

Curriculum Vitae

Robert D. Cox

Department of Natural Resources Management
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Education

- Sep 2006 Ph.D., Botany (Ecology and Conservation Biology). University of California, Riverside, CA; Dissertation: Ecology and Management of Rare Plants Following Exotic Invasions in Riverside County, California.
- Aug 2000 MS., Botany. Aug 2000. Brigham Young University, Provo, UT; Thesis: Experimental Seeding of Native Species into Crested Wheatgrass and Cheatgrass Monocultures in Tooele County, Utah.
- Dec 1997 BS., Conservation Biology (Emphasis in Zoology). Dec 1997. Brigham Young University, Provo, UT.

Employment History

- 2023-Pres Associate Dean for Academic and Student Programs. Davis College of Agricultural Sciences and Natural Resources, Texas Tech University. Managed the academic and student programs for the College.
- 2021-2023 Interim Associate Dean for Academic and Student Programs. Davis College of Agricultural Sciences and Natural Resources, Texas Tech University. Managed the academic and student programs for the College.
- 2021-Pres Professor, Habitat Restoration Ecology. Department of Natural Resources Management, Texas Tech University. Courses Taught: Range Plant Ecology, Range Forest and Wetland Plant ID, Range Improvements, Restoration Ecology; Graduate courses: Advanced Range Ecology, Advanced Restoration Ecology.
- 2014-2021 Associate Professor, Habitat Restoration Ecology. Department of Natural Resources Management, Texas Tech University. Courses Taught: Range Plant Ecology, Range Forest and Wetland Plant ID, Range Improvements, Restoration Ecology; Graduate courses: Advanced Range Ecology, Advanced Restoration Ecology.
- 2008-2014 Assistant Professor, Habitat Restoration Ecology. Department of Natural Resources Management, Texas Tech University. Courses Taught: Range Plant Ecology, Range Forest and Wetland Plant ID, Range Improvements,

Restoration Ecology, Vegetation and Wildlife Inventory and Analysis Techniques (Co-taught with Dr. Kerry Griffis-Kyle), Plant Physiology (Co-taught with Dr. Villalobos), Introductory Wildlife; Graduate courses: Advanced Range Ecology, Advanced Restoration Ecology, Wildlife Conservation and Management.

- 2006-2008 Post-doctoral Ecologist. Shrubland Ecology and Restoration Group, USDA Forest Service Rocky Mountain Research Station, Boise Lab. Develop knowledge, plant materials, and technology for successful long-term restoration of diverse shrubland plant communities to meet needs and values of land managers, wildlife, and public. Research includes: large-scale field experiments at various locations throughout the Great Basin, studies of sagebrush seed longevity in storage, hydrothermal time of sagebrush seed germination. Other responsibilities include curating the 8807 specimen RMRS herbarium (code: BOIS), directing data collection and field activities for term and seasonal employees, and managing USDA training for lab employees.
- 2003- 2006 Research Assistant, Center for Conservation Biology, University of California Riverside. Responsible for design and implementation of a research plan for monitoring 32 species of rare and endemic plants in Riverside County, California. Created and managed a database of over 1500 historical records reporting these rare species, and collected data on current species presence and community composition at each location described in these records. Finally, I developed GIS-based niche models to predict species occurrence through statistical analysis of habitat similarity across the landscape.
- 2002-2004 Teaching Assistant, Department of Botany and Plant Science, University of California Riverside. Spring Wildflowers and Foundations of Plant Biology Classes. Responsible for leading lab sections and teaching undergraduate students basic principles of plant biology. Lectured to lab section for 1 hr every week, conducted quizzes and exams, and assisted students in laboratory procedures and field trips. Managed class roster, calculated and recorded scores, and helped faculty in assigning and posting grades.
- 2002 Associate Faculty. Department of Biological Science, Mt. San Jacinto Community College. Environmental Science 101. Responsible for developing and teaching a course in general environmental science. Lectured two hrs per week, consulted with students, wrote and administered exams.
- 1999-2000 Field Ecology Class Teaching Assistant. Department of Botany and Range Science, Brigham Young University. Responsible for teaching undergraduate students vegetation sampling techniques and data analysis. Demonstrated sampling techniques in the field, corrected quizzes, and graded lab reports and papers.
- 1998-2000 Range Plant Ecology and Identification Class Teaching Assistant. Department of Botany and Range Science, Brigham Young University. Responsible for teaching

undergraduate students characteristics for identifying 250 species of plants, as well as conducting review sessions, administering and grading quizzes and exams.

