



## A PARK IS A NATURAL RESOURCE

More than picnic areas and playgrounds, parks protect more than 15,000 acres of open space in Monmouth County. The fields, forests, lawns, trails, and waterways of the parks serve as both a place to recreate **and** a way to preserve the environment.

### New Jersey & You (and You, and You, and You....)

According to the latest census numbers, NJ has 1,195 people per square mile, making it—by far—the most densely populated state in the nation. Compare this to Alaska or Wyoming with 1.2 and 5.8 people per square mile, respectively and it can definitely feel crowded here sometimes! When you consider how much space is needed for infrastructure to meet the needs of all these residents (from roads, houses and public utilities to clean water, schools and soccer fields) as well as property for grocery stores, gas stations and countless other businesses, you can see why land use has become such a critical issue.

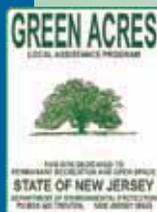
Buying property in NJ is a competitive endeavor, but unless we continue with conservation efforts, much of this area's remaining land will end up being developed for other purposes. Looking forward, the decisions we are making right now will determine what type of environment our children, and their children's children, will be living in...just as those who came before us thought ahead to preserve the parks we enjoy today.

### We All Benefit by Preserving Park Land

There are many definitions for the term "natural resource," but most usually mention land or an environment that is left in a pristine or relatively untouched state, so that it can produce "things" of value to

**Did You Know?**  
*Critical funding assistance for many Monmouth County parks was provided by the state's **Green Acres Program**. Created in 1961 to meet NJ's recreation and conservation needs (and celebrating its 50th Anniversary this year) it allowed for state bond initiatives to buy land for parks and conservation. Here in Monmouth County alone, the Green Acres Program helped fund the purchase of more than 8,631 acres; that's more than half of the county Park System's total 15,030 acres of open space.*

us: fields to grow crops, clean water to drink, a healthy forest for wildlife/plant species to flourish, etc. Proper planning and management has made sure the Monmouth County parks offer many beautiful recreational opportunities while protecting the resources needed to ensure clean water, land and habitats.



Green Acres has also funded state and local acquisitions in Monmouth County.



The Park System's Manasquan River Greenway protects land along the Manasquan River between Freehold and Howell. It is an important source of drinking water **and** a beautiful place to paddle.



NJ is a popular place to be, especially during summer. Seven Presidents Oceanfront Park in Long Branch hosts almost ¼ million visitors each season **and** is a protected ecological habitat.



Park facilities, such as this extension to the Henry Hudson Trail along Sandy Hook Bay in Atlantic Highlands, thrive where there are plenty of people to enjoy them. (shown bottom left).



Sometimes...it's hard to ignore the impact of people on the landscape.

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## Recreation Benefits of Parks

- **Supporting Healthy Lifestyles:** Park System land in Monmouth County is spread across 39 locations with 124 miles of trails, countless pastoral vistas and one-of-a-kind recreation facilities so residents can retreat from their intense, daily routines and rejuvenate, body and mind close to home.
- **Building Social Connections:** Coming together as neighbors and friends in the outdoors is a great American tradition. While technology may tempt us to spend more solitary time indoors, the Park System offers nature events and outdoor programs that entice people back outside to spend time with friends and family.
- **Addressing Outdoor Deficit Syndrome & Inactivity:** The Parks provide a safe and beautiful environment where people of all ages can get regular exercise and participate in wholesome outdoor activities, year round. A scenic pond, water playground, or charming historic site might be just the enticement needed to get out and get moving.
- **Teaching People How to Enjoy the Outdoors:** Camping, canoeing, hiking, birding...with over 4,000 reasonably priced programs and activities offered each year, people of all ages can learn a new outdoor activity, in every season.



What a Way to Spend the Day: enjoying a picnic in Holmdel Park when the cherry blossoms are in bloom. Admire nature, then after lunch, take a walk along the trails.



Run (to the) Forest, Run! Thompson Park Day is one of the Park System's most popular events. Families, friends (and their pets) get out in the parks to run, walk, climb, ride, learn and celebrate autumn.



