

# MONMOUTH COUNTY PARK SYSTEM GREEN HERITAGE

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

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## Celebrating the Life and Legacy of Park System Director James Truncer

Zack Karvelas, Assistant Public Information Officer



The Park System's beloved and nationally regarded Director, James J. Truncer, 86, of Allentown, passed away on Sunday, February 19, 2023, at his home while surrounded by family. Mr. Truncer has been a part of the Park System for almost 60 years and served as Director since 1965. His first job with the county started in 1964 as a park planner at a time when there was no park budget. From 350 acres within three parks to more than 18,000 acres of parkland, which includes 37 parks, six golf courses and 148 miles of trails, Mr. Truncer played a role in almost every single expansion, project and aspect of the Park System over the years. His foresight and dedication to planning is what kept and will keep our parks flourishing for decades to come.

New Jersey was one of the first states to become involved in preserving state forests, going back to slightly after the turn of the century. Most of the state land acquisition was during the 1920s and 1930s when there was interest as well as both state and federal funding available. The Monmouth County Park System really started through the Monmouth County Planning Board studies and reports. Charlie Pike was the County Planning Director at the time and as a result of his studies and reports, and the Planning Board's recommendation, the Board of Chosen Freeholders (as they were called at the time) embarked on acquiring land in 1960 from the New Jersey Highway Authority at Shark River. That was the first county park site, involving about 24 acres.

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Editor/Writer: Zack Karvelas Photographer: Maribeth Gardner Graphics: Michelle Scolletta Questions/Subscriptions: 732-842-4000, ext. 4312; info@monmouthcountyparks.com

That site was developed using county highway employees, the county engineers office and county prisoners. At the same time, the Soil Conservation Service was doing work creating farm ponds, and they created a small lake at Shark River Park. In 1961, the Board of Chosen Freeholders (later to be renamed Board of County Commissioners) created, by resolution, the Board of Recreation Commissioners, which is a statutory board with nine members appointed for five-year staggered terms. They receive no compensation and have meetings twice a month. Mr. Truncer served as secretary to that board and also as the Director of the Park System for most of his time here.

The Board of Chosen Freeholders appropriated money specifically at that Jusey Department of Environmental time to acquire



Construction of the New Jersey Parkway in Wall Township, early 1950s.



Construction of the pond at Shark River Park, 1961.

the property at Shark River, and in 1962 the first Green Acres program was approved. A referendum was held statewide in 1961, which was passed by the electorate, and in 1962, funds became available to assist the county and municipalities in acquiring land. As a result of that program, lands Anniversary were acquired at Holmdel, which is now Holmdel Park, as well as in Freehold for Turkey Swamp Park. So, Shark River Park, Holmdel Park and Turkey Swamp Park were the first three properties owned and operated by the Monmouth County Park System and some of the first early achievements of the Park System under Mr. Truncer's leadership. This helped pave the way for what was to come.



Green Acres Program

Since 1961

After designing a plan for acquisition and expansion for the next five to ten years, the focus soon became on the development of infrastructure and facilities at Turkey Swamp Park. By the end of 1965, the Park System reached almost 100,000 visitors across the three park areas (Shark River, Holmdel and Turkey Swamp). Ten years later by the end of 1975, annual attendance had surpassed one million visitors across more than ten park areas, including two golf courses which saw over 73,000 rounds of golf played. Nature, outdoor recreation and performing arts programs were well underway with dedicated staff to lead them. Also, East Freehold Showgrounds operated the first Monmouth County Fair, now going on its 48<sup>th</sup> year.

Hominy Hill Golf Course, 1980.





Aerial photo of the Monmouth County Fair from August 1992.

Aerial photo of the Monmouth County Fair from July 2021.

Over the next several decades under Mr. Truncer's leadership, the Monmouth County Park System saw significant expansion with the addition of several new parks and the enhancement and development of existing ones. He worked tirelessly to secure funding and resources for park improvements, including the construction of destination playgrounds, athletic fields and facilities, the development of scenic trails, and the preservation of natural habitats as undeveloped open space. His unwavering commitment to providing opportunities for outdoor recreation and environmental education has had a lasting and positive impact on the health and well-being of the citizens of Monmouth County.

His inclusive approach to park planning ensured that the diverse needs and interests of the citizens of Monmouth County were taken into consideration not only now, but for the future, resulting in parks that are truly reflective of our community's values and aspirations.

