California Wildlife Habitat Relationships System

California Department of Fish and Wildlife California Interagency Wildlife Task Group

BALD EAGLE Haliaeetus leucocephalus

Family: ACCIPITRIDAE Order: FALCONIFORMES Class: AVES

B113

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Permanent resident, and uncommon winter migrant, now restricted to breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity cos. About half of the wintering population is in the Klamath Basin. More common at lower elevations; not found in the high Sierra Nevada. Fairly common as a local winter migrant at a few favored inland waters in southern California. Largest numbers occur at Big Bear Lake, Cachuma Lake, Lake Mathews, Nacimiento Reservoir, San Antonio Reservoir, and along the Colorado River.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Requires large bodies of water, or free flowing rivers with abundant fish, and adjacent snags or other perches. Swoops from hunting perches, or soaring flight, to pluck fish from water. Will wade into shallow water to pursue fish. Pounces on, or chases, injured or ice-bound water birds. In flooded fields, occasionally pounces on displaced voles, or other small mammals. Groups may feed gregariously, especially on spawning fish. Scavenges dead fish, water birds, and mammals. Open, easily approached hunting perches and feeding areas used most frequently.

Cover: Perches high in large, stoutly limbed trees, on snags or broken-topped trees, or on rocks near water. Roosts communally in winter in dense, sheltered, remote conifer stands. In Klamath National Forest, winter roosts were 16-19 km (10-12 mi) from feeding areas (Spencer 1976b).

Reproduction: Nests in large, old-growth, or dominant live tree with open branchwork, especially ponderosa pine. Nests most frequently in stands with less than 40% canopy, but usually some foliage shading the nest (Call 1978). Often chooses largest tree in a stand on which to build stick platform nest. Nest located 16-61 m (50-200 ft) above ground, usually below tree crown. Species of tree apparently not so important as height and size. Nest usually located near a permanent water source.

Water: In California, 87% of nest sites were within 1.6 km (1 mi) of water.

Pattern: Requires large, old-growth trees or snags in remote, mixed stands near water.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity. Winter feeding usually occurs immediately after dawn and in late afternoon.

Seasonal Movements/Migration: Individuals that breed in California may make only local winter movements in search of food. Winter migrants move from north to south.

Home Range: Home range in Oregon averaged 22 square km for both breeding and none breeding pairs, ranging from 6 to 47 square km (Monte et al. 1993)

Territory: Breeding territory in Alaska (n = 14), varied from 11-45 ha (28-112 ac), and averaged 23 ha (57 ac) (Hensel and Troyer 1964). Breeding territory defended from mating through fledging. Minimum distances between nests were 1 km (0.6 mi) in Alaska, and 17 km (10 mi) in Washington.

Reproduction: Breeds February through July; peak activity March to June. Clutch size usually 2; range 1-3. Incubation usually 34-36 days. Semialtricial young hatch asynchronously (Ehrlich et al. 1988). Monogamous, and breeds first at 4-5 yr.

Niche: Highly vulnerable to DDE-induced eggshell thinning. Competes with, and steals prey from osprey. Territories have been abandoned after disturbance from logging, recreational development, and other human activities near nests (Thelander 1973). Usually does not begin nesting if human disturbance is evident.

REFERENCES

- Brown, L., and D. Amadon. 1968. Eagles, hawks and falcons of the world. 2 Vols. Country Life Books, London. 945pp.
- Call, M. W. 1978. Nesting habits and survey techniques for common western raptors. U. S. Dep. Inter., Bur. Land Manage., Portland, OR. Tech. Note No. 316. 115pp.
- Detrich, P. J. 1979. Bald eagle winter habitat on BLM lands in California. U.S. Dep. Inter., Bur. Land Manage., Sacramento. Tech. Rep. 24pp.
- Ehrlich, P. R., D. S. Dobkin, and D. Wheye. 1988. The birder's handbook. Simon and Schuster, New York. 785pp.
- Hensel, R. J., and W. A. Troyer. 1964. Nesting studies of the bald eagle in Alaska. Condor 66:282-286.
- Lehman, R. N. 1979. A survey of selected habitat feature of 95 bald eagle nest sites in California. Calif. Dep. Fish and Game, Sacramento, Wildl. Manage. Branch Admin. Rep. No. 79-1. 23pp.
- Monte, G. G., J. W. Watson, and R. G. Anthony. 1993. Bald eagle hame range and habitat use in the Columbia River Estuary. J. Wildl. Manage. 57(1): 19-27.
- Snow, C. 1973. Southern bald eagle, Haliaeetus leucocephalus leucocephalus, and northern bald eagle, Haliaeetus leucocephalus, alascanus. U.S. Dep. Inter., Bur. Land Manage., Wash. DC. Tech. Note No. 171. 58pp.
- Spencer, D. A., ed. 1976b. Wintering of the migrant bald eagle in the lower 48 states. Natl. Agric. Chem. Assoc. Publ., Wash. DC. 170pp.
- Steenhof, K. 1978. Management of wintering bald eagles. U.S. Dep. Inter., Fish and Wildl. Serv., Wash. DC. OBS 78/79. 59pp.
- Thelander, C. G. 1973. Bald eagle reproduction in California, 1972-1973. Calif. Dept. Fish and Game, Sacramento. Wildl. Manage. Branch Admin. Rep. 73-5. 17pp.

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