Swing a Club... or a Paddle. Take up golf as a junior, or canoeing as a senior. Each activity is tailored to an age-specific audience.

## What Makes Parks Possible?

**Your Support.** Unlike schools, courts, police and fire departments, our parks and open spaces are not mandated by government. Preserving open space is driven by public need and interest, and is based on public support and the government's ability to provide funding. Since 1960, you—the residents of Monmouth County—have consistently supported efforts to secure funding for open space. And today, there are dozens of beautiful, safe and well-managed parks, greenways, golf courses, gardens and historic sites to enjoy.



Want to Support the Parks? Come, Visit, Enjoy! This Senior Hikers Group is a well-known and lively presence in the parks. Not a group to back away from a challenge, they completed the Park System's 50 Miler Anniversary Challenge with much fanfare last year.



Nature Beckons. A popular fishing/boating spot in the summer, the pond at Turkey Swamp Park has frozen over for skaters to enjoy.

## Conservation Benefits of Parks

- **Protecting Water Quality:**

Preserving land around critical bodies of water helps keep them clean. This, in turn, protects the supply of drinking water and ensures the well-being of fish, birds and other water-based species.



Frogs, like this Pickerel, are a sensitive species and one of the first affected by a compromised environment.

- **Limiting the Impact of**

**Development:** When open space is preserved near wetlands, stream valleys and reservoirs, it can reduce soil erosion and flooding of streets, homes and businesses.



This county greenway protects land along the Metedeconk River, which serves as the dividing line between parts of Monmouth and Ocean county and as a source of drinking water.

- **Protecting Plants, Wildlife Species & Their**

**Habitats:** Two of the most visible and dramatic examples of species recovery here in Monmouth County are the endangered Bald Eagle and Osprey. Nearly driven to the brink of extinction just a few decades ago, both are now seen with increasing frequency in a handful of Park System properties.



Parkland around a stream can act as a sponge when it overflows, absorbing excess water then slowly releasing it so it doesn't flash flood further downstream. This trail boardwalk at Turkey Swamp Park crosses the Metedeconk, one of two rivers that flow through this 2,173 acre park in Freehold. (The other is the Manasquan River.)



The Osprey is a regular breeder at the Manasquan Reservoir. Here it is flying overhead. Take a good look at its features. Perhaps you will recognize it on your next visit.

- **Removing Invasive Species/Restoring Habitats:**

The Park System has been monitoring non-native plant species for decades and has recently implemented a series of large scale measures to control some particularly unruly and aggressive invasives. The goal is to restore the landscape to its original appearance and/or composition. Recent efforts include the removal of target species such as Garlic Mustard, kudzu vine and Norway Maple (shown below) as well as more extensive habitat restoration projects.



Removing select invasive trees, shrubs and grasses creates "breathing room" so that healthier native species—the ones meant to be here—can thrive again. Read more about a seaside habitat restoration project at Fisherman's Cove on page 10.

- **Preserving History & Cultural Resources:**

In addition to its two historic sites, Longstreet Farm and Historic Walnford, there have been dozens of smaller restoration projects throughout the Park System. From barns and houses to gardens and wells, these projects preserve the county's former look and feel so that people can still get a taste of its rich agricultural past.



The Activity Barn at Thompson Park was carefully restored and is used for many programs and activities.



Take a peek inside... a perfect site to host a Barn Dance and Jack-o-Lantern Jamboree.

Reference: Population Density, Resident Population Data-2010. US Census Bureau. Available at <http://2010.census.gov/2010census/data/apportionment-dens-text.php>. Accessed 3/17/11. State and County Quick Facts, New Jersey-2009. US Census Bureau. Available at <http://quickfacts.census.gov/qfd/states/34000.html>. Accessed 3/17/11.

## HELPING TOWNS PRESERVE OPEN SPACE: MONMOUTH CONSERVATION FOUNDATION

**F**ounded in 1977, the Monmouth Conservation Foundation (MCF) is a non-profit "Land Trust" dedicated to acquiring, holding and preserving open space in Monmouth County. To date, the Monmouth Conservation Foundation has helped preserve 49 properties throughout the county, ranging in size from 1 acre to 416 acres and totaling over 6000 acres.



