

Gulls winning wetlands battle

By Suzanne Bohan **Contra Costa Times**

Posted: 11/05/2009 02:35:47 PM PST

Updated: 11/09/2009 02:54:00 PM PST

FREMONT — As biologist Josh Scullen drove toward a maze of salt ponds here in late October to conduct his monthly monitoring of California gulls, he pointed to a green field dotted with more than 3,000 of the birds.

The scene conjures images of a Hitchcock movie only it's not humans threatened by the predatory birds, but rare and imperiled shorebirds from around the Bay.

Only three decades ago, a handful of California gulls tending nests on a jut of land near Alviso were a wildlife novelty in the region, as they preferred such inland areas as Mono Lake to rear chicks.

But they've been wildly successful since that discovery in 1980, multiplying at a dizzying rate from 24 adult gulls to 46.800 in 2008 — a 2.000fold increase. Their numbers ieopardize the goal of a \$1 billion wetlands restoration project under way in the South Bay.

"You could very reasonably say that California gulls threaten the success of the restoration of the marshes," said Jill Demers, executive director of the San Francisco Bay Bird Observatory in Milpitas.

Begun in 2003, the marsh restoration to which Demers referred is the largest such project on the West Coast. The U.S. Fish and Wildlife Service is the lead agency heading the 50-year plan to revert 15,000 acres of industrial salt ponds in the South Bay into tidal marshes, or into "managed ponds" engineered to promote wildlife diversity.

In addition to enhancing the Bay's aquatic life. water quality and capacity to absorb floodwater, the wetlands restoration project sets as a critical goal preserving the diversity and abundance of such vulnerable shorebirds as avocets, black-necked stilts, federally threatened snowy plovers and federally endangered least terns. And the California gulls, which prey on shorebird chicks and eggs and take over shorebird breeding habitat, could easily derail the goal.

Those first California gulls staying to rear their voung clearly liked their new home, where they found abundant food from natural sources, as well as from landfills and trash bins, and ample new breeding and roosting grounds.

Since then, these intelligent birds have flouted the rules of nature that keep populations of less adaptable species in check.

"They are so smart," Demers said.

Receding waters

No one fully understands why California gulls took up permanent residence in the Bay Area in recent decades, although scientists believe that in the late 1970s receding waters in Mono Lake, located just east of Yosemite National Park, played a role. In 1977, water diversion to Los Angeles from streams feeding Mono Lake dropped lake levels so low that a land bridge formed to an island harboring the state's largest breeding colony of California gulls. The bridge opened the island to such predators as covotes.

Advertisement





"It's not proven, but it's a generally accepted theory of what happened," Demers said.

Before the California gull nests were discovered in 1980 near Alviso, the gulls were only observed wintering around the Bay and along the Pacific Coast, returning inland in the spring to breed and raise chicks. Because most were gone when shorebirds around the Bay were raising chicks, the gulls didn't pose the threat they do today.

And biologists say three landfills in the South Bay helped fuel the population explosion, as thousands of the gulls forage daily on food waste. Gulls fitted with radiotelemetry devices revealed that the birds practically clock in at the landfills, arriving at 6 a.m. when operations begin. They depart about 6 p.m., when the dumps close and the refuse is covered. Though several gull species use the landfill, California gulls constitute the majority.

Rick King, who runs the Newby Island Sanitary Landfill in Milpitas, however, thinks landfills get too much blame.

"There are other factors," he said, noting that there are fewer landfills now than in the past. "But we're certainly trying to mitigate our part of it."

King voluntarily teamed with the San Francisco Bay Bird Observatory to test gull abatement programs. Now, at a cost of \$10,000 a month, the Newby Island landfill uses pyrotechnics to scare away the gulls, resulting in a 70 percent to 95 percent decline of California gulls using the landfill during the breeding season, according to Demers. King said he'll soon be adding a falconer to the gull-deterrent strategy, as falcons prey on gulls. That step is "three times" the cost of pyrotechnics, he added.

Scientists restoring the South Bay wetlands face an

unusual challenge. They want to restore much of the land to the tidal marshes that once ringed the Bay, but the man-made environs of the salt ponds attract many bird species. Avocets and black-necked stilts feed on brine flies and brine shrimp in the salty ponds. Small islands provide excellent nesting and resting habitat, as do the miles of earthen levies surrounding the water. Caspian and Forster's terns make their homes there, among other shorebird species.

New types of birds

The salt ponds, in fact, drew new types of shorebirds to the area. The first crude salt ponds were diked in the mid-19th century to supply salt to gold prospectors and a booming Bay Area population. By the 1950s, thousands of acres of salt ponds spread out across the south end of the Bay. Then, during the early to mid-20th century, biologists for the first time found avocets, stilts and terns breeding around the Bay.

Although these shorebirds weren't year-round residents before settlers arrived, they're now beloved denizens of the region, Demers said. And they've also lost much of their historic habitat elsewhere, she added. For these reasons, one of the goals of the wetlands restoration project is preserving the abundance and diversity of these shorebirds — even if they aren't bona fide natives.

California gulls also thrive on the salt ponds, however. And biologists worry that when they lose that habitat as the levies are breached, gulls seeking new nesting and roosting places will force out valued shorebird species looking for the same. In 2010, workers will tear open the levies surrounding a former salt pond near Alviso that harbors more than half the Bay Area population of California gulls, a tract called A6. As Bay waters reclaim A6, scientists will carefully monitor where the displaced gulls end

Advertisement



CONTRA COSTA TIMES

up.

But gulls preying on the chicks and eggs of shorebird species pose an even larger concern, said John Takekawa, a biologist with the U.S. Fish and Wildlife Service. A 2006 report he co-authored detailed California gulls' predation on chicks in 61 percent of avocet nests in the South Bay, and 23 percent of stilt nests. Scientists suspect the gulls' predation also takes a toll on Forster's terns, federally threatened snowy plovers and federally endangered California least terns.

Scullen, the biologist keeping a monthly tally of California gulls, works with the San Francisco Bay Bird Observatory, which began monitoring the gulls after its researchers in 1980 discovered those early nests near Alviso. He and others will be closely watching how or if the number of California gulls, and the shorebird species on which they prey, change in salt ponds in Fremont and nearby areas as the gulls lose their breeding grounds elsewhere around the South Bay.

Abatement strategies

Proposed solutions are expensive, and outcomes are uncertain. The Newby Island landfill gull abatement strategy was effective, although biologists say the gulls might become accustomed to the commotion and ignore many of the scare tactics.

The best hope, scientists say, is preserving or building breeding habitat for avocets, plovers. terns and other shorebirds after the levies are breached. One salt pond near Redwood City, scheduled for restoration in 2010, will include small islands — safe from predators — built for that purpose. But the biologists will closely watch which birds take to the islands, fearing the California gulls might prefer that costly new habitat themselves.

"We don't want to build a nice, expensive hotel for gulls," said Cheryl Strong, a wildlife biologist with the Fish and Wildlife Service.

Listen up

For more on this story, tune in to the radio program Crosscurrents on KALW-FM (91.7) at 5 p.m. Monday. The show will repeat at 8:50 a.m. Tuesday. Listen online at www.KALW.org .

Advertisement

