Great Blue Heron *Ardea herodias*

The Great Blue Heron is one of San Diego County's most familiar water birds, occurring year round at wetlands of all kinds. It uses dry land, too, commonly foraging away from water for gophers and rats. Some Great Blue Herons nest as isolated pairs, but most are colonial, nesting high in tall trees. A majority of the county's approximately 250–300 nesting pairs are concentrated in the six largest colonies. The Great Blue Heron has taken readily to artificial nesting habitat like eucalyptus groves; it feeds largely on prey introduced by man. Yet, unlike those of the

Great and Snowy Egrets, the population of the Great Blue Heron has not exploded.

Breeding distribution: The Great Blue Heron nested at 30 recorded sites in San Diego County from 1997 to 2001. Thirteen of these had only isolated pairs, but 17 had from two to 54 nests (Table 6). Most of the colonies are in the coastal lowland, but a few are at higher elevations. The highest is at 4650 feet elevation in Rattlesnake Valley (N22) in the Laguna Mountains.

Also, two or three pairs have built nests but apparently not fledged any young at Santee Lakes (P12), as in 2002 (M. B. Mulrooney).

Breeding Great Blue Herons apparently forage within 5 miles or so of their colonies; for example, the birds nesting at the Rancho Santa Fe colony appear to forage primarily at San Elijo Lagoon. Away from known or probable nest sites, the Great Blue Heron occurs widely but uncommonly through the breeding season, with up to five at, for example, Cuyamaca Lake (M20) 25 June 1998 (A. P. and T. E. Keenan), Barrett Lake (S18) 18 June 2000 (R. and S. L. Breisch), and Lake Morena (S21) 7 July 2001 (R. and S. L. Breisch).

Nesting: In San Diego County, most Great Blue Herons build stick nests in trees, often adding to them year after year. At O'Neill Lake, Batiquitos Lagoon, Rancho Santa Fe, and Lindo Lake they nest in eucalyptus trees, whereas at Carlsbad, Mission Bay, and Coronado they nest in planted pines. At North Island and Point Loma they nest in both. At the San Dieguito River mouth, Los Peñasquitos Lagoon (N7), and Sea World the herons nest in native or planted Torrey Pines, and at Pine Valley (P21) and Rattlesnake Valley they nest in tall Jeffrey pines. An isolated nest at the mouth of Couser Canyon (E10) was in a palm. In 1998 the colony at Lake Henshaw was in cottonwoods. Occasionally the herons use artificial structures; those reported during the atlas period were around San Diego Bay, on a crane in National City and on the catwalk of a power plant in Chula Vista. At least in 1994 the herons built 13 nests on abandoned platforms and barges off National City (T10; Manning 1995); we did not survey this site 1997–2001. Past nest sites included sycamores and a scrub oak among sandstone cliffs (WFVZ).

Photo by Anthony Mercieca

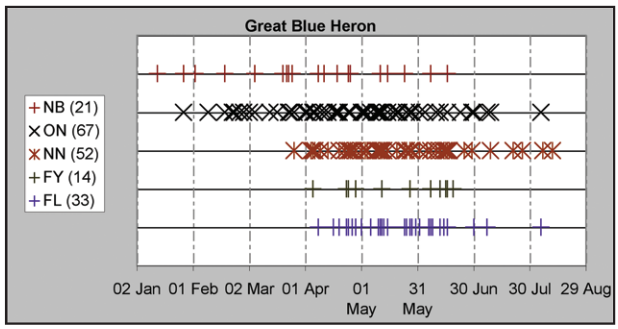
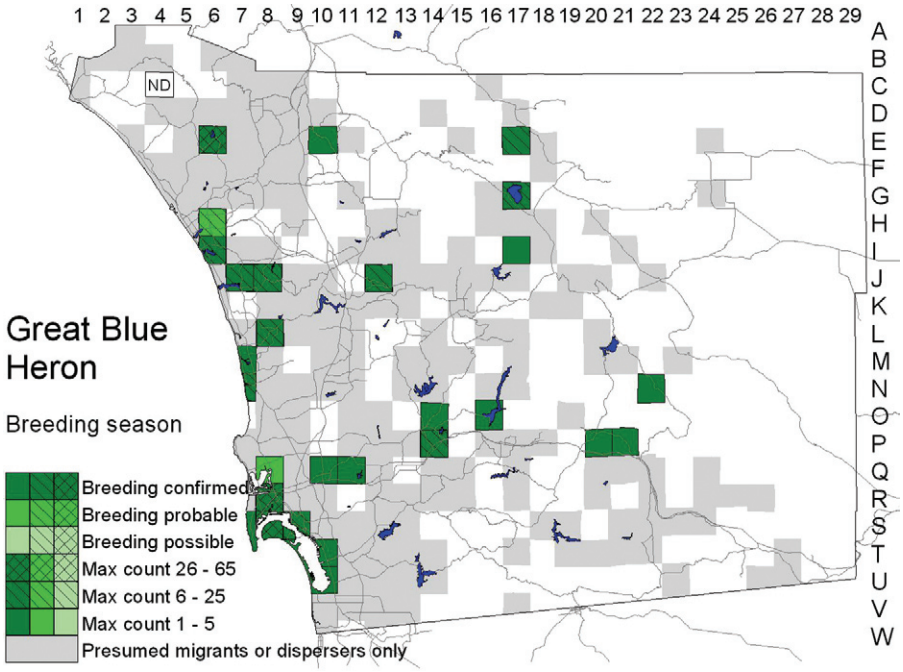


