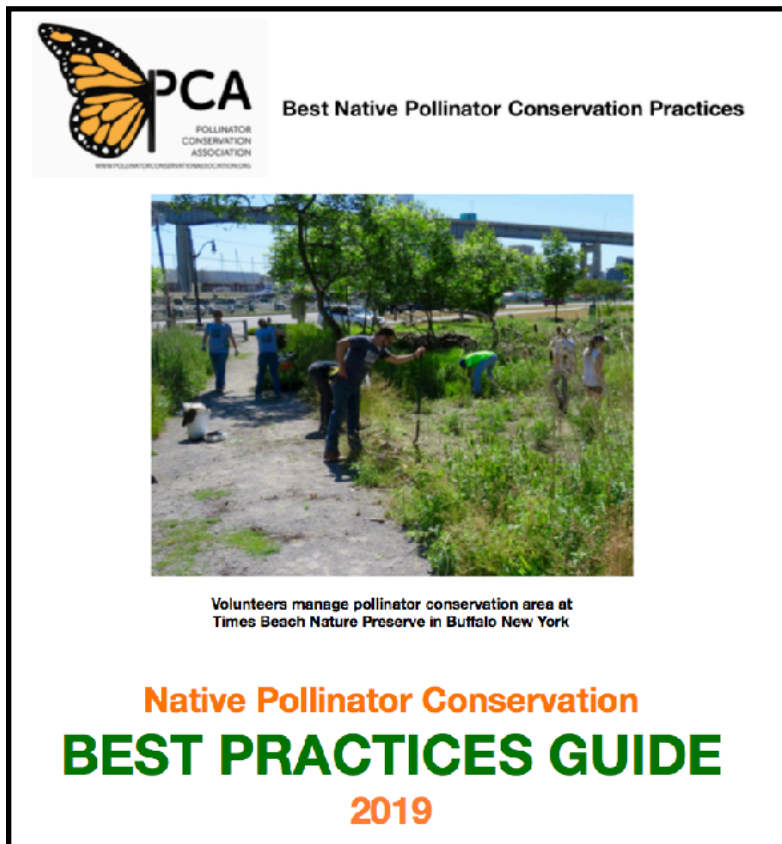
Links

Grazing Buffalo Design and Restoration
"Working with nature to plant refined ecological landscapes"
www.grazingbuffalo.com

FACEBOOK

Grazing Buffalo Eco-Landscape
Design and Restoration
Newell Nussbaumer Buffalo Rising,
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[https://www.buffalorising.com/
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Best Practices?

Everyone knows -botanists, biologists, naturalists, gardeners, consultants, site managers, educators, public officials, you and me -everyone knows that we can do better. Even the fundamental things like choosing or planning a site, targeting conservation goals, picking plant species, can be complicated, time consuming, and in many cases just plain maddening. What are the appropriate plants? What are the right management and maintenance strategies, schedules, tools, and planning mechanisms?

The publishers of **the POLLINATOR** are at work compiling a best practices guide, and we need your help. We plan to publish a series of articles in this magazine, with the eventual goal of creating a best practices guidebook that can be distributed through the Pollinator Partnership Network. Please help us by sending along some of your ideas, practices, hints, and strategies for the successful creation, installation, and implementation of a pollinator conservation area.

Topics to Consider

- site selection and analysis-
- soil selection, soil analysis-
- water access-
- stormwater management-
- learning about native pollinators-
- plant and seed selection and acquisition-
- targeting for native species
- invasives control-
- maintenance practices, schedules-
- education, outreach, and community engagement-

email your ideas, links to best practices, or suggestions to: GREENWATCH100@gmail.com



-an appreciation of fall native flowers-

