



# MONMOUTH COUNTY PARK SYSTEM GREEN HERITAGE

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

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## AFTER STORM SANDY...

### THOMPSON PARK SERVES AS STORM RELIEF CENTER

In the aftermath of Superstorm Sandy on Monday, October 29, Monmouth County officials quickly realized that thousands of residents would soon need help to meet their basic survival needs. Within days, they established a supply and distribution network to provide essential supplies to families, especially in the hard-hit Bayshore region and coastal communities.

*Thompson Park had the space, staff, and equipment to mount a relief operation.*

Thompson Park in Lincroft was designated as the supply clearinghouse. Centrally located just off Parkway Exit 109, this site had just the right combination of elements needed to mount a relief effort--a storage building with loading equipment, trucks and vans for deliveries, and staff with operational experience who could quickly mobilize to get the effort underway.

By Wednesday, October 31, the county and park offices activated all their available communication networks to provide a list of critical items needed, urging residents to drop off supplies to Thompson Park. This effort included traditional press advisories to newspapers and radio, messages on Facebook, emails to local OEM offices, website postings and even 'old-fashioned,' recorded phone messages to spread the word.



*Inside the Storm Relief Center, industrial shelving units and transport equipment came in handy to haul and stock supplies.*



*Thompson Park's supply building features 2 large loading bays and immediate access to extra large tents, which were eventually needed for supply overflow.*



*In addition to volunteers from the Air Force, it took an 'army' of volunteers just to track incoming supplies.*



*People of all ages volunteered on-site.*



*Day after day, people lined up to drop off their donations.*

### An Overwhelming Response

It didn't take long. In the days and weeks that followed, a steady stream of donors rolled into the park, from dawn to dusk. Cars and trucks were packed with supplies from families and individuals, firehouses and churches, scout groups and clubs, small businesses and large corporations. Bakery goods from Thomas' and Entenmann's, sandwiches from Boar's Head, and supply boxes from AOL-Time Warner bolstered the provisions. Their generosity was both astounding and moving.

To date, more than 2,000 individuals, families and businesses from all over New Jersey and beyond made donations. Groups from Pennsylvania and New York trekked to Lincroft to drop off supplies, and calls came in from as far away as Florida, Wisconsin, Mississippi and New Hampshire with offers to ship whatever was needed most.

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*Unloading a trailer of supplies is when the operational expertise of military volunteers helped speed along the process.*

## A Community of Volunteers

Working side by side with Park Rangers and staff, hundreds of community volunteers and members of the active duty Air Force personnel from Joint Base McGuire-Dix-Lakehurst unloaded, sorted, cataloged, and repackaged tons of supplies. As fast as the supplies came in, they were sent back out into the communities hit hardest by the storm.

Volunteers pitched in wherever there was a need: sorting donated clothes, preparing food for the workers, and helping with

paperwork. This relief effort has been energized by grass roots support, allowing Park System staff to coordinate a streamlined and efficient supply chain. To all who participated with us, we offer our heartfelt thanks.

## Building a Distribution Network

Initially destined for three primary relief distribution centers, Park System staff delivered supplies to key nodes in the



*Heavy Lifting: Park staff worked side by side with volunteers for hours each day to keep the flow of supplies moving.*

Bayshore and coastal towns. As the need grew, and supplies burgeoned, the distribution network grew to 57 locations such as churches, schools, municipal centers, and firehouses that were best suited to get supplies closest to the hardest hit neighborhoods. By early December, staff had made over 250 deliveries.



*A Park System van driver confers with Red Cross worker at a drop off site.*

## COUNTY PARKS ASSESS IMPACT

In the chaotic aftermath of the storm, the Park System realized how important it was for people who were not displaced or catastrophically affected, to begin resuming their normal schedule. Having a safe place to exercise, walk the dog or attend after-school programs could be an important part of the healing process. To that end, staffers who were not engaged in the relief effort at Thompson Park got right to work clearing debris, making repairs and resuming scheduled activities.

