OVERVIEW OF BEACH-NESTING BIRDS IN NEW JERSEY

■ **TODD POVER**

The Piping Plover is certainly no stranger to controversy. There are the bumper stickers that read "Piping Plovers Taste Better than Chicken", and endless sensational headlines that pit plovers against cat lovers, off-road vehicle users, organizers of fireworks celebrations, and officials in coastal communities. For those of us whose job it is to protect Piping Plovers, at some point it is a little hard not to feel like the fun police.

Of course, Piping Plovers are not the only endangered species to attract this sort of unwelcome attention. The battle on the West Coast over the Northern Spotted Owl is just one of the more publicized recent examples. In that case it is loggers versus environmentalists, in an argument that boils down to jobs and the economy versus species and habitat protection. To some degree it is the entire federal Endangered Species Act (and its various state equivalents) that is under attack from multiple sources – industry, private landowners, politicians, policy-makers, and special-interest groups of all sorts.

Regardless, here on the East Coast the Piping Plover is a longstanding lightning rod for a particularly intense battle that plays out over our beaches. This is probably not going to change in the foreseeable future. Socio-economic trends are such that pressures on our coastal species will only get worse. The coastal building boom and population growth that began after World War II have intensified. This demographic trend brings more people (both residents and tourists) into potential conflict with beach-nesting birds, whose breeding habitat has already been diminished in extent and quality as a result of the first wave of coastal development.

New Jersey beaches are a poster child for this phenomenon. What isn't already built on is otherwise dramatically altered in the form of jetties, groins, bulkheads, boardwalks, and through large-scale beach "nourishment" projects. For a species like the Piping Plover that, in part, depends on dynamic natural processes to regenerate new habitat over time, these changes can be difficult to overcome. While our state's beaches are beautiful and enjoyable to visit, with a few exceptions, most cannot be characterized as pristine and uncrowded. I have been involved in plover protection for twelve years now, and when I first started there were still some relatively undisturbed public beaches with suitable nesting habitat (Strathmere and Barnegat Light come to mind), but today, outside of our preserved federal and state lands, all our beaches are heavily used.

While the direct impacts that humans have on Piping Plovers and other beach-nesting bird species may be easy to understand, there are other less obvious consequences resulting from the increase in people in our coastal region, especially on the barrier islands. Along with flooding, predators are one of the "natural" factors influencing reproductive success of beach-nesting birds. Some non-native predators like cats are introduced into the coastal habitat by humans. Many other native species, including gulls, crows, raccoons, and skunks, can thrive in close proximity to humans – and along with humans comes a more steady supply of food in the form of garbage, restaurant scraps, handouts, and even food left behind on the beach. Populations of these predator species are, in effect, human-abetted. Red Foxes are particularly effective predators of beach-nesting bird eggs and chicks, but were rarely seen on barrier islands. Now they are common residents, and are far less subject to the natural boom/crash cycle tied to food availability that would have kept their population in check.

Looking at all the potential obstacles for survival, there are some days when I think it is a small miracle that Piping Plovers and their beach-nesting counterparts, such as the state-endangered Least Tern and Black Skimmer, and species of special concern like the Common Tern and American Oystercatcher, still nest on the beaches in New Jersey to any significant degree.

But it is no miracle; rather, it's the result of a great deal of hard work and dedication. Each spring, as the birds return to their breeding grounds, various groups and agencies throughout the state set in motion measures to help protect them – an effort that has been going on for over twenty years now.

