

R2 Sensitive Species List Recommendation

Northern Leopard Frog (*Rana pipiens*)

By Gary Patton

11/27/01

Recommendation: **R2 Sensitive Species**

Rationale: The northern leopard frog is widely distributed across northern and western North America. There remain locales where the species continues in relative abundance. Still, widespread declines and local extirpations have been documented across this range. In much of the western U.S., the northern leopard frog is considered to be vulnerable (including Colorado and Wyoming) or imperiled. Declines in Colorado and Wyoming are well documented, with the species becoming scarce or even extirpated in many locations. The causes of these declines appear to be complex and can be only partially explained. In some areas, particularly on the eastern plains, predation by expanding populations of introduced bullfrogs and carnivorous fish species appears to have made significant inroads into leopard frog populations. Disease, water pollution, and insecticide applications also play a role in declines. Dewatering and hydrological modification have substantially reduced available breeding habitat in some areas. At the same time, this species is fairly plastic in its habitat tolerances and does adapt to some manmade aquatic habitats, which have expanded overall. Many man-made habitats, however, also become home to introduced predatory fish species and bullfrogs.

The circumstances surrounding the northern leopard frog, like other amphibians worldwide, present a complex problem. Nonetheless, because of the substantial declines and frequent local extirpations, as well as the influence FS management can have on leopard frog conservation, we recommend retaining this species on the R2 sensitive species list.

Note: In addition to the evaluator's references, also referred to biodiversity documentation at Natureserve.com,; distribution data from the Colorado Herpetological Society; and Collins and Collins (1991) *Reptiles and Amphibians of the Cimarron National Grasslands, Morton County, Kansas*.