1998-2000 Plant Identification Team Coach. Department of Botany and Range Science, Brigham Young University. Teach the team key characteristics for identifying 200 common rangeland plants. The BYU team finished 3rd in national competition.

Peer-reviewed Publications

Garcia-Cancel, JG. and R.D. Cox. 2025. Modeling Future Lehmann Lovegrass (*Eragrostis lehmanniana*) Distribution in Texas and Adjacent Areas. Rangeland Ecology and Management 101:80-88.

<https://doi.org/10.1016/j.rama.2025.04.001>

Hardberger, A., D. Craig, C. Simpson, R.D. Cox, and G. Perry. 2025. Greening Up the City with Native Species: Challenges and Solutions. Diversity 17:56.

<https://doi.org/10.3390/d17010056>

Lechnar, C.V., G.K. Gyan, R. Puckett, R.D. Cox, B. Grisham, and N.S. Gill. 2025. Post-fire Herbicide Application Reduces Macartney Rose in Attwater's Prairie-chicken Habitat. Rangeland Ecology and Management 98:237-245.

<https://doi.org/10.1016/j.rama.2024.06.017>

Teveni, P.C., R.D. Cox, and C.E Cooper-Norris. 2024. Temperature Effects on Huisache (*Vachellia farnesiana* (L.) Wight & Arn.) Seed Germination. Rangeland Ecology and Management 96:197-202.

<https://doi.org/10.1016/j.rama.2024.07.004>

Subedi, M.R., C. Portillo-Quintero, N.E. McIntyre, S.S. Kahl, R.D. Cox, G. Perry, and X. Song. 2024. Ensemble Machine Learning on the Fusion of Sentinel Time Series Imagery With High-Resolution Orthoimagery for Improved Land Use/Land Cover Mapping. Remote Sensing 16:20778.

<https://doi.org/10.3390/rs16152778>

Jacobi, C.B., S.S. Kahl, R.D. Cox, and G. Perry. 2024. Assessment of a Machine-learning Software for Classifying Ground Cover. Southwestern Naturalist 67:239-243.

<https://doi.org/10.1894/0038-4909-67.4.239>

Perry, G. and R.D. Cox. 2024. Opportunities for Biodiversity Conservation via Urban Ecosystem Regeneration. Diversity 16:131

<https://doi.org/10.3390/d16030131>

Subedi, M.R., Portillo-Quintero, C., Kahl, S., McIntyre, N.E., Cox, R.D., and Perry, G. 2023. Leveraging NAIP imagery for accurate large-area land use/land cover mapping: A case study in central Texas. *Photogrammetric Engineering and Remote Sensing* 89:547-560.
<https://doi.org/10.14358/PERS.22-00123R2>

Garcia-Cancel, J.G. and R.D. Cox. 2023. Future presence of an invasive grass in the Caribbean: Modeling Potential distribution of *Cenchrus ciliaris* L. (Buffelgrass) in Puerto Rico. *Caribbean Journal of Science* 53:229-242
<https://doi.org/10.18475/cjos.v53i2.a7>

Hale, G., R.D. Cox, and G. Ritchie. 2023. Canopy Detection Beyond the Field: Colored Backgrounds Impact Precision of Canopeo. *Sensing and Bio-Sensing Research* 42(2023):100587
<https://doi.org/10.1016/j.sbsr.2023.100587>

