

## Education

### **Texas Tech University, Department of Natural Resources Management**

IN PROGRESS – PhD in Wildlife, Aquatic, and Wildlands Science and Management

### **Sul Ross State University, Department of Natural Resource Management**

M.S. in Range and Wildlife Management – Spring 2018 to Fall 2020

3.8 GPA

### **Texas A&M University – Kingsville, Dick and Mary Lewis Kleberg College of Natural Resources**

B.S. in Range and Wildlife Management – Fall 2014 to Fall 2017

3.34 GPA

## Professional Activity and Training

### **Search committee for Carnivore Specialist position – 2025**

- Borderlands Research Institute
- Carnivore post doctoral visiting professor appointment

### **Alpine Wildlife Weekend – 2024 – 2025**

- Lunch and learn speaker – 2024
- Event keynote speaker – 2025

### **Chemical immobilization training – 2022**

- Completed San Diego Zoo Wildlife Alliance Academy’s “Safe Capture – Chemical Immobilization of Animals” course
- Training led by Dr. Kenneth Waldrup, DVM, PhD

### **CKWRI policy bootcamp – 2023**

- Attendants learned the intricacies behind wildlife policy decision making, and how to be effective communicators in that realm
- Discussions led by current Texas wildlife policy professionals

### **Oregon Chapter of the Wildlife Society Annual Meeting – 2022**

- Oral presentation: Analysis of Ungulate Occupancy and Co-Occurrence Relationships in the Oregon Cascades
- Oral presentation: Archie Creek Fire: Wildlife Recovery Survey

### **Texas Chapter of the Wildlife Society Annual Meeting - 2015 - 2020 and 2023-2025**

- **Annual Meeting**
  - Poster presentation: Effects of Rainfall and Coyote Abundance on Spatial Distribution of Bobcat and Ocelot - 2016
  - Poster presentation: Determining a Sustainable Harvest Rate for Collared Peccary - 2017
  - Poster presentation: Preliminary Analysis of Kit Fox Occupancy in West Texas – 2019
  - Oral presentation: Preliminary Analysis of Kit Fox Occupancy in West Texas – 2020
  - Oral presentation: Assessing Temporal Space Use Stability in the Trans-Pecos Black Bear Population - 2024
  - Oral presentation: Identifying the optimal survey design for estimating black bear density using simulated SECR models – 2025
- **Committee appointments**
  - Co-chair of the Photo and Arts committee – 2024
  - Chair of the Photo and Arts committee - 2025

## **Camera Trapping Study Design & Data Analysis Training – 2019**

- Two-week long training with hands-on assistance from experts in the field of R Programming who teach occupancy modeling and density estimation at the Smithsonian Mason School of Conservation in Front Royal VA.
  - Advanced my knowledge in Program R, as well as broadened my understanding of occupancy analysis

## **The Wildlife Society National Meeting - 2017 and 2020**

- Oral presentation: Analysis of Kit Fox Occupancy in the Trans-Pecos, Texas - 2020
- Competed in quiz bowl - 2017

## **Texas Society of Mammologists - 2016**

- Poster presentation: Effects of rainfall and coyote abundance on spatial distribution of bobcat and ocelot

## **Texas A&M University – Kingsville Student Chapter of the Wildlife Society – 2014 to 2017**

- Served as freshman representative and fundraising chair during my time as an officer for the chapter

## Publications

**Hewitt, M. O.**, D. L. Karelus, L. A. Harveson, R. L. Martin, P. M. Harveson. 2022. Modeling habitat use and potential distribution of kit fox in the Trans-Pecos, Texas. *Journal of Wildlife Management*.

Pappas, C. C., **M. O. Hewitt**, A.M.V. Dutt, L.A. Harveson, P.M. Harveson. 2024. Camera trap detections of the long-tailed weasel (Neogale frenata) in west Texas: implications for habitat use of an elusive carnivore. *The Southwestern Naturalist*, 68(3), 222-227.

