## Canada Goose Branta canadensis

Roughly 5000 to 8000 Canada Geese spend the winter in San Diego County, visiting habitats that combine fresh or brackish water with low grass or succulent leaves on which the birds graze. Most of the geese congregate in a few large flocks that frequent the same areas year after year. Urban sprawl has displaced some, and continued development of pastures and floodplains could leave the geese with little habitat but golf courses, inviting the conflict between man and goose seen elsewhere in the United States. Though the nuisance of the goose's nesting in developed areas is notorious, captives have been released in San Diego County and have begun nesting here.

Winter: By the late 1990s, San Diego County's largest flock of the Canada Goose was that in the San Pasqual Valley. Counts here in a single atlas square ranged up to 2083 near the east end of Lake Hodges (K11) on 2 January 1999 (E. C. Hall), and the entire flock, with annual variation, may number about 1500 to 3000. Another major site for the species is the Santa Maria Valley around Ramona, where our single-square counts ranged up to 549 southwest of Ramona (L14) 21 January 1998 (F. Sproul). In central coastal San Diego County another flock (up to 450 on 10 January 1998, R. T. Patton) focuses on the San Dieguito Valley (M8), where it moves among the remaining natural floodplain, horse pastures, and golf courses. In northwestern San Diego County pastures in the San Luis Rey valley continue to be a center for the Canada Goose, especially near Bonsall (F8; up to 350 on 18 December 1998 and 5 January 1999, J. Evans).

At Lake Henshaw (G17) and nearby in the Warner Valley numbers in the low hundreds are regular; during the atlas period our maximum on the lake was 510 on 12 December 2000 (J. R. Barth). Numbers on Lake Henshaw

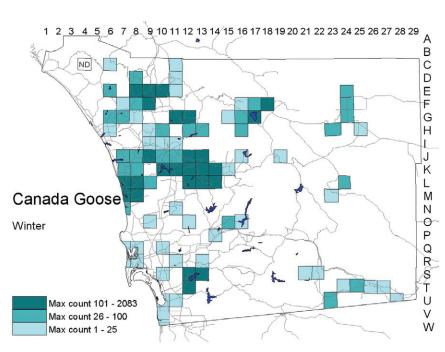




Photo by Anthony Mercieca

Christmas bird counts have varied much more than at the goose's other regular sites, from a high of 2581 on 3 January 1987 to lows of one on 18 December 2000 and zero on 16 December 2002. In the south county the goose's main site is Sweetwater Reservoir (S12), with up to 806 on 16 December 2000 (P. Famolaro). On the Campo Plateau the Canada Goose occurs in only small numbers, up to 40 at Campo (U23) 22 January 2000 (D. S. and A. W. Hester) and 36 in Hill Valley (T25) 10 February 2001 (E. C. Hall). The installation of golf courses in the Borrego Valley has allowed the Canada Goose to winter regularly there, with up to 98 on the Anza–Borrego Christmas bird count 31 December 1988 and 100 on 27 December 1992 (A. G. Morley).

The geese probably move freely among all the main wintering sites. Flocks are sometimes seen in flight far from them, such as 100 over El Monte Park (O15) 9 February 1998 (D. C. Seals) and 17 over Presidio Park (R8) 10 December 1997 (P. Unitt).

**Migration:** Mid November to late February is the Canada Goose's main season in San Diego County. In 2002 and 2003 the species arrived two weeks earlier than previ-

ously recorded with 23 at San Elijo Lagoon (L7) 14 October 2002 (R. T. Patton et al.), two there 13 October 2003 (A. Mauro), and six at the San Dieguito River estuary (M7) the same day (R. T. Patton). At Turner Lake, Valley Center (G11), a wintering flock of 400 departed on 25 February 1998 (V. Dineen). Few geese remain after 1 March; those left after mid March are likely sick, injured, or released captives. Some individuals have remained year round, such as one at El Capitan Reservoir (O16), still present in 2001, that had stayed for six or seven years, according to reservoir employees. Three records from the Anza-Borrego Desert, however, suggest migration until mid April: one in Culp Valley (G23/H23) 8 April 1996 (M. L. Gabel), one with

a broken wing in San Felipe Wash 15 April 1964 (ABDSP database), and 11 flying northwest of Ocotillo Wells (H28) 16 April 1998 (M. Vaught). Some February records from the desert are clearly of migrants, but others, such as 33 heading west over Mason Valley (L22) 27 December 1991 and 35 heading west over Blair Valley (L24) 15 January 1998 (R. Thériault), suggest a more local commute between the Salton Sink and the coastal slope of San Diego County.

