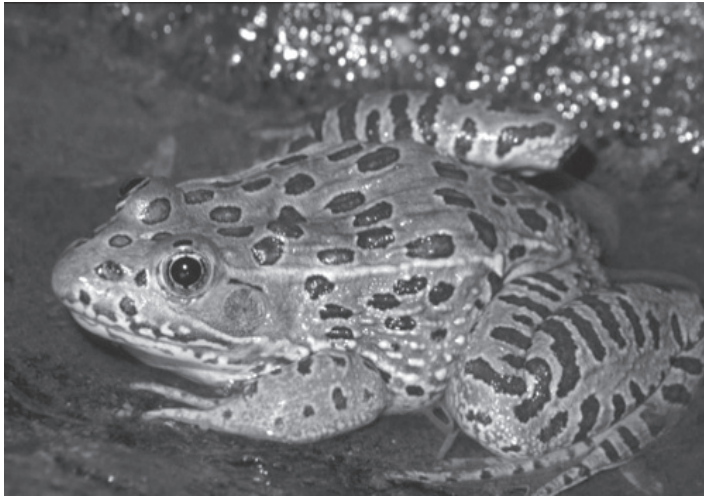


Chiricahua Leopard Frog
(*Rana chiricahuensis*)

text and photograph by
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Of Arizona's 8 ranid frog species the Chiricahua leopard frog (*Rana chiricahuensis*) is arguably its most distinctive. When mature this stocky, robust frog may approach 14 cm (6 in.) in length (SVL) making it one of the larger leopard frogs found. The dorsal ground color is usually various shades of green, but younger individuals and those found at lower elevations are commonly dark brown. The dorsal spots of this species tend to be black or dark brown and are usually more abundant than those of other leopard frog species but may also fade with maturity. The venter may be white/cream colored. This species also possesses a very distinctive green facial color that usually extends past the eyes. Immature and young *R. chiricahuensis* and *R. yavapaiensis* (lowland leopard frog) share similar morphological characteristics and can (at lower elevations) be difficult to distinguish.

Like all leopard frogs, *R. chiricahuensis* was once considered *R. pipiens* and wasn't described as a species until 1979 based on a specimen collected from the Chiricahua Mts. in 1971. Since that time it has been separated into two "forms": the Mogollon Rim form and the southeastern form, while a controversial third population was designated a species (*R. subaquavocalis*) in 1993, due in large part for its tendency to vocalize underwater (a trait still shared by *R. chiricahuensis*).

R. chiricahuensis is part of a unique group of species that includes the jaguar, thick-billed parrot and brown vine snake that inhabit the cool, seasonally-moist montane habitats of Arizona's northern extension of the Sierra Madre Occidental. It's a shy, reclusive and mostly nocturnal frog that is rarely found away from water and the protection of cover. *R. chiricahuensis* was once commonly found in rocky spring headwaters of Madrean woodland and associated wetlands. It was also common in the once vast unspoiled grassland communities of southeastern Arizona. Today it is mostly relegated to earthen stock tanks that dot the Arizona

landscape by the 1000's. Unfortunately those same stock tanks usually contain water for only short periods.

Historically Chiricahua leopard frogs occurred commonly throughout the mountains of the Mogollon Rim, White Mts, and southeastern Arizona. Today it is known from ca. three localities along the Mogollon Rim and White Mts. In southeastern Arizona it remains at ca. 30% of its historic localities and continues to disappear. In the 100 mile circle *R. chiricahuensis* probably occurs at fewer than 20 localities. Nearly all of the 100 mile circle populations are isolated from one another by habitat fragmentation. The aquatic corridors that once served as meta-population links have long since disappeared and left these populations with little dispersal opportunity and low recruitment rates.

Chiricahua leopard frogs may be active from February through November and usually breed during the warmer spring and summer months. Male *R. chiricahuensis* have paired vocal sacs and usually vocalize either partially or completely submerged under water and are rarely far from escape cover.

The continued existence of the majestic Chiricahua leopard frog within the 100 mile circle and throughout its range is tenuous at best. Widespread and dramatic population declines have left few remaining populations in the 100 mile circle. Those populations that do remain are badly fragmented by human caused habitat alteration and must also contend with destructive non-native predatory species such as the American bullfrog, crayfish, and exotic fishes. The introduced American bullfrog (*R. catesbeiana*) continues to be an environmental eyesore and nemesis of many of Arizona's native species, particularly the Chiricahua leopard frog. It has displaced *R. chiricahuensis* at many localities.

In June of 2002, the United States Fish and Wildlife Service designated the Chiricahua leopard frog as a threatened species.

Historic distribution of *Rana chiricahuensis* in Arizona

