

Desert Tracks



Helping conserve the natural resources of the Chihuahuan Desert Borderlands through research, education, & outreach

RESEARCH IN ACTION:

Wintering Grassland Birds in West Texas

Denis J. Perez-Ordoñez, Mieke Titulaer, Russell Martin (TPWD), and Louis A. Harveson

Populations of grassland birds that winter in northern Mexico and the southern United States are declining more than any other bird group in North America; yet causes of these declines are poorly understood. Habitat loss and degradation are thought to be the main factors.

In conjunction with studies in Mexico, Canada, North Dakota, and Montana, the Borderlands Research Institute is partnering with Texas Parks and Wildlife Department, Bird Conservancy of the Rockies, and the Dixon Water Foundation to study two species of grassland birds: Baird's sparrow (*Ammodramus bairdii*) and grasshopper sparrow (*Ammodramus savannarum*).

These birds spend summers in the Northern Great Plains and come to the Chihuahuan Desert for the winter. In the Marfa Grasslands of West Texas, BRI researchers are working to monitor winter survival rates and determine home ranges and habitat preferences for the two species.

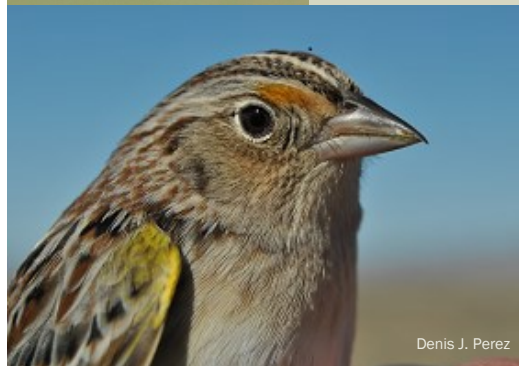
As in 2016, this winter more than 40 Baird's and grasshopper sparrows will be fitted with VHF transmitters and numbered USFWS leg bands. BRI researchers then track and locate the birds daily from December to March and obtain visual estimates of ground cover within 15 foot radius circular plots of 20 radiotelemetry locations per bird. Our researchers also collect habitat data across a grid of points spaced every 300 feet within the study area. This information will allow us

to better understand the ecology of these species and how they might react to different management actions or changes in their habitat. It can also be used as a baseline for further conservation planning efforts.

Our preliminary results indicate that the home range of both species is similar, with a mean of 18.8 acres per bird. We are also finding that the birds prefer to utilize areas with more grass cover and less bare ground. Data from the Marfa site will contribute to full annual cycle models that will help guide grassland management.



Baird's sparrow (left) and grasshopper sparrow (below) populations have declined by 70–80% since 1966. Researchers across North America are working to understand why.



Denis J. Perez

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Inside this issue:

Research in Action	1
From the Director	2
New Staff Members	2
Donor Spotlight: Concho Resources	3
Visit Our New Website	3
NatGeo Features Mountain Lion Film	3
Ten Years of Conservation	4

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- Grassland Bird Ecology



BRI is committed to bolstering the body of scientific knowledge that will guide the best management decisions for the Chihuahuan Desert Borderlands into the future. With your help, our work to support land managers across the region will continue for decades to come.

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From the Director—"10 Years: A Milestone Worthy of Celebration!"

Ten years may not seem like much, but for the students, staff, faculty, and Advisory Board at the Borderlands Research Institute, ten years is a milestone worthy of celebration!

Conservation organizations like us that rely on charitable giving don't last unless they have broad support and stay focused on their conservation mission.

We are so thankful for the friendships we have forged and for the support that landowners, hunters, nature enthusiasts, and our conservation partners have provided during our first decade.

As we mature, we also grow. New staff, a

revamped website, and our newly launched Songbird Conservation program are just some examples of initiatives we have developed to further our conservation mission.

We have come a long way in 10 years, but have so much work to do. Please contact us to see how you can help Conserve the Last Frontier!

—Louis A. Harveson



CONSERVING THE LAST FRONTIER

New Staff Members Join Borderlands Research Institute

Please welcome Amanda Peppers and Dr. Mieke Titulaer to West Texas!

Amanda Peppers joined BRI as the Philanthropy Coordinator in September of this year. A native Alabaman, Amanda is a graduate of Sul Ross with a BA in History. She has worked in the non-profit field for 5 years with a focus in museum collections, fundraising, and event planning. She lives in Alpine with her husband Jeremy, daughter Reagan, and nieces Aubrey and Allison. You can reach Amanda in her office at 432-837-8418, or by email at amanda.peppers@sulross.edu.