Flooding at the beach and other waterfront sites, downed trees and tree limbs, and to a lesser extent equipment and electronic failures caused by power outages created the biggest problems. Fortunately, most parks and golf courses were able to reopen at least partially within days of the storm and scheduled programs soon followed as power was restored. The following sites sustained the heaviest damage, and will require more extensive or ongoing repairs.



*After a relief delivery to storm ravaged Sea Bright, this Park Ranger helps a municipal worker place supplies into a front end loader.*



*A tree blocks an access road at Turkey Swamp Park.*



*More trees fell at Turkey Swamp Park, this one onto a playground, a few days after Hurricane Sandy when a Nor'Easter hit the area.*

## Waterfront Damage

**Monmouth Cove Marina.** In addition to boat damage, structural components such as docks and pilings, were destroyed, and the building flooded.



*Remnants of a bridge near Popamora Point.*

### **Henry Hudson Trail/Bayshore-Highlands Bridges.**

The most heavily damaged area was from Popamora Point to the Atlantic Highlands Municipal Marina, where the bridges were destroyed and the trail itself washed out.

**Seven Presidents Oceanfront Park.** The Skateplex Hockey Rink and fencing around the park (including parts of the retention wall) sustained the most serious damage, coupled with damage to restroom facilities, pavilion decking and boardwalks.



*Damage at the marina.*



*Paved sections of trail near the marina entrance look like they were ripped apart like pieces of paper.*

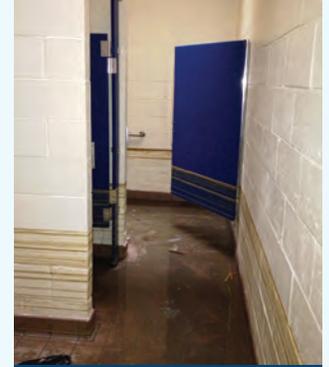
**Fishing Piers/Throughout the Parks.** These features are regularly damaged by even modest storms, so it is no surprise they were affected by Sandy.



*Fishing pier at Bayshore Waterfront Park.*



*Bel Aire Golf Course lost more than 50 trees.*



*A flooded restroom at Seven Presidents, note the striped waterline left by the sand.*

## Tree & Landscape Damage



*A picnic grove at Huber Woods Park.*

**Turkey Swamp, Huber & Hartshorne Woods, Clayton and Perrineville Lake, Holmdel and Shark River Parks.** Wherever there were a lot of trees, especially large trees, there was a lot of damage. Rangers at heavily wooded sites first had to remove downed trees from approaching roadways, then parking lots, and finally the trails, playgrounds and picnic areas before visitors could safely access facilities.

**Thompson Park and Golf Courses.** At manicured locales such as Thompson Park and Bel Aire Golf Course in particular, many large iconic trees that defined the landscape or served as guideposts, were toppled.



*Sandy dealt another blow to the copper beech in front of Thompson Park's Visitor Center.*

**Hartshorne Woods Park.** The waterfront landscape was dramatically altered as chunks of land and trees literally broke off and fell into the water. Parcels along the Navesink River simply disappeared, altering scenic vistas as well as familiar water access sites and trail scenery.

There have been a few positive and interesting observations from this storm. First, the damage to county park facilities overall was relatively minor, especially when compared to other coastal areas. At Seven Presidents Oceanfront Park, the dunes may have protected park infrastructure from more

severe damage. At Bayshore Waterfront Park, the dunes had just been reinforced with a concrete stabilization mat because they were seriously compromised by previous storms; this mat sustained relatively minor damage and perhaps most surprisingly, the Activity Center (known to many as the "Spy House") sits just a few yards from these reinforced dunes and Raritan Bay, and it was not damaged at all.



*This ridge—and others like it—now exist where land meets water along the Navesink.*

## RECYCLING OUR HISTORIC RESOURCES

Our rich local and national heritage of historic buildings continues to be threatened, sometimes by simple neglect, other times by poor planning or even just a lack of imagination. Of course, not every old building can be saved, but there are many historic properties that can and should be rescued.