Chen, Y., D.W. Schwilk, R.D. Cox, and M.G. Johnson. 2022. Including Phylogenetic Conservatism of Shortgrass Prairie Restoration Desired Species Does Not Improve Species Germination Prediction. *Frontiers in Ecology and Evolution*. 10.3389/fevo.2022.983192
<https://doi.org/10.3389/fevo.2022.983192>

Langlois, G.D., R.D. Cox, P.S. Gipson, R. Stevens. 2022. The North American Beaver (*Castor canadensis*) is Recolonizing the Llano Estacado. *Western North American* 82:190-195.
<https://doi.org/10.3398/064.082.0120>

Hamilton, N., S. Yelenik, T. Durboraw, R.D. Cox, N. Gill. 2021. Understanding Grass Invasion, Fire Severity, and *Acacia koa* Regeneration for Forest Restoration in Hawai'i Volcanoes National Park. *Land* 10:962
<https://doi.org/10.3390/land10090962>

Johnson, M.D., R.D. Cox, M. Fokar, M. Barnes. 2021. Airborne Environmental DNA Metabarcoding Detects More Diversity, With Less Sampling Effort, Than a Traditional Plant Community Survey. *BMC Ecology and Evolution* 21:218.
<https://doi.org/10.1186/s12862-021-01947-x>

Johnson, M.D., R.D. Cox, B.A. Grisham, D. Lucia, and M.A. Barnes. 2021. Airborne eDNA Reflects Human Activity and Seasonal Changes on a Landscape Scale. *Frontiers in Environmental Science* 563431; DOI: 10.3389/fenvs.2020.563431.
<https://doi.org/10.3389/fenvs.2020.563431>

Teveni III, P.C., R.D. Cox, and R.E. Sosebee. 2020. Characterizing Temporal Ecophysiology for Herbicide Management of Huisache (*Acacia farnesiana* [L.] Willd.). *Rangeland Ecology and Management* 73:871-878; DOI: 10.1016/j.rama.2020.07.003.
<https://doi.org/10.1016/j.rama.2020.07.003>

Jackson, M., C. Portillo-Quintero, R. Cox, G. Ritchie, M. Johnson, K. Humagain, and M.R. Subedi. 2020. Season, Classifier, and Spatial Resolution Impact Honey Mesquite and Yellow

Bluestem Detection Using an Unmanned Aerial System. *Rangeland Ecology and Management* 75:658-672; DOI: 10.1016/j.rama.2020.06.010.

Sorensen, G.E., D.W. Kramer, J.W. Cain III, C.A. Taylor, P.S. Gipson, M.C. Wallace, R.D. Cox, and W.B. Ballard. 2020. Mule Deer Habitat Selection Following Vegetation Thinning Treatments in New Mexico. *Wildlife Society Bulletin* 44:122-129. DOI: 10.1002/wsb.1062.

Johnson, M.D., R.D. Cox, and M.A. Barnes. 2019. The detection of a non-anemophilous plant species using airborne eDNA. *PLOS ONE* 14(11):e0225262; DOI: 10.1371/journal.pone.0225262.

Johnson, M.D., R.D. Cox, and M.A. Barnes. 2019. Analyzing airborne environmental DNA: A comparison of extraction methods, primer type, and trap type on the ability to detect airborne eDNA from terrestrial plant communities. *Environmental DNA* 1:176-185; DOI: 10.1002/edn3.19.

Boye, A., S. Tapp, J.N. Couch, R.D. Cox, and L.G. Santa. 2019. Faculty Voices and Perspectives on Transparent Assignment Design: FAQ's for Implementation and Beyond. Chapter 3 *In: Transparent Design in Higher Education Teaching and Leadership*. Winkelmes, M., A. Boye, and S. Tapp, eds. Stylus Publishing, Sterling VA. 233 pgs.

Barnes M.A, R.D. Cox, and J. Spott. 2019. Place-based learning with out-of-place species and students: teaching international students about biological invasions. *American Biology Teacher* 81:503-506. DOI: 10.1525/abt.2019.81.7.503.