Mr. Truncer's passion for parks extended beyond his professional role. His selflessness and unwavering dedication to the betterment of our parks were truly inspirational, and he set a high standard for public service and community engagement.

With how much Mr. Truncer and the Park System accomplished (and still accomplishes) every year since its formation, listing each exciting new development, park, program or achievement would take up this entire issue (and maybe even more). For a more detailed timeline of the Park System's history, go to the "About Us" page on our website.

At the time of Mr. Truncer's passing, the Park System had accomplished so much, such as offering over 3,100 programs annually, operating more than 40 different park areas, assistance and contributions from over 700 volunteers and over eight million annual park visitors. More success stories and growth are happening every single day.

As the extended Park System family reflects on the loss of Mr. Truncer, they also celebrate the profound impact that Mr. Truncer has had on our Park System and our community. His legacy will live on in the verdant landscapes, joyful laughter of children playing and cherished memories created in our parks. We will forever be grateful for his tireless dedication, unwavering passion and visionary leadership that have transformed our parks into havens of natural beauty and community pride. His enduring legacy will continue to inspire and enrich our Park System for generations to come.



## News

# 20th Anniversary Of Municipal Open Space Grant Program Introduces Big Changes

Paul Gleitz, P.P. AICP, Principal Park Planner

n 2003, 13 towns in Monmouth County were collectively awarded \$1.9 million in the inaugural round of the newly created Monmouth County Municipal Open Space Grant Program. Asbury Park built a new playground at Veteran's Memorial Park, Atlantic Highlands completed a section of the Bayshore Trail that later became part of the Henry Hudson Trail, Long Branch built a sports complex at Manahasset Creek Park, and Neptune Township bought ballfields from the Board of Education to create Jumping Brook Park. These projects and others began the legacy of cooperative projects with the Monmouth County Board of County Commissioners supporting municipal partners in creating or improving parks and recreation facilities for citizens all over the county.

Twenty years later, the Monmouth County Board of County Commissioners has awarded \$2.831 million in park improvement grant funds to 17 municipalities through the 2022 round of the Monmouth County Open Space Grant Program. The program continues to demonstrate the County Commissioners' support of local parks and recreation projects throughout the county.

A total of 26 applications were received requesting an aggregate total of \$4,624,000. Another \$2 million in grant funds, combined with \$831,000 of reprogramed grant funds, allowed the county to award a total of \$2.831 million in grant funding.

### The municipalities awarded funding through the 2022 grant round included:

<u>TOWN</u>	<u>PROJECT</u>	<u>AWARD</u>
Township of Millstone	Clarksburg Cultural Center Improvements - Phase IV	\$200,000
City of Long Branch	Manahasset Creek Park & Pleasure Bay Park Improvements	\$250,000
Borough of Belmar	Lake Como Improvements	\$200,000
Borough of Avon-by-the-Sea	Volunteer Park Improvements	\$73,000
Wall Township	Inclusionary Playground at Community Park	\$200,000
Borough of Matawan	Clinton Street Park Improvements	\$97,000
Borough of Shrewsbury	Playground Improvements to Robert Graham Athletic Fields	\$100,000
Township of Middletown	McMahon Park Improvements - Phase II	\$250,000
Borough of Eatontown	Gurbisz Park Improvements	\$100,000
Borough of Manasquan	Curtis Park Improvements - Phase III	\$90,000
Borough of Union Beach	Scholer Park Improvements - Phase IX	\$125,000
Borough of Monmouth Beach	Griffin Park Improvements - Phase III	\$200,000
Borough of Spring Lake	Marucci Memorial Park Improvements	\$250,000
Borough of Highlands	Overlook Park Improvements	\$148,000
City of Asbury Park	Fourth Avenue and Heck Street Park Playground Improvements / Liberty Square Fountain Rehabilitation	\$250,000
Township of Freehold	Michael J. Tighe Park Pedestrian Trail Bridge	\$190,000
Township of Manalapan	Manalapan Recreation Center Dreyer Playground Improvements	\$108,000
TOTAL		\$2,831,000.00

Since the inception of the program, 50 of Monmouth County's 53 municipalities have been awarded almost \$40 million for local parks and acquisition projects. As of 2023, 292 grants have been awarded with 230 of those grants going toward park development projects and 62 of the grant awards going toward open space acquisition projects.