*The Count Basie Theatre, built in 1926 as the Carlton Theatre, was recently restored. The building attracts economic activity to downtown Red Bank and preserves a local landmark. Courtesy Mills + Schnoering Architects, Princeton.*

Historic structures are often lost because too few people know that in addition to preserving the history, architecture and character of a community, recycling older buildings makes good economic sense and good environmental sense.

***Recycling old buildings makes good economic and environmental sense.***

Barns, schools, houses, train stations and factories may no longer be needed for their original purpose, but they can be renovated and re-used in creative new ways such as new housing, commercial office space, recreation facilities, and community centers.

Moreover, many of the changing needs of today's households and businesses can be met with historic buildings. Functional adaptability of historic buildings is one of their greatly under-recognized attributes. Some imaginative reuse for historic buildings includes senior housing in an empty downtown department store, a trade school in a former factory, a municipal building in a 19th century school and a health spa in a former Elks Club.

*In the parks, many old dairy barns (like this one from the 1950s at Dorbrook Recreation Area) are now used for storage or activities.*



### Historic Preservation Makes Economic Sense

A look at the economics of historic preservation has shown that saving old buildings has a positive impact on the community, while also preserving a piece of history. Rehabilitation of older buildings is a proven cost-competitive alternative to new construction.

***Rehabilitation is a cost-competitive alternative to new construction.***

Every rehabilitation project is unique, so there is no absolute rule to determine which ones will be more or less expensive than new construction, but a consistent pattern has emerged after 25 years of studies.

When complete renovation of a historic building is necessary, it is usually possible to build something new that is cheaper. But, that new structure will likely be of much lower quality and have a shorter life expectancy than the quality rehabilitation of a historic structure. If, on the other hand, you compare the cost of a high-quality new building to a high-quality rehabilitation of a historic building, the new building will generally be more expensive. Square foot for square foot, historic rehabilitation is a reasonable cost-competitive alternative.



*Sunnyside farmhouse is currently undergoing restoration.*

## Sunnyside Farmhouse: A Case in Point

The rehabilitation of a 6,500 square foot former farmhouse at Sunnyside Recreation Area in Lincroft is a case in point. This building includes sizable rooms for public programs and office space. The cost to rehabilitate the building is approximately \$145 per square foot, whereas good quality new commercial construction would be around \$200 per square foot.

***The cost to rehabilitate is only \$145/sq. ft. versus \$200/sq. ft. for quality new construction.***

And, to construct a comparable Colonial Revival building in style, materials and detailing would be close to \$400 per square foot!



*Built primarily in the 19th century, features of this farmhouse—such as the sunburst entry transom and lovely sunrooms—will be transformed into a new entrance and reception area as part of the current renovation.*



*In keeping with many historic porches, the new corridor has a metal roof.*

Creating jobs and increasing local household income are at the top of the list for economic development. By any measure, the rehabilitation of older and historic buildings is a real “job creator.”

In general, while new construction will be half materials and half labor, rehabilitation will be 60-70% labor, with the balance being materials. A million dollars spent in new construction generates 30.6 jobs, whereas a million dollars spent in rehabilitation of an historic building creates 35.4 jobs.

## Sustainability: It's for Our Future

How can historic preservation contribute to sustainable development? Let's start with solid waste disposal. In the United States, the average person generates almost one ton of solid waste per year and its disposal is increasingly expensive both in dollars and environmental impact. Environmentalists cheer when used tires are recycled into

asphalt shingles or recycled newspaper becomes part of fiberboard. But did you know? When we rehabilitate a historic building, we are both reducing waste and recycling.

In addition to a lesser impact on the landfill, consider the embodied energy of historic buildings. This is the total expenditure of energy involved in the creation of that building and all its constituent materials. When we tear down a historic building, we are throwing away thousands of dollars of embodied energy and replacing it with materials vastly more consumptive of energy.

