

Desert Tracks

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



RESEARCH IN ACTION:

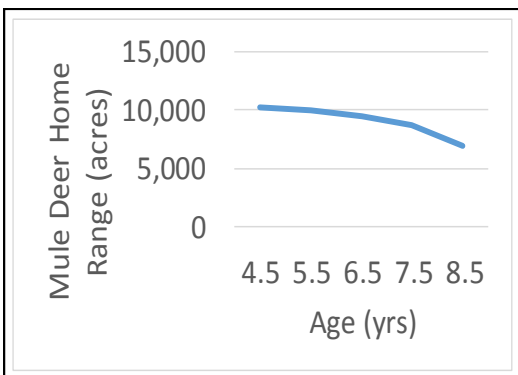
Effects of Age on Home Ranges of Mule Deer Bucks

Louis A. Harveson, Thomas S. Janke, and Andy James

Radio telemetry studies provide unique opportunities to better understand the movements of wildlife relative to an animal's life cycle. Mule deer are ecologically and economically important to West Texas landowners, managers, and wildlife enthusiasts.

We evaluated the effects of age on the movements of mature mule bucks from 2006 to 2017 across three study sites in the Trans-Pecos. We have captured, radioed, and monitored more than 75 different mule deer bucks from six different ranches. Mule deer were aged and fitted with radio collars. Radio collars were programmed to record a geographic location (GPS point) every five hours for as many as two years. Home ranges were estimated for each age cohort.

As seen below, mule deer home ranges consistently got smaller as age of bucks got older. Young mule deer (4.5-year old) had the largest ranges of approximately 10,000 acres, whereas our oldest cohort (8.5-year old) had reduced their home ranges by al-



As mule deer bucks age, their home range size decreases. Because they are lower in the social hierarchy, younger bucks travel more, looking for reproductive opportunities, whereas more mature bucks have established their territories and harem of does.

most 30 percent (7,000 acres).

Mule deer bucks can breed at an early age, but generally are unable to establish territories until they are more mature. Being able to establish a territory and defend a harem is critical to breeding opportunities. Additionally, the antlers of mule deer generally do not peak until 8.5–9.5 years old. As they become more dominant, they are more successful in gathering and protecting their harem of does.

Younger bucks are constantly looking for breeding opportunities and being chased off by more mature bucks. Thus, younger bucks have larger home ranges than more mature bucks.

Summer 2017

Volume 10, Issue 2

Editor: Patricia Moody Harveson

Inside this issue:

| | |
|--|---|
| Research in Action | 1 |
| From the Director | 2 |
| Pronghorn Report Available | 2 |
| Harte Joins Board | 2 |
| TPWF Establishes Kelly R. Thompson Professorship | 3 |
| Harveson Receives Award | 3 |
| Wild Texas Film Tour | 4 |

BRI Researchers:

Dr. Louis A. Harveson, Dan Allen Hughes, Jr., Endowed Director and Professor of Wildlife Management

- Big Game Ecology & Management

Dr. Patricia Moody Harveson, Associate Professor of Conservation Biology

- Population Ecology & Spatial and Systems Analysis

Dr. Robert J. Kinucan, Professor of Range Management

- Disturbance Ecology & Plant Biology

Dr. Ryan S. Luna, Kelly R. Thompson Professor in Quail Research and Assistant Professor of Wildlife Management

- Upland Gamebird Ecology & Management

Dr. Ryan O'Shaughnessy, Assistant Professor of Agribusiness

- Agribusiness & Wetland Ecology

Dr. Bonnie J. Warnock, Clint Josey Endowed Chair and Professor of Sustainable Ranch Management

- Rangeland Ecology & Sustainable Ranch Management

Dr. Whitney Gann, Research Scientist

- Pronghorn Ecology & Restoration



Advisory Board member, Kelly R. Thompson was recently surprised by Texas Parks and Wildlife Foundation trustees as they established a named professorship in his honor at BRI. The new Kelly R. Thompson Professorship in Quail Research will have immediate and lasting impacts on quail conservation.

