

Southwest Section Newsletter

Spring & Fall 2022 - Vol. 13 Issues #1 & #2

President's Message

Whitney Gann - 2022 President SW Section of The Wildlife Society

Spring Message:

I am very excited to introduce myself and serve the Southwest Section of The Wildlife Society this year! We just held our return to in-person TWS chapter meeting in Texas and it was very well received. I, like many of you, enjoyed seeing and interacting with colleagues after the long break and left the meeting feeling rejuvenated.



I would like to thank Jimmy Cain for his service as president and to acknowledge and welcome our new president-elect, Kay Nicholson. Welcome to the team, Kay! Returning officers are Jimmy Cain (now Past president), Erika Nowak (Treasurer), and Masa Ohnishi (Secretary).

The recipient of the 2022 Wildlife Graduate Student Scholarship of the Southwest Section of The Wildlife Society was Olivia Gray. Olivia is a Masters Student at Sul Ross State University studying bighorn sheep, aoudad, and mule deer interactions. You can read more about Olivia and her research below. Congratulations to Olivia on her scholarship award. Graduate students who are interested in applying should keep an eye out for our scholarship announcement later this year.

Looking forward, don't forget that TWS is hosting the 29th Annual Conference in Spokane, Washington November 6-10, 2022. I plan on attending the meeting, if you will be there too, please don't hesitate to come say hello! Oral and poster presentations, symposia, workshop, and panel discussion submissions are all currently open. Hopefully we will have a large SW section presence at the meeting. Travel grants are available for students and professionals through TWS; check out their website for more information.

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President's Message

Whitney Gann - 2022 President SW Section of The Wildlife Society

The last year has presented an incredible diversity of challenges for everyone but we, wildlife biologists and conservation professionals, have continued to persevere for the betterment of the resource. Despite these obstacles, I have seen and heard stories of continuing conservation, mentoring, collaboration, and fieldwork. The article below by Shannon Grubbs is a great example of how wildlife professionals came together to provide a solution to a sensitive problem during a challenging time. This story is a testament to the professional perseverance of natural resource professionals, and the strong conviction to continue to do good conservation work and serve our constituents, even when it is not logistically easy.

I hope you all have a fantastic spring and summer. And, as always, we will continue to hope for good rainfall!

Whitney Gann

Wonder why you have received a combined Spring and Fall newsletter? Don't blame the board. This special edition was created because of a very persistent virus that wrecked havoc on my computer and nearly destroyed my sanity. I did not run everything through a virus checker upon receipt and paid dearly for that error.

As we mention in every request for content, this newsletter is by the members for the members. We appreciate each and every submission but PLEASE, PLEASE, PLEASE, do not send any documents, photos, or attachments of any kind without running them through your virus checker before sending.

Not exactly the vision I had for the last edition of the newsletter as co-editor but as they say "C'est la vie".

Misty L. Sumner
Co-editor no more



Photo courtesy
Cathy Buckingham



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President's Message

Whitney Gann - 2022 President SW Section of The Wildlife Society

Fall Message:

Hello Again Southwest Section!

As I write this newsletter note- rain is falling outside my office building for the first time since early August. It is not uncommon for deep South Texas to go many months without moisture, but I have to admit that each time we get much-needed rain it also brings with it some relief. It gives me a sense of optimism knowing that our wildlife will receive a boost of nourishment going into the physically stressful winter season.

Speaking of stress...Fall seems to be a time when we participate in group events. For many of us- school trips, conferences, hunting expeditions, vacations, and family time during the holidays are common during this time of year. Whether you are jam-packed with work or family responsibilities this fall I sincerely hope you take a moment to enjoy the outdoors. I find myself needing to make more of a conscious effort to spend time doing the things that inspired my interest in Wildlife Conservation every year.

This double issue of the newsletter is filled with some awesome information. Please grab a cup of coffee (or your beverage of choice) and enjoy; we worked hard to provide membership with some interesting stories for a diverse audience. Both Misty and Jamie have collectively made a huge effort to get this issue out-the-door to you all and, I certainly think, their work has paid off. Please also take a moment to advertise our Wildlife Student Scholarship opportunity to anyone who may be eligible to apply.

Thank you again for your membership in the Southwest Section and for the conservation work you do in your personal and professional lives. Come say Hello if you're in Spokane next month; I'd love to meet!



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Thank you to those that contributed to this newsletter: **Whitney Gann, Kathy Granillo, Olivia Gray, Stephanie Herbert, Shannon Grubbs, John Sproul, Tyler Campbell, Wyman Meinzer, Maureen Frank, Kaitlyn Restivo, David R. Patton,** and Rob Tyler.

We need photos and/or articles from YOU!

Please contribute to the next newsletter. Consider submitting articles or photos on work related adventures, conservation happenings, or any topics of interest to Southwest Section members. If you're interested in contributing but don't know what to write, give us a call!

Deadline for the Spring newsletter articles is **March 1st.**

Deadline for the Fall newsletter articles is **September 30th.**

Submit all photos and articles to your newsletter editor(s).



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Southwest Section Tracks

Kathy Granillo - Southwest Section Representative To Council

Spring

I am honored to be the new Southwest Section Representative. Thank you for electing me to serve as your representative on The Wildlife Society Council. This is a three-year term, and I look forward to interacting with you over the next few years.



I am recently retired from the U.S. Fish and Wildlife Service and a long-time member of TWS. For the past almost 12 years I was the Refuge Manager at Sevilleta NWR in central New Mexico. Prior to that I worked in the Regional Office of the Southwest Region for many years as the Regional Refuge Biologist. This position allowed me to get out in the Region (AZ, NM, OK, TX) quite a bit and I made frequent trips to all parts of the Southwest. I look forward to learning more about current issues and your concerns as I serve you on Council.

The biggest news for Council is the transition to a new CEO. Ed Thompson resigned last summer and the new CEO, Ed Arnett started in November 2021. He brings a wealth of experience to the position and Council looks forward to working with him as we strive to make TWS the best that it can be in serving its members and meeting its mission.

TWS Council adopted a Diversity, Equity and Inclusion Vision in 2021 and putting it into practice it is a top priority for 2022. To read more about this vision and how TWS is incorporating it into our Strategic Plan and other guiding documents, please visit wildlife.org, click on "engage" in the top bar of the webpage, and then on the DEI link. You may be familiar with "Wildlife Vocalizations" from the weekly eWildlifer from TWS. This effort is part of implementing the DEI vision.

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Kathy Granillo - Southwest Section Representative To Council

I also chair the Women of Wildlife Community Team, within the Inclusion, Diversity, Equity and Awareness Working Group of TWS. We have recently created a structure for this team, and are actively recruiting members. If interested, please contact me via email. We are already planning some events for the 2022 Annual Conference as well as other events throughout the year.

Other top priorities for Council include international conservation, and expanding partnerships.