Where Piping Plovers are concerned, the New Jersey Division of Fish and Wildlife – Endangered and Nongame Species Program (ENSP) is currently responsible for the monitoring and protection of about half of the state's breeding population (129 pairs in 2007) and nearly three-fifths of its

Cape May, New Jersey
PHOTO BY MARK S. GARLAND

Beach-nesting bird areas are sometimes roped off and informative signs help beach-goers understand the conservation initiatives. These youngsters gathered to listen to Nancy Hayduk of Wreck Pond Watershed Association as she spoke about protecting the beach nesting birds' habitat.
PHOTO BY TIZZIE CREGAN

active sites (twenty-six in 2007). This includes not only the state-owned beaches but all of the municipal sites where birds are present as well. The National Park Service manages one of the state's largest concentrations of plovers at the Sandy Hook Unit of the Gateway National Recreation Area. The U.S. Fish and Wildlife Service is responsible for nesting birds at the Edwin B. Forsythe National Wildlife Refuge (Holgate and Little Beach units) and the Cape May NWR (Two-Mile Beach Unit). The U.S. Coast Guard assists with monitoring at its Cape May Training Center South and The Nature Conservancy at the Cape May Migratory Bird Refuge (aka Cape May Meadows). Most of these sites host Least Terns and other beach-nesting birds that also need to be protected. Rutgers University conducts research and surveys for the Barnegat Bay population of Black Skimmers and for American Oystercatchers throughout the state. Monmouth University provides interns to assist with stewardship in Monmouth County. The Conserve Wildlife Foundation of New Jersey helps coordinate and support the ENSP's statewide beach-nesting bird project.

There are countless individuals – paid and volunteer – involved in this effort. Indeed, "it takes a village" – and a small army, too. In an earlier edition of this publication, Clay Sutton wrote a lovely reminiscence of his childhood visits to Stone Harbor Point and of the nesting birds he encountered there. That article perfectly captured the spirit of what goes into protecting beach-nesting birds – I encourage you to reread or seek out that article (*N.J. Audubon* magazine, Summer 2003). It would be inaccurate to call it a thankless task, as helping steer these critically imperiled species towards recovery is rewarding in and of itself, but it isn't easy, either. There are irate beachgoers to deal with, the physical demands of the job, extreme weather to cope with, not to mention the frustration and emotional toll of seeing nests you spent weeks trying to find and then monitor washed away in a flood; or even worse, young chicks just days away from being able to fly scooped up by a Laughing Gull. (Yes, they eat things other than the French fries you just bought on the boardwalk.) In any event, it is not the "day at the beach" that some people envision.

Most of the actual strategies utilized to protect beach-nesting birds are probably familiar to anyone who has been to a beach where nesting occurs. There are the post-and-rope fences and "AREA CLOSED" signs that protect the areas where nesting occurs or could occur – this is the main tool to help minimize human disturbance. Predator exclosures (cages) are placed around individual plover nests, sometimes in conjunction with electric fences to further thwart mammalian predators. Where needed, targeted mammalian predator removal is implemented. Seasonal restrictions on public off-road vehicle usage are instituted at some sites. Intensive monitoring is conducted at every site, at least three to five times a week but daily for some sites. This entails collecting biological data to track population trends and reproductive success, but also involves keeping tabs on human activity near nesting sites. The latter is especially important on weekends and holidays when our beaches are most crowded – monitors are even out at night on the Fourth of July when fireworks are scheduled. A stewardship component includes outreach and education; everything from handing out brochures and talking one-on-one with beachgoers to strategically placed interpretive signs and public presentations for larger audiences.

Other elements of beach-nesting bird conservation are less evident to the public. Close coordination with municipalities and other agencies is necessary to ensure that their actions don't adversely impact nesting birds, whether that is preventing municipal vehicles (i.e., beach patrol, trash collection, beach rakes) from running over nests and young chicks, or making sure the timing or location of state and federally funded beach nourishment projects don't conflict with nesting activity. The state's ENSP and the U.S. Fish and Wildlife Service work closely together to help towns and agencies that own or administer beaches develop beach management plans that address a wide range of factors that affect nesting birds at specific sites. This type of long-range planning provides the framework for the entire conservation effort.

The main thing that should be clear from this long list of manage-

Piping Plover with chicks.
PHOTO BY KEVIN T. KARLSON

ment actions is this: It is comprehensive. It would probably not be an exaggeration to say that the Piping Plover is the most intensively managed endangered species in the state. This is partially by design, but also a matter of necessity. And it has produced results.

