DNS nature study summery by Zach Flora

Durango Nature Studies is a 140-acre nature preserve near the New Mexico border. They are a small organization that was started in 1994 but it wasn’t till 1998 till they acquired the land. The goal of Durango Nature Studies is to… The property they acquired consists of juniper forests, meadows, desert patches, and riparian areas.

In recent years, bullfrogs (*Rana catesbeiana*) have been spotted on the DNS property. The bullfrog is an invasive species to the ponds, rivers, etc. So it can out-compete the other frogs like the leopard (*Rana pipiens*) . An invasive species is a animal that is not from their so local species can’t know what to do to be safe from them. Currently, the leopard frog is considered a species of special concern. There has been a petition to add leopard frogs to the Colorado endangered species list. This isn’t just happening at DNS, the bullfrog is invasive throughout the western United States and Europe. In the presence of bluegill (*Lepomis macrochirus*) bullfrogs are an even greater threat to leopard frogs because they’ll eat leopard frogs but not bull frogs. They will also eat the predatory insects that would eat the bullfrog.

Leopard frogs are very interesting creatures. They live anywhere there is some water. They’ll live in urban areas or swamps. They also eat anything that moves pretty much. They’ll eat reptiles, tadpoles, flies, smaller frogs you name it. They start out as eggs in march thru July and are attached to vegetation. Then later they turn into tadpoles. Then they in 3 to 6 months turn into their full form.

Bullfrogs are different than the northern leopard frogs. They are also found near water to just like the leopard frog. You can find them in Canada and the USA They eat anything that moves just like the leopard frogs. But they go bigger like bats and snakes and not to mention smaller frogs. They reproduce in mass amounts thought. On average on frog lays 20,000 eggs in one cycle. And that’s enough so 70% of them can be picked off and still they’re pests.

We collected are data in many ways. One all of the class members were involved in was the 1-hour mark and recapture session at DNS. We had a field trip to DNS spread out through the week with the different classes to mark and capture the frogs we saw on the DNS property. We did this with the kicking method by going thru bushes and having them go jump in the water. Then if we caught any bullfrogs we would kill them because of the threat they are to the ecosystem. The materials we needed for this was cars, paper (to record), fishing nets, people, and pens. During this we also did the visual encounter survey.

Then we had pitfall traps to capture the frogs. They were checked dally. The group i was not part of this so we cant give the materials used to make these traps. Other methods we used. There was the vegetation survey were we scavenged thru the water and looked for bugs to see the density of each population. The materials we had to use for that was pliers, metal pans and dishes to hold the bugs. The last thing we did was the water chemistry test. This was seeing the particular levels of phosphate, dissolved oxygen etc. we did this with suntan methods we don’t know how to describe and excel.

<http://wiki.answers.com/Q/What_do_the_northern_leopard_frog_eat>

<http://en.wikipedia.org/wiki/Bullfrog>