# Summer 2022 (2nd Quarter)

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# NEW MEXICO CHAPTER OF THE WILDLIFE SOCIETY

# President's Message, Summer 2022 — Elise Goldstein

In recent years, the NMTWS has taken a diminished role in the professional community. As promised, the 2022 NMTWS Board is working to change that, and is very excited to announce that we will be hosting a 1-Day Meeting on August 29, 2022 in Albuquerque, NM. We hope that you will be able to join us at the Rotunda at the University of New Mexico from 8:00 – 4:00 to hear paper presentations and panel discussions, interact with students and professionals, network, and eat some good food. There will be raffle prizes, t-shirts for sale, and other schwag to engage your interest, in addition to the informative and stimulating conversation. We are currently accepting abstracts for paper presentations, and the deadline for submission is July 22, 2022. Please visit the newly updated website to see additional information and to register for the meeting. Registration costs will increase the week prior to the meeting, so be sure to register early. We are looking for assistance organizing the meeting in the early planning stages, the few days before the meeting, and the day of the meeting. If you are interested in helping out, shoot us a line at twsnewmexico@gmail.com. We can't wait to see you there!



Until Next Time, Flise Goldstein



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### **Around New Mexico!**

# Collision with Bear Highlights Importance of Safe Passages in New Mexico By: Mark Watson, New Mexico Department of Game and Fish

Tragically, on June 14 a mother bear with two young cubs was hit and killed by a vehicle on Interstate 25 near Glorieta Pass. New Mexico Department of Game and Fish (NMDGF) personnel responded, and with the help of the Glorieta and Arroyo Hondo Volunteer Fire Departments, rescued the two cubs out of a tree. The cubs were transported to Cottonwood Veterinary Clinic in Espanola, where they will be raised. Unfortunately, vehicle collisions with bears and other wildlife are all too common, yet unnecessary. There is little to no debate among highway ecologists and researchers regarding the most effective methods to reduce wildlife-vehicle collisions and increase wildlife habitat connectivity across highways. These methods include the construction of wildlife-dedicated overpasses, underpasses and game fence to keep animals off the roadway, effectively reconnecting habitat fragmented by highways.

To help reduce wildlife-vehicle collisions and increase habitat connectivity across highways, the New Mexico Departments of Transportation (NMDOT) and NMDGF recently finalized the Wildlife Corridors Act Action Plan (Plan). The Plan was developed in partial fulfillment of the 2019 Wildlife Corridors Act, which directs NMDOT and NMDGF to identify highway segments and other barriers that pose a risk to wildlife movements and the traveling public. The agencies and their contractors conducted extensive analyses of New Mexico large game animal-vehicle collision accident report data, wildlife movement data, and habitat connectivity models to develop a list of 11 priority project areas in the state.



Black bear cub after being removed from nearby tree.
Photo credit: NMDGF

I-25 through Glorieta Pass was one of the top five collision hotspots identified by the Plan team and was also identified as a priority wildlife corridor for mule deer and black bears. Detailed recommendations were provided in the Plan on exact locations for seven miles of mitigation that includes wildlife-dedicated overpasses, underpasses, and fence ends. One overpass, three arch culverts, and one bridge are recommended for construction. Most of the highway within this hotspot borders private property but some portions abut Santa Fe National Forest lands and Pecos National Historical Park. The village of Glorieta is within the hotspot.



View of Glorieta Pass. Photo credit: Mark Watson, NMDGF

NMDOT large game animal-vehicle collision accident report data from 2009-2018 documented 43 reported collisions involving big game animals in Glorieta Pass: 33 with mule deer, 2 with elk, and 8 with black bear. The accident report data identified that this hotspot had more recorded crashes with black bears than any of the other prioritized wildlife-vehicle collision hotspots or wildlife movement corridors.

Although implementation of wildlife-vehicle collision mitigation projects that include construction of wildlife-dedicated overpasses and/or span bridges (for wildlife underpasses) are expensive, costs can often be reduced by piggy-backing onto routine highway improvement projects. Using pre-cast modular overpass sections that greatly reduce construction and lane closure times reduces costs. Enlargement of culverts to single span bridges or culvert sizes adequate for the passage of ungulates, large carnivores and other wildlife can often be justified to meet drainage needs, in addition to benefitting wildlife passage.

