## White-faced Ibis Plegadis chihi

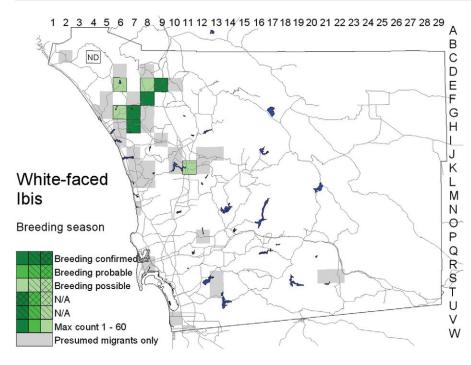
The White-faced Ibis nests in freshwater marshes and forages in shallow water and wet grass. After a decline through the middle of the 20<sup>th</sup> century, its population resurged and shifted west, leading to an increase in San Diego County. Currently dozens remain through the breeding season, with at least two nesting colonies, and hundreds winter, largely in the county's northwestern quadrant. But these gains are threatened by development of the flood-plains in which the ibises forage.

Breeding distribution: Two colonies of the White-faced Ibis were known to be active in San Diego County from 1997 to 2001. Kenneth L. Weaver observed the colony at Guajome Lake (G7) in 2001; his maximum count was 34 birds on 25 June. On 5 July he noted one large nestling being fed and two other juveniles. A complete census of the colony, however, requires a boat and cannot be done from the lake's shore. In 1995, T. A. Scott and P.-Y. Lee surveyed the lake more intensively, using a boat, and concluded that at least six and possibly as many as eight pairs nested that year. A new colony formed in 2000 in a pond in the San Luis Rey River valley at the mouth of



Photo by Jack C. Daynes

Keys Canyon, just east of Interstate 15 (E9). At this site D. and C. Wysong noted one carrying nest material into a marsh 5 May and adults feeding nestlings in two nests 5 June. In 2001 the colony evidently grew, with 15 juveniles seen there 10 June (J. E. Pike).

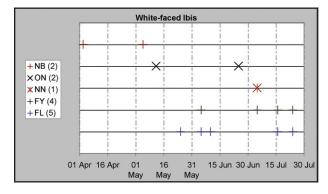


June 1997 (E. C. Hall), and 55 at Los Peñasquitos Lagoon (N7) 5 April 1998 (D. K. Adams). In southern San Diego County we encountered only a few scattered individuals through the breeding season, except for 25 at the upper end of Sweetwater Reservoir (S13) 4 June 2001 (P. Famolaro) and 15 flying north over the naval radio station at the south end of the Silver Strand (V10) 3 May 2001 (S. Yamagata).

Nesting: At some places Whitefaced Ibises nest in trees, in shrubs, or on the ground on islands. But at both colonies in San Diego County they nest in marshes of tule and cattail. The nest is supported on leaves that have been bent over to make a

Also, the ibises may have attempted nesting at Calaveras Lake (H8) in 2001, where one was carrying twigs 3 April (L. M. Holt), but no further activity was reported from this site. Undiscovered colonies may exist elsewhere, especially within private ranches in the San Luis Rey River valley around Bonsall (F8), between the two known colonies. Jane Evans noted a fledgling there 25 May 2000.

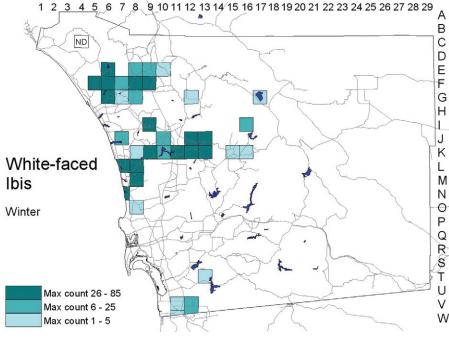
During the breeding season, the birds range at least for foraging throughout the lower Santa Margarita and San Luis Rey river valleys, to the coastal lagoons of northern San Diego County, and up Escondido Creek and the San Dieguito River to the San Pasqual Valley. High counts are of up to 60 near O'Neill Lake (E6) 19 July 1999 (P. A. Ginsburg), 52 near the east end of Lake Hodges (K11) 9



crude platform. In 1995 two nests at Guajome Lake were over water, three were over mud 2 23 24 25 26 27 28 29 (T. A. Scott, P.-Y. Lee).

Observations during the atlas period of fledglings from late May to late July suggest that in San Diego County White-faced Ibises lay eggs from the last week of March to mid May. In 1995 T. A. Scott and P.-Y. Lee inferred that laying at Guajome peaked in the first two weeks of May and continued to the end of May.

