

Publication of the Texas Bighorn Society

Restoring Bighorn Sheep to their native ranges in Texas, and ensuring the viability of the habitat







EL CARMEN LAND & CONSERVATION CO. LLC CEMEX USA & JOSIAH AUSTIN RANCHES

A WORKING PARTNER WITH THE TEXAS BIGHORN SOCIETY TO INSURE THE FUTURE OF THE DESERT BIGHORN SHEEP IN WEST TEXAS

The Bighorn

The official magazine of the Texas Bighorn Society Advertising Ranges Effective 1/1/2009 The Bighorn is published 3 times annually

Technical Specifications

The Bighorn is a four-color glossy publication, and the following is required:

Ads should be supplied via email in the following formats:

* Jpeg (Preferred) or

* PDF

Each Ad should be at least 300 dpi (minimum)

All other formats must be approved

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Third Page	\$120.00
Ouarter Page	\$75.00

Note: Exchange of advertising for donations, sponsorships, and in-kind advertising will be considered on an individual basis.

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Terry Rathert and Kat Hunter





Cover Photo Hailey Barton

The Bighorn



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crisy@texasbighornsociety.org

Letter from President Sam Cunningham

TBS Membership,

I would like to extend a personal "Thank You" to everyone who participated in the work project at the Franklin Mountain State Park. It was a successful project and we completed construction of two mountain top guzzlers in the Park. As you are aware, we will be translocating sheep from Elephant Mountain to the Franklin Mountain State Park in the fall, and having these guzzlers in place gives us a head start on providing water for the sheep as well as resident wildlife.

This year marks the 35th Roundup and it will be at the Odessa Marriott in Odessa, Texas, on Saturday, June 8, 2024. This year will be a Saturday only banquet, but we will have a Welcome Reception Friday night from 6-8pm. Saturday morning there will be a Research Update with presentations from the research projects that TBS is sponsoring. Please visit the TBS website for more information and for registration instructions.

We have lots of great items in both our live and silent auctions. In the following pages you will see detailed descriptions of those opportunities. Included are a Desert Bighorn Sheep tag, Red Rock Ranch Mule Deer Hunt, a Texas Pronghorn Antelope hunt, a Mule Deer Hunt at La Palmosa, an Argentinian Dove hunt and several others. This year we will have two dedicated youth hunting opportunities, a Texas Dall Sheep hunt, and a New Mexico Pronghorn Antelope hunt. As in previous years, all attendees 16 years and under will be entered in a drawing for a FREE Texas Lifetime Hunting and Fishing License. There are also great raffle items as well as fun games with fabulous prizes.

Looking forward to seeing everyone in Odessa!

Thank you





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Hank Mason Hailey Barton
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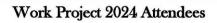
Kelly Wesner

Thank you to our newest members!

Please help us stay current with your address and email contact information. Please contact Kathy Boone at info@texasbighornsociety.org if you have moved or changed email or contact information.

Franklin Mountains – 2024 TBS Work Project

Thank you to all of our volunteers for another successful TBS Work Project!



Ethan Cole Ames

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Casey Cunningham

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Manny Fernandez

Kenneth Garcia

Mark Garrett

Ava Gentzler

Zoe Gentzler

Brian Giles

Michael Gomez

Doug Grahmann

Tyler Grahmann

Michael Guerrero

Patrick Guerrero

Richard Gutierrez

John Gutz

David Harrell

Bobby Harrison

David Heft

Forylan Hernandez

Ace High

Lynton Holloway

Mike Janis

Robert Joseph

Hill Krause

Kevin LeGrow

Scott Lerich

Adam Maddox

Bob McCoy

Cody McEntire

Billy Pat McKinney

Bonnie McKinney

Connor McMichael

John Meyer

Walker Netherton

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Dirk Parks

Ravin Reddy

Don Schmidt

Sloan Schmidt

Travis Smith

Peyton Smith

Keith Smotherman

Randy Stolte

Crisy Stratton

Tonya Trevino

Julie Tripp

Pablo Viramontes

Iames Weaver

Cabot Wolfom

oudot ii onom

Mike Zumar





Franklin Mountains – 2024 TBS Work Project

In March 2024, members and friends of the Texas Bighorn Society met in El Paso to install two new water guzzlers in the Franklin Mountains. Later in 2024, Texas Parks and Wildlife Department (TPWD) with the support of TBS will be translocating bighorn sheep from the Elephant Mountain Wildlife Management Area to the Franklins. This new population is intended to serve as an additional source population of bighorn sheep, protected from interactions with aoudad and potential disease issues, and to secure another healthy population in Texas.

