



## TRAIL HACKS

Lisa Bonelli, Asst. Public Information Officer

Hey, new trail users! If you haven't been shown the ropes by a fellow hiker, or taken a hiking program with us, these "rules of the road" may help. Here are some of our top tips for beginner trail users.

### Start with a PAVED Trail. ( — solid black line on maps)

The Park System has 31 miles of paved trails designed for easy walking. These are generally flat and easy to follow, and usually have some benches to rest along the way. Paved trails are a great first trail experience, especially if you'd like to really relax, because the path is wide and very easy to follow.



Take a long or short walk on the paved trail at Thompson Park, Lincroft. In August you will see these and other trailside wildflowers.

The following paved trails start off close to parking lots with restroom buildings and beverage vending machines nearby.

- **Holmdel Park** (Holmdel): 0.5 mile loop through the heart of developed park areas
- **Dorbrook Recreation Area** (Colts Neck): 2.4-mile double loop ("figure 8") featuring two short 1+ mile loops
- **Thompson Park** (Lincroft): 4.3 mile perimeter loop (with a short 1.2-mile inner loop option)

**Timing Tip:**  
At a brisk pace, it takes about 20 minutes to walk 1 mile.

**Trail Map Tip:** Visit [www.MonmouthCountyParks.com](http://www.MonmouthCountyParks.com). Choose a park from the drop down menu (in this case *Henry Hudson Trail*) to view a brochure with trails map.

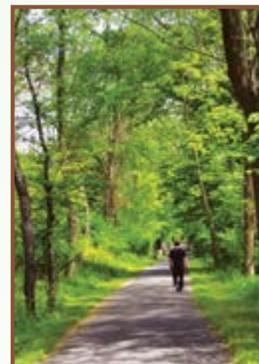


The paved trail at Holmdel Park.

**HHT Tip:** Scout your trip ahead of time, with special consideration for restroom facilities (which are limited).

There's also a much longer paved trail experience with rustic amenities. Most parking lot access points offer just a portable toilet nearby. New trail users usually select and travel short sections.

- **Henry Hudson Trail (HHT):** This 20+ mile, mostly paved trail is a former railroad right-of-way with multiple access points that travels across the county. A few sections are incomplete. Expect to cross street intersections, some of which may be busy.
- **Big Brook Park (Marlboro):** One mile of the Henry Hudson Trail passes through this park, which has an additional 0.9 miles of paved trail.



The Henry Hudson Trail (south) near Big Brook Park, and one of the street crossings.



The Park System offers expert-led group hikes and walks year-round to explore, exercise and socialize. (top) Ladies After Work Hike, Huber Woods Park; Wondrous Winter Walk, Clayton Park; Senior Hikers, Tatum Park.



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Here's some information you may not know about paved trails.

- **Paved trails are NOT exclusive to walkers/runners.** All trails in the Monmouth County Park System are multi-use, unless otherwise noted. That means you might share a paved trail with bicyclists, strollers, people on rollerblades, and even equestrians.
  - Holmdel Park has the only paved trail for Pedestrian/Foot Traffic Only.
- **Not all paved trails are short.** You could get tired after a mile or two on a longer trail, especially with children, elderly or first time walkers.
  - Plan your trail route ahead of time. This means look at the trail map and pick your start and finish points. Know how far you will walk before turning around if you don't plan to complete the whole route.
- **Not all paved trails are completely flat.** Some may have hilly sections.



Sections of the paved trail in Big Brook Park are hilly.



Equestrians on the paved trail at Thompson Park.

**Questions? Call us 7 days a week:  
732-842-4000 ext. 4312: M-F 8am-4:30pm,  
Weekends/Holidays 9am-4pm.**



Easy trail at Huber Woods Park (Fox Hollow).

## EASY, Natural Surface Trails Next.

(●/--- Circle/green dashed line on maps) If your goal is to get out in the woods and walk on a dirt path, try one of the following short, EASY trails to start. They may have some hills and dips, or obstructions like tree roots, but are generally comfortable for the kind of casual walking/hiking done by beginners.

- **Shark River Park/Cedar Loop Trail:** nice and wide!
- **Tatum Park/Holly Grove Trail:** especially pretty
- **Huber Woods Park/Fox Hollow:** a quiet, woodsy walk with nature
- **Thompson Park/Track Loop:** 1-mile, scenic loop through a tunnel of trees
- **Holmdel Park/Pond Walk:** travel through stands of stunning cherry blossoms in April (or Beech Glen for classic woodland trails year-round)



The Track Loop at Thompson Park.



The perimeter loop at the Manasquan Reservoir.

Our most popular natural surface walking trail is likely the 5-mile perimeter loop around the Manasquan Reservoir (classified MODERATE due to length). If you want to walk less than all five miles, you must pick a point to turn around.