## In progress

Hewitt, M. O., D. L. Karelus, A. Dutt, L. A. Harveson, R.L. Martin, P. M. Harveson. 2023. Co-occurrence of canids in arid landscapes: kit foxes and coyotes in the Trans-Pecos, Texas.

## Paper Reviews

- Ecosphere
  - 2025-04

## Work Experience

### **Research Assistant – Borderlands Research Institute**

Supervisor: Dr. Louis Harveson 2022 - present

- Guide and mentor masters' students and technicians
- Conduct spring/summer/fall back bear captures using culvert traps and NalMed-A
- Use programming languages, like R, python, and PostgreSQL, to process and store data
- Manage black bear captures and capture logistics
- Communicate with landowners and TPWD biologists
- Present findings at community and professional meetings

### **Research Assistant – Oregon Department of Fish and Wildlife**

Supervisor: Dr. DeWaine Jackson 2020 - 2022

- Oversee sampling efforts and data processing of a large-scale camera trap study
- Use programming languages, like R and Python, to process large amounts of camera data
- Generate and present reports on data updates
- Aid in large cervid captures, collaring, and monitoring

## **Masters Research Assistantship**

Supervisor: Dr. Patricia Moody Harveson 2018 - 2020

- Design and conduct a trail camera survey throughout the Trans-Pecos for kit fox

- Create and maintain a photo data management system
- Contact and organize ranch visits with > 50 property owners and managers
- Use programming languages to conduct species modeling

### **Bear Census Technician**

Louisiana Department of Wildlife and Fisheries - summer 2017

- Constructed and maintained 82 hair snare sites over 5 weeks of sampling time
- Assisted with 4-wheeler maintenance and repair
- Used GPS unit to navigate the Tensas NWR in northern Louisiana

### **Research Technician**

Caesar Kleberg Wildlife Research Institute 2016 - 2017

- Maintained a captive pigeon and chicken flock
- Assisted with rodent trapping surveys
- Assisted with bobcat/ocelot trapping
- Assisted with white-tailed deer captures
- Set up and maintained trail camera survey grids, as well as help with photo analysis
- Located feral hogs, turkeys, and felids using radio telemetry

### **Facility Intern**

Millville Predator Research Facility 2015

- Conducted independent project photographing and cataloguing coyotes to determine if coyotes can be recognized by physical characteristics
- Animal care: monitoring pup development and animal feeding
- Facility maintenance

### **Ranch Hand/Hunting Guide**

IBC Borregos Hunting Camp 2014 - 2016

- Ranch work:
  - Filling and maintaining wildlife feeders
  - Maintaining fences, and work vehicles
  - Clearing brush
- Processing harvested animals
- Interacting with clients

### *Teaching Experience*

#### **ANSC\_NRM 3308 - Agricultural Statistics – Fall 2024**

- Sul Ross State University – Instructor of record

### *Grants and Funding Acquisition*

#### **Developing a Reliable Monitoring Program for Recolonizing Black Bear Populations in the Trans-Pecos – Funded 2023**

- Submitted to Texas Parks and Wildlife for Pittman-Robertson funds - \$1.2 million
- Assisted with narrative writing – listed as a co-principal investigator

#### **Assessing and mitigating potential ecological impacts to large mammals from border barrier system construction and installation in South Texas, USA – Funded 2023**

- Submitted to US Fish and Wildlife Service – \$1.75 million

- Assisted with narrative writing – listed as a co-principal investigator

## Volunteer Experience

### **Oregon Department of Fish and Wildlife**

Supervisor: Emma Brought

- Aid in turkey trapping efforts through sight preparation, capture day preparation, and bird handling/transporting

### **Wildlife Conservation Camp – Texas Chapter of the Wildlife Society**

Supervisor: Whitney Gann 2018, Thomas Janke 2019, Masi Mejia & Kelly Mundy 2023, Kelly Mundy 2024, John Cayton Campbell 2025

