

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

RED-BELLIED NEWT

Taricha rivularis

Family: SALAMANDRIDAE
A008

Order: CAUDATA

Class: AMPHIBIA

Written by: M. Marangio

Reviewed by: T. Papenfuss

Edited by: R. Duke, J. Harris, S. Granholm

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The red-bellied newt ranges within Sonoma, Mendocino, Humboldt and Lake cos. Abundant in most of range. Migrates to streams during fall and winter rains. Inhabits primarily redwood forest, but also found within mixed conifer, valley-foothill woodland, montane hardwood and hardwood-conifer habitats.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Feeds on arthropods, worms and snails in water and on forest floor within ground litter.

Cover: Spends dry season underground within root channels.

Reproduction: Requires rapid streams with rocky substrate for breeding and egg-laying.

Water: Rapid-flowing, permanent streams are required for breeding and larval development.

Pattern: Streams in proximity to redwood forest are required.

SPECIES LIFE HISTORY

Activity Patterns: Primarily active at night. Migrate to streams during autumn rains, returning to terrestrial habitat in the spring. Aestivation in terrestrial habitat takes place during the summer months.

Seasonal Movements/Migration: May migrate a mile or more to and from the breeding stream. Migratory movements stimulated primarily by rain, but in heavy amounts rain inhibits movement toward the stream.

Home Range: Displaced individuals return to home site (within 50 ft of point previously occupied in stream) (Packer 1963). "Neighborhood size" within a segment of stream was estimated at 0.4-1.0 km (0.2-0.6 mi) (Hedgecock 1978). Home range over land extends only over a small area adjacent to the breeding site (Twitty et al. 1967). Density was estimated at 22 per m (6.7 per ft) of stream at Pepperwood Creek, Sonoma Co. (Hedgecock 1978).

Territory: Not territorial.

Reproduction: Males arrive at breeding site before females, in February. In March to April, females lay approximately 12 flat clusters of 6-16 eggs each, on undersides of rocks (Behler and King 1979). Females breed on the average every 3 years (Hedgecock 1978). Larvae transform in late summer to early fall. Sexual maturity occurs at 6-10 years of age

(Hedgecock 1978). Life span is relatively long; 25% of animals marked in 1953 were captured in 1964 (Twitty 1964).

Niche: Has few enemies due to poisonous skin secretions.

REFERENCES

- Behler, J. L., and F. W. King. 1979. The Audubon Society field guide to North American reptiles and amphibians. Alfred Knopf, New York. 743pp.
- Hedgecock, D. 1978. Population subdivision and genetic divergence in the red-bellied newt, *Taricha rivularis*. *Evolution* 32:271-286.
- Packer, W. C. 1963. Observations on the breeding migration of *Taricha rivularis*. *Copeia* 1963:378-382.
- Twitty, V. C. 1964. *Taricha rivularis*. Cat. Am. Amphibians and Reptiles. 9.1-9.2.
- Twitty, V. C., D. Grant, and O. Anderson. 1967. Home range in relation to homing in the newt *Taricha rivularis* (Amphibia: Caudata), *Copeia* 1967:649-653.

A008

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.