Most historic buildings are constructed of brick, plaster, concrete and timber, all of which are among the least energy consumptive of materials. New buildings, on the other hand, consist mainly of plastic, steel, vinyl and aluminum, which are among the most energy consumptive of materials.

*Tatum Park's Holland Activity Center (built in the 1800s) is currently being upgraded for use as program and rental space.*



*This view from the porch illustrates the type of stunning park scenery that make this building a desirable site for an elegant reception or meeting.*

Furthermore, embodied energy savings increase dramatically as building life stretches over fifty years. If you have a building that lasts 100 years, you could use 25% more energy every year and still have less lifetime energy use than a building that only lasts 40 years. And many buildings constructed today will not last 40 years.

## Historic Structures in Our Backyard

There are dozens of historic structures in Monmouth County awaiting creative plans for new uses. So the next time you hear about a threatened historic landmark in your town where people say, “There's no use for that old building,” please ask them to think again.

Reference: Measuring Economic Impacts of Historic Preservation: A Report to the Advisory Council on Historic Preservation. 2011. Donovan Rypkema, Caroline Cheong and Randall Mason. <http://www.achp.gov/docs/economic-impacts-of-historic-preservation-study.pdf>

## ARE YOUR ROSES IN DANGER FROM RRD?

Diane Allen, Staff Horticulturalist



The Rose Parterre at Deep Cut Gardens



A resident rose

As if gardeners who grow roses didn't have enough to worry about – blackspot, thrips, Japanese beetles – there's a new threat in our region: Rose Rosette Disease (RRD). While the rose is, in fact, a vigorous and resilient shrub, as befits our national flower, this new disease could be disastrous for home gardeners, public gardens and commercial growers. It is contagious, almost always fatal, and there is no preventative and no cure.



A thickened stem, reddish coloration and distorted growth may indicate infection with RRD virus; the overabundance of thorns is not present here. This rose was in Deep Cut's rose garden and was removed.

**Rose Rosette Disease (RRD) is contagious and almost always fatal. There is no preventative and no cure.**

### History & Cause of RRD

Although the disorder was first observed in the wild in northern US and southern Canada in 1941, it was not perceived as a threat to cultivated roses until the 1960s. The pathogen was finally identified as a virus just last year.

The vector is a microscopic eriophyid mite, *Phyllocoptes fructiphilus*, often found on roses. The mite transmits the virus from an infected rose when it begins feeding on a new plant. Tender new growth is particularly attractive. From there, the disease becomes systemic, traveling through the plant's vascular system, down to the roots and up to the rest of the shrub.



All the bushes in the one affected bed at Deep Cut Gardens were completely removed.

These wingless mites cannot fly; they crawl to adjacent plants if leaves or canes are touching. Mites also spread via air currents or by attaching themselves to insects. Adult mites overwinter on rose canes and migrate to developing shoots in spring where they lay their eggs. The disease can also be spread during the grafting process or by contaminated pruning shears. Recent research suggests the possibility of root-to-root spread.

### Symptoms

Symptoms may appear 1-3 months or more after infection. Some roses die within 3 months, while others linger for a year or more, serving as sources of infection. Although symptoms vary depending on plant age and cultivar, season, growing conditions and stage of infection, they are usually first observed in spring, intensifying as the season progresses.



Note the red, 'witches broom-like' appearance of the RRD affected cane, and how it compares to the healthy ones.

To the observant, an affected cane will often stand out among the healthy ones, exhibiting one or more of the following:

- Rapid elongation of shoots
- Prolific clustering of shoots (known as “witches’ broom”)
- Abnormal red discoloration of shoots and foliage\*
- Overabundance of thorns, which may be more pliable than normal
- Shortening of internodes
- Deformed leaves, buds or flowers
- Spiral pattern of cane growth
- Thickened stems (thicker than the canes from which they emerged)

\*The key word here is ‘abnormal.’ Many rose cultivars normally exhibit reddish new growth which disappears as the leaf matures.