# **Around New Mexico!** (continued)

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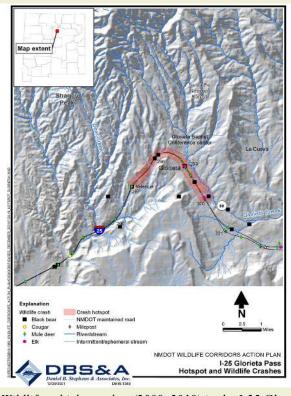
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### Collision with Bear Highlights Importance of Safe Passages... ...Continued from Page 3

Funding for proposed projects is still uncertain, but multiple funding opportunities were created through passage of the recent federal infrastructure bill, such as the Wildlife Crossings Pilot Program, which dedicates \$350 million over the next five years. Pre-infrastructure bill programs such as the Highway Safety Improvement Program, which has been used in the past by NMDOT to implement wildlife-vehicle collision mitigation projects, could also be used.

A reading of the Wildlife Corridors Act clearly indicates the intent of the New Mexico State Legislature and Governor Lujan Grisham that wildlifevehicle collision mitigation projects be implemented as funding becomes available. Non-profit conservation organizations and both state agencies recently formed a coalition to assist with seeking funding and gaining local support for implementing wildlife-vehicle collision mitigation projects. The coalition anticipates working with concerned citizens, private landowners, public land management agencies, Tribes, and local communities to implement wildlife-vehicle collision mitigation projects in fulfillment of the spirit and intent of the Wildlife Corridors Act, including at I-25 Glorieta Pass. Project implementation will be expedited by the formation and advocacy of local coalitions of citizens tired of seeing unnecessary mortality of wildlife in the form of carcasses on the side of the road, or worse, hitting an animal themselves.

The Final Wildlife Corridors Act Action Plan can be found at https://wildlifeactionplan.nmdotprojects.org/



Wildlife-vehicle crashes (2009-2018) in the I-25 Glorieta Pass hotspot. From New Mexico Wildlife Corridors Action Plan.

### NMSU Student Receives 2022 Donald H. Rush Memorial Game Bird Research Scholarship for White-Tailed Ptarmigan Research

The New Mexico Chapter of the Wildlife Society would like to extend our congratulations to James Lee of New Mexico State University for receiving the 2022 Donald H. Rush Memorial Game Bird Research Scholarship! We would also like to recognize James as being the first Black student to receive this highly competitive award. James is one of two M.S. students from the

NMSU New Mexico Cooperative Fish and Wildlife Research Unit that leads data collection efforts to learn more about factors influencing survival and habitat use in a reintroduced population of white-tailed ptarmigan. The project is in cooperation with and funded by NMDGF and USFWS.

Below is a message from The Wildlife Society CEO, Ed Arnett:

"It gives me great pleasure to inform you that you have been selected as the 2022 recipient of the Donald H. Rusch Memorial Game Bird Research Scholarship. The scholarship was established to honor the memory of Donald H. Rusch and to continue his legacy by contributing to graduate studies on any aspect of upland game bird or waterfowl biology and management. Congratulations!"





Adult male White-tailed Ptarmigan in summer plumage. Photo credit: James Lee; Cottonwood Pass, CO, 2021

# **Around New Mexico! (continued)**

### **Highlighting Wildlife Students and Education in New Mexico**

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#### **Thesis Defense**

#### **Zack Farley**

New Mexico Cooperative Fish and Wildlife Research Unit Department of Fish, Wildlife, and Conservation Ecology New Mexico State University

Title: Influence of Mexican gray wolves on elk behavior in relation to maternal constraints, multitasking, and predation risk

#### Abstract:

The non-consumptive effects of predation can reduce prey fitness by reducing foraging time, increasing stress levels, and shifting habitat use to lower quality habitat resulting in reduced birth rates and decrease neonate survival. However, prey have the ability to increase their vigilance to avoid predation and decrease the non-consumptive effects of predation via behavioral changes, such as spatiotemporal avoidance of predators and multitasking. This study aims to quantify the effects of the Mexican gray wolf (Canis lupus baileyi) reintroduction to Arizona and New Mexico on elk (Cervus canadensis) behavior. We conducted behavioral observations on elk herds and adult females, with and without calves, across energetically and biologically important periods. We developed multiple spatiotemporal predation risk indices using a combination of GPS locations of collared Mexican wolves, elk killed by Mexican wolves, and landscape covariates. Using generalized linear mixed models implemented in a Bayesian framework, I compared a priori models, to determine the best predictors of multitasking and elk behavior at the individual and herd level. Predation risk from Mexican wolves was a top predictor in all datasets. Adult females showed strong increases in the probability of vigilance due to increasing predation risk whereas as herd behavior did not. At the individual and herd level, predation risk increased the probability of foraging and decreased resting. In a post hoc analysis, the effects of predation risk on the probabilities of foraging and resting differed across diurnal periods, at both scales, with an increased probability of foraging in relative high predation risk areas during a period of relative low wolf activity, midday. These results suggest elk are temporally avoiding the risk of predation by Mexican wolves by trading resting for foraging, a trade-off often not incorporated in behavioral studies. Increased estimated predation risk from Mexican wolves increased the probability of adult females multitasking suggesting that adult female elk may be offsetting reduced feeding time due to the non-consumptive effects of Mexican wolves. These results shed light on potentially important but often excluded behaviors and trade-offs elk may use to reduce the indirect effects of predation, contributes additional context to our understanding of predator-prey dynamics, and provides baseline data in an ecosystem exhibiting sustained population growth by a recolonizing predator.