Humagain, K., C. Portillo-Quintero, R.D. Cox, and J.W. Cain III. 2018. Estimating forest canopy cover dynamics in Valles Caldera National Preserve, New Mexico, using LiDAR and Landsat data. *Applied Geography* 99:120-132. DOI: 10.1016/j.apgeog.2018.07.024.

Fritts, S.R., B.A. Grisham, R.D. Cox, C.W. Boal, D.A. Haukos, P. McDaniel, C.A. Hagen, and D.U. Greene. 2018. Interactive effects of severe drought and grazing on the life history cycle of a bioindicator species. *Ecology and Evolution* DOI:10.1002/ece3.4432.

Roberts, C.P., J.W. Cain III and R.D. Cox. 2017. Identifying ecologically-relevant scales of habitat selection: diel habitat selection in elk. *Ecosphere* 8(11):e02013. DOI: 10.1002/ecs2.2013.

Humagain, K., C. Portillo-Quintero, R.D. Cox and J.W. Cain, III. 2017. Mapping Tree Density in Forests of the Southwestern USA Using Landsat 8 Data. *Forests* 8:287. DOI: 10.3390/f8080287.

Ott, J.E., R.D. Cox and N.L. Shaw. 2017. Comparison of postfire seeding practices for Wyoming big sagebrush. *Rangeland Ecology and Management* 70(5): 625-632. DOI: 10.1016/j.rama.2017.03.005.

Cox, R.D., Y.F. Chou and D.B. Wester. 2017. Smoke water and heat influence emergence of shortgrass prairie species. *Fire Ecology* 13:138-148.
<https://doi.org/10.4996/fireecology.1301138>

- Cavalcante, A.M.B. and R.D. Cox. 2016. *Acacia farnesiana* (L.) Willd. -A Potentially Invasive Alien Species? International Journal of Ecology and Environmental Sciences 42(3):209-215.
- Roberts, C.P., J.W. Cain III and R.D. Cox. 2016. Application of Activity Sensors for Estimating Behavioral Patterns. Wildlife Society Bulletin 40:764-771. DOI: 10.1002/wsb.717.
- Ott, J.E., R.D. Cox, N.L. Shaw, B.A. Newingham, A.C. Ganguli, M. Pellant, B.A. Roundy and D.L. Eggett. 2016. Post-fire Drill-seeding of Great Basin Plants: Effects of Contrasting Drills on Seeded and Nonseeded Species. Rangeland Ecology and Management 69:373-385. DOI: 10.1016/j.rama.2016.05.001.
- Fritts, S.F., B.A. Grisham, D.A. Haukos, C.W. Boal, M.A. Patten, D.H. Wolfe, C.E. Dixon, R.D. Cox and W.R. Heck. 2016. Long-term lesser prairie-chicken nest ecology in response to grassland management. Journal of Wildlife Management 80:527-539. DOI: 10.1002/jwmg.1042.
- Kramer, D.W., G.E. Sorensen, C.A. Taylor, R.D. Cox, P.S. Gipson and J.W. Cain III. 2015. Ungulate Exclusion, Conifer Thinning and Mule Deer Forage in Northeastern New Mexico. Journal of Arid Environments 113:29-34; DOI: 10.1016/j.jaridenv.2014.09.008.
- Cox, R.D., K.L. Preston, R.F. Johnson, R.A. Minnich and E.B. Allen. 2014. Influence of Landscape-scale Variables on Vegetation Conversion to Exotic Annual Grassland in Southern California, USA. Global Ecology and Conservation 2:190-203.
- Cox, R.D. and B.G. Johns. 2014. Dragged-rail Treatments for Reducing Cholla Infestation in SE New Mexico, USA. Weed Technology 28:286-289.
- Chou, Y., R.D. Cox and D.B. Wester. 2012. Smoke Water and Heat Shock influence Germination of Shortgrass Prairie Species. Rangeland Ecology & Management 65:260-267.
- Cox, R.D., L.H. Kosberg, N.L. Shaw and S.P. Hardegree. 2011. Effect of fungicides on Wyoming big sagebrush seed germination. Native Plants Journal 12:263-267.
- Cox, R.D. and E.B. Allen. 2011. The Roles of Exotic Grasses and Forbs When Restoring Native Species to California Annual Grassland. Plant Ecology 212:1699–1707.
- Cox, R.D. and E.B. Allen. 2008. Stability of exotic annual grasses following restoration efforts in southern California coastal sage scrub. Journal of Applied Ecology 45:495-504.
- Cox, R.D. and E.B. Allen. 2008. Composition of soil seed banks in southern California coastal sage scrub and adjacent exotic grassland. Plant Ecology 198:37-46.
- Allen, E.B., R.D. Cox, T. Tennant, S.N. Kee and D. Deutsman. 2005. Landscape restoration in southern California forblands: Response of abandoned farmland to invasive annual grass control. Israel Journal of Plant Science 53:237-245.

