



LEANNA MORIN

MS Thesis Candidate
Big Game & Habitat, Pronghorn
Hondo, TX

STUDENT PROFILE

Leanna (Lilly) grew up in Hondo, Texas. After high school, she studied at Southwest Texas Junior College. She then attended Texas A&M University-Kingsville and graduated in May 2020 with a Bachelor of Science in Agriculture, Range and Wildlife Management. While earning her degree, she interned with the USDA and Oregon State University Extension Center studying grazing season effects on sagebrush-obligate avian habitats, where she developed a passion for natural sciences and conservation. Family is a big part of Leanna's life, as they have supported her throughout her collegiate career. She is a proud dog owner, and the coolest aunt to two nieces and two nephews. One of her favorite things to do is share her adoration for nature with her nieces and nephews by taking trips to the park, walking nature trails, and catching bugs together.

PROJECT PROFILE

Pronghorn (*Antilocapra americana*) habitat in the Trans-Pecos region of Texas has become fragmented and degraded, leading to a decrease in forage quality and quantity of available grasslands in North America. Although the pronghorn diet has been studied, experiments analyzing grazing effects on vegetation selection in West Texas are limited, and this is a fundamental key to pronghorn habitat restoration. To analyze pronghorn dietary selection, Leanna will collect 50 random fecal samples around Marfa in spring 2021 and 2022, and will examine plant species composition using microscopic histological procedures. She will also study vegetation production across continuous, rotational, and deferred cattle grazing systems. She will analyze samples for biomass production, energy composition, moisture content, and protein composition. Then, uniting dietary selection to vegetation production, she will provide insight into their undefined relationship. This research is essential in understanding the effects of livestock grazing regimes on forbs. Results may assist landowners and biologists in the restoration of pronghorn habitat utilizing grazing as a tool.