Council is also revising 5 Position Statements in 2022. We have teams and Working Groups working on revising these documents. The 5 are:

- Global Climate Change and Wildlife
- The U.S. Endangered Species Act
- Firearms
- Lead in Ammunition and Fishing Tackle
- Livestock Grazing on Rangelands in the Western U.S.

The next Council meeting will be March 12-14 in conjunction with the North American Wildlife and Natural Resource Conference in Spokane, WA. Earlier in the year I attended the virtual Joint Annual Meeting of the Arizona and New Mexico Chapters and the in-person Texas Chapter Annual Meeting.

As you may know, Mexico is part of the Southwest Section. Luis Tarango and Raul Valdez are leading efforts to create a Mexico Chapter. This includes legally establishing the association that would be named The Mexico Chapter of The Wildlife Society A.C. They have drafted bylaws, which are out for review among the Mexican biologists who are interested in forming the chapter.

I especially want to hear what thoughts members might have regarding the current direction of The Wildlife Society and any suggestions for ways to ensure the Society is responsive to the needs of the membership.

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Southwest Section Tracks

Kathy Granillo - Southwest Section Representative To Council

TWS 2022 Annual Conference will be in-person! November 6-10 in Spokane, WA. I hope to see many of you there.

Your current TWS Council is 50/50 men and women for the first time ever.

Current TWS Council:

President Gordon Batcheller

President-Elect Don Yasuda

Past President Carol Chambers

Vice President Bob Lanka

Southeast Rep Lisa Mueller

Southwest Rep Kathy Granillo

Northeast Rep Duane Diefenbach

Northwest Rep Grant Hildebrand

North Central Rep Pat Lederle

Central Mountains & Plains Rep Andrea Orabona

Western Rep Kelley Stewart

Canada Rep Evie Merrill

Student Liaison to Council Darwin Mayhew

Respectfully,

Kathy Granillo

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Kathy Granillo - Southwest Section Representative To Council

Fall

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:

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Kathy Granillo - Southwest Section Representative To Council

- 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.”

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Kathy Granillo - Southwest Section Representative To Council

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

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

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

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

November 10, 7-9 PM – 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/>

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Kathy Granillo - Southwest Section Representative To Council

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.



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Student News

Olivia Gray - SWS TWS Graduate Student Scholarship Awardee

Never in my wildest dreams did I picture myself at age 23, sitting in the middle of the Chihuahuan desert, staring at the back end of a bighorn sheep, hoping for it to poop, but there I was.

Growing up in San Antonio, TX, I saw the disconnect many urbanites had with the natural world. Luckily, it was instilled in me from a young age to appreciate nature and all it has to offer by camping, fishing, and hiking throughout the Southwest. These early experiences developed a passion within me to study these ecosystems, as well as the growing need for public education within the field of conservation.

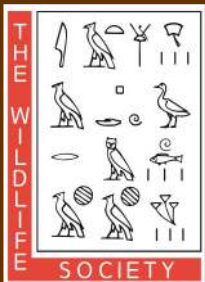
I attended Texas Tech University to study Natural Resources Management where I gained countless experiences inside and outside the classroom. I joined the Student Chapter of the Wildlife Society in 2018 where I took advantage of as many field experiences as I could, including mule deer, prairie chicken, coyote, nilgai, turkey, and sandhill crane captures, as well as mist netting for birds and bats. Attending the Texas Chapter of the Wildlife Society Annual Meeting in 2019 exposed me to the other side of field work: research. I was hooked on the idea of answering research questions to further our understanding of roles species provide in ecosystems. This passion is what led me to watching sheep poop.

Texas' bighorn sheep and mule deer declined in the 20th century due to habitat loss, unregulated hunting, and the introduction of livestock diseases. Fortunately, beginning in the mid 1900's, restoration efforts were implemented and successfully reestablished both species across their historic range. However, around the same time, a non-native invasive species was introduced onto the landscape in Texas.

Originally from Northern Africa, aoudad were introduced into Texas in the mid-20th century when 44 individuals were released into Palo Duro Canyon. By 1999, upwards of 20,000 aoudad were reported throughout the state. Aoudad are a very gregarious species and have



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adapted well to the rough terrain of the Trans-Pecos. Females are sexually mature at 9 months old with a gestation period of only 22 weeks, often producing twins. The ability to reproduce at such a young age, twin, and shorter pregnancy time, could result in population growth rates twice that of mule deer and upwards of six times of bighorn sheep. The similarity in anatomy and native habitat of aoudad to those of native desert bighorn sheep and mule deer suggests that aoudad may share common behaviors and preferences as our two native species. If this is the case, there is concern that aoudad could compete with the natives for scarce desert resources such as food and water, compromising the restoration efforts of our native species.

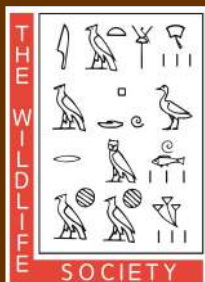
Since the introduction of aoudad into Texas, little has been researched on the degree of competitive interactions between these three ungulate species. Luckily, Borderlands Research Institute and Texas Parks and Wildlife are tackling these research questions through what we have coined as our BAM project (Bighorn, Aoudad, Mule deer). This study initially set out to answer the question of how similar aoudad habitat preferences are to mule deer and desert bighorn sheep by collaring over 100 individuals of all three species in the Van Horn Mountains. From this, we found aoudad and desert bighorn sheep selecting similar habitat. Mule deer habitat distribution only marginally overlapped with aoudad and bighorn, but competition may become a concern as the aoudad population continues to grow. This information indicated we needed to investigate finer scale interactions of these three species, including their dietary preferences and how they use resources through time, to understand more fully "when" competition could be occurring.

Desert Bighorn released in West Texas in Borderlands Research Institute and Texas Parks & Wildlife joint Bighorn Aoudad & Mule Deer research project.

Photo courtesy Dana Karelus



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Olivia Gray - SWS TWS Graduate Student Scholarship Awardee

While there is already some information about the diets of all three ungulate species individually, there is currently no information on overlap of diet when these species overlap on the landscape. When species coexist, they modify how they use resources to limit competition. This is not always possible in places like the Chihuahuan desert where low rainfall limits the amount of quality forage for a large portion of the year. Through my study, we want to understand how dietary overlap changes throughout the year. My field work consists of collecting fecal samples of all three species monthly over the course of a year in the Van Horn Mountains. I am currently conducting microhistology on all the fecal samples. This entails, grinding and bleaching the fecal samples, mounting them on slides, and looking at them under a microscope. By doing this, I can identify specific plant cell fragments down to the species, giving us a detailed description of diet composition from each species, each season. This will show when and to what degree diet is overlapping between all three species.

