LEAH WHITE

leahmwhite42@gmail.com · (910)391-5155

EDUCATION

Master of Science, Fish, Wildlife, and Conservation Ecology (in progress), Expected graduation 2023,
New Mexico State University | Las Cruces, NM
Minor in Applied Statistics | GPA 4.00

Bachelor of Arts, Biology, 2015, Appalachian State University | Boone, NC
Minor in Psychology | *Cum laude* graduate | Major GPA 3.87 | Cumulative GPA 3.52 | Dean's List 6 semesters

PROFESSIONAL NARRATIVE

Faced with the threats of a changing climate and expanding wildland-urban interface, I will dedicate my career towards the understanding and conservation of functioning ecosystems in North America. I am pursuing a Ph.D. to prepare me to bridge the gap between science and resource management and to meaningfully contribute to wildlife and ecosystem conservation in an uncertain future. <Sentence about community and TEK>

SKILLS

- **Data analysis, management, and visualization** *(*R, ArcGIS, Program Mark, FRAGSTATS, WinBUGS, JAGS, Microsoft Office suite, SPSS, QGIS, Google Earth, Adobe Photoshop, Timelapse, Garmin Basecamp)
- **Leadership** (interviewing, hiring, and training technicians, overseeing safety and logistics of group efforts, motivates coworkers, proactively problem-solving, tactful and effective interpersonal communication)
- **Backcountry travel** (strenuous hiking with heavy pack, minimum impact camping, orientation via GPS/map and compass, 4th and 5th class terrain, use of ice axes, snowshoes, and cross-country skis)
- **Scientific equipment** (VHF/GPS collars, radio frequency receivers/antennas, remote cameras, vegetation measurement tools (e.g., DBH tape, Robel pole, Daubenmire quadrat, spherical densiometer), spotting scope/binoculars, handheld GPS, etc.)
- **Species identification** (plant and animal)
- Above average **vision** (20/13) and **hearing**
- **Vehicles** (4wd, manual, ATV, UTV, and snowmobile operation over muddy, snowy, unmaintained roads, troubleshooting and maintenance)

RESEARCH EXPERIENCE

Graduate Research Assistant | Southwest Jemez Collaborative Forest Restoration Project (CFLRP)
New Mexico State University, Las Cruces, NM August 2020-Present

- Created proposal for thesis research investigating large mammal responses to forest restoration treatments in the Jemez Mountains, New Mexico
- Developed protocols and timelines identifying critical tasks for multiple time-sensitive projects with minimal supervision

- Independently managed long-term vegetation plot monitoring for the CFLRP, including coordinating and supervising five interagency field crews, QA/QC for 113 plots, and personally completing 40 plots, in addition to regular thesis-related fieldwork
- Collected, managed, and analyzed large ecological and spatial datasets in R in both frequentist and Bayesian frameworks, using generalized linear and hierarchical models
- Earned grant funding and scholarships
- Presented at university, regional, and national meetings
- Budgeted and purchased materials for research
- Interviewed, hired, trained, and supervised technicians
- Deployed and maintained 145 remote cameras across a 180 km^2 area
- Identified, measured, and collected plant species following detailed transect protocols
- Founded departmental Justice, Equity, Diversity, and Inclusion committee, compiled educational materials, organized weekly discussions of materials
- Served as president (2021) and secretary (2020) of the Graduate Student Organization
- Organized an undergraduate outreach and mentorship program; led meetings, organized skills workshops on radiotelemetry, orienteering, basic fieldwork skills, and resume building/interviewing
- Cultivated one-on-one mentoring relationships with undergraduate students
- Pursued additional opportunities for primary author publication

Supervisor: Dr. James W. Cain III; jwcain@nmsu.edu; (575) 646-3382

Remote Camera Analysis Technician | Idaho Wolf Monitoring
University of Idaho, Moscow, ID May-July 2020

- Remotely classified over 200,000 camera trap images using Timelapse template
- Identified carnivores, ungulates, small mammals, and human recreation
- Managed schedule independently while maintaining a team effort