### Funding Boost For The Grant Program

For 2023, the Monmouth County Board of County Commissioners has revised the Municipal Open Space Grant Program and split it into two new programs. One grant program is specifically for parks and open space improvement projects and the other is a shared services program that will assist with municipal open space acquisitions.

The Monmouth County Municipal Park Improvement Grant Program will assist municipalities by providing additional funding needed to make park improvements in municipal parks and open space. The Municipal Open Space Grant Program was previously limited to two million dollars a year and up to \$250,000 per project. The new grant program is funded at six million dollars a year and up to \$500,000 per project. The Municipal Park Improvement Grant Program has expanded to include dredging projects for parks and recreation purposes. The grant application process has been simplified and streamlined.

The Monmouth County Municipal Land Preservation Incentive Program will assist municipalities by providing additional funding needed to preserve lands for municipal parks and open space. These will be cooperative projects with the Board of Recreation Commissioners and the County Commissioners. The applications will be accepted throughout the year on a first-come, first-served basis with a limitation of one active acquisition project per municipality at a time.

For projects up to five million dollars, the county will match up to 75% of acquisition costs not funded by the State Green Acres program. For projects over five million dollars, the county will fund up to 75% of the first five million dollars and up to 50% of the amount over five million dollars of acquisition costs not funded by the State Green Acres program.

"We are very excited to be announcing these changes to the Municipal Grant Program. As the former mayor of a small town in Monmouth County, I personally know how important the funding provided by the county can be for getting these types of projects completed. I am also very pleased that we are now including dredging projects in the grant program. For many people the idea of a parks project means playgrounds or a ballfield, but we know so many Monmouth County residents turn to our waterways for recreation and anything we can do to help towns improve that access will be money well spent," said County Commissioner Director Thomas A. Arnone.

"I am really looking forward to the Land Preservation Incentive Program. As the Board of County Commissioners liaison to the Board of Recreation Commissioners, I know there are many projects that are important to the local municipalities that might not be a great fit for the Monmouth County Park System. This new program is going to allow the county to partner with local towns to preserve open space in a much more meaningful way than we had been able to under the previous program. \$250,000 does not help towns buy open space like it could 20 years ago. The County Commissioners are committed to devoting more resources for local open space preservation to keep Monmouth County a great place to live and play," said County Commissioner Ross Licitra.

Both the Monmouth County Municipal Park Improvement
Grant Program and the Monmouth County Municipal Land
Preservation Incentive Program are administered by the
Monmouth County Park System on behalf of the Monmouth
County Board of County Commissioners.

### Notable Projects Completed This Year

Sea Bright - Shrewsbury Riverfront Park — In 2016, Sea Bright received a grant for \$100,000 to make improvements to a property that had been purchased by the NJDEP after Superstorm Sandy and converted into a municipal park. The project included removing an existing concrete sidewalk, stabilizing the gravel walkway at the bulkhead, site lighting and electrical work. Park improvements included installation of a patio and walkways, concrete sidewalks, a flagpole, a park sign, installation of handrails and guardrails, a fish cleaning station, water safety stations, water fountains and trash receptacles. When construction of the Shrewsbury River Bridge is completed, additional improvements to the park will be made.



Monmouth Beach - Griffin Park - In 2017, Monmouth Beach

received a grant for \$100,000 to make improvements to Griffin Park. The project included the replacement of the existing playground with new playground equipment, new safety surfacing, improved site drainage and fencing.





### Deep Cut Gardens

# Home Gardener

152 Red Hill Road Middletown, NJ 07748

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

# Hardy Geraniums Are Tough, Resilient And Great Companion Plants. Plus, They Feed The Bees!

Tanya Dinova, Horticulturist & Park Ranger

ncorporating hardy geraniums into your garden is an easy, simple and rewarding experience you ought to try. These plants are very adaptable. They grow great in rockeries, alpine gardens, flower beds, borders and wildflower gardens. Most of all they are perfect ground covers with attractive texture, intricate leaf shape, dainty flowers and long pointed fruit that looks like a crane's bill. "CranesBill" is in fact their common name along with "Wild geranium" and "Hardy geranium". The Greek word *geranos*, meaning "a crane," is the root to their genus name *Geranium*. Current records indicate the existence of 400 named wild geraniums. They are observed on most continents except for the tropic and sub-tropic regions. Because they grow perfectly in dappled light, naturally they occupy the woodland's edge often forming mats of mass color. These are completely different than the zonal type geraniums, or pelargoniums,



Geranium maculatum growing at Deep Cut Gardens.

known by their large spherical shaped blooms that are grown in window boxes, containers, or as houseplants.

