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Volunteers Work to Save Pelicans Stricken With Botulism

by: Kate Folmar

They're trucked in by the dozen every day: limp, listless bundles of feathers--endangered brown pelicans sickened by the annual botulism outbreak at the Salton Sea.

Already, 112 sick birds have arrived at the Pacific Wildlife Project in Irvine, where volunteers under veterinary supervision painstakingly nurse the pelicans back to health with the goal of releasing them to the wild.

Some birds have fallen ill every year since 1996--when about 1,500 pelicans perished. Signs are ominous for this year: The big-billed birds are getting sick a month earlier than usual, and they're flowing to Irvine in a steady gush, not a trickle.

"It's happening a bit sooner than in years past," said a harried Linda Evans, project director. "Early predictions are that it's going to be a hot summer [which helps ferment botulism] and that unusually great numbers of brown pelicans are living at the lake right now. . . It looks like we're getting greater numbers than in previous years."

Despite the troubling numbers of birds many of them are arriving in good shape because U.S. Fish and Wildlife Service employees at the Sonny Bono Salton Sea National Refuge patrol the lake daily hunting for ill pelicans. So far this year, only a couple of birds have died.

By 11 a.m. most days, birds arrive in Irvine from the Salton Sea, southeast of Palm Springs. On Sunday, the van ferried 11 crumpled pelicans. Slumped on top of one another in the back, the birds resembled a gray-brown smudge.

The sickest birds don't budge when they see daylight. Because botulism has slowed or paralyzed their neurological systems, the pelicans can barely blink their eyes, let alone raise their heads or unfurl their magnificent wings. They are placed in an avian trauma ward, where they are tube-fed and propped up on rolled towels. Still, they flop their long necks about in frustration, fighting their own bodies.

The pelicans that are a little better off tend to squat and rest on their bellies; they lift their heads but don't stand. The healthiest ones are feisty enough to snap their bills and flap their wings at volunteers' ministrations.

All the new arrivals get their eyes rinsed with saline and their systems flushed with a fluid and electrolyte solution squirted directly into their stomachs.

"We do for these birds exactly what we would be doing if a human went into a hospital with severe food poisoning--flushing the system and [giving] nursing and supportive care," Evans said. Caring for a sick pelican can cost between \$300 and \$400 a bird, depending on the length and seriousness on the length and seriousness of the illness. Half the cost is covered by private contributions, Evans said, and the remainder comes from the federal wildlife service. The city of Irvine donates a bunker of cages at the rear of the Irvine Animal Care Center.

Pelican rehabilitation is not glamorous, and it requires many more volunteers than the project has available, Evans said. Nursing the birds is a 16-hour-a-day task--requiring compassion, a tolerance for the smell of ripe fish and bravery in the face of a snapping bill.

The pointy bills, attached to the pelicans' expandable gullets, are of concern to a new batch of six volunteers learning the ropes Sunday. During a tour of the Pacific Wildlife Project's facilities, one woman ventured, "Do they bite?"

Longtime volunteer Bruce Evans, no relation to the project director, didn't blink: "Do they bite? much, unless the birds scrape the rough roof of their bills against your arm. That'll send you scurrying for the hydrogen peroxide.

The birds' biting habits are, in part, what landed them here. Scientists believe the birds acquire botulism by eating infected fish that live in the briny Salton Sea. The bacterial spores that cause botulism are normally dormant until activated by a mix of heat, wind and oxygen in the environment.

The troubled sea was created in 1905 when an engineering blunder sent a torrent from the Colorado River into a salt sink. The sea has no natural drainage and it serves as a sump for agricultural runoff.

Scientists are studying Salton Sea pollution and seeking possible remedies.

It's unclear how the botulism outbreak is related to the Salton Sea's annual summer fish die-off, which is relatively mild so far this year, said Jihadda Govan, refuge operation specialist for the Salton Sea.

Back in Irvine, volunteers wash out cages and bathe birds that are too paralyzed to care for themselves. As the pelicans get healthier, they progress from formula (think Ensure for birds) to tasty smelts and anchovies. Given this care, between 80% and 90% of the birds survive.

Newport Beach nurse Andrea Thompson found that her bedside manner serves her as well with avian patients as with the human ones. She expertly carried birds by lightly grasping their bills and the crook of their wings.

The problems at the sea and by extension with the pelicans, "are man-made," she said. "I feel like we're obligated to help."