**Breeding distribution:** The Canada Goose had not been reported nesting in San Diego County before we initiated field work for this atlas. None of the nesting we observed was in natural habitats. In most cases the birds were known or presumed to have been planted, though some could have been joined by wild geese that failed to migrate. Sites of confirmed nesting were the east basin of Buena Vista Lagoon (H6; young on 8 June 1999, M. Freda), La Costa Meadows Business Park (J7; two goslings with 20 adults 10 May 2000, C. C. Gorman), San Marcos Creek at Questhaven Road (J8; young on 8 June 1997, J. O. Zimmer), Wynola (J19; two released captives with a nest and eggs 11 April 2000, D. Brimm), and the Princess Resort, Vacation Isle, Mission Bay (Q7; pair on nest with eggs 21 April 2000, L. Polinsky). Other places with several summering Canada Geese, more or less domesticated, were Mendenhall Valley (E15; 20 on 21 July 2001, J. R. Barth), San Marcos (I9; 10 on 23 June 2001, P. Zucker), Valley Center (G11; 20 on 30 June 2000, S. L. and S. J. Farrow), and the San Diego River near Boulder Creek (M17; five on 18 May 2000, K. J. Winter).

Conservation: Like other geese, the Canada was abundant in the 19th century, then decimated by overhunting. With hunting regulated the numbers stabilized but, in San Diego County, loss of habitat remains a threat. A change is most evident in the San Luis Rey River valley of Oceanside, where Whelan Lake (G6) was formerly one of the goose's main sites in San Diego County (Unitt 1984). From 1976 to 1980 the Oceanside Christmas bird count averaged 2809 Canada Geese; from 1997 to 2002 it averaged only 107. Even if many of these birds simply relocated to other wintering grounds within the county, the change was a response to rapid urbanization. Nevertheless, Christmas bird counts suggest the total number in the county remained fairly steady from at least 1985 through 2002.

In other parts of the United States the goose has adapted to suburbs and golf courses, domesticating itself. The establishment of nonmigratory geese in such places elicits human complaints about the birds' copious droppings, fear over the spread of disease, and the growth of an industry in goose repellent. San Diego County could save itself from this conflict by curbing the proliferation of golf courses, where geese can graze year round, and leaving floodplains in their natural state, attractive to geese only

during the winter rainy season. Release of captive geese should be forbidden, as these may form a nucleus around which wild birds settle. Better to preserve the goose's natural migration, which inspires awe, than to encourage self domestication, which inspires contempt.

**Taxonomy:** Of the many subspecies of the Canada Goose, the primary winter visitor in San Diego County is the large *B. c. moffitti* Aldrich, 1946, which originates largely in the intermountain region and to which this account as a whole applies. Four San Diego County specimens have been preserved from Point Loma, Lake Henshaw, and Warner Ranch. One specimen from Lake Henshaw (SDNHM 42132) had been banded as a chick at Willard, northern Utah.

While this atlas was in press, the American Ornithologists' Check-list Committee split the Canada Goose into two species, the large Canada Goose (B. canadensis), including moffitti, and the small Cackling Goose (B. hutchinsii). At least two subspecies of the Cackling Goose are known from San Diego County. The smallest subspecies, the Cackling Goose proper, B. c. minima Ridgway, 1885, is a rare winter visitor, usually keeping to itself rather than flocking with moffitti. Records since those listed by Unitt (1984) include one at Famosa Slough (R8) 25 October 1985 (D. Patla), one at Ocean Beach (R7) 2 November 1995 (SDNHM 49432), and one in Mission Bay (Q8) 6 December 2000 (L. Johnson). Also, two Cackling Geese visiting spots with domestic geese failed to migrate: one in the east basin of Buena Vista Lagoon (H6) 11 February 1998-21 July 2001 (P. A. Ginsburg) and one at Lindo Lake (P14) 26 May 2000 (C. G. Edwards). The primary winter range of the Cackling Goose is shifting north from the Central Valley of California to the Willamette and Columbia River valleys of Oregon and Washington (Mowbray et al. 2002), so the frequency of this subspecies in San Diego County may decrease.

The Aleutian Cackling Goose, *B. c. leucopareia* (Brandt, 1836), has been reported twice, on the basis of sightings of a flock of 13 photographed in the Tijuana River valley 13–14 November 1981 (G. McCaskie, J. Oldenettel, AB 36:217, 1982) and up to seven in San Dieguito Valley 16 December 1990–21 January 1991 (L. Santaella, AB 45:320, 1991). This formerly endangered subspecies, which winters largely in the Central Valley, has been restored, so it may become more frequent, unless its range shifts north like that of the Cackling.

Under the name *hutchinsii*, A. W. Anthony (in Belding 1892) reported the Lesser Canada Goose—presumably *B. c. parvipes* (Cassin, 1852) or *B. h. taverneri* Delacour, 1951—to be numerous in parts of San Diego County. But in lack of a specimen to identify the subspecies definitively the Lesser Canada Goose is best omitted from the list of San Diego County birds.