Geranium species and cultivars are hardy perennials and make an important contribution to the long-term structure of the garden. They support pollinators, suppress weeds, keep pests and diseases at bay as a companion plant, and can offer moisture control instead of mulch beneath shrub roses. They are easy growing plants that flower all season long. Like nepetas, yarrows, echinacea and rudbeckias, they produce a lot of





Geraniums, like the Johnson's Blue variety on the left, are hardier and have five petals; whereas pelargoniums, pictured on the right, are not winter hardy and have large spherical shaped blooms.

interest without the fuss, and pollinators love them. They are resistant to pests and diseases, which makes them an overall winner. Some, like the Rozanne geranium, are even fire resistant.



Geranium macrorrhizum

example, used *G. maculatum* to treat diarrhea as well as open sores and wounds. In Europe, geraniums symbolize good fortune and longevity. Some even say that "Snakes don't go where geraniums grow!". The truth is, you can't have too many hardy geraniums. They are wonderful as edging in the front of a border, and equally impressive as mounded specimen plants anywhere.

If you have a problematic spot in your home landscape, chances are there is a hardy geranium for that. Hardy geraniums belong to the family *Geraniaceae* and are amongst the world's most popular garden plants. Some are native wildflowers, and some are naturalized from

Europe and/or Asia. Many of them are fragrant, with some even releasing their fragrance at night. Some wild geraniums have medicinal applications. Native Americans, for



Geranium sanguineum, or Max Frei, is a great choice for front of a border edging plant.

### **Native Geraniums**

Wild Geranium, or Wild Cranes Bill, *G. maculatum*, are found over most of the eastern United States. Bicknell's Cranesbill (*G. bicknellii*) is found in the Northeast and Midwest. And Carolina geranium (*G. carolinianum*) can be found from Florida to New England and westward to Kansas and Wyoming. All of them are treasured wildflowers.

The flower – five delicate petals and an amazing variety of colors. This five-pedaled configuration is a characteristic of cranesbills unless they are double-flowered. Meadow cranesbill and its hardy geranium relatives generally carry their flowers singly or in very loose clusters. When the petals drop, the resulting sharp-pointed seed capsules bear resemblance to a crane's head and bill. Yet, you can extend the flowering season by cutting the spent flowers before the plant has gone to seed. Overall, the wild geraniums benefit from a mid-season cut back to restart and stimulate new growth for the fall.

Geranium flowers, similar to hibiscus and rose flowers, exhibit entomophilous features. They have visually attractive petals, robust stigmas, abundant pollen and presence of active nectaries and nectar guides. They are eagerly visited by insects attracted mainly by nectar with high sugar content. Because of that, hardy geraniums are valuable plants for pollinators during high-demand months and especially important to urban beekeepers. Research from the Urban Forestry & Urban Greening suggests that hardy geraniums could hold the key to future pollinator supportive cityscapes, when bumblebees, butterflies and

Geranium macrorrhizum leaf close-up.

honeybees are in search of their next meal (Masierowska, et. all, 2018). If you happen to live in such a setting are looking for a hardy plant that feeds the bees without any fuss, try growing Geranium macrorrhizum.

When not in bloom, wild geraniums provide abundant green foliage cover that changes into red, maroon and burgundy in the fall. The leaves are almost fern-like, divided into deeply dissected lobes. The plants have a spreading, somewhat mounding habit, so those lovely leaves are on full display on specimens that can grow two to three feet tall and wide. Most often the foliage is medium to dark green, but some varieties feature chocolate

brown to deep purple-black leaves (*G.maculatum*). As hardy perennials, their mass of leaves shade the ground underneath, which acts as moisture control, lowers the temperature of the soil and most of all prevents any sprouting weeds from growing, making for a low-maintenance garden once established.



Geranium maculatum "Espresso" has dark purple to brown foliage. If the deer eat your coral bells, replace them with this geranium for similar color scheme in your garden bed.

