

## Fabiola Baeza-Tarin, M.S. Thesis Candidate

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I was born in Ojinaga, Chihuahua, Mexico, where I lived for the first ten years of my life. I discovered my passion for nature at an early age living and working on my father's cattle ranch. As a young girl I would find myself taking long hikes into the rocky desert mountains that surrounded my family's ranch to explore and on occasions see the wildlife. My family and I moved to Presidio, Tx where I graduated high school. I decided to pursue my passion at Sul Ross to major in Biology. I started my research career as an undergrad conducting research on the phenology of Common Black Hawks and Gray Hawks at Big Bend National Park under the McNair Scholars Program. Borderlands Research Institute also gave me the opportunity to be part of their Undergraduate Research Mentorship Program to study Mule Deer. I graduated from Sul Ross on December 2016. After graduation I remained actively working and volunteering on different projects, most of which focused on

herpetology and ornithology. I am now working as a Research Assistant for Borderland Research Institute and working towards getting my M.S. degree under the direction of Dr. Mieke Titulaer. I am very thankful for all the opportunities that Dr. Louis Harveson and this great institution have provided me with.

### **Thesis Project: Overwinter Habitat Use of Baird's and Grasshopper Sparrows in the Marfa Grasslands, Texas.**

Baird's sparrows (*Ammodramus bairdii*) and Grasshopper sparrows (*Ammodramus savannarum*) have lost approximately 70-80% of their populations since 1966, mainly due to habitat loss. The Chihuahuan Desert grasslands are important wintering grounds for these grassland obligates. However, suitable habitat has been degrading due to cattle overgrazing, soil erosion, periodic drought, etc; leading to some of these grasslands to become invaded by a mixture of desert scrub vegetation. Shrub encroachment reduces the availability of suitable habitat for grassland species, which contributes to their population decline. A more in depth understanding of their habitat use and preferences will lead to better management for these species. The main objectives of this project are 1) map Chihuahuan Desert grasslands and document shrub encroachment, 2) monitor wintering grassland bird assemblages associated with desert grasslands, 3) asses habitat conditions of desert grasslands, 4) evaluate bird-habitat relationships relative to habitat conditions, 5) identify priority areas for habitat restoration. This information will allow us to better understand the relationship between grassland birds and their habitat to better inform land managers and researchers about the ecological conditions needed to support thriving grassland bird populations within the region.



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