

You may find this article interesting as San Diego Audubon Chapter is facing a similar situation with the least terns

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California least terns cared for the most



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Audubon Society nest site research and maintenance at Fiesta Island

By [Dave Rice](#), [Sept. 25, 2017](#)

The [California least tern](#), a light-brown shorebird that nests along the state's coastline, is one of the smallest tern species in the world, growing to just nine inches in length at adulthood. It's also one of the longest-tenured recipients of federal protection, being listed shortly after the passage of the Endangered Species Act of 1974.

The least tern, then, is of particular interest to scientists and volunteers at the [San Diego Audubon Society](#). The group, funded by a Sandag (San Diego Association of Governments) grant, maintains four nesting habitats in Mission Bay. With the terns having left their nests to winter in warmer climes, the group is beginning the task of assessing and revitalizing the sites in anticipation of their return next spring.

"San Diego Audubon has been helping the city to manage this nesting site since 2011," Audubon restoration programs manager Megan Flaherty said on a recent Wednesday afternoon. She and a volunteer were working at Stony Point, a protected nesting site at the

southwestern tip of Fiesta Island a half-mile from the entrance to the island's off-leash dog park.

"Part of that has been our effort to transition from large-scale, mechanized scraping of the site — that gets the bare sand the birds need to nest on, but whenever they do it they're also wiping out native species and encouraging invasive weeds to grow, because weeds love disturbed soil," Flaherty said. "We've been moving more toward hand management, keeping the healthy native plants and removing the bad plants without stirring up their seeds."

On the day that I visited, no plants were being pulled; instead, the site was being meticulously surveyed, with stakes and long measuring tapes dividing the site into sections, and each of those sections being viewed one square meter at a time aided by the use of a square constructed of PVC piping. Flaherty measured her location, dropped the square, and called notes to a clipboard-wielding volunteer about the presence and type of ground cover, from native evening primrose to invasive tumbleweed.

"We collect data on ground cover — is it open sand or is there vegetation?" Flaherty explained. "If there's vegetation, is it native or is it an invasive species? We're going to analyze all that to get a picture of how effective we've been. We're out at these sites twice a year, once in spring right before the birds get here and again in fall just after they've left."

While Audubon hasn't had the chance to scientifically analyze their data, anecdotal evidence suggests it's working. While the group has been hand-managing the southern portion of the site for seven years, until two years ago the city was using a plow to scrape the north side of the site bare between nesting seasons.

"We did notice that the southern half had a lot more native plants and a lot less of the invasive species, which is what we were expecting to see," Flaherty said. "Our goal is to reduce the site down to where it's all native plants. But even then, those native plants need to be controlled because the ideal blend for the birds is about 20 percent vegetation with the rest being a clear sand-dune environment.

"What we'll do first is remove the invasives, then in the months just before spring we make a big push to clear out the excess natives, which are much easier to manage."

It takes a big crew to handle the plant-removal efforts — San Diego Audubon says as many as 1500 volunteers contribute each year. But research suggests that as many as 60 percent of the entire California least tern population makes their home within the county, either in Mission Bay or at sites including Camp Pendleton and along the Silver Strand leading from Coronado to

Imperial Beach. Those sites, less impacted by human development, require less human interaction to keep them in suitable condition. But Flaherty says Mission Bay is still an important, if challenging locale.

"The birds have a pretty strong nest-site fidelity, so they'll often return to the same site where they were born," according to Flaherty. "That said, if they return to their birthplace and see a predator, like a peregrine falcon, chances are that they'll flee and look for another home, which is why we want to make sure all of the places they could potentially use are restored and ready to go."

The work is made difficult due to the fact that Mission Bay was created by [dredging what was then known as False Bay](#) to create an aquatic playground in the middle of the 20th century. The sediment pulled from the murky waters to create islands is much more fertile than a natural coastal sand dune.

"A natural sand dune would have a low level of nutrients, and the only plants would be the ones that have evolved to live there," Flaherty says. But the more inviting bay soil at Stony Point, a second northern nesting site on Fiesta Island, FAA Island (referred to as such for a navigational aid placed by the Federal Aviation Administration), and Mariner's Point mean that even native plants can grow at rates that wouldn't be found at a natural dune.

"The most productive site is Mariner's Point, over by the Bahia Hotel. San Diego Audubon has been helping to maintain that site for 15 years or so, and it's one of the best-preserved coastal sand-dune habitats in Mission Bay."

With data in hand from the recent survey, San Diego Audubon is planning the first volunteer event to begin removing invasive species from Stony Point on Sunday, October 1.