#### List of Hardy Geraniums we think you would like:

- The wood cranesbill (Geranium sylvaticum) is a great mixer. They tolerate
  dappled light, and average soil, making them perfect for borders, around
  orchards, and around edges of woods and hedges. We love the idea of using
  them in our rose garden as a companion plant.
- Rozanne geranium (Geranium "Gerwat") is a favorite if you like blue flowers.
   During the summer it is covered in large, saucer shaped blue or purple-blue flowers with white centers. It is likely to produce blooms until the frost gets it. As a bonus, its foliage turns a showy shade of orange and red in autumn. Interesting fact: This variety is known to be fire resistant.
- Bigroot geranium (Geranium macrorrhizum) are fragrant and will offer a
  pleasant scent in your outdoor living space, so forget about that yearly
  citronella pot and save your money. These are available in white and pink
  flowers and the leaves are evergreen.
- Geranium wallichianum, named after botanist N. Wallich, is native to the Himalayas, Kashmir and Afghanistan. It grows well in a rock garden and flowers from July to October.
- Dalmatian cranesbill (Geranium dalmaticum) features a profusion of shell pink flowers over aromatic green leaves in summer. Come fall, the leaves turn orange and red. A durable, long-lived plant, it is native to the Balkan Mountains of Bulgaria/Serbia.



Geranium Rozanne, a favorite amongst pollinators.



Part-Shade Bed in bloom: Geranium macrorrhizum.

Geranium sanguineum is native to northern Europe and Asia and known as bloody cranesbill due to its magenta flowers. It has become famous itself (the wild form) and is now the most popular hardy geranium in the US. Try "Max Frei" (Geranium sanguineum) which is magenta in color; the striped bloody cranesbill (Geranium sanguineum

var. striatum) is a six to eight inch tall, spring blooming perennial with pink or white flowers. Noted for its long flowering season, Geranium "Elke" (Geranium sanguineum) is an eye-catching, mat-forming, spreading perennial with upward-facing, strong pink flowers with a small white eye and a pale outer edge to the petals. Blooming from late spring to late summer, the almost fluorescent blossoms rise above the foliage of finely dissected, dark green leaves, that turn bronzy-red in fall. This hardy geranium is more or less evergreen in mild winter climates. Easy to grow, Geranium 'Elke' provides long-lasting color in the garden.

- Armenian Cranesbill (Geranium psilostemon), is a large voluptuous plant that likes a partner to lean on. The flowers are showy magenta in color and due to their height and growing habit they are flowy and very dynamic in a border. Pair this hardy geranium with your day lilies, dahlias and/or peonies.
- Johnson's blue is one of the most popular, blue-flowered geraniums. It first appeared in English gardens in the 1950s. Reportedly a hybrid between G. himalayense and G. pretense, it is a rhizomatous perennial that typically grows in a dense spreading mound to 12-18" tall and 24-30" wide. Large, saucer-shaped, sky-blue flowers (two-inch in diameter) bloom in clusters (cymes) above the dark green foliage from late spring to early fall. Johnson's blue is the standard by which any blue or bluish geranium hybrids are judged. With large, clear blue flowers and a neat growth habit to about 16 inches tops, it is a national favorite.
- Derrick Cook (Geranium himalayense) has droves of large saucer-shaped white flowers, delicately veined with purple on thin stems. The enduring blossoms top neat fine-hewn bright green leaves, crafting a fantastic carpet-like cover that broadcasts brilliant red shades in autumn, keeps weeds and rabbits at bay, charms the bees and withstands drought.



Striped bloody cranesbill.



Geranium himalayense "Derrick Cook".

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### Feel the Benefits of Indoor Gardening – Strategies for Success

Kate B. Lepis, Ph.D., Horticulturist

Home gardeners know the joy working in the yard can provide: the therapeutic benefit of feeling your hands connected with the soil, the relaxation one gets when you sit and soak up the beauty, or the empowerment of growing your own food. These experiences can be traced to our biophilia – the inherent connection humans have to nature and other living things. The well-being realized when we nurture that connection has been well documented. These benefits can be enhanced by growing houseplants and nurturing nature in the home or office. Here are some strategies to help you be more successful with houseplants and unleash your inner biophilia.