**Plan Your Visit.** We know it's fun to be spontaneous. Driving to a new park or exploring a new trail can be the best kind of adventure...but only if you plan ahead. Knowing where you are on the trails is a requirement, not a recommendation.

**Weather Tip: Check the weather on the day of your visit and note if it's rained in the past few days. Muddy trails can be slippery and messy.**

**Footwear Tip: For natural surface trails, we recommend sturdy shoes with knobby treads and good ankle support. See Hiking Essentials and more from our Outdoor Adventures staff at [www.MonmouthCountyParks.com](http://www.MonmouthCountyParks.com), under "Activities."**

- **Check the Trail Map Before You Visit.** View maps online at [www.MonmouthCountyParks.com](http://www.MonmouthCountyParks.com), Click on Parks>Map Gallery to view the whole county and find a park trail near you. (pictured, right)

- Download a free trail map app on your phone. We provide instructions on the Map Gallery for the Esri ArcGIS Explorer.

- Visit the individual park page for a brochure, which will contain a detailed map of the trails.

- **Check the Trail Map When You Arrive.** Most parking lots near trail access points contain an Information Kiosk where you will find the park map and brochures, plus safety information such as emergency numbers and wildlife warnings (if there are any). Take a copy of the trail map with you!



Tatum Park kiosk/Red Hill Rd.



Zoom into this county map online to see the kinds of trails in each park: solid black line (paved), green dash (easy), blue dash (moderate) and black dash (challenging).

**WAYFINDING ON THE TRAILS.** Park System trails have a system of directional posts at starting points and intersections. These are now backed up in most parks with white, reflective tree markers, about 6-7' high, to guide you at decision points (intersections) and offer reassurance on longer sections of trail.



Directional posts and tree markers on the trails will help you find your way.

## What's a Rogue Trail?

These trails are not made by the Park System and are therefore not signed or on the maps.



This rogue trail (right, shown blocked with a fence) at Shark River Park now has a tree marker to keep you on course.

They are created by walkers taking short cuts, bikers seeking alternative routes with more challenging elements (roots and inclines), or naturally by deer as paths through the woods.

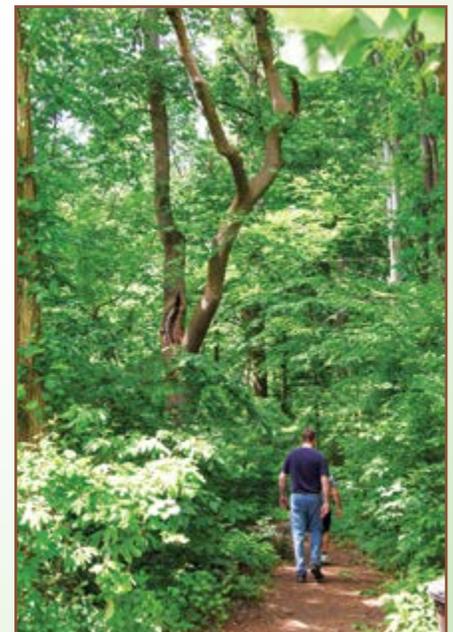
**Navigation Tip: Use a Map!** Many forest trails look alike, it's easy to get lost. If you wander onto an unknown trail it may have more difficult conditions than you are prepared for. Or, you could wander off the trail system altogether and end up on a path without markers (rogue trail).

## Trail Etiquette

- **Stay on Marked Trails:** Existing trails have been carefully selected to balance the user experience while protecting the natural environment. There could be delicate wildlife or plant species off trail; marked trails will carefully avoid these areas. Going off trail may also expose you to grassy, brushy areas favored by ticks.
- **Mind the Trail Width.** Travel single file on narrow trails to make room for people to pass (don't block the trail; stop to pass if needed).
- **Stay Right (Pass Left when approaching from behind).** Call ahead "on your left" when running/biking past others to warn of your approach.
- **Follow Right-of-Way Rules.** Bicyclists yield to all trail users because they are faster moving and may come upon others suddenly; bicyclists have to be in control. Pedestrians yield to equestrians because it's easier for walkers to step aside.



Trail courtesy is critical when the trails are busy at Dorbrook Rec Area.



Single file on narrow trails at Clayton Park.

## Coming Home to Walnford

*Gail Hunton; Chief, Acquisition & Design*

One day last December there was an urgent phone message on my desk. Kevin Chambers, an Ocean Grove resident called to let us to know that there was a set of eleven chairs up for auction. These weren't just any old chairs; they were early 19<sup>th</sup> century painted fancy chairs attributed to a well-known Philadelphia chairmaker and made for Nicholas Waln of Walnford. The auction house, a well-regarded antiques dealer in the Philadelphia area, stated that the chairs had good "provenance" (documented origin and ownership history). "They belong at Historic Walnford," Kevin said, encouraging us to purchase them.

