



Ty J. Werdel

VICE CHANCELLOR'S POSTDOCTORAL FELLOW

Department of Rangeland, Wildlife and Fisheries Management - Texas A&M University, College Station, TX

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My research interests include the fields of Wildlife Management and Landscape Ecology. This work addresses questions that provide insight into the relationships between wildlife, native environments, and contemporary human-modified landscapes. I am also interested in software programming to advance my professional acumen, with this CV being compiled with code.

Education

Ph.D. Horticulture and Natural Resources

KANSAS STATE UNIVERSITY

Manhattan, KS

2022

M.S. Wildlife Sciences

SOUTH DAKOTA STATE UNIVERSITY

Brookings, SD

2017

B.S. Rangeland and Wildlife Management

CHADRON STATE COLLEGE

Chadron, NE

2013

Certifications

Esri Academy ArcGIS (9 Certifications)

ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE

Online

2021

Professional Certification in Data Analysis for Life Sciences (R)

HARVARDX, HARVARD UNIVERSITY

Online

2020

GTA Certificate of Achievement in Professional Development

KANSAS STATE UNIVERSITY

Manhattan, KS

2020

Faculty Exchange for Teaching Excellence

KANSAS STATE UNIVERSITY

Manhattan, KS

2020

Associate Wildlife Biologist®

THE WILDLIFE SOCIETY

Online

2016

Graduate Certification in Geospatial Technology

SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY

Rapid City, SD

2016

Project WILD/Project WILD Aquatic

ASSOCIATION OF FISH AND WILDLIFE AGENCIES

Chadron, NE

2013

Employment

Vice Chancellor's Postdoctoral Research Fellow

DEPARTMENT OF RANGELAND, WILDLIFE, AND FISHERIES MANAGEMENT, TEXAS A&M UNIVERSITY

College Station, TX

2022 – Present

Graduate Research and Teaching Assistant

DEPARTMENT OF HORTICULTURE AND NATURAL RESOURCES, KANSAS STATE UNIVERSITY

Manhattan, KS

2017 – 2022

Graduate Research and Teaching Assistant

DEPARTMENT OF NATURAL RESOURCE MANAGEMENT, SOUTH DAKOTA STATE UNIVERSITY

Brookings, SD

2014 – 2017

GIS Technician

NORTH PLATTE NATURAL RESOURCES DISTRICT

Scottsbluff, NE

2014 – 2014

Undergraduate Researcher

SEVILLETA LTER RESEARCH EXPERIENCE

Socorro, NM

2013 – 2013

Construction Foreman

WERDEL STEEL CONSTRUCTION

Chadron, NE

1998 – 2013

Teaching Experience

Texas A&M University

CO-INSTRUCTOR

- Techniques of Wildlife Management, RWFM 408 & WFSC 638

College Station, TX

2022

Kansas State University

GRADUATE TEACHING ASSISTANT

- Firearms Cartridges and Ballistics, WOEM 201
- Rifle and Handgun Range Design, Construction and Operations, WOEM 202
- Introduction to Wildlife and Outdoor Enterprise Management, WOEM 250
- Flora and Fauna of the Great Plains, WOEM 350
- Big Game Management, WOEM 555
- Waterfowl and Wetlands Management, WOEM 561
- Advanced Wildlife Habitat Management, WOEM 562

Manhattan, KS

2017 – 2022

South Dakota State University

GRADUATE TEACHING ASSISTANT

- Introduction to Wildlife and Fisheries, WL 220

Brookings, SD

2014 – 2017

Publications

Peer-Reviewed

5. Palomo-Muñoz, G, **T.J. Werdel**, C.W. Piper, M.S. Peek, A.M. Ricketts, and A.A. Ahlers. **2022**. Spatiotemporal distributions of mammals occurring in an agro-prairie ecosystem. *Ecology*. <https://doi.org/10.1002/ecy.3945>
4. **Werdel, T.J.**, C.W. Piper, A.M. Ricketts, M.S. Peek, and A.A. Ahlers. **2022**. Scale-specific landscape effects impose range-limiting constraints on the distribution of swift fox. *Landscape Ecology*, 37(8), 2065–2079. <https://doi.org/10.1007/s10980-022-01466-0>
3. **Werdel, T.J.**, J.A. Jenks, J.T. Kanta, C.P. Lehman, and T.J. Frink. **2021**. Space use and movement patterns of translocated bighorn sheep. *Mammalian Biology*, 101(3), 329–344. <https://doi.org/10.1007/s42991-021-00107-4>
2. **Werdel, T.J.**, J.A. Jenks, T.E. Besser, J.T. Kanta, C.P. Lehman, and T.J. Frink. **2019**. Restoration of a bighorn sheep population impeded by *Mycoplasma ovipneumoniae* exposure. *Restoration Ecology*, 28(2), 387–395. <https://doi.org/https://doi.org/10.1111/rec.13084>
1. **Werdel, T.J.**, J.A. Jenks, T.E. Besser, J.T. Kanta, C.P. Lehman, and T.J. Frink. **2018**. Survival of translocated bighorn sheep in the Deadwood region of the Black Hills, South Dakota. *Northwestern Naturalist*, 99(3), 222–231. <https://doi.org/10.1898/NWN18-06.1>