Supervisor: Dr. David Ausband; DAusband@uidaho.edu; (208)885-1172

Scientific Aid | Sierra Nevada Red Fox Monitoring
California Department of Fish and Wildlife, Redding, CA December 2019-April 2020

- Created system for analyzing and organizing remote camera data with Timelapse software
- Remotely classified over 20,000 camera trap images using Timelapse template
- Assisted with capture, processing, and monitoring of state-listed Sierra Nevada Red Foxes
- Analyzed collar location and movement data, identified clusters and home ranges
- Installed, operated, and maintained baited remote camera stations, box traps, and cage traps
- Conducted track and scat surveys
- Worked remotely and independently in mountainous terrain and winter conditions
- Troubleshooted and maintained 4wd vehicles, ATVs, and UTVs with snow tracks

Supervisor: Jennifer Carlson; Jennifer.Carlson@wildlife.ca.gov; (530)225-2754

Biological Science Technician (GS-6) | Mountain Ungulate Population Monitoring
Grand Teton National Park, Moose, WY April-September 2018, 2019

- Monitored numbers, distribution, and reproduction of ungulates using remote cameras, radio telemetry, and visual observations
- Maintained superior physical conditioning for multi-day backcountry travel at high elevation in steep, rugged terrain hiking up to 15 miles a day with up to 50-pound backpack
- Installed, operated, and maintained equipment such as remote cameras and radio telemetry to monitor wildlife populations
- Collected and organized bighorn sheep fecal DNA samples from mineral lick sites
- Created, maintained, and organized databases to compile, reduce, store, retrieve, enter, analyze, and report data
- Used GIS to create maps to identify study sites and display and analyze spatial data
- Prepared summary reports for interagency use
- Conducted thorough literature review to inform future park projects
- Performed data quality control/assurance and management
- Planned logistics for multiday backcountry trips, reviewed safety plans
- Collected and moved road-killed ungulates, collected and prepared CWD samples
- Prepared biological samples from hunter harvest for age classification
- Investigated ungulate mortalities and retrieved GPS collars
- Assisted with capture, processing, and collaring of large mammals including grizzly bears and mule deer
- Assisted with other wildlife projects including sage grouse leks and harlequin duck surveys

Supervisor: Carson Butler; carson_butler@nps.gov; (307)739-3487

Natural Resources Intern—Americorps

Chaco Culture National Historic Park, Nageezi, NM October 2016-August 2017

- Independently coordinated and conducted field data collection including wildlife, vegetation, climatic, geological, paleontological, night sky quality, and air quality data, following detailed existing protocols and creating protocols for new projects
- Prioritized projects and managed time, efforts, and resources under minimal supervision
- Collaborated with other federal, state, university, and non-profit agencies to facilitate projects including aerial ungulate surveys, browse impact surveys, and springs monitoring
- Created maps using GPS and GIS to visually represent data and findings
- Organized and recruited volunteers for citizen science projects such as Audubon Christmas Bird Count
- Designed trail camera monitoring plan, installed and maintained cameras
- Synthesized existing literature and previous park projects, compiled findings to inform management priorities
- Navigated back-country using 4x4 vehicles and on foot with Trimble GPS device, crossing steep and sandy terrain for up to 12 miles with up to 40 lb. pack
- Led high school Youth Conservation Crew for a week-long revegetation project; planned, oversaw, and assisted with invasive plant removal, seeding, and planting native species

Supervisor: Aron Adams; aron_adams@nps.gov; (505)786-7014 ext. 226

Project Co-manager, Biological Science Technician | King Cobra Spatial Ecology

Sakaerat Conservation and Snake Education Team
Nakhon Ratchasima, Thailand February-August 2016

