

## NEW MEXICO CHAPTER OF THE WILDLIFE SOCIETY

### President's Message, Fall 2022 — Elise Goldstein

October has always been my favorite month in New Mexico, with the sun at just the right angle to turn everything golden, the vibrant yellow of the aspens and cottonwoods, the heat of summer finally past but the cold of winter not yet arrived. Whether it is hiking, camping, wildlife viewing, hunting, or fishing (or all of the above!) that makes your soul happy, I hope you take some time to enjoy the outdoors at this beautiful time of year. And if your schedule doesn't allow you to get away, take a walk down the street and watch the birds as they embark on the fall migration to their wintering grounds.

I am pleased to report that NMTWS had a very success 1-Day Meeting at the end of August. We had 85 people register for the meeting. Attendees were able to listen to paper presentations, listen to panel members speak on a variety of events, participate in student/professional mixers, and have time to catch up with colleagues not seen since pre-pandemic times. They also had the chance to win some door prizes and raffle prizes, and drink some beverages at the unofficial social after the meeting. NMTWS intends to make this an annual event so we hope to see you at the meeting next year. Speaking of meetings, I am excited to announce that the Joint Annual Meeting (JAM) of NMTWS, AZTWS, and the NM/AZ Chapter of the American Fisheries Society will be held on February 2-4 in Farmington, NM. I look forward to seeing everyone there!

Until Next Time,  
Elise Goldstein



#### **New Mexico Chapter of The Wildlife Society, Officers and Board Members**

President: Elise Goldstein; President-Elect: Orrin Duvuvuei; Secretary: Anna Stearns; Treasurer: Tony Opatz

Board Members: Leland Pierce, Nicole Tatman, Stephanie Herbert

Newsletter Editor: Matt Haverland

SW Section Representative: Kathy Granillo

If you would like to contribute articles, stories, announcements, or photos, please submit to [twnewmexico@gmail.com](mailto:twnewmexico@gmail.com)

## Around New Mexico!

### **New Mexico Chapter One-Day Meeting Held**

**By: Leland Pierce, New Mexico Department of Game and Fish**

The Board of the New Mexico Chapter of The Wildlife Society was pleased to host a one-day meeting on Monday, August 29, 2022. Earlier this year, the current Board decided to host the event as part of an on-going effort to bring members back together and to energize them moving forward. The Board and volunteers spent the spring and summer to organize the event and fully intend to continue having a Chapter one-day meeting in addition to the annual Joint Annual Meeting of the AZ/NM AFS and AZ and NM TWS, normally held the first weekend of February each year. This year's one-day meeting was held in late August in order to engage students as they return to school but also to not interfere with members' September hunting schedules.

Over 60 people attended a mix of talks and panels. Esther Nelson (US Forest Service) led an excellent panel of officials to discuss how the Forest Service responds to wildfire events both during and after the fires, and how fish and wildlife are integrated into those responses, including all of the partners USFS works with. Rhonda Stewart, USFS, Kirk Patten, NM Dept. Game and Fish-Fisheries, and Clint Smith, US Fish and Wildlife, participated on the panel. Kathy Granillo, SW representative to the TWS Council, updated the audience on Parent Society activities before Dan Collins, USFWS, provided a talk examining where to place the Sun-Zia powerlines over the Rio Grande drainage in such a way to least impact Sandhill Cranes. Before lunch a panel was held to provide background on Wildlife Corridor activities, closing with Matt Haverland, NM Department of Transportation, providing an extensive update of the ongoing Wildlife Corridor Act. The other members of the panel were Orrin Duvuvuei and Nicole Tatman, with Leland Pierce moderating, all from NMDGF.



The panel on "Fire and Fish and Wildlife" discusses how wildlife are considered while responding to and recovering from a wildfire event.



Lunch break allowed an opportunity for students to mingle and ask questions of professionals.

Lunch was provided to allow for students to meet with professionals. The student-mentor lunch was organized by Chapter President, Elise Goldstein, and proved to be quite the success. After lunch, a series of talks were given: Kris Johnson, NM Heritage Program-retired, on modeling to benefit the conservation of pinyon jays; Anna Kirby, NMSU, on hemorrhagic disease and lagomorphs; Jenna Stanek, Los Alamos National Labs, on avian health during fall migration; and Jessica Schlarbaum, New Mexico Wildlife Rehabilitation Center, on trends in wildlife the Center was seeing. Finally, Taylor Joray, USFS, hosted by what may have been the most exciting of the panels, given the audience participation, a panel on how agencies make use of young professionals to meet agency missions and how students can best make use of such opportunities. Larry Cordova, USFS, Martha Desmond, NMSU, Kathy Granillo, TWS, and Elise Goldstein, NMDGF, participated on the panel, along with extensive discussion from audience members.

