



JACOB LOCKE

MS Thesis Candidate
Habitat/Rangeland
Center, TX

STUDENT PROFILE

Jacob was raised deep in the pineywoods of Center, Texas. He spent a lot of time hunting and fishing growing up in a small town. This upbringing in the outdoors led him to graduating from Texas A&M University in May 2018 with a Bachelor of Science degree in Wildlife and Fisheries Sciences and an emphasis in Wildlife Ecology. Jacob's undergraduate career provided him with many opportunities studying wildlife abroad and conducting undergraduate research projects, ultimately leading him to continue his education by pursuing a Master of Science degree studying pronghorn ecology in Far West Texas.

PROJECT PROFILE

The Trans-Pecos region of Texas is undergoing pronghorn restoration efforts. As part of these efforts, Jacob is determining a carrying capacity estimate for pronghorn in the Marfa northwest and Marathon Basin restoration areas. This estimate will be based on biomass and nutritional composition of pronghorn-preferred forage. Jacob is collecting data during the cool/dry and warm/dry seasons, when vegetation is at its lowest level of production, to prevent an overestimation. In addition, he is conducting an analysis of the relationship between cattle grazing regimes and pronghorn-preferred forage production on the Mimms Ranch. For this portion of the study, Jacob is sampling for biomass and nutritional composition of pronghorn-preferred forage across three different grazing regimes: continuous, high-intensity/low-frequency rotational, and non-grazed. This study will allow Texas Parks and Wildlife Department to better aid private landowners in managing for pronghorn through the use of grazing regimes.