Book Chapters

1. Hessami, M.A., **T.J. Werdel**, S.J. Hoagland, and M.T. Kohl. **In-Press**. Melding Past, Present, and Future: The importance of tribal management in wildlife conservation and management. Chapter 1 in E. Gomez, C. Bishop, Ryder, and Organ eds. *Wildlife Management and Conservation in North America: An Overview*. Great River Learning of Dubuque, IA.

In-Revision/Review

5. **Werdel, T.J.**, C.W. Piper, A.M. Ricketts, M.S. Peek, and A.A. Ahlers. **In-Revision**. Landscape-scale effects structure carnivore communities in an agro-prairie ecosystem. *Journal of Mammalogy*.
4. Piper, C.W., **T.J. Werdel**, M.S. Peek, A.M. Ricketts, D.S. Sullins, and A.A. Ahlers. **In-Revision**. Spatiotemporal distributions of mammals occurring in an agro-prairie ecosystem. *Journal of Mammalogy*.
3. **Werdel, T.J.**, J.A. Jenks, J.T. Kanta, C.P. Lehman, and T.J. Frink. **In-Revision**. Resource selection and herbaceous biomass at foraging sites of translocated bighorn sheep. *Rangeland Ecology and Management*.
2. **Werdel, T.J.**, C.W. Piper, A.M. Ricketts, M.S. Peek, D.S. Sullins, and A.A. Ahlers. **In-Revision**. Strategic grassland conservation to improve conservation outcomes for swift foxes in a multi-use landscape. *Biological Conservation*.
1. **Werdel, T.J.**, M. Fidino, C.W. Piper, A.M. Ricketts, M.S. Peek, and A.A. Ahlers. **In-Review**. Landscape composition mediates spatiotemporal interactions among sympatric canids in a prairie ecosystem. *Ecological Applications*.

Investigator Grants & Contracts

Funded (\$160,000)

2. **Department of Rangeland, Wildlife and Fisheries Management.** 2023-2024. Long-term wildlife monitoring for unmanaged rangelands transitioning to planned grazing management. **\$100,000.** Co-PIs: Stephen L. Webb and **Ty J. Werdel.**
1. **Department of Rangeland, Wildlife and Fisheries Management.** 2023-2025. River otter (*Lontra canadensis*) population dynamics in Texas. **\$60,000.** PI: **Ty J. Werdel.**

Honors & Awards

Awards (\$121,150)

Community Building Through Mentorship Conference Panel Travel Grant, The Wildlife Society	2022
Agriculture Dean and Director's Award for Graduate Student Research, Kansas State University	2022
Advancing Agricultural Science Opportunities for Native Americans Scholarship, AISES	2021
Robert Nunemacher Scholarship, Kansas State University	2021
Advancing Agricultural Science Opportunities for Native Americans Research Award, AISES	2020
Advancing Agricultural Science Opportunities for Native Americans Scholarship, AISES	2020
Lighting the Pathway to Faculty Careers for Natives in STEM, AISES	2020
College of Agriculture Graduate Student Recognition of Achievement, Kansas State University	2020
AISES Together Towards Tomorrow T3 Scholarship, AISES	2020
Gamma Sigma Delta, Kansas State University	2019
AISES Travel Grant, AISES	2019
Advancing Agricultural Science Opportunities for Native Americans Scholarship, AISES	2019
Kansas State University Graduate Student Recognition of Achievement, Kansas State University	2019
College of Agriculture Graduate Student Recognition of Achievement, Kansas State University	2019
Inclusive Pedagogy Travel Grant, The Wildlife Society	2018
Life Membership Fund Scholarship, Wild Sheep Foundation	2018
Predoctoral Ford Fellowship, (Honorable Mention) Ford Foundation Fellowships Program	2018
Native Student Professional Development Grant, The Wildlife Society	2017
Launch Collegiate Business Pitch Competition, Kansas State University	2017
Native Student Professional Development Grant, The Wildlife Society	2016
Phi Kappa Phi Honor Society, South Dakota State University	2016
Excellence in Wildlife Management, Chadron State College	2013
Platinum Eagle Award, (Finalist) Chadron State College	2013
Gates Millennium Scholarship, Bill and Melinda Gates Foundation	2005
Scholastic Excellence in Engineering, University of Wyoming	2005
Scholars Stipend, University of Wyoming	2005
Computer Science, Engineering, and Mathematics Scholarship, University of Wyoming	2005
Honors Program, University of Wyoming	2005