Dr. Mieke Titulaer joined us as lead researcher on BRI's Grassland Bird Habitat study, focusing on overwintering grassland birds. Her research interests include the influence of habitat alterations such as invasive exotic grasses, shrub encroachment, and grazing management on grassland bird populations. Dr. Titulaer received her PhD in Natural Resources from Universidad Autónoma de Chihuahua, Mexico, where she studied winter diets of grassland sparrows. She received her MS from Wageningen University in the Netherlands.



Donor Spotlight: Concho Invests in Native Seed Program

A \$275,000 gift from Concho Resources Inc., a Midland-based oil and gas company, has funded the first of a three-phase project to establish a West Texas Native Seeds Research Center in Alpine. When completed, the \$2 million center will produce bulk quantities of native seeds for use in virtually any type of land restoration, including highway right-of-ways, oil and gas development reclamation, pipeline revegetation, and replanting after natural disasters.

Concho Resources is the largest pure-play Permian Basin operator, with nearly one million gross acres. The company employs more than 1,100 people in the region and has annual sales of more than \$1.6 billion.

The greenhouse, which is the first phase of the project, will enable us to grow seeds in controlled conditions, identify which species grow best, and then determine priority plants for mass production. Phases two and three of the project will include a parking area, walking garden and outdoor classroom, and a laboratory and work space.

“Concho is committed to the responsible development of our natural resources and is excited about contributing to a project that will have a lasting impact in West Texas,” says Scott Kidwell, Concho’s Vice President of Government and Regulatory Affairs. “We consider it our corporate responsibility to promote sustainable development and environmental stewardship.”



The new greenhouse for the West Texas Native Seeds program will allow researchers the ability to plant, propagate, and evaluate native seed collections in a controlled environment, furthering our ability to restore habitats across west Texas.

BRI Broadens Outreach Efforts with New Website

This fall, we launched our newly redesigned website, and we’re excited to share it with you! We’re still at bri.sulross.edu, but it’s now easier to navigate and is tablet and smart phone compatible.

We hope you’ll stop by to check out our latest publications and learn more about wildlife and conservation in the Chihuahuan

Desert. You can download research reports, past *Desert Tracks* issues, and our *Borderlands News* articles from *Texas Wildlife Magazine*. This is also a great place to start if you’re interested in our Ranch Mapping Service or you’re exploring giving opportunities.

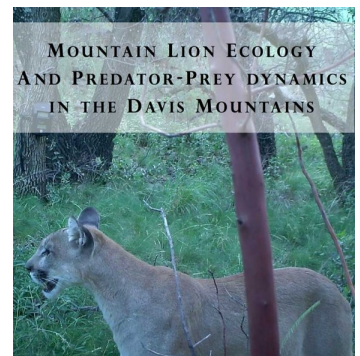
We are indebted to the Permian Basin Area Foundation for providing a grant to support this upgrade!

This holiday season, please consider making a tax-deductible donation to the Borderlands Research Institute.

NatGeo Features “Lions of West Texas” Film

Following filmmaker Ben Masters’ Wild Texas Film Tour, National Geographic has selected Masters’ new film about West Texas mountain lions for their Short Film Showcase. The film features BRI research and is accessible from the BRI website,

where you can also download the full report on what’s happening with mountain lions in West Texas, from survival rates and causes of mortality to prey composition and home range estimates.





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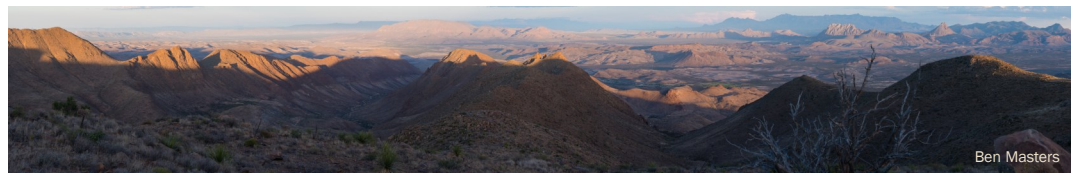
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Celebrating Ten Years of Collaborative Conservation!



This year we mark a decade of collaborative efforts to conserve one of the most biologically diverse regions of the world: the Chihuahuan Desert borderlands of West Texas.

Since BRI's inception, we have graduated more than 60 graduate students, with another 12 currently enrolled. Under the guidance of faculty at Sul Ross, more than 80 significant research projects have been completed, adding to the body of knowledge that has improved land management practices.

"One of the key things we've learned in the

last decade is that we need to manage wildlife on a much larger scale," says BRI Director Dr. Louis Harveson. "Tracking thousands of radio-collared animals has demonstrated that many species require much larger landscapes than we thought. That means if we want healthy wildlife, we need to work with our neighbors. We all have a responsibility and role to play in conservation."

Thanks to our partnerships with over 50 organizations and hundreds of landowners, we're looking forward to another decade of research, education, and outreach!