From the Director—“A Rising Tide Lifts All Boats”

John F. Kennedy often used the adage “a rising tide lifts all boats.” Although his remarks were specific to economic development during the 1960s, the expression can easily be applied to one of our conservation partners: Texas Parks and Wildlife Foundation (TPWF).

TPWF has been a long-time partner of the Borderlands Research Institute (BRI). TPWF is the primary funder of the Pronghorn Restoration Project—a monumental effort by Texas Parks and Wildlife Department, BRI, and private landowners to restore declining pronghorn numbers in the Trans-Pecos.

TPWF was created to provide private support

for TPWF and to ensure that wild things and wild places are available for all Texans. TPWF recently celebrated their 25th Anniversary and has certainly hit their stride as they are wrapping up a \$100,000,000 campaign!

The leadership of their trustees and staff has been tremendous to BRI and many other conservation organizations. As you’ll read on page 3, TPWF has pledged \$600,000 to BRI to establish the Kelly R. Thompson Professorship in Quail Research.

TPWF’s “tide” has certainly lifted BRI’s “boat!”

—Louis A. Harveson

Borderlands Research Institute Advisory Board

Elliott G. Hayne, Chair
San Antonio, TX

J.P. Bryan
Houston, TX

Toby Darden
Fort Worth, TX

Charles Davidson
San Antonio, TX

Will S. Harte
Fort Davis, TX

Dan Allen Hughes, Jr.
Beeville, TX

Parker Johnson
Houston, TX

James King
Fort Davis, TX

Bobby McKnight
Fort Davis, TX

Dana Nunley
Sabinal, TX

John B. Poindexter
Houston, TX

Ruthie Bowman Russell
San Antonio, TX

Allen W. Smith
Austin, TX

Kelly R. Thompson
Fort Worth, TX

Justin B. Yarborough
Austin, TX

2017 Pronghorn Research Report Available Online

The Borderlands Research Institute recently released a report updating progress on the Pronghorn Restoration Project. Since 2011, the pronghorn restoration project has translocated 668 pronghorn from

surplus populations in the Texas Panhandle to supplement depleted populations in the Trans-Pecos. If you would like to receive a copy of the report, contact us or go to http://bri.sulross.edu/pubs_reports.html.

Please Welcome Will Harte to BRI Advisory Board

Will Harte is a native Texan and active in ranching and the oil and gas business. For the past decade, Will has been actively involved in supporting education initiatives. Will currently serves as Secretary of the Choose to Succeed board and is a trustee on several other private foundations, including San Antonio’s Ewing Halsell Foundation. He is a former trustee of Texas Agricultural Land Trust, Texas Wildlife Association, American

Farmlands Trust, and Texas Parks and Wildlife Foundation. Will and his wife Pam live and ranch in the Davis Mountains.



TPWF Establishes Kelly R. Thompson Professorship

The Borderlands Research Institute (BRI) at Sul Ross State University has announced that Dr. Ryan Luna has been appointed to the newly created Kelly R. Thompson Professorship in Quail Research. The professorship was established earlier this year by Texas Parks and Wildlife Foundation, in honor of Kelly R. Thompson, who served as chair of its board of trustees for six years. Thompson also serves on BRI's Advisory Board.

Dr. Luna has been a Research Scientist with BRI and an Assistant Professor of Wildlife Management in the Department of Natural Resource Management at Sul Ross State University since 2013. He earned his Master's degree from University of Texas at San Antonio, and a PhD from Texas State University. After receiving his bachelor's degree from Texas Tech University, Ryan worked as a Game Warden for New Mexico Department of Game and Fish until he returned to Texas to begin his master's and doctoral work.

"Since Ryan's arrival at BRI, he has been a workhorse in the classroom and in the research arena," said Dr. Louis Harveson, who is the Dan Allen Hughes, Jr., Endowed Direc-

tor and Professor of Wildlife Management at BRI. "Ryan dove in head first with our Desert Quail Research Program. The financial investment from TPWF and the creation of the Thompson Professorship will help us sustain and grow our quail conservation efforts."

