

Photo: © Kathy Clark

## ENDANGERED SPECIES SPOTLIGHT

### Piping Plover (*Charadrius melodus*)

It's that time of year again! Piping plovers (*Charadrius melodus*) are back on New Jersey beaches, sitting on their nests and raising their newly hatched chicks!

Piping plovers are small shorebirds with a black neck band and a black bar across the forehead. The upperparts are light sandy-brown and the underparts are white, providing camouflage against the sandy beach. They have orange legs and an orange and black beak. Piping plovers feed on marine worms, small crustaceans, mollusks, and some insects.

Piping plovers breed on NJ barrier islands and beaches from Sandy Hook to Cape May. In late March and April, piping plovers begin arriving. Males use aerial displays to establish territories and call to mark boundaries and attract mates.

The male digs numerous nests (scrapes) throughout his territory by kicking up sand with his back legs until the female selects the right scrape. Plovers exhibit fidelity to nesting sites, and may return to a previously successful area the next year(s).

During April and May, female piping plovers lay 3 to 4 sand-colored eggs which both parents incubate for about 27 days. If a nest is destroyed early in the season by floods or predators, the pair will re-nest, sometimes several times in a season.

The newborn chicks are tiny, white, and downy. They leave the nest within a few hours of hatching. Able to walk right away, the chicks follow their parents in search of food.

When predators or intruders come close, chicks squat motionless on the sand while



Photo: © Chris Davidson

the parents attempt to distract intruders by pretending to have a broken wing. Both parents care for the chicks for three to four weeks. Chicks are able to fly at 25-35 days and fledge from late June to mid-August.

In addition to nesting birds, many plovers migrate south along the Atlantic seaboard, over-wintering in the Southeast U.S. and the Bahamas. Migrants can be seen in New Jersey from early March to late April, and again from mid-July to the end of October. Females are the first to leave the breeding grounds for fall migration, followed by males, then juveniles.

Far less is known about the wintering sites used by piping plovers, even though they spend at least half their lives on the wintering grounds. Over the past five years the importance of the Bahamas as a major

*continued on page 3*

## A Note From the Executive Director

*New Jersey's most famed season is here — summertime! And you know what that means: amusement parks and boardwalks, suntanning on the beach, traffic jams. At least, that's the New Jersey summer experience according to the pop culture stereotypes.*

*But another option offers far more. Let's get out there in search of hidden wonders and best-kept secrets, like gorgeous nature destinations and an unparalleled diversity of wildlife.*

*At Conserve Wildlife Foundation of New Jersey, our scientists, educators, and volunteers do everything we can to protect the rare wildlife of our unique state. Yet we recognize that connecting New Jerseyans with the nature all around them is equal in importance. Our younger generation is growing up in a maze of technology — but rarely enjoys any off-screen time.*

*So make a point this summer to visit somewhere new in the state, somewhere far beyond the typical tourist spots.*

*Take a break from the sun in the cool depths of our forests, still covering so much of the state. Keep an eye out for the bobcats and songbirds, and listen for owls and woodpeckers.*

*Kayak through our vast coastal saltmarshes, watching the water for the peeking heads of diamondback terrapins and river otter, while osprey and northern harrier soar high above.*

*Hike along our streams and swamps, where beavers build dams, bog turtles hide underfoot, and tiny treefrogs fill your ears with a wall of primordial sound.*

*Stuck in the suburbs or cities? No problem — a short walk through the neighborhood is often all you need to spot American kestrels and Coopers hawks perched above, or snapping turtles and great blue herons along a roadside creek.*

*Finally, you don't want to forget about New Jersey's legendary beaches in the summer. Instead, add a few nature spots along the coast to the popular bathing beaches on your itinerary. At places like Island Beach State Park, Edwin B. Forsythe National Wildlife Refuge, and Sandy Hook within the Gateway National Recreation Area, you can still find beaches where you can leave solitary footprints on an empty beach right in the heart of summer. Where the only other visitors are piping plover, American oystercatcher, horseshoe crabs, and migrating shorebirds like red knots.*

