

Abby Lodge

Challenges in Eradicating Goats, Feral Pigs, and Donkeys from the Islands

The goats did not choose to be on the Galapagos islands – they were brought there by sailors and buccaneers as they made room on their ships for the tortoises that they were taking back with them. The goats soon ate any and all of the vegetation on the islands, however, this left nothing for the native tortoises to eat. Scientists began asking why don't they eradicate the goat population, there are thousands of islands anyways around the world with goats, but the Galapagos tortoises are only found there. One proposal was to put lions on the islands to eat the goats – this sounded horribly awful to me because once all the goats are gone, then they would have the problem of hungry lions in a very fragile environment.

It took eight years of planning but finally a plan was devised: using helicopters, the scientists would round up the goats and then pick them off one by one with guns. This actually ended up wiping out 90% of goat population very quickly. Unfortunately, the goats learned to hide from helicopter noises because they knew that meant death. The scientists then came up with Judas goats – this selected goat had a tracker placed on them, and then that goat would go back to the hiding herd. All the goats in the herd were then killed but the Judas goat, then they would just wait for Judas goat to find a new herd and kill all of those goats. I was thinking while hearing this: “those poor Judas goats must have had such horrible PTSD and must have blamed themselves for their friend's deaths.”

The next challenge the scientists faced was that a good Judas goat was only a good Judas goat until they get pregnant because pregnant goats are not social. They need a Judas goat that searches for a herd, is also sought after and never gets pregnant. So, they began sterilizing them and give them hormone implants (this put them into heat for more than 180 days instead of a few weeks). The percent of the goat population was declining – by mid-2006, 250,000 goats were irradiated – and plants and trees were reemerging, and tortoises got their home back.

The Judas goats were kept around however, because people started demonstrating. Fisherman got mad when they were told by the national park administration to stop fishing, so many sea-cucumbers and they decided to kill tortoises and put back goats on islands where they had been eliminated. Eventually though fisherman started converting to tourism – giving tours from island to island with their boats.

The elimination of feral pigs began in 1968 with hunting and the use of traps and snares sporadically, which turned out to be ineffective. Then in 1985, the hunting effort was increased, and a poisoning campaign was imitated, using sodium monofluoroacetate. In 1995, hunting efforts were again increased, and goat and sea turtle carcasses were poisoned and used a bait/ 260 km of additional trails were cut to provide the hunters and their dogs improved access to the pigs. Fall of 2000 was the first time in 150 years that Santiago Island was free of pigs – over 18,000 pigs were removed from the island. I was very concerned about them using poisoning in this effort to eliminate pigs because normally animals that you are trying not to poison end up getting poisoned. However, I was happy to read that the only non-target or secondary impacts observed from the poisoning were several non-native rats.

Donkeys, which also had adverse impacts on the Galapagos plants endemic plant species, were eradicated similarly to the pigs and goats. Beginning in the 1970s ground hunters were used

to eliminate the donkeys, and then in 2004 aerial hunting operations began. The aerial hunting of the donkeys proved to be highly effective due to their size and behavioral patterns – such as lack of hiding. Today Santiago Island and Alcedo Volcano are completely free of donkeys for the first time in 120 years.