



Cove Currents

Greetings from the Executive Director

I am writing this greeting four days before the start of May. The temperature outdoors is 90 degrees Fahrenheit under a cloudless, blue sky with only the gentlest breeze for a hint of cooling. Visitors come into the Environmental Discovery Center red-cheeked and sweaty wearing the light summer clothing typically reserved for an August afternoon. One week ago the weather was just the opposite. Visitors in heavy jackets, hats, and gloves came into the Center for a little relief from the cold, gray, rainy days of 40 degrees Fahrenheit accompanied by a brisk wind off the river, weather more suited to late November than to late April.

It always amazes me that, somehow, the variability of the weather in spring seems unrelated to the predictability of the season's arrival. In spite of unseasonable temperatures, song birds are migrating, trees are budding, early spring flowers are blooming, and new generations of species are appearing in the park. Snapping turtle eggs have begun to hatch, early butterflies have awakened from hibernation, and a new batch of milkweed has emerged ready to take up its role as host plant for the Monarch butterfly. The three new owlets, offspring of the resident great horned owl pair that Kristina writes about in this issue, are already in the general population; the peregrine falcon pair, are sitting on eggs high atop the Tacony Palmyra Bridge; and entire families of Canada geese alternate between waddling across the grass and gliding smoothly on the river. So far, even if the weather has us confused, we can continue to take comfort in the predictability of seasonal changes in the park.

The species diversity in the park that is especially apparent in spring will continue only to the extent that

the park is managed for diversity and balance.

Many of our visitors have been concerned about white-tailed deer overbrowsing in the park. They have noticed an absence of understory, the low-growing ground-cover and small seedlings that, if left intact, would eventually become mature trees in the forested areas. In the course of the natural succession process, especially in the vicinity of Honeysuckle, Eastern Cottonwood, and Fox Run trails, mature trees are dying, falling, and decomposing, but there are very few saplings to take their place. Eventually, if left unchecked, the forested areas of Palmyra Cove will disappear. Without the forest, the song-birds and other species will suffer from further habitat loss, one of the main reasons species become endangered in New Jersey.

The northern saw-whet owl, for instance, had used the canopy provided by the honeysuckle vine as protection from predators during its winter visits to Palmyra Cove. However, these past several years, deer have eaten the honeysuckle from the ground up several feet, thus causing the canopy to die back. Last winter, the saw-whet owl did not winter-over in our park.

The deer have no natural predators in the park; consequently, the population increases. The herd has reached an unsustainable and unhealthy population level for Palmyra Cove Nature Park and has placed many species of trees, plants, birds, butterflies, and other animals in jeopardy. In the interest of the future of the park itself we will need to find a way to balance the needs of all of the diverse wildlife that make their home here in spring and throughout the year.

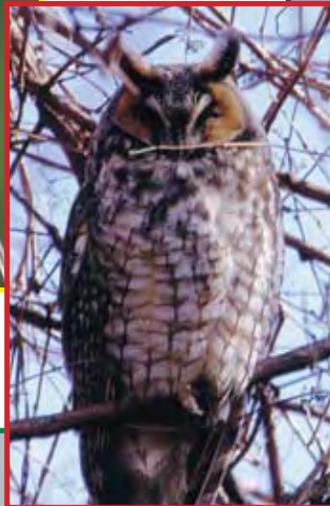
Clara Ruvolo, Executive Director



Bird Quest

The Burlington County Bird Quest 2009 was a soggy success, with 87 individual species observed throughout the drizzly morning in Burlington County. In fact, the weather helped to make the day such a success. The over-cast day allowed for a continual dawn-effect, with birds singing throughout the morning, as well as preening themselves whenever the rain stopped making them an easy target to catch through our binoculars. A few of the interesting species observed were American bittern and Caspian tern at Palmyra Cove, Bonaparte's gull at Amico Island, white-breasted nuthatch in

Tabernacle, eastern bluebird at Brightview Farm, hooded warbler at Hawkin Road, and bobolink at Brightview Farm. Also visited were Bear Swamp, Chairville Elementary School, Kirby's Mill, and Harrington Middle School. The number of species found per birding group ranged from 40 to 47, with the "winners" being the Palmyra Pied-Bills. Congratulations go out to all of the participating teams: Palmyra Pied-Bills, Burlington Township Raptors, Olson Owls, and Horn's Harriers. Thank you to all our participants for making Burlington County Bird Quest 2009 such a success.