Cox, R.D. and V.J. Anderson. 2004. Increasing native diversity of cheatgrass-dominated rangeland through assisted succession. *J. Range Management* 57:203-210.

Other publications

Johnson, M., R.D. Cox, B. Grisham, D. Lucia, M. Barnes. 2021. Airborne Environmental DNA Reflects Landscape Changes. *Texas Wildlife Magazine* December 2021.

Kabat, K.L., C. Jacobi, A. Ryan, M.A. Barnes, R.D. Cox, C. Portillo, M. Subedi, and G. Perry. 2021. Texas Lizards at Risk. *Texas Wildlife Magazine* April 2021.

Lindsay, D., and R.D. Cox. 2018. The Art and Science of Restoration Ecology. Art Gallery Exhibition, June 8, 2018-September 25, 2018, Museum of Texas Tech University.

Perry, G., and R.D. Cox. 2016. Grasslands. Pp 62-67 *In: Habitat Management Guidelines for Amphibians and Reptiles of the Southwestern United States*. PARC Technical Publication HMG-5.

Sosebee, R.E., C. Villalobos, and R.D. Cox. 2013. Control of noxious brush and weeds. *Rangeland Issues* 1(4):1-7.

Cox, R.D. (ed). 2008. Revegetation equipment catalog (website). <http://www.reveg-catalog.rw.ttu.edu>- no longer online.

Professional Activities and Awards:

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| 2023-Pres | NARRU (Non-land-grant Agriculture and Renewable Resources Universities) representative to the APS (Academic Programs Section) of the APLU (Association of Public and Land-grant Universities). |
| 2023-Pres | NARRU (Non-land-grant Agriculture and Renewable Resources Universities) representative to the ACOP (Academic Programs Committee on Organization and Policy) of the APLU (Association of Public and Land-grant Universities). |
| 2023-Pres | NARRU (Non-land-grant Agriculture and Renewable Resources Universities) Board of Directors. |
| 2023-Pres | AgIDEA (Agriculture Interactive Distance Education Alliance) Cabinet |
| 2021-Pres | AgIDEA (Agriculture Interactive Distance Education Alliance) Board of Directors |