Since we already know these species select similar habitats in the Van Horn Mountains, the next question I am trying to answer is: Are bighorn sheep, aoudad, and mule deer using resources at the same time, or are they partitioning when they use these resources to limit competition? Using collar data, I am inspecting cycles in resource use of each species through time including water sources, vegetation resources, aspect, and escape cover. Using resources on different cycles (e.g., diurnal vs. crepuscular use) may indicate temporal partitioning of those resources. This information will identify when these resources most influence movement behavior, as well as both when and how these species manage competition for them.

The BAM project addresses multiple knowledge gaps in our understanding of how aoudad interact with our two native ungulates. The results of this research will allow managers to target management actions in specific places, at specific times, to achieve specific results, helping assure the long-term success of mule deer and desert bighorn sheep restoration in Texas.

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State News

**David R. Patton Professor & Dean Emeritus School of Forestry,
Forest Wildlife Ecology Northern Arizona University**

The Management Principle of Looking Good; A Philosophy of Work and Life

My objective in this essay is to introduce managers in supervisory positions to the Management Principle of Looking Good—an indirect way of collaborating with people. You will not find MPLG in any publication because it is my own thinking that resulted from an event that took place in 1973 that drastically changed my life. On January 2nd my friend, mentor, and supervisor, used a gun to commit suicide. At the end of the day, I was asking: Why did he commit suicide, did I or other employees contribute to his problem. The next day I was appointed to his position as Project Leader of a Forest Service Wildlife and Range Research Unit.

In trying to understand the reason for his suicide I became interested in psychology and human behavior in the workplace, and how to help people be successful. Over a period of several years, I was able to combine this interest with my background in systems analysis to formulate the Management Principle of Looking Good which involves a process and a principle.

THE PROCESS

As you review each of the items in the process, think about how it relates to your own experiences. There are several areas of involvement to understand before one can adequately put MPLG into practice. It is not the individual items that are important but the whole of the system.

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**David R. Patton Professor & Dean Emeritus School of Forestry,
Forest Wildlife Ecology Northern Arizona University**

1. Know yourself (human uniqueness).
 - a. No other person in the world is just like you.
 - b. What can you do very well, what do you not do so well and what work load can you sustain?
 - c. How do you react to people and how do people react to you?
 - d. Consider generational differences, tolerance to differences, and what makes you angry.
 - e. Do you see behavior in others that you do not like?
 - f. Do you always feel tired and rundown? You can reduce stress by behavior modifications such as relaxation techniques.
2. Work with successful people
 - a. Identify key people in your work environment who continually meet their assigned objectives.
 - b. Set direction and have a plan to reach your goals by collaborating with those people who can help you do a better job than you can do by yourself.
 - c. A productive employee may be one who often refuses leadership but may be creative in accomplishing goals in their own way.
 - d. Be informed about people that can collaborate with you. Visit them in their workplace.
 - e. Be a good listener and encourage people to talk about themselves and to feel important—**they are!** Let them know that any personal issue will always be kept confidential.
 - f. Discuss employer issues and concerns, **their** goals and desires, the fun things they like to do, and the job-related issues that irritate them most.

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State News

**David R. Patton Professor & Dean Emeritus School of Forestry,
Forest Wildlife Ecology Northern Arizona University**

3. Do not be a thief by withholding information that could help others be successful.

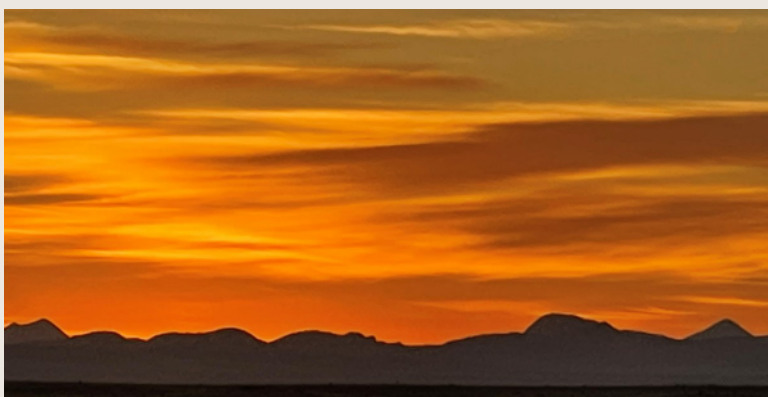
THE PRINCIPLE

If you understand The Process, then you are ready to put MPLG into effect. So, what is MPLG?

"Do everything you can that is legal, and within your ethical and moral standards to make the people you work for and with look good to their peers."

What makes MPLG work? It works because there is a synergistic feedback mechanism that increases your efficiency to complete your job assignment. You will know when you are practicing MPLG when you are thinking in terms of how you can help other people achieve their goals and be successful.

The fun is to make people look good without them knowing of your involvement.



Sunrise over the Chihuahuan Desert

Photo courtesy Misty Sumner

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State News

Stephanie Herbert ~ Being Involved Leads to Success

I am a Wildlife Biologist, climber, cyclist, and backpacker living in New Mexico after recently relocating from California. As an active outdoorsperson, I have spent my entire life appreciating Western and Southwestern landscapes. I am lucky enough to now call New Mexico home. I graduated with honors in 2015 from UC Davis with a major in Ecology, Evolution, and Biodiversity and a minor in Wildlife, Fish, and Conservation Biology. Through the honors program I wrote a thesis analyzing impacts of solar development on a rare milkweed, the culmination of this research was a chapter published in a California Energy Commission report.

After graduation, I put my botanical knowledge to work monitoring floodplain restoration projects with The Nature Conservancy in California. I then worked for the Bureau of Land Management as a Rangeland Management Specialist in Northeastern Nevada. This was an incredible place to experience the vast yet delicate nature of sagebrush steppe. This position exposed me to the intersection of natural lands conservation and wild horse management, gold and silver mining, public recreation, cattle grazing, oil and gas exploration, and increasingly severe wildfires. I eventually moved on to work as a Biologist with the California Department of Transportation conducting field studies, permitting, impact analysis, and mitigation for an array of listed wildlife species ranging from abalone to critically endangered salamanders to small mammals. Working on complex projects in a state as diverse as California taught me to be a collaborative partner with many state and federal agencies. This was the only way to find innovative solutions to successfully achieve complex wildlife habitat restoration and mitigation.

I consider myself lucky to have such varied experiences early in my career. It allowed me to cultivate a unique perspective, in that I have worked with public, private, and non-profit sectors and understand the strengths and challenges in each of these roles. Throughout my

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State News

Stephanie Herbert ~ Being Involved Leads to Success

professional journey, I learned that inclusivity was paramount to successful wildlife conservation. To be a better scientific collaborator, I would need to facilitate strong relationships with diverse members of the wildlife community. I began looking for ways to meet and work with land managers, researchers, and the many biologists who apply management decisions and research in the field to create more fruitful conservation efforts. In short, I came to understand the mission of The Wildlife Society. This spurred my interest in joining and being active in The Wildlife Society.