### Strategy 1: Identify the plant species you're bringing into the home.

Identification is the first step in learning what plants need to survive. Each species evolved in a specific habitat. Mimicking those conditions as best we can help the plant thrive. If your ID skills are lacking, only purchase plants with informative labels that provide a species name and care requirements. Avoid vague labels like "foliage plant" which simply tells you the plant has desirable looking leaves.

### Strategy 2: Know the light environments in your home.

Plants flourish under three basic light conditions. Take inventory of

what you have and purchase plants that will be happy in each space.

High Intensity: Can be found within two feet of a south or southwest facing window where the sun directly hits the leaf surface or floods it with bright light.

Medium Intensity: Can be found in an east or west facing window but protected from direct afternoon sun.

five feet away from a south or southwest window.

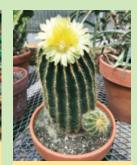
Low Intensity: Is found in a north facing window or in a darker corner of an otherwise bright room.



Varieties of Croton (Codeaum varigatum) display an array of leaf colors and shapes. Vivid colors are achieved in high light, but plants do well in medium light.



Cast-iron plant (Aspidistra elatior) would happily provide interest to a low light corner.



Most cacti, like balloon cactus (Parodia sp.), thrive in high intensity light.

### Strategy 3: Water only when the soil feels dry.

Watering frequency depends on three factors: brightness, temperature and humidity. Even within the home these aspects change with the seasons and your watering schedule will need to change accordingly. A south facing window can be much brighter and hotter in the summer than in the winter and result in more frequent watering, but if there's a deciduous tree shading it in the summer the roles may be reversed. Home humidity is drastically reduced by the heating system in the winter and can increase significantly when the windows are open on nice days. The only way to really know when to water is to feel the soil. With most plants, it's time to water when the top half inch of soil feels dry.

### Strategy 4: Water deeply each time.

Growing containers with drainage holes are important to root health. Often plants purchased at box stores or grocery stores lack this and should be repotted. To protect home furnishings, place the growing pot inside a decorative container without holes or use a saucer. Plants of a manageable size can be watered in a sink where the soil can be flooded, allowing at least ten percent of the water to drain out. Flushing prevents root damaging salts from accumulating in the soil. Let excess water drain for several minutes so it does not accumulate in the decorative container. Most plants hate sitting in water as it causes root rot.

### Other Things to Think About

Providing the proper lighting and watering regimes is most of the battle. Plants can spend years in the same pot and remain happy. If plant vigor decreases and appears pot bound, find which potting mix is appropriate for that species. Spending the summer outside can strengthen plants tremendously. To learn more, peruse Deep Cut's book collection in the Horticultural Library, call our horticulture help line, or sign up for our informative programs like Summer Camp for Houseplants and Houseplants 101.



Spreading club moss (Selaginella kraussiana) is an example of what the earliest land plants looked like 300 million years ago and thrives in low light conditions.



Veronica Puza, Park Naturalist

## Rodents. You can't live with them; you can't live without them.

ften misunderstood creatures, rodents provide ecosystem services that other organisms simply do not. Although labeled as nuisances, we can learn a lot about these organisms ranging from their density in individual numbers, physiological diversity, and contributions to a healthy environment.

Rodents are uniquely characterized by a single pair of continuously growing incisors in each of the upper and lower jaws. The word rodent originates from the Latin word rodere, which means "to gnaw." A rodent's jaws perform many functions such as self-defense, gnawing food, and excavating burrows. Because their incisors do not stop growing, the animal must continue to wear them down. As the incisors grind against each other, the animal's teeth are left sharpened and shaped like the blade of a chisel. In addition to their unique dentition, rodents are also often characterized by their robust bodies, short limbs and long tails. Extremely diverse in their ecology and life history, rodents are naturally found all over the world except Antarctica, New Zealand, and a few small islands. Remarkably, 40% of all mammal species are rodents.

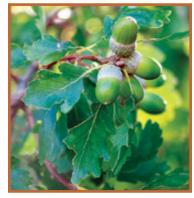


North American beaver skull. Photo from Wikimedia Commons.

### The Secret Gardener

A common site throughout Monmouth County is the eastern grey squirrel (*Sciurus carolinensis*). Most frequently, we associate the grey squirrel as an interference on our daily commute, but squirrels perform an important ecosystem

service that may change your perception of them. Grey squirrels are cache animals. To cache means to place or store something in a hidden or secure place for future use. Caching is an instinctive behavior where an animal will save food in times of surplus (usually in the summer and fall) to prepare for times of scarcity (in the winter). Since squirrels do not hibernate in winter, caching is a necessary strategy for survival. But will a squirrel always remember where it has cached all those acorns? The answer is most likely not. As cause, squirrels function as an amazing seed disperser throughout our



Acorns on an oak tree. Photo from Wikimedia Commons.



