

# DESERT TRACKS

**BORDERLANDS**  
RESEARCH ♦ INSTITUTE

CONSERVING THE LAST FRONTIER

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Editor: Julie Rumbelow

## Overwinter Habitat Use of Baird's and Grasshopper Sparrows in the Marfa Grasslands

*Fabiola Baeza-Tarin and Mieke Titulaer (BRI), Photos by Paul Slocumb*



**T**he grassland ecosystem is one of the most threatened ecosystems globally, with only 20% of its historical range left in the world. Because of this, grassland birds have lost approximately 70-80% of their total population since 1966. As key indicators of grassland health and integrity, these birds are ecologically significant and merit further study.

Although habitat alteration on their wintering range has been acknowledged as a potential cause affecting winter survival and driving population declines, this key area remains poorly explored. With partners from Texas Parks and Wildlife Department, Bird Conservancy of the Rockies, and the Dixon Water Foundation, BRI has been studying two grassland-obligate bird species, Baird's sparrow and grasshopper sparrow, to better understand their ecological requirements during the winter. Using mist nets, we captured birds each winter from 2016-2019, placed radio transmitters on them to track them daily, and documented vegetation composition throughout the study site to evaluate habitat conditions.

Preliminary results indicate that both species select for areas with low shrub cover and dense, tall grass, on which they depend for food and cover. We are also finding that Baird's sparrow habitat requirements are more restricted; in addition to selecting for grass density and height, this species appears to be more negatively affected by the presence of tall shrubs, forbs, and tumbleweed compared to grasshopper sparrow. Such information on habitat requirements is key to better managing the winter habitat for the conservation of these and other declining grassland bird species.



Above: BRI Researchers set up mist nets on the Dixon Water Foundation Mimms Unit Ranch near Marfa. Top left: Baird's and grasshopper sparrows, two grassland species that are in decline due to habitat loss.



Thanks to our amazing staff, faculty, students, partners, and donors, we are proud to be a leader in West Texas conservation and research.

## From the Director – Surround Yourself With Good People

In a conservation-focused program like the Borderlands Research Institute, our conservation outcomes are only as good as those we employ or partner with. At BRI we are very blessed to work with a world-class group of students, staff, and faculty that are committed to Conserving the Last Frontier.

You'll find several articles in this issue that focus on our dedicated staff and faculty, including new hires and accolades of our team members. Our conservation mission at BRI would not be possible without their dedication to the wildlife, land, and the water resources of the region and to those that steward those resources.

If you haven't already joined (or renewed) your commitment to conservation efforts in West Texas, we encourage you to join our Stewardship Program (see back page). The Stewardship Program provides an annual stream of funding that enables us to help landowners and managers advance wildlife science and educate future conservation leaders on a much greater scale!

*—Louis A. Harveson*

## Luna Receives Outstanding Teaching Award



Dr. Ryan Luna received the Sul Ross State University 2018-2019 Outstanding Teaching Award. He is a Research Scientist with BRI and Chair of the Natural Resource Management Department.

committee was chaired by Dr. Jay Downing, Dean of the College of Arts and Sciences.

Dr. Luna joined the faculty of the Department Natural Resource Management in the fall of 2013. He earned his PhD degree from Texas State University, his MS degree from University of Texas at San Antonio, and his BS degree from Texas Tech University. Dr Luna is the Kelly R. Thompson Professor in Quail Research, Chair of the Department of Natural Resource Management, and a scientist with the Borderlands Research Institute.

We congratulate Dr. Luna for receiving this honor and thank him for his distinguished service to our students. In the field and in the classroom, Dr. Luna has been an exceptional instructor and advisor, having served as committee chair for 14 graduate students to date, and he continues to be an integral part of the work we do at BRI. Dr. Luna will be recognized and honored by President Bill Kibler at a reception during the Fall 2019 semester.

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**D**r. Ryan Luna, Associate Professor of Natural Resource Management, has been selected as the 2018-2019 recipient of the Sul Ross State University Outstanding Teaching Award. Dr. Luna was selected by a committee of students and faculty members from the College of Agricultural and Natural Resource Sciences, the College of Arts and Sciences, and the College of Education and Professional Studies. The selection

## Introducing Respect Big Bend Coordinators: Destiny Locke and Julie Schmidt

In the last issue of *Desert Tracks*, we announced BRI's involvement as a partner in the Respect Big Bend Coalition. We are pleased to introduce two BRI employees who are an essential part of the Respect Big Bend team: Destiny Locke and Julie Schmidt.

Destiny (pictured top left) is the Engagement Coordinator for Respect Big Bend. Destiny has a background in hydrology and is completing her thesis with Texas A&M. As Engagement Coordinator, she is eager to help landowners and communities balance future energy development with conservation in the Big Bend Region.

Julie (pictured bottom right) is the Engagement Assistant for Respect Big Bend. She is a senior in the Sul Ross Natural Resource Management Department and collects community content for Respect Big Bend Coalition's social media sites.

**Save the date!** BRI and Texas Agricultural Land Trust are partnering to host a workshop in Alpine on **November 14, 2019**. Join us for **Saving Working Lands: Preparing Landowners for Energy Sprawl**. More details to follow.



## Gonzalez Named to Nau Endowed Professorship in Habitat Research

BRI is pleased to announce the selection of Dr. Carlos (Lalo) Gonzalez as Assistant Professor of Natural Resource Management and the Nau Endowed Professor in Habitat Research and Management.

Gonzalez earned a BS in Range and Wildlife from Texas A&M-Kingsville, an MS in Range and Wildlife Management from Sul Ross State University, and his PhD in Wildlife Science in 2018 through a cooperative doctoral program with Sul Ross and Texas A&M.

The new position oversees the development of the Habitat Research and Management Program, including coordinating research grants, working with the West Texas Native Seed Program, and developing rangeland restoration techniques for West Texas.

"Habitat management is my passion, and I am grateful for this incredible opportunity to be part of the BRI team," said Gonzalez. "It means a lot to me, especially because the generosity of the Nau family has impacted my work since I was a grad student here at Sul Ross. They funded my

master's research on scaled quail on their West Texas property, and I and many others are fortunate to have been beneficiaries of the Nau family's passion for wildlife and land stewardship. Their support for habitat management guided by sound science will continue to have an impact across the entire Trans-Pecos Region of Texas."





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## We Love Our Land Stewards!

**W**e would like to give a shout-out to our Stewardship Program members, a group of dedicated individuals, ranches, and organizations that are making a difference in West Texas wildlife research and conservation. We could not do this without you!

Enroll or renew now to advance wildlife science and education. Giving levels and benefits are below:

**FRIEND:** With a donation of \$1,000/year:

- Metal gate sign
- VIP event invitations

**PATRON:** With a donation of \$5,000/year, you'll get FRIEND level benefits plus:

- An opportunity for a visit from our science team to discuss conservation techniques and unique flora and fauna on your property.



Thanks to our Stewardship Program members, over 100 of these signs can be seen throughout Texas. Land Steward Philip Walker at 7-Oaks Ranch sent this sweet photo of their dog Georgia with their Stewardship sign. To show your support for BRI and West Texas, become a member and we'll send you a sign!