After some background research with the auction house, I asked The Friends of the Parks\* to assist us with the auction, to purchase the chairs on our behalf. Executive Director Maria Wojciechowski jumped into action, establishing an account with the auction house. Then, somewhat excited and nervous, we bid on the chairs. To our delight, we won the bid and the eleven chairs became ours.

### Special Fancy Chairs

The eleven chairs were part of an original set of twelve—the location of the missing twelfth chair is unknown—purchased by Nicholas Waln (1763 – 1848). Nicholas is the son of Richard Waln, after whom Walnford is named. He learned the family's merchant trade business in Philadelphia then returned to Walnford to take over its management and commit himself to agriculture. Described by his father as "deep in the earth," Nicholas expanded the farming and milling activities at Walnford, enlarging the farm to 1,300 acres and rebuilding the gristmill in 1822. He and his wife Sarah presided over a large household including seven children and several non-family members, frequently hosting relatives from Philadelphia who considered Walnford their country home.

This set of chairs was made about 1830, probably acquired for the generously-sized dining room to accommodate the growing family and regular visitors.

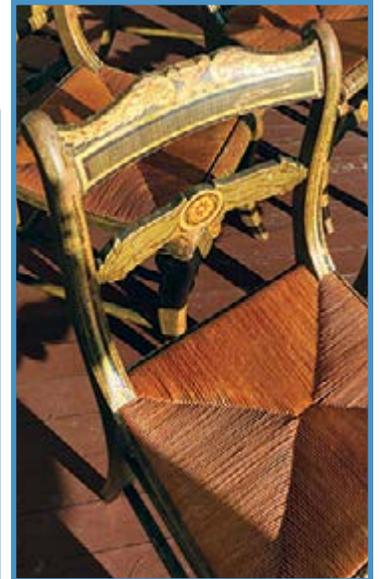
Nicholas Waln's estate inventory in 1848 lists "18 chairs and 2 tables" in the dining room, likely including this set of chairs. Most of the chairs are stamped "Walnford" on the rear seat rail, and they exhibit many similar features to other Philadelphia fancy chairs made at the time.



*Close-up of stamp on chairs*



*These chairs were returned to Historic Walnford in December 2020 (l to r) Site Supervisor Julie Fenlon, Friends Director Maria Wojciechowski and me on the Waln House front porch.*



Painted so-called "fancy chairs" such as these, constructed of wood with rush seats and stylized paint and gilt decoration, were a high-end production for the middle-class market. They often featured curved rear stiles and flared legs, like the Walnford chairs. Painted fancy chairs were produced throughout America during the first half of the 19<sup>th</sup> century. In Philadelphia, one of the major centers of early American furniture-making, the number of furniture craftsmen including ornamental painters almost doubled between 1800 and 1830.

### Researching Provenance

Through correspondence with the auction house and the Winterthur Museum, we learned that the Walnford chairs had been owned by a direct descendant of the Walns of Walnford, and were possibly made by John W. Patterson, a Philadelphia chairmaker working between about 1820 and 1840.

According to the research of Joshua W. Lane, Curator of Furniture at The Winterthur Museum, Patterson was one of many chairmakers in Philadelphia making fancy chairs in this style based on illustrated advertisements in local newspapers from that time.

Patterson made and mended chairs and stools, selling both retail and wholesale to the coastal trade and also selling "blanks" for other makers to ornament and sell. Chair styles that crop up in his accounts include slat back, Windsor, ball back, rocking, square back, "new pattern," sewing, Grecian, fancy, turned tops, round post, and others. Per Mr. Lane, Patterson varnished, painted matted, ornamented, and gilded the chairs he made. Among the woods cited in his account books were "poplar planks, curled maple rosewood and bird's eye maple."

## Why These Chairs Matter

When Edward and Joanne Mullen donated the 36-acre Walnford historic district to the Park System, the large gracious Waln house, built in 1773, came with very few original furnishings. The Park System carefully restored the historic house, mill and farm buildings in the 1990s, and this charming historic site has been open to the public since 2001.

Over the past 20+ years, very few Waln family furnishings with strong provenance have become available. That's why the homecoming of these Walnford chairs was such a welcome surprise not only because the chairs are a new-found tangible connection to Walnford's history, but also because of the happy circumstances that led to their purchase.