Since the Atlantic Coast population of the Piping Plover was federally listed in 1986, the range-wide population has risen from 790 known breeding pairs to 1,743 as of 2006. The population has more than doubled and is nearing the recovery goal of 2,000 pairs (although a productivity level of 1.50 fledglings per pair for at least five years, one of the other major goals, has not been as achievable). In New Jersey recovery has not been as dramatic, but there is no doubt we would not have been able to maintain the population without the tremendous ongoing management effort. (To find out exactly how Piping Plovers, Least Terns, and Black Skimmers are doing in New Jersey, see the related articles in this issue.)

The other reason any conservation effort for beach-nesting birds needs to be comprehensive is that factors that landed and keep them on endangered species or "watch" lists are so numerous – habitat loss and fragmentation, predators, human disturbance, and flooding, to name the more obvious ones. Beach-nesting birds are under siege from all sides. This is an important point that sometimes seems lost on the public, especially the foes of what has been called "overzealous" protection. Certain animal welfare groups blame developers, saying that loss of habitat caused by overdevelopment is the major problem, not predators. Beach buggy organizations point to predators or irresponsible dog owners as the main issue, claiming vehicles have little impact on nesting. Boaters blame jet-skis for causing more disturbance. Residents blame tourists, and on and on it goes. The truth is, all of these things matter – the cumulative effect of all of the impacts are what puts the survival of beach-nesting bird species in jeopardy. Recovery will not occur if we ignore one problem over another because it is harder to accomplish or more politically difficult to deal with.

The equation is pretty simple – we, as a species, love the beach, while species like the Piping Plover absolutely depend on the same beach for their survival. I'm often asked, why bother saving a bird like the Piping Plover, what purpose does it really serve?

This is not a difficult question to answer. I could take the easy route and say that because as a society we have instituted laws and regulations to protect endangered species, it is the mandate or will of the people – a shared value, so to speak (at least of enough people to constitute a majority). As for the common self-interest argument some make for saving species, it is doubtful Piping Plovers or other beach-nesting bird species hold the key to conquering cancer or developing drugs for other diseases, as is the case with some plants, for instance. Birds surely have some economic value in the sense that bird-watching and ecotourism is of growing importance in generating revenue in New Jersey, both statewide and for local communities. However, when compared to the economy as a whole, I doubt this makes a compelling argument for the Piping Plover by itself.

To me, any case to be made for the "value" of a species like the Piping Plover ultimately comes down to defining what type of world we want to live in. If the beach is to be more than just a commodity (i.e., a place that generates revenue) or simply a place to play out our recreational whims – and I believe for most people the beach and ocean hold a deeper place in their psyches – then our native wildlife and plants must have an equal place in the equation. It may sound like a bit of a cliché, but we have to "share the shore" with species like the Piping Plover if our beaches are to remain unique and special. ■

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BIRDING IN CAPE MAY:

Third Time's the Charm

■ **ELIZABETH J. ROSENTHAL**

If I said I spent my formative years of the 1960s on the site of a 17th-century farm in New York, one might assume that wildlife was plentiful in my childhood. Certainly I was well-acquainted with fleeting chickadees and titmice; the ebony "V" on Eastern Meadowlarks' necks; the ringing song of the Red-winged Blackbird; the cry of the gravel-loving Killdeer.

No? How about the grating voice of the Common Grackle? No, again? Surely, I could recognize the blush breast of the House Finch? Not quite. I knew pigeons. And sparrows – the "generic" kind. Also those small, gregarious, noisy, black birds (European Starlings, I would later learn). I'd heard of crows, hawks, and owls, and I saw plenty of seagulls at Orchard Beach. Chickadees? I thought they had something to do with W. C. Fields and Mae West. And titmice? Weren't they a kind of rodent?

The site of the farm I lived on, which once belonged to Jonas Bronck, had long since lost the attributes of a crop-producing tract. The closest thing to a meadow was the weedy patch beyond the cyclone fence that kept young bicyclists like me from veering off the asphalt cycling path in Van Cortlandt Park. The nearest thing to a ramshackle barn was a sagging structure that had