



MONMOUTH COUNTY PARK SYSTEM GREEN HERITAGE

The Newsletter of Monmouth County's Open Space, Parks & Recreation Agency

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Breaking Hibernation & Shedding Our Winter Coats

Zack Karvelas, Assistant Public Information Officer

By the time you're reading this, the winter season will be coming to an end. As I am writing this, we have yet to see what kind of winter is in store for us (so far so warm). Hopefully you all caught the last issue of the Green Heritage highlighting ways to stay active throughout the winter season and were able to take advantage of some of the activities and opportunities the Park System provides. If not, there is always next year. But until then, it's time to welcome spring and all the lovely wildlife, plants, events and park opportunities that come with it.



As the snow melts and the chill gets replaced with a warmer, albeit rainier breeze, the plants and flowers will begin breaking through the soil to catch the first rays of the sunlight hitting their stems, the animals will be squirming out of their winter residences and birds returning to their favorite bird feeders and perches. The greens at our six golf courses will begin to thaw and get back to their smooth and well-maintained status. The Park System will begin preparing for a whole host of spring events and new and returning programs and camps will open for registration.

Here's a sampling of what the parks offer this spring!

Spring Plants

One of the first signs that the season is changing is the arrival of spring ephemerals. These are perennials that take advantage of the warming temperatures before the trees leaf out and create shade on the forest floor blocking the sun. Here are just a few examples out of the many early bloomers that begin to emerge, some as early as February:

- Trout lily, *Erythronium americanum*, bloom early spring during trout fishing season. Leaves are said have the coloration of brook trout.
- Shadbush or Serviceberry, *Amelanchier arborea* or *canadensis*, blooms between March and April. It is called shadbush because it blooms when the American shad fish run in the Delaware.
- Red maples, *Acer rubrum*, are one of the first trees to bloom in spring. They are an important early food source of pollen and nectar for pollinators and wildlife.
- Virginia spring beauties, *Claytonia virginica*, are one of first wildflowers to bloom around April.

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Trout lily



Shadbush



Virginia



Red maple

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- Skunk cabbage, *Symplocarpus foetidus*, often the first flower of winter, can emerge very early and flower as early as February. Pollinators like flies and beetles are attracted by the rotten scent given off by the flower. The plant is also thermogenic (generates its own heat), melting snow around it and raising its internal temperature to a comfortable 70°F. Early emerging bumblebees often use the flower spathe as a “warming hut.”
- Common blue violet, *Viola sororia*, the state flower of New Jersey, is an important early bloomer for emerging pollinators. Birds eat and help disperse the seeds and the blue violet plant becomes a vital host plant for various fritillary butterfly caterpillars.



Even though not all the plants on this list are native, with over 2,000 native plant species and nearly 700 considered rare, this list could go on and on.

Plants are only one piece of the seasonal transition puzzle. Many different species of animals also begin to emerge come springtime and some even help spread the seeds of many of our plant community members mentioned above creating a thriving symbiotic relationship.

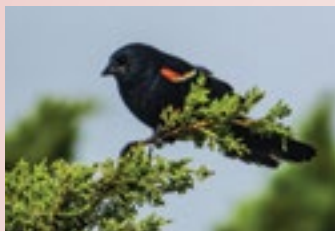
Spring Animals

In terms of animals, spring is a time of renewed activity and mating rituals for our resident animals. Some examples of animals that are commonly seen in the spring in New Jersey include:

- Birds: Many bird species migrate back to New Jersey in the spring including robins, warblers and orioles, and some of our coastal favorites like ospreys, sandpipers and plovers. Birds like the red-winged blackbird, which you'll most likely hear before you see, can also be a telltale sign of spring. It's usually the males that stand out with their red and yellow colors that they puff up when showing off for the browner and duller colored females. With each chorus and tune sang comes a promise of warmer weather.
- Frogs and toads: As the weather warms up, these amphibians become active again and can be heard singing in the evenings like the Northern spring peeper, a small chorus frog which usually begins to appear in March/early April and is often considered one of the first harbingers of spring.
- Butterflies: Some butterfly species, like the Eastern tiger swallowtail, are seen during the spring in New Jersey among many others.
- Rodents: Eastern chipmunks can start to be spotted around mid-March. Out of the 24 species in North America, this is the only one in New Jersey. Others like squirrels, raccoons, skunks, beavers and many more begin to birth their young and stretch their limbs as they mosey out of their winter bunkers.



Black-throated green warbler at Sandy Hook. Photo by Paul Mandala.



