GARRET MOUNTAIN BUTTERFLY GARDEN

Spring/Summer 2021

Garret Mountain Reservation, Passaic County, New Jersey



Butterfly Garden in late August

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Summary

The Friends of Garret Mountain Reservation (FOGMR) have created a new 30 X 80 foot butterfly garden at Garret Mountain Reservation near the Tower Picnic Area. Christine Toth was the Primary Project Coordinator and Designer. Vera Lazar was the Assistant Coordinator, and Fred Pfeifer was the Construction Manager. The planning began in the winter of 2020 and a garland cutting ceremony was held in mid July 2021. Passaic County Parks Dept. provided and built a deer fence around the garden. The volunteers did the planting work. Bergen County Audubon Society, Passaic County Board of County Commissioners/CityGreen, and FOGMR funded the garden. Master Gardener Kathy Sauerborn and Robert Somes from NJDEP also donated plants. This garden is an effort to attract more butterflies and butterfly species to Garret Mountain, and to increase public awareness.

Background Information

Over the past few decades many species of butterflies, such as the Monarch, have declined around the world. One of the major threats to butterflies includes habitat loss due to residential, commercial, and agricultural development. Butterfly habitats play a significant role in increasing biodiversity and keeping the environment healthy. As a National Natural Landmark site and one of Passaic County's most frequented parks, Garret Mountain is, indeed, a key location to support butterfly populations and raise public awareness.

Goals

- To create public awareness about the importance of butterflies and of native plants.
- To provide educational opportunities for the public, especially for children.
- To support biodiversity and help in preventing butterfly species from going extinct.
- To provide a supplemental food source for birds.
- To enhance the natural beauty at Garret Mountain Reservation.



Monarch Butterfly at Garret Butterfly Garden
Photo by Al Graham

Garden Creation (Timeline)

Mid May - Passaic County Parks Dept. prepared the soil and installed an eight-foot high deer fence. **FOGMR** then held planting events attended by FOGMR Volunteers, Master Gardeners, and City Green. The events include:

Late May - Volunteers planted perennials/shrubs from Bergen County Audubon and Kathy Sauerborn's donations.

Early June - Volunteers created a woodchip path and planted additional perennials.

Late June - With Julian Cannatta, volunteers planted perennials and shrubs from City Green.

July - Fred Pfeifer (FOGMR) created a raised bed in the garden. Since the garden is situated in a wet area, the raised bed allows some plants that prefer dry conditions to grow. Fred also managed the application of woodchips over the entire garden and installed chickenwire around the garden to deter groundhogs from entering.

August - FOGMR volunteers planted native shrubs with deer protection outside the butterfly garden. Fred created a patch outside the garden.

Early September - Volunteers planted donations from NJDEP and Kathy Sauerborn. Perennials were planted inside the garden. Several plants distasteful to deer, including Mountain Mint and Common Milkweed, were planted in the patch outside the butterfly garden.

Late October - FOGMR volunteers planted trees from City Green's Dig-in Tree Grant. Understory trees with deer protection were planted behind the garden.









Raised Bed created by Fred Pfeifer

Garden Design

The 30 X 80 foot garden consists of a right, center (walking path), and left lane. Since the right lane is closer to the forest it contains the taller shrubs/plants. The left and right lanes consist of eight 10 x 11 sections. Each section contains one or two groupings of the same type of plant. Grouping plants of the same type make it easier for the butterflies to locate. Plant groupings also make it easier for visitors to identify plants. For visual appeal, rows of Zinnia extend down the entire length of the garden along the fence. To benefit Monarchs, rows of Swamp Milkweed extend down the entire length of the garden along the walking path. Monarchs use Swamp Milkweed as their host and prefer to lay eggs when the milkweed is spread out in different locations.

It is also important for butterflies to have flowers continually blooming from early spring through late fall. When one type of flower stops blooming the next begins. Very early and very late bloomers are particularly critical. For example, the butterfly garden contains sections of Zizia and Common Blue Violet that begin blooming as early as April. The garden also contains late bloomers including Goldenrod and New England Aster, which bloom into October.

<u>Educational Signs</u>. Butterfly and plant ID signs were set up throughout the garden for visitors to learn about butterfly gardening. We hope that visitors will start butterfly gardening in their own yards.