#### FAQ: New Mexico Opportunity Scholarship

Borrowed from New Mexico Higher Education Department, <a href="https://hed.state.nm.us/uploads/documents/OS\_FAQ.pdf">https://hed.state.nm.us/uploads/documents/OS\_FAQ.pdf</a>

#### What is the New Mexico Opportunity Scholarship?

Established by Gov. Lujan Grisham in 2020, the Opportunity Scholarship covers tuition and required fees for eligible New Mexico residents pursuing career training certificates, associate degrees, and bachelor's degrees at New Mexico public colleges and universities.

#### • Do I qualify for the Opportunity Scholarship?

If you are an established New Mexico resident and plan to enroll in at least six credit hours at a public college or university in New Mexico toward a training certificate, associate degree, or bachelor's degree, you may qualify.

#### How do I apply for the Opportunity Scholarship?

There is no application for the scholarship. If you are an eligible student enrolled in a New Mexico public college or university, the financial aid office at your school will work with you to award the scholarship.

#### • What does the Opportunity Scholarship pay for?

The Opportunity Scholarship can be used to cover up to 100% of tuition and required fees at any New Mexico public college or university.

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# **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. 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 meadow jumping mouse (*Zapus hudsonius luteus*). Bosque del Apache NWR. Photo credit: Jim Stuart



Clark's spiny lizard (*Sceloporus clarkii*). Grant County, NM. Photo credit: Mark Watson



Trail camera captures golden eagle (*Aquila chrysaetos*) at wildlife drinker. Sevilleta NWR. Photo credit: USFWS

# The Dog Days of Summer

By: Kathy Granillo, Southwestern Representative to Council

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Welcome to the "Dog Days of Summer." It's been a warm spring, warmer than "normal" one could say. Perhaps we should start talking about the "new normal." We are edging closer and closer to average global temperature reaching 1.5 degrees Celsius above pre-industrial levels. The 1.5 degrees C is what the Paris Climate Change Agreement deems the point at which climate impacts will become increasingly harmful for people and indeed the entire planet. One could argue that we are already seeing harm to people and the planet. But let's go back to the phrase "dog days of summer" – did you ever wonder where it came from? The Farmer's Almanac tells us:

"The phrase is actually a reference to the fact that, during this time, the Sun occupies the same region of the sky as <u>Sirius</u>, the brightest star visible from any part of Earth and part of the constellation *Canis Major*, the *Greater Dog*. This is why Sirius is sometimes called the **Dog Star**.

In the summer, Sirius rises and sets with the Sun. On July 23rd, specifically, it is in conjunction with the Sun, and because the star is so bright, the ancient Romans believed it actually gave off heat and added to the Sun's warmth, accounting for the long stretch of sultry weather. They referred to this time as *diēs caniculārēs*, or "dog days." Thus, the term Dog Days of Summer came to mean the 20 days before and 20 days after this alignment of Sirius with the Sun—July 3 to August 11 each year."

While you ponder that, I shall write of something of major importance to wildlife in our country. The House of Representatives passed "Recovering America's Wildlife Act" (H.R. 2773) a few days ago. The House's approval moves the focus for the Recovering America's Wildlife Act to the Senate floor, where it is still awaiting a vote at the time of my writing this article. This Act is incredibly important for wildlife in our country. Specifically:

The Recovering America's Wildlife Act will provide states, territories, and tribes with \$1.39 billion annually to catalyze proactive, on-the-ground, collaborative efforts to restore essential habitat and implement key conservation strategies, as described in each state's Wildlife Action Plan.

- The House bill would provide \$1.39 billion in dedicated annual funding for proactive, collaborative efforts by the states and tribes to recover wildlife species at risk.
- The state agencies have identified 12,000 species of wildlife and plants in need of conservation assistance in their federally approved State Wildlife Action Plans. These plans would guide spending from the bill.
- Tribal Nations would receive \$97.5 million annually to fund proactive wildlife conservation efforts on tens of millions of acres of land.
- At least 15 percent of the resources would be used to recover species listed as threatened or endangered.