Migration: Thousands of Whitefaced Ibises breeding in the Great Basin migrate to the Imperial Valley (Patten et al. 2003). In spite of the species' abundance there the only records from the Anza– Borrego Desert are of one at Carrizo Marsh (O29) 17 May 1991 (K. Dice) and one at the Borrego Springs sewage ponds (H25) 6



November 1995 (R. Thériault). Postbreeding dispersal or fall migration begins by late July (one at Lake Morena, S21, 28 July 2001, R. Breisch) and is substantial by late August (29 at Santee, P12, 26 August 1999, P. Willman).

Winter: The San Pasqual Valley (K11/K12/K13/J12/J13) is the primary center for wintering White-faced Ibises in San Diego County. We had many counts of 50 or more individuals in this area, with a high of 274 in the Wild Animal Park (J12) 29 December 2001 (K. L. Weaver). The lower Santa Margarita and San Luis Rey river valleys remain important as well, with up to 85 in a flooded field adjacent to the Camp Pendleton supply depot (F5) 28 December 1998 (B. E. Bell) and 70 at Bonsall 9 February 2001 (P. A. Ginsburg). At the coastal lagoons the ibises are irregular but occasionally numerous, with up to 40 at San Elijo Lagoon 7 December 1997 (A. Mauro) and 70 at Los Peñasquitos Lagoon (N7) 7 February 1999 (D. K. Adams).

White-faced Ibises are occasional in winter at Ramona (K15; up to two on 2 January 1999, D. and C. Batzler) and at the Dairy Mart pond in the Tijuana River valley (V11; maximum 1997–2002 only three on 20 December 1997, G. McCaskie). Elsewhere in the county they are rare; the only counts of more than four were of 24 on Otay Mesa (V12) 23 February 1998 (P. Walsh) and a flock of eight flying up the unsuitable habitat of Black Canyon (I16) 15 January 2002 (O. Carter, J. Decanio, M. Baumgartel). One at Lake Henshaw (G17) 29 December 1997 (J. O. Zimmer) was the only ibis ever recorded on the Lake Henshaw Christmas bird count, instituted in 1980–81.

Conservation: The White-faced Ibis has seen both ups and downs, its population and distribution affected by the management of wetlands, changes in agriculture, and climate cycles of wet and dry. In San Diego County, it nested at Guajome Lake at least in 1901, when Sharp (1907) reported "a colony of about a dozen birds," but no other nestings or colonies were reported from then until 1979. Then J. P. Rieger discovered two nests and estimated six breeding pairs at Buena Vista Lagoon (H5/H6;

AB 33:896, 1979), but that colony proved ephemeral. The ibises recolonized Guajome Lake by April 1986, when E. Copper noted 20 pairs building nests. Nesting has probably been annual there since, with six pairs in 1990 and six to eight in 1995 (T. A. Scott, P.-Y. Lee).

Changes in the species' winter distribution have been even more dramatic. On the San Diego Christmas bird count the ibis was recorded only twice before 1978, but then it became regular in the Tijuana River valley. The count peaked at 100 on 15 December 1984 but then declined as quickly as it increased. The pattern on the Oceanside count is similar but less extreme, with a peak of 184 on 21 December 1991 and decline since. On the Escondido count, by contrast, the ibis was recorded in only two of the count's first six years, 1985–90, but then it became regular and increased rapidly, peaking at 507 on 29 December 2001. Possibly the birds are shifting from the San Luis Rey River valley to the San Pasqual Valley, as is almost certainly the case with the Canada Goose, which winters in the same habitats where the ibis feeds.

After a decline earlier in the 20th century, numbers of the White-faced Ibis have increased greatly throughout the United States since the 1970s (Shuford et al. 1996). Maintenance of these enhanced numbers, however, depends on an adequate supply of water to marshes where the ibises nest and sufficient habitat in which the birds can forage. In San Diego County, loss of the latter is likely the primary threat. Much of the ibises' core foraging habitat, agricultural land and pastures along the San Luis Rey River, has already been consumed by the expanding city of Oceanside. What remains in the Bonsall area is in private ownership and in the path of further development. Ironically, the digging of a borrow pit to provide fill dirt for a housing development at the mouth of Keys Canyon created the site for the colony there. Changes in land-use policies in the Santa Margarita River valley (within Camp Pendleton) and in the San Pasqual Valley (zoned largely for agriculture) could deprive the ibis of the damp pastures and floodplains where it feeds.