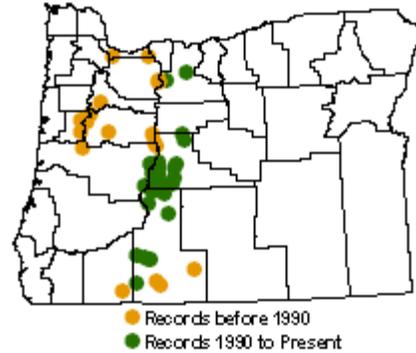


Species Fact Sheet
Oregon spotted frog
Rana pretiosa

<http://www.fws.gov/oregonfwo/Species/Data/OregonSpottedFrog/>



Oregon spotted frog potentially occurs in these [Oregon counties](#)

(Map may reflect historical as well as recent sightings)

STATUS: Proposed Threatened

In 1993, the U.S. Fish and Wildlife Service determined that the Oregon spotted frog warranted listing under the Endangered Species Act, but doing so was precluded by higher priority listing actions. The frog then became a candidate for listing in the future. On August 29, 2013, the USFWS proposed to list the frog as a threatened species and to designate critical habitat.

Historical Status and Current Trends

The Oregon spotted frog has been lost from at least 78 percent of its former range. Precise historic data is lacking, but this species has been documented in British Columbia, Washington, Oregon, and California. It is believed to have been extirpated (locally extinct but exists elsewhere) from California. It is currently known to occur from extreme southwestern British Columbia, south through the eastern side of the Puget/Willamette Valley Trough and the Columbia River Gorge in south-central Washington, to the central Cascades Range and Klamath Valley in Oregon.

In Oregon, Oregon spotted frogs historically were found in Multnomah, Clackamas, Marion, Linn, Benton, Jackson, Lane, Wasco, Deschutes and Klamath counties. Currently, this species is only known to occur in Wasco, Deschutes, Klamath, Jackson and Lane counties.

Habitat

This species is the most aquatic native frog in the Pacific Northwest. It is almost always found in or near a perennial body of water that includes zones of shallow water and abundant emergent or floating aquatic plants, which the frogs use for basking and escape cover (Leonard et al. 1993, Corkran and Thoms 1996, McAllister and Leonard 1997, Pearl 1997, Pearl 1999). Oregon spotted frogs seem to prefer fairly large, warm marshes (approximate minimum size of 4 hectares (9 acres)) that can support a large enough population to persist despite high predation rates (Hayes 1994) and sporadic reproductive failures. Large concentrations of Oregon spotted frogs have been found in areas with the following characteristics: (1) the presence of good breeding and overwintering sites connected by year-round water; (2) reliable water levels that maintain depth throughout the period between oviposition and metamorphosis; and (3) the absence of introduced predators, especially warm-water game fish and bullfrogs.

In Oregon, the Oregon spotted frog occurs on federal lands managed by USDA Forest Service (Mt. Hood, Deschutes, Willamette and Winema National Forests), Bureau of Land Management (Wood River Ranch), U.S. Fish and Wildlife Service (Klamath National Wildlife Refuge), and on private land.

Description

The Oregon spotted frog is named for the black spots that cover the head, back, sides, and legs. The dark spots have ragged edges and light centers, which are usually associated with tubercles or raised areas of skin; these spots become larger and darker and the edges become more ragged with age. Body color also varies with age. Juveniles are usually brown or, occasionally, olive green on the back and white or cream with reddish pigments on the underlegs and abdomen. Adults range from brown to reddish brown, but tend to become more red with age; large, presumably older individuals may be brick red over most of the back. Red increases on the abdomen with age, and the underlegs become a vivid orange-red. This red coloration can be used to distinguish the spotted frogs from other native frogs.

The Oregon spotted frog is a medium-sized frog, ranging from 44 to 100 millimeters (1.74 to 4 inches) in body length (McAllister and Leonard 1997). Females are typically larger than males and can reach up to 100 millimeters (4 inches) (Leonard et al. 1993).

Life History

This species typically begins to breed at three years of age. Breeding occurs in February or March at lower elevations and in late May or early June at higher elevations. Females may deposit egg masses at the same location in successive years in shallow, often temporary, pools no more than six inches deep. Eggs usually hatch within three weeks after oviposition. Tadpoles are grazers, having rough tooth rows for scraping plant surfaces and ingesting plant tissue and bacteria. They also consume algae, detritus, and probably carrion (Licht 1974, McAllister and Leonard 1997). Tadpoles then metamorphose into froglets during their first summer (Leonard et al. 1993). Post-metamorphic Oregon spotted frogs feed on live animals, primarily insects.

Reasons for Decline

Many factors are believed to have caused Oregon spotted frogs to decline and continue to threaten this species, including loss of habitat, non-native plant invasions, and the introduction of exotic predators such as bullfrogs. Over 95 percent of historic marsh habitat, and consequently Oregon spotted frog habitat, has been lost in the Willamette and Klamath basins. Changes in hydrology (due to construction of ditches and dams) and water quality, development, and livestock overgrazing continue to result in habitat loss, alteration, and/or fragmentation. Non-native plant invasions by such aggressive species as reed canarygrass (*Phalaris arundinacea*), and succession of plant communities from marsh to meadow also threaten this species' existence. Introductions of bullfrogs and non-native fishes have affected this species both directly, by eating them, and indirectly, by outcompeting or displacing them from their habitat.

The majority of Oregon spotted frog populations are small and isolated. These factors make the Oregon spotted frog more vulnerable than large connected populations to random, naturally occurring events, such as drought, disease, and predation.

Conservation Measures

Efforts are being made to eliminate and to prevent future introductions of bullfrogs and warm-water game fish from spotted frog habitat. Active management is also required to control non-native plant species like reed canarygrass. Protecting Oregon spotted frog populations through maintaining healthy aquatic habitats will continue to be the key objective of land managers.

References and Links

Corkran, C.C. and C.R. Thoms. 1996. Amphibians of Oregon, Washington, and British Columbia: A field identification guide. Lone Pine Publishing, Edmonton, Alberta. 175 pp.

Hayes, M.P. 1994. The spotted frog (*Rana pretiosa*) in western Oregon. Part I. Background. Part II. Current status. Oregon Department of Fish and Wildlife Tech. Rept. #94-1-01. Unpublished Report.

Leonard, W.P., H.A. Brown, L.L.C. Jones, K.R. McAllister, and R.M. Storm. 1993. Amphibians of Washington and Oregon.