### **What to Do if You Spot RRD**

First, rule out nutrient deficiency or herbicide exposure, which may cause similar symptoms, but in either event it is likely that the entire plant would be affected. As yet there are no lab tests for definitive diagnosis of RRD.

If you feel you have caught it early and are loath to part with the affected shrub, you can try removing the affected cane down to the base and watch for recurrence of symptoms. If more

than one cane is affected, removal of the entire plant and immediate disposal is recommended. Because the pathogen can reside in infected root pieces, it is important to be thorough in removal. Be careful not to scatter disease-carrying mites to nearby rose shrubs.



*Multiflora rose, now a widespread invasive, is highly susceptible to RRD and is the primary host and serves as a reservoir of the disease.*

Disposal by burning is preferred, but if not permitted, bag and place in the trash. By the time symptoms are severe, the mites, and possibly disease, are likely to have already spread to neighboring plants. Focal application of an appropriate miticide on surrounding plants may be warranted.



*Cottage-style plantings may inhibit the spread of mites.*

If you have not seen evidence of RRD and want to lessen the chances that it will find its way into your garden:

- Space plants so they don’t touch
- Purchase new roses from a reliable source; inspect plants before purchase
- Quarantine new or suspect roses
- Disinfect pruners when pruning or deadheading
- Consider interplanting roses with other plants, cottage garden style, to inhibit spread of mites
- Remove multiflora roses from within 100 yards of cultivated roses whenever possible. Cultivated roses planted downwind will be at greatest risk

### **Researchers Experimenting With Chemical Control**

This four-legged mite is not a spider mite and not susceptible to most miticides. Except when migrating, this mite spends most of its life in sheltered places which makes it difficult to control with topical pesticides. Although there are some reports of effective control with horticultural oils, no organic controls have been proven effective.

Avamectin (Avid) is a registered miticide for both eryophyid and spider mites on roses, and has been recommended by VA Tech as an alternative to Cygon 2E (an effective miticide no longer available for home use).



*Even the disease-resistant ‘Knockout’ rose, found in gardens throughout the parks and carefully tended by Park System volunteers, has been found susceptible to RRD.*

Use of miticides is not a substitute for cultural controls (i.e., removal of infected roses), and prophylactic use of miticides is not considered practical or wise.

### **No Resistant Rose Cultivars...Yet**

At this time no resistant species or cultivars have been identified. Even the disease-resistant ‘Knockout’ rose has been found very susceptible to RRD. The future may bring the incorporation of resistance into cultivated roses, and possibly biological control of the vector (the mites themselves are susceptible to tiny predators and fungal diseases). In the meantime, the best advice is to stay informed.

*Further Reading: Due to the recent discovery of the causal agent, there is still much to be learned and a good deal of conflicting literature. The VA Cooperative Extension [www.ext.vt.edu](http://www.ext.vt.edu) has some good information in their Publication #450-620 and Ann Peck of the NJ Rose Society has compiled some very comprehensive information at [www.rosegeeks.com](http://www.rosegeeks.com).*



# A Fairy-Friendly Garden

Legend tells us that fairies like many different kinds of environments – woodlands, meadows, seashores and gardens – and that there are some plants they favor above others. Choose from these if you want to attract them, and you may find your garden is attracting many birds and beneficial insects as well.

## FAIRY FLOWERS

anemone	forget-me-not	lilac	rose
baby's breath	four o'clocks	lily of the valley	rosemary
bee-balm	foxgloves	milkweed	snapdragon
bluebells	heather	money plant	sunflower
buttercups	heliotrope	nasturtiums	sweet peas
columbine	hollyhock	pansies	sweet woodruff
coral bells	honeysuckle	peonies	thyme
cosmos	lady's mantle	periwinkle	tulips
daisies	lady's slippers	poppies	valerian
dianthus	lamb's ear	primroses	violets
ferns	lavender	purple coneflower	yarrow



Summer to fall, Lamb's Ear is soft and furry



Bright flowers in dappled sunlight; the Spring Primrose



Spring Bleeding Heart



Summer Hollyhock, an old-fashioned favorite



Fall, Montauk Daisy



Late winter to spring; Snowdrops

Native plants – wildflowers, grasses and mosses – are a good choice for a fairy garden. Try to have something in bloom throughout the growing season. The gardens and library at Deep Cut Gardens can help you with ideas.



