

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

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CALIFORNIA TREEFROG

*Pseudacris cadaverina*

Family: HYLIDAE  
A038

Order: ANURA

Class: AMPHIBIA

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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The California treefrog has a wide, but patchy, distribution along rocky, mountain streams of coastal southern California from central San Luis Obispo Co. south to the Mexican border. An interior range extension to the western edge of the desert occurs in San Bernardino and Riverside cos. It may be common in quiet, shaded pools and other favored habitats. Occurs from sea level to 1690 m (5500 ft) (Stebbins 1985).

#### SPECIFIC HABITAT REQUIREMENTS

**Feeding:** Adults take small terrestrial arthropods including spiders, centipedes, caterpillars, grasshoppers, ants, beetles, moths, isopods, bugs, and neuropterans (Cunningham 1964, Stebbins 1972). Tadpoles probably filter, or graze, on algae and diatoms.

**Cover:** During the spring and summer activity period, individuals often spend their days secluded in vertical depressions in rocks or boulders at the water's edge. They will jump into the water to avoid capture, but quickly emerge on shore boulders or other objects protruding above the water's surface. A period of winter inactivity is spent deep in moist crevices near streams (Harris 1975).

**Reproduction:** Egg clusters are deposited in quiet waters, loose on the bottom and attached to submerged objects (Stebbins 1972).

**Water:** During the spring and summer activity period, adults are always found in the immediate vicinity of deep pools along stream courses. Damp crevices where they spend the winter may be important in reducing desiccation during drier winters (Harris 1975). Jameson (1966) showed that adults lose body water rapidly when exposed to high temperature and low humidity in laboratory conditions. Tadpoles may require standing water for up to 2.5 months while completing their aquatic development (Stebbins 1951).

**Pattern:** This species usually occurs near rocky or boulder-strewn streams in valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, montane hardwood-conifer, desert riparian, coastal scrub, chamise-redshank chaparral, and mixed chaparral habitat types. Populations are also known from a few desert palm oases.

#### SPECIES LIFE HISTORY

**Activity Patterns:** During spring and summer, individuals may be active at all hours, but concentrate most activity between late afternoon and midnight. They are inactive from late fall through winter.

**Seasonal Movements/Migration:** By late fall, California treefrogs migrate up to deep

crevices as far as 12 m (39 ft) away from streams. The return migration occurs in the spring, just prior to the onset of breeding activities (Harris 1975).

**Home Range:** Harris (1975) reported daily movements of adult frogs (spring and summer) averaged about 3 m (10 ft) from daytime perches on rocks and boulders to streamside foraging areas. Frogs are essentially inactive in their winter hibernacula.

**Territory:** Males apparently defend small territories by vocalization or physical combat.

**Reproduction:** Breeding and egg-laying occur during a brief period from March to May depending on local conditions. Eggs are deposited in loose clusters of up to several hundred (Stebbins 1954). Tadpoles require 40 to 75 days to transform (Stebbins 1951).

**Niche:** Tadpoles and adults may compete for space and food with Pacific treefrogs in places where the two species coexist. Various life stages are probably eaten by garter snakes, especially *Thamnophis couchi*.

## REFERENCES

- Cunningham, J. D. 1964. Observations on the ecology of the canyon treefrog, *Hyla californicae*. *Herpetologica* 20:55-61.
- Gaudin, A. J. 1979. *Hyla cadaverina*. *Cat. Amer. Amphibians and Reptiles* 225.
- Harris, R. T. 1975. Seasonal activity and microhabitat utilization in *Hyla cadaverina* (Anura: Hylidae). *Herpetologica* 31:236-239.
- Jameson, D. L. 1966. Rate of weight loss of tree frogs at various temperatures and humidities. *Ecology* 47:605-613.
- Stebbins, R. C. 1951. *Amphibians of western North America*. Univ. California Press, Berkeley. 538 pp.
- Stebbins, R. C. 1954. *Amphibians and reptiles of western North America*. McGraw-Hill, New York. 536pp.
- Stebbins, R. C. 1972. *California amphibians and reptiles*. Univ. California Press, Berkeley. 152 pp.
- Stebbins, R. C. 1985. *A field guide to western reptiles and amphibians*. 2nd ed., revised. Houghton Mifflin, Boston. 336pp., Vol. 1. Academic Press, New York. 638pp.
- Oliver, J. A. 1955. *The natural history of North American amphibians and reptiles*. Van Nostrand Co. Princeton, NJ. 359pp.
- Pickwell, G. 1947. *Amphibians and reptiles of the Pacific States*. Stanford Univ. Press, Stanford, CA. 236pp.
- Porter, K. R. 1972. *Herpetology*. W. B. Saunders, Philadelphia. 524pp.
- Stebbins, R. C. 1954. *Amphibians and reptiles of western North America*. McGraw-Hill, New York. 536pp.
- Stebbins, R. C. 1972. *California amphibians and reptiles*. Univ. California Press, Berkeley. 152 pp.
- Stebbins, R. C. 1985. *A field guide to western reptiles and amphibians*. 2nd ed., revised. Houghton Mifflin, Boston. 336pp.
- Wright, A. H., and A. A. Wright. 1949. *Handbook of frogs and toads of the United States and Canada*. Cornell Univ. Press, New York. 640pp.