

ROUGH-SKINNED NEWT

TAXONOMY

Scientific name: *Taricha granulosa* (Skilton, 1849)
Common name: Rough-skinned newt, Roughskin newt
Family: Salamandridae

Taxonomic comments:

Two subspecies currently recognized. The Northern rough-skinned newt *T. g. granulosa* is found throughout species range. The Crater Lake newt *T. g. mazamae* is found in Crater Lake, Oregon area.

A high frequency of breeding adults on Gravina Island near Ketchikan, Alaska display morphological characters similar to the Crater Lake subspecies, *T. g. mazamae*. Genetic studies suggest that newts from Wrangell Island differ little from those in Washington State (MacDonald 2003).



DESCRIPTION

Basic description: A newt.

General description:

Coloration is plain brown to black above, with sharply contrasting bright yellow to reddish orange below. Eyes are pale yellow and crossed by a distinct, dark bar. Skin surface is rough and grainy except in breeding males, which develop a smooth and even slimy skin, swollen vent, flattened tail and dark pads on feet. Males have relatively longer tails and limbs than females. Lacks costal grooves (MacDonald 2003).

Reproduction:

Breeds primarily from late December to July, October to November at higher elevations. Eggs hatch in 20-26 days (Nussbaum et al. 1983) or 5-10 weeks (Behler and King 1979). Aquatic larvae metamorphose in late summer or overwinter and metamorphose the following June or July.

In Alaska, breeding probably commences in April and continues into June. Hatching takes 5-10 weeks. Larvae may require two years to complete metamorphosis (MacDonald 2003).

Length (cm): 22

Ecology:

After breeding season, adults, as well as subadults and larvae, may form large aggregations. Skin secretion repels many predators.

Migration:

Migrates to breeding sites during or after seasonal rains. Often seen moving to breeding sites in large numbers. Males migrate earlier than females.

Food:

Larvae probably eat zooplankton and small aquatic invertebrates. Adults feed mostly on small terrestrial or aquatic invertebrates.

Habitat:

Global habitat:

Forests, woodlands, grasslands, open valleys, and ranchland. Found on land (in open or under rocks, logs, etc.) or in ponds, lakes, reservoirs, and slow-moving streams. The most aquatic western newt. Breeds in ponds, lakes, reservoirs and slow-moving streams. Lays eggs singly on aquatic plants or submerged twigs (Behler and King 1979).

State habitat:

Species uses forested cover adjacent to aquatic habitat for breeding and overwintering. Found in and about small permanent bodies of water with abundant vegetation (Hodge 1976). On Wrangell Island, species found using backwater lakes and muskegs (Waters 1992).

STATUS

Global rank: G5 (1996-10-11)

Global rank reasons:

Global rank reasons currently unavailable.

State rank: S2? (1992-02-25, reviewed 2004-11-03)

State rank reasons:

Although considered common in Southeast Alaska, very little information is available for this species. Status unknown. Degree of threat appears minimal, although species is highly associated with old-growth forests which are subject to logging activities. A higher rank may be warranted, requires study.

DISTRIBUTION AND ABUNDANCE

Range:

Global range:

Pacific coast from southeastern Alaska to Santa Cruz County, California (Stebbins 1985, Petranka 1998). Records from the Rocky Mountains, including populations in Latah County, Idaho, could represent introductions, though Monello and Wright (1997) recorded three small populations in Latah County in 1997. Sea level to about 9200 ft (Stebbins 1985).

State range:

Found throughout Southeast Alaska as far north as Juneau, and on the Alexander Archipelago on Admiralty Island, Shelter Island, and on many islands south of Fredrick Sound. They have also been reported on Bamdoroshni Island, and more recently on Rockwell Island in Sitka Sound (MacDonald 2003, Anderson 2004). Newts on mainland near Juneau and Bamdoroshni and Rockwell islands may be the result of transplants from Shelter Sound around 1980 and Ketchikan in the 1960s respectively (MacDonald 2003). Unvalidated and highly questionable reports from farther north along Gulf Coast and perhaps as far west as Cook Inlet.

Abundance:

Global abundance:

Total adult population size is unknown but surely exceeds 100,000.

State abundance:

The most common tailed amphibian in Alaska (MacDonald 2003). Rough-skinned newts were abundant in several mountain lakes on Wrangell Island (Waters 1992). Carstensen et al. (2003) found rough-skinned newts to be fairly common throughout Southeast Alaska.

Trends:

Global trend:

Likely stable in extent of occurrence and probably stable to slightly declining in population size, area of occupancy, and number/condition of occurrences.

State trend:

Unknown.

EXISTING PROTECTION

Global protection:

See State protection.

State protection:

In Alaska, amphibians are managed by Alaska Department of Fish and Game under statute 16.05.030, which legally includes amphibians in the definition of “fish”. This statute makes it illegal for anyone to “hold, transport or release” any native amphibians without a valid permit. Occurs in some designated wilderness areas of the Tongass National Forest such as Stikine-Leconte Wilderness.

CHALLENGES

Global challenges:

May be detrimentally impacted by deforestation of areas surrounding breeding sites, though the degree of impact is difficult to quantify. Exposure to UV-B may alter certain behaviors which could have ecological and evolutionary consequences (Blaustein et al. 2000).

State challenges:

Species is closely associated with coastal forests (Hodge 1976). May be detrimentally impacted by deforestation of areas surrounding breeding sites, though the degree of impact is difficult to quantify. Exposure to UV-B may alter certain behaviors which could have ecological and evolutionary consequences (Blaustein et al. 2000). Highly toxic skin secretions aid in species defense.

RESEARCH AND INVENTORY NEEDS

Global research needs:

See State research needs.

State research needs:

Establish programs to monitor population trends; identify threats or limiting factors. Research is needed on the effects of roads and logging on population persistence.

Global inventory needs:

See State inventory needs.

State inventory needs:

Additional inventory to precisely determine the species' range and population estimates for each area of occurrence are needed.

CONSERVATION AND MANAGEMENT NEEDS

Global conservation and management needs:

See State conservation and management needs.

State conservation and management needs:

Studies elsewhere suggest newt populations reach their highest densities in mature old-growth forests. Logging practices should minimize impact in sensitive areas where newts are known to occur.

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Acknowledgements

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NatureServe Conservation Status Factors Edition Date: 28Mar2002

NatureServe Conservation Status Factors Author: Hammerson, G.

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Global Element Ecology & Life History Author(s): Hammerson, G.