- Volunteered as a college mentor for a group of high school campers
- Gave presentations on game camera set up and photo management
- Served as assistant camp cook

### **Borderlands Undergrad Mentorship Program**

Supervisor: Thomas Janke 2018-2019

Mentored two undergraduate students through the development of research projects, from data collection to analyzing and presenting at professional conferences

### **Assisted with Animal Captures**

Borderlands Research Institute, Caesar Kleberg Wildlife Research Institute, Texas Parks and Wildlife, East Foundation, Oregon Department of Fish and Wildlife

- Coyote – Helicopter (2019)/ Box trap (2017)
- American Marten – Box trap (2022)
- White-Tail Deer – Helicopter (2015-2019)
- Black-Tailed Deer – Clover traps/Dart gun (BAM) (2020-2022)
- Turkey – Drop net / Rocket net (2019 & 2021)
- Mule Deer – Helicopter / Drop Net (2018-2019)
- Pronghorn – Helicopter (2018)
- Ocelot/Bobcat – Box trap (2014-2015)
- Raccoon – Box trap / Foot holds (2014 -2015)
- Ringtail – Box trap (2021)
- Feral Pigs – Corral trap (2016)
- Quail/Dove – Walk in trap (2014 – 2015 & 2018)
- Passerines – Mist net – (2014 & 2018)
- Small Mammals – Sherman trap – (2013-2014)
- Prairie Dog – Burrow flooding / Box trap (2019)
- Aquatic Turtles – Hoop net – (2012)
- Black Bear – culvert and barrel traps – (2022 – end of PhD)

## Abilities and interests

- Experience working with many wildlife species:
  - Drawing blood on medium and large mammals
  - Make blood slides
  - Fitting radio telemetry units to multiple species
  - Deploying and reading pit tags

- Can accurately take and record morphological measurements
- Setting up and operating drop nets, as well as safe animal handling
- Have led chemical immobilizations on black bears (NalMed-A) and black-tail deer (BAM)
- Have assisted with chemical immobilizations on many wildlife species
- Experience interacting with private landowners
- Used truck and trailer to transport 4-wheelers, snowmobiles, side-by-sides, camper trailers, large volumes of field equipment
- Experience operating handheld GPS units in the field
- Experience conducting radio telemetry; aerial and terrestrial
- Proficient in GUI GIS programs (ESRI and QGIS) for map making and data analysis
  - Introductory experience with high precision survey techniques: Lidar, RTK, and drones.
  - Completed 14 credit hours of GIS related course work
- Experience working with programming languages for data organization and analysis:
  - Program R
  - Python
  - PostgreSQL
  - LaTeX
  - HTML (R Shiny)
- Hiking, backpacking, fishing, hunting, archery
- Experience driving a manual transmission vehicle
- Experience operating 4x4 vehicles in low traction situations
- Vehicle and small engine repair and maintenance
- Some experience with heavy machinery
- Carpentry
- Welding and metal fabricating

## Scholarships and Honors

### Scholarships

- Dan Boone Memorial Scholarship - 2019
  - Texas Chapter of the Wildlife Society
- SALE Scholarship – 2018 and 2019
  - San Antonio Livestock Show and Rodeo
- Dan L Duncan Memorial Scholarship – 2018 and 2019
  - Houston Safari Club
- Texas Big Game Awards Scholarship – 2014
- Kingsville Area Educators Federal Credit Union Scholarship – 2014
- Houston Livestock Show and Rodeo Scholarship - 2012
  - Texas A&M University-Kingsville, Dick & Mary Lewis Kleberg College of Agriculture and Natural Resources

### Honors

- Texas A&M University-Kingsville Student Chapter Awarded National Chapter of the Year while an officer
  - The Wildlife Society
- Earned my Eagle Scout – 2013
  - Boy Scouts of America

### References

Available upon request