

Water Matters

The Awesome California Gull: Mono's Unlikely Mountaineer

by Justin Hite

Justin Hite is a researcher from Cornell University who has spent summers since 1999 studying the California Gull colony at Mono Lake. The California Gull research through Cornell University, the Point Reyes Bird Observatory, and the Mono Lake Committee has occurred since 1983, and was instrumental in gaining protection for Mono Lake. Over the past four years of observing and documenting California Gull behavior Justin has developed a strong appreciation and a contagious love for this sometimes taken for granted species.

The shores of Mono Lake offer a perspective of the natural world unique among lakes in North America. Along with stark and lonely tufa towers, the lofty Sierra Nevada to the west, and the corrugated Basin and Range country to the east, there is a thriving ecosystem nurtured by the lake's conditions. And the California Gull, perhaps the unlikeliest of avian mountaineers, is particularly fond of Mono Lake. This 'seabird' spends its winters along the California coast with up to a dozen other species of gulls, where it enjoys the plentiful harvests of fish, marine invertebrates, and abundant refuse from large city landfills. Beginning in March when the reproductive instinct begins to motivate all gull species, most scatter up and down the coast, some north to Alaska and some south to desert islands on the Sea of Cortez, but California Gulls head inland to barren windswept islands on lakes and reservoirs throughout the interior west, from the Great Basin to the Canadian prairies.

The call of a gull is the sound of the sea, yet this evocative music plays over our portion of the Sierra and Great Basin from their first arrival in March until late October when the last of the fledglings, the season's young, leave the basin. The California Gull comes here because Mono Lake offers what all breeding birds require: adequate nesting habitat and a reliable food source. Mono's islands, both large and small, serve as a nesting haven for the species, which lays its eggs on the ground in shabby little nests constructed of a few twigs, feathers, and random bits of garbage (blue and yellow colored items seem to be preferred). As a ground nesting bird, it is at serious risk to predation or disturbance from hungry reptiles, mammals, or the careless wheels of motorized vehicles. The California Gull is able to nest successfully only by heading to remote and often desolate islands free of predators.

The gulls also come to Mono Lake to capitalize on the lake's rich supply of invertebrates, which owe their abundance to the highly salty Mono Lake water. The key to their unlikely success in this harsh environment lies in their ability to utilize prey sources that other gulls fail to recognize as food. While most nesting gull species are following other seabirds to schools of fish and visiting city dumps and landfills, the more adventurous California Gulls are gulping down masses of minuscule brine shrimp, charging through clouds of alkali flies and using their bills to dig holes in sandy beaches to uncover dense concentrations of long-legged fly larvae.

In addition to gorging themselves on these three prey sources, the California Gull also finds forage in the surrounding sage scrub. During cicada-outbreak years the gulls may be seen attacking the tops of juniper and pinion pines where these large and vociferous insects congregate. Gulls are also seen hunting the cicada and other animals on the wing much like a bat hunts its flying insect prey. A few of the more ingenious individuals slowly circle fields and

meadows, ready to plummet down onto unwary ground squirrels that wander too far from their burrows, while others ambush Violet-green Swallows as they fly out of their rock-crevice nests. And at least one bird has turned professional trout-stealer: for the past three years more than half the food this male has brought to his chicks has been cleaned, headless trout with filets still fully intact.

Island nesting grounds and a summer-time monopoly on Mono's prodigious crop of salt-tolerant flies and shrimp together reinforce the lake's role as a culinary haven for the California Gull. Yet this nesting refuge has twice been breached by human activities. Professional egg gatherers in the late nineteenth century scoured the islands during the laying season and sold the season's reproductive effort to feed the hungry mouths of Bodie. Years later, beginning in 1941, falling lake levels caused by diversions of the Mono Basin's water to Los Angeles led to the formation of a landbridge linking Negit Island – then home to more than 30,000 nesting gulls – to the mainland, providing access to coyotes who sated themselves on eggs.

In 1994, a decision by the State Water Resources Control Board set a management lake level for Mono Lake that reduced diversions to Los Angeles. Although the lake is on the rise the effects of the landbridge have not disappeared. Negit Island once hosted the bulk of the population, but it now contains less than 2% – with none of these birds breeding in former nesting locations. Most of the population was forced onto the nearby islets where they now nest at greater densities and with almost no shade-providing vegetation. How this might affect reproductive success is still under investigation.

The California Gull is an accomplished opportunist, requiring little more than island nesting grounds and an adequate supply of prey, be it shrimp, flies, squirrels, swallows, or scraps of food humans provide. Mono Lake is one of the oldest lakes in North America, in continuous existence for perhaps more than a million years, and the California Gull has long soared over this spectacular corner of our continent. With our help, through constructive—not destructive—long-term solutions to our water needs, it will grace our skies for millennia to come.

Water Matters is a periodic column devoted to Mono Lake, one of Mono County's world-renowned natural features. The Mono Lake Committee will be offering periodic columns on a range of issues, including how water use in Los Angeles affects Mono Lake and the Eastern Sierra, the future of Mono Lake, and how we all can be more-efficient water users.