A male red-winged blackbird perched watching the world go by on Sandy Hook. Photo by Zack Karvelas.



Piping plovers in a fenced off area in the dunes. Photo by Linda Rovder.



Robins eating some berries in the snow.



An osprey mid-flight spotted at Sandy Hook. Photo by Zack Karvelas.



A yellow female eastern tiger swallowtail.



A (super adorable) eastern chipmunk spotted at Dorbrook Recreation Area.



A raccoon playing hide and seek in a tree hole.



Keep in mind that the timing and specific animals that are seen can vary depending on the weather, location and specific ecosystem.

Park System Openings/Changes in Spring

Since our parks stay open throughout winter and we run various winter activities and programs, the welcoming of spring can be shared and experienced by other natural phenomena. One of the more popular and eye-catching ways spring is celebrated in the Monmouth County parks is with the blooming of the cherry blossoms at Holmdel Park. Depending on environmental factors and weather, they are usually in full bloom around early April.

Deep Cut Gardens in Middletown is also worth the stop to check out the tulips that bloom in early April amongst the 54 acres of other gardens and greenhouses full of life and color.



A beautiful drone shot of the cherry blossoms in Holmdel Park.



Outdoor Adventures Supervisor Doug Kalucki and staff helping some folks launch their kayaks into the water at the Manasquan Reservoir..

Do you prefer being on the water? We have a variety of parks that offer different types of boat rentals beginning either on April 1 or May 1, depending on what type of watercraft and which park you're visiting.

If you're looking to stay busy with some of our camps and programs offered post winter, our Spring Parks & Programs Guide is currently available and registration is open. Right on the heels of that, our Summer Camps edition comes out February 24 (registration starts March 5) and, as many of you know, camps fill up quick so mark your calendars!

Events

Outside of programs, the Park System hosts and participates in a myriad of events throughout the year, especially during the warmer months. In anticipation of spring, we are organizing and getting ready to kick off our Summer Job Fair on March 11 at Fort Monmouth Recreation Area. Interested in working for the Park System or know anyone who is?

Come check it out!

Here are a few other events to keep an eye out for:

- Spring Craft Show at Fort Monmouth Recreation Area on April 15
- Earth Day Activities at various park locations on April 22
- Sheep Shearing/Wool Days at Longstreet Farm on April 29 & 30
- Spring Native Plant Swap at Tatum Park (Red Hill section) on May 6
- Creative Arts Festival at Thompson Park on May 13
- Walnford Day on May 21 at, you guessed it, Historic Walnford



For more information and a calendar of all upcoming events, go to <https://www.monmouthcountyparks.com/eventcalendar.aspx>.

As you can see, no matter the weather, the season, the day or the park, there is ALWAYS something to do in the Monmouth County Park System. We aim to provide beautiful experiences and help create memories for many years to come.

Preserving History in Hartshorne Woods Park

Dorothy A. Reilly, Historic Site Interpreter

Imagine yourself as a 17th century English Quaker having crossed the Atlantic Ocean to settle in the isolated and unfamiliar wilderness of the British colony of East Jersey. Bountiful resources and religious and personal freedoms that are usually not afforded to you in your homeland awaited you, with hopes of a better life.

Richard Hartshorne (1641–1722) was one such immigrant. He arrived in East Jersey in 1669 and settled in the Bayshore area. He rose to become a leader in regional politics and Quaker matters. He ultimately amassed 2,400 acres including the Navesink Highlands and the Sandy Hook peninsula. Over the course of three centuries, those rural lands were inhabited, farmed, passed down, subdivided, developed and sold by generations of Hartshorne family members. In the late 20th century, a large tract of the former Hartshorne family lands was transformed into Hartshorne Woods Park.



Portland Place sits on a bluff overlooking the Navesink River in the Locust section of Middletown. The historic property, once part of the Hartshorne family farm, encompasses 35-riverfront acres connecting Hartshorne Woods to its pastoral heritage.

Early settlers also encountered many hardships including sickness, disease, and political discord. Conflicts with the Lenape, for whom individual ownership of land was an alien concept arose. Europeans concluded it was expedient to purchase the land, or land rights, from the Lenape. These transactions – some fair, but many exploitive – pushed the Lenape further out of the colony.

Working Farm to Country Place

After 1720, the Hartshorne family acquired 200 acres along the Navesink River that became known as Portland Place. A modest homestead surrounded by maritime forest was replaced by a sprawling farm. The vast riverfront location was bordered by agricultural and grazing fields and orchards. The adjacent woodlands were harvested for lumber.