I started my membership in The Wildlife Society in California in 2016. I presented my work on small mammal habitat restoration and California Tiger Salamander mitigation at local chapter meetings including the San Joaquin Chapter's Natural Communities Conference and the California Central Coast Chapter's Annual Symposium. I then volunteered on the Professional Development Committee of my local chapter of TWS in California. I was inspired by the board members of the chapter to become more involved and was elected as Secretary and then Treasurer of the chapter. In these rolls, I planned professional workshops on small mammal tracking and helped coordinate the annual symposium. My work at the chapter level opened the door to volunteer work with the Western Section. I volunteered for the past few years on the planning committee of the Western Section Annual Meeting helping transition the section to a virtual format during the global pandemic. That role introduced me to the Western Section's many professional workshops, and I now volunteer to help coordinate those workshops as often as I am able. Recently I have assisted with a wildlife crossings symposium and a Mohave ground squirrel workshop. This has been a huge benefit to my career, as my knowledge of wildlife continues to grow with each workshop, I participate in. I also volunteer with the National Quiz Bowl, which has helped me find joy in wildlife science, and keeps me up to date on ever-growing wildlife taxonomy. I am in the first generation of college graduates in my immediate family, and I feel extremely privileged to work as a wildlife biologist when I consider the

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Stephanie Herbert ~ Being Involved Leads to Success

sacrifices my family made for me to attend UC Davis. I volunteer with the quiz bowl and mentor students in The Wildlife Society in hopes that I can help relieve the pressure students face to succeed in this field.

I moved from California to New Mexico in 2021, and my membership in The Wildlife Society has been invaluable in building a community in a new state and section. I presented at and volunteered on the quiz bowl committee for the Arizona/New Mexico Joint Annual Meeting in January (and found comradery in fellow quiz bowl enthusiasts). I was elected to the board of the New Mexico Chapter, and I am excited to contribute to the chapter and learn about the wildlife community in my new home. I am looking forward to settling in New Mexico as a wildlife biologist. I hope to increase my contribution to the Southwest Section by attending meetings and volunteering for the section committees and meetings where it is most helpful. I also look forward to building working relationships between New Mexico and neighboring states through my Southwest Section Membership. I continue to hold memberships at the National, Southwest Section, Western Section, California Central Coast Chapter, and New Mexico Chapter because I have formed friendships through every level of this organization, and I cannot imagine where I would be without each of these memberships. I hope my involvement and commitment to The Wildlife Society can serve the Southwest Section. I look forward to meeting you all in Spokane in 2022!

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State News

John Sproul Program Coordinator/Manager Rio Bosque Wetlands Park

RIO BOSQUE WETLANDS PARK: AN UPDATE

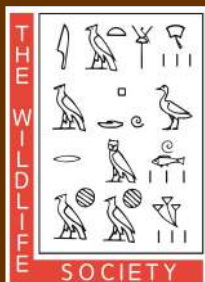
The Fall 2016 issue of this newsletter provided an overview of ecosystem restoration efforts at Rio Bosque Wetlands Park, located next to the Rio Grande in El Paso, Texas. At that time, we had only recently overcome some long-standing challenges getting water to the site during the growing season. Wetland and riparian habitats were just starting to respond.

Since then, much has happened. Prior to 2015, water was only available to the park in late fall and early winter. In some years, beavers moved onto the site during those wet periods, but they would leave when water deliveries ended. When a beaver appeared in January 2019, though, with water now consistently present, it stuck around (Figure 1). It is still present.

Yellow-billed Cuckoos formerly nested at Rio Bosque, and one goal of riparian restoration efforts at the site has been to lure them back as a nesting species. In 2016, they were still just sporadic visitors, appearing briefly in some years, not at all in others. For the past 5 years, though, starting in 2018, we have been detecting cuckoos consistently throughout the summer. We suspect breeding, though it is not yet documented.

Another restoration goal has been to establish enough freshwater-emergent- wetland habitat to lure Least Bitterns back as a nesting species in the El Paso area. Channelization of the Rio Grande in the 1930s and early 1940s led to loss of the wetlands these birds historically used for nesting locally. In June-July 2021, our first-ever Least Bittern appeared at Rio Bosque in an extensive cattail marsh. We hope it was the first step towards eventual nesting at the park.

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John Sproul Program Coordinator/Manager Rio Bosque Wetlands Park

We knew 2022 would bring more surprises. What might they be? In late June, we got a big one, one that is significantly affecting our approach to water management at the park: Our resident beaver, after keeping a low profile for 3.5 years, decided the time had come to build some dams...

More about the Rio Bosque Wetlands Park in Part 2 in the Spring coming up in the 2023 Spring SWS TWS Newsletter.



North American Beaver (*Castor canadensis*) along the Rio Grande in the Rio Bosque Wetlands Park, El Paso, Texas.

Photo courtesy John Sproul

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Shannon Grubbs Texas Parks & Wildlife Biologist

Youth Hunt in a City Park

Knitted in between the traditional Christmas activities during this past December, The City of Victoria, Texas hosted a unique event. On Friday afternoon December 10th, 6 area youth met at Riverside Park to begin a week-end of learning how to responsibly hunt wild game, led by Texas Youth Hunting Program (TYHP) mentors. This is believed to be the first hunt in a city park in Texas. At least legally!



Youth hunters receive instruction prior to spending time practicing with the firearms they will use for the next day's hunt at Riverside City Park, Victoria, Texas

Photo courtesy Meagan Lesak

Riverside Park is 600 acres in the west-central area of Victoria and is also home to the municipal golf course and the Texas Zoo. The Guadalupe River serves as the western border. White-tailed deer, feral hogs, opossum, raccoons, skunks, and a diversity of birds make the park their home. For years there has been concern over what to do with the very high population of deer. Deer litter the golf course and are frequently hit by vehicles on nearby Main Street. City officials had previously been presented with options for controlling the number of deer in Riverside Park. One option discussed was Texas Parks and Wildlife Department's (TPWD) Trap Transport and Process (TTP) program. With this program, deer are trapped and then taken to a processing facility. The meat is then donated to food banks. However, former City Council member and current mayor, Jeff Bauknight, had been trying for years to get a hunt organized at Riverside Park.

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Shannon Grubbs Texas Parks & Wildlife Biologist

Things began moving faster in June 2020 when TPWD's Executive Director, Carter Smith, and TYHP's Director, Chris Mitchell, met with City officials in Victoria. The path was paved to begin planning for a youth hunt in Riverside Park. It was officially approved by City Council in February 2021. While this hunt alone won't provide instant relief of deer numbers, if the hunt is deemed successful and becomes an annual event, the youth hunt may work to decrease deer density.