Professional Service

Executive Service in Professional Organizations

Program Coordinator

NATIVE STUDENT PROFESSIONAL DEVELOPMENT GRANT

The Wildlife Society

2018 – Present

Secretary/Treasurer

CENTRAL MOUNTAINS AND PLAINS SECTION

The Wildlife Society

2018 – 2021

Working Group Membership

Rangeland Wildlife Working Group, The Wildlife Society

2018 – Present

Native Peoples' Wildlife Management Working Group, The Wildlife Society

2015 – Present

Student Development Working Group, The Wildlife Society

2013 – Present

Chapter Membership

Central Mountains and Plains Section, The Wildlife Society

2018 – Present

Kansas Chapter, The Wildlife Society

2015 – Present

South Dakota Chapter, The Wildlife Society

2014 – 2017

Nebraska Chapter, The Wildlife Society

2013 – 2014

Chadron State Student Chapter, The Wildlife Society

2012 – 2013

Professional Organization Membership

Society for Advancement of Chicanos/Hispanics and Native Americans in Science

2021 – Present

Gamma Sigma Delta Honor Society

2019 – Present

American Indian Science and Engineering Society

2019 – Present

Swift Fox Conservation Team

2018 – Present

Phi Kappa Phi Honor Society

2016 – Present

Native American Fish and Wildlife Society

2015 – Present

Rocky Mountain Bighorn Society

2015 – 2017

Wild Sheep Foundation

2014 – 2020

American Society of Mammalogists

2013 – Present

The Wildlife Society

2013 – Present

External Journal Reviewer

Journal of Mammalogy, PeerJ, Canadian Journal of Zoology

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Presentations

Contributed

15. Palomo-Muñoz, G., **T.J. Werdel**, C.W. Piper, M. Fidno, A.M. Ricketts, and A.A. Ahlers. **2022**. Local-scale habitat structure mediates interactions between coyotes and lagomorphs. *101st Annual Meeting of the American Society of Mammalogists, Tucson, AZ*.
14. **Werdel, T.J.**, C.W. Piper, A.M. Ricketts, M. Peek, and A.A. Ahlers. **2021**. Scale-specific landscape effects impose range-limiting constraints on the distribution of swift foxes. *The Wildlife Society 28th Annual Conference, Virtual*.
13. Piper, C.W., **T.J. Werdel**, A.M. Ricketts, D. Sullins, M. Peek, and A.A. Ahlers. **2021**. Landscape composition and proximity to water structure American badger distributions in shortgrass prairies. *The Wildlife Society 28th Annual Conference, Virtual*.
12. **Werdel, T.J.**, C.W. Piper, A.M. Ricketts, M. Peek, and A.A. Ahlers. **2021**. Multiscale landscape effects impose range-limiting constraints on the distribution of swift fox. *Swift Fox Conservation Team Meeting, Virtual*.
11. **Werdel, T.J.**, C.W. Piper, A.M. Ricketts, M. Peek, and A.A. Ahlers. **2021**. Multiscale landscape effects impose range-limiting constraints on the distribution of swift fox. *Midwest Association of Fish and Wildlife Agencies Furbearer Workshop, Virtual*.
10. Piper, C.W., **T.J. Werdel**, A.M. Ricketts, M. Peek, and A.A. Ahlers. **2021**. Landscape composition and proximity to water structure American badger (*Taxidea taxus*) distributions in shortgrass prairies. *Midwest Association of Fish and Wildlife Agencies Furbearer Workshop, Virtual*.
9. **Werdel, T.J.**, A.M. Ricketts, M. Peek, and A.A. Ahlers. **2020**. Assessing factors that influence occupancy and colonization of swift fox in western Kansas. *Kansas Natural Resources Conference, Manhattan, KS*.
8. **Werdel, T.J.**, A.M. Ricketts, M. Peek, and A.A. Ahlers. **2019**. Assessing factors that shape carnivore diversity in shortgrass prairie ecosystems. *American Fisheries Society and The Wildlife Society 2019 Joint Annual Conference, Reno, NV*.
7. **Werdel, T.J.**, A.M. Ricketts, M. Peek, and A.A. Ahlers. **2019**. Carnivore richness and diversity is driven by landscape change in shortgrass prairie ecosystems. *99th Annual Meeting of the American Society of Mammalogists, Washington, D.C.*
6. **Werdel, T.J.**, A.M. Ricketts, M. Peek, and A.A. Ahlers. **2019**. Landscape effects on swift fox occupancy in western Kansas. *South-west/Midwest Joint Furbearer Meeting, Enid, OK*.
5. **Werdel, T.J.**, A.M. Ricketts, and A.A. Ahlers. **2019**. Landscape change structures carnivore communities in shortgrass prairie ecosystems. *Kansas Natural Resources Conference, Manhattan, KS*.
4. **Werdel, T.J.**, A.M. Ricketts, M. Peek, and A.A. Ahlers. **2018**. Assessing the spatial distribution of swift fox in western Kansas. *The Wildlife Society 25th Annual Conference, Cleveland, OH*.
3. **Werdel, T.J.**, J.A. Jenks. **2018**. Survival of bighorn sheep in the Deadwood region of the Black Hills. *Nebraska/Central Mountains and Plains Section of The Wildlife Society Annual Meeting, Kearney, NE*.
2. **Werdel, T.J.**, J.A. Jenks, J. Kanta, and C. Lehman. **2016**. Evaluation of the Deadwood bighorn sheep herd translocation. *The Wildlife Society 23rd Annual Conference, Raleigh, NC*.
1. **Werdel, T.J.**. **2013**. Small mammal population and diversity in relation to prairie dog reintroduction sites. *Seville LTER Research Experience for Undergraduates Summer Symposium, Socorro, NM*.