*Above all, get outdoors this summer to find nature's hidden wonders!*

**David Wheeler**  
Executive Director



## New Film Celebrates Delaware Bay Beach Restoration

Greener New Jersey Productions this spring produced a 30-minute film documenting the ambitious campaign by Conserve Wildlife Foundation, American Littoral Society (ALS), and other partners to restore Delaware Bayshore beaches decimated by Hurricane Sandy. This project ensures that the at-risk horseshoe crabs and globally migrating shorebirds relying on this habitat can survive.

Conserve Wildlife Foundation teamed up for two well-attended premiere screenings: at Duke Farms in Somerset County, and an Earth Day screening co-hosted by ALS at the Levoy Theatre in Millville.

Generously funded by the New Jersey Recovery Fund, the video is co-produced by CWF and the Delaware Riverkeeper Network. Producer Ed Rodgers, the former environmental reporter for NJN Network, produced the video for Greener New Jersey Productions.



Photo: © Jan van de Kam

The film can now be enjoyed for free online at <http://www.greenernewjersey.org/films/a-race-against-time/>

## ENDANGERED SPECIES SPOTLIGHT – Piping Plover

wintering site for piping plovers has become increasingly evident. CWF has played an integral role in shedding light on their wintering habitats and threats. CWF also works to raise awareness and provide education to the general public and schoolchildren in the Bahamas and in New Jersey.

New Jersey's piping plover breeding population has averaged about 120 pairs since they were federally listed as threatened species in 1986. Unfortunately, their numbers have dropped in recent years, with 108 pairs in 2013. Unlike their federal designation, piping plovers are listed as 'endangered' under the New Jersey Endangered and Nongame Species Conservation Act.

Threats to piping plovers include loss of habitat from development; predation by red fox, raccoons, feral or free-roaming cats, gulls and crows; flooding from storms; disturbance from beach recreation activities such as vehicles, dogs, kite flying and kite surfing; and disturbance from incompatible beach management practices such as beach raking, vehicle use, moving of sand and overplanting of beach grass; and climate change impacts including sea-level rise.

CWF manages piping plovers on the ground by posting fencing and education signage around nests each breeding season. Once biologists locate nests, we typically provide them with a special enclosure that keeps predators out.

Seasonal biologists, interns, and volunteers also regularly patrol nesting sites to help beachgoers understand why access to some portions of the beach and certain activities, such as dog walking, are temporarily restricted to protect piping plovers.

So while you are at the beach this summer, keep your eyes peeled for these enjoyable critters. And look for the steps we take to protect them. 🦅

by Stephanie Egger

### ENDANGERED OR THREATENED

#### What's the difference?

*An endangered species is in danger of becoming extinct throughout all or most of its range. A threatened species is likely to become endangered in the foreseeable future.*

## Geolocators Help Track American Kestrels on their Migratory Journeys

by Melanie Mason

The American kestrel, *Falco sparverius*, is the smallest and most widely distributed falcon in North America. Unfortunately, their numbers are declining, particularly in the northeast. The lack of nesting sites is thought to be a factor, but there may be other important causes as well. Fortunately, kestrels will utilize manmade options such as cavities in eaves of buildings, barns and constructed nest boxes.

To help protect kestrels in New Jersey, Conserve Wildlife Foundation launched the successful American Kestrel Nestbox Project in 2006 in collaboration with the New Jersey Division of Fish and Wildlife's Endangered and Nongame Species Program. While this initiative has helped address the problem of limited nesting sites, the kestrel numbers remain precarious. These beautiful, beneficial birds are now a state threatened species in New Jersey.

We are attempting to better understand all aspects of their life histories. Since kestrels appear to be breeding successfully, we sought to investigate their non-breeding ecology. This is where our geolocator study comes in.

