

Cliff Swallow *Petrochelidon pyrrhonota*

Bottles made of mud pellets and stuck to bridges and buildings, Cliff Swallow nests are perhaps more easily found and identified than those of any San Diego County bird. Living overwhelmingly around these man-made environments, usually in colonies, Cliff Swallows are familiar to San Diegans—sometimes too familiar, when the colonies are over doors, walkways, and patios. The species is still a common summer resident, locally abundant around some lakes and lagoons, but creeping signs of decline suggest that the Cliff Swallow's bargain with humanity carries a price.

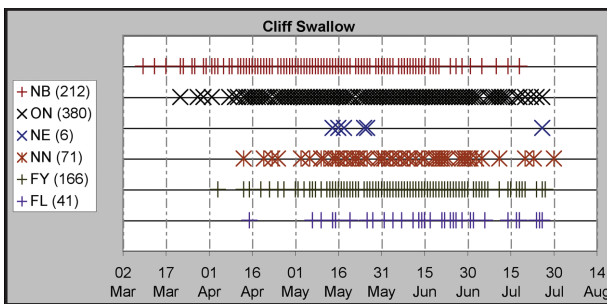
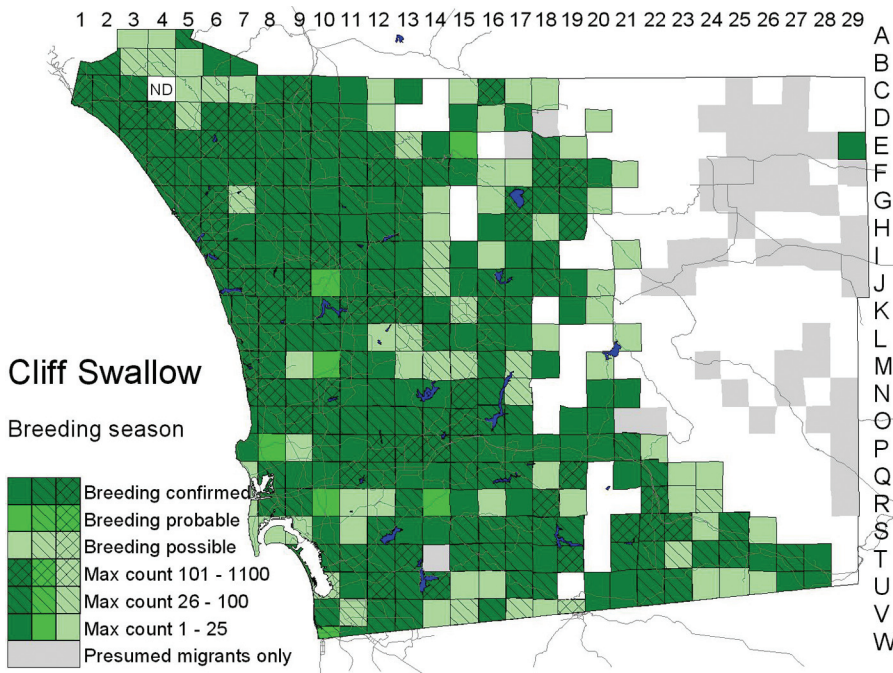
Breeding distribution: The Cliff Swallow is widespread though the coastal lowland, with colonies known from the great majority of atlas squares in the western half of the county. Along the coast, the only exception is Point Loma (S7), where the species is a rare migrant or non-breeding visitor only. The largest colonies are on bridges over the lagoons, such as Buena Vista (H6, 1100 on 11 May 1999, M. Freda), Agua Hedionda (I6, 425 on 11 May 1999, W. E. Haas), and San Dieguito (M7, 400 on 31 May 1998, D. R. Grine). Farther inland, the reservoirs are home to substantial colonies, but the swallows also nest on buildings far from lakes, sometimes in large numbers. The species becomes more scattered at higher elevations



Photo by Anthony Mercieca

and farther inland, but Cliff Swallow colonies trace the route of Interstate 8 as far east as Jacumba (U28). There are few colonies above 4000 feet elevation, but the highest site is at 6140 feet on the fire lookout tower atop High Point, Palomar Mt. (D15, up to nine on 1 July 1999, K. L. Weaver).

The Cliff Swallow's breeding range barely extends onto the desert slope at Tule Lake (T27) and where Carrizo Creek crosses under Interstate 8 (T28). In the Anza-Borrego Desert, the species is only a migrant or nonbreeding visitor, with one interesting exception. On 25 June 1998, on a rock overhang near a *tinaja* where big-



horn sheep come to drink in the north fork of Palm Wash (E29), Paul Jorgensen noted the remains of three old Cliff Swallow nests. The nests, in one of the most remote and arid parts of the Anza–Borrego Desert, could have been many years old—Mark Jorgensen had seen nests here in the 1970s. Though the Cliff Swallow began colonizing the Imperial Valley in 1977, and is now abundant there (Patten et al. 2003), it has not done so around Borrego Springs, even on buildings near golf-course ponds.