The event closed with some cool raffle prizes and even a subsequent social event.

As noted above, the Board intends for this to be an annual event, with a goal of having a date and venue assigned by the annual business meeting at the 2023 JAM. Please consider helping out! There are multiple ways to join in, such as: venue management, registration, AV, speaker selection, agenda, food and drink, student mentorship, raffles and other goodies, and a lot more. Please join in and help out your chapter.

## Around New Mexico! (continued)

### Studying Mesquite Removal Treatments in Southeast New Mexico with the Bureau of Land Management

By: Anne Bartuszevige, Playa Lakes Joint Venture

Playa Lakes Joint Venture (PLJV) – a non-profit organization dedicated to working with partners to conserve the playas, prairies and landscapes of the western Great Plains to benefit birds, other wildlife, and people – has been collaborating with the Bureau of Land Management (BLM) in southeastern New Mexico to evaluate the effects of mesquite removal on grassland birds. Using the Integrated Monitoring in Bird Conservation Regions (IMBCR) program, PLJV is measuring differences in grassland bird density in treated areas with  $\geq 85\%$  reduction in mesquite cover versus areas that have not been treated.

Woody plants such as honey mesquite are encroaching into grasslands and reducing habitat for grassland birds, many of which have a remarkably low tolerance to increases of shrubs and trees in grassland areas. Many species will abandon grasslands with  $>5\%$  woody plant cover, while some species exhibit even less tolerance for woody plants. Lesser Prairie-Chicken is one such species, and in response, the BLM in southeast New Mexico has been treating mesquite with herbicide for many years to reduce and eliminate mesquite on their property. While the primary focus for many herbicide treatments is to increase habitat suitability for Lesser Prairie-Chickens, many other grassland bird species could also benefit from this work. Thus, the BLM wants to document the potential benefits of mesquite removal treatments to grassland bird species.



Skeleton of mesquite after treatment in 2021 in shortgrass prairie near Roswell, NM. *Photo credit: PLJV*

Preliminary results after two years of field sampling through the IMBCR program indicate that, in general, grassland bird density is high in areas where mesquite has been treated versus controls. This work is ongoing, and results from this work will help BLM make important decisions about future mesquite treatments.

To learn more, contact PLJV Conservation Science Director Anne Bartuszevige at [anne.bartuszevige@pljv.org](mailto:anne.bartuszevige@pljv.org).

Acres Currently on the Landscape				Acres of Conservation Needed Annually			
Planning Area	Grassland	CRP Lands	Woodland, Shrubland, & Savannah	Planning Area	Protection	Restored (CRP & Other Programs)	Woody Plant Removal
Colorado	11,700,000	1,641,500	0	Colorado	35,000	458,850	175,000
Kansas	6,500,000	1,616,450	0	Kansas	35,000	323,400	153,400
Nebraska	3,900,000	540,000	12,100	Nebraska	35,000	72,890	148,200
New Mexico	11,100,000	388,000	1,963,000	New Mexico	35,000	99,780	503,700
Oklahoma	7,100,000	585,000	952,100	Oklahoma	35,000	221,260	270,700
Texas	2,375,000	13,200,000	14,722,000	Texas	35,000	1,052,000	1,556,600

Table borrowed from: <https://pljv.org/grasslands/grassland-goals/>

## Around New Mexico! (continued)

### Thesis Defense

**Caitlin Q. Ruhl** (Big Game Program Manager, NMDGF)  
Department of Fish, Wildlife, and Conservation Ecology  
New Mexico State University

Title: IMPROVING POPULATION ESTIMATES FOR DESERT BIGHORN SHEEP IN NEW MEXICO THROUGH DOUBLE OBSERVER SIGHTABILITY MODELING AND THE ESTIMATION OF RESIDUAL HETEROGENEITY

