



Friends of the Forest Gets Grant to Fence Frogs

By Carol Wirkus

Sedona Friends of the Forest was awarded a \$32,000 grant to protect a small population of northern leopard frogs. The leopard frog is a small critter, previously wide-spread across northern and central Arizona, but now found in few areas. Not yet placed on the endangered species list, the current protection status is “sensitive.”

So, why should we care if some small amphibian is threatened? “Saving species is important to many people,” says Janie Agyagos, the Red Rock Ranger District Wildlife Biologist who will assist Arizona Game and Fish in overseeing this project. “People care for a variety of reasons—for their beauty and the thrill of seeing them, for scientific and educational purposes, and for their ecological, historic, and cultural value.”

According to Agyagos, the earthen livestock tank in the Stoneman Lake/Apache Maid area in the Coconino National Forest is one of a few source populations of leopard frogs in Arizona. Here, the frogs breed and lay eggs which then hatch into tadpoles and then metamorphose into juveniles. During wet monsoon years, the juveniles disperse up and down wet drainages and recolonize other water sources in the area.

This leopard frog population is threatened by both man and beast. People on ATVs drive over the earthen berms, destroying the perimeter vegetation. Cattle trample the edges of the tank and graze on the foliage. These negative impacts threaten the frogs, which need the vegetation for hiding cover and places for the egg masses to cling.

The \$32,000 grant awarded to the Friends of the Forest from the Arizona Department of Game and Fish Wildlife Conservation Fund was used to construct a sucker rod fence that partially encircles a portion of the livestock tank, and another fence that goes around the perimeter of the meadow in which the tank is located.

“By protecting the leopard frog’s habitat, there will be more aquatic vegetation, the eggs will have a place to attach, there will be higher survival rate for tadpoles, and the frogs will be able to hide and disperse,” said Mike Ward, Past-President of the Friends of the Forest and the grant writer. “We can keep this population going, and agency biologists can even use it as a source for raising tadpoles to reintroduce to areas where the frogs used to live.”

The most likely reasons for the dramatic decline of the frog population are habitat destruction due to water diversion and drought, and the introduction of non-native predators, like crayfish, American bullfrogs and many non-native sport fish.

Smaller than a teacup, the Northern leopard frog has a lifespan of two to four years. Males are smaller than females, and advertise for a mate with a medley of chuckles, rumbling

snores, and rapid grunts. Breeding occurs in the spring. In late spring or early summer, females deposit about 3,000 black and white eggs that they attach to underwater vegetation in clustered egg masses. Tadpoles hatch in one to three weeks and metamorphose to frogs in three to six months.

During the summer, leopard frogs move away from the breeding pond to look for food in grassy places. During this time, they get water by absorbing dew from the plants around them, and they dine on insects. During the rainy, monsoon season the frogs colonize. Throughout winter, they hibernate in the mud at the bottom of a pond.

One compelling reason to preserve species is that each one plays an important role in an ecosystem, says Agyagos. "When a species becomes endangered, it indicates something is wrong." Like the canaries used in coal mines, whose deaths warned miners of bad air, the increasing numbers of endangered species warn us that the health of our environment has declined. The measures we take to save endangered species will help ensure the planet we leave for our children is as healthy as the planet our parents left for us.

The most important biological reason for protecting the Northern leopard frog is to preserve the integrity of our ecosystems, to maintain diversity and healthy ecological function, says Agyagos. They are an important part of the ecosystem in which they live, helping to control invertebrate pests and serving as an important food source for larger animals, including bass, herons, garter snakes, and hawks.

In addition, from a cultural standpoint, if we don't preserve what is native and distinctive to our state, we will lose what makes Arizona unique from other states, and our plants and animals will look much like the rest of the country.

For more information about the Friends of the Forest, visit www.friendsoftheforestedona.org or contact the Red Rock Ranger Station at 203-2900.

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