Eagles In My Backyard

One day last winter while hiking in the wooded area of Palmyra Cove Nature Park, a large shadow crossed my path from above. Looking skyward I expected to see a red tailed hawk or turkey vulture. Instead I was greeted by the sight of an American bald eagle. It almost took my breath away. Even though I have seen eagles many times before, the sight of one still thrills me.

The American bald eagle is the largest bird of prey native to North America. It has a wing span of 6 to 7 feet and can weigh 8 to 14 pounds. This bird has a dark brown body with a distinctive white head and tail. (Bald means white in Middle English). Young Eagles don't display the white head and tail until they become sexually mature at age four or five.

The bald eagle's usual prey is fish but they will take mammals and other birds. They are also adept at robbing other birds of their prey. Their natural habitat is coastal areas, rivers and large lakes. They build huge nests in trees not far from their hunting grounds. Nesting in the northeast usually takes place sometime in February. The female lays two or three eggs. The male and the female take turns sitting on the nest. Incubation takes about 35 days and the new eagles will leave the nest for the first time ten to twelve weeks later.

More than twenty years ago my-nine-year old son became interested in birds. He would read about a bird and he would ask me to take him to see it. That's how I got started birding. Back then we had to travel to the Chesapeake Bay to see an Eagle. I didn't think I would ever see eagles on a regular basis in my own neighborhood.

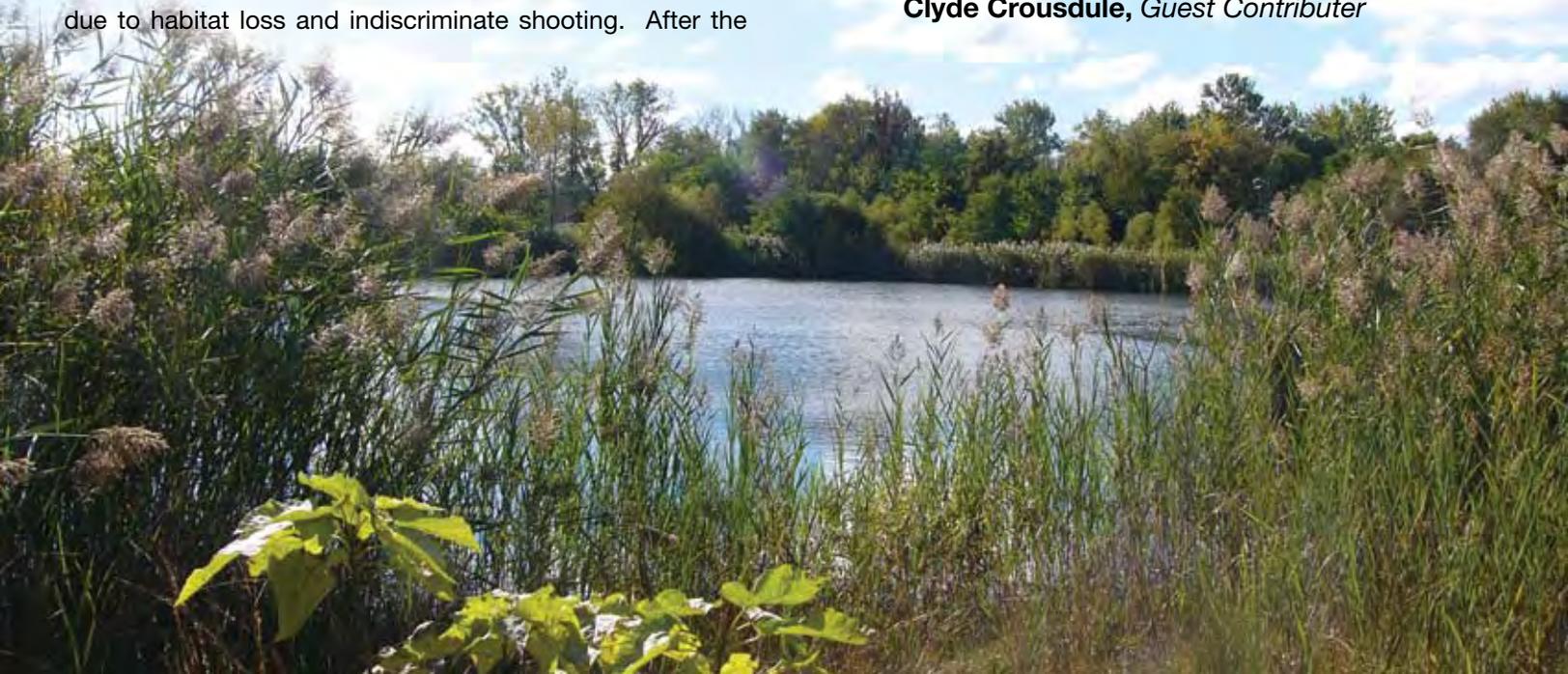
Once, eagles were widespread throughout all of North America. By the 1930s the eagle population was in decline due to habitat loss and indiscriminate shooting. After the