Bergen County Audubon's Butterfly ID Sign

The garden has also been certified as a wildlife garden by the Bergen County Audubon Society.

Plant ID Signs





<u>Plants</u>

The plants in the garden consist mainly of perennial flowers, shrubs, and vines native to New Jersey. Butterflies have evolved with native plants over thousands of years and depend on them for survival. Specific host plants for many types of butterflies and nectar-producing flowers were included. Annual plants, such as Zinnia and Lantana, were included as an additional source of nectar.

Plant List

- Northern Spicebush (Lindera benzoin)
- Low Bush Blueberry (Vaccinium angustifolium)
- Winterberry Shurb (*Ilex verticillate*)
- Sweet Pepper Bush (Clethra alnifolia)
- Buttonbush (Cephalanthus occidentalis)
- Switch Grass (Panicum virgatum)
- Arrowood Viburnum (Viburnum dentatum)
- Pipevine (Aristolochia macrophylla)
- Inkberry (Ilex glabra)
- Swamp Milkweed (Asclepias incarnata)
- Ironweed (Vernonia gigantea)
- Swamp Rose Mallow (Hibiscus moscheutos)
- Hibiscus (Hibiscus laevis)
- Violet (Viola sororia)
- Joe-pye weed (Eutrochium purpureum)
- Joe-pye weed (Eupatorium dubium)

- Golden Alexander (Zizia aurea)
- Golden Alexander (Zizia aptera)
- Coneflower (Echinacea purpure)
- Green Headed Coneflower (Rudbeckia laciniata)
- Mistflower (Conoclinium coelestinum)
- Bee Balm (Monarda didymium)
- Liatris (Liatris spicata)
- Cardinal Flower (Lobelia cardinalis)
- Compass Plant (Silphium laciniatum)
- Brown eyed Susan (Rudbeckia triloba)
- False Indigo (Baptisia australis)
- Aster (Stokesia laevis)
- New England Aster (Symphyotrichum novae-angliae)
- Golden Rod (Solidago)
- Zinnia
- Lantana

Garret Mountain Butterfly Garden Photos

Some photos taken at the Garret Butterfly Garden this summer are shown below:

Female Eastern Tiger Swallowtails



Photo by Al Graham



Photo by Christine Toth

The dark form mimics the Pipevine Swallowtail, which is distasteful to predators, giving it additional protection.

Silver Spotted Skipper



Photo by Zulma Colon

Delaware Skipper



Photo by Christine Toth

Monarchs and Swamp Milkweed

Monarch laying eggs



Monarch egg on a Swamp Milkweed flowerhead



Photos by Fred Pfeifer

Monarch Caterpillar on Swamp Milkweed



Photo by Al Graham

Monarch Chrysalis



Photo by Christine Toth

Butterfly species that visited the garden

Butterfly list compiled by Fred Pfeifer at the Garret Butterfly Garden during spring/summer/fall 2021.

- Cabbage White
- Clouded Sulphur
- Orange Sulphur
- Tiger Swallowtail
- Spicebush Swallowtail
- Black Swallowtail
- Red-banded Hairstreak
- Summer Azure
- Eastern Tailed Blue
- Red Admiral
- American Lady
- Question Mark
- Painted Lady
- Dun Skipper

- Little Wood Satyr
- Monarch
- Silver Spotted Skipper
- Wild Indigo Duskywing
- Horace's Duskywing
- Northern Broken Dash
- Little Glassywing
- Sachem
- Pecks Skipper
- Least Skipper
- Delaware Skipper
- Zabulun Skipper
- Broad-winged Skipper

Activities

- At the Garret Mountain Bioblitz in June, Christine Toth gave tours of the new Butterfly Garden. The garden featured Black Swallowtail caterpillars on the Zizia. Master Gardener Kathy Sauerborn set up a butterfly display table nearby including informational signs, brochures, and live caterpillars. She discussed topics, including host plants and monarch migration, with visitors.
- On July 14th FOGMR held a Garland Cutting ceremony. The speakers included:
 Christine Toth (Trustee FOGMR), Vera Lazar (President FOGMR), Patti Pfeifer (Member
 North American Butterfly Association), Jasmine Moreano (Director of Community
 Engagement and Advocacy), Don Torino (President Bergen County Audubon Society),
 and Assad R. Akhter (Passaic County Commissioner). Patti Pfeifer presented the
 commissioners with butterfly garden certification from the North American Butterfly
 Association.