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.

The annual conference of TWS will be here before we know it – hopefully I will see many of you there for this first in-person conference since 2019. There are a record number of submissions for symposia, panel discussions, workshops, posters and presentations. It is shaping up to be one of the best conferences to date. Be sure to register early to get the best rates.

The host location is Spokane, WA. This is a beautiful town located in far eastern Washington, in a region known as the Palouse. Heartland of the Inland Pacific Northwest, the rolling hills of the Palouse are a mystical expanse of stunningly beautiful landscapes of the Washington-Idaho border farming region from the Spokane-Coeur d'Alene Valley south to Walla Walla, and from Lewiston and Clarkston westward to the Tri-Cities.

Another topic I'd like to highlight is disease. Seems appropriate in this era of the pandemic. This year's outbreak of the H5N1 virus has resulted in the deaths of nearly 400,000 wild birds worldwide. It has been detected in at least 41 US States so far. It has been found in over 100 species of wild birds. While it can have huge impacts on the poultry industry, it can also have huge impacts on our wild birds. For example, On Quebec's Magdalen Islands, wildlife officials recently discovered the carcasses of thousands of white gannets that had been wiped out by the flu. Ducks, geese, gulls and swans are thought to be the major carriers of this virus. This is another reminder of how small our blue planet is and how interconnected our ecosystems are. 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.

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### **New Mexico Wildlife Viewer Survey Webinar** By: Ginny Seamster, NMDGF

The New Mexico Department of Game and Fish (Department) and Virginia Tech announce a webinar focused on presenting the key results of a wildlife viewer survey for which the Department has contracted with Virginia Tech to gather data specific to New Mexico. Virginia Tech has also completed a national survey, but this webinar will focus on takeaways from their collection of data for New Mexico.

Wildlife viewing is one of the fastest growing wildlife-related recreational activities. The Department currently relies heavily on support from hunters and anglers to fund its wildlife conservation activities. Many wildlife viewers, while their wildlife viewing experience may be enhanced by these conservation activities, do not currently provide financial support to the Department. The goal of conducting this survey is to better understand wildlife viewers in New Mexico and identify ways in which the Department may better engage with these very important partners in wildlife conservation.

The survey considers a variety of factors with respect to wildlife viewers, including their preferred taxa for viewing; where they like to view wildlife; the extent to which they know about, trust, and are interested in supporting the Department; and ways that the Department can best support their wildlife viewing activities.

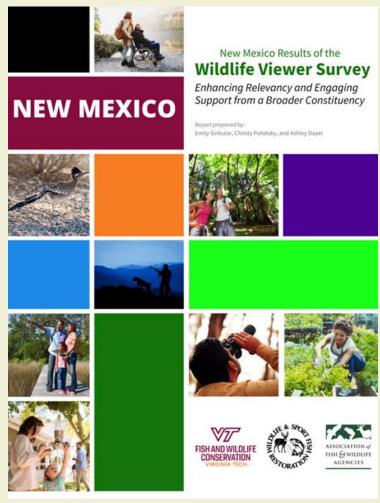
Survey results are particularly relevant in the context of the potential full passage of Recovering America's Wildlife Act (RAWA), which passed the House of Representatives in June 2022, and associated enhanced funding for work with Species of Greatest Conservation Need. If passed, RAWA would essentially double the Department's budget and would also dramatically increase the amount of state funds the Department must raise in order to fully utilize the new federal funds. This would heighten the importance of engaging with, and encouraging support from, a broad diversity of groups and individuals interested in wildlife conservation.

# Webinar will be 9:30 to 11 AM MDT on Tuesday, July 26<sup>th</sup>.

Please use the below link to register to attend. After registering, you will receive a confirmation email with details about how to join the webinar:

# https://virginiatech.zoom.us/meeting/register/tZAudO2sqDsoGNQLOuotAy76WnfcaNvYb50x

For more information on the webinar or survey, please contact Ginny Seamster, Assistant Chief for Technical Guidance at the Department (virginia.seamster@state.nm.us).



# NEW MEXICO CHAPTER OF THE WILDLIFE SOCIETY

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

Simply visit the Join/Renew page of our website at <a href="https://wildlife.org/nm-chapter/membership/">https://wildlife.org/nm-chapter/membership/</a>, 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.



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

<u>President</u>: Elise Goldstein; <u>President-Elect</u>: Orrin Duvuvuei; <u>Secretary</u>: Anna Stearns; <u>Treasurer</u>: 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 twsnewmexico@gmail.com

#### **Stay in Touch!**

Website: http://wildlife.org/NM-chapter/

Email: twsnewmexico@gmail.com