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Open Spaces/Livable Places (OSLP) recently talked to Executive Director Adele Keller and Conservation Project Manager Fran Varacalli about the Foundation's work.

**OSLP: Most people know MCF as a funding partner for land preservation for Monmouth County and its municipalities. What else does MCF do?**

MCF: Over the years we've played a **large role in pro-open space initiatives**, including the statewide Keep It Green Coalition which advocates for a stable source of funding for the Garden State Preservation Fund, and the successful voter referendums on the dedicated County Open Space Tax. We are active in **educating people about preservation of open space and farmland**, including **serving on the steering committees** for the



### MCF Can Help Municipalities...

#### In general:

- Answer basic questions about preserving land
- Help establish municipal open space taxes
- Identify State or County open space funds for local projects

#### More in-depth services, by contract:

- Prioritize possible acquisitions
- Negotiate with land owners
- Coordinate survey, appraisal, contract and environmental assessment work
- Work with potential funding sources
- Monitor easements
- Prepare grant applications

Monmouth County Greentable and the annual New Jersey Conservation Rally. And we provide **technical support** to Monmouth County and its municipalities both as a source of information and as a provider of **direct assistance in open space planning** and acquisition. The Foundation also holds **easements on over 300 acres** of open space and farmland which are monitored annually for compliance with the terms of the easement. Special projects have included the 2008 Great Places of Monmouth County, a Geographic Information System (GIS) inventory and methodology for defining land preservation priorities.



The Plum Tree and Aker Farms were preserved by the Township of Howell with the assistance of the Monmouth Conservation Foundation.



(l to r) Monmouth Conservation Foundation Director Adele Keller with Project Coordinator Jena Cosimo and Project Manager Fran Vacarelli.

**OSLP: How do these services relate to MCF’s mission?**

MCF: Anything that promotes funding for open space or enables municipalities to acquire open space advances the Foundation’s mission of preserving open space in Monmouth County.

**OSLP: Can you tell us more about the municipal technical assistance services?**

MCF: We routinely handle basic questions from towns and landowners on matters such as options for preserving land, establishing municipal open space taxes, and what State or County open space funds are available for local projects. More in-depth services available by contract include: prioritizing possible acquisitions; negotiating with land owners; coordinating survey, appraisal, contract and environmental assessment work; acting as a liaison with potential funding sources; monitoring easements; and preparing grant applications. We can tailor our services to meet the needs of the town for the particular project.

**OSLP: Does MCF charge for the planning and acquisition services it offers to municipalities?**

MCF: There is no charge for our basic informational services but we do have fees for the contract work. As a non-profit whose work is supported almost solely by donations, the modest fees we charge are critical to supporting the professional staff providing the services.

**OSLP: What advantages are there for municipalities to use MCF for this work rather than doing it in-house?**

MCF: This is what we do – our experience and specialization means we can perform these services quickly and efficiently. We have strong working relationships with other open space organizations and

we understand the often delicate nature of landowner negotiations.

**OSLP: Can you give several examples of towns that you’ve assisted?**

MCF: We’ve had contracts for technical assistance in twelve municipalities. These include Avon-by-the-Sea and Manasquan where single small, but important waterfront parcels were acquired and Howell where we assisted on the acquisition of approximately 30 farmland easements including landowner outreach and all due diligence (appraisals, surveys, contracts, etc.). We’ve been very active in Middletown and Upper Freehold on both park and farmland preservation.

**OSLP: How do you choose towns to receive assistance?**

MCF: We don’t choose towns, they choose us. For an open space plan or project to be successful, municipal leaders must be committed to the effort, and able to expend local funds. When a town is serious about a local preservation plan or project, the Foundation is ready to assist.