Table 6 Nesting Colonies of the Great Blue Heron in San Diego County, 1997–2001

Colony	Square	Maximum Count of Active Nests	Year of Maximum	Observer
O'Neill Lake	E6	25	2000	P. A. Ginsburg
West Fork Conservation Camp	E17	6+	2001	E. C. Hall, C. R. Mahrdt, J. O. Zimmer
Lake Henshaw	G17	4	1998	P. Unitt
Highland Dr. at Oak Ave., Carlsbad	I6	14	1999	P. A. Ginsburg
Batiquitos Lagoon	J7	3	2000	J. Ciarletta
Wild Animal Park	J12	"large"	1997	D. C. Seals
Escondido Creek at La Bajada, Rancho Santa Fe	L8	30	2000	A. Mauro
San Dieguito River mouth	M7	2	2001	D. R. Grine
Lucky 5 Ranch, Rattlesnake Valley	N22	2	1998, 1999	P. D. Jorgensen
El Capitan Reservoir	O16	1[a]	1999, 2001	S. Kingswood
Lindo Lake	P14	5	2001	C. G. Edwards
Sea World	R8	52	1997	Black et al. (1997)
Point Loma	S7	54	1999	M. F. Platter-Rieger
North Island Naval Air Station	S8	22	1999	P. McDonald
Spreckels Park, Coronado	S9	13	1998	Y. Ikegaya
Glorietta Blvd. at Miguel Ave., Coronado	S9	9	1997	P. Unitt
Hitachi crane, National City	T10	8[b]	2000	R. T. Patton

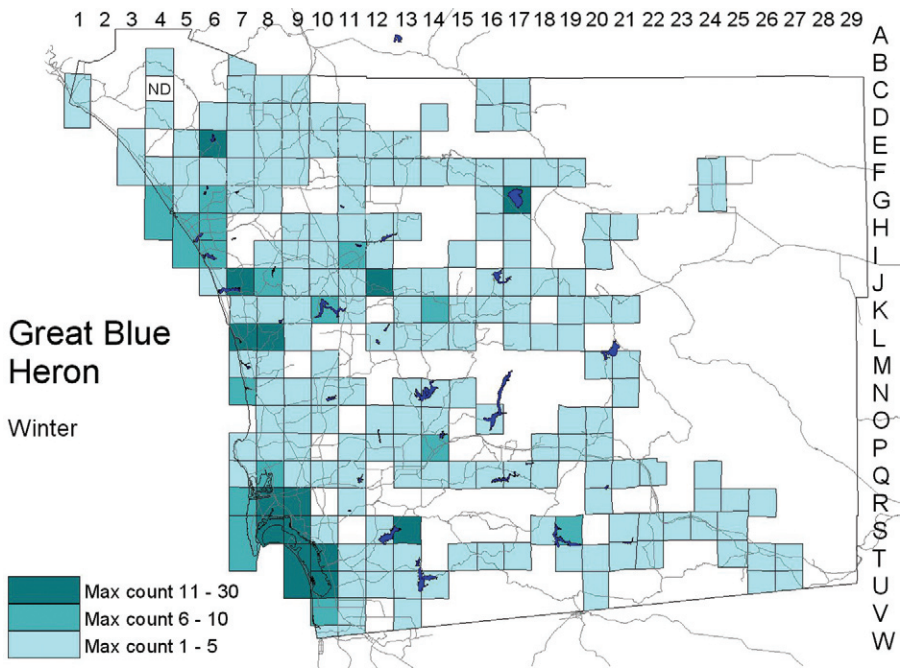
[a]One nest of the Great Blue with more of the Great and Snowy Egrets.
[b]Eight individuals; number of nests not specified.