*Chairs by the fireplace in upstairs Waln House bedroom, then (1915) and now (2021)*

*The Park System is grateful to our many friends and supporters who, like Kevin Chambers, tip us off about items of interest small and large, whether they are special items for our historic sites or an important parcel of land for sale. Many thanks to the Friends of the Parks who purchased the chairs on our behalf. **The Waln family chairs will be exhibited this summer at Historic Walnford. Please check this site's page on our website for notice of the exhibit opening.***

\* The Friends of the Parks is a non-profit organization that helps fund special park programs and projects. [www.friendsofmonmouthcountyparks.com](http://www.friendsofmonmouthcountyparks.com)

## Walnford: Home of Historic Chairs

The Windsor chair, dating back to the late 17<sup>th</sup>- early 18<sup>th</sup> century, has maintained its level of mass popularity for four centuries largely due to two factors: they were comfortable and affordable. Windsor chairs received an even larger boom in popularity during the Colonial Revival Period of home furnishing in the early 20<sup>th</sup> century: a return to the historic colonial look with a modern twist. Homeowners used Windsor chairs as a focal point of many rooms to achieve the desired colonial look.



*Sack Back Windsor Chair: Early 19<sup>th</sup> Century, Wood MCPS Collection 84.17.658*



*Young visitors especially enjoy the Windsor rockers on the front porch.*

The Windsor chairs (and settee) currently in the Waln house front hall and the rockers popular with visitors on the front porch are reproductions of the Windsors that were formerly at Walnford and now privately owned. They were handcrafted as part of site restoration by the master Windsor chairmaker, William Wallick.

Traditionally, plank chairs were a utilitarian chair made of different types of wood and decorated to disguise its composition. This German style plank chair illustrates a much more elaborate version. The intricate carvings and details on the chair take what was typically a functional object and makes it a prestigious and elegant piece of furniture.



*Carved Plank Chair: Late 19<sup>th</sup> Century, Walnut MCPS Collection 84.17.285*



*Elizabethan Revival Parlor Chair: c. 1850, Rosewood with needlepoint seat MCPS Collection 84.17.254*

A subcategory of the Victorian Era furnishings, the Elizabethan Revival style used new machinery to make turned spools and spiral profiles. This allowed for more intricately carved chairs, such as this Elizabethan Parlor Chair, to be produced more quickly with increasingly more intricate patterns and decorations.

## The Intimate Relationship Between Gardener, Flower & Pollinator

Kate B. Lepis, Ph.D., Horticulturist

**P**ollinator gardens have become popular and for good reason: pollinators need our help. A phenomenon known as Colony Collapse Disorder in bees was recognized in 2006 as honey beekeepers around the country noted substantial losses in their domesticated hives (30-90%).<sup>1</sup> Unfortunately, this declining trend has continued and it is now clear wild pollinators are also in trouble.<sup>2</sup> Globally, 40% of pollinator species are facing extinction.<sup>2</sup>

What is happening? As with most ecological problems, there is no single answer. An ecosystem is a complex web of interactions. If you remove species, or add exotic invasives, the strands of interaction that connect life will also change, altering the way the ecosystem behaves. In the case of pollinators, there have been a number of assaults on the "ecothreads" that support them.

Feeding opportunities, along with nesting and overwintering habitat, have been shrinking worldwide as the use of intensive agriculture expands. This type of cultivation relies heavily on vast monocultures that replace native plant communities. Chemical control of weeds and pests further reduce pollinator resources or directly poison these valuable creatures.

*In NJ, the biggest threat to pollinator habitat is the conversion of fields and forests into developments, and replacement of native plants with species from other parts of the world.*

Newly introduced diseases and changes in historical climatic patterns have also had a negative impact on pollinator numbers.<sup>4</sup>

### Why Are Pollinators So Important?

Pollinator interactions are critical to the ecosystem because they help flowering plants reproduce. In their quest for food (usually nectar and excess pollen), pollinators get covered in a flower's pollen.

*Pollen is botanical sperm produced by the anthers (male part) of flowers. If pollen is successfully transferred from an anther to a receptive stigma on another flower (female part), then pollination has occurred.*



*Mason bee (Osmia sp.) on a pansy; Transverse-banded flower fly (Eristalis transversa) – a bee/wasp mimic – on chrysanthemums; Painted lady butterfly (Vanessa cardui) on zinnia; Eastern firefly (Photinus pyralis) on annual vinca.*

Without this process, fertilization (the fusion of sperm and egg) would not be possible and the ability of most flowering plants to produce seeds and fruits would be substantially reduced, if not eliminated.

It can be argued that human civilization would not exist if not for flowering plants; we simply rely too heavily on them directly for food or as feed for livestock. Plants, in turn, are dependent upon their pollinators.

### Home Gardeners Can Help

Even if your land is less than an acre in size, decisions about what to plant and the methods you use can help. Planting a pollinator garden can provide food and shelter for these hard working insects.