***When a town is serious about a local preservation project, the Foundation is ready to help.***

**OSLP: If a town is interested in your services, who should they contact?**

MCF: Towns may contact the Foundation by telephone at 732-671-7000 or by e-mail to either Akeller@monmouthconservation.org or Fvacarelli@monmouthconservation.org. We also encourage people to visit our website [www.monmouthconservation.org](http://www.monmouthconservation.org).

## SHADE GARDENS

Diane Allen, Staff Horticulturalist

Shady areas in the garden are often viewed as a problem. But they shouldn't be! The shaded garden can be an enviable asset, providing a cool retreat on hot summer days, a habitat for birds and other wildlife, and the qualities of tranquility, maturity and privacy.

### What Type of Shade Do You Have?

The first step in developing a shade garden, as any garden, is to determine the site conditions. The type of shade will determine which plants you may consider.

**Light shade** is bright and open, receiving about six hours of sun per day. This kind of shade is often found on the north side of a building that is otherwise unobstructed. There is usually plenty of reflected light. Such a site will afford a wide range of plants, as many full-sun plants will grow here.

**Partial shade**, also called half-shade, receives four to six hours of direct sun during the day, either in the morning or afternoon. The east or west side of a building or tree are examples. Most sun-loving plants will be successful here, as well as shade-loving plants, providing a very wide choice of plants. A key factor is whether the area receives sun in the morning or afternoon - morning sun offers more options, as the plants receive protection from the hot afternoon sun.

**Dappled shade** is characterized by spots of sun and shade that shift throughout the day. Here, the sun's rays may be filtered by a high, open tree canopy or pergola. A wide variety of plants are well-suited for such areas, especially our native woodland plants.

**Full shade** is that cast by evergreens, dense tree canopies, tall buildings or under wide eaves or an entryway. There is no direct sun and light intensity is low. Though the choices are more limited, there are plants that will thrive in such areas.

### Seasonal Shade and Moisture

Remember that shade patterns will change through the seasons and over the years. The lower winter sun casts longer shadows than summer sun and as trees grow, the canopy will too. Areas beneath deciduous trees may receive full sun during the winter and early spring.

It is also important to determine the amount of moisture available. Dense tree canopies may block some rainwater and their roots will most likely take up the lion's share of moisture. Near a building, soil compaction or runoff from the roof may cause poor drainage conditions, while a deep overhang may block rainwater.



Flowers that tolerate partial shade (front to back): weigela 'Wine & Roses', iris, peony 'Exquisite Jade', daylily, Montauk Daisy (not in bloom), weigela 'Rubidor', liliium

#### Plants for Shade

Perennials: tiarella, chelone, columbine, hardy cyclamen; Shrubs: pieris, leucothoe, fothergilla; Trees: redbud, amelanchier

#### Plants for Dry Shade

Perennials: Solomon's seal, epimedium; Shrubs: Carolina allspice; Trees: witch hazel

**Plants for Moist Shade**—Perennials: fernleaf bleeding heart, columbine, astilbe; Shrubs: American elderberry

**Annuals for Shade**—Begonias, caladium, coleus, heliotrope, pansy

**Edibles for Shade**—(may not be as prolific, but will produce in partial

shade) Root crops: carrots, radishes; Leafy greens: lettuces, spinach; Peas, beans and cabbage family all benefit from some shade in the warmer months; Rhubarb, horseradish; Herbs: mints, thyme, sage, dill, oregano, chamomile, borage, parsley, chives, basil; Fruits: red raspberries, Alpine strawberries, blueberries, cranberries

## How To Reduce Shade

The tree canopy may be thinned by selective pruning, or lower limbs may be removed to allow more ambient light. Either will increase air circulation as well as light, but remember that it is not a one-time deal – the tree will compensate and the canopy will fill in again over time.

Painting walls and fences a light color will increase reflected light and have the effect of brightening the area as well.

## Shade Secret: Prepare Your Soil

Because plants placed beneath trees will be competing not only for sunlight, but also water and nutrients, soil preparation is particularly important. Be careful, however, digging beneath your trees, lest you damage their roots. Explore between major roots for pockets that you can amend with compost, then add a top-dressing of compost (no more than 3-4") and mulch lightly with shredded leaves. Earthworms will gently incorporate the organic matter into the soil.



