

# ALEJANDRO CHÁVEZ TREVIÑO

Phone number: (512) 919 9297

email: [acxgd@umsystem.edu](mailto:acxgd@umsystem.edu), [alexchavezt@gmail.com](mailto:alexchavezt@gmail.com)

Current address: 1205 University Ave, Apt. 427, Columbia MO 65201



---

## SUMMARY

Ph.D. candidate with experience in grassland bird ecology, habitat restoration, and land management. My research focuses on developing novel measures of restoration success and investigating the impacts of bison reintroduction and restoration treatments through diverse approaches including bird abundance, community structure, breeding success, and movement ecology. Proficient in a range of field methods and quantitative analyses. Passionate about science communication, outreach, and its intersection with artistic expression. Eager to develop collaborative efforts of land management and build bridges between public and private landowners for collaborative action.

---

## EDUCATION

2021-Present	<b>Ph.D., Natural Resources Management (emphasis on fisheries and wildlife)</b> School of Natural Resources, University of Missouri, Columbia, MO.
2021	<b>M.Sc., Range and Wildlife Management,</b> Borderlands Research Institute, Alpine, TX.
2015	<b>B.Sc., Biotechnology and Genomics,</b> Universidad Autónoma de Nuevo León ( <i>Autonomous University of Nuevo León</i> ) Monterrey, Mexico.

---

## EXPERIENCE

2021-present	<b>Research Assistant</b> University of Missouri, Columbia, MO.
2019-2021	<b>Research Assistant</b> Sul Ross State University, Alpine, TX.
2021-2024	<b>Field Crew Leader</b> Research data collection at Midewin National Tallgrass Prairie, IL.
2019-2021	<b>Field Crew Leader</b> Research data collection for Borderlands Research Institute, TX.
2014-2019	<b>Various Field Technician Positions</b>  Bird point-counts, bird nest-searching/monitoring, vegetation surveys, radiotelemetry, mist-netting, bird banding, bird tagging, bird song recording, sea turtle nest searching  Autonomous University of Nuevo Leon, MX, Bird Conservancy of the Rockies MT & ND,

Thunder Cape Bird Observatory ON, Canada

2012-2016

**Research Technician**  
Universidad Autónoma de Nuevo León (MX)

## DATA ANALYSIS SKILLS

---

<b>Technical Skills</b>	Statistical modeling, hypothesis testing, data visualization Software: R (advance), ArcGIS Pro, ArcMap 10, and QGIS Data base management: Access, Breeding Bird Surveys Ecological Modeling: <ul style="list-style-type: none"><li>– LM, GLM, GAM, mixed effects</li><li>– Bayesian modelling</li><li>– N-mixture modelling</li><li>– Distance sampling</li><li>– Occupancy</li><li>– Diversity indices</li><li>– Multivariate Statistics (PERMANOVA, NMDS, PCA, RDS, Canonical Analyses)</li><li>– Movement ecology (UD estimation, RSF, SSF)</li></ul>
<b>R packages</b>	tidyverse, lme4, glmmTMB, vegan, unmarked, move, and others.

## PUBLICATIONS

---

Chavez-Trevino A., Correll, M.A., Lerman B. S., Byrne E. M., (2025). “Quantifying avian specialization to tallgrass prairie: Bison grazing supports higher specialized communities than cattle grazed pastures and ungrazed restoration” [Manuscript in preparation]

Chavez-Trevino, A, Titulaer, M, Gonzalez C. E., Correll M., Harveson L. A. (2022). Community structure and density of wintering grassland birds in managed sites of west Texas. Ecosphere. [Manuscript in preparation]

Chávez-Treviño, A., Canales-del-Castillo, R., Ruvalcaba-Ortega, I., Reséndez-Pérez, D., González-Rojas, J. I., Guzmán-Velasco, A., & Panjabi, A. O. (2017). Primer development for amplification of toll-like genes for the assessment of adaptive genetic diversity in vulnerable grassland bird species. Conservation Genetics Resources, 9(3), 385–387

## GRANTS AND SCHOLARSHIPS

---

2023	Philosophical Society of America – Lewis and Clark Fund for Exploration and Field Research. \$5,500
2022	Missouri Birding Society – Research Graduate Scholarship. \$3,500

2021	U.S. Forest Service Doctoral Fellowship for the project “Evaluating prairie restoration with active bison grazing on Midewin National Tallgrass Prairie”.
2018	Grassland Restoration on Working Lands in the Big Bend Soil and Water Conservation District