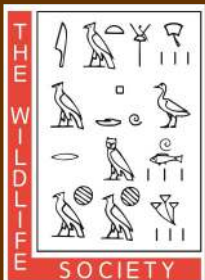
When focusing on decreasing deer populations, doe harvest is key. Because of the park's location, the only time to harvest does is during the archery, youth-only, or muzzleloader seasons, or the 4 day "doe days" beginning on Thanksgiving Day each year. To have more flexibility, the park signed up for TPWD's Managed Lands Deer Program (MLDP) so they could be issued antlerless permits. City employees were asked to take herd composition counts, as are all MLDP participants. TPWD biologists also set up a spotlight route and worked with city employees to conduct the nighttime counts correctly. These formal counts began in 2020 and will continue moving forward. Based on the data collected for Riverside Park, 18 antlerless permits were issued for the 2021-22 season. This allowed each of the 6 participants the opportunity to harvest 3 antlerless deer. Additionally, youth hunters could use a tag from their hunting license to harvest one buck but were encouraged to focus on doe harvest. Feral hogs are also a problem in the park, causing damage to the riverbank, golf course, and new soccer fields. Youth hunters could harvest an unlimited number of hogs.

TYHP participant Alyse Gonzales practices her shooting skills. Riverside City Park. December 11, 2021

Photo courtesy Shannon Grubbs



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The event was capped at 6 participants between the ages of 12 and 16. The City gave special permission for shotguns to be used within city limits for this event and the golf course and most of the park were closed to the public for the weekend. The registration fee, meals, fire-arms, and ammunition were provided to the participants and the cost of this was covered by TPWD scholarships. As with all TYHP events, youth were required to have taken a hunter education course and have a guardian with them for the entire weekend. Hopeful hunters applied for a chance to participate on the THYP website and priority was given to those from Victoria or surrounding areas and first-time hunters.

Participants were chosen by TYHP, but City officials also selected 6 additional youth from the applicant pool to attend a TYHP hunt at the Welder Wildlife Foundation in January. All costs were covered for those youth as well.

On Friday, the kids were kept busy with a safety brief, orientation, and shooting practice. After dark, a local hunter came to share stories and words of wisdom with the kids, and they were also addressed by Mayor Bauknight and State Representative Geanie Morrison. Hunters were allowed to tent camp on the grounds or use the adjacent RV park. The kids had 3 hunting sessions: Saturday morning and afternoon and Sunday morning. Even with very high winds on much of Saturday, 18 doe and 1 buck were harvested over the weekend. Something to note: the deer that TPWD biologists saw being processed on Saturday morning were very lean (i.e., very little body fat), especially compared to deer harvested on other MLDP properties just across the river. While an anecdotal observation, this indicates the lower overall health of the deer at Riverside Park when compared to deer on managed properties. After the first morning session the kids learned about gutting and skinning the deer, meat processing, aging deer by tooth wear, and Chronic Wasting Disease (CWD). Of course, safety was a key component, especially since this was in a city park. City officials did their best to keep people out of the park, but a few people found their way in. Hunters were very aware of their surroundings and spotted unauthorized people from blinds on at least 2 occasions. Officers were on duty to escort them out.

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Shannon Grubbs Texas Parks & Wildlife Biologist

While this was a controversial event, it had many supporters and went about as well as one could hope. After the hunt, Assistant Director of the Parks and Recreation Department, Kimberly Zygmant, was asked if she thought it was successful. She answered that it was very successful, not only in harvesting deer but as a lesson in safety. If the hunt does become an annual event, it will be a great opportunity for new hunters to get involved, potentially help the long-term health of the Riverside Park deer herd and achieve the goals of the City Parks and Recreation Department. With the importance of hunter recruitment and increasing challenges of managing deer in artificial environments, perhaps this type of hunt can be an inspiration to other areas across the U.S.



Shannon Grubbs shows hunters at the Riverside Park Youth Hunt how to age deer using the Severinghaus tooth wear and replacement technique.

Photo courtesy Meagan Lesak

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State News

Submitted by Tyler Campbell Science Manager East Foundation

Importance of "Bull" Mesquite for Rangeland Birds

Faith O. Hardin, Samantha Leivers, Jacquelyn K. Grace, Zachary Hancock, **Tyler A. Campbell**, Brian Pierce, and **Michael L. Morrison**



Bull mesquite at dusk on East Foundation's San Antonio Viejo Ranch.

Photo courtesy Wyman Meinzer

Honey mesquite dominates many rangelands in the southwestern United States and northern Mexico. Mesquite is a member of the legume family of plants which includes peanuts, alfalfa, clover, and other beans. The growth form of mesquite varies from shrub to small tree (to 25 ft tall); with single or multiple trunks, much-branched, crown rounded; and growth beginning in late spring, flowering from March to May, and with fruits maturing from June to August. Mesquite reproduces from seeds and basal shoots. **"Bull" mesquite are single trunked, crown rounded,**

mature mesquite with a tree growth form and with a trunk that is a foot or more in diameter.

Most of the areas where mesquite occurs have low annual rainfall. Bull mesquites have a long taproot that they use to locate enough moisture to keep them alive. This feature allows them to survive through droughts. The roots of mesquite can regenerate if the aboveground portions of the tree are removed through mechanical treatments (e.g., roller chopping and shredding). As such, mesquite is difficult to control through mechanical means.

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Submitted by Tyler Campbell Science Manager East Foundation

Bull mesquites are valuable to livestock and wildlife, providing shade within semi-arid rangelands. Additionally, mesquite seed pods are an important food for many wildlife species, including white-tailed deer, collared peccary, and coyotes and as an emergency feed for livestock.

On South Texas rangelands, mesquite provides essential nesting habitat for many bird species. The importance of bull mesquite to woodpeckers and secondary cavity, ash-throated flycatcher, brown-crested flycatcher, and Bewick's wren) on the ranch (Hardin et al. 2021).

Our monitoring approach included 1) point count surveys during the spring and summer months, with points visited six times per month from 2014–2020; 2) nest searches and monitoring with cameras; and 3) sampling insects (as a prey item of birds) along transects (Hardin et al. 2021).

First, we found 55 woodpecker nests, of which 40 successfully fledged young (73%). Across all cavities found, abandoned woodpecker cavities ($n = 526$) were built with smaller cavity entrances, and in less decayed trees with larger diameters than cavities formed naturally by decay ($n = 847$; Figure 1). The height and depth of the cavity were not different between cavity types.