Kestrels are too small to bear devices that transmit their positions via GPS but technology has advanced in a way that allows small light sensing devices (geolocators) to record day lengths and temperature allowing researchers to ascertain locations. This technology is used on many other birds, including the imperiled red knot, to track migration.

Thanks to funding from the Osprey Foundation and New Jersey Division of Fish and Wildlife, CWF purchased 15 geolocators during the 2013 breeding season to affix to female kestrels in order to track their migratory destinations in winter.

So far this season we have recovered three of the 15 devices. Two geolocators were on females that returned to the very same nestbox where they were captured and outfitted the year before.

Preliminary findings reveal a mixed bag of results. Some kestrels remained in New Jersey over the winter, while others may have traveled as far as Florida in search of milder winters and more abundant prey. We look forward to learning more about these threatened raptors so that we may better aid their recovery. 🦅



**Female kestrel in the geolocator study. The small device weighs less than 1 gram but is capable of logging critical locational data.**

See Page 4 for Tips on How to Identify American Kestrels

# Conserve Wildlife Webcams Delivering Wildlife Adventures to Computer Screens Across the World

by David Wheeler

## Over 200,000 viewers enjoying front row seats for up-close-and-personal wildlife drama

Never before has wildlife been so easy to enjoy – and I don't mean those songbirds at your feeder!

Wildlife webcams bring the nature spectacles right to viewers on computer screens everywhere. And they are dramatically growing in popularity, with more options for enjoying wildlife than ever before.

Conserve Wildlife Foundation is taking the lead in many of the state's most popular wildlife webcams - none more beloved than the Jersey City Falcon Cam, which was believed to be the state's first wildlife webcam when it launched. Back for its 14th season of live streaming video, the Falcon Cam captures the breeding, nesting, feeding and flight of a family of endangered Peregrine Falcons living on a Jersey City skyscraper.

New this year, for the first time, CWF operates the Falcon Cam rather than the New Jersey State Division of Fish and Wildlife. Thanks to generous individuals, matching grants, and a Board fundraising campaign, CWF raised the funds needed to modernize the webcam and keep it live.

Our biologist Ben Wurst has brought the Falcon Cam viewer experience to new heights – pardon the pun. One new pinhole camera brings viewers inside the nestbox, while another camera pans, tilts, and zooms around the exterior to best capture the falcons outside the nest, to the stunning backdrop of the Manhattan skyline.

And then there's the sound – a new microphone in the nestbox provides the real-life soundtrack for the video feeds, much to the delight of viewers.

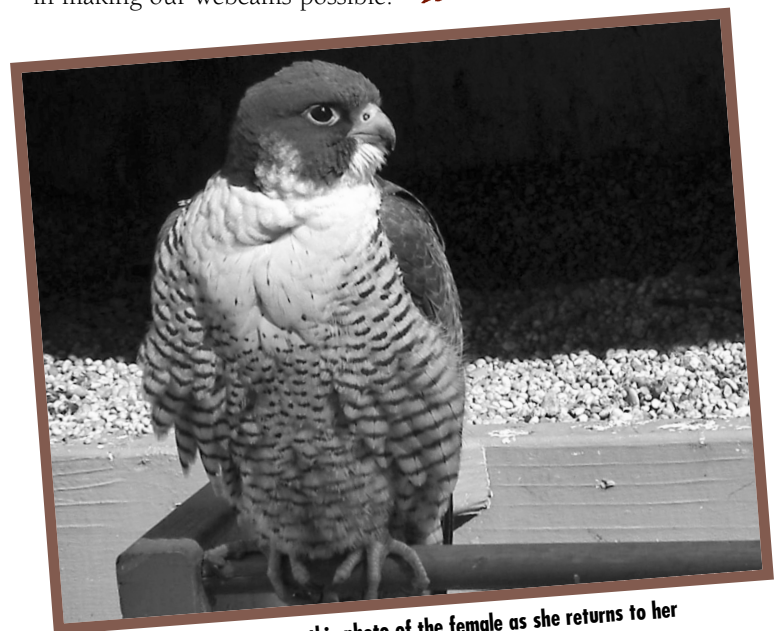
CWF also partners with Duke Farms on the fan favorite Eagle Cam, which captures the daily action of a bald eagle family in this Somerset County nature destination. The Eagle Cam thrilled viewers last year with a life-or-death struggle between the nesting eagle