The dwelling began as a small 18th century cabin, evolved into a farmhouse and then a country estate in the early 20th century. Other Hartshorne family houses dotted the local landscape. Several are now under private ownership, while others were lost to fire or demolition.

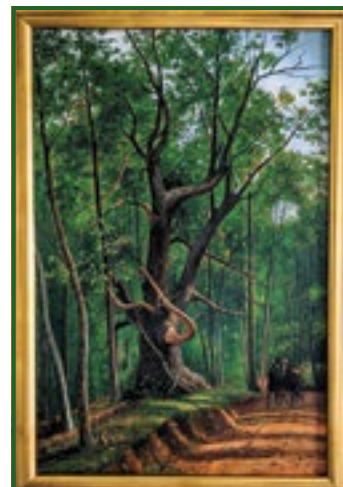
Fortunately, Portland Place has survived, with its architectural integrity intact. The oldest section of the house with its Dutch anchor-bent framing, and original hearth, dates to c.1717.



Cabin to Farm to Country Place.



Historic Portland Place retains its farmhouse aesthetic.



An 1878 oil painting by William Hahn, on exhibit in the west parlor at Portland Place, likely depicts a tree-lined carriage road in Hartshorne Woods. Many of the park's maintenance roads follow the design of the original Hartshorne carriage roads.

A Historic Gift

Portland Place was bequeathed to the Park System in 2008 by Daniel Ward Seitz (1931–2008). Mr. Seitz, a Hartshorne descendent, was passionate about his family's history and the 18th century home along the Navesink River which was under his stewardship for over 40 years. Family heirlooms, which were also donated, are on exhibit inside the house. Mr. Seitz's philanthropy was inspired by Richard Hartshorne's ethics and values, as well as the Park System's historic preservation standards.

"I make this devise and appointment in honor of the values, which Richard Hartshorne, the first of the family to come to America and to build on this land, exemplified both by his action in public service and by the principles set forth in his letters to his children."

- Last Will and Testament of Daniel Ward Seitz, signed January 30, 2007



Daniel Ward Seitz (1931–2008) bequeathed Portland Place and 4.5 acres to the Monmouth County Park System.

Open to All

After an extensive historic restoration conducted by the Park System, Portland Place opened in late 2022 for guided tours, educational and cultural programs, and other activities, such as yoga classes.

The Park System has acquired additional neighboring parcels, once part of the historic landscape, resulting in a 35-acre riverfront site. The 2023 season will begin on May 6.

Historic Pedigree

Portland Place is on the New Jersey State and National Register of Historic Places. It represents the region's early settlements and culture and the impact of the Hartshorne family on our shared experience.



Visitor Center

The Visitor Center is next to the historic house in a restored 19th century barn. Interpretive panels illustrate the story of Portland Place and the Hartshorne family along with the early development of the Navesink Highlands.



Guided tours begin at the Visitor Center.

Coastal Vistas

Perched on a bluff above the Navesink River, Portland Place offers sweeping vistas of the surrounding coastline. The environs have long inspired painters, writers and naturalists. Bring your binoculars to observe bird and waterfowl activity. Formal gardens, old growth trees and expansive lawns add to the site's beauty. There is no river access permitted from the historic property.

Guided Tours and Programs

Historic Portland Place, 200 Hartshorne Road, Locust, New Jersey 07760

Open: May–November,
Wednesday–Sunday,
9 a.m.–4 p.m.

Guided tours of the historic house:
10:30 a.m., 11:30 a.m.,
1:30 p.m. & 2:30 p.m.
Please register on the same day in the Visitor Center. Tour size is limited to ten people.



Volunteer with Us

Volunteer docents and greeters are welcome to work alongside staff to assist visitors. If you are interested in local history and would like to train to become a volunteer, please reach out to the Park System volunteer office at 732-842-4000, ext. 4283.

Hartshorne Woods Park Origins and Expansion

The Park System acquired the first 660 acres of Hartshorne Woods in 1974. The U.S. government conveyed additional land in 1984, and subsequent purchases including the 44-acre Claypit Creek section in 2005. Historic Portland Place now encompasses 35 riverfront acres, connecting one of the county's best-loved parks to its historic heritage. Hartshorne Woods Park now encompasses more than 800 acres.