- Conducted VHF radio telemetry on King Cobras in rugged and human-dominated habitats in extreme environmental conditions
- Collected detailed habitat, shelter site, and environmental condition data for each telemetry pinpoint using iForms software
- Managed a team of volunteers to tackle day-to-day logistical problems and ensured high-quality data collection
- Navigated off-trail using Garmin GPS device
- Developed standardized reference waypoints and created trail/road maps for GPS devices
- Compiled weekly and monthly summaries of collected data using ArcGIS, QGIS, Program R, and Excel
- Set and monitored camera traps, managed photo database
- Interviewed and trained volunteers in field and data analysis techniques
- Participated visual encounter surveys for various herpetofauna
- Processed venomous and non-venomous snakes following strict protocol, collecting morphometric and diagnostic data
- Constructed and checked drift fence plots and traps
- Performed outreach and education with local Thai villagers and students

Supervisor: Dr. Colin Strine; ajarncolinpromma@gmail.com; (resides in Thailand)

Firefighter Type 2
Mesa Verde Fire Management Office, Mesa Verde, CO May-October 2017

- Responded to wildland fires on engine and hand crews
- Reached fires using GPS and map and compass, carrying up to 60+lbs and hiking several miles off trail
- Worked 16 hour shifts during both day and night
- Participated in a close team, where communication and safety were utmost priorities to accomplish potentially dangerous fire suppression via arduous physical labor
- Assisted with fuels reduction project work

Supervisor: Steve Underwood; steveunderwood2011@gmail.com; (970)570-9800

Field Technician
Inter Mountain Aquatics, Ririe, ID October 2017

- Restored fire-impacted wildlife management area with sagebrush seedlings
- Operated ATVs to reach remote planting sites
- Performed physical labor for 10 hours/day on a team of 20 planters, using hand tools
- Lodging consisted of tent camping and communal kitchen

Supervisor: Rachael Mayer; mayer.rachaela@gmail.com; (406)531-0136

Research Volunteer
New Mexico State University, The Ladder Ranch, NM Summer 2017

- Assisted with graduate study investigating the efficacy of hair snare traps for genetic inventory of mountain lions
- Independently navigated to trap locations using GPS, topographic maps, 4wd vehicles and on foot
- Collected triggered hair trap samples, maintained camera traps and collected camera data
- Constructed hair snare trap assemblies

Supervisor: Tricia Rosettie; tricia.rossettie@gmail.com; (607)377-2198

Park Ranger—Americorps

Allegheny County Ranger Corps
Student Conservation Association, Pittsburgh, PA May 2015–January 2016

- Patrolled over 6,000 acres of county parks on foot and bicycle, navigated using GPS, map and compass
- Designed and presented environmental education programs, led hikes for groups of all ages to explore and interpret natural resources and wildlife
- Contributed to GIS inventory of natural features and species
- Assessed sustainability of trails and participated in trail work days with public volunteers; included identifying and clearing invasive plants, removing fallen logs, clearing flooded areas, building foot bridges, etc.

Supervisor: Braden Meiter; braden.meiter@alleghenycounty.us; (412)835-0143

Research Assistant | Effects of *Didymosphenia geminata* on macroinvertebrate populations

Aquatic Invertebrate Ecophysiology and Toxicology Lab
Appalachian State University, Boone, NC Fall 2014

- Collected freshwater invertebrate samples, habitat, and environmental data in South Holston River
- Processed, labeled, and organized samples to assess invertebrate diversity

Supervisor: Dr. Shea Tuberty; tubertysr@appstate.edu; (828)262-6857

Research Assistant

Aquatic Conservation Research Lab
Appalachian State University, Boone, NC Seasonal 2013, 2014

- Followed field protocol to inventory threatened Hellbender salamanders, freshwater mussels, terrestrial salamanders, and fish
- Handled animals, collected samples for fungal disease monitoring, checked and inserted PIT tags
- Recorded detailed morphometric and environmental data

Supervisor: Dr. Michael Gangloff; gangloffmm@appstate.edu; (828)262-7790

FUNDING RECEIVED

- T&E, Inc, "Influence of wildfire and forest management on large mammal distribution, habitat use, and interspecific interactions in the Jemez December 2021