and an overconfident red-tailed hawk who had the audacity to attack the nest. The final score? Eagles 1, Hawks 0.

Yet other webcam competitors fly along the horizon. Last year, CWF launched an Osprey Cam at Edwin B. Forsythe National Wildlife Refuge in Oceanville, New Jersey. Like the Jersey City falcons, this webcam boasts another sensational view, as the Atlantic City skyline offers the glitzy backdrop for this family of ospreys.

Wurst also helped install a wildlife webcam at Island Beach State Park, along with the most novel species webcam yet – a Black-crowned Night Heron webcam at Stone Harbor Bird Sanctuary!

"In this digital age, the use of a webcam is a key component in engaging the public in wildlife conservation," said Wurst. "To be able to share these incredible adventures with thousands of viewers is inspiring, and I am so grateful for the generosity of our supporters in making our webcams possible!" 🦅



The NEW Falcon Cam snaps this photo of the female as she returns to her nest for the 2014 breeding season.

## How to Identify American Kestrels

Kestrels can be mistaken for other birds of similar size, such as mourning doves, because of their propensity to perch on utility lines. Proper lighting, however, reveals their vivid plumage. Males are more colorful than females, with bluish-gray wings and rufous (reddish-brown) tails. Females are rufous on their wings and tails and are much more striped than males. Both sexes exhibit two vertical black stripes down their white cheeks and black "eyespot" on the backs of their heads.

Kestrels occupy large open areas with short vegetation so are commonly attracted to human altered or managed areas such as farmland, parkland and livestock pastures. Kestrels hunt for insects and small vertebrates (mice, voles) from perches but are also capable of hovering when a breeze is present.

See Page 3 for related story

## Recent Dolphin Fatalities Among Topics Explored at CWF Marine Mammal Workshops by David Wheeler

At least 135 bottlenose dolphins became stranded in New Jersey over the past year. Most of the strandings were fatal, and many dolphins showed lesions and other infections. These strandings, occurring along the entire Eastern seaboard, are bleak enough that the National Oceanic and Atmospheric Association (NOAA) declared an Unusual Mortality Event.

The cause is cetacean morbillivirus. About half of coastal migratory bottlenose dolphins are affected, leading to this stock's federal classification as 'Depleted' under the Marine Mammal Protection Act. Bottlenose dolphins were already considered species of special concern in New Jersey, and this only further threatens their population.

The dolphin virus was among the issues discussed at Conserve Wildlife Foundation's inaugural marine mammal stranding workshops last month at Monmouth University and Richard Stockton College.

Speakers led interactive discussions to educate first responders on how to handle marine mammal and sea turtle strandings. Jen Zebrowski from Jenkinson's Aquarium educated responders on how to identify some 13 species of marine mammals and 5 sea turtles they might encounter on the New Jersey coast. NOAA speakers Mendy Garron, Kate Sampson and Scott Doyle explained



Photo: © Cordell K. Brown

what a responder should do once they encounter the animal, how to make the situation safe, and the legal obligations facing first responders with a stranding.

Now we enter this summer hoping that cetacean morbillivirus will not claim nearly as many dolphins this year. Keep your fingers crossed! ✈

Check out our new Marine Mammal webpage at <http://www.conservewildlifenj.org/protecting/projects/marine-mammals/> for more information on those incredible sea creatures!