New Hiking Trail: Lighthouse Link

The recently constructed Lighthouse Link trail will take visitors from the eastern/Rocky Point section of Hartshorne Woods Park to the Twin Lights of Navesink, a National Historic Site, which is owned and operated by the New Jersey State Park Service. The Monmouth County Park System is pleased to collaborate with Twin Lights to provide access to this historic landmark. The Lighthouse Link trail is 0.5 miles one way. Hours for Twin Lights: 9 a.m. – 4:30 p.m., daily. More details are available at: nj.gov/dep/park-sandforests/historic/twinlights.html or twinlightslighthouse.org

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Boston, Massachusetts 1994*

Deep Cut Gardens Home Gardener

152 Red Hill Road
Middletown, NJ 07748

GS Parkway Exit 114, to Red Hill Road
732-671-6050

The Nocturnal Magic Of A Moon Garden

Kate B. Lepis, Ph.D., Horticulturist

Moon gardens are designed to shine as the sun sets and the light of the day gives way to things nocturnal. It incorporates plants with silvery foliage and/or white flowers that efficiently reflect the dim light of the night.

Other stars of the moon garden are those plants whose blooms only open at night releasing copious fragrance that wafts through the summer air. The best location for such a garden is where you spend most of your evening time outside.



Lamb's ears (Stachys byzantine) was commonly used in the earliest of moon gardens – the path leading to the outhouse. Before the advent of toilet paper, the fuzzy, silvery leaves provided two important functions!



Sow seeds of annual evening stock (Mattiola longipetala) directly in a pot and place by the front door. This allows for the nightly enjoyment of the flowers' sweet scent in June.

Why not plant a moon garden? Nighttime is when most of us are free from our daily responsibilities and have time to relax. Instead of sitting down and watching TV, go outside and enjoy your patio, deck or porch. Maybe even actively explore the nocturnal beauty we tend to ignore. A nighttime planting along the path you take to and from the house would also work well. If you want to start small, plant a fragrant night blooming species under your kitchen window and tantalize your nostrils with the deliciously sweet aromas as you clean up from dinner. If this is your starting point, choose a plant that blooms in late spring/early summer or early fall when you're most apt to have the windows open on those nicer evenings.

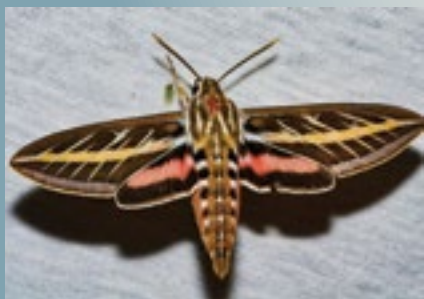
Many moon garden plants are pollinated by moths and this symbiotic relationship results in an increase in floral activity only after dark. With approaching dusk, such blossoms emit the loveliest of fragrances, but these joys are only for night dwellers. As the sun rises the fragrance ceases and the blooms close. Our native evening primrose (*Oenothera biennis*) is one such species

that is best appreciated when the sun is about to meet the horizon. Go out into the garden and enjoy the evening sky, but be sure to keep your eye on the primrose. As dusk sets in the flower buds quickly open as if the plant took a deep breath. Look around, at this point the colors of the garden are no longer washed out by the strong summer light, and everything truly pops, including the yellow petals of evening primrose.

Just then you may think you spotted a hummingbird, but it's the white-lined sphinx moth (*Hyles lineata*). Attracted to primrose's mild lemon fragrance, it darts and hovers, using its long tongue to drink from the yellow blossoms.² The plant also supports their larva that feed on the leaves.



The primrose moth (Schinia florida) has a close relationship with evening primrose. Adults act as pollinators and some of the resulting seeds provide food for its larvae.^{1,2} The plant reseeds readily so sacrificing some seeds to the caterpillars is no problem.



White-lined sphinx moth¹

A moon garden can also be considered a nocturnal pollinator garden. With more than 10,000 North American species (14 times that of butterflies), moths are arguably more important ecologically and some rival in beauty.³ Moths get a bad rap from a few bad players that chew holes in clothing or behave as agricultural pests. In fact, only 0.1 % of species damage fabric³ and the over-whelming majority of agricultural pests are exotic invasive species. Planting native and nurturing caterpillars can help transform your yard into an oasis of life, day or night. Like butterflies, moth larvae are an invaluable resource to birds raising young. You may find as your moon garden matures you enjoy more bird sightings during the day. Our world only gets bigger as we broaden our scope to nurture an array of life forms. Try to garden ecologically by nurturing the life in the soil, plant life, and the food webs they support. Traditional gardening tends to be very plant-centric and can be beautiful indeed, but their reliance on synthetic

fertilizers and chemical controls can have a devastating impact the health of the ecosystem. When the focus is placed solely on plants we miss out on so much more. An ecological garden vibrates with the life energy it supports and provides the homeowner with an opportunity to see a more wonderful world right in your own backyard.