Eastern grey squirrel eating an acorn.

deciduous forests. A squirrel may forget the location of its buried treasure, and instead provide an opportunity for new life to grow.

### A Graceful Glider

Another arboreal rodent, which spends most of its time in trees but is not so commonly seen, is the southern flying squirrel (*Glaucomys volans*). Flying squirrels are one of the most unique rodents that reside in New Jersey. Following a nocturnal lifestyle and active at night, these specialized animals do not actually fly, but instead glide through the forests with the help of loose furred skin that acts as a parachute. The patagium, which is the wing-like fold of skin that stretches from the forearms to the hind legs, enables the animal to cover up to 150 feet in a single glide. They control the direction of their glide through tensing and turning their legs and can even turn at a completely

right angle.
When the animal is approaching its landing, the squirrel flips its flat tail up and holds its body back to slow it down, giving it the appearance of a parachute.



Southern flying squirrel gliding.

### **Small but Mighty**

The eastern chipmunk (Tamias striatus), a ground dwelling species of rodent most notoriously known for its ability to transport large quantities of food within its cheek pouches, is a familiar sight within the parks. This rodent spends most of its time foraging the forest floor for foods it can bring back to its extensive underground home. Chipmunks use their underground burrows not only for food storage, but to give birth, provide a refuge from the harsh winter, and as a quick escape from predators. It has been recorded that a chipmunk's burrow can be up to three feet deep and may reach as much as 30 feet long. Primarily solitary outside of the breeding season, chipmunks will fiercely defend their territories. With a series of chirps, a chipmunk wards off its competitor and, at times, will resort to physical threat if necessary. The next time you hear chirping on the trail, take a moment to look down as it may be the sounds of a feisty chipmunk rather than a bird.



Eastern chipmunk.

### **Ecosystem Engineers**

The North American beaver (Castor canadensis) is known as a keystone species. Keystone species are organisms that have a disproportionately large effect on an entire ecosystem. Such species are so important to a particular environment that if they are removed, the ecosystem would change drastically. Beavers inhabit riparian ecosystems, which means they are always found near or in water. Beavers are one of the few animals that modify their habitat. They move into areas with dense vegetation they will then use as a vital food source as well as for dam and lodge building. Beavers are some of the most hardworking organisms in the natural world, continuously working on their dams, which can be made of branches, rocks, saplings and mud. Dams can be incredible features to the landscape and, in this circumstance, create a beneficial environment for the organisms around them. Dams reduce stream erosion by forming slow-moving ponds and these ponds will then serve as habitat for a wide range of aquatic life. Through dam building, beavers facilitate a diverse biological community made up of fish, aquatic plants, amphibians, waterfowl and insects.



Beaver swimming with vegetation in its mouth. Photo from Wikimedia Commons



Beaver chew along a stream.

Rodents shape our landscape, regenerate our forests and provide a source of sustenance to many other organisms within our ecosystems. Rodents keep the environment functioning through the checks and balances of their populations and ecosystem services they contribute to. Not often revered, our world would simply not be the same without this group of organisms. The challenge of sharing our world with the animals that inhabit it is understanding the role they play in a healthy ecosystem and not always the inconvenience they pose to our lives. The next time you see a beautiful, stately oak tree take a moment to think that a squirrel may have been the cause for its presence or the way small tributaries flow and feed the rest of the land were made possible through a beaver's engineering efforts. The more we reframe our thinking, the more we can work together with nature rather than against it.

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# Volunteers are the heart and spirit of the Park System. Make a positive impact on our community by volunteering with our Invasive Plant Strike Force!



Coordinator of Volunteers Holly Junice (left) with the MCPS Volunteer Invasive Plant Strike Force and Public Information Officer Karen Livingstone (far right) after uprooting garlic mustard at Historic Portland Place in Hartshorne Woods.

To register as a volunteer, fill out an application here:

For more information on becoming a Monmouth County Park System volunteer, contact volunteer@monmouthcountyparks.com or call 732-842-4000, ext. 4283.

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