

## **BRI Celebrates 15 Years of Conservation Research in the Trans-Pecos**

Article by SHAWNA GRAVES and LYDIA SALDAÑA Photos courtesy of BORDERLANDS RESEARCH INSTITUTE



Students celebrate after finishing a day in the field.

he Borderlands Research Institute (BRI) celebrated its 15-year anniversary, a major milestone for the small but mighty research organization located at Sul Ross State University in Alpine. Its mission is to conserve the natural resources of the Chihuahuan Desert Borderlands through research, education, and outreach.

The organization was launched in the fall of 2007, inspired by West Texas' expansive private lands that harbor many wildlife species and unique habitats that were relatively understudied.

Since then, BRI has been a key player in collaborative wildlife research while offering meaningful graduate projects for students enrolled in the Natural Resource Management program at Sul Ross State University.

Students have come from all over the United States, and even internationally,

## CENTER FOR LAND STEWARDSHIP AND STAKEHOLDER ENGAGEMENT Helping Landowners Meet Their Conservation Goals BORDERLANDS ONSERVING THE LAST FRONTIER

to join the BRI research team. During its first 15 years, more than 100 students have received their master's degree with a thesis project focused on conservation research in the Trans-Pecos.

This focus on Trans-Pecos' natural resources has helped build the knowledge base of the wildlife in the region. Researchers continue to learn more about their diets, the factors influencing their survival, the boundaries of their range, habitat selection, and inter-species overlap.

Wildlife studies cover many species, including mule deer, pronghorn, kit foxes, black bears, mountain lions, grassland birds, hummingbirds, small mammals, and more. Research also includes the study of wildlife habitat, livestock, and rangeland relationships.

Researchers often do their work in unchartered territories.

BRI Big Game Specialist and Assistant Professor of Natural Resource Management Dr. Justin T. French was one of those master's students. He attended BRI as a graduate assistant to study pronghorn foraging ecology as a component of a pronghorn restoration project led by Texas Parks and Wildlife Department (TPWD).

French graduated in 2015, earned his Ph.D., and promptly returned to West Texas to work with BRI as a post-doc, where, as a faculty member, he now studies the interactions of aoudad and desert bighorn sheep.

TPWD has led multiple restoration initiatives in West Texas, and BRI has had the opportunity to partner on many

and to add data from a research capacity. One of those restoration efforts involved reestablishing desert bighorn sheep herds across West Texas.

"Desert bighorn restoration was a success," French said. "We achieved historic population levels."

But new threats face the herds, and that is where French's current work comes into play.

"Bacterial pneumonia and aoudad interactions imperil that success," French noted. He is now mentoring new cohorts of BRI graduate assistants as they study the carrying capacity, space use, competition, and disease risk to desert bighorn sheep.

Fifteen years ago, there weren't any organizations dedicated to this kind of work



Taking in the beautiful scenery of the Trans-Pecos is one of the perks of doing fieldwork for Borderlands Research Institute graduate assistants.



Students and staff work together to process data and tissue samples before placing a tracking collar on this black bear in Black Gap Wildlife Management Area. BRI researchers are studying the natural recolonization of black bears in West Texas. What researchers learn about black bear ecology and habits will help black bears and people peacefully coexist.

in the Trans-Pecos. Dr. Louis A. Harveson, the Dan Allen Hughes Jr. Endowed Director and founder of BRI, as well as associate provost of research and development at Sul Ross, recalls seeing an opportunity for this type of institute at the university when he was a new hire almost 25 years ago.

Harveson first arrived to teach in the Natural Resource Management program at Sul Ross as a young Ph.D. graduate of the Caesar Kleberg Wildlife Research Institute at Texas A&M University Kingsville.

"Of all places in the state, the Trans-Pecos, with its intense variety of wildlife and vast landscapes, makes for the most compelling outdoor research laboratory," Harveson said. "I was inspired by the Caesar Kleberg Wildlife Research Institute model and began thinking about what the possibilities might be for a similar organization in West Texas that is based on public-private partnerships."

Sul Ross State University is surrounded by significant state managed lands, including Elephant Mountain and Black Gap Wildlife Management Areas and Big Bend Ranch State Park—Texas' largest state-managed park, plus Big Bend National Park along the border. But most importantly, landowners have been actively managing large tracts of ranchlands for livestock production and hunting for many generations. There was clearly a need for science-based wildlife and land management research dedicated to this region.

"All the ingredients were here to build a successful wildlife research organization," Harveson said.

With the support of the administration at Sul Ross State University, BRI was born. It was a natural expansion of long-lasting partnerships between private landowners, the Natural Resource Management program at Sul Ross, and cooperating state, federal, and non-governmental organizations that were already in place.

BRI Advisory Board Chairman Dan Allen Hughes Jr. has been involved since day one. He was attracted to BRI because of its ability to address important wildlife issues at the landowner level. Other parts of Texas had resources available to landowners regarding wildlife and habitat



Borderlands Research Institute graduate assistants get hands-on experience working with wildlife of the Trans-Pecos, alongside agency partners like Texas Parks and Wildlife Department.



management, and there was a need for that in West Texas.

Hughes grew up as an active hunter and outdoorsman all over Texas. He has held leadership positions in a variety of organizations, including chairman of the Texas Parks and Wildlife Commission.

His family stewards a ranch in Culberson County. While developing a management program for the wildlife there, he wondered what the home range was for mule deer bucks. No one in West Texas had a clear answer.

Enter BRI. Researchers conducted one of their earliest studies on mule deer, using the latest technology in tracking collars to follow the animals for five years. The results showed a much larger home range than was expected, approximately 15,000 acres on average, for adult males. Some bucks would roam as many as 20 to 30 miles before returning to their home base.

"It all comes back to BRI doing studies that have never been done in the Trans-Pecos," Hughes said.

BRI staff has grown from a couple of professors to now include a handful of post-doc researchers, four endowed positions, support staff, and a communications team. Collectively, they produce multiple research papers, newsletters, scientific publications, and reports each year.

"Our whole purpose is to share data with landowners and land managers about how wildlife and landscapes are most effectively conserved and managed," Harveson said.

The transparency with which the organization operates and its emphasis on outreach has helped BRI gain its stellar reputation.

"A lot of people know BRI; it's very well respected," Hughes said. "Biologists, ranchers, conservationists recognize the good work BRI has done with Trans-Pecos wildlife, and they appreciate the value of science-based research to guide management decisions."

The scope and scale of projects has broadened as researchers build on the strong foundation laid in the organization's early years.

Over the next 15 years, BRI researchers will continue to expand our understanding

of Trans-Pecos wildlife. Several long-term projects are already underway, including the study of black bears as they begin to naturally recolonize Texas.

Black bears were extirpated from Texas by the 1950s, but have made a comeback on their own. BRI is working to understand their needs and habits on the landscape. This information will help Texans be the best stewards they can be for this incredible mammal as it returns to its native habitats.

Additionally, the organization's land stewardship program was recently es-

tablished. This program is dedicated to partnering with landowners on habitat enhancement projects that will benefit wildlife. They recently embarked on a collaborative multiyear project to restore function of riparian systems within the region.

Thanks to the growing support for conservation research in Texas, BRI envisions a bright future for wildlife and their habitats in West Texas.

Learn more about BRI at bri.sulross.edu and follow on social media @BorderlandsResearchInstitute. \*\*\text{\text{\$\text{\$\text{\$0}\$}}}