Planting woody natives is the most effective way to support native caterpillars, and several species work well in a moon garden. Northern sweet bay magnolia (*Magnolia virginiana*) is a tree that lives up to all those requirements and more. The creamy white blossoms can be enjoyed during the day and glow in the night. This multi-trunked tree supports leaves with a silvery undercoat that shimmers against the moonlight on breezy summer nights² and nurtures caterpillars of the sweetbay silk moth (*Callosamia securifera*).

Getting to know our nocturnal neighbors is a bit more challenging than our diurnal counterparts. Using a flashlight that has a yellow or red film attached will help illuminate the area and minimize the disturbance. As you shine the light, look for a pinhead-sized coppery glint from the insect's compound eyes.² To make your yard more moth friendly, and to create a more magical moon garden, avoid flood lights. Countless moths die of starvation or exhaustion because they can't resist flying to the light instead of searching for food.



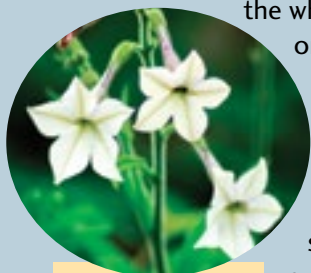
In May, and sporadically throughout summer, flowers of this magnolia provide a sweet and fruity scent that magnifies after dark.



The surprisingly beautiful sweetbay silk moth.¹ Males search for females during the day and females search for egg laying spots at night.³

Annuals for the Moon Garden²

- Jasmine tobacco (*Nicotiana glauca*) is best grown from seed and started 6-8 weeks before the last frost. As the name suggests, the white trumpet shaped flowers produce a honey sweet scent, but only open at dusk or on cloudy days. Most tobacco sold as bedding plants are hybrid cultivars with a range of colors and blooms that open during the day, but often at the cost of fragrance.



Jasmine tobacco¹

- There are a number of varieties of white petunia (*Petunia sp.*) that would glow beautifully in a moon garden, but it will require a few seasons of trial and error to find one that also provides a joyful olfactory experience. Similar to tobacco, the sweet odors tend to be bred out of them. The Argentinian species, *P. axillaris*, is the parental stock of many of our common varieties and is exceptional on both counts.



White petunia¹

Perennials for the Moon Garden²

- American twinflower (*Linnaea borealis*) is a slight woody evergreen vine native to the Northeast. Best sited in partial shade and in soil that is rich in organic matter. In late spring/early summer the plant produces a pair of flowers on 4" stalks. Like other members of the honeysuckle family (*Caprifoliaceae*) it releases a sweet almond smell that is stronger at night.



American twinflower¹

- Rock pink (*Dianthus petraeus*) & Russian dianthus (*D. squarrosus*) are alpine species from Eastern Europe, making them perfect plants for the rock garden. They both produce mounds of grey-green leaves that support short stalks of white fringed petaled flowers. The pleasant aroma they emit can be detected from some distance away.



Rock pink (*Dianthus petraeus*)¹

- Garden phlox (*Phlox paniculata*) is another native that comes in several summer colors: lavender, pink and white. Growing 3-5' in sun or part shade it would be best placed toward the back of the garden. Many cultivars exist with varying colors and varying fragrance.

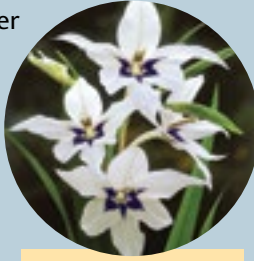


Phlox paniculata 'White Admiral' with its pleasant scent is a variety perfect for the moon garden.¹

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Bulbs for the Moon Garden²

– Fragrant gladiolus (*Gladiolus murielae*) are tender bulbs from Ethiopia. Plant the corms in spring after the threat of frost or start in pots about a month prior. Plant in full sun and by late July you'll enjoy 18" stalks with multiple flowers. They fill the night air with a sweet violet-like perfume. After the leaves fade, dig up the corms



*Fragrant gladiolus*¹

and store in a cool dry spot over winter.



*Formosa lily*¹

– Formosa lily (*Lilium formosanum*) and Madonna lily (*L. candidum*) both produce large fragrant white flowers atop tall stems (4-6'). Their timing differs with Formosa displaying in August-September and Madonna in May-June.

