

FOCUS ON CONSERVATION

Conserving Southern California's Mountain Yellow-legged Frog (*Rana muscosa*)



According to the World Conservation Union, at least one-third of the world's estimated 6,000 amphibian species are threatened with extinction. Many of these amphibians reside in the United States, and two critically endangered species, the Mountain Yellow-legged Frog (*Rana muscosa*) and the California Red-legged Frog (*Rana draytonii*), reside in California.

In close partnership with the U.S. Fish and Wildlife Service, the U.S. Forest Service, the U.S. Geological Survey, and California Department of Fish and Game, the San Diego Zoo's Conservation and Research for Endangered Species (CRES) is participating in the recovery of the critically endangered Mountain Yellow-legged Frog (*Rana muscosa*). In August 2006, CRES received 82 Mountain Yellow-legged Frog tadpoles. These animals were salvaged from a drying streambed in Southern California's San Jacinto Mountains. The tadpoles were brought to the Applied Animal Ecology lab at CRES, where they were housed in spacious aquaria. As of August 2008, the remaining 62 frogs are all nearing adult size and are showing breeding behaviors. Some frogs will be moved to other AZA institutions for breeding, and all progeny will be released within the historical range of the species in a project designed to monitor the fate of released frogs and develop an optimal release strategy. The project will end when the conservation partners determine that captive propagation is no longer useful for recovery efforts, an outcome expected to be more than 10 years in the future.

California populations of the Mountain Yellow-legged Frog were listed as endangered by the U.S. Fish and Wildlife Service in 2002. Despite this protection, these frogs continue toward extinction, with only seven known populations remaining in southern California, each ranging in size from seven to no more than 75 adults. While habitat loss historically has been the leading cause of amphibian decline, the most immediate threat is from the chytrid fungus. In addition to recent fire and drought damage, the decline of the frog is further compounded by non-native predators such as bullfrogs and trout, and possibly by airborne and aquatic contaminants.

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