Rock Garden – What fairy could resist such an appealing mixture of color, fragrance and texture, complete with warming rock.

Fairies like to play in sunlight or moonlight filtered through the leaves of trees. They cherish oak trees; the great trunks and branches provide shelter, while the leaves and acorns are put to many practical and



Bright colored berries on a holly tree practically glow in the winter landscape.

decorative uses. Some other trees they like are apple, ash, hawthorn, and holly.

Every fairy garden should include some water. A waterfall or brook is ideal, but a shallow dish of clean water with a small stone in it will do for a spot where fairies (as well as birds and butterflies) can bask in the sun and refresh themselves. Finally, fairies love things that sparkle and glow. Place a piece of sea glass, a sparkly stone or even a shiny ribbon in the garden to attract their attention.

## It's Time To ...



### January ✓

- Check for winter mulches and plants displaced by the weather; replace as needed.
- Gently remove snow from evergreens to prevent damage.
- Start a garden journal, it will prove to be an invaluable asset.
- Increase humidity around houseplants by setting plants on pebble trays or grouping them together.
- Clean & oil your garden tools and add years to their life.
- Pot up paperwhites – these will bloom within 3-4 weeks and don't require the chilling period most other bulbs require.
- Remove amaryllis flowers as they fade and the stem when it has yellowed. Place the plant in bright sunlight and treat as you would any other houseplant, watering and fertilizing as needed.



*A snowed-covered boxwood*

### February ✓

- Turn the soil in your vegetable and annual beds now to expose insect eggs to foraging birds and the ravages of winter.
- Keep houseplants dust free and look out for insects. Feed any plants in bloom or showing new growth.
- Force branches of flowering trees or shrubs like forsythia, cherry, apple or quince.
- Insect & disease control is important for fruit trees – call Rutgers Cooperative Extension 732-303-7614 or visit [www.njaes.rutgers.edu/garden](http://www.njaes.rutgers.edu/garden).
- On a mild day, prune trees & shrubs; start with damaged branches.
- When the snow has melted, sow an early crop of spinach.



*A branch of cherry blossoms*

### March ✓

- Fertilize trees & shrubs after soil temperatures have reached 40°F, but before new growth begins. Apply dormant oil spray on a calm day above 40°F.
- Repot and fertilize houseplants as needed.
- Indoors, start seeds for broccoli, cabbage, cauliflower, eggplant, lettuce, parsley, peppers and tomatoes.
- Outdoors, direct-sow seeds for cool crops like peas, beets, Swiss chard, lettuce, and seeds of cold-tolerant annuals.
- Don't work the soil until it will form a ball that crumbles when pressed with your thumb.
- If not done in the fall, get a pH test and apply lime if needed.
- Divide and transplant perennials as needed.
- Visit area flower shows - Check our website or Program Directory for dates and times of bus trips.
- Purchase a rain barrel to catch those "April Showers."



*The Spring Plant Swap is April 27*

## PHOTOGRAPHY EXHIBIT: EPHEMERAL & ENDURING DEEP CUT GARDENS THROUGH THE SEASONS

Monday-Saturday, January 7-31, 10am-3pm

Enjoy the beauty of the seasons, as captured by visiting photographers. Weather permitting, take a stroll through the gardens and discover textures and colors revealed by the starkness of winter.

