

CARLEEN N. SILVA

EDUCATION

PhD Student in Biology

Fall 2021 - Current

New Mexico State University | Las Cruces, NM

USDA nextGen LEADING Hispanics Scholar

Thesis: Relationships between wildfire, host-stress, and hantavirus prevalence in New Mexico; Co-advised by Dr. Kathryn Hanley and Dr. Matthew Gompfer (in memorium) and

Bachelor of Science in Animal Ecology

May 2018

Iowa State University | Ames, IA

AWARDS

- USDA nextGen L.E.A.D.I.N.G Hispanics | 2024-2026
- National Science Foundation Graduate Research Fellowship Recipient | 2021-2024
- American Museum of Natural History Theodore Roosevelt Memorial Award (\$3500) | 2024
- Joint Fire Science Program Grant Recipient (\$25,000) | 2023-2025
- George Washington Carver Academy Scholarship Recipient | 2014-2018
- Sojourners Scholarship Recipient | 2016
- School for Field Studies Diversity Scholarship Recipient | 2016
- College of Agriculture & Life Sciences - Dean's Scholarship Recipient | 2014
- Presidential Leadership Scholarship Recipient | 2014

RESEARCH EXPERIENCE

PhD Student | New Mexico State University

Current

Las Cruces, New Mexico

- Designed and organized a research project examining relationship between fire, stress, and Sin Nombre Virus in Northern New Mexico
- Live trap rodents
- Collect biological samples from *P. maniculatus*, adhering to strict biosafety protocols
- Measure habitat complexity across fire burn severities in Santa Fe National Forest
- Collaborate with forest managers, fire researchers, and disease ecologists
- Perform PCR assays to quantify Sin Nombre Virus infection in deer mice
- Perform corticosteroid assays to quantify stress in deer mice

Predator-Prey Technician | USGS

April 2021 - August 2021

Las Vegas, Nevada

- Baited and captured wild rabbits
- Collected morphometric data and biological samples to test for Rabbit Hemorrhagic Disease -2
- Tracked study animals once a week to collect movement data
- Performed monthly spotlight surveys to study population and community structure
- Maintained and serviced trail cameras
- Sorted and managed large camera trap study database

Desert Tortoise Technician | USGS

March 2020 - April 2021

Las Vegas, Nevada

- Used radio telemetry to monitor tortoise movement and behavior
- Attached, removed, downloaded, and troubleshooted radio transmitters and data loggers
- Collected tissue samples and morphological measurements; performed blood collection using subcarapacial venipuncture techniques
- Conducted health assessments on captive juvenile tortoises and wild adult tortoises
- Performed vegetation surveys to characterize habitats

Lab Technician | Virginia Tech University**October 2019-December 2019***Blacksburg, Virginia*

- Lab technician for the Michael Cherry Lab in the Department of Fish and Wildlife Conservation at Virginia Polytechnic Institute and State University
- Assisted with data management and input for three ongoing studies in Virginia and Florida
- Duties included identifying wildlife to species, quantifying vigilance behaviors, and uniquely identifying carnivores and deer via trail camera images

Wildlife Crew Lead | Great Basin Institute**April 2019-September 2019***Las Vegas, Nevada*

- Worked as an AmeriCorps Intern through the US Forest Service to conduct avian research including daytime and nighttime acoustic callback surveys, point count surveys for migratory songbirds and habitat assessments in the Spring Mountain National Recreation Area (SMNRA)
- Assisted with surveys for the endangered Mount Charleston Blue butterfly with the district Wildlife Biologist under 10A1A Permit
- Conducted line transect surveys for threatened, endangered, and sensitive plants
- Opportunistically collected data regarding wild horse demography including herd size, identifying marks, and body condition rated on a Henneke system
- Managed a 6-person crew in a remote environment

ANIMAL CARE EXPERIENCE**Wildlife Care Clinic Intern****August 2015 – December 2015***Ames, IA*

- Handled and observed various native species of south Texas
- Trained in handling of vector species and poisonous snakes
- Observed behavioral changes in wildlife to assess physical health
- Successfully released rehabilitated wildlife