Besides his leadership role at TPWF, Thompson has served on Texas Parks and Wildlife Department's Upland Game Bird Advisory Board. He has spent much of his adult life dedicated to conservation. The named professorship is the second for BRI. The Dan Allen Hughes, Jr., Endowed Director and Professor of Wildlife Management was created in 2012. Since BRI only gets about ten percent of its funding from the university, these named positions provide critical sustainable funding.

"I've had the privilege to work with Mr. Thompson the last couple of years on Texas Parks and Wildlife Department's Upland Gamebird Advisory Committee," said Dr. Luna. "He's a strong leader and is certainly passionate about quail. I'm honored to carry his name and we're grateful for his support of BRI."



Dr. Ryan S. Luna was recently named the Kelly R. Thompson Professor in Quail Research.

Over 90% of our funding comes through private donations!

Please consider making a tax-deductible donation to the Borderlands Research Institute.

Harveson Receives Distinguished Faculty Award

Dr. Louis Harveson was recently awarded the President's Distinguished Faculty Achievement Award. Harveson has been a faculty member in Natural Resource Management since 1998 and currently serves as Professor of Wildlife Management and the Dan Allen Hughes, Jr., Endowed Director of the Borderlands Research Institute.

Harveson's teaching and research focus

has centered on conserving wildlife and promoting private land stewardship in Texas.

"The selection of Dr. Harveson as the university's first Distinguished Faculty Achievement Award recipient definitely meets the anticipated standards of excellence," said Dr. Bill Kibler, Sul Ross President. "His accomplishments embody the goals this university strives to meet."



Sul Ross State University President Dr. Bill Kibler (right) presents Dr. Louis A. Harveson with the President's Distinguished Faculty Achievement Award.



Sul Ross State University
P.O. Box C-21
Alpine, TX 79832
432.837.8225
<http://bri.sulross.edu>

Address Service Requested
272003-120473-40-RES

Non-Profit Org.
U.S. Postage
PAID
Alpine, Texas
Permit No. 2

Connect with us:



Texas State University System Board of Regents

Ms. Rossanna Salazar, Chair
Austin, TX

Mr. William F. Scott, Vice Chair
Nederland, TX

Mr. Charlie Amato
San Antonio, TX

Ms. Veronica Muzquiz Edwards
San Antonio, TX

Dr. Jaime R. Garza
San Antonio, TX

Mr. David Montagne
Beaumont, TX

Mr. Vernon Reaser III
Bellaire, TX

Mr. Alan L. Tinsley
Madisonville, TX

Ms. Donna N. Williams
Arlington, TX

Ms. Kaitlyn Tyra, Student
Huntsville, TX

Dr. Brian McCall, Chancellor
Austin, TX

Wild Texas Film Tour—Coming to a City Near You!

Join the Borderlands Research Institute at the 2017 Wild Texas Film Tour as we celebrate wildlife, conservation, and adventure in Texas!

The 2017 Wild Texas Film Tour is an 11-city speaker tour featuring inspiring adventures and conservation stories. The goal of the tour is to showcase important local conservation issues, inspire viewers to engage in grassroots efforts, and increase recruitment for local conservation organizations. The 2017 Wild Texas Film Tour is hosted by filmmaker and conservationist Ben Masters and will feature several films, including two that highlight BRI research efforts.

Sponsors of the 2017 Wild Texas Film Tour include BRI, Texas Parks and Wildlife Foundation, YETI, Stewards of the Wild, King



Locations and dates for the 2017 Wild Texas Film Tour include: San Antonio (Sep 21), Houston (Sep 27), College Station (Sep 28), Corpus Christi (Oct 5), Austin (Oct 10), Amarillo (Oct 12), Midland (Oct 19), Marfa (Oct 20), El Paso (Oct 23), Dallas (Oct 25), and Fort Worth (Oct 26).

Land & Water, and Epic Provisions.

Various members of the BRI Research Team will be in attendance, so make plans now to attend the 2017 Wild Texas Film Tour! Go to www.wildfilmtour.com to learn more.