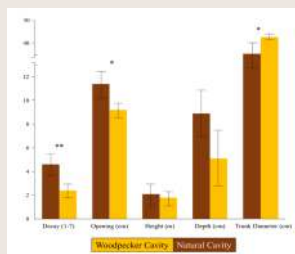


Figure 1: Characteristics of woodpecker and natural cavities. Results of Welch's t test comparing differences between woodpecker and decay-formed cavities. Natural decay-formed cavities $n = 847$, Woodpecker cavities $n = 526$. Error bars represent standard error. Abandoned woodpecker cavities were built in bull mesquite trees with significantly less decay, with smaller openings, and in trees with larger diameters, compared with decay-formed cavities. Note the break in the y-axis. Data were collected on East Foundation's San Antonio Viejo Ranch during 2019.

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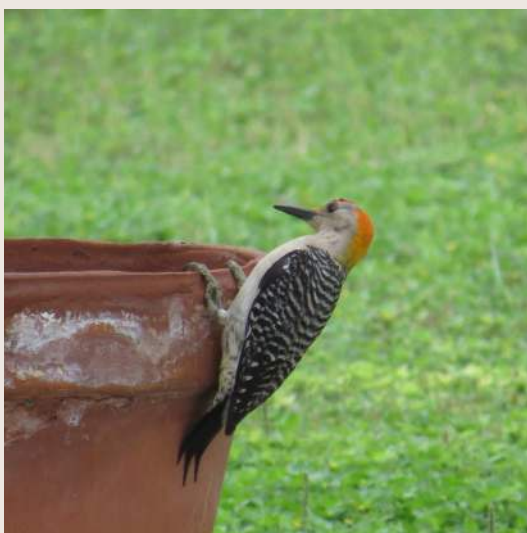
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Submitted by Tyler Campbell Science Manager East Foundation

Second, we found 79 wren nests, 102 flycatcher nests, and 39 tit-mouse nests. All species other than wrens preferred to nest in trees with lower decay, even though fully live trees were less common (<20%) than those with decay.

Lastly, we found secondary cavity nesting birds had higher than expected success when nesting within an area commonly foraged in by woodpeckers. Additionally, within foraging sites, the nesting success of all birds was correlated with the biomass of beetles, grasshoppers, and termites but were unrelated to the biomass of mantises, true bugs, walking sticks, and flies.

In summary, we found that 1) similar cavity metrics predicted daily survival rates of woodpeckers and secondary cavity nesters; 2) all secondary cavity nesters had high nest survival rates when in an abandoned woodpecker cavity versus a cavity formed by decay; and 3) average woodpecker foraging distances were correlated with the biomasses of beetles, grasshoppers, and termites.



Male golden-fronted woodpecker on East Foundation's San Antonio Viejo Ranch.

Photo courtesy Christopher Huff

So, what does this mean?

First, golden-fronted woodpeckers prefer to create cavities and nests in bull mesquite, where nesting attempts were more successful. Additionally, secondary cavity nesting birds (i.e., black-crowned titmouse, ash-throated flycatcher, brown-crowned flycatcher, and Bewick's wren) have greater reproductive success when nesting in abandoned woodpecker cavities in bull mesquite.

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Submitted by Tyler Campbell Science Manager East Foundation

Bull mesquite is extremely important to rangeland bird reproductive success and the causative mechanism may be related to prey abundance (i.e., availability of beetles, grasshopper, and termites) or predator avoidance behavior.

Second, land managers in the southwestern United States and northern Mexico interested in conducting brush control to promote cattle forage production or as a habitat management tool for white-tailed deer, northern bobwhite, and other game, should **take measures to retain bull mesquite** to promote breeding bird communities, rangeland health and productivity.

Literature Cited

Hardin, F.O., S. Leivers, J.K. Grace, Z. Hancock, T.A. Campbell, B. Pierce, and M.L. Morrison. 2021. Secondhand homes: the multilayered influence of woodpeckers as ecosystem engineers. *Ecology and Evolution*, 11, 11425–11439. <https://doi.org/10.1002/ece3.7932>



Mesquite flowering on East Foundation's San Antonio Viejo Ranch.

Photo Courtesy Wyman Meinzer



Mesquite seed pods on East Foundation's San Antonio Viejo Ranch.

Photo Courtesy Wyman Meinzer

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State News

Submitted by Maureen Frank Associate Professor & Extension Wildlife Specialist

Circle Up: An Interactive, Peer-to-peer Workshop Teaches Texas Landowners about Prescribed Fire

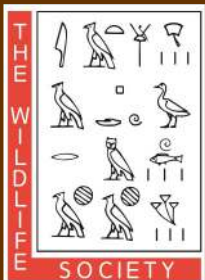
The Peers and Pros 360° Teaching Method was originally developed by Dr. Sanford Smith and David Jackson at Penn State Extension. This workshop was developed by Dr. Maureen Frank and Kaitlyn Restivo.



Traditional outreach programs convey information from an expert to participants, but effectively educating today's landowners may require a new method. Research indicates that adults prefer to learn from the experiences of others, and they love to share their own personal experiences. For my Master's project at Texas A&M University, I investigated the Peers and Pros 360° method for outreach about prescribed fire. Peers and Pros 360° is designed to build on the knowledge of a group of participants (peers) and is mediated by subject matter experts (pros) who follow a set progression of themes and talking points. To prepare for the workshop, we wrangled up several prescribed fire experts and asked them to brainstorm common statements they hear from the target audience, landowners in the Edwards Plateau ecoregion of Texas. We organized the statements into 8 themes, each with 3 associated statements. We then asked the experts to create talking points for each statement to guide the pros at our workshops.

We tested our Peers and Pros 360° curriculum at 3 workshops in the beautiful Texas Hill Country. After check-in at each, participants found a seat among a circle of chairs, so they knew right away this

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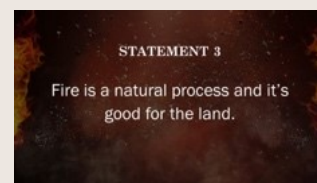
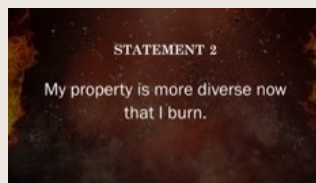


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Kaitlyn Restivo & Maureen Frank

them some assurance that we wouldn't be singing campfire songs, then introduced ourselves and handed out the program-specific numbered statement cards, which we printed and cut out in advance.

Once all the cards were distributed, the pro asked the participants who received the cards for the first theme (cards 1, 2, and 3) to read their statements out loud. The pro then asked all participants to share their opinions, thoughts, and reactions relative to the statements. We wanted participants to respond as if one of their peers said these statements



During an everyday discussion. Everyone was encouraged to express their thoughts regardless of their level of knowledge.

I coached the pros at each workshop to not interrupt peer discussions even if inaccurate information was presented. It can be tricky to stay quiet when you want to teach and make sure everyone has the correct information! But once the peers discuss all the statements and the discussion is starting to die down, the pro gets to summarize the theme, contribute additional information, and gently correct any misinformation if appropriate. The participant who presented the inaccurate information is often made aware of this during the discussion with his/her peers, and the purpose of this teaching method is to encourage open discussion. Thus, pros should not call anyone out so that the participants feel comfortable and willing to share.

