

Blacktail Deer Study

The Confederated Tribes of Grand Ronde has been working to regain and retain hunting and fishing rights for tribal members since 1983 when the tribe was restored with federal recognition. Today, the tribe has a Natural Resources Department (NRD) that “serves the Grand Ronde tribal membership through responsible stewardship of all-natural resources important to the cultural identity.” Hunting and fishing rights are important to the tribe because it helps promote land management, land conservation and also allows the tribe to continue to practice cultural ceremonies and activities.



In the spring of 2017, the tribe’s NRD conducted a study where they collected fecal samples from 269 blacktail deer to determine individual **genotypes** (the genetic makeup of an organism) and identify recaptured individuals (fecal samples from a deer that had been captured more than once).

A team of four Grand Ronde biologists came together to collect fresh deer pellets on the reservation. The surveyed area consisted of habitats that were freshly logged or the trees were only 0-5 years old. The team covered 403 acres of land. Fresh deer pellets were collected into containers that held 95% ethanol. In order to process the pellets correctly, the team had to follow a protocol that was generated by the Epps lab at OSU. The biologists used the **alleles** (one of the possible forms of a gene. Most genes have two alleles, a dominant allele, and a recessive allele) from a previous study done at OSU in order to determine individual identification and which deer had been recaptured.



The purpose of the study is to find out the blacktail deer population on the reservation to help determine how many additional hunting tags should be given to tribal members. The reservation falls in the Trask unit and is open to the public to hunt. This is a general season tag. Over distributing hunting tags could potentially have a negative effect on the habitat on the reservation. Overpopulation of deer can cause a loss in agriculture and vegetation, causing a rippling effect on the habitat.