**Desert Bighorn Sheep: A Comparison of Translocation Methods**

*Taylor Daily, Carlos Gonzalez, Louis Harveson (BRI), & Froylan Hernandez (TPWD); Photos by Ben Masters (above) and Josh Cross*

Desert bighorn sheep once occurred throughout the Trans-Pecos region of Texas, and were distributed throughout 16 mountain ranges with an estimated population of 1,000–1,500 individuals during the 1800s. However, by the 1960s, it is believed that desert bighorn sheep had been extirpated from Texas.

To initiate restoration efforts, Texas Parks and Wildlife Department (TPWD) began desert bighorn sheep translocations by bringing individuals from other states. As part of translocation management strategies, desert bighorn sheep may be released by two different methods: 1) hard-release (i.e., translocated animals released immediately onto landscape) or 2) soft-release (i.e., released into an enclosure for an acclimation period before being released onto the landscape). Soft-release is usually preferred because it is thought to maintain site fidelity and aid in post-release survival, although it has been documented that some species do not benefit from this.

For many years BRI has partnered with TPWD to study translocated desert bighorn sheep populations throughout the Trans-Pecos. With this project we are starting to look into the differences among resident, hard-, and soft-released populations following translocation. We captured and equipped desert bighorn sheep with GPS radio collars during October 2017 and December 2017, with the first capture being resident individuals and the latter being hard- and soft-released translocated individuals. We monitored their survival for two years and documented cause-specific mortality.

Preliminary results indicate that soft-release may not be beneficial to survival. We have found that soft-released individuals had roughly three times the amount of mortalities and a lower overall annual survival than hard-released individuals. Our results also indicate that season has a large effect on mortality rates of desert bighorn sheep on an annual basis. The results will aid wildlife professionals in decision-making for future desert bighorn sheep restoration in Texas.
From the Director – Private Land Stewardship is at Our Core

Over the last year, we’ve been working with a stakeholder advisory group as part of the Respect Big Bend Initiative. The group consists of community members, landowners, energy representatives, and conservation professionals. Through a series of meetings and exercises, the group was tasked with identifying the conservation and cultural values for the region.

It is no surprise that “Ranching Heritage and Private Property Rights” was the highest ranking value identified by the group. Private land stewardship is key to the continued conservation of the region and overarches all other values identified by the group, including wildlife, sky islands, water, ecotourism, hunting, viewsheds, dark skies, and culture.

As you’ll see in this issue of Desert Tracks, we are working hard to share scientific information so all stewards can make good decisions for the resources we hold dear.

—Louis A. Harveson

Trans-Pecos Wildlife Conference in Alpine this August

The Trans-Pecos region of Texas is among the most biologically diverse regions of the world. Scientists and conservation partners will gather in Alpine, Texas, to present current wildlife and conservation research pertinent to this region.

The Borderlands Research Institute, Texas Wildlife Association, Texas Parks and Wildlife Department, and others will host the Trans-Pecos Wildlife Conference, Aug. 6–8, 2020, at the Sul Ross State University Espino Conference Center in the University Center, Alpine, Texas.

Landowners and other community members of the Trans-Pecos are encouraged to attend. Engaging with scientists about the most current information in wildlife and natural resources can assist in making effective decisions on land stewardship and biodiversity management.

This year, presentations will include talks and panel discussions on wildlife and conservation-related topics, including habitat, game species, birds, and carnivores in the greater Big Bend region.

The Trans-Pecos Wildlife Conference is held in Alpine every four years. More details and registration information to come.
Permian Basin Area Foundation (PBAF) is providing a $300,000 grant to the Borderlands Research Institute to support stakeholder engagement and outreach as part of the Respect Big Bend Coalition’s efforts in West Texas.

Respect Big Bend is a collaboration between local landowners, community residents and leadership, scientists, industry, researchers, and conservationists formed to address energy development’s impact in the greater Big Bend region of far West Texas. The coalition aims to inspire and empower all stakeholders to conserve unique resources and protect iconic communities of the greater Big Bend region of Texas while developing energy responsibly.

“Borderlands Research Institute is a great asset to West Texas, and we applaud their scientific approach in advancing best practices for land and wildlife conservation,” said Guy McCrary, president and CEO of Permian Basin Area Foundation. “We are pleased to join with the Cynthia and George Mitchell Foundation and others in supporting the Respect Big Bend Coalition. We believe that BRI is well-positioned to advance this important initiative.”

BRI is taking a leadership role in coordinating and implementing the outreach and education aspects of the project. Stakeholder groups that have been identified for this project include landowners, mineral owners, energy industry and service providers, community members, conservation partners, and regulators. BRI will be primarily responsible for communicating and meeting with the varied stakeholders through a variety of strategies, from private one-on-one meetings to broader community forums.

BRI Students Awarded More Than $100K in Scholarships

Ten Borderlands Research Institute graduate students have garnered $116,000 in scholarships over the 2019–2020 academic year, which is the most ever awarded to BRI students in a single year.

The San Antonio Livestock Exposition bestowed fellowships to four students. Nine students were honored with the Dan L. Duncan Scholarship, sponsored by the Houston Safari Club. The Virginia Matthews Law Scholarship, which was endowed last year, provided an additional two scholarships. Kudos to these deserving students!
Big Bend Seminar Series on Energy Development

A seminar series is underway in Alpine, Texas, engaging Big Bend community members to inform them on recent energy projections, potential impacts on communities, and to develop strategies to conserve the unique resources and communities of the region. The first seminars were held on Jan. 15 and Feb. 5. See details below for upcoming seminars in March and April at the Sul Ross State University Espino Conference Center at 6:30 pm. If possible, please register at https://respectbigbend.org/p/seminar-series.

Keynote: Joe Kiesecker - The Nature Conservancy of Texas
         Melinda Taylor - UT-Austin

April 22, 2020: The Case for the Trans-Pecos: Texas’ Last Frontier
Keynote: Roel Lopez - Texas A&M Natural Resources Institute
         Louis Harveson - Borderlands Research Institute at Sul Ross State University