

# DESERT TRACKS

**BORDERLANDS**  
RESEARCH ♦ INSTITUTE

CONSERVING THE LAST FRONTIER

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## The Power of Rocks: Using Trincheras to Enhance Scaled Quail Habitat

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**S**caled quail is an iconic game bird in the Chihuahuan Desert, particularly in the Trans-Pecos region of Texas. It serves as a vital wildlife species, indicating healthy rangelands. Despite this, scaled quail populations have experienced a decline across their Texas range, raising concerns about the well-being of the rangelands they inhabit. Primary hypotheses for this decline point to habitat loss due to overgrazing and mismanagement, leading to soil erosion and hindered plant growth.

Efforts to revive scaled quail populations have centered on providing food through feeders and artificial water sources, addressing only a fraction of the species requirements. However, the focus has shifted toward recognizing that a high-quality habitat can offer sufficient quality food and essential cover from weather elements and predators.

To enhance habitat quality, restoration practices in the Trans-Pecos region aim to mitigate soil erosion through water runoff management and increase ground moisture to foster plant growth. Among these practices are check dams, known as "trincheras" in Spanish. While trincheras have been utilized in the Western United States and Northern Mexico, further research is necessary to quantify their benefits.

In response to these questions, the Borderlands Research Institute conducted extensive research on a private ranch in Brewster County, Texas, where 130 trincheras were strategically implemented. This study assessed soil

accumulation at trinchera sites over two years during the monsoon season (August to September in 2022 and 2023).

Analysis of the collected data revealed significant sediment accumulation, extending up to six feet upstream from the trincheras. However, acknowledging the arid nature of rangelands characterized by scarce annual precipitation, the study recognizes that two years may not be sufficient to observe tangible changes in plant cover. Nevertheless, this research serves as a guiding light, informing the placement and expectations of ecohydrology improvements, ultimately contributing to more effective restoration of scaled quail habitat.



Sul Ross State University and BRI researchers and students constructed 130 trincheras at a private property in Brewster County. To measure soil capture, rebar posts were placed upstream and downstream from 50 of these trincheras. Significant soil accumulation was shown to occur upstream of the trincheras, and minimal soil loss occurred downstream.



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## From the Director – Cibolo Creek Ranch and John B. Poindexter, 2024 West Texas Conservationist of the Year

The Borderlands Research Foundation and Borderlands Research Institute were proud to honor Cibolo Creek Ranch and John B. Poindexter as the recipient of the West Texas Conservationist of the Year award for 2024 in Houston this April. This award honors visionary conservationists who are making a positive impact that will be felt for generations.

As the steward of Cibolo Creek Ranch, a sprawling 30,000-acre expanse in the Big Bend region, Poindexter has not only preserved the land’s ecological integrity but also its historical soul. Under his watchful care, the ranch has become a sanctuary for both wildlife and history. His visionary approach ensures that the natural splendor and storied past of these lands will be treasured forever.

His engagement with the natural environment is further demonstrated through

the John B. Poindexter Endowed Fellowship for Desert Quail Research, established with the Borderlands Research Institute, to deepen the understanding and ensure the conservation of these iconic species of the Texas landscape.

John’s commitment to conservation is evident in his beloved Cibolo Creek Ranch. Cibolo Creek Ranch is one of the most spectacular and one of the most visited ranches in West Texas. Few ranches can match the historical, cultural, and natural resource value that radiates from Cibolo Creek Ranch.

We are so grateful to our friends and supporters for making the celebration for John B. Poindexter such a memorable awards reception!

—Louis A. Harveson



The 2024 West Texas Conservationist of the Year was awarded to John B. Poindexter (center). John is joined by Dan Allen Hughes, Jr., chairman of the BRI Advisory Board (left) and Dr. Louis Harveson, Director of BRI.

## Water in the Desert Conference Brings Together Experts from Across the State



Texas senators Charles Perry and Cesar Blanco were among the panelists at the conference. Topics included state water policy, desalination of wastewater from oil fields, aging infrastructure, and the needs and challenges unique to West Texas landowners and ranchers. (Photo credit: Scott Del Vecchio)

**A**fter a successful Water in the Desert conference in January, Sul Ross State University (SRSU) officials are working to enhance the university's influence regarding water issues in West Texas. The conference brought together over 260 attendees.

"Our university is perhaps the most appropriate location for teachers and researchers, legislators and landowners, conservationists and innovators, to meet and share information and ideas," said SRSU President Carlos Hernandez. "We were pleased to see the interest in this important topic, and we hope this will be the first of many years of partnership with the Water in the Desert conference."

The conference was funded by organizations from across the state, including the Dixon Water Foundation, Environmental Defense Fund, Horizon Foundation, King Land & Water, Lyda Hill Philanthropies, Shield Ranch, Still Water Foundation, and Texas Wellspring Fund. Several organizing partners also played a role in the conference, including Borderlands Research Institute, Rio Grande Joint Venture, Rio Grande Research Center, Texas Agricultural Land Trust, Texas Parks and Wildlife, Texas Runs on Water, Texas Water Foundation, and The Nature Conservancy.

University officials hope to build on the interest generated by the conference going forward.

## BRI Welcomes Maxwell and Seiders as New Advisory Board Members



**N**yle Maxwell is a native Texan who has dedicated his life to family, philanthropy and public service. The former Round Rock mayor is best known as a 40-year leader in the auto industry with the Nyle Maxwell Family of Dealerships in Central Texas. Nyle and wife Nancy are parents to four children, grandparents to three grandsons, and live in Georgetown.

With ranches near El Paso, Alpine and Brady, Nyle is passionate about hunting, conservation, and managing wildlife. Nyle is a life member of the Texas Wildlife Association (TWA), and is currently serving as TWA Vice President. He is also a regular member of the prestigious Boone and Crockett Club.



**R**yan Seiders grew up in Driftwood, Texas, and has a deep passion for hunting and fishing. It was that passion for the outdoors and an entrepreneurial spirit that led Ryan, and his brother Roy, to co-found YETI Coolers in 2006. Today, YETI products are the yardstick by which all other outdoor products are measured and include far more than the coolers that launched their business.

Ryan's passion for the outdoors has only grown, with favorite pursuits being white-tailed deer, quail, sheep, redfish, and tarpon. He has ranching interests in the South Texas Brushlands, the Coastal Prairies, the Trans-Pecos, and Kansas. Ryan resides in Austin with his three children. Ryan also serves as a trustee for the International Game Fish Association and Texas Foundation for Conservation.



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## Apache Corporation Partners with BRI on Well Pad Restoration



**B**orderlands Research Institute is partnering with Apache Corporation to launch a well pad restoration research project. Through this multiyear partnership, researchers at BRI will investigate methods to improve habitat restoration efforts in the Permian Basin with the goal of publishing a science-backed, best practices reclamation document to be shared with other Permian operators.

“We are honored to partner with BRI on this important effort, which aligns with our

mission to meet the growing demand for energy and to do so in a cleaner, more sustainable way,” said Jessica Jackson, Apache’s vice president of environment, health and safety. “For many years, Apache has worked to restore well pads to their habitat potential. To further our efforts to continuously improve, Apache is supporting scientific research at sites in the Permian Basin to study the efficacy of methods for habitat restoration.”