In addition to flowers that provide nectar and pollen for adult pollinators to eat, plant botanicals that provide food for the insect's young (i.e. caterpillars of butterflies and moths). It's essential to feed all stages in the life cycle. Many insect larval stages are host-specific, meaning they feed on only a few kinds of plants, including grasses, vines, trees and shrubs. When designing for pollinators, expect some feeding damage...it's for a good cause.



*Plant/Pollinator Love Affair: The monarch butterfly caterpillar and egg on milkweed (the only plant it will eat).*

Choose plants native to our region. These species do well in our climate with minimal effort, but they have also evolved alongside our native pollinators to provide a “well balanced” meal. While the name butterfly bush (*Buddleja davidii*) implies it’s a good choice for a pollinator garden—and you’ll see butterflies and bees buzzing around the copious flowers—this plant does not provide food for any caterpillars native to the Northeast.



*Butterfly bush only feeds adults.*

Provide habitat that will help pollinators survive winter (as adults, eggs, or immature pupa). This may even provide a benefit to the gardener—less autumn work.

- Let dried flower stalks remain in the garden all winter. The hollow stems are used by several kinds of bees as hibernating shelter.
- Allow fallen leaves to remain in shrub beds. Solitary bees burrow into holes and winter underground. The leaves supply insulation to keep subterranean cavities from freezing and protection from predators.
- If you prefer a neat yard, keep the beds closest to the house ship-shape and tidy and allow the beds further from your sight to be a bit “messier.”



*Our “bee hotel” in the All-American Garden has cavities as nesting habitat and overwintering sites for non-aggressive solitary bees, like the mason bee.*

Switch to an organic yard to benefit pollinators and the greater ecosystem. Insecticides often kill non-target species, including pollinators, and herbicides eliminate valuable food sources. In a way you need to follow the guidance of Yoda and “...unlearn what you have learned.” (Star Wars. The Empire Strikes Back)

Instead of spraying at the first sight of critters chomping on leaves, find out if those critters may be valuable pollinator larvae. Steering clear of insecticides also means the beneficial insects that eat pests can thrive and keep things in balance. The goal is not to eliminate aphids altogether, for example, but allow the balance of nature to keep their numbers below the point of damaging plant growth. Discover which insects are truly pests, and which are worth promoting. A beneficial insect may be poised to eat those pests, if given the chance.

**We Are Here to Help. Stop in or call with your garden insect questions. Take clear photos that will help us identify insect life on your property.**

An organic yard may require you to let go of some control as natural processes move forward. Another example is breaking away from the use of herbicides and allowing “weeds” to exist among the blades of grass.



*Common blue violet (*Viola sororia*) in your lawn can be an important spring food source for bees emerging from hibernation. White clover (*Trifolium repens*) provides pollinators with food throughout summer and adds nitrogen to soil (PHOTO: wikicommons).*

## Flower & Pollinator Co-Evolution

The relationship between flower and pollinator can be so intimate that the two species co-evolve. Over hundreds of millennia, as one partner changes, the other responds in concert. This can lead to flower and pollinator looking surprising similar. One extreme example would be a group of deceptive orchids that evolved flower parts to look and smell like a female bee, to trick males into trying to mate and inadvertently transfer pollen. (pictured)

Most flowers are not this specific, but you can observe certain flower characteristics and predict what type of pollinator they are designed for (see Table, next page).

On the other end of the spectrum, there are blooms considered to be generalists such as the daisy, sunflower or zinnia; their floral architecture allows for pollination by a variety of insects.



*The lip of bee the orchid (*Ophrys apifera*) growing in Ireland mimics the abdomen of a female bumble bee, luring males to try and mate and ensuring pollination.*

Pollinator	Color of Bloom	Aroma	Shape	Example
Ant	Green, yellow, brownish-red	Mild	Small, inconspicuous growing close to stem & low to ground, nectar glands on plant stem	<i>Euphorbia</i> 
Bee	Bright white-yellow. Blue or ultra-violet (bees cannot see red); color pattern provides nectar guide (often visible only with UV light)	Pleasant, sweet or minty	Often tubular with nectar at the base of tube; structure provides a place to land	<i>Chelone</i> 
Beetle	White to green	None to strongly fruity or rank scent	Large, bowl shape	<i>Magnolia</i> 
Butterfly	Bright-white, yellow, blue, red, purple; color pattern provides nectar guide	Faint but pleasant	Narrowly tubular; structure provides a wide place to land	<i>Ruellia</i> 
Fly [hoverfly preference more similar to bees]	Pale and dull to dark brown or purple; sometimes flecked with translucent patches	Putrid, like rotting meat	Funnel shaped or complex traps	<i>Asarum</i> 
Hummingbird	Bright red, yellow, orange	Scentless or mild	Long, narrow tubes with nectar glands at the end of the tube, often drooping; no landing pad	<i>Silene</i> 
Moth	White or pale	Strong sweet scent usually produced at night	Narrowly tubular, structure provides a wide landing pad; opens in evening	<i>Epiphyllum</i> 
Wasp	Like bees, wasps see UV light and tend to visit white or yellow flowers	Scent often mimics pheromones	Shallow flowers with sexual parts (& nectar glands) readily accessible	<i>Hypericum</i> 