- 2019-2020 Texas Tech University STEM Teaching, Engagement, and Pedagogy (STEP) Program Faculty Specialist. Work with other Specialists and Fellows in the STEP program to enhance STEM teaching methods at TTU.
- 2019 College of Agricultural Sciences and Natural Resources Teaching Award.
- 2018-Pres Texas Tech University Excellence in Teaching Professorship. Awarded to 12 professors at TTU in recognition of outstanding teaching efforts. Re-awarded to a second (and final) three-year term in 2021.
- 2018-2019 Texas Tech University STEM Teaching, Engagement, and Pedagogy (STEP) Program Faculty Specialist. Work with other Specialists and Fellows in the STEP program to enhance STEM teaching methods at TTU.
- 2017-2018 Texas Tech University STEM Teaching, Engagement, and Pedagogy (STEP) Program Faculty Specialist. Work with other Specialists and Fellows in the STEP program to enhance STEM teaching methods at TTU.
- 2017-2018 Texas Tech University Provost's Task Force for Student Success & Retention. Suggest benchmarks and incentives for increasing student success at TTU.
- 2017 Online Courses Review for TTU Worldwide eLearning. Work with a team to review several online courses according to Quality Matters principles.
- 2017 Texas Tech University President's Excellence in Teaching Award. Awarded in recognition of meritorious teaching achievements.
- 2017 Transparency in Teaching and Learning (TILT) Program at TTU. Work with the TTU TILT Learning Group to implement Transparency Principles in teaching.
- 2016-Pres Texas Tech University Teaching Academy. Elected by current members, the TTU Teaching Academy advocates for excellence in teaching across the University.
- 2016-Pres Texas Tech University Tenure Hearing Committee. Consider, as part of the Committee, faculty terminations under University policy.
- 2016-Pres College of Agricultural Sciences and Natural Resources Orientation Speaker. Speak to prospective students for the College about Texas Tech, CASNR, and their individual majors. About 10 sessions during the summer.
- 2016-Pres Texas Section, Society for Range Management Publications Awards Committee Chair. Manage the nomination and judging process for granting awards to meritorious publications.

- 2016-2017 Texas Tech University STEM Teaching, Engagement, and Pedagogy (STEP) Program Faculty Specialist. Work with other Specialists and Fellows in the STEP program to enhance STEM teaching methods at TTU.
- 2016 Online Courses Review for TTU Worldwide eLearning. Work with a team to review several online courses according to Quality Matters principles.
- 2016 Transparency in Teaching and Learning (TILT) Program at TTU. Work with the TTU TILT Learning Group to implement Transparency Principles in teaching.
- 2015 Online Course Review for TTU Worldwide eLearning. Work with a team to review an online course according to Quality Matters principles.
- 2015 TeMPO Fellow. The Teaching, Mentoring and Peer Observation (TeMPO) program at Texas Tech University is designed to “facilitate interdisciplinary mentoring relationships among faculty to discuss teaching and create a culture that will help foster the participation of all departments in more consistent and high-quality peer observation and review”.
- 2014-Pres Associate Editor, Native Plants Journal. Conduct, manage, and request peer-reviews of submitted papers.
- 2014-Pres Department of Natural Resources Management Teaching Peer Observation Leader. Organize and lead departmental efforts to conduct peer observation of teaching.
- 2014 TeMPO Fellow. The Teaching, Mentoring and Peer Observation (TeMPO) program at Texas Tech University is designed to “facilitate interdisciplinary mentoring relationships among faculty to discuss teaching and create a culture that will help foster the participation of all departments in more consistent and high-quality peer observation and review”.
- 2014 Range Science Education Council Early Career Undergraduate Teaching Award. Awarded annually by the Range Science Education Council and the Society for Range Management for excellence in undergraduate teaching.
- 2013-Present Texas FFA Plant ID CDE Contest Coordinator for Texas Tech University. The Texas FFA CDD Plant ID Contest at Texas Tech consists of 60 plant specimens that HS students from around the state identify. An average of 110 students take the test each year, which I create and run.
- 2013 TTU New Faculty Award. Awarded to new faculty members annually by the Texas Tech Alumni Association for meritorious teaching.