Tropicals for Containers on Patio/Deck²

– Night Jasmine (*Cestrum nocturnum*) is a bush with arching stems that can reach 8' tall in a 12" pot. They are vigorous growers and produce copious clusters of small white/cream flowers said to be the most fragrant in the world. Water freely and fertilize regularly during growing season. It can be cut back drastically before it is stored in front of a south facing window over winter.



*Night Jasmine*¹

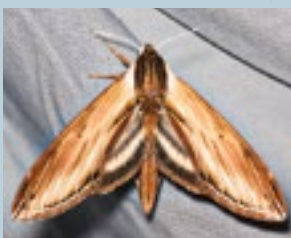
– Night blooming cereus (*Epiphyllum sp.*) also called cactus orchid are epiphytes that grow on trees in tropical regions. Treat light orchids by planting in an orchid basket lined with sphagnum and orchid bark. When outside, best placed in the shade of a tree, but when storing for winter place in a south facing window.



Epiphyllum hookeri flower still open at Deep Cut in the early morning hours of summer.

Shrubs for the Moon Garden

– There are several native azaleas that produce white to pinkish flowers with a spicy fragrance day and night. Plant them in dappled shade with moist organic rich soil and supply the food host for the laural sphinx caterpillar (Sphinx kalmiae).



*Laural sphinx moth*¹

Swamp azalea (*Rhododendron viscosum*) grows 3-5' tall and blooms late June.¹



Vines – A Living Landscape In Your Home Garden

Tanya Dinova, County Park Ranger & Horticulturist



Are you looking for a fresh and “zen” landscape idea? How about companion vines? Vines are among the most versatile and useful plants in a gardener's repertoire. Given almost any available support, from thin wire to solid masonry walls, vines provide a maximum vertical display while taking up hardly any ground space. Incorporating these diminutive yet achingly beautiful vining plants within the home garden landscape will provide an elegant surprise to the eyes and a highly desired ecosystem for native wildlife (see Dutchman's pipe). It's a win-win!

Vines are perfect at occupying multiple layers of horizontal landscape and its specific habitats – shade, part-shade, sun and full-sun. They add colors, textures, screening and habitat value to gardens of any size with minimal requirements. Most vines take up very little space at ground level and produce profuse amounts of foliage, flowers, seeds and/or fruits in the upper canopy layers.



Pipevine at the National Botanic Garden in Washington D.C. growing on a palm tree and blooming high up in the treetops.

They are adaptable to urban conditions and many of them are easily grown on man-made structures like fences, walls and covered porches.

Some vines are winter hardy, and some could spend their entire life indoors. Due to their vigor and vitality, vines are the perfect plant to garden with your children. Remember Jack

References:

¹Wikimedia Commons - <https://creativecommons.org/licenses/by-sa/4.0/deed.en>

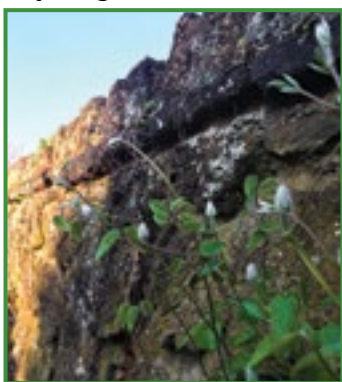
²Loewer, P. 1993. The Evening Garden. Macmillan Publishing Co. NY, NY

³Winter, D. 1990. Moths and the Garden at Night. The Xerces Society: Butterfly Gardening. Sierra Club Books, San Francisco, CA

climbing his giant beanstalk or Tarzan with his lianas? Vines' ability to spring up swiftly from the ground and reach up for the perfect place to cling gives children of all ages instant satisfaction. Their tenacious hold to life offers inspiration, as well as fulfilling interaction. In addition to the morning glories, beans and peas, here are few of our favorites that you can see growing at Deep Cut Gardens:

The Queen of Climbers

Clematis – this medium-sized climber is just the right fit for the reclaimed bamboo trellis at the entrance of the All-America Selection Winners Display Garden. We love its intricate flowers and vigor. You can try it as a feature or intertwined with bold vertical plants like agaves and yuccas, or, even better, train it to cover tree stumps and fences in your garden.



Clematis vine in early spring growing up the stone wall at the Japanese Garden at Deep Cut.



