Hawks, Kites, and Eagles — Family Accipitridae

Osprey *Pandion haliaetus*

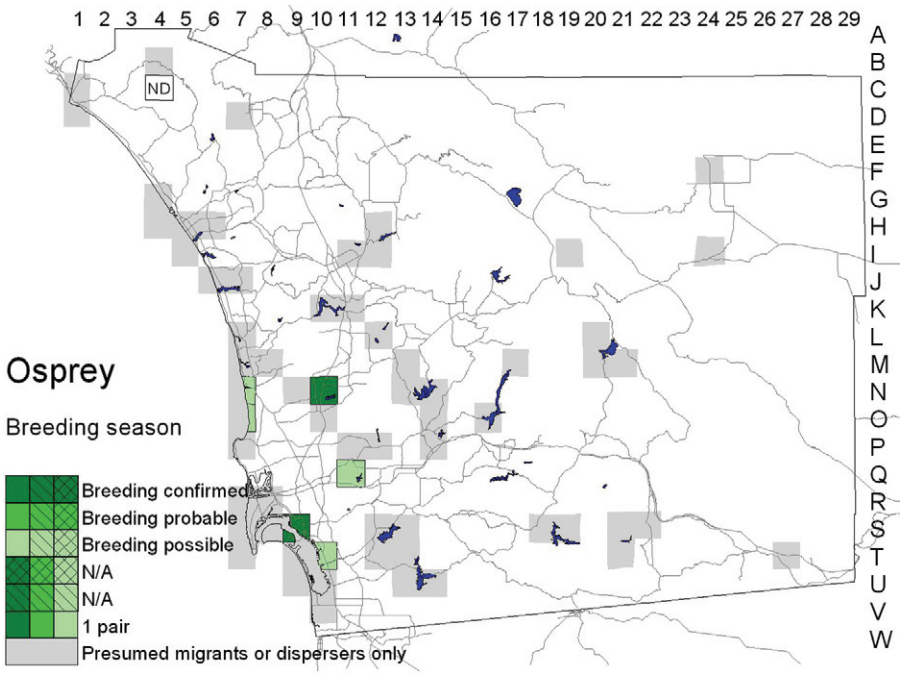
Through the middle of the 20th century the Osprey suffered the ill effects of pesticide poisoning, contracted through the contamination of its staple food, fish. After being released of much of this burden in the 1970s, the Osprey population resurged. In San Diego County this resurgence is conspicuous: once rare, the Osprey has become regular year round in small numbers both along the coast and on inland lakes. Several pairs have begun nesting.

Photo by Anthony Mercieca

Breeding distribution: The Osprey's recolonization of San Diego County as a breeding species coincided with the beginning of field work for this atlas in 1997. Each year from then through 2002 a pair nested in the northeast corner of North Island Naval Air Station (S9). They fledged young in 1998 and 2000 and probably other years as well (G. Perkins et al.). Another pair began nesting at Scripps Ranch High School (N10) in 1998 and continued annually, with success from 1999 at least through 2002 (G. Steinbach et al.). The birds made uncertain or aborted attempts to nest near Torrey Pines State Reserve (N7) or UCSD (O7) in 1998 (carrying sticks or seaweed, M. C. Jorgensen, S. E. Smith), at Lake Murray (Q11) in 1997 and 2002 (carrying sticks to platform, N. Osborn, P. Famolaro), on the mast of a boat in Mission Bay (R7) 2001–03 (all attempts unsuccessful, D. Bittner), and near Pepper Park, National City (T10), in 1998 (R. T. Patton).

With the conclusion of the atlas study in 2002 came a spurt of new Osprey nests: at Mesa College (Q9), San Diego State University (Q11), on some quarry equipment along Mission Gorge Road (Q11), and along the Tijuana River in Marron Valley (V16). Some of these were only tentative attempts, but the nests in Marron Valley and at Mesa College were successful (J. A. Martin, J. Hannan).

Nesting: Ospreys build huge stick nests, often augmenting and reusing them year after year. Their trend toward nesting on man-made structures is well illustrated in San Diego County: the most frequent nest site here is racks



