Jack Reid Carlin

Lubbock TX

EDUCATION

Masters in Plant and Soil Science (Crop Science)
with research focused on Plant-Pollinator Mutualistic-Networks Spring 2025
Texas Tech University Lubbock, TX

Bachelor of Science in Natural Resource Management (Wildlife)
with a Minor in Biology and Russian Language Class of 2022
Texas Tech University Lubbock, TX

SUMMARY

Highly motivated research assistant and master's student with a strong commitment to advancing the fields of plant and pollinator ecology, conservation, and restoration. I possess a diverse scientific and academic background, including extensive experience in ecological literature across disciplines such as entomology, ichthyology, botany, and mammalogy. I have led and organized scientific collection trips focused on pollinator observation and collection. Additionally, I have volunteered to teach undergraduate students in wildlife techniques, invertebrate and pollinator identification, and provided tutoring in the Russian language.

SKILLS:

- Invertebrates, plant, and fish identification; invertebrate sample collection, plant surveying, advanced pollinator observation and sampling, PCR testing, dissection, microscopy, spectrophotometry; R coding, ArcGIS, ArcMap, Stella Architect, Gaia GPS Tracking, game cameras.

- Lesson planning, scientific writing, academic research, public speaking, leadership, long-distance camping and hiking, belay certified, certified to drive TTU vehicles, proficient in Russian.

EXPERIENCE

Research Assistant/ Masters Student (Pollinator Ecology) September 2023 - May 2025
Texas Tech University Lubbock, TX

- Planning and executing a scientific collection of plant and pollinator species in the Edwards Plateau (TX) and curation of said plants and pollinators for preservation in the TTU Natural Science Research Laboratory and E.L. Reed Herbarium.
- Identification of diverse bee species in the Junction (TX) and Lubbock (TX) areas for use in long-term data sets of pollinator diversity.
- Construction of plant-pollinator mutualist networks for analysis for restoration and conservation purposes.
- Leading the TTU “Bee Clinic” where we teach graduate and undergraduate students the nuances of using diverse literature and keys to identify or “diagnose” bee specimens to the taxonomic level of species.
- Conducting extensive research on plant-pollinator networks and ecology, to produce reports, literature reviews, and a master's thesis.

Riparian Ecology Research Aide October 2021 - September 2023
Texas Tech University Lubbock, TX

- Performing macroinvertebrate sample and data collection on 8+ trips to Jemez Springs (NM) and Del Rio (TX).
- Daily identification and study of a wide range of macroinvertebrates from streams in Del Rio (TX).
- More than 50 hours of experience in electrofishing for invasive brown trout in Jemez Springs (NM).
- PIT tagging for mark and recapture studies for invasive brown trout in Jemez Springs (NM).
- Working 10+ research trips to boat electrofish and collecting data for various species in the Sulphur River (Texarkana, TX-AR).
- Experience in counting and identifying zooplankton in samples from the Sulphur River (Texarkana, TX-AR).
- Processed over 300 samples of chlorophyll from Del Rio (TX), Jemez Springs (NM), and the Sulphur River (TX-AR) using a spectrophotometer to gauge the amount of photosynthesis occurring in said ecosystems. I also performed the collection of said samples.
- Building, maintaining, and fixing many pieces of scientific equipment, such as temperature loggers, shock boxes (for electrofishing), spectrophotometers, microscopes, laboratory glassware, scales and other delicate lab and field equipment.

Volunteer Teacher Fall Semester 2022 - Present
Texas Tech University, Junction Campus Junction, TX

- Teaching the aquatic macroinvertebrate section of NRM 1401 to more than 20 groups of freshman students, including aquatic invertebrate sampling methods such as kick netting and D-netting.

- Teaching the terrestrial macroinvertebrate section of NRM 1401 using sweep nets and other various methods to more than 20 groups of freshman students.
- Leading freshman students on nightly observations of scorpions and their habitat using UV flashlights.
- Assisting in teaching the morning classroom section on invertebrate orders, characteristics, and life histories.

Russian Language Tutor Fall Semester 2021 - Present
Texas Tech University Lubbock, TX

- Tutored 3 students in the fundamentals of the Russian language for RUSN 1501/1502.
- Tutored a student in advanced Russian oral and written expression for RUSN 2302.
- Developing lessons for mentioned tutoring sessions.

Outdoor Pursuits Center Employee March 2019 - August 2019
Texas Tech University Lubbock, TX

- Over 20 hours of teaching Texas Tech students outdoor skills such as basic survival, canyoneering, and backpacking.
- Managing monthly events for outdoor education and recreation activities.
- Teaching daily lessons on climbing safety, equipment, and belaying fundamentals at the Texas Tech Recreation Center Rockwall.

Mammalogy Research Volunteer September 2020 - May 2021
Texas Tech University Lubbock, TX

- Performed various genetic tests on samples from different species of rodents, including PCR testing.
- Handled lab equipment and synthesized chemicals needed for experimentation.
- Setting and positioning small mammal traps to capture and obtain specimens for dissection, as well as for mark and recapture studies.
- Daily dissection of small mammals, specifically kangaroo rats to get samples of specific organs to obtain testable genetic material.
- Assisted in editing scientific papers of lab mates and graduate students.

Citations
Posters and Presentations
Carlin, J.R., and Longing, S. (2024). Biodiversity of Bees (Anthophila) Among Riparian and Upland Habitats in the Upper Llano River Basin (Texas, USA). Poster presented at the Entomological Society of America Annual Meeting, Phoenix, Arizona, November 13, 2024.

Thesis
Carlin, J.R. (2025). Characterizing Bee Communities and Plant-Pollinator Networks in Riparian and Upland Habitats of the South Llano River Basin. Master's Thesis, Plant and Soil Science Department, Texas Tech University.

Planned Publications
Carlin, J.R., Ancira, J., and Longing, S. (In preparation). Comparative Analysis of Bee Diversity and Plant-Pollinator Networks in Upland and Riparian Habitats: Insights for Restoration Ecology. Target Journal: Journal of the Entomological Society of America.