#### **Abstract:**

Abundance estimation is the root of wildlife conservation. Survey methods that facilitate the estimation of detection bias can account for the reality of imperfect detection and improve population estimates. Hybrid double-observer sightability models that incorporate a parameter representing heterogeneity bias represent an attractive option that optimizes tradeoffs between bias and precision. I explored the applicability of this approach to aerial surveys for desert bighorn sheep in New Mexico. I collected double-observer sightability data for 168 desert bighorn groups. I assessed the influence of covariates on detection and compared abundance estimates under four modeling methods: a standard sightability model, a standard double-observer sightability model, a double-observer sightability model incorporating a recapture type heterogeneity parameter, and a double-observer sightability model incorporating a mark-type heterogeneity parameter. Lincoln-Peterson population estimates were also calculated for comparison. In estimating group detection probabilities, models including group behavior were the most supported. Log-transformed group size was also present in competitive models as was drainage terrain and percent obscuring cover. Detection probabilities varied by group and across methods, and the recapture heterogeneity model produced an average group detection probability of 0.735 [range, 0.189–0.894]. Abundance estimates for desert bighorn in the Fra Cristobal Mountains were 301 (95% CI = 271–392), 292 (95% CI = 273–352), and 337 (95% CI = 276–480) using the recapture heterogeneity model. The proportions of estimated bighorn sheep observed using the recapture heterogeneity model were 80.7, 90.1, and 65.3 %. Coefficients of variation were consistently below 0.20 for all estimation methods and residual heterogeneity models had average CVs  $\leq$  0.10. Lincoln-Peterson estimates were similarly precise but the requirement of uninterrupted maintenance of radio collars, and inability to incorporate information from factors influencing detection probability threatens their reliability. Estimates that resulted from hybrid models with residual heterogeneity had improved precision over sightability modeling and accounted for more bias than a traditional double-observer sightability model. Further, because residual heterogeneity models offer enhanced capabilities in estimating visibility bias, flexibility in their accommodation of radio-collar data, and robustness and adaptability to unique survey occasions, they present a viable and robust option for estimating desert bighorn abundance.

### Jobs and Internships

- Wildlife Rehabilitation Intern – New Mexico Wildlife Center (Española)  
Last Date to Apply: 12/31/2022  
<http://www.newmexicowildlifecenter.org>
- Postdoctoral Fellowship: Dryland Ecosystem Modeling – NMSU  
Last Date to Apply: 11/30/2022  
<https://lter.jornada.nmsu.edu/job/postdoctoral-scientist-dryland-ecological-modelin/>
- Postdoctoral Position in Avian Ecology – NMSU  
Last Date to Apply: 10/31/2022  
<https://airtable.com/shrnL3jLSYtr28TnJ>
- Mexican Wolf Biologist-Operational – NMDGF  
Last Date to Apply: 10/27/2022  
<https://careers.share.state.nm.us/>
- Game and Fish Warden Recruit – NMDGF  
Last Date to Apply: 11/06/2022  
<https://careers.share.state.nm.us/>



## Around New Mexico! (continued)

### Photo Gallery

Who needs to read when you can just look at pictures?!

Enjoy these photos submitted by wildlife-loving folks across the state! If you would like to submit a photo for the NM TWS Newsletter, please send to [TWSNewMexico@gmail.com](mailto:TWSNewMexico@gmail.com). Photos can include New Mexican wildlife, fish, plants, or landscapes. Make sure to include the species, plus the name of the photographer. Location taken would be great also!



New Mexico state endangered Sheer's beehive cactus (*Coryphantha robustispina scheeri*) in southeastern New Mexico. Photo credit: Matt Haverland



Newly-released black-footed ferret (*Mustela nigripes*) at unknown location in New Mexico. Photo credit: Jim Stuart



Hooded merganser (*Lophodytes cucullatus*) munching on crayfish at Bosque Del Apache NWR. Photo credit: Mark Watson

## Annual TWS Conference and Learning Opportunities

By: Kathy Granillo, Southwestern Representative to Council

Fall is officially upon us (Autumnal Equinox September 22)! Although it still feels like summer at my house, and my daily clothing choices are still tank tops and shorts. But the birds are migrating, leaves are thinking about changing, and soon I will not have hummingbirds at my feeders. For me, there are really just two seasons in the year: hummingbird season and crane season. As the hummingbirds migrate south, so do the sandhill cranes and the Middle Rio Grande Valley, where I live, is filled with their haunting calls. The cranes linger into March each year, then head north to their breeding grounds. Meanwhile, the hummingbirds show up in April to start their breeding season and the cycle continues. It is one of my favorite days of the year when I see my first hummingbird zipping around the yard and visiting my feeder.

Of course, we are doing our best to disrupt the natural cycles on our planet as global warming continues unabated. We continue to see record heat across the globe, and storms of incredible force. The Wildlife Society, along with many other organizations, agencies, and industries, is concerned about the impacts to wildlife and all other life on this planet, including people.

There will be several opportunities to learn more and engage with other wildlife professionals at the Annual Conference, and I'd like to highlight one event that will also be available as an online live event that anyone can attend:



November 9, Wednesday, 5-7 PM Mountain Time – Climate Change and Sustainability Roundtable and Listening Session.

This will be an interactive discussion among the audience and the organizers with the goals of:

- Discussing actions taken and to be taken by TWS and the profession on climate and sustainability.
- Catalyzing action on climate and sustainability across the profession.
- Engaging membership in topics related to climate and sustainability.
- Enriching debate on climate and sustainability in the profession and TWS.