We met Thursday morning near the Park entrance at the staging area and started work. Prepping frames and tanks and dividing supplies for the two sites – everyone worked hard all morning to ensure the building process in the mountains would go smoothly. After lunch we loaded the helicopter in groups and left for the sites where we would be building the guzzlers for the next two days.



Under Lynton Holloway and Ace High's leadership, we began positioning the frames and receiving the supplies and tools we would need for our work. We cleared workspaces Thursday afternoon and secured the tanks and tools for the following day. Friday was lost due to high winds, but that was offset by a great BBO dinner and auction that evening before everyone retired early in preparation for a full Saturday. Arriving early on Saturday morning, everyone was back at their assigned sites as soon as the morning fog lifted. Both groups worked all day, taking a short break for lunch, and both guzzler projects were completed and ready for the thirsty sheep arriving later this year.









Thank you to both Ace and Lynton for managing the project and all of the volunteers! They ensured everyone was safe, and that the projects progressed seamlessly. Thank you to all the TBS members who made it out to West Texas - this project could not have been completed without everyone's dedication to keeping sheep on the mountain. Also, a heartfelt thank you to the Cesar Mendez and the Franklin Mountains State Park crew for this opportunity to expand the range and provide a sanctuary for future bighorn sheep. This year's work project went very well, and we are looking forward to the TBS Work Project '25!

Submitted by Chris Carter









"Restoring desert bighorn sheep to their native ranges in Texas and ensuring the viability of their habitat"



2024 Roundup Banquet

Odessa Marriott

June 8th @ 5PM

Dinner/Live Auction/Silent Auction/ Raffles & Games/ Morning Golf Tournament





Register online

The Bighorn Page 12 texasbighornsociety.org or by phone 321-525-6724



2024 Sponsorship Opportunity

Become a Sponsor in Odessa at our 35th Annual Roundup Banquet

Tier I – Bighorn Sponsor

\$10,000/ \$9,000

- \$9,000 for Tier 1
 Sponsorship OR \$10,000
 with 8 Banquet
 Admissions
- Acknowledgement as Tier
 1 Sponsor on website and social media
- Acknowledgement as Tier
 1 Sponsor our 2024
 auction catalog
- Company banner displayed at the Banquet
- Full page ad in our 2024 auction catalog
- Advertising insert into our Banquet welcome packets
- Tier 1 Firearm gift for Sponsor – Value \$1,500

Tier 2 - Ewe Sponsor

\$5,000/ \$4,000

- \$4,000 for Tier 2
 Sponsorship OR \$5,000
 with 8 Banquet
 Admissions
- Acknowledgement as Tier2 Sponsor on website
- Acknowledgement as Tier
 Sponsor our 2024
 auction catalog
- Company banner displayed at the Banquet
- Half page ad in our 2024 auction catalog
- Tier 2 Firearm gift for Sponsor – Value \$1,000

Tier 3 - Lamb Sponsor

\$3,500/ **\$2.500**

- \$2,500 for Tier 3
 Sponsorship OR \$3,500
 with 8 Banquet
 Admissions
- Acknowledgement as Tier
 3 Sponsor on website
- Acknowledgement as Tier
 3 Sponsor our 2024
 auction catalog
- Half page ad in our 2024 auction catalog
- Tier 3 Firearm gift for Sponsor – Value \$500





Texas is home to one of the most successful desert bighorn sheep restoration programs in exhistance, and that success is directly attributed to a strong working relationship between Texas Bighorn Society, Texas Parks and Wildlife, and private land owners. 100% of the proceeds from this tag will be used for the restoration, management, and research of desert bighorn sheep in Texas.

More Information:

Season Dates: 11/15/2025 - 9/30/2026

Froylan Hernandez
Bighorn Sheep Program Leader
Texas Parks & Wildlife Department
432-837-0666 ext 227
froylan.hernandez@tpwd.texas.gov





2025 Season

This hunt will be valid for one pronghorn hunt with High West Outfitters in the 2025 season. Hunt can be done in Texas or New Mexico, buyers choice.

More Information:

Jim Breck @ 915-526-3001 or Jasper @ 432-227-4302





In the Chihuahuan desert, this ranch is known for producing bucks with wide frames and an excess of antler mass. La Palmosa only encourages taking large, mature bucks and most hunting is done during the January rut when the bucks transit through known areas of the ranch in search of does.