## CWF Forum Connects Businesses with Campaign for a Healthy Barnegat Bay by David Wheeler

The Barnegat Bay Watershed, spanning 660 square miles in Ocean County and neighboring areas, may be the most economically valuable estuary in the nation, per acre. This promising finding was revealed by Dr. Gerald Kaufman, the morning keynote speaker at Conserve Wildlife Foundation's inaugural Barnegat Bay Business Forum this spring.

The forum, funded by Barnegat Bay Partnership and hosted at Ocean County College in Toms River, celebrated the fact that "A Healthy Barnegat Bay is Everyone's Business!" CWF created this event to connect business leaders, government representatives, and conservation advocates with the expansive campaign to restore a healthy Barnegat Bay and the regional economy that depends on it.

N.J. Department of Environmental Protection Deputy Commissioner Michelle Siekerka highlighted the significant ecological and economic benefits for a restored watershed.

Presenters from the U.S. Environmental Protection Agency, Casino Reinvestment Development Authority, Island Beach State Park, Rowbear Consulting, and Long Beach Township, educated the attendees about different approaches for restoring Barnegat Bay's health. And in the afternoon, speakers spotlighted corporate success stories from Wawa, Waste Management, Scotts Miracle-Gro, and Forty North Oysters.

CWF has long treasured the Barnegat Bay watershed for its osprey, diamondback terrapins, and many other at-risk wildlife species thriving in its extraordinary habitat. To further develop the momentum on this campaign, we have launched a new webpage and social media dedicated to the Barnegat Bay Business Forum.

To learn more about how your company can support this campaign, visit us at: <http://www.conservewildlifenj.org/protecting/barnegatbaybusiness>



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# “Sister Schools” Connect School Kids Across Cultures in Campaign for Piping Plovers

by Todd Pover

Nearly a thousand miles and an ocean separate them. Yet one school in New Jersey and another in the Bahamas are now closely connected – and all because of piping plovers.

Amy Roberts Primary School – located on Green Turtle Cay, Abaco, in the Bahamas – and Ocean City Intermediate School here in New Jersey just finished participating in a “sister school” program as part of a grant awarded to Conserve Wildlife Foundation by the Disney Worldwide Conservation Fund.

Why the Bahamas, you may ask? The piping plover, a tiny endangered shorebird, breeds along the Atlantic coast of the U.S. in states such as New Jersey and winters in the Bahamas. The sister school program is just one component of our Disney grant. We are also researching plover wintering grounds to better understand their habitat needs, and expanding public awareness of the importance the Bahamas plays in the survival of this imperiled species.

Third and fourth grade students from these schools learned about piping plover biology and conservation, as well as the similarities and differences between their distant islands. I head up the project

along with my fellow CWF biologist, Stephanie Egger. Our team visited both schools in the fall to introduce the students to piping plovers through in-classroom presentations and discussions.

Students in the Bahamas learned that the tidal flats – which are vital for other valued species such as bonefish and conch – share this critical habitat with shorebirds. Meanwhile, the students in Ocean City discovered that the beaches where their families frolic in the summer are also the home of an elusive at-risk shorebird – a highly active bird that is a lot of fun to watch!

This winter, Egger and I returned to the Bahamas to lead a field trip on Green Turtle Cay with the Amy Roberts students, so they could see piping plovers first-hand. It was a thrilling experience and the students learned how to identify shorebirds using binoculars and spotting scopes. Back here in the States, we brought the Ocean City students to a local breeding site in Strathmere to see nesting piping plovers. It was incredible to see the students’ eyes widen with excitement as they spotted the plovers for the first time!

Among the shorebird activities incorporated into the curriculum, both schools created artwork focused on piping plovers. This creative side of the project also played a conservation role – their inspiring artwork is helping inform the public about protecting piping plovers.

The Bahamas students’ artwork was displayed at the Island Roots Heritage Festival this past May. We hope to erect signs on Green Turtle Cay before piping plovers return next winter. This would parallel the Ocean City students helping to install signs that utilized their own artwork during the recent field trip.