Second World War the number of eagles plummeted precipitously. Eagles were disappearing all across their range except for Alaska and Northwest Canada. The eagles were gone and no one knew why. In the 1960's it was discovered that the pesticide DDT, which was introduced at the end of World War II, was being ingested by the eagles and other birds of prey through the birds and fish that they preyed upon. The DDT caused thinning of the eagle's eggs. The thin-shelled eggs were crushed by the brooding parents. By 1970 only one pair of eagles was known to nest in New Jersey.

In 1972 Congress banned the use of DDT in the United States, and the eagle started its climb from the brink of extinction. The eagle was placed on the New Jersey endangered species list in 1974 and on the U.S. list in 1978. New Jersey Wildlife officials reintroduced eagles from Canada in 1982. The efforts to save the eagle have paid off. As of 2007 there were 64 pairs of eagles in New Jersey and they hatched 62 new eagles. I'm happy to report that this year a pair of bald eagles built a nest across the Delaware River opposite my home in Palmyra. I really do have eagles in my backyard.



Clyde Crousdale, Guest Contributor



Education Corner



Staffing: Spring began with our teachers meetings on March 23 and 24. The teaching staff now has 17 members, our largest group ever. The additional staff enables us to host larger numbers of students and sometimes more than one school per day. When we began hosting schools in 2003, we could rarely schedule more than 50 students per day. We now routinely schedule from 75 to 80 students per day.

Schools: We have 23 schools and 2 day-care centers scheduled

to bring more than 1700 children to Palmyra Cove for a spring environmental education activity. Burlington County schools include: Burlington Township Middle, Cinnaminson Family COOP, New Albany Elementary (Cinnaminson), Delran Intermediate, Rice Elementary (Evesham), Allen Elementary (Medford), Southampton Elementary, Roberts Elementary (Moorestown), and Tabernacle Elementary. We have had a surge in schools from Camden County in recent years and a dozen schools will be visiting this year, including: Roher Middle and Strawbridge Elementary from Haddon Township; Burling, Carson, and Franklin from Pennsauken; Bret Harte Elementary, King's Christian and Pioneer Academy of Cherry Hill; Haddonfield Friends and Haddonfield Middle School, Oaklyn Elementary School, and ET Hamilton of Voorhees. Several schools from Philadelphia have also discovered Palmyra Cove. Wagner Free Institute, Nebinger Elementary, and First Philadelphia Charter will be making their first visit to Palmyra Cove.

Curriculum Development: Our educational programs can be applied to the general curriculum areas of forest, river, and wetlands ecology. Lessons are often site-specific to the habitats of the park. We emphasize the importance of hands-on, interdisciplinary, small group activities. This spring, we put more focus on geography skills in our curriculum by integrating maps in some activities and creating new lessons that stress map and compass reading skills. Environmental education is more than science education. Many of our lessons apply to standards in math, reading, language arts, social studies, and physical education. We also create new lessons to meet the curriculum needs of individual schools.

College Interns: We have two returning interns for the summer. Alicia Begun and Nick Strom are both going to be entering their senior year in college next fall. This spring and summer will be their final season with us. We are grateful to

have these veterans returning with their experience and professionalism.

New Partnership: Palmyra Cove Nature Park is working with the New Jersey Youth Corps to upgrade and maintain some of our trails. Work began at the southwest terminus of Cove Trail on April 2. This trail had become impassable and littered with debris for much of the year. Through the efforts of the NJ Youth Corp, we hope to keep the trail open and make it more aesthetically pleasing. The work is exhaustive and tedious but in one visit they cleared and cleaned several hundred yards of trail.