Once the pro is done contributing additional information, the next theme begins as the pro instructs for the corresponding cards to be read aloud. This process continues until the end of the workshop. Typically, a 1-hour program can cover 3 to 4 themes and a 2-hour program can cover up to 8 themes (not including travel time).

An indoor location would work for our curriculum, but we chose outdoor sites where prescribed fire had been used as a management tool. This allowed us to use our surroundings as a visual aide to supplement discussions. For example, we discussed the theme "Timing" at a location where a field that had been burned in the winter sat adjacent to a field

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Kaitlyn Restivo & Maureen Frank

that had been burned in the summer. Our workshops took a bit longer than anticipated since we moved from one site to the next via hayride, but our participants had a blast, and it was the perfect opportunity for them to chat and get comfortable with one another.

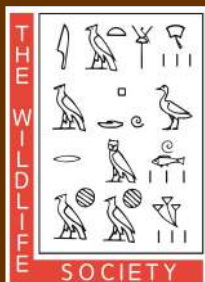
We received lots of positive feedback from this program and are looking forward to using this teaching method in the future with different topics. Special thanks to our prescribed fire experts, site hosts, and to the Shield-Ayres Foundation for funding this project.



Maureen Frank and Kaitlyn Restivo along with workshop participants preparing to move to a new site.

Photo courtesy Liz Tidwell

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Student News

Robert Tyler Graduate Student Texas State University

Surveying Methods of Bat Risk Assessment

My name is Robert Tyler, and I am a master's student at Texas State University, San Marcos, Texas. My research is focused on the surveying methods of bat risk assessments for wind farm development in the South Texas Plains. I am investigating the benefits of implementing thermography into existing acoustic monitoring to better approximate bat activity at locations for potential wind farms.

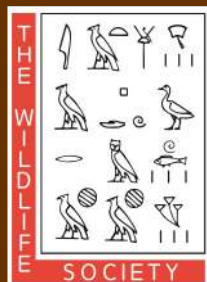
In response to the hundreds of thousands of bat fatalities that result from wind turbines annually in the USA, wind energy has become a focal point of bat conservation. The balancing of developing renewable resources and minimizing environmental disturbances has led to significant effort being directed towards alleviating impact at previously constructed windfarms. Research has indicated promising prospects for post-construction mitigation through the implementation of ultrasonic acoustic deterrents that are used to keep bats from flying in the dangerous rotor-swept area and curtailment, where wind turbines are shut off when bats are most active.

Additionally, the wildlife impacts generated by wind farms are now taken into consideration before development begins. Studies monitor the acoustic bat activity in an area to reduce the impact on sensitive and threatened species. However, these studies lack predictive power of true bat activity and therefore for future wind farm fatalities.

My research incorporates thermal imaging into existing acoustic monitoring protocols. Thermography offers a unique potential to improve pre-construction surveys, since it makes it possible to visually capture bat activity in the dark. The shortcoming of acoustic monitoring is that it is unable to discern counts of bats, and therefore underestimating the true bat presence and activity during the survey. Conversely, thermography is unable to identify active bats to species. My study seeks to pair these methodologies to capture and assess bat activity during pre-construction survey efforts more accurately.



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Student News

Robert Tyler Graduate Student Texas State University

During 2020 and 2021, I investigated the benefits of supplementing pre-construction wind energy acoustic surveys at 3 meteorological towers in the South Texas Plains with my team and mentors, Dr. Sarah Fritts, Dr. Sara Weaver, Brogan Morton, and Nevin Durish. Results suggest that using both thermal cameras and acoustics to monitor bats gives better results, particularly during some weather conditions. Overall, acoustic bat activity and thermal bat activity showed similar patterns, increasing with higher temperatures and humidity. However, the number of bats around the tower had a negative relationship to acoustic bat activity, indicating that more bats can be recorded as fewer acoustic detections.

During data processing, we also observed interesting and novel behaviors of the bats captured by our thermal recordings. The bats displayed an apparent attraction to the towers, characterized by continuous investigation. They were particularly attracted to the static regions towards the top of the tower. Not only were individual bats drawn to this area, but it continued to attract bats throughout the duration of the study. This behavior is leading to new ideas about the attraction of bats to large structures in the landscape.

We hypothesize that the cause of this attraction is olfactory in nature, with bats using the tallest structures in the land to mark pheromones, potentially for navigation or reproduction. Though it is thought that the echolocating insectivorous bats in the United States do not rely on olfaction to the degrees fruit bats do, they do contain numerous pheromonal glands. More research is needed to determine if olfaction is a component around bat attraction to large structures. Studies should investigate pheromonal and olfactory interactions of species highly impacted by windfarms.

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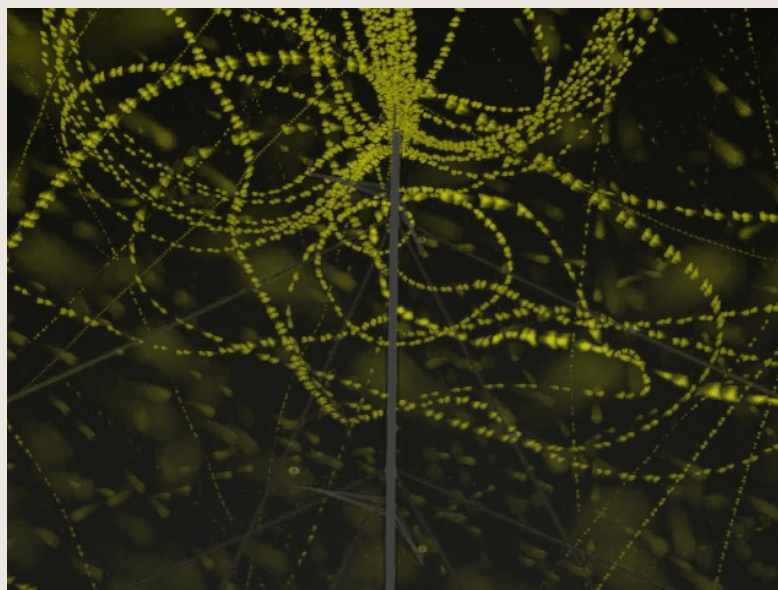
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Robert Tyler Graduate Student Texas State University



Thermal camera setup used in thermography and acoustic monitoring. Photo taken at a meteorological tower in the South Texas Plains.

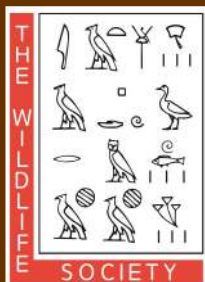
Photo courtesy Robert Tyler



Summary image of a 5-minute video recorded at the tower May 1st, 2021. It was generated by layering detections from every other frame of the video to provide insight into bat activity around the tower. Image was generated by Brogan Morton from Wildlife Imaging Systems. South Texas Plains.