More Information:

www.lapalmosa.com or info@lapalmosa.org

2025 Season





2024/2025 MLDP Season

This hunt produces some of the best mule deer in the state of Texas, and is certainly a great opportunity at a big deer. In the past 3 years we have taken 3 deer over 195".

Dates and Guiding must be coordinated with High West Outfitters.

More Information:

Jim Breck @ 915-526-3001 or Jasper @ 432-227-4302



Texas Dall Youth Sheep Hunt



2024/25 OR 2025/26 - TBD

Come shoot a Texas Dall ram for ages 16 and under in Junction, TX. Parents must be present. This will be a weekend hunt with arrival on Friday and departure on Sunday with lodging provided. Recommended hunt time is November through February for thicker coat. Must have hunter safety course completed. If scheduling during deer season, a whitetail could be added for further donation to TBS (parent elligible for this add on as well). Dates to be determined with host.

More Information:

Rob Cinclair 512-917-1409



35th ANNUAL TBS ROUNDUP

Saturday, June 8th, 2024 Odessa Marriott Hotel & Conference

A 3% Credit Card Service Charge will be added to all auction purchases.

To avoid this, please bring your checkbook!

Name		Guest Name	
Address		City/State	Zip Code
Phone Number		Email Address	
Registration: (per	person) Amount		(per person) Amount
Before May 15th \$150	.00 \$	After May 15th	\$175.00 \$
Kids 12 & under FREI	Name:		
Welcome FREI	– 7:30 PM	Will Attend Will NOT Attend West Toyas Huntin	g & Fishing Heritage Museun
Gathering		West Tenas Hallall	g
	0.00 \$	West Texas Hallall	ggg
Saturday Golf: \$10	ROUNDUP SPON	SORSHIP OPTION	
Saturday Golf: \$10 RESERVED TABLES: \$2,0	ROUNDUP SPON	<mark>ISORSHIP OPTION</mark> Please call the T	BS office at 806-745-7783 n or to become a sponsor.
Saturday Golf: \$10 RESERVED TABLES: \$2,0	ROUNDUP SPON 00 IP: SEE OPTIONS ATTACHED	<mark>ISORSHIP OPTION</mark> Please call the T	BS office at 806-745-7783
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HOTEL INFORMATION

Reservation Cut-Off Date: May 15, 2024
TBS GROUP RATE: \$189 Regular OR \$239 for M-Club Access
GROUP CODE BY PHONE ONLY: Texas Bighorn Society
(432)580-5805 – Odessa Marriott, 305 East 5th St., Odessa, TX 79761

MAIL TO: TBS, 1615 West Loop 289, Lubbock, TX 79416, or FAX to 806-745-8475

Telephone: 806-745-7783 Text: 321-525-6724 Email: crisy@texasbighornsociety.org

Full Refund less \$10.00 handling fee for cancellations received on or before May 15, 2024 No refunds for cancellations after May 15, 2024

Value of Meals: \$75.00 www.texasbighornsociety.org



Carrying Capacity of Bighorn Sheep and Mule Deer on Elephant Mountain Wildlife Management Area

Hailey Barton, Froylan Hernandez, Cody McEntire, Shawn Gray, Carlos Gonzalez, Levi Heffelfinger, and Justin French

Elephant Mountain Wildlife Management Area is a vital component in bighorn sheep restoration in the state of Texas. The property was generously donated to the Texas Parks & Wildlife Department (TPWD) in 1985, with the stipulation that it be used for bighorn restoration and the conservation of other native species. In 1987, the first bighorn from Sierra Diablo Wildlife Management Area were released on Elephant Mountain, 10 rams and 10 ewes. The population steadily grew and the first relocation of bighorn from Elephant Mountain occurred in 2010 with animals released in Black Gap Wildlife Management Area and Big Bend Ranch State Park. Since then, Elephant Mountain has been the Texas nursery herd, providing source stock to bolster other Trans-Pecos bighorn populations. This role is increasingly important, given the challenges of increasing aoudad populations and recent outbreaks of Mycoplasma ovipnuemoniae (M. ovi) in some Trans-Pecos bighorn populations.