Adopt A Beach: On April 25, Palmyra Cove Nature Park participated in the International Ocean Conservancy's Coastal Cleanup. New Jersey DEP registers cleanup sponsors for our state and names the cleanup "Adopt A Beach". Palmyra Cove is just one sponsor in our state. Although, we are about 50 miles from the Atlantic Ocean, we are inextricably linked by the tidal flows of the Delaware River. More than 80 volunteers collected 100+ bags of debris, weighing more than 1500 pounds. Volunteers recorded their findings on data sheets which were tabulated and sent to NJDEP to be released later in a report by the Ocean Conservancy (www.oceanconservancy.org). Leading the way in volunteers was Bethany Lutheran Church, Palmyra. Their youth group and scouts (Palmyra/Riverton Pack 9) provided 35 workers. We also had major contributions from Beverly/Edgewater Park Troop 24, and Lockheed Martin. Several schools were represented, including Holy Cross, Our Lady of Perpetual Help, Palmyra High Interact Club, and St. Paul's Elementary. Many individuals unaffiliated with particular groups donated their time and energy to make a difference, or as the Ocean Conservancy says, to "start a sea change". We also want to acknowledge Pam Tidswell, Burlington County Clean Communities, who helped mobilize participants. Individuals working together can make a difference. According to The Ocean Conservancy "2007 Report", 378,192 people picked up 6,075,698.4 pounds of debris along 33,426 miles of coast. We are proud to be a part of this worldwide effort.



Edward Sanderson, *Director Environmental Education*



Letters to the Editor can be mailed to Clara Ruvolo at Palmyra Cove Nature Park, 1300 R73 North, PO Box 6, Palmyra, NJ 08065-1090.

Photos credited to Bennett Landsman and Steve Greer

Palmyra Cove Environmental Education Foundation thanks Ed McCabe for his assistance in editing *Cove Currents*.

Naturalist Notes

Spring is in full swing here at the Cove. So much is happening that it was hard to decide what to focus on for this issue of Cove Currents; however, my Beginning Birding for Adults tale was requested.

In April, my Beginning Birding for Adults group was finding most of the usual species observed around the park at this time of year: American goldfinch, tree swallow, northern cardinals, a few gulls and sparrow species, etc. I was also interested in what had become of the great horned owl nestlings – the week prior they had left the nest, but had been staying in trees around the nest. We headed toward Eastern Cottonwood Trail. After searching around the old nesting tree, we expanded our search. I thought they could be further in the woodland, so we continued down Eastern Cottonwood Trail, keeping an eye out for perpendicular branches along the way. I noticed some white-wash along the trail and was explaining what it was, when a member of the group, Peter, noticed one of the young owls sitting tall in a tree to the west of the trail. It was still very fluffy in the chest, and had mature feathers on the wings. Young great horned owls usually stay together while the mother is still feeding them, so we kept looking for the other two. Then we noticed an adult in a tree east of where we were. It was the mother. She had a great view of the young owl and of us as we watched her. We kept looking for the two other young owls around the first. Peter then saw a small bump on a branch directly under the first young owl. It was the second small owl, laying down flat against another branch of the same tree, with its camouflaged wings wrapped around the branch. I had never observed a bird in that position before! All you could see was the wing and the head peeking up just enough to see the eyes. After searching for the third owl for a while longer, we took a few steps ahead and looked back. There we saw the third young owl, smaller than the others, directly under the first two, but in another, smaller tree. The young owls, usually found together, were sitting in a straight vertical line, from the oldest sitting tall on the top, to the middle owl laying against a branch, to the smallest, not able to get up the big tree yet, sitting in a smaller tree underneath, all under the watchful eye of

the mother sitting on the opposite side of the path, but not far away. We watched them for a while, and then had to move on. We ended up spooking the mother owl, and she flew to another tree away from the young owls. It just so happened that when she flew, a peregrine falcon was also flying by. The peregrine falcon is sitting on eggs this time of year. Peregrines nest on the bridges, so the only real predators to their chicks are great horned owls. The peregrine screeched in and mobbed the mother owl, with its closed talons slapping the owl in the head. The owl clacked at the peregrine, but didn't move. The peregrine circled and came back, again and again bothering the adult owl, who did not want to leave her young owls unattended. The owl clacked her beak, and performed aggressive postures. Finally, the owl took off and the peregrine left in the same direction. We listened to hear if the fight was continuing elsewhere, but it turned silent. What a sight!

A few seconds later, I saw something large soar over head, where the adult owl had been watching over her chicks – an osprey. We had a very eventful birding day at the Cove! If you would like to participate in Beginning Birding for Adults hikes, they are scheduled for the third Saturday of every month.



Kristina Merola, Naturalist





Cove Caterpillars Class of Spring 2009



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