Image courtesy Brogan Morton from Wildlife Imaging Systems

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Student News

SWS TWS Southwestern Wildlife Graduate Student Scholarship Call for Applications:

The Southwest Section of The Wildlife Society is soliciting applications for the \$500 Southwestern Wildlife Student Scholarship. This scholarship will be presented at either the 2022 Joint Annual Meeting of the New Mexico and Arizona Chapters of The Wildlife Society and the Arizona/New Mexico Chapter of the American Fisheries Society or the 2022 Annual Meeting of the Texas Chapter of The Wildlife Society. Please submit nominations electronically by **15 December 2022** to whitney.gann@tpwd.texas.gov

Southwestern Wildlife Student Scholarship

Description:

The Southwestern Wildlife Student Scholarship is an award in the amount of \$500 that is given annually to a graduate student who is currently enrolled in a natural resource-oriented program at a college or university in Arizona, New Mexico, or Texas and is studying wildlife. Wildlife includes all fauna and habitat components, excluding fisheries-related studies. Applicants should have a minimum cumulative grade point average of 3.5. Women, members of minorities, or students who are the first in their family to attend graduate school are especially encouraged to apply. The Southwest Section's Geospatial Advisory Committee encourages exchange of information regarding the application of geospatial technology to wildlife research. In support of the work of this committee, students who are extensively utilizing geospatial data, including satellite imagery or other products of remote sensing technology, and/or generating their own geospatial products through the use of drones, are also encouraged to apply. Incorporation of these technologies in an applicant's graduate research is NOT required; applicants not using these technologies should still apply.

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Student News

SWS TWS Southwestern Wildlife Graduate Student Scholarship Call for Applications:

Application Format:

The application package should be addressed to the Southwest Section of The Wildlife Society Board and consists of a cover letter and current resume. The cover letter should be no longer than one page, and the resume no longer than two pages. Please use standard one inch margins and size 12 font. The application package should contain the following information:

In their **cover letter**, applicants should briefly describe their graduate research project, state their academic and professional goals, and include details on past and anticipated future contributions to the conservation of biodiversity in the Southwestern United States, including Arizona, New Mexico, and Texas, and elsewhere. Applicants should also provide information on relevant leadership experience, either through academic or professional experiences or extracurricular activities. Finally, applicants must provide a brief statement of financial need, including personal indebtedness related to education, current scholarships, grants or assistantships, and whether the applicant has previously received the Southwestern Wildlife Student Scholarship.

Resumes should contain detailed information on educational experience including: field of study; college or university where currently enrolled and those previously attended; expected date of completion; completed relevant coursework; and cumulative grade point average. Additional information on honors, awards, and/or scholarships previously received is also appropriate. Resumes should also include information on professional experience, whether paid or volunteer, including employers, locations, time periods, and brief descriptions of work responsibilities.

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Spring & Fall 2022 - Vol. 13 Issues #1 & #2



Student News

SWS TWS Southwestern Wildlife Graduate Student Scholarship Call for Applications:

Scholarship Criteria:

The Southwest Section of The Wildlife Society Board reviews applications and determines awardees through a ranked review process based on the following criteria:

Current cumulative grade point average and related educational experience and/or achievements receive the highest consideration during the review process.

Contribution(s) to the field, especially current and anticipated future contributions to the conservation of biodiversity in states within the Southwest Section, receive secondary consideration.

Demonstrated leadership through professional and/or academic experiences is also given consideration during the review process, as is the inclusion of geospatial data and/or technology in a student's graduate research project.

Demonstrated financial need and, in the interest of recognizing students from all states in the Southwest Section, the state of the prior year's scholarship recipient, are considered as final determinative factors to distinguish among applicants who may otherwise receive equal rankings during the review process.

Application Submittals:

Applications for the SWS of TWS Southwestern Wildlife Student Scholarship should be submitted electronically to: Whitney Gann, President of the Southwest Section of The Wildlife Society at whitney.gann@tpwd.texas.gov

Please write Southwestern Wildlife Student Scholarship in the subject line and include the submittal package as one email attachment (pdf is preferred) using the following naming format:

Applicant Name_SWSTWS_SWScholarship_Year

Example: WhitneyGann_SWSTWS_SWScholarship_2022

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State News
International News
Tribal News
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Southwest Section News



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SWS Board & Committee Chairs

Current Board

President: **Whitney Gann** whitney.gann@tpwd.texas.gov 830-676-3413
President-Elect: **Kay Nicholson** kay.e.nicholson@jacobs.com 602-530-1605
Past President: **James Cain** jwcain@nmsu.edu 575-646-3382
Secretary: **Masa Ohnishi** masahiro.ohnishi@tamuk.edu
Treasurer: **Erika Nowak** Erika.Nowak@nau.edu 928-523-7760

Southwest Section Representative to TWS Council

Kathy Granillo kbirder55@gmail.com (505) 350-1007

Active Committees

Conservation Affairs:

Romey Swanson romeyswanson@gmail.com 512-667-8124

Geospacial Advisory Committee:

Leland Pierce leland.pierce@state.nm.us 505-476-8094
& **Ginny Seamster** virginia.seamster@state.nm.us 505-476-8111

Newsletter:

Jamie Killian jamie.killian@tpwd.texas.gov 254-566-5011
& **Misty Sumner** msmuledeer@gmail.com 254-702-1869

Women of Wildlife Committee:

Is now under TWS' Ethnic and Gender Diversity Working Group (EGDWG)

Don Yasuda Chair dyasudaTWS@gmail.com

Women of Wildlife Committee & EGDWG Liason

Kathy Granillo kbgirder55@gmail.com 505-864-4021



Southwest Section News



Join!



Membership Application

Membership Fee \$5.00

First Name Middle Name Last Name
Suffix

Mailing Address

City State Zip Code Country

E-mail address Phone

Member Type (Please circle one): Student Regular Retired

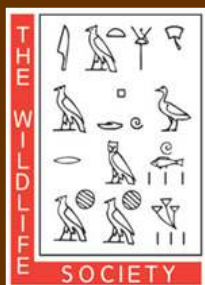
Please include this form with your payment and mail to:

**Erika Nowak, Treasurer, Southwest Section of TWS, USGS
Southwest Biol Ctr Box 5614 Flagstaff AZ 86011**

Membership benefits for the Southwest Section TWS

- SWS TWS Newsletter
- Scholarship opportunities
- Section-level meetings and conferences
- Strengthen your connections to national TWS
- Peer connections through Listserv and [Facebook](https://www.facebook.com/wildlife.org)
- Website information at <http://wildlife.org/sw-section/about/>

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Current Members

AZ NM TX Int Oth
58 78 113 2 52