### Pre-Opening Reception

Saturday, January 5 from 1:00-3:00pm

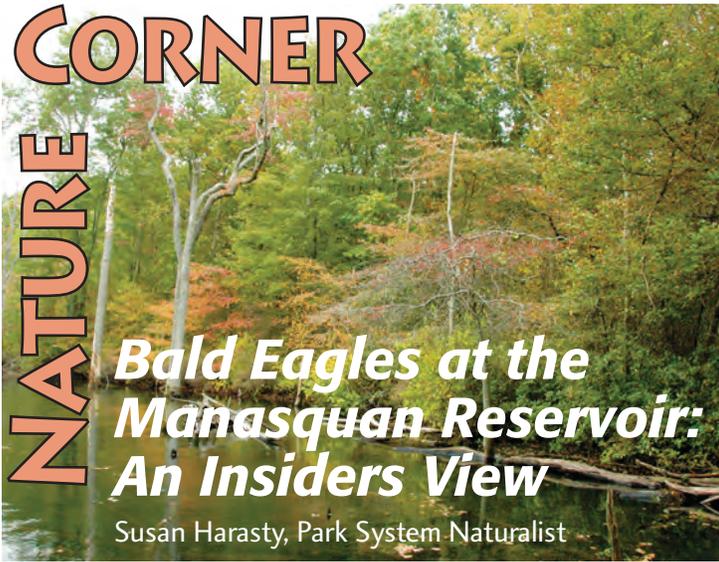
Meet and speak with the photographers. Light, warming refreshments. No fee or registration required, but please call park staff at 732-671-6050 to RSVP for the reception or for more information.



*Winter at Deep Cut Gardens*

# CORNER

## NATURE



### Bald Eagles at the Manasquan Reservoir: An Insiders View

Susan Harasty, Park System Naturalist

Eagles are attracted to large trees like these near water at the Manasquan Reservoir.

Location, location, location! Bald eagles instinctively know how important real estate is when choosing a nesting site. The Manasquan Reservoir provides a winning combination of all the essentials: a year round supply of food and plenty of large trees perfect for perching near open water and building a nest. The proof is in the numbers, eighteen eaglets have been produced at the reservoir since 2002. This is impressive productivity over eleven breeding seasons.

#### Once Upon a Time in 2000...

Our first records of eagles at the reservoir start in early 2000. A male eagle arrived with a silver federal band on his left leg, followed by a female that summer; they formed a pair. Males and females look exactly the same, except females are larger. This size difference can only be seen when the pair are side by side.

**Male and female eagles look exactly the same, except for size. Females are larger.**

The best way to tell these first two eagles apart were their leg bands. The female had none and the male had a silver one.

Often when a new pair forms, their first year they will build a practice nest that does not produce eaglets. It was not until February of 2002 that the pair produced their first successful clutch of eggs resulting in 2 eaglets. From 2002 to 2004, this duo successfully raised a total of 7 offspring.



When side by side, you can see the larger female in back. Photo by Dennis Ruffe.

#### Tragedy Strikes in 2005

Tragedy struck the pair in February of 2005. She laid two eggs but died while the third was still inside her. Although it is true that eagles mate for life, if something happens to one, the surviving eagle will find another. This male did not stay alone for long. Around the same time, a new female was seen in the area. The original male and new female quickly formed a pair.



It's a bit hard to see in this photo, but an immature eagle (this one female) has dark feathers mixed in with white head feathers.

This new female was young, between 4 and 5 years old. We knew this because she still had darker immature feathers mixed in her signature white head and tail.

**A young adult eagle has darker, immature feathers mixed in with the signature white head and tail.**

She bore two bands: one silver and one green. The silver is from the federal government, the green from New Jersey—which means she's a Jersey girl! The identifying numbers "A85" on the green band were captured in 2011 through an expert photograph. The numbers trace her origins to a nest in Galloway Township where she was banded in May 2001.



Jersey Girl: The female with the green 'Jersey' band on her right leg and federal silver band on her left, carries some nest materials. Photo by Dennis Ruffe.



Nest-mates: The native eagle (right) and the Maryland adoptee (left) from 2007.