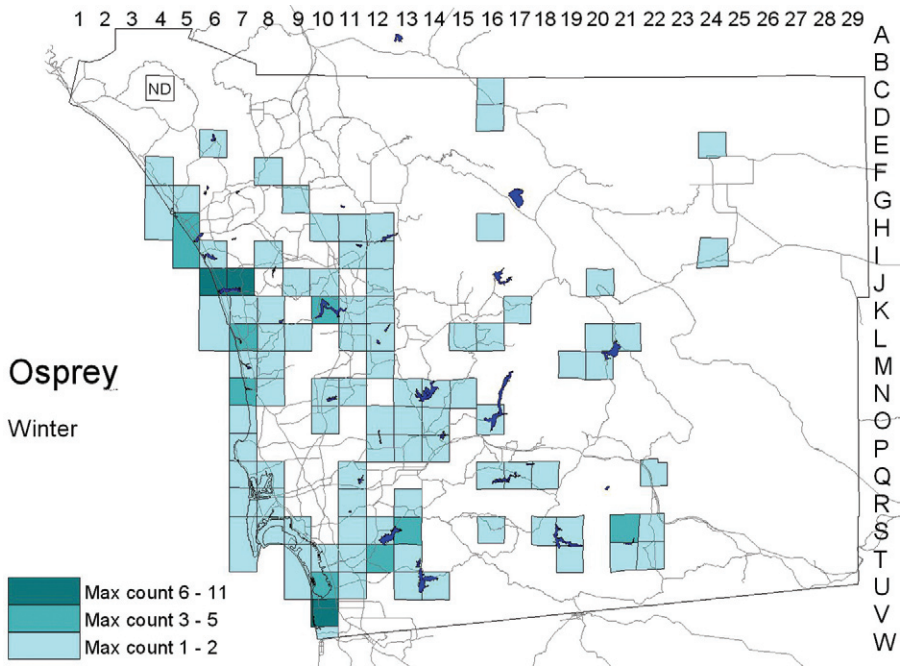
of floodlights for ball fields, used at Scripps Ranch High School, Mesa College, and North Island. The only nest site in a tree was the one in Marron Valley, in a eucalyptus. The nests at North Island and Scripps Ranch High School were used repeatedly, though the birds also built some new nests, some unused (typical for the species), accounting for nesting "confirmations" in adjacent atlas squares S8 and O10 (on a cell-phone tower at Alliant International University, D. Bainbridge). Osprey nests are generally near water; the one at Scripps Ranch High School was 0.5 mile from Lake Miramar. But the one at Mesa College was 2.3 miles from Mission Bay, and the one in Marron Valley was 8 miles from Lower Otay Lake, over the top of Otay Mountain, and over 10 miles from Presa Rodriguez on the outskirts of Tijuana.

The schedule of Osprey nesting is tricky to ascertain because the nests are high, so the young are not visible until well grown, and the male feeds the female throughout incubation as well as the young after they hatch. At Scripps Ranch High School, incubation had apparently begun by 8 February 2000; a chick was visible in this nest by 4 April (G. Grantham). At North Island, the first of three young fledged in 2000 on 18 June, suggesting laying about 11 March (G. Perkins).

Migration: The Osprey is still more numerous in San Diego County during migration and winter than in the breeding season. In regular surveys of north and central San Diego Bay 1993–95 Mock et al. (1994) and Preston and Mock (1995) found the Osprey most frequently in September and October, with a maximum of six per day. From 1997 to 2001 numbers in fall ranged up to nine at San Elijo Lagoon (L7) 7 October 1999 (P. A. Ginsburg).

Nonbreeding Ospreys are widely scattered over San Diego County through the spring and early summer, mainly along the coast (up to seven in the San Diego River flood-control channel, R8, 2 April 2000, Y. Ikegaya) and in the coastal lowland. Single individuals have been seen repeatedly at this season farther inland around lakes Cuyamaca, Barrett, and Morena and even at Tule Lake (T27; one on 6 and 27 June 2001, J. K. Wilson).

In the Anza–Borrego Desert the Osprey is a rare migrant, recorded on 1 and 25 October in fall and about nine times from 16 February to 12 April in spring (ABDSP database).



Winter: In winter the Osprey occurs more widely than in the breeding season. During the atlas period we noted it wintering at almost every coastal wetland and at most inland lakes. Sites getting the heaviest Osprey use in winter were Batiquitos Lagoon (J6/J7; up to 11 on 28 December 1999, R. and A. Campbell) and south San Diego Bay (U10/V10; up to six

on 3 December 1999, B. C. Moore). Especially favored lakes are Hodges, (K10; two counts of up to three, R. L. Barber), Sweetwater (S12/S13; up to five on 2 December 1998, P. Famolaro), and Morena (S21/T21; three counts of up to three, S. E. Smith). The Wildlife Research Institute (2004) found 21 individuals wintering in the southwestern quadrant of San Diego County in 2002. Perhaps because the Bald Eagle is so regular there, the Osprey is rare at Lake Henshaw, recorded on only one of 22 Lake Henshaw Christmas bird counts 1981–2002.

Conservation: The Osprey's resurgence gained traction in the late 1980s and continued through the end of the century. By 2001 it was more abundant in San Diego County than at any time in recorded history. From 1953 to 1972 the San Diego Christmas bird count averaged 0.4 per year; from 1997 to 2002 it averaged 23.5. The trend on Oceanside, Rancho Santa Fe, and Escondido counts is similar though less dramatic. On monthly counts of San Elijo Lagoon 1973–83, King et al. (1987) found the Osprey only occasionally and almost always singly. Before 1997 the only reported nesting attempts were on a boat in San Diego Bay, probably in the early 1860s (Cooper 1870), and on a beacon in the bay in 1912 (eggs collected 21 April, WFVZ 71019).

Reduced shooting and, especially, the banning of nondegradable organochlorine pesticides are the factors allowing the Osprey's increase. In San Diego County, the building of dams and the stocking of reservoirs with fish created much new Osprey habitat. Acclimatizing to human activity around nests and adopting man-made structures as nest sites allowed the Osprey to recolonize. But the uses for which these structures were designed may be incompatible with Osprey nesting, possibly leading to a new generation of conflict.

Taxonomy: Ospreys throughout North America have long been ascribed to *P. h. carolinensis* (Gmelin, 1788). On the basis of field observations, Blanco and Rodriguez (1999) reported Ospreys from Baja California Sur to have nearly white underwing coverts as in *P. h. ridgwayi* Maynard, 1887, of the West Indies. But a one-year-old male and two one-year-old females in the San Diego Natural History Museum from San Ignacio and Scammon's lagoons, Baja California, have the same amount of dark barring on the under primary coverts as specimens from farther north.