Mountains of New Mexico," **$2,996**

- Bringham Young University Redd Center, Summer Award for Upper Division and Graduate Students, **$1,450** — May 2021
- Mesilla Valley Audubon Society, Richard Bischoff Scholarship, **$1,500** — April 2021
- New Mexico State University, Era Rentfrow Memorial Endowed Scholarship, **$664** — March 2021
- T&E, Inc, "Influence of wildfire and forest management on large mammal distribution, habitat use, and interspecific interactions in the Jemez Mountains of New Mexico," **$2,996** — December 2020

TRAINING/CERTIFICATIONS

- **Wilderness First Responder,** Wilderness Medical Associates — March 2021
- **All-Terrain Vehicle Training,** USGS — October 2020
- **Firefighter Type 2 (Red Card),** National Wildfire Coordinating Group — June 2019
- **Mountain Travel Safety,** Exum Mountain Guides — June 2019
- **Wilderness First Aid/CPR,** Jackson Hole Outdoor Leadership Institute — May 2018
- **Paddle Sport Safety,** National Association of State Boating Administrators — May 2018
- **S212 Wildland Fire Chainsaws,** National Wildfire Coordinating Group — May 2017

PRESENTATIONS & CONFERENCES ATTENDED

- **The Wildlife Society National Meeting,** Spokane, WA — November 2022
  - **Poster:** Influences of wildfires and forest restoration treatments on large mammal distribution, habitat use, and co-occurrence in the Jemez Mountains of New Mexico
- **Jones Applied Quantitative Ecology Lab** — June 2022
  - **Invited talk:** Influences of wildfires and forest restoration treatments on large mammal distribution, habitat use, and co-occurrence in the Jemez Mountains of New Mexico
- **Traditional Ecological Knowledge Virtual Summit**, Virtual — May 2022
- **The Wildlife Society/American Fisheries Society NM/AZ Joint Annual Meeting,** Virtual — February 2022
- **9th International Fire Ecology and Management Congress,** Virtual — December 2021
- **The Wildlife Society National Meeting,** Virtual — November 2021
- **NMSU Biosymposium**, Virtual — March 2021
  - **Presented:** Influences of wildfires and forest restoration treatments on large mammal distribution, habitat use, and co-occurrence in the Jemez Mountains of New Mexico
- **The Wildlife Society/American Fisheries Society NM/AZ Joint Annual Meeting,** Virtual — February 2021
  - **Presented:** Influences of wildfires and forest restoration treatments on large mammal distribution, habitat use, and co-occurrence in the Jemez Mountains of New Mexico
- **USGS New Mexico Cooperator Meeting,** Virtual — October 2020
  - **Presented:** Influences of wildfires and forest restoration treatments on large mammal distribution, habitat use, and co-occurrence in the Jemez Mountains of New Mexico

- **The Wildlife Society National Meeting**, Virtual — October 2020
- **The Wildlife Society/American Fisheries Society National Meeting** Reno, NV — October 2019
- **Wildlife Migration Symposium**, Jackson, WY — June 2018
- **12th Annual Mountain Lion Workshop**, Estes Park, CO — May 2017
- **The Wildlife Society/American Fisheries Society NM/AZ Joint Annual Meeting**, Farmington, NM — February 2017
- **Association of National Park Rangers' Ranger Rendezvous,** Santa Fe, NM — October 2016
- **South East Partners in Amphibian and Reptile Conservation (SEPARC),** Baton Rouge, LA — February 2016

REFERENCES

Dr. James W. Cain III, Major advisor
Assistant Unit Leader-Wildlife, USGS, New Mexico Cooperative Fish and Wildlife Research Unit
jwcain@nmsu.edu; (575) 646-3382

Dr. Fitsum Abadi Gebreselassie, Co-advisor
Assistant Professor, Fish, Wildlife, and Conservation Ecology, New Mexico State University
fgebrese@nmsu.edu;

Carson Butler, Previous Supervisor
Biological Science Technician, Grand Teton National Park
carson_butler@nps.gov; (307)739-3487