Managing a nursery herd is no small task and requires balancing the need for surplus animals against the health of the habitat that supports them. Understanding carrying capacity, or the number of animals a given area can support, is critical to such efforts. While it may seem like a simple idea, carrying capacity is remarkably complex because it is a moving target. Normal seasonal changes and drought cycles influence how much forage is available to animals in several ways, some of which are easier to predict than others. It also takes a remarkable amount of data to estimate carrying capacity from vegetation sampling, which makes traditional methods both labor and cost intensive. Often, costs prevent yearly sampling, so estimates are not routine enough to keep pace with changes in carrying capacity. Even if they could, the resulting estimates usually have little precision at achievable samples sizes, which causes real problems. For example, an estimate of 50 animals is not very useful if the margin of error ranges from 5 to 150, which is not uncommon in such efforts. Thus, the limited usefulness of traditional estimates often does not outweigh their cost and many managers instead operate from rules of thumb gained from experience. At Elephant Mountain, past research has estimated that the mountain can support approximately 160 sheep. Staff use this as a guideline for decision making and adjust their decisions to conditions on the ground, but there is a need for updated and modern approaches to estimating carrying capacity on Elephant Mountain.



To that end TPWD and the Borderlands Research Institute partnered to investigate cost-effective methods of monitoring desert bighorn carrying capacity at Elephant Mountain. We are building upon past research on Elephant, and in the Mojave Desert that could allow us to estimate carrying capacity via satellite, instead of on the ground. A 2016 study in the Mojave Desert found that fecal nutrition measures were strongly related to satellite-derived normalized difference vegetation index (NDVI) data within their range. If the relationship between NDVI and nutrition further depends on animal density, as theory would suggest, we can leverage it to estimate carrying capacity from continued satellite monitoring. This framework would provide much more precise estimates than traditional methods and, because the satellite data involved are freely available, it would do so at no cost.

In February 2023, we deployed 57 collars on Elephant Mountain, 30 of which were placed on bighorn (15 ewes, 15 rams), 24 on mule deer (15 does, 9 rams), and 3 on elk (3 cows). GPS coordinates and times for each collar are reported every 6 hours to map how these animals are using the landscape. This shows us what areas are important to consider in estimating carrying capacity for each species, and which are not. So far, median range size for rams is 5,890 acres and 3,141 acres for ewes. Mule deer median range sizes are 5,890 acres for bucks and 3,141 acres for does. Importantly, all bighorn have stayed on Elephant Mountain itself, while mule deer and elk use the surrounding areas as well. This means that the area considered for bighorn carrying capacity is less than that of the other two species.



However, satellite data do not capture everything about bighorn habitat. For example, measuring the productivity of vegetation with NDVI does not necessarily tell you if that vegetation is the kind bighorn need. Because of this, we aren't abandoning on-the-ground sampling. Instead, we are collecting information about vegetation composition, productivity, and browse pressure on the ground as well. This will allow us to see what measures are captured well with the satellite, and which are not. By focusing field time on the data that add value, we can let the satellites do what they do best and get better estimates of the things they miss. Thus, by combining traditional estimators with advanced satellite technology we can get the best of both worlds.



While our work continues, we look forward to sharing our results. We deeply appreciate the Texas Bighorn Society for funding a large portion of this research, and their commitment to bighorn restoration in Texas. The results from this research at Elephant Mountain will help us to ensure that we are doing all we can to sustainably manage our nursey herd so that it can continue to support restoration for years to come.

Adopt-A-Guzzler Update

Text and Photos Provided by Terry Rathert and Kat Hunter

During January and February, seventeen volunteers visited seven guzzlers at Black Gap Wildlife Management Area. In the last twenty four months, nearly half of the 'high guzzlers' - those for which no road exists and therefore require a hike or a helicopter to service - have been checked/repaired to assure they are ready for the rains to help desert bighorn sheep, mule deer, elk and other wildlife.





Thank you to: Joseph Barbknecht, Charlie Barnes, Jamie Bennett, Rachel Bitner, Curt Brockmann, Chris Gasper, David Harrell, Kat and Delilah Hunter, Gary Liefer, Tiffany Osburn, Terry Rathert, Ravin Reddy, Sydney Scriber, Bodey Scrupps, Steve Porto and Stacey Wink. And a special thanks to Texas Park & Wildlife Department's BGWMA staff Travis Smith, Kevin LeGrow and Connor McMichael.







Tye Vick (432) 207-0953 DesertTaxidermy.com Alpine, Texas









HIGH WEST OUTFITTERS







JIM BRECK BEAN
WWW.HIGHWESTOUTFITTER.COM

