

TEXAS STATE VITA

I. Academic/Professional Background

A. Name: James Emerson

Title: Assistant Professor of
Instruction of Wildlife Biology

B. Educational Background

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>Major</i>	<i>Thesis/Dissertation</i>
Ph.D.	2020	University of Texas at El Paso	Ecology and Evolutionary Biology	Behavioral ecology of a desert ambush predator: assessing movement patterns, habitat and microhabitat uses, and the innate feeding response of Eastern Blacktailed Rattlesnakes (<i>Crotalus ornatus</i>) in the northern Chihuahuan Desert
B.S.	2010	West Texas A&M University	Wildlife Biology	N/A

C. University Experience

1. 2019–2020: Research Fellow – University of Texas at El Paso
2. 2013–2019: Assistant Instructor – University of Texas at El Paso
3. 2014–2018: Site Manager – Indio Mountains Research Station, University of Texas at El Paso
4. 2013: Research Assistant – West Texas A&M University
5. 2010–2013: Teaching Assistant – West Texas A&M University

D. Relevant Professional Experience

1. 2025–Present: Assistant Professor of Instruction – Texas State University
2. 2022–Present: Senior Lecturer – Texas State University
3. 2020–2021: Adjunct Professor of Biology – El Paso Community College

II. TEACHING

A. Courses Taught:

1. Herpetology (Bio 4434/7434)
2. Mammalogy (Bio 4422/5422)
3. Techniques in Wildlife Management (Bio 4435/5435)
4. Wildlife Management (Bio 4423)
5. Natural History of the Vertebrates (Bio 4420/5420)
6. Introductory biology (Bio 1306)
7. Introductory biology lab (Bio 1106)

B. Directed Student Learning (i.e. theses, dissertations, exit committees, etc.):

1. 2026–2028 (exp): Josh Rusnak. M.Sc. Nesting ecology of *Graptemys caglei*. Committee member. Department of Biology, Texas State University.

2. 2026–2028 (exp): Elibardo Leal III. M.Sc.: Hibernacula characterization of *Crotalus horridus* in east Texas. Co-Chair. Department of Biology, Texas State University
3. 2025–2027 (exp): Allison Schellenberg. M.Sc. Habitat preference of *Phrynosoma cornutum*. Committee member. Department of Biology, Texas State University.
4. Spring 2024: Douglas Franks II. Faculty mentor for the Internship for Credit course (Bio 4481). Department of Biology, Texas State University
5. 2022–Present: Virgillio Gomez: non-thesis M.Sc. committee member. Department of Biology, Texas State University
6. 2015–2018: REU project mentor at University of Texas at El Paso (Sara Ebert, Ruben Gamez, Miranda Gaupp, Adolfo Rodriguez, and Hope Smith). Department of Biological Sciences, University of Texas – El Paso

C. Courses Prepared and Curriculum Development:

1. Bio 4435/7435
2. Bio 4434
3. Bio 4423/5423
4. Bio 4422/5422
5. Bio 4420/5420
6. Bio 1306
7. Bio 1106

D. Teaching Professional Development Activities Attended

1. 2020: El Paso Community College Faculty Training for Distance Education

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

1. Articles:

a) Refereed Journal Articles: (* Co-lead author)

1. Witkowski, S, M Forstner, S Sirsi, J Emerson, D Orlando, and RW Clark. **Accepted**. Examining the population genetic structure of Timber Rattlesnakes in East Texas. *Herpetological Conservation and Biology*.
2. Emerson, JD, DM Orlando, and MRJ Forstner. **Accepted**. *Crotalus horridus* (Timber Rattlesnake) Arboreal Behavior. *Herpetological Review*.
3. DeSantis*, DL, JD Emerson*, JD Johnson, and V Mata-Silva. 2024. Spatial ecology of a secretive Chihuahuan Desert colubrid, *Lampropeltis alterna* (Brown, 1901), in west Texas. *Herpetology Notes* 17:693–701.
4. Emerson, JD. 2024. *Trimorphodon lambda* (Sonoran Lyre Snake) envenomation. *Herpetological Review* 55:126–127.
5. Emerson, JD, and JD Johnson. 2023. Evidence for an Innate Basis of Prey Preference in a Desert Ambush Predator. *Evolutionary Ecology* 37: <https://doi.org/10.1007/s10682-023-10286-w>.
6. Emerson, JD, DL DeSantis, AE Wagler, V Mata-Silva, and JD Johnson. 2022. Movement, home range size, and habitat use of Eastern Black-tailed Rattlesnakes (*Crotalus ornatus*) in the northern Chihuahuan Desert. *Herpetologica* 78:110–118.