## OUTREACH

---

2024	<b>Planner and speaker of the Spring Workshop Series hosted by the Wildlife and Fisheries Sciences Graduate Student Organization (WAFSGSO)</b> A series of professional development seminars including science writing, R programming, and oral presentations
2023	<b>Vice-president of WAFSGSO</b> Organized events, invited guest speakers, and community building activities.
2023	<b>“A year in the life (of an Eastern Meadowlark)”.</b> Outreach talk for Science on Wheels, Columbia MO.
2022 & 2023	<b>“Sobre fuego, bisontes y praderas” (<i>About fire, bison, and prairies</i>)</b> Outreach talk for “Science on Wheels” (Spanish Edition) Daniel Boone Regional Library, Columbia, MO.
2022	<b>“Bison and sparrows: An unexpected love story”</b> Outreach talk for “Science on Tap”, Columbia, MO.
2022	<b>“My Research Pathway”</b> Invited Speaker at Rockbridge High School.
2021	<b>“BRI Grassland bird Project”</b> Outreach talk for Virtual Birding Seminars Texas A&M AgriLife Extension Service
2020	<b>“Monitoring vulnerable grassland birds after habitat restoration efforts” for Texas Wildlife Association</b> Outreach article.
2020	<b>Organizer, merch designer, and birding guide</b> “Borderlands Birding Bonanza”

## TEACHING

---

2022	<b>Ornithology, TA</b> School of Natural Resources, MU.
2024	<b>Principles of Wildlife Management, TA</b> School of Natural Resources, MU

# CONFERENCE PARTICIPATION

---

- 2024                    **“Bison grazing and restoration treatments influence nest-site selection and nesting success in a tallgrass prairie”**  
Oral presentation at the American Ornithological Society Annual Meeting  
Estes Park, CO
- 2024                    **“Quantifying Avian Habitat Affinity: Impact of Grazing Regimes in Tallgrass Prairie Restoration”**  
Oral presentation at Ecological Society of America Annual Meeting  
Long Beach, CA
- 2023                    **“Application of a solar powered GPS logger to study space use of the Eastern Meadowlark”**  
Invited speaker for seminar on movement ecology at American Ornithological Society Annual Meeting,  
London, ON, Canada
- 2022                    **“Avian community differences among pastures grazed by bison and cattle at Midewin National Tallgrass Prairie”**  
Poster presentation at Missouri Natural Resources Conference  
Lake of the Ozarks, MO
- 2020                    **“Estimating Non-Breeding Grassland Birds Populations in Managed Ranches in West Texas, USA”**  
Poster presentation, North American Ornithology Conference  
Virtual
- 2018                    **Assistant to the Nacional Conference of Ornithology**  
Saltillo, Mexico
- 2016                    **“Amplification of Toll-Like Receptors extracellular region in vulnerable bird species of the Chihuahuan desert grasslands”**  
Poster presentation at North American Ornithology Conference  
Washington D.C.
- 2015                    **“Evaluación piloto de las condiciones sulfato-reductoras para remover fluoreno en un biorreactor”** (*Pilot evaluation of the sulfate-reducing conditions to remove fluorene in a biorreactor*)  
Poster presentation at in the 50° Mexican Congress of Chemistry

## HONORS

---

2023	American Ornithological Society – Conference Travel Award.
2023	MU Graduate Professional Council – Conference Presentation Award August
2023	MU Graduate Professional Council – 1 <sup>ST</sup> Place at the 39 <sup>th</sup> RCAF Poster Presentation
2021 & 2020	Outstanding Graduate Student in Range and Wildlife Management Award
2020	Scuddy Scholarship. Chihuahuan Desert Research Institute
2020	Appacheria Fellowship Honorable Mention. Appleton-Whittell Research Ranch Audubon.
2016	Latin American Travel Award, North American Ornithology Conference.
2015-2016	Undergraduate Thesis Scholarship, (CONACyT)

## LANGUAGES

---

<b>Spanish</b>	Native
<b>English</b>	Fluent
<b>French</b>	Basic

## REFERENCES

---

Michael E. Byrne, Ph.D. Associate Professor of Wildlife Ecology  
School of Natural Resources, University of Missouri  
[byrneme@missouri.edu](mailto:byrneme@missouri.edu), (573) 882 9516

Susannah B. Lerman, Ph.D. Research Ecologist  
USDA Forest Service, Northern Research Station  
[susannah.b.lerman@usda.gov](mailto:susannah.b.lerman@usda.gov), (413) 275 6079