

California Wildlife Habitat Relationships System
California Department of Fish and Wildlife
California Interagency Wildlife Task Group

RING-NECKED DUCK

Aythya collaris

Family: ANATIDAE

Order: ANSERIFORMES

Class: AVES

B091

Written by: S. Granholm

Reviewed by: D. Raveling, D. Airola

Edited by: R. Duke

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The ring-necked duck is a fairly common winter resident throughout most of California, preferring freshwater lacustrine habitats; breeds rarely in northeastern California. Fairly common (and common locally) October to early April, uncommon May and September, in the Coast Ranges, Sierra Nevada foothills, and southern mountain and desert areas (Cogswell 1977). In northeastern California, and above the foothills in Sierra Nevada, common November and December, rare March to June and September to October. Nests regularly in small numbers in the Cascades and northern Sierra Nevada (McCaskie et al. 1979, D. A. Airola, unpublished data). Uncommonly found in estuarine and marine habitats along coast.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Mainly eats seeds, tubers, rootstocks, and foliage of aquatic plants, including algae. Also eats aquatic insects, mollusks, and other invertebrates, mainly in summer. Feeds in shallow water, mostly less than 1.8 m (6 ft) deep, usually diving for food, but rarely tipping (Bellrose 1976). Takes food from muddy bottoms or subsurface water. Downy young primarily eat invertebrates for first 2 wk of life.

Cover: During wing molt, in late summer, males move into areas with dense emergent vegetation (Bellrose 1976).

Reproduction: Uncommon, local, and irregular as a breeding species in California. Nests in emergent vegetation, often sedges, usually near open water, but sometimes 25 m (83 ft) away, or more. Favors areas at least partially surrounded by wooded habitat (Bellrose 1976). Occasionally nests in herbaceous vegetation on islands or along shoreline.

Water: No additional data found.

Pattern: For nesting, prefers lakes or ponds with emergent vegetation, bordered by wooded habitat.

SPECIES LIFE HISTORY

Activity Patterns: Active yearlong, generally diurnal. Rarely feeds at night (Palmer 1976).

Seasonal Movements/Migration: Mostly migrates to breeding areas in northern U.S. and Canada. Mostly arrives in California in September and October, departs in late April and May.

Home Range: Mendall (1958) found maximum breeding densities of 4.3 to 16.7 pairs per 40 ha (100 ac) in Maine. Breeding densities were 6-9 pairs per 40 ha (100 ac) in Wisconsin (Jahn and Hunt 1964), and 0.7-1.9 pairs per 40 ha in Minnesota (Jessen et al. 1964). Nests of renesting females in California were spaced an average of 540 m (1773 ft) apart (Hunt and

Anderson 1966), and in Maine nests were 302-1189 m (990-3900 ft) apart (Mendall 1958).

Territory: In Maine, Mendall (1958) found that drakes defended small areas around their hens. Although there was little aggression, spacing between pairs was evident, especially just before egg-laying.

Reproduction: Pair bonds are established in fall, winter, or spring. Monogamous, and nests solitarily, but often near other pairs. Nesting takes place from early May to early August. Clutch size ranges from 5-14, averaging 9.0 (Bellrose 1976), and incubation lasts approximately 26 days. Young are precocial, and cared for by female, which usually remains with the young until they are capable of flight, at about 7-8 wk (Bellrose 1976). If nest fails, at least half of the hens will reneest (Mendall 1958). Most individuals apparently breed at 1 yr.

Niche: Most mortality of adults probably results from hunting, disease, and poisoning from lead shot in local areas. Highly susceptible to lead poisoning because commonly picks up food from bottom mud. Most nest failures result from egg predation by mammals and large birds.

REFERENCES

- Bellrose, F. C. 1976. Ducks, geese, and swans of North America. 2nd ed. Stackpole Books, Harrisburg, PA. 544pp.
- Cogswell, H. L. 1977. Water birds of California. Univ. California Press, Berkeley. 399pp.
- Hunt, E. G., and W. Anderson. 1966. Renesting of ducks at Mountain Meadows, Lassen County, California. *Calif. Fish and Game* 52:17-27.
- Jahn L. R., and R. A. Hunt. 1964. Duck and coot ecology and management in Wisconsin. *Wis. Conserv. Dep. Tech. Bull.* 88:62-75.
- Jessen R. L., J. P. Lindmeier, and R. E. Formes. 1964. A study of duck nesting and production as related to land use in Mahnomon County, Minnesota. *Minn. Conserv. Div. Game and Fish Tech. Bull.* 8:26-85.
- Johnsgard, P. A. 1975b. Waterfowl of North America. Indiana Univ. Press, Bloomington. 575pp.
- McCaskie, G., P. De Benedictis, R. Erickson, and J. Morlan. 1979. Birds of northern California, an annotated field list. 2nd ed. Golden Gate Audubon Soc., Berkeley. 84pp.
- Mendall, H. L. 1958. The ring-necked duck in the Northeast. *Univ. Maine Bull.* 40 No. 16. 317pp.
- Palmer, R. S., ed. 1976. Handbook of North American birds. Vol. 2. Yale University Press, New Haven, CT. 521pp.
- Palmer, R. S., ed. 1976. Handbook of North American birds. Vol. 3. Yale University Press, New Haven, CT. 560pp.

B091

Life history accounts for species in the California Wildlife Habitat Relationships (CWHHR) System were originally published in: Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.