The Great Blue Heron's exact nesting schedule is difficult to follow because its nests are in the treetops where their contents are not obvious until the chicks are calling. The herons begin defending nest sites at the end of November (Black et al. 1997) and building or refurbishing their nests in early to mid January. They begin laying in early to mid January as well, as implied by hatching in mid February and fledglings by 4 April 1997 at Sea World (Black et al. 1997). Late February through March appears to be the time of peak laying. Herons nesting in established colonies may nest earlier than those in new colonies or those in isolated pairs. A nest at a new colony overlooking the San Dieguito River estuary still had young, nearly full grown, on 11 August 2001 (P. Unitt), suggesting laying as late as early June. At Point Loma some nests still had large young in mid September. Several Point Loma nests hatched and fledged two successive broods within the same year; it is unknown if the second brood was raised by the same parents (M. F. Platter-Rieger).

Migration: The Great Blue Heron is nonmigratory in southern California, but juveniles sometimes disperse long distances; an extreme example is of one tagged as a nestling in Orange County found the following winter at Elko, Nevada (K. Keane and P. H. Bloom). Surveys around San Diego Bay revealed somewhat higher numbers in fall, probably corresponding with the dispersal of juveniles (Macdonald et al. 1990, Stadtlander and Konecny 1994). Surveys at San Elijo Lagoon found somewhat lower numbers in spring, probably corresponding with adults spending more time at nesting colonies (King et al. 1987).

In the Anza–Borrego Desert, where it is a rare nonbreeding visitor, the Great Blue Heron occurs mainly in fall and winter; the only records from late April through June are of one at Scissors Crossing (J22) 14 May 1998 (E. C. Hall), one at Borrego Springs (G24) 14 May 2000 (P. D. Ache), one in the north Borrego Valley (E24) 8–11 June 2001 (P. D. Jorgensen), and one along Coyote Creek (D24) 26 June 1988 (A. G. Morley).



Winter: Atlas results suggest that the number of Great Blue Herons in San Diego County does not vary much with the seasons. Our highest winter counts in single atlas squares 1997–2002 were of 27 around north San Diego Bay 18 December 1999 (D. W. Povey, M. B. Mulrooney), 27 at the Wild Animal Park 3 January 1998 (K. L. Weaver), and 30 at Lake Henshaw 3 December 2000 (L. J. Hargrove). Thus many birds remain near the nesting colonies through the winter. Great Blue Herons range in winter as high as 4500–4600 feet elevation, in Lower Doane Valley (D14; one 31 December 1999–7 January 2000, P. D. Jorgensen), at Cuyamaca Lake (many observations, with up to five on 17 January 2000, G. Chaniot), and in Thing Valley

(Q24; three records, J. R. Barth, P. Unitt). Wintering Great Blue Herons are irregular in the Borrego Valley, with five individuals seen during the atlas period and records on five of 18 Anza–Borrego Christmas bird counts 1984–2001, maximum three on 30 December 1990.

Conservation: In San Diego County the Great Blue Heron has become thoroughly integrated into the domesticated environment. Many colonies are directly over places heavily trafficked by people, the nesting birds being indifferent to human activity below. A study of the food of nestlings at the Point Loma colony in 1995 revealed the birds were fed largely on northern anchovy, crawfish, rats, domestic goldfish, and bullfrogs—hardly any of their diet consisted of items available before the founding of San Diego in 1769.

In spite of being something of an urban adapter, and establishing colonies at sites unsuitable before trees were planted there, the Great Blue Heron has increased in numbers only modestly. On the San Diego Christmas bird count, from 1953 to 1972, it averaged 61 (0.35 per party-hour); from 1997 to 2002, it averaged 113 (0.51 per party-hour). A factor likely keeping the population in check in San Diego County is the high rate of steatitis, an often fatal disease in which the birds are afflicted with large deposits of necrotic fat. Its cause is unknown, and its rate among other herons is much lower.

Taxonomy: The Great Blue Heron has been oversplit into many subspecies, primarily by Oberholser (1912). With most of these synonymized, the birds of southern California are best called *A. h. wardi* Ridgway, 1882 (Hancock and Kushlan 1984, R. W. Dickerman pers. comm.).