

Weekly Zoo Article – February, 8 2008

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Hundreds of animals across the globe face serious problems like habitat loss, environmental pollution, and poaching that threatening possible extinction. While numerous conservation projects are underway at zoos across the country to save many of these animals, most issues require coordinated teamwork between conservation agencies. Each year, the Association of Zoos and Aquariums (AZA) develops a nationwide conservation message for member zoos to utilize in educational events and conservation projects. This year, AZA has selected a group of animals truly in danger of disappearing from our world... amphibians. To help spread awareness about the plight of amphibians, 2008 has been deemed the “Year of the Frog”.

Frogs make up the largest group of the nearly 6,000 species of amphibians. Frogs can be found on every continent of the world except Antarctica. Their ability to adapt and survive in various habitats has made them one of the hardiest creatures on the earth for hundreds of millions of years. Today however, increasing human pressure on the environment coupled with a widespread threat called “Chytrid fungus” has forced over one-third of all known amphibian species to be threatened with extinction, not to mention, those that have yet to be discovered. In fact, just last year, a new species of chorus frog was discovered in the Southern U.S.

Here at the Lee Richardson Zoo, we have several native amphibians that you can learn about and see firsthand in the Finnup Center for Conservation Education. Within our Kansas animal exhibit you will find two barred tiger salamanders, a plains spadefoot toad, a Woodhouse’s toad, and a plains leopard frog. Each species represents unique adaptations that have allowed them to survive the wild weather that can occur Kansas.

In 1994, the barred tiger salamander crawled its way into Kansas history by becoming the state amphibian. These large and powerful eating machines are colored with thick yellow and black stripes that double as camouflage and a warning message. Like most amphibians, tiger salamanders have a moist covering that allows them to absorb air and water through their skin. The moist covering also makes them quite distasteful to most animals. Yet, in order to taste, an animal must first bite. To avoid this dilemma the salamander’s bright coloration tells other animals, “Don’t eat me, I don’t taste good!”

Many amphibians spend the winter hibernating underground. The 2 inch long plains spadefoot toad is especially well adapted to perform this task. Each of the toad's hind legs have small black spurs used to shovel dirt as they dig a hole into the ground. Once underground, the toad may make a moisture retaining "cocoon" that consists of several layers of skin that were shed. The cocoon acts much like a dry suit that a diver may wear by keeping the toad warmer than its surroundings.

All amphibians must live in a moist environment, but not all of them need to stay near bodies of water. The Woodhouse's toad, like most other toads, needs only dew and condensation to avoid drying out its skin. This large stout toad, hops around the plains consuming up to 2/3 of its body weight in a single day. That would be the same as an average size man eating 508 quarter pound burgers. Despite the toad's plump appearance, most animals will avoid snacking on this amphibian. Behind the toad's shoulders are two glands that release toxins if the toad is stressed. The chemical, called a Bufotoxin, causes an increased heart rate and can be fatal if swallowed in sufficient amounts.

While salamanders crawl and toads hop, frogs like to jump, and the leopard frog can certainly jump. Though their ability to jump long distances resembles that of a leopard in the feline family, they received their name from the black spots that cover their brown and green body. During breeding season, a female leopard frog may lay as many as 6,500 eggs in a marshy area at the edge of a pond or stream. Females and males find each other during mating season by producing their own unique call that sounds like, "chuck-chuck-chuckle". The call may sound like laughter to us, but it is all business to the leopard frog.

Zoos across Kansas, including the Lee Richardson Zoo, are participating in "Year of the Frog" festivities by providing programs and events about our amphibian friends. On Saturday, March 1st the Lee Richardson Zoo will be hosting our "Year of the Frog Festival" from 11AM-3PM. The festival will have plenty of hoppin' fun games, activities, a craft, and live amphibians. The event is free, so come on down on March 1st and learn about what makes amphibians so cool, and how to make our world a better place for amphibians.

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