Nesting: The Cliff Swallow’s retort-shaped nest, built from pellets of mud, is unique in North America. Though cliffs were the species’ primitive nest site, the nests now are plastered typically under bridges, on concrete structures in reservoirs, and under the eaves of buildings—always where a vertical surface is sheltered from above. They often put the nests in corners and against neighboring nests, minimizing the amount of mud needed to enclose the nest. Our observers reported only a few colonies on natural cliffs or boulders, though another is on simulated rocks at the Wild Animal Park, San Pasqual (J12; K. L. Weaver).

Nest building begins usually in late March but began in mid March in the wet year 1998. The birds repair the nests whenever needed, accounting for nest building throughout the breeding season. Early in the season they

may investigate and enter old nests, accounting for a report of an occupied nest as early as 17 February (P. A. Ginsburg). Checking old nests for parasites helps the swallows decide whether to build a new nest or refurbish an old one (Brown and Brown 1995). Atlas data imply that Cliff Swallows lay as early as the first week of April; otherwise they are consistent with the 29 April–3 July range of 51 egg sets collected 1896–1935.

Migration: In spring, the Cliff Swallow typically arrives from mid February to early March—well before the birds’ fabled return to San Juan Capistrano on St. Joseph’s day, 19 March. The earliest arrival recorded 1997–2002, at Fallbrook (D7) 7 February 2001 (K. L. Weaver),

differs little from the earliest arrivals recorded in the past, in the first week of February (Unitt 1984). Most Cliff Swallows pass through in March and April, with only a few stragglers noted far from breeding colonies by the first week of May. Three in the northeastern Borrego Valley (E25) 13 May 2000 (P. D. Ache) were apparently our latest spring migrants. Five at Ocotillo Wells (I29) 27 May 2000 (R. Miller) and one in Bow Willow Wash (O28) 7 June 2001 (P. D. Jorgensen) may have been ranging from colonies in the Imperial Valley, while one in San Felipe Valley (I21) 16 June 2000 (J. O. Zimmer) may have been ranging from those in the Lake Henshaw region.

After nesting, Cliff Swallows desert their colonies in August, but fall migrants show up in large numbers in mid July, sometimes in early July (86 at Sentenac Ciénaga, J23, 7 July 1999, R. Thériault). Their numbers drop rapidly in early September, and records from late September through October are few.

Winter: Only three records ever: San Diego Christmas bird count, six on 23 December 1967 (AFN 22:394, 1968), Otay (V11), one on 15 December 1973 (J. L. Dunn, AFN 28:536, 1974), and Oceanside, one on 23 December 1984 (G. McCaskie, AB 39:211, 1985).

Conservation: The Cliff Swallow presents a paradox: a species that relies for a nest site almost totally on man-made structures—yet shows signs of decline. At many colonies atlas observers reported that only a fraction of the nests were active, and other colonies were abandoned entirely. Results of the Breeding Bird Survey suggest a significant decline in southern California since 1982 (Brown and Brown 1995). At San Elijo Lagoon (L7), from 1973 to 1983, King et al. (1987) recorded an April–July average of 230 and a maximum of 620 on 3 June 1979. From 1997 to 2002, with 26 records, the maximum reported there was only 100, on 2 May 1999 (B. C. Moore). Similarly,

at Batiquitos Lagoon (J7), Mona Baumgartel's maximum monthly count decreased from 920 in 1994 to 32 in 2001.

The erection of thousands of bridges and millions of buildings has given Cliff Swallows countless new colony sites, and the importation of huge quantities of water has given them new sources of mud. But the paving over of so much of the coastal lowland, and the landscaping of so much of what has not been paved, must be more than compensating, by reducing the supply of both mud for nests and insects for food. Homeowners and building managers annoyed with the mess underneath a Cliff Swallow colony may knock or hose the nests down; atlas observers occasionally noted nests deliberately destroyed. A citation from the health department obliged the Cuyamaca school camp (N21) to destroy nests over the door to its cafeteria (P. D. Jorgensen). San Diego State University adopted a policy of "no swallows," so the former large colonies there are now history (P. R. Pryde). One of the most frequent public inquiries I get is how to prevent Cliff Swallows from nesting on buildings.

Few birds test the limit of human toleration of wildlife more than the Cliff Swallow, and the evidence is growing that intolerance is winning.

In the northeastern U.S., House Sparrows usurping nests are responsible for Cliff Swallows declining (Brown and Brown 1995), and this problem is likely a factor in San Diego too. The proliferation of ravens and crows may be a threat as well—observers at Barrett Reservoir (S19/T19) repeatedly reported ravens destroying Cliff Swallow nests and eating the young.

Taxonomy: The small subspecies *P. p. tachina* Oberholser, 1903, is the one nesting in San Diego County, as elsewhere in southern California. Though there are as yet no specimens, the larger, more northern nominate *pyrrhonota* may pass through in migration, as through the Salton Sink (Patten et al. 2003), or it may bypass San Diego County. At 104 mm, the wing chord of a juvenile fall migrant picked up near Lake Henshaw 21 September 2000 (W. E. Haas, SDNHM 50553) is equivocal (cf. Phillips 1986).