Clematis

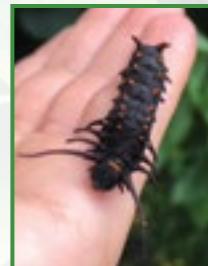
Many species of clematis are much more prized ornamentals. Some are perennial herbs and others are small-flowering woody vines planted for permanent cover of fences, arbors and porches. But did you know that clematis are the perfect companion plant for climbing roses? Indeed, they are happy to share the same structure, arch or trellis with the rose while adding their colorful blooms and vigorous foliage to the mix. This combo is a winning display to a home gardener as the blooming times of the two partners are staggered (the clematis will often be blooming when the rose is not). The light weight of the clematis is an advantage as well as the provided shade, cover and extra pollinator attraction. Clematis are ideal companion plants as they require little ground space and to a keen gardener, they offer imaginative solutions.

Dutchman's pipe, *Aristolochia macrophylla* (Pipevine) – This deciduous woody climber is a rapid grower and therefore perfect for covering buildings and/or screens for porches.



But that is not all. This plant is the principal food source for the pipevine swallowtail larvae of the rare pipevine swallowtail butterfly.

This native vine is easily grown in sun or shade on a wide range of soils. It prefers full sun to partial shade, and may be pruned in the late winter to control its growth.



The flowers are usually inconspicuous because they are hidden or lost in the vine's dense foliage. The small blossoms are greenish with brownish-purple lobes in the shape of a smoking pipe. Hummingbirds are attracted to them for nectar. The leaves are smooth, heart-shaped, deep green and silver-colored underneath.

The overlapping and dense cloak of leaves can form a beautiful screen for a garden or porch wall. Though deciduous, pipevine will eventually create a dense enough mass of stems to provide semi-transparent screening even during its dormancy. The vine is moderately resistant to deer.



American wisteria (Wisteria frutescens) – This woody vine is an excellent source of late summer nectar and pollen for butterflies and bees.



Trumpet honeysuckle or coral honeysuckle (*Lonicera sempervirens*) is one of the easiest, most adaptive native viners. At Deep Cut Gardens, ruby-throated hummingbirds are regular visitors to the vine when in bloom. Its long trumpet-like flowers are fragrant and full of sweet nectar that is also appreciated by butterflies. The vine is also a home to a pair of house wrens each year.



Gold flame honeysuckle Lonicera heckrottii 'Gold Flame'.

Purple hyacinth bean (*Lablab purpureus*) is a vining annual typically grown for its deep blue-purple flowers and its purple foliage. It makes a good cut flower too.

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CORNER

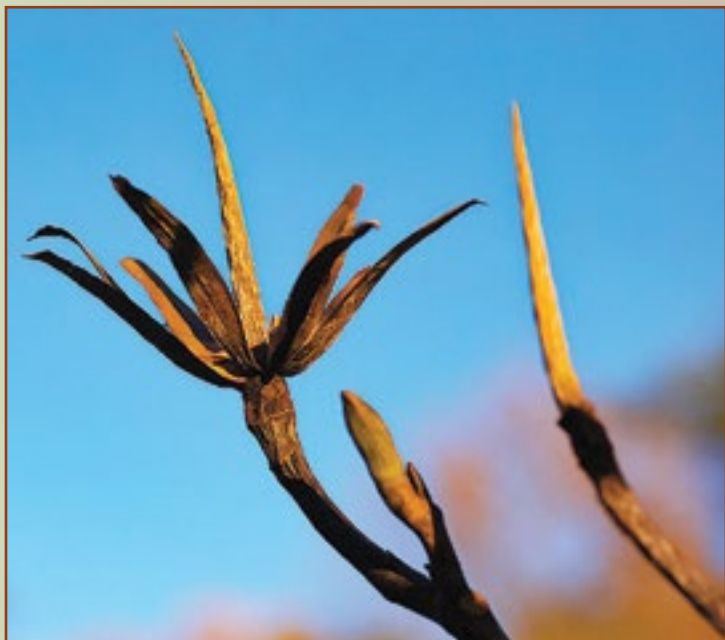
NATURE

How Animals Help Shape The Landscape

Megan Orens, Park Naturalist

Plants are a lot smarter than most people realize as they evolve and adapt in a changing environment to ensure their survival. Because they cannot simply grow legs and walk, they have established a variety of ways to help disperse their seeds. Wind, water and gravity are among the most common methods, but some have figured out how to use animals as a mode of transportation.

There are many plant species like the tulip poplar tree (*Tulipifera lirodendrum*) that use wind dispersal. The poplar has a cone shaped fruit that has modified winged seeds called samaras. During the fall the fruit dries up and its seeds separate from it. As they fall, the wings allow them to be carried by wind and glide down to their new destination, or as some would say “helicopter” down. These seeds now have the chance to germinate. But what does seed dispersal by animals look like?