Golden or chartreuse leaves will amplify sunlight, or even give the impression of a pool of sunlight where none exists.



White and light colors brighten shade without disrupting the serenity.



Create layers when planning your garden – large trees, smaller trees, shrubs, perennials, bulbs, annuals, groundcovers.

## Planning a Shady Garden

A shady garden is likely to be less formal than a full-sun garden, but should still have structure and cohesiveness. Woody plants and evergreens will provide structure and winter interest. Repetition of colors and shapes will provide cohesiveness. Because the flowers of shade plants tend to be more modest than those of sun-lovers, foliage will play a more important design role. Contrast and compliment leaf shape, size, texture and color. The flowers of shade plants, though smaller and less profuse, are often exquisite; place them where they can be seen and appreciated.

Garden décor like chairs, urns, containers and birdbaths can also be used to add color to the shady garden.

## CONTAINERS FOR THE SHADE

A container can go a long way to brighten a shady spot. When selecting plants you generally want to pick out a “thriller,” a “filler,” and a “spiller.” The first is the focal point of the planter, the second fills in the middle section, and the last cascades down the sides, to soften the transition from plants to container.

**A container planting rule of thumb: Pick a thriller, a filler and a spiller!**

Depending on the size of your container and how ambitious you wish to be with your design, you may choose more than one filler and/or spiller. Since shade-loving plants often have less showy flowers, and fewer of them, look for eye-catching foliage.

Make sure the container has drainage holes. Fill it halfway with a container mix; sprinkle a time-release fertilizer, and then begin placing your plants, start with the largest. When you are satisfied with placement, fill in with more mix, firm gently around the roots, and water with a mild fertilizer solution.

Maintenance should be fairly easy, requiring regular watering, removal of spent flowers, and perhaps pinching back from time to time to keep the plants full. While tending the plants be on the lookout for signs of pests or disease so you can nip any problems early on.



Sweet potato vine 'Marguerite', coleus, lamium 'Purple Dragon', tuberous begonia, sweet potato vine 'Blackie'



Tuberous begonias, which grow from a bulb-like corm, thrive in the shade and are available in an array of striking forms.

# LIFE IN THE LILY POND

Deep Cut Gardens' tranquil and inviting Lily Pond was originally built as a swimming pool by Marjorie and Karl Wihtol, who owned the property from 1952-1977. Cruising near the surface spring through fall, are large graceful fish called koi. To supplement the food provided by park rangers, they eat a variety of insects that dip into the water.



*The Lily Pond at Deep Cut Gardens, with waterlilies, papyrus, cattails, reeds & rushes.*

Park visitors are surprised to learn that these fish spend winter in the same pond. As the water cools, their metabolism slows and they enter a period of dormancy, usually staying close to the bottom. Once the water temperature drops to around 50 degrees, they are no longer fed (it would make them sick). The bubbler that helps keep the water aerated during the summer months continues to run, to keep a hole in ice that forms on the pond and facilitate gas exchange.

A variety of smaller fish like comets and shubunkins keep the koi company. Frogs and turtles also dwell in the pond, while dragonflies and damselflies hover above. The pond is also home to a variety of hardy and tropical plants that provide perches and cover for pond inhabitants. The tender tropical plants spend the winter in one of the greenhouses. They are trimmed and placed back in the pond after the last frost, ready to delight visitors and wildlife through the peak season.



*Resident koi, short for the Japanese nishikigoi, which means "brocaded fish."*



*The pond in winter...the koi are still in there!*

## UPCOMING EVENTS

### Daylily Day

**Saturday, June 25, 10am-2pm**

Presented by the Monmouth County Park System and the Garden State Daylily Growers.

Free Horticultural advice, displays, garden design ideas. Free Admission/Free Parking.

### Jersey Shore Rose Society 40th Annual Rose Show



**Saturday, September 10**

Watch as roses are prepared for exhibition (starting at 8am); entries will remain on exhibit for the public after judging is complete at 12:30pm. Information in the selection & care of roses, plus Garden & Rose Show tours. Free Admission/Free Parking.

