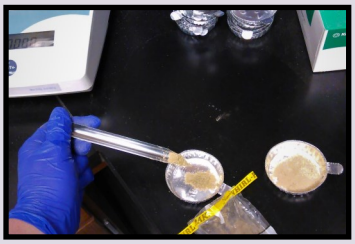
Katherine E. Haile — BRI Undergraduate Researcher

My name is Katherine Haile, and I am from Sisterdale, Texas. Born and raised on my family's farm/ranch, I developed a great interest in managing natural resources, including range, livestock, and wildlife. I was home-schooled and an active member of 4-H. With 4-H, I was involved in the Plant ID and Range Evaluation projects for two years in high school. I carried that interest with me to Sul Ross where I am now a sophomore majoring in Sustainable Ranch Management and a member of the Plant ID Team. I am also a member of the Honors Club and the Range and Wildlife Club, in addition to being treasurer of the Cattleman's Club. Through these organizations, I have been able to greatly expand my understanding of many different areas of interest, gain leadership skills, and complete community service projects. I am really looking forward to furthering my natural resource management knowledge in the future through Sul Ross State University and the Borderlands Research Institute.



Examining Nutritional Values of *Bouteloua* and *Aristida* in the Marathon Basin

1 February — 31 August 2018

My undergraduate research project examines the nutritional differences of genera *Bouteloua* (grama) and *Aristida* (threeawn) during the warm-wet growing season of June through September. This project is part of a larger parent study on the influence of black-tailed prairie dogs on vegetation and cattle movement in the Marathon Basin. The study site is located north of Marathon, Texas on The Nature Conservancy's Marathon Grassland Preserve. Vegetation will be collected through the warm-wet growing season following cattle rotation, dried, and ground for nutritional analysis. Nutritional analysis will include dry matter, neutral detergent lignin (NDL), acid detergent lignin (ADL), acid detergent fiber (ADF), ash, and protein. These nutritional properties will be used to determine the digestibility for livestock and wildlife. The results of this study will allow ranch managers and biologists to better understand and estimate the quality of two common vegetation genera present in the Trans-Pecos ecoregion of Texas.

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