- 2012-2013 Rangeland Technology and Equipment Council (RTEC) Workshop Organizer. Co-organized and co-chaired the annual RTEC workshop held during the Society for Range Management meetings in Spokane, WA and Oklahoma City, OK.
- 2012 US Forest Service/Bureau of Land Management Joint Conservation Project Award. Recognized as part of the Great Basin Native Plant Selection and Increase Project, a joint conservation/research project with the US Forest Service and Bureau of Land Management.
- 2011 Rangeland Technology and Equipment Council (RTEC) Workshop Organizer. Organized and chaired the annual RTEC workshop held during the Society for Range Management meetings in Billings, MT.
- 2008 Certificate of Merit, to R.D. Cox and N.L. Shaw for Alpha team participation. Restructuring decisions for Research Natural Areas, Experimental Forests and Ranges, and Ecosystem Management Research Units.
- 2007 “On the Spot” Award for Excellence. Organizing summer data collection and fall planting of experimental sites, setting up the plots, and designing the seed mix.
- 2005 University of California Riverside Botany Department Graduate Student Achievement Award. Awarded annually to a graduate student in the Department of Botany and Plant Sciences at UCR who demonstrates outstanding achievement and ambition in research.
- 2005 University of California Riverside Botany Department Outstanding Teaching Assistant Award. Awarded annually to one teaching assistant in the Department of Botany and Plant Sciences at UCR, in recognition for outstanding service and ability as a Teaching Assistant.

Invited Presentations

Jacobs, M., R.D. Cox, B. Pihlaja, M. Beruvides, C. Komen, M. Murimi, M. Lesley, and S. Schiffecker. 2022. Making Connections: Engaging Students Beyond Course Content Through Art and Expression. Texas Tech TLPDC Workshop, October 11, 2022.

Jasik, C. and R.D. Cox. 2019. Relationship between Huisache (*Acacia farnesiana*) Canopy Cover and Understory Forage Characteristics in Texas Coastal Prairies. Abstract presented at Texas Section, Society for Range Management Annual Meeting, Kerrville, TX. Oct 9-11, 2019.

Cox, R.D. 2019. Transparency in Learning and Teaching. STEM Teaching and Learning Mini-conference, TTU TLPDC. Lubbock, TX. Oct 14, 2019.

- Cox, R.D. 2019. Top Ten Tools for a Student-centered Classroom. STEM Teaching, Engagement, and Pedagogy Program (STEP) Workshop TTU TLPDC. Lubbock, TX. Feb 6, 2019.
- Cox, R.D. 2018. Peer Mentoring. STEM Teaching, Engagement, and Pedagogy Program (STEP) Workshop. TTU TLPDC. Lubbock, TX. Sep 3, 2018.
- Cox, R.D. 2018. Plants in Lubbock. Presentation and Tour of NRM Rangeland for Lubbock Master Naturalists. Lubbock, TX. Mar 22, 2018.
- Cox, R.D. 2017. Restoring Native Habitats for Native Pollinators. Northside ISD Visiting Students. Lubbock, TX. Mar 6, 2017.
- Cox, R.D. 2017. A Small Change Can Make a Big Impact: Increasing Assignment Transparency to Improve STEM Student Learning. Texas Tech University Teaching Learning and Professional Development Center, STEM Teaching Engagement and Pedagogy Program Workshop. Oct 10, 2017, Lubbock, TX.
- Castillo, E., R.D. Cox, D. Forrest, L. Garner, D. Laverie, B. Lawson, S. Morse, J. Nelson., 2017. Transparent Assignment Design at Texas Tech: A Panel Discussion. 13th Annual Advancing Teaching and Learning Conference. March 3, 2017, Overton Hotel, Lubbock, TX.
- Cox, R.D. 2016. Effective Questioning Strategies in STEM. TTU TLPDC STEP Program Journal Club. Oct 4, 2016, Lubbock, TX.
- Cox, R.D. 2014. Restoration Ecology (Y'all): the View from Texas. Brigham Young University Department of Plant and Wildlife Sciences Seminar, 2014 Oct 30, Provo, UT.
- Cox, R.D. 2013. Teaching, Learning, and Practicing Ecological Restoration. TTU ANRS Seminar, Texas Tech Association of Natural Resources Scientists, March 19, 2013, Texas Tech University, Lubbock, TX.
- Cox, R.D. 2013. The Revegetation Equipment Catalog. Society for Range Management Annual Meeting, 2013 Feb 3-7 Oklahoma City, OK.
- Cox, R.D., N.L. Shaw and M. Pellant. 2012. Seeding Wyoming Big Sagebrush in the Northern Great Basin. Society for Range Management Annual Meeting, 2012 Jan 29-Feb 3 Spokane, WA.
- Cox, R.D., N.L. Shaw and M. Pellant. 2011. Seedling Emergence of Diverse Seed Mixes in Post-Wildfire Rangelands. Society for Range Management Annual Meeting, 2011 February 7-11, Billings, MT.
- Hardegree, S., J. Cho, B. Roundy, C. Moffet, T. Jones, J. James, N. Shaw and R.D. Cox. 2011. Hydrothermal Indices for Classification of Seedbed Microclimate. Society for Range Management Annual Meeting, 2011 February 7-11, Billings, MT.