Wildlife Rescue and Rehabilitation, Inc. Intern**May 2015 – August 2015***San Antonio, TX*

- Assessed avians for body condition and illnesses; ensured proper care
- Tube-fed dove hatchlings and native avian nestlings
- Released rehabilitated wildlife into natural habitat

TEACHING EXPERIENCE**Teaching Assistant****Spring 2023***New Mexico State University | Las Cruces, NM*

- Teaching assistant for Biodiversity, Ecology & Evolution laboratory course (BIOL 2610L)
- Lectured and directed two sections on concepts related to evolution and ecology subjects
- Graded weekly quizzed and lab reports in a timely manner

Guest Lecturer**Fall 2022***New Mexico State University | Las Cruces, NM*

- Lectured on parasitism for Wildlife Ecology course
- Created exam and review questions on parasitism to assess student knowledge

Lead Student Advisor & Co-Instructor**Fall 2017 – Spring 2018***Iowa State University | Ames, IA*

- Created and planned events to engage multicultural scholars in community and increase retention
- Facilitated and co-instructed two discussion-based courses for first-year recipients of the George Washington Carver full-tuition scholarship: University Studies 105 & 106
 - UST 105 revolved around race, ethnicity and multicultural identity
 - UST 106 is a course regarding the life and legacy of George Washington Carver, Iowa State's first black student and professor and world-renowned scientist
- Restructured previous curriculum to create an engaging and informative 1-credit semester long course around George Washington Carver

- Intentionally chose relevant reading material that would spark meaningful dialogue and reflection
- Created bi-weekly assignments related to the readings to further engage students in reflection regarding the given material

SERVICE

Fish Wildlife and Conservation Ecology Faculty Search Committee **2023**

- Served on the search committee to hire an Assistant Professor of Wildlife Disease

Center for Undergraduate Research and Creative Activity Workshop Panelist **2021-2022**

- Volunteered to speak with undergraduate and graduate students to demystify the National Science Foundation Graduate Research Fellowship application process

Womyn of Colour Network | President **2017-2018**

- Elected President of a network which provided a place of empowerment and community to womyn of minoritized racial and ethnic backgrounds at Iowa State University
- Organized and provided logistical assistance to coordinate one of the largest multicultural retreats at Iowa State University

Iowa State Data Symposium: Closing the Achievement Gap | Panelist **2018**

- Spoke as a Panelist for the student session “*Factors Contributing to my Academic Success at ISU*” to faculty and administration on the challenges students of color face at a predominately white institution

SJ2750 | Member **2017-2018**

- Member of SJ2750, a University affiliated social justice group that sought to identify and address issues of institutionalized racism at Iowa State University
- Met with faculty, staff and administration to work to better campus climate
- Worked closely with other students, and staff of the Office of Multicultural Student Affairs, to complete a project addressing social justice issues on campus
- Presented at the 2018 Iowa State Conference of Race and Ethnicity; *Lost Stories: Women of Color and Iowa State*

George Washington Carver Scholarship Program | Advisory Board Member **2015-2018**

- Served on the George Washington Carver Scholarship Advisory board for three years
- Created and chaired the social media committee whose goal was to increase scholars’ awareness and participation in events held by the program and across campus
- Planned events for multicultural scholars to engage in community outreach

Women’s Center for Politics | Research Intern **2015**

- Researched, transcribed, and translated speeches given by Latinas in the politics
- Contributed to one of the country’s largest database of speeches given by women in politics, while highlighting the severe lack of resources for non-white women

SKILLS

Data Analysis

- **Computer Programs:** Microsoft Excel, Microsoft Word, Microsoft PowerPoint, Microsoft Publisher, Microsoft Access, FileMaker Pro, MediaPro, HotSpotter, dnrGPS, HOBOWare, Google Earth
- **GPS/GIS:** Handheld Trimble and Juno units, ArcMap and ArcCatalog, Pathfinder Office, @TripPC

Field Related

- Extensive experience driving 4-wheel drive vehicles on steep, rocky, difficult off-road terrain
- Backcountry camping, hiking, and leave-no-trace practices
- Handheld Trimble and Garmin GPS units
- Extensive VHF telemetry experience

Languages

- Intermediate Spanish language skills