Invited

Community Building Through Mentorship Panel

THE WILDLIFE SOCIETY ANNUAL CONFERENCE

Spokane, WA

2022

Wildlife Professional Experience

TEXAS A&M UNIVERSITY

College Station, TX

2022

Bighorn Sheep Capture and Monitoring Techniques

KANSAS STATE UNIVERSITY

Manhattan, KS

2022

Applied Wildlife Management: A Landscape Ecology Approach

TEXAS A&M UNIVERSITY

College Station, TX

2021

Traditional Ecological Knowledge: A Place-Based Perspective

TEXAS A&M UNIVERSITY

College Station, TX

2021

Distribution of Swift Fox in Kansas

KANSAS DEPARTMENT OF WILDLIFE, PARKS AND TOURISM

Emporia, KS

2021

Traditional Ecological Knowledge (TEK) of Wetlands

KANSAS STATE UNIVERSITY

Manhattan, KS

2021

Bighorn Sheep Capture and Monitoring Techniques KANSAS STATE UNIVERSITY	Manhattan, KS 2021
Wild Sheep Natural History KANSAS STATE UNIVERSITY	Manhattan, KS 2021
Bighorn Sheep Capture and Monitoring Techniques KANSAS STATE UNIVERSITY	Manhattan, KS 2020
Traditional Ecological Knowledge (TEK) of Wetlands KANSAS STATE UNIVERSITY	Manhattan, KS 2019
Keynote Speaker: Youth Wildlife Conservation Experience WILD SHEEP FOUNDATION SHEEP SHOW	Reno, NV 2019
Inclusive Pedagogy Student Panel THE WILDLIFE SOCIETY ANNUAL CONFERENCE	Cleveland, OH 2018
Bighorn Sheep Monitoring KANSAS STATE UNIVERSITY	Manhattan, KS 2018
Marlatt STEM Night MARLATT ELEMENTARY SCHOOL	Manhattan, KS 2018
Initiating a Student Chapter of The Wildlife Society HASKELL INDIAN NATIONS UNIVERSITY	Lawrence, KS 2018
Toyota STEM Speaker RED CLOUD INDIAN SCHOOL	Pine Ridge, SD 2016
Deadwood Bighorn Sheep Translocation SOUTH DAKOTA GAME, FISH, AND PARKS	Rapid City, SD 2015
Bighorn Sheep and Community Interaction KIWANIS CLUB	Lead, SD 2015
Graduate School Experience and Preparation CHADRON STATE COLLEGE	Chadron, NE 2015
Project WILD, Children and Wildlife RED CLOUD INDIAN SCHOOL	Pine Ridge, SD 2013