### Bonsai Day

**Sunday, September 18,  
12:00-4:00pm**

The Deep Cut Bonsai Society & Deep Cut Gardens invite you to enjoy the Bonsai experience! See demonstrations and exhibits, talk to the experts. Visit the Jane Scott bonsai collection. Free Admission/Free Parking.

### The Great Fall Perennial Plant Swap

**Saturday, September 24,  
10am-2pm**

It's the gardening event of the season! It's Fun – Free – Easy! Bring your plants in 1-qt, 1-gal or 2-gal containers and trade them in for different plants of the same size. Houseplants may also be exchanged, but no annuals, please.

Please label all plants.

Call 732-671-6050 for more information.

# It's Time To...



## July ✓

- Take note of any gaps in your garden, which plants you will want to divide in the fall or next spring. If you aren't keeping a garden journal, consider starting one.
- Check plants for insects/disease and use Integrated Pest Management (IPM) methods for dealing with problems (Visit the Deep Cut Library to learn more.)
- Apply/replenish mulch to conserve water and suppress weeds.
- After bloom has finished, dig and divide irises, lily of the valley, Oriental poppies and bleeding hearts.
- Water thoroughly before and after transplanting container-grown plants.
- To keep vegetable gardens producing, harvest ripe produce regularly and ensure plants have 1" of water weekly. Water deeply, early in the day, and try to keep water off the leaves.
- Start seeds for fall crops: beans, peas, summer squash, cabbage family.
- For a stronger, healthier lawn, keep grass at least 3" high and water in the morning, deeply and less frequently.



*Hornworm (July): A hornworm can decimate a tomato plant in a few days, but if you spot one bearing what looks like tiny grains of rice – leave it in your garden! These are cocoons of a small beneficial parasitic wasp. The larvae kill the hornworm caterpillar and live on to produce another generation to patrol your garden.*

## August ✓

- During dry spells, water your compost bin to keep it active.
- Fertilize late summer and fall flowers. Give your roses their last feeding of the season by Labor Day.
- Sow late crops of radishes, beets, lettuce, kale, spinach, and turnips into September.
- Start planning for Deep Cut's Fall Perennial Plant Swap, Sept. 24.



*Clematis Seed Heads (August): Consider allowing some seeds to ripen for their beauty, for wildlife, or to save for next year; otherwise, continue deadheading.*

## September ✓

- Fertilize lawns late this month. Now is the best time to reseed or renovate.
- Plant evergreen and hardy shrubs; mulch and water well.
- After mid-month, leave some spent roses to produce hips and induce dormancy.
- Plant spring-flowering bulbs in groups or drifts for best effect next spring.
- Acclimate houseplants to lower light before bringing them indoors this month. Thanksgiving and Christmas cactus may be left out until just before the first frost.
- Dig and pot some of your herbs to grow inside through the winter in a cool, sunny spot; allow the soil to dry slightly between waterings.



*Pansies (September): Plant some pansies for fall color. Look for varieties that will bloom again next spring.*

# CORNER

## NATURE



Old Bait Shop sign, before the building was converted to an Activity Center.



Old aerial view of Fisherman's Cove; the Atlantic Ocean is across the top, Manasquan Inlet upper right, and Manasquan River—which changes from saltwater to freshwater—to the right. Note the different habitats within the site.

## ONCE UPON A SALT MARSH

Janet Ryan, Park Naturalist

Recent visitors to Fisherman's Cove in Manasquan may have noticed the changes brought about by the Park System's Habitat Restoration Project, currently underway. This site is composed of beach, dune and coastal salt marsh but because it was also used as a dredge spoils site\* (1931-1984), it has a mix of native coastal plants and invasive, non-native plants. There are

large stands of tall reed grass, called Phragmites, that indicate a disturbed environment as well as other invasives such as Oriental Bittersweet, Tree of Heaven (Ailanthus), Knapweed, and Japanese Knotweed.



