

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

PIED-BILLED GREBE

Podilymbus podiceps

Family: PODICIPEDIDAE
B006

Order: PODICIPEDIFORMES

Class: AVES

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Fairly common all year in lacustrine habitats and fresh emergent wetlands throughout most of state, less common in the mountains (above foothills), and rare during winter in mountains and Great Basin. From August to early May, fairly common in estuarine habitats and saline emergent wetland, but rare in marine habitats. Also found, especially in winter, in quiet backwaters of large rivers such as the Sacramento (Cogswell 1977, McCaskie et al. 1979, Garrett and Dunn 1981).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Preferred foods are insects, crustaceans, and fish; their relative proportions in the diet vary with availability. Other foods include amphibians, mollusks, leeches, and aquatic plants. Young chicks are fed insects. All food is taken in aquatic and wetland habitats. Adults dive for food, pursuing prey underwater, or searching the bottom. Feathers may form up to 52% of the stomach contents (Palmer 1962), and may help prevent bones, chitin, and other hard parts from damaging the intestine.

Cover: Often avoids danger by submerging quietly; sometimes surfaces among emergent plants. May submerge repeatedly, exposing only the beak or head each time. Usually nests over water, but occasionally rests and preens ashore.

Reproduction: Builds nest in emergent vegetation, usually beside an opening that allows an underwater approach from nearby open water. Glover (1953b), in Iowa, found 94% of nests were over water less than 102 cm (40 in) deep; Gould (1974) at Eagle Lake, Lassen Co., found some nests over only 25 cm (10 in) of water; Sealy (1978), in Manitoba, found nests over as little as 13 cm (5 in) of water, but on average they were over water 36 cm (14 in) deep. Nests most commonly on ponds, but also found in marshes, large ditches, and marshy borders of lakes.

Water: No additional data found.

Pattern: Requires ample amounts of both open water and emergent vegetation. In Louisiana, preferred ponds with 75% open water (Chabreck 1963).

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity, except migrates nocturnally.

Seasonal Movements/Migration: Lowland populations primarily yearlong residents. Most individuals withdraw from mountains and Great Basin in winter (Cogswell 1977, Palmer 1962). There is local movement into estuaries and saline emergent wetlands from August to early May.

Home Range: In Iowa, Glover (1953b) estimated breeding home range was about twice the area of territory.

Territory: For 44 pairs in Iowa, the breeding territory extended in an arc, averaging about 46 m (150 ft) around the nest (Glover 1953b). The minimum distance between nests was 27 m (90 ft) at Eagle Lake (Gould 1974), and 23 m (75 ft) in Louisiana (Chabreck 1963). Aggressively defends territory; may attack eared grebes, coots and ducks, as well as own species. Probably has winter territory also (Palmer 1962).

Reproduction: There is some pairing in winter, with nest-building beginning in late March or April, and egg laying usually beginning in April. Monogamous, solitary nester. Of 22 complete clutches in Manitoba, 17 contained 7 eggs, range 5-8; this is probably the best estimate for temperate North America (Sealy 1978). Two broods may be fairly common (Palmer 1962). Incubation lasts about 23 days. Precocial young are cared for by both parents, but possibly for less than 3 wk (Palmer 1962). There are some parents with young until late September. Age of first breeding unknown.

Niche: Defends breeding territory against other species of grebes, coots, and ducks. Nest failures often due to wave action, fluctuating water levels, and predators, commonly including raccoons. Gould (1974) and Lederer (1976) emphasized that nesting success may be reduced markedly by nearby lakeshore development. Also detrimental are excessive shoreline grazing on emergent vegetation, pollution by pesticides, and disturbance during nesting by boaters and fishermen.

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