

Project Description:

My collaborators and I are conducting a study of pronghorn populations in the Oklahoma panhandle in Cimarron and Texas counties. Pronghorn populations have been declining in the region over the past decade, and our goal is to understand the factors contributing to this trend. Specifically, we are monitoring the movements and spatial ecology of pronghorns using GPS collars and radio telemetry. In addition, the team members from ECU are examining the potential impact of parasites on the survivorship of pronghorns, using both fecal and blood samples collected from the animals. The adult animals are captured using a helicopter and net gun in the winter, whereas fawns are captured by hand with nets in early summer. ECU students have participated in both events, helping with sample processing and fawn captures in the field and sample analyses in the laboratory. In the laboratory, fecal samples are examined using the McMaster egg counting method to quantify parasitic barber's pole worm eggs. The blood serum samples are examined to detect the presence of epizootic hemorrhagic disease (EHD) virus.

Project Participants:

Principal Investigators:

OSU: Dr. W. Sue Fairbanks, Dr. Robert C. Lonsinger, Dr. Colter Chitwood

Texas A&M Kingsville: Dr. Michael Cherry, Dr. Evan Tanner, Dr. Randy DeYoung

ECU: Dr. George Wang

Graduate Students:

OSU: Derek Hahn (M.S.), Matt Turnley (Ph.D.)

Texas A&M Kingsville: Marlin Dart (Ph.D.)

Undergraduate Students:

ECU: Brandon Roniss, Jamian Maxwell, Hunter Forbes, Alyssa Dodd