Phragmites crowd out plants that are better suited to local wildlife and habitat, and are also a fire hazard.

### What is Fisherman's Cove?

This 55-acre property along the Manasquan Riverfront next to the inlet was established by the Monmouth County Park System as a Conservation Area in 1995. A former bait and tackle shop at the eastern end was converted into a small Activity Center, and aside from a summer parking area, the site remains undeveloped. It is a popular spot for area dog walkers (dogs must remain on a leash), anglers, birders, sunbathers and occasionally, kayakers.

While invasive plants may look nice, they displace native plant and animal species, degrading adjacent tidal wetlands, and reducing natural diversity of the habitat. This restoration project aims to correct these problems, improve recreation access and shoreline views, and reduce fire hazard from excessive dry plant material.



Pre-clearing, December 2010



Post-Clearing, January 2010.

### A Brief History of the Salt Marsh

Early colonists were familiar with salt marshes from their own homeland, and knew their value. Cows, oxen, and horses could pasture on the salt hay that grew here. They considered the hay a "gift of nature" because it grew on its own without the need for cultivation.

The colonists were aware, too, that salt marshes were effective buffers from ferocious storms, soaking up excess water from rain and tides, and keeping sand from being blown away. They knew from experience that plants of the marshes—those that can withstand the inundation of salty water—can even take the fierce battering of the heavy winds, when many manmade structures are demolished and washed away.

## The Salt Marsh Life Cycle

Salt marshes, wetlands between ocean mudflats and freshwater rivers, are extravagantly productive habitats. Nutrients from both the salty sea and the freshwaters of a river wash nutrients in and out with the tides. A high percentage of animals that live in the ocean will spend some part of their life cycle in the salt marsh. The salt marsh serves as a “nursery” for immature sea creatures and as a “cafeteria” for adult sea creatures, such as shell fish and fin fish that feed on them.

These creatures of the sea, in turn, attract waterfowl, shorebirds, and a variety of reptiles, amphibians, and mammals that can endure its unique conditions.



A hearty plant and NJ's only native cactus, the Prickly Pear, grows in sandy soil near the beach and is abundant at Fisherman's Cove. It is shown here with its bright yellow blooms.

## Wildlife Species of the Marsh at Fisherman's Cove



Mussels



Crab



Great Egret

## Harvesting Salt Hay for Many Uses

Saltmeadow cordgrass (*Spartina patens*) is one of the plants that thrive further back in the high salt marsh zone. It is a perennial grass, about 2-3 feet high, practically impervious to rot and is free of weed seeds. In the 19th century, there were many who harvested this “salt hay” to sell as fodder.

Later on, creative entrepreneurs came up with a multitude of other uses:

- Henry Ford used it to upholster the cushions of his Model T
- Builders used it to insulate houses and freshly poured concrete
- Farmers used it as mulch and to insulate tender crops
- Owners of ice houses used it for insulation
- Iron foundries used salt-hay rope to make cast-iron pipes
- The US government used it to construct airport runways during WWII



Salt marsh cordgrass (*Spartina patens*) at Fisherman's Cove

But times changed...new materials were developed to replace salt hay. People wanted relief from mosquitoes and in the 1940s many salt marshes were ditched and drained to keep mosquitoes from breeding. This caused fish to die—fish that would have eaten the mosquito larvae. Also, developers wanted the land near the water for vacation cottages and marinas. Some building projects caused more fresh water to enter marshes which, in turn, allowed the non-native variety of phragmites—the ones now being removed—to become dominant.

\*A dredge spoils site is a location where the excess sand, silt and mud dredged from waterways is placed. Busy waterways, like the Manasquan Inlet, are periodically dredged to remove accumulated material on the water's bottom so they remain deep enough to allow boat traffic to pass.



# GREEN HERITAGE

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PARK SYSTEM

## Can You Believe...

*This fish lives in a “garden,” while this plant grows “on the water” in the Monmouth County parks. Details inside...*



Visit [www.monmouthcountyparks.com](http://www.monmouthcountyparks.com)