*Asarum photo by F.F. Reynolds, Wikcommons; Epiphyllum photo by Beverly DeFelice*

## Pollinators: Not Just Bees & Butterflies

The insect world supplies ants, beetles, flies, midges, moths and wasps to help pollinate. Watching a hummingbird zip around from flower to flower teaches us that birds can be pollinators too. In warmer regions, small mammals play a much bigger role in pollination than they do here in the Northeast. Bats, lemurs, lizards, monkeys and opossum have been observed covered in pollen as they feed from flower to flower.



*Female ruby-throated hummingbird (Archilochus colubris) hovering in front of blooms of giant purple hyssop (Agastache scopulariifolia).*

Finally, try not to discriminate against the scary looking pollinators, they are not all aggressive towards people. The cicada killer wasp for instance is not known to attack people. The female preys on cicadas, pulling them into her underground tunnel where she lays her eggs inside as a feast for future larvae.



*Cicada Killer Wasp on vinca*

1. EPA, 2018. Environmental Protection Agency, Pollinator protection: colony collapse disorder. <https://www.epa.gov/pollinator-protection/colony-collapse-disorder> 2. Kopec, K. & L.A. Burd, 2017. Pollinators in peril: A systematic status review of North America and Hawaiian native bees. Center for Biological Diversity. 3. Pollinator Partnership, Protect Their Lives. Preserve Ours. (2021). Pollinators need you. You need pollinators. <https://www.pollinator.org/pollinators#fn>. 4. Ley, E.L. 2007. Selecting plants for pollinators. A regional guide for farmers, land managers, and gardeners in the eastern broadleaf forest oceanic province. Including the states of Connecticut, New Jersey, Rhode Island and parts of: Delaware, Kentucky, Maine, Maryland, Massachusetts, New Hampshire, New York, Ohio, Pennsylvania, Tennessee. A NAPPCC AND Pollinator Partnership™ Publication. 5. Ren, Z., Y. Zhao, H. Liang, Z. Tao & H. Tang. 2018. Pollination in China 1977 to 2017. Plant Diversity. 40: 172-180. 6. Bayer Contributor, 2019. The Value of Pollinators to the Ecosystem and Our Economy. Forbes. October 14. <https://www.forbes.com/sites/bayer/2019/10/14/the-value-of-pollinators-to-the-ecosystem-and-our-economy/?sh=64e315cb7a1d7>. Monmouth County Planning Board. 2017. Eco-tips Supporting pollinators. [https://www.co.monmouth.nj.us/documents/24/MCEC\\_Pollinator%20Brochure\\_112917.pdf](https://www.co.monmouth.nj.us/documents/24/MCEC_Pollinator%20Brochure_112917.pdf)

# POLLINATOR-FRIENDLY FLOWERS

Tanya DiNova, Park Ranger and Horticulturist

Monarda spp. (commonly called Bee Balm or Wild Bergamot) is a native American woodland mint, more popular as a perennial flower due to its pollinator significance. If you have ever visited Deep Cut Gardens, you have walked by this garden treasure at least 10 times. We love its bright colors adorning our summer bed, yet most of all we love it because of the pollinators it supports.

With habitat fragmentation and diminished natural resources, our hard working pollinators are in peril. This is why we go overboard planting as many pollinator-friendly flowers as we can fit in our space. You can be a pollinator champion too by planting Monarda in your yard.



**Latin Name:** Monarda fistulosa  
**Growth:** Herbaceous perennial, 2-4 feet tall, lavender to pink flowers.  
**Hardiness:** Zone 3-9  
**Light:** Full to partial sun  
**Soil:** Well-drained loam, sand or clay, but will tolerate poor soils  
**Water:** Dry to moderate moisture

*Monarda fistulosa, or wild bergamot is highly aromatic with showy lavender-pink flowers.*

Monarda consists of multiple species, most of which are hardy perennials and all of which are native to North America. Summertime flowers on all these species are attractive to humans and wildlife, including hummingbirds, bees, butterflies, moths and seed-eating birds. Blooms occur May-July in southern range and July-September in northern range. Foliage is greyish-green to dark green, lance-shaped with toothed margins, and a hairy or smooth surface. Aroma can range from thyme to oregano, mint, or rose geranium. This species is prone to powdery mildew, so adequate air circulation and soil drainage are necessary. Mammalian grazers such as deer and rabbits, avoid this plant, primarily due to its strong flavor.



