

Nicholas Lobato

*Studying the Effects of Incubation Rates and Water Temperature on Gila Pandora's Eggs*

The Rio Grande Chub is a native fish species of the San Luis Valley, it is currently a species of concern for endangerment. I worked at the Native Aquatic Species Restoration Facility, in Alamosa to test a new method (Dexter's Method) of spawning the Rio Grande Chub. The traditional way of spawning the fish's eggs is to put a spawning mat in the tank and let the fish spawn naturally. The problem is that it takes three weeks to spawn. I used Dexter's method to inject the fish. This involves injecting the chubs with hormones Human Chorionic Gonadotropin (HCG) and Common Carp Pituitary (CCP). HGC is the hormone that I injected the male chubs. HCG made the male fish want to spawn. I injected the females with CCP, which made them release their eggs. First, I used 28 males and 24 females. 12 females and 22 males spawned. Second, I tested six males and six females. Two females and two males spawned. I stripped the eggs from the fish, and put them into three separate jars at temperatures of 60, 70, and 80 degree water, to find the best water temperature to hatch the eggs. The 60 degree water had the highest egg survival rate at 91%. Eggs in the 70 degree water took three days, only 75% of the eggs hatched. Eggs in the 80 degree water took two days, only 50% of the eggs hatched. Dexter's method could be essential to save the Rio Grande Chub.