A tulip poplar cone that has opened and dropped some of its winged seeds.

Nature's Hitchhikers

Some seeds hitchhike, using a sticking method where seeds are covered in hooked bristles like common burdock (*Arctium minus*). Its spurs cling to anything that brushes by it – clothing, animal fur, you name it, transporting it easily and allowing for it to spread quickly.



Common burdock

But not all plants use this method of hitchhiking; some seeds hitch a ride in the gut of an animal. Mayapple (*Podophyllum peltatum*) is a common native Monmouth County plant, named after the month which it blooms and the “apple” fruit it produces. All parts of the plant, including the unripened fruit, are highly toxic if consumed. Many animals have figured out how to tell when it is fully ripe and enjoy its tropical-like taste. Raccoons, skunks and opossums are a few of



Eastern Box Turtle

its common visitors but the Eastern box turtle is believed to be one of the main distributors of its seeds. They are the ideal height for picking its fruit and the seeds passing through the gut of the turtles are said to have a higher germination rate.



Mayapple plants lining the floor of the forest

Small But Mighty

An animal that may shock you with its seed dispersing ability is the ant. Ants may be small, but they can make a large impact on the landscape.



Wild ginger

The ginger has a symbiotic relationship with ants. The ants are attracted to and enjoy the fleshy part of the seed called the elaiosome. It is high in protein and fat and once consumed,



Hyacinth seeds (black) with attached elaiosomes (light beige)

they discard the seeds underground in their nests. Since ants can transport seeds as far as 220 feet, this allows for colonization of new areas which can increase the odds of the seed's survival. This specific type of dispersal done by ants is called myrmecochory and ginger isn't the only plant to benefit from it; hyacinth plants also use the same method of spreading their seeds.

Early Bird Gets the Acorn

Oak trees are another plant that gets a little help from our forest friends. When you hear the word acorn it's hard not to immediately think of squirrels. They prepare for the winter by collecting them in large numbers. Not all are found and some nuts that were buried will have the opportunity to grow. But squirrels are not the only animal to enjoy acorns. Blue jays have adapted to use their beak to chisel them open and can carry up to five acorns at once. They can expand their necks and hold up to three in there alone, and the remaining two in their mouth and beak. If that wasn't impressive enough, they can carry them distances of one to five miles away. Previous studies have even shown that jays can transport up to 110 acorns in a single day. Jays usually scatter their storage locations over a large area and are selective of where they leave them, preferring damp soils. This unconsciously puts the acorns



Blue jay collecting seed

in the optimal environment for them to grow. Acorn production costs a lot of energy for oak trees, but the jays and other animals transporting them balance the energy lost.

Prized Fruit

If you visit Huber Woods Park in the fall you are sure to catch a glimpse of one of our rarer trees in the Park System, the American Persimmon (*Diospyros virginiana* L.), also known as the common persimmon. This tree produces a beautiful orange fruit that has a resemblance to the Jersey tomato, but its taste can be described as either sweet when perfectly ripe, or mouth numbingly sour when unripe. Its fruit is a common delicacy to many during the colder months, from October to February. During this time, you will notice many birds and other animals visiting for a chance to pick this prized fruit.

Unfortunately for us, this fruit is off limits to humans. ***Always remember, picking any type of fruit, foliage, flowers or berries is prohibited in all County Parks or Recreation Areas.***

However, this rule does not apply to animals. The persimmon is considered anachronistic which means it uses its large fruit to attract mammals to disperse its seeds. Some evidence has even shown that seeds traveling through the digestive system of mammals like the common raccoon (*Procyon lotor*), coyote (*Canis latrans*) or even the Virginia opossum (*Didelphis virginiana*) have shown a quicker germination rate and successful seed dispersal.



Raccoon foraging for fruit

Plants are Unbe-LEAF-able

Plants have shown they can do incredible things. They provide us with food, medicine, shelter and fuel. But none of that would be possible without their ability to reproduce and the unique ways in which they have adapted to disperse their seed. Forming symbiotic relationships with some of the most unlikely animals, a tiny ant, blue jay or even a reptile, are just a few strategies that plants rely on to help shape our landscape. I leave you with two challenges. The next time you are enjoying a walk, remember to take a moment to appreciate the diverse flora and fauna and think about how that plant "got there." Lastly, I challenge you to try and visit one new park this season, we have over 18,000 acres to explore!

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