*Monarda didyma or scarlet bee balm has long been cherished for its ornamental value.*



# POLLINATOR "GARDENERS"

Spring ephemeral woodland wildflowers such as trillium, wild ginger, bloodroot and violets would not be possible if it wasn't for ants who play an important role in seed dispersal, according to research. The seeds of these wildflowers contain a special adaptation elaiosome – a food source that helps the ants to carry them to their nests where it's used to feed the colony. After the elaiosome is consumed, the seeds germinate inside the ant colony. Assist our ant friends in their garden endeavors and "leave the leaves (and logs)" where ants live, so they have plenty of cover.



*Ants pollinate trillium and bloodroot (pictured) as well as wild ginger and violets.*

Flies, mosquitos and gnats pollinate too. In the woodland, skunk cabbage and Dutchman's pipe are attractive to flies because of their putrid smell. In the garden, Jack-in-the-pulpit flowers have a fungus-like smell that attracts many tiny insects, particularly fungus gnats.



*Flies pollinate vinca flowers.*

In recent years, bumble bee queens have been emerging from hibernation early, before the flowering plants that provide vital pollen and nectar. These hungry early bees cut holes in the plant leaves, which cause the plant to flower almost twice as quickly! Research suggests that bees are using this unusual "gardening" technique to get their food supply when flowers are not abundant.



*These holes in plant leaves are evidence it has fed the bees!*

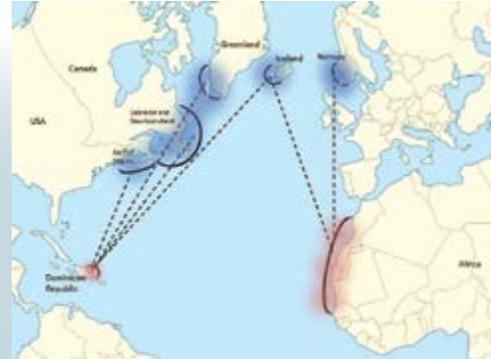
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# Humpback Whales

Paul Mandala, Park Naturalist

**H**umpback whales are a large species of baleen whale that can reach 40-50 ft. in length and weigh up to 25-30 tons. Baleen refers to the stiff keratin mouth plates they use to filter their food from the water. The name “humpback” comes from the distinctive hump on their back which is in front of their low, often stubby, small dorsal fin. They also have distinct knobs on the top of their head and lower jaw, as well as long flippers (up to 1/3 of the body length).

To understand humpback whales along the Jersey shore we need to “zoom out” and get some information on their habitat. Humpbacks are known for their long migrations from breeding grounds in tropical waters to feeding grounds in arctic waters. The four East Coast populations share the same breeding grounds in the tropics, but have different feeding grounds in the arctic. It is speculated that at some point in their migration, they may pass through and possibly even feed in NJ waters.

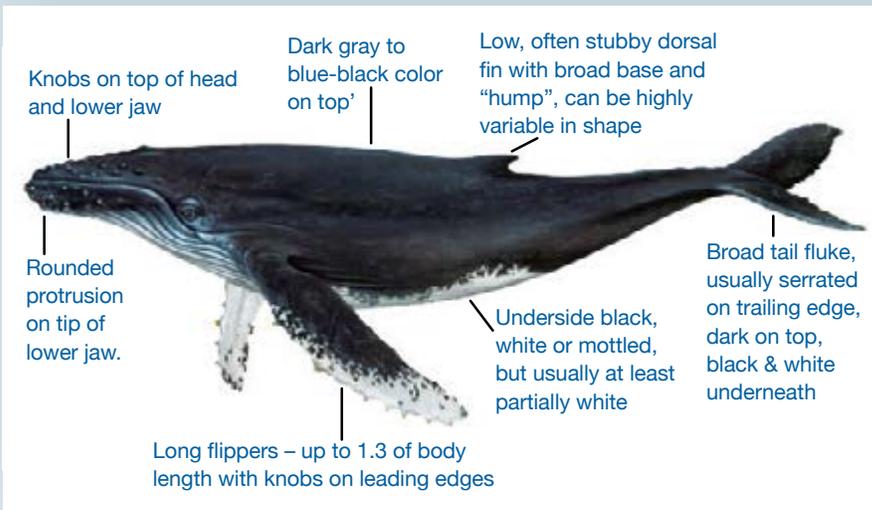


*This map shows the path that humpbacks use on their migration from breeding grounds in the tropics to feeding grounds in the Arctic in the Atlantic Ocean. Map by Mithriel Mackay*

## Humpback Whales of the New York Bight and the Hudson Canyon

The New York Bight includes the geographic term bight, which is a bend or curve in coast line, and is roughly the triangular area between Cape May, New Jersey to Montauk Point, Long Island. This NY Bight houses one of the largest submarine canyons of the world, known as the Hudson Canyon, which supports a rich and diverse aquatic ecosystem of significant ecological importance. Upwelling from the deeper waters to the shallower waters of the continental shelf brings a lot of nutrients to the water which provides food sources for a rich ecosystem.