Cox, R.D., N.L. Shaw, M. Pellant, D. Pyke, L. St. John, D. Ogle, S. Perkins and J. Truax. 2008. Seed and Seeding Technologies for Reestablishing Wyoming Big Sagebrush in Diverse Seed Mixes. Great Basin Native Plant Selection and Increase Project Annual Meeting, 2008 February 13-14, Salt Lake City, UT.

Shaw, N.L., R.D. Cox and M. Pellant. 2008. Native Plants and Seeding Methods for the Great Basin. Society for Range Management/ American Forage and Grassland Council, 2008 Joint Annual Meeting, 2008 January 26-31, Louisville, KY.

Cox, R.D. 2007. Restoration of Damaged Wildlands: Requirements for Success. Texas Tech University, Department of Natural Resources Management Seminar, 2007 October 25, Lubbock, TX.

Cox, R.D., and N.L. Shaw. 2007. Sagebrush, fire and restoration: new approaches in the Great Basin. In: 150 Years of Human Activity in the Sagebrush Grass Steppe: Ecological and Genetic Consequences. Symposium presented at the annual meetings of the AAAS Pacific Division, Boise, ID, June 19, 2007.

Cox, R.D., 2007. Riverside County, California: where have all the flowers gone? Pahove Chapter, Idaho Native Plant Society, Boise, ID, Jan 18, 2007.

Contributed Presentations and Abstracts

Subedi, M. C. Portillo Quintero, S. Kahl, N. McIntyre, R.D. Cox, and G. Perry. 2022. Do LiDAR data provide practical significance to improve classification accuracy over NAIP Data?: Evidence from target-oriented validation strategies. Presented at AAG Annual Meeting, American Association of Geographers (AAG), Online, February 2022.

Garcia-Cancel, J., and R.D. Cox. 2022. Effects on Soil Moisture by Invasive Grasses Key for Native Plant Survivorship. Society for Range Management Annual Meeting, Society for Range Management, Albuquerque, NM, February 2022.

Garcia-Cancel, J.G. and R.D. Cox. 2021 Species distribution modeling for Lehmann's Lovegrass (*Eragrostis lehmanniana* Nees) under future climatic models. Oral presentation at Society for Range Management Annual Meeting Online. Feb 15-18, 2021.

Cox, R.D. and K.W. Griffith. 2021. The State of Rangeland Plant ID Education in North America. Oral presentation at Society for Range Management Annual Meeting Online. Feb 15-18, 2021.

Garcia-Cancel, J.G. and R.D. Cox. 2020. Buffelgrass (*Cenchrus ciliaris*) Invasion Pathways Across Texas. Abstract presented at Society for Range Management Annual Meeting, Denver, CO. Feb 16-20, 2020.

Jasik, C., C. Miller, S. Deiss, and R.D. Cox. 2019. Relationship Between Canopy Cover and Forage Nutritive Value in Texas Coastal Prairies. Abstract presented at Society for Range Management Annual Meeting, Minneapolis, MN. Feb 10-13, 2019.

Miller, C., C. Jasik, S. Diess, and R.D. Cox. 2019. Effects of Huisache and Honey Mesquite Canopy Cover on