

Daniel A. Guerra, Ph.D.

Curriculum Vitae – August 2025

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PRIMARY EDUCATION

- 2021 – 2024 Graduated December 2024. TEXAS STATE UNIVERSITY, San Marcos, TX
Aquatic Resources and Integrative Biology. Dissertation: The Tortoise and the
Landscape: Examining the Habitat, Daily Movement, Home Range Size, and
thermal Ecology of the Texas Tortoise (*Gopherus berlandieri*)
- 2018 – 2020 Graduated December 2020. TEXAS STATE UNIVERSITY, San Marcos, TX
Population and Conservation Biology. Thesis: Characterization of Texas Tortoise
(*Gopherus berlandieri*) Home Ranges, Habitat Use, and Landscape-Scale Habitat
Connectivity in Cameron County, Texas.
- 2015 – 2018 Graduated May 2018. TEXAS A&M UNIVERSITY – SAN ANTONIO, San
Antonio, TX
Biology with Teaching Certification.

FIELD RESEARCH EXPERIENCE

TEXAS STATE UNIVERSITY San Marcos, TX 78666

Thesis and Dissertation Research – G. berlandieri (Texas Tortoise) 2020-2024

- Outfitted over twenty tortoises with data loggers (GPS or thermal) and VHF transmitters
- Relocated tortoises routinely to replace loggers and aggregate data
- Assisted Gulf Coast Inventorying and Monitoring Network with annual Texas Tortoise surveys, 2019-2021

Research Assistant – D. elator (Texas Kangaroo Rat) 2021-2022, 2024

- Assisted in burrow surveys, capturing individuals via Sherman traps, night cruising and camera trapping on burrows for the Texas Kangaroo Rat.
- Assisted in roadside mowing habitat modification for the Texas Kangaroo Rat.

Post-doc Research – Mixed-species and Western Cattle-Egret (WECE) Rookeries 2025-Present

- Conducting vegetation surveys at active and defunct or remediated rookeries at public and private sites in the San Antonio metro area.
- Adapted multi-agency Grassland Effectiveness Monitoring (GEM) protocols to a novel (urban) environment for evaluation of transferability.
- Coordinating collection and analysis of water and soil samples within active and defunct rookeries with collaborators at Texas A&M – San Antonio.
- Will outfit sixty birds with satellite telemetry backpacks to track movement in early 2026.

WORK HISTORY

TEXAS STATE UNIVERSITY San Marcos, TX 78666

Instructional Assistant 2018-2023

- Taught Functional Biology (Bio 1130) labs, 2 three-hour labs per week

Research Assistant 2021-2022; 2023-2025

- Texas Kangaroo Rat (2021-2022)
- Whooping Crane (2023 –2024)
- Texas Tortoise (2024)

Post-doctoral Scholar 2025 – Present

- Reddish Egret foraging habitat modeling in the northern Gulf (funded via Gulf of America Alliance, expected completion December 2025)
- Western Cattle-Egret and mixed species rookeries in the San Antonio metro (Funded via City of San Antonio, expected completion August 2026)

TEXAS A&M UNIVERSITY – SAN ANTONIO San Antonio, TX 78224

Adjunct Faculty 2020-2024, 2025 – Present

- Taught General Biology I, General Biology II, Invertebrate Zoology and Ecology labs
- Taught General Biology I and General Biology II lecture courses

GRANTS AND SCHOLARSHIPS

- 2019 – Texas State Thesis Research Support Fellowship (\$2,000)
- 2020 – Desert Tortoise Council Lockheed-Martin Diversity Inclusion Grant (\$2,500)
- 2020-2021 – W.E. (Henry) Norris Jr. Scholarship Fund (\$800)
- 2021 – Spoonamore Doctoral Merit Fellowship (\$6,000)
- 2021 – Texas Academy of Sciences Annual Student Research Competition 3rd place (Ph.D. level) (\$1,000)
- 2021 – Sw. Assn. of Naturalists Howard McCarley Student Research Award (\$1,000)
- 2021 – Southwestern Center for Herpetological Research Laurence M. Klauber Memorial Summer Research Grant (\$500)
- 2021 – Am. Soc. of Ichthyologists and Herpetologists Cashner Student Award (\$1,000)
- 2023 – Desert Tortoise Council David J. Morafka Memorial Research Award (\$2,500)
- 2023 – Texas State University Dissertation Support Fellowship (\$5,000)
- 2024 – Texas State University Dissertation Completion Fellowship (\$30,000)

