Kaitlyn Williams, M.S. Thesis Candidate

My name is Kaitlyn Williams and I am from Aledo, Texas. I graduated from Texas A&M University in May 2016 with a Bachelor of Science in Wildlife and Fisheries Sciences with an emphasis in Wildlife Ecology and Conservation. I grew up in a small town with nature as my backyard, which fostered a respect and love for the outdoors. This experience provided me with a passion for the environment and animals which lead me to the wildlife field. While attending Texas A&M, I had the opportunity to do a summer internship working for the National Audubon Society with Atlantic Puffins off the coast of Maine. I was also able to study abroad in the Amazon Rainforest of Brazil, volunteer at the campus wildlife center, and participate in different activities within the department. I have the privilege of continuing my education at Sul Ross State University by pursuing a Master's of Science in Range and Wildlife Management under the advisement of Dr. Ryan Luna and Dr. Ryan O'Shaughnessy.

Thesis Project: Using Quail and Grassland Birds as Indicators of Chihuahuan Desert Grassland Ecosystem Health

One of the most biologically diverse and largest North American deserts, the Chihuahuan Desert spans the western portion of Texas known as the Trans-Pecos. Elevation changes, temperature differences, and precipitation variation across the region contribute to diverse vegetation types, including desert grassland, and desert scrub. But recently, grassland deterioration has become a major threat to the Chihuahuan Desert ecosystem health. Grassland deterioration in the form of brush encroachment is caused by many factors, including overgrazing by livestock. This study aims to use quail and winter and summer grassland birds to assess grassland health in the Chihuahuan Desert. Study sites will include grasslands experiencing varying grazing pressures which causes a varying degree of diversity. Quail and songbird abundance will be used as indicator species of grassland health. Population abundance of the species will be estimated from flush counts along line transects. Flush counts will be conducted on the study sites on fixed lines and through the use of pointing dogs. Quail diet, and seed and invertebrate availability will be determined as well to establish a relationship between quail and songbird abundance and forage accessibility. The results of this study will be used to create management plans for these species, as well as to educate landowners and ranch managers on ideal grazing approaches.