

**NORTHERN LEOPARD FROG**  
*(Lithobates [=Rana] pipiens)*

**STATUS:** No Federal status. Arizona Game and Fish Department Species of Greatest Conservation Need.

**SPECIES DESCRIPTION:** A smooth-skinned green, brown, or sometimes yellow-green frog with well-defined dark spots. One large dark spot is typically present on the snout. This is the only leopard frog in Arizona with complete dorsolateral folds. The pattern on the rear of the thigh is also distinctive, and includes a few dark spots or blotches on a light background. A large northern leopard frog is about 4.5 inches in length. The call is a pleasant medley of chuckles, snores, and grunts heard during the breeding season.

**NATURAL HISTORY:** Northern leopard frogs use a variety of habitats including grassland, brush land, woodland, and forest, usually in permanent waters with rooted aquatic vegetation; also frequents ponds, canals, marshes, springs, and streams. In Arizona they are found in elevations of 2,640-9,155 ft (805-2,790 m). Adult frogs consume small invertebrates. Larvae eat algae, plant tissue, organic debris, and probably small invertebrates.

**HISTORICAL RANGE:** The northern leopard frog historically ranged from Newfoundland and southern Quebec, south through New England to West Virginia, west across the Canadian provinces and northern and central portions of the United States to British Columbia, Oregon, Washington, and northern California, and south to Arizona, New Mexico, and extreme western Texas. In Arizona, *R. pipiens* has been found in the lakes, earthen tanks, springs, creeks, and rivers of the Colorado Plateau in the northeast portion of the state (Coconino, Navajo, and Apache Counties). Historically, the northern leopard frog was well-distributed across northern Arizona, including wetlands in wooded areas and meadows above and below the Mogollon Rim, as well as in more open and arid country on the Colorado Plateau.

**CURRENT RANGE:** The overall extent of the northern leopard frog has decreased throughout the western portion of its range. The species is greatly reduced and/or extirpated from a significant portion of its western range throughout the United States and Canada. Currently in Arizona, northern leopard frogs are largely restricted to man-made waters (earthen tanks constructed for livestock and wildlife) on the Coconino National Forest. This may be the only remaining functional metapopulation in Arizona, although a few small and isolated populations persist elsewhere in its Arizona range.

**REASONS FOR DECLINE:** Over the past 30+ years, the northern leopard frog has experienced dramatic declines in the number and health of functioning metapopulations across its western range, including Arizona. Introduction of exotic predators (e.g., sport fish, bullfrogs, and crayfish), loss of habitat (e.g., spring developments, water diversions, and drought) and other poorly understood factors (e.g., diseases, pesticides) have resulted in extirpation of northern leopard frogs throughout much of their historical range.

**NOTES:** The U.S. Fish and Wildlife Service was petitioned in June 2006 to list the western United States Distinct Population Segment of northern leopard frog as an endangered or threatened species with critical habitat under the Endangered Species Act (Act). We are currently working on a status review to determine if the species warrants protection under the Act.