7. Emerson, JD, and JD Johnson. 2020. *Crotalus ornatus* (Eastern Black-tailed Rattlesnake) Feeding Behavior. *Herpetological Review* 51, p. 346.

B. Works Not in Print:

1. Papers Presented at Professional Meetings:

1. Witkowski, S, M Forstner, S Sirsi, J Emerson, D Orlando, and RW Clark. Examining Population Genetic Structure of Timber Rattlesnakes in East Texas. [Oral Presentation]. Biology of the Pit Vipers 5 Symposium, Rodeo, New Mexico, July 2025.
2. Emerson, JD, DL DeSantis, V Mata-Silva, and JD Johnson. Spatial Ecology of a Secretive Desert Colubrid (*Lampropeltis alterna*). [Oral Presentation]. 60th Annual Texas Chapter of the Wildlife Society Meeting, Houston, Texas. February 2024.
3. Emerson, JD, and JD Johnson. Do Naive Neonate Eastern Black-tailed Rattlesnakes (*Crotalus ornatus*) discriminate among scent cues of potential prey items? [Oral Presentation]. Southwestern Association of Naturalists 70th Annual Meeting, San Antonio, Texas. August 2023.
4. Emerson, JD, DL DeSantis, V Mata-Silva, and JD Johnson. Spatial Ecology of a Secretive Desert Colubrid (*Lampropeltis alterna*). [Oral Presentation]. Southwestern Association of Naturalists 70th Annual Meeting, San Antonio, Texas. August 2023.
5. Emerson, JD, DL DeSantis, V Mata-Silva, AE Wagler, and JD Johnson. Movement, home range size, and habitat use of Eastern Black-tailed Rattlesnakes (*Crotalus ornatus*) in the northern Chihuahuan Desert. [Oral Presentation]. 59th Annual Texas Chapter of the Wildlife Society Meeting, Houston, Texas. February 2023.
6. Emerson, JD, DL DeSantis, V Mata-Silva, AE Wagler, and JD Johnson. Movement, home range size, and habitat use of Eastern Black-tailed Rattlesnakes (*Crotalus ornatus*) in the northern Chihuahuan Desert. [Poster]. Biology of the Pitvipers 4 Symposium, Rodeo, New Mexico. July 2022.
7. Emerson, JD, DL DeSantis, and JD Johnson. Ambush site selection by Eastern Black-tailed Rattlesnakes (*Crotalus ornatus*) in the Northern Chihuahuan Desert. [Poster]. Biology of the Pitvipers 3 Symposium, Rodeo, New Mexico. July 2019.
8. Emerson, JD, V Mata-Silva, JD Johnson. Movement patterns of Eastern Black-tailed Rattlesnakes (*Crotalus ornatus*) in the northern Chihuahuan Desert. [Oral Presentation]. Biology of Snakes, Rodeo, New Mexico, July 2017.
9. Emerson, JD, and RT Kasmaier. Influence of habitat type on the snake community in a Rolling Plains ecosystem. [Oral Presentation]. Southwestern Association of Naturalists 61st Annual Meeting, Stillwater, Oklahoma, April 2014.
10. Emerson, JD, RT Kasmaier, and DC Ruthven III. Sampling a snake community: comparing different sampling methods. [Oral Presentation]. Southwestern Association of Naturalists 60th Annual Meeting, Lake Charles, Louisiana, April 2013.
11. Emerson, JD, RT Kasmaier, J Baker, and DC Ruthven III. Variation in snake communities: comparing two habitats at a site in the northeastern Texas

Panhandle. [Oral Presentation]. The Texas Chapter of the Wildlife Society Annual Meeting, Houston, Texas, February 2013.

12. Emerson, JD and Kazmaier, RT. Ecology of a snake community along the Canadian River drainage. [Oral Presentation]. Kansas Herpetological Society Annual Meeting, Fort Hayes, Kansas. November 2012.