For those who attend the conference in person, there are several sessions about climate change and wildlife:

November 7, 3:30-5 PM, Symposium: Climate Change Impacts on Human-Wildlife Interactions.

November 9, 1-5 PM – Workshop: Habitat Restoration and Conservation with a RAD New View.

November 10, 10:30-12 PM – Contributed oral presentations on “Climate Change: Habitat and Species Response.”

November 10, 1:30-3 PM – Contributed oral presentations on “Climate Change: Biometrics and Modeling.”

Another area of interest of mine is Diversity, Equity, and Inclusion (DEI). I chair the Women of Wildlife (WOW) Community Team, which is part of the Inclusion, Diversity, Equity and Awareness (IDEA) Working Group. The Conference will have several events hosted and/or supported by WOW and IDEA.

November 7, 3:30-5 PM – Panel Discussion: “Parenthood in the Field: Challenges and Advice for Raising Your Own Brood.”

November 8, 12:30-2:30 – DEI Network meeting

November 9, 1:30-5PM – Symposium: “Women in Wildlife Sciences: Building Equity, Diversity and Inclusion.”

## ....Annual TWS Conference and Learning Opportunities (Continued)

November 9, 7:30-9:30PM – WOW Social and Book Signing (for the brand-new book Women in Wildlife Sciences)

November 10, 8:30AM-12PM – Symposium: “Women at Work: Stories of Wildlife Science and Management.”

November 10, 7-9PM – Special Session IDEA Working Group Storytelling Event.

Of course, the Conference will have symposia, panel discussions, workshops, poster sessions and contributed oral presentations that address the whole spectrum of wildlife research and management. There will truly be something for everyone, no matter your area of expertise or interest. Please visit the Conference website to learn more, where the full schedule is posted. <https://twconference.org>

I hope to see many of you there!

TWS Council has been busy over the last several months. Just one of the things we are working on is revising Several Position Statements (PS). I urge you to visit TWS website to view these position statements. <https://wildlife.org/position-statements/>

These statements are developed by advisory teams and/or Working Groups and are sent as drafts to all Working Groups for their review and comment before finalizing by Council. This year we have revised the PS on the use of lead ammunition and fishing tackle, and are finishing up the PS on rangelands and grazing, and one on climate change, wildlife, and sustainability. These statements are used in policy discussions with our partners in conservation, non-governmental organizations, agencies, and Congress, and can be influential in Federal, State, and local decisions.

An update to my last post about “Recovering America’s Wildlife Act” (H.R. 2773). It was introduced to the Senate in July and is still awaiting their action. As I said last time, I urge you to pay attention as this bill is considered by the U.S. Senate, and if you feel so inclined, please contact your Senators to voice support for the Bill.

Please take care of whatever piece of the planet that you can, be safe and be hopeful – if we all work together, we can make the world a better place.

### **ANNUAL MEETING VOLUNTEER OPPORTUNITIES**

- Speaker Support Volunteer (Contributed Papers and Symposium)
  - Registration Desk Volunteer
  - Conference Office Volunteer
- Speaker Preview Room Volunteer (uploading talks prior to session)
  - Poster Session Volunteer
  - Social Volunteer (greeting and ushering)
  - Quiz Bowl Volunteer

### **CONTACT**

For questions, please contact [Kerrell Dunsmore](mailto:kerrell@thenextgreatevent.com) (kerrell@thenextgreatevent.com)

# NEW MEXICO CHAPTER OF THE WILDLIFE SOCIETY

Intro  
New Mexico  
Regional/National  
Announcements

## The New Mexico Chapter of the Wildlife Society Announces Electronic Membership Enrollment/Renewal!

Simply visit the Join/Renew page of our website at <https://wildlife.org/nm-chapter/membership/>, fill out the membership form, and pay for your membership with PayPal. Annual membership fees are still only \$8, and your first year is free. If you would like to send a check through the mail, simply include your name, affiliation, address, email address, and payment and mail to: NMTWS, PO Box 35936, Albuquerque, NM 87176.



*Looking to join a community of wildlife professionals?*

### Join the New Mexico Chapter of The Wildlife Society!

**How to Join:**

- Add an annual membership during registration for the TWS/AFS JAM
- Add an annual membership to a National Membership renewal
- Sign up on our new website!  
<https://wildlife.org/nm-chapter/>

**Membership Perks:**

- Expand your network of diverse wildlife professionals
- Access NM TWS newsletter to stay up to date with local Wildlife topics
- Attend events and meetings to engage with innovative wildlife management and research

Questions about membership? Email: [twsnmexico@gmail.com](mailto:twsnmexico@gmail.com)



**Website:**

<http://wildlife.org/NM-chapter/>

**Email:**

[twsnmexico@gmail.com](mailto:twsnmexico@gmail.com)