The sister school project has been a huge success by every measure. But perhaps most encouragingly, we have connected children across vastly different cultures while inspiring them with the wonders of wildlife in their own backyard!

With the help of Disney and Friends of the Environment, our local partner in the Bahamas, we hope to continue and expand this exciting initiative next year. ✈



4th graders from Ocean City Intermediate School pose with the "Plover Power" sign they helped create and install.

## EXPLORATIONS

*In addition to TRACKS, we also produce a free electronic magazine called Explorations. Our online Explorations magazine tells stories about New Jersey’s wildlife, enabling us to take advantage of electronic communications to present full-color photographs and links to more information. The most recent edition of Explorations features the winners of the 2013-14 Species on the Edge Art & Essay Contest, and stories about the Jersey City peregrine banding and the OspreyCam.*

*If you would like to subscribe to Explorations, please send your email address to [info@conservewildlifenj.org](mailto:info@conservewildlifenj.org) and put "Explorations" in the subject line.*

## Absolutely Fish Celebrates Earth Week with Terrapin Fundraiser

Absolutely Fish – an exclusive retail store in Clifton known for their aquariums and hard-to-find fishes – held an innovative Earth Week fundraiser on behalf of CWF’s diamondback terrapin program. Thanks in part to a gorgeous terrapin named “Terra” who quickly became a fan favorite in their store, Absolutely Fish raised over \$10,000 for CWF!

This generous funding will help save countless diamondback terrapins from becoming roadkill. During the late spring and early summer, adult terrapins cross coastal roads near saltmarshes to lay their eggs in sandy beaches and other upland gravel areas. Many are crushed by passing cars, so CWF has taken the lead in recruiting and managing teams of volunteers who install protective fencing that directs terrapins to safer crossings.

CWF is also working with local leaders and the business community in Avalon and nearby towns to better understand social attitudes and knowledge of terrapins.

The leadership of Absolutely Fish will make the terrapin advocacy of CWF biologists Ben Wurst and Stephanie Egger so much more successful! 🐢



David Wheeler and the staff of Absolutely Fish, who raised awareness and funds to help support CWF's terrapin project.

## Thanks for Touching So Many Lives

Longtime CWF Education & Outreach Manager Maria Grace is moving with her family to New England and will be leaving CWF. Maria’s educational leadership, wildlife expertise, and warm encouragement have touched the lives of countless school kids, teachers, educators, and the general public over the past decade. Her vision has been crucial in developing CWF’s Species on the Edge program, webcam curriculums, educational outreach, and inner-city field trips to Island Beach State Park.

We thank Maria for all she has done and wish her the best on her big move!



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Our mission is to protect and preserve the rare and imperiled species of wildlife that live, breed, and migrate through our state by restoring habitat, managing species, educating and engaging citizens, and conducting research.



Use your Smart Phone to scan this code for more information about *Conserve Wildlife Foundation of New Jersey*.



## MARK YOUR CALENDARS!

### SEPTEMBER, 2014 **New Jersey WILD Outdoor Expo**

Saturday, September 13 and Sunday, September 14, 2014  
Colliers Mills Wildlife Management Area

Celebrate the state's bountiful natural resources and rich outdoor heritage. The event is held from 10 a.m. to 5 p.m. daily at the Colliers Mills Wildlife Management Area in Jackson Township, Ocean County.

**For more info, visit [www.wildoutdoorexpo.com](http://www.wildoutdoorexpo.com)**

### OCTOBER, 2014 **Women & Wildlife Awards**

Thursday, October 23, 2014, 6:00 p.m. to 8:30 p.m.  
Trenton Country Club

Join us for a special cocktail party and silent auction to celebrate and recognize outstanding women for their contribution to New Jersey's wildlife.

**Visit [www.conservewildlifenj.org](http://www.conservewildlifenj.org) for additional information, updates, and reservations**