ACADEMIC PRESENTATIONS

- February 2021 – Desert Tortoise Council Symposium: Characterization of Texas Tortoise (*Gopherus berlandieri*) home ranges and habitat use in Cameron County, Texas. **Daniel A. Guerra**, Todd C. Esque, and Joseph A. Veech.
- July 2021 – Joint Meeting of Ichthyologists and Herpetologists: Characterization of Texas Tortoise (*Gopherus berlandieri*) home ranges and habitat use in Cameron County, Texas. **Daniel A. Guerra**, Todd C. Esque, and Joseph A. Veech.
- August 2021 – Turtle Survival Alliance: Characterization of Texas Tortoise (*Gopherus berlandieri*) home ranges and habitat use in Cameron County, Texas. **Daniel A. Guerra**, Todd C. Esque, and Joseph A. Veech.
- February 2022 – Texas Academy of Sciences: Examining variation in vegetative density within Texas Tortoise (*Gopherus berlandieri*) home ranges in Cameron County, Texas. **Daniel A. Guerra** and Joseph A. Veech.

- February 2023 – Desert Tortoise Council Symposium: Examining variation in environmental variables within Texas Tortoise (*Gopherus berlandieri*) utilization distributions in Cameron County, Texas. **Daniel A. Guerra**, Todd C. Esque and Joseph A. Veech.
- August 2023 – Southwestern Association of Naturalists: Examining variation in environmental variables within Texas Tortoise (*Gopherus berlandieri*) utilization distributions in Cameron County, Texas. **Daniel A. Guerra** and Joseph A. Veech.
- February 2024 – Texas Chapter of the Wildlife Society: Examining variation in environmental variables within Texas Tortoise (*Gopherus berlandieri*) utilization distributions in Cameron County, Texas. **Daniel A. Guerra** and Joseph A. Veech.
- February 2025 – Desert Tortoise Council Symposium: Analysis of the thermal ecology of the Texas tortoise (*Gopherus berlandieri*) with regard to potential anthropogenic alteration of its thermal environment. **Daniel A. Guerra** and Joseph A. Veech.
- May 2025 – Texas Tortoise Working Group: Analysis of the thermal ecology of the Texas tortoise (*Gopherus berlandieri*) with regard to potential anthropogenic alteration of its thermal environment. **Daniel A. Guerra** and Joseph A. Veech.

PUBLIC OUTREACH / EDUCATIONAL PRESENTATIONS

- June 2025 – Witte Museum Defense Detectives Summer Camp (San Antonio, TX): Adaptations in Texas Tortoises. **Daniel Guerra**.

PUBLICATIONS

- Veech, J.A., **Guerra, D.A.**, Castro-Arellano, I., and Plappert, J.L. 2023. Estimating size and density of roadside populations of the Texas Kangaroo Rat. Final project report for Grant F20AC11497-00, USFWS, 12 pp.
- Siciliano-Martina, L., **D.A. Guerra**, and J.A. Veech. 2023. Forelimb morphology as an adaptation for burrowing in kangaroo rat species (Genus *Dipodomys*) that inhabit different soil substrates. *Journal of Mammalogy* 104:1377-1389.
- Chambers, S., J. von Nunn, M.A. Burgess, L.R. Brady, J. Bracewell, **D.A. Guerra**, and M.L. Villareal. 2025. The tortoise and the antilocaprid: adapting GPS tracking and terrain data to model wildlife walking functions. *Landscape Ecology* 40:92.
- **Guerra, D.A.**, Esque, T.C., Davis, D.R., and Veech, J.A. 2025. Home Range, Seasonality, and the Importance of Canopy Cover for Texas Tortoises (*Gopherus berlandieri*). *Herpetologica* 81:224-235.