 Videos: FOGMR volunteer, Ray Perez, created a short video about the creation of the garden: Garden Creation

In late summer, another short YouTube video created by Peter Cerussi and John Korduba. <u>Garret Butterfly Garden</u>

• On November 2nd, Fred Pfeifer and Christine Toth presented at a North American Butterfly Association North Jersey meeting about the evolution of the garden.

Expansion

In October 2021, butterfly host trees were planted in the area behind the garden. Passaic County/City Green's Dig In! Tree Planting Program funded the trees. In addition, FOGMR provided shrubs. The plants included:

- American Cranberry Viburnums (Viburnum trilobum)
- Blackhaw Viburnums (Viburnum prunifolium)
- Elderberry (Sambucus)
- Pussywillow (Salix discolor 'Rosea')
- Autumn Brilliance Serviceberry (Amelanchier grandiflora)
- Silky Dogwood (Cornus amomum)
- Eastern Redbud (Cercis canadensis)
- American Mountain Ash (Sorbus americana)



Current Maintenance

To water the first plantings, three 100' hoses were connected to a faucet in the nearby building. Since the garden is in a wet area, it did not require watering through the summer. Passaic County Parks Dept. also provided abundant woodchips, which FOGMR volunteers placed over the entire garden. The woodchips were used as mulch, which conserves moisture and prevents weeds from spreading.

During the fall, the perennial flowers were left uncut. The seed heads of many flowers such as Coneflowers, Brown-Eyed Susans, Liatris, and others, provide a food source for birds. There are also several berry-producing shrubs in the garden, such as Inkberry, that will provide food for birds over the winter. Since Garret Mountain is an Audubon Society Important Bird Area, its fall harvest of berries and seeds is particularly valuable.

Future Plans

In the spring, FOGMR will evaluate the garden and determine if any additional planting or mulching will be needed. FOGMR also plans to investigate the possibility of further enhancing the area behind and around the garden by removing invasive grasses/plants and planting more native trees, shrubs, grasses and vines. Other ideas being explored include creating an area behind the garden for education, and the setting up of Bluebird nest boxes nearby.

ACKNOWLEDGEMENTS

FOGMR wish to offer our sincere thanks and gratitude to all who assisted in this project. We would like to thank the Passaic County Board of County Commissioners for providing funds for this project, and we would like to thank everyone in the Passaic County Parks Department, especially Parks & Recreation Director, Darryl Sparta, and Parks & Recreation Manager, Greg Moore. Much thanks to Frank Viglione, Daniel Inoa, and team for creating the fence. FOGMR never expected such a great fence for the garden!

Our sincere gratitude to all the Volunteers from Friends of Garret Mountain who helped with this project - with the digging, planting, mulching and other labor... Fred Pfeifer, Ray Perez, Kathy Sauerborn, Elsa Hidalgo Latheef, Alessia Eramo, Linda Mullaney, Jolene Sims, and Terry Perna. Special thanks to Elsa for providing lunches for the volunteers.

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Thank you to Al Graham for providing many beautiful butterfly photos. Thank you to Peter Cerussi and John Korduba for traveling from NYC a few times to create a youtube video.

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Thank you to Master Gardener Kathy Sauerborn for her advice, help in designing the garden, and for donating so many plants. Thank you to Robert Somes from NJDEP for his donations of plants. And thanks to Suzanne Bauer and Joan Murko for Cardinal flower donations.

Thank you to City Green for awarding us the Dig In! Grants and for providing and delivering quality shrubs/plants. Julian Cannatta was so helpful and a pleasure to work with.

Thank you to Don Torino and Bergen County Audubon Society for the grant and beautiful signs which they provided, and their teaching about the value and importance of native plant butterfly gardening.

Special thanks to Fred Pfeifer for his ongoing dedication in working on the butterfly garden throughout the summer and fall, and for continually looking to enhance the garden and the area around it.