According to Danielle Brown, Lead Researcher for the nonprofit organization Gotham Whale and PhD Candidate at Rutgers University. “As far as why it [NY Bight] is important for whales, we don’t actually know ... Currently, we are finding that increasing numbers of humpback whales are using the NY Bight as a feeding ground. All we know is that our ecosystem is healthy enough to sustain an abundance of Atlantic menhaden, which appears to be attracting whales here.”



*Anatomical photo of a Humpback by the National Oceanic and Atmospheric Administration (NOAA); descriptive information from the International Whaling Commission (IWC).*

They are known for their beautiful complex songs which are sung by males. They also display active surface behaviors such as



*Humpback Whale Breach. Photo by Danielle Brown.*

blows, breaching, fin slaps, and tail slaps. Breaching refers to when whales use their powerful fluke (or tail fin) to launch themselves out of the water.



*The New York Bight, the area between Cape May, NJ and Montauk Point, Long Island; includes the submarine Hudson Canyon. Figure by NOAA and the USGS*

# Tail Fluke Identification

The Gotham Whale organization, with the help of Danielle Brown, has documented over 200 different individual whales off the coast of New York and New Jersey since 2012. Each whale tail, or fluke, is unique to the individual. It has multiple identifiable characteristics that scientists use to make a positive identification. The first step in the ID process is examining the amount and pattern of the black and white coloration on the fluke. Next, the different notching of the fluke edges are examined, along with the scarring and barnacle formations. As the whales grow and age, these markings can change and new scars can be formed, adding to the difficulty of making a positive ID.



*Humpback whale flukes can be used to identify individuals. (top left) NYC0083 seen in the NY Bight in 2018 and 2020, (top right) NYC0213 only seen in 2020 and previously undocumented until I took this photo, which became first evidence for this whale in the NY bight, and (left) NYC0200 only seen in 2020.*

# Feeding Near vs Offshore

Humpback whales feed primarily in the summer to acquire large fat reserves known as blubber. They use their blubber reserves to survive in the less productive tropical waters where they breed and rarely feed. Humpbacks primarily eat krill and small schooling fish, accomplished by skim and lunge feeding methods. They use their baleen, instead of teeth, to naturally filter out prey from the water.

In Monmouth County waters, solitary or small pods of juvenile humpbacks have been seen feeding on Atlantic menhaden (bunker fish) by lunging at large schools of fish or by skim feeding—filtering prey by swimming with mouths open.

This is quite the sight to behold while standing on shore or on the deck of a tour boat. Larger pods are commonly seen further out at sea, in the deep waters close to the Hudson Canyon.

*“Whale, it must be time to eat! #HumpbackWhales, like this one in @*

*NOAASBNMS, filter-feed on small crustaceans and small fish, consuming up to 2,000 lbs of food per day. Sounds like there’s always room for dessert!” By “EarthsBlue” @sanctuaries NOAA Twitter.*



# Historic & Present Day Threats

The population of humpback whales was previously much larger; unfortunately, they were overharvested. The whaling industry used whales to create oil from blubber, and the population loss was estimated to be 90% globally. Ship strikes, entanglements, pollution (including noise) and overfishing have also had detrimental effects on whale populations and continue to be a threat today.

Laws and regulations are helping populations recover. Here in the US, whales are protected by the Marine Mammal Protection Act and the Endangered Species Act of the 1970s.

Boaters are asked to maintain a distance of 100 yards from any whale. If a vessel comes near any feeding whales, it is recommended to shut down the engine (and drift). This is to avoid disturbing, or worse—striking, one as it feeds. “You have to remember that these animals are focused on feeding; they eat hundreds and thousands of pounds of fish in a day,” Brown says. “And they don’t always pay attention to their surroundings. You don’t want to disrupt their feeding, or risk getting (them) hurt.”



*In spite of large body mass, humpbacks can be acrobatic in the water, appearing almost weightless as they perform the surface activities they are famous for. By Ed Lyman NOAA*

The best opportunity to see whales in NJ waters is by taking a commercial whale watching tour by boat. Humpback whales in Monmouth County can be seen primarily from April – December, but peak season is within the summer months. Many of the photos from this article were taken while at sea with Jersey Shore Whale Watching Tours.

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# GREEN HERITAGE

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## **Summer Scene**

*This photo of a painter in a tree-lined clearing at Thompson Park looks like a painting itself.*



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