2. Invited Talks, Lectures, and Presentations:

1. Emerson, JD. Behavioral Ecology of Rattlesnakes. [Podcast]. Crockcast Reptile Ramblings #28 with Nathan Truax. Recorded 22 November 2025.
2. Emerson, JD. Ornate Black-tailed Rattlesnake. [Podcast]. Snake Talk with Dr. Chris Jenkins. Episode 128, April 2025.
3. Emerson, JD. Gray-banded Kingsnake Ecology. [Podcast]. Snake Talk with Dr. Chris Jenkins. Episode 122, January 2025.
4. Emerson, JD. Behavioral ecology of a desert ambush predator: movement patterns, home range size, and innate foraging response of Eastern Black-tailed Rattlesnakes (*Crotalus ornatus*) in the northern Chihuahuan Desert. [Oral Presentation]. Lake Superior State University Seminar. April 2022.
5. Emerson, JD. Harvest management for recreational use of game species. [Oral Presentation]. Lake Superior State University Seminar. April 2022.
6. Emerson, JD. Behavioral ecology of a desert ambush predator: movement patterns, home range size, and innate foraging response of Eastern Black-tailed Rattlesnakes (*Crotalus ornatus*) in the northern Chihuahuan Desert. [Oral Presentation]. Northwestern Oklahoma State University Seminar. April 2022.
7. Emerson, JD. The origin of evolutionary theory. [Oral Presentation]. Northwestern Oklahoma State University Seminar. April 2022.
8. Emerson, JD. Behavioral ecology of desert ambush predators. [Oral Presentation]. Bethel College Seminar. February 2022.

3. Other Works not in Print:

a) Works "in progress":

1. Emerson, JD and DP Walker. **Submitted**. *Pantherophis emoryi* (Great Plains Ratsnake) Distributional Record. Herpetological Review.
2. Emerson, JD. **Submitted**. Amphibian Distributional Records for Herpetofauna in the Texas Panhandle. Herpetological Review.
3. Emerson, JD. **Submitted**. Reptile Distributional Records for Herpetofauna in the Texas Panhandle. Herpetological Review.
4. Emerson, JD. and JD Johnson. In Prep (expected submission February 2026). Reproduction in a wild population of Eastern Black-tailed Rattlesnakes (*Crotalus ornatus*). The Southwestern Naturalist/Herpetological Review/Herpetological Notes.
5. Emerson, JD, D Orlando, and M Forstner. In Prep (expected submission Spring 2026). Movement, home range size, and habitat use of Timber Rattlesnakes (*Crotalus horridus*) in east Texas. Herpetologica/Journal of Herpetology.
6. Emerson, JD, D Orlando, and M Forstner. In Prep (expected submission March 2026). Notes on the efficacy of the rattle tie plus epoxy method for attaching radio transmitters to *Crotalus horridus* (Timber Rattlesnakes) in east Texas. Herpetological Review.

7. Leal III, E, JD Emerson, and M Forstner. In Prep (expected submission Feb 2026). *Crotalus horridus* (Timber Rattlesnake). Arboreal Rain Harvesting. Herpetological Review.

C. Scholarly / Creative Grants and Contracts:

a) Funded Internal Grants and Contracts:

1. 2019: UTEP Summer Grant for Graduate Students–UTEP Graduate School, \$1,650
2. 2018: UTEP Grant for Graduate Students–UTEP Graduate School, \$1,650
3. 2018: Texas Public Educational Grant–The State of Texas, \$1,000
4. 2017: UTEP Grant for Graduate Students–UTEP Graduate School, \$1,650
5. 2017: Texas Public Educational Grant–The State of Texas, \$1,000
6. 2016: Dodson Research Grant– UTEP Graduate School, \$3,000
7. 2016: Dodson Research Grant– UTEP Graduate School, \$3,000

D. Scholarly / Creative Fellowships, Awards, Honors:

1. 2020: Graduate Excellence Fellowship Award–UTEP Graduate School, \$10,000
2. 2019: Graduate Excellence Fellowship Award–UTEP Graduate School, \$8,000

E. Scholarly / Creative Professional Development Activities Attended:

1. 2020: UTEP Graduate School Professional Development and Writing Workshop

IV. SERVICE

A. Institutional

a) University:

1. Wildlife Biology program director – Texas State University (2022–Present)
2. Faculty advisor – Texas State University Student Chapter of the Wildlife Society (2022–Present)
3. Biology Curriculum Committee – Wildlife biology representative (2022–Present)
4. Christmas Mountains Advisory Committee – Texas State University (2022–Present)
5. Biology Department Representative – Bobcat Day, Spring/Fall 2023/2024/2025
6. Student mentorship – University of Texas at El Paso, Campus Office of Undergraduate Research Initiatives

b) Department/School:

1. 2025: Collaborated with other faculty (Dr. Forstner, Dr. Fritts, and Dr. Haverland) to establish a turtle trapping project at Spring Lake for undergraduate students to gain research experience.
2. 2025: Established lower vertebrate population monitoring program at Powderhorn Wildlife Management Area to provide an avenue for undergraduate research experience.
3. 2024: Began telemetry-based behavioral ecology research on a population of *Crotalus horridus* in East Texas with Dr. Mike Forstner.

4. 2024: Secured teaching and field trip access to >7,000 acres of actively managed private land (Cook's Branch Conservancy) that has received past stewardship awards from Texas Parks and Wildlife Department. Currently, visits and activities are being planned for the Fall 2024 semester.
5. 2023–present: Served on Biological Sciences seminar committee, Wildlife Biology representative, Texas State University
6. Spring 2023: Served on faculty search committee for wildlife evolutionary ecologist position, Texas State University
7. 2022–present: Co-representative for the Texas State University Student Chapter of the Wildlife Society
8. 2014–2015: Faculty search committee (Graduate student representative): Department of Biology Chair, Department of Biological Sciences, University of Texas at El Paso

B. Community:

1. 2025: Peer-reviewer for *South American Journal of Herpetology*
2. 2024: Peer-reviewer for *Ichthyology & Herpetology* (formerly *Copeia*)
3. 2024: Peer-reviewer for *Herpetological Conservation and Biology*
4. 2023: Peer-reviewer for *Texas Journal of Science*
5. 2022: Peer-reviewer for *Herpetological Review*
6. 2016–2019: Venomous snake education, coexistence, and relocation – Tom Mays Unit, Franklin Mountains State Park, El Paso, TX
7. 2015–2016: Student Science Fair Judge – El Paso County Day School
8. 2012: Volunteer – Spring Snake Count, Center for Snake Conservation
9. 2012: Ecological importance of snakes and how to coexist with them, Cross Bar Cooperative Management Area, Amarillo Independent School District
10. 2012: Volunteer – Christmas Bird Count, National Audubon Society, Gene Howe Wildlife Research and Demonstration Area
11. 2011: Volunteer – Fall Snake Count, Center for Snake Conservation
12. 2011: Ecological importance, research, and coexistence with snakes – Camp Don Herrington, Boy Scouts of America
13. 2009: Volunteer – Fall Black-footed Ferret Survey, Arizona Game and Fish Department

C. Organization Memberships:

1. The Southwest Section of the Wildlife Society: 2023–Present
2. The Herpetologist's League: 2013–Present
3. Society for the Study of Reptiles and Amphibians: 2013–Present
4. The Southwestern Association of Naturalists: 2013–Present
5. The Wildlife Society: 2012–Present
6. The Texas Chapter of the Wildlife Society: 2011–Present
7. Turtle Survival Alliance: 2012–2014
8. The Kansas Herpetological Society: 2008–2014
9. The West Texas A&M University Student Chapter of the Texas Wildlife Society: 2008–2013

D. Service Professional Development Activities Attended:

1. 2025: Attended *New to Teaching? We've Got Your Easy Button* workshop through Texas State University

2. 2025: Attended *Course Contextualization: Strategies for Adapting Learning Activities to Support Students Across Majors* workshop through Texas State University
3. 2025: Attended *Click Here for Success: Strategies for Asynchronous Teaching* workshop through Texas State University
4. 2025: Attended *Research GPS: Charting Your Course Through Managing Awards* workshop through Texas State University
5. 2025: Attended *Research GPS: Charting Your Course Through Submitting Proposals* workshop through Texas State University
6. November 2024: Attended *Exploring SimplyAnalytics for Mapping* Research Data Services Series workshop through Texas State University
7. October 2024: Attended *Introduction to GIS* Research Data Services Series workshop through Texas State University
8. September 2024: Attended *Introduction to Data Analysis & Visualization in Power BI* Research Data Services Series workshop through Texas State University
9. July 2020: Distance Education training seminar with Canvas and Blackboard, El Paso Community College Distance Education Office
10. 2011: Grazing Management and Herbicide Application Workshop, Matador Wildlife Management Area