#### 2007: A Year of Many Firsts

Two-thousand seven was the year the new pair produced their first eaglet, the first time eaglets were banded at the Manasquan Reservoir by New Jersey's Department of Fish and Wildlife, and the only year that an orphaned eaglet was fostered at the reservoir. An eaglet from Maryland fell out of its nest during a nor'easter and broke its leg. By the time the leg healed, the parents had abandoned the nest and it needed a new home. It was placed in the nest at the reservoir, which only had one eaglet, and successfully fledged.



*This stunning photo of a male with its wings up shows some incredible feather detail. Photo by Dennis Ruffe.*

## **Nest Drama & Banding Issues, 2009-2012**

Between 2007 and 2012, 11 more eaglets were produced, but not without some drama. The nest was nearly blown down twice. In May 2009, soon after the 2 young eaglets had taken their first flights (fledged), strong winds dismantled half the nest. The weakened nest came down completely in June.

The eagles rebuilt the nest in October in the same tree, but about 10 feet higher. Then Hurricane Irene made its impact in August 2011, knocking down almost the entire nest. This time, the eaglets had fortunately long moved on. The eagles quickly started rebuilding, preparing for the next nesting season.

Three eaglets hatched in February 2012, a large family by eagle standards. This would be the sixth season for eagle banding by the state, and having three eaglets would be an exciting event.



*The eagle family from 2011; 2 adults and 2 fledglings. Photo by Ralph Bernstein.*

***Eagle pairs commonly produce 1-2 eaglets. Having 3 eaglets is less common but has occurred twice.***

Biologists planned to climb the tree, retrieve the eaglets and gently lower them to the ground to be measured and banded. But unfortunately, when they inspected the nest, they noticed the supporting branch was rotten. It would not hold the weight of the climber without risking additional damage and possible collapse of the nest. The eaglets were left and the mission abandoned.

## **Best Time to View the Eagles: December to June**

The Manasquan Reservoir female is often the first to lay eggs in the state, usually early to mid January.

- January—pair incubates eggs on the nest
- February— eaglets hatch
- March—eaglets grow
- April-June—eaglets learn to fly and hunt

*Special thanks to Dennis Ruffe for providing many of the detailed eagle photos seen in this article.*

## **2012: The Mysterious Male?**

In 2012, loyal photographers who frequent the reservoir first noticed the male no longer had a silver leg band. After some photo investigation, it was discovered that there are pictures of the male with the silver band up to 2007, followed by pictures of the male from 2009-2012 with no leg bands. But, there's a two year gap. Since leg bands are riveted on, it is unlikely they fell off and the conclusion is this is not the original male. Something must have happened to him between 2007-2009, but we may never know for sure.



*Without a leg bands, staff wonder if this is a new male. Photo by Dennis Ruffe.*

## **Learning from Observation**

There has only been one nesting pair of bald eagles at the reservoir at a time. Others may pass through, but mature eagles are territorial and chase them away.



*The old nest (#2) survived Sandy, but the eagles started to build a new nest (#3) anyway.*

There have been three nest locations. The first was close to the Environmental Center (gone now). The second survived Sandy, but the eagles opted to build a third nest at a new location instead.

Our resident bald eagle pair can be seen year round and do not migrate. However, they are the most active and easiest to observe when nesting and raising the eaglets.



*This juvenile has learned to hunt and eat its catch. Photo by Dennis Ruffe.*



# GREEN HERITAGE

805 Newman Springs Road, Lincroft, NJ 07738-1695

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PARK SYSTEM

## Over the River and Through the Woods...

When the new 44-acre property at Claypit Creek tract was acquired near the heavily traveled Buttermilk Valley Section of Hartshorne Woods Park, park staff knew that visitors would want a trail connection. This past fall, with the help of the Volunteer Trails team, the Park System completed Phase I of a new 0.7 mile trail. Like much of Monmouth County's parkland, there's significant water nearby (the creek leads out to the Navesink River) and this small section required both a bridge and a boardwalk to traverse the wet areas, and fortunately, they both survived the storm.

**Hurricane Sandy Update  
inside.....**



A brand new trail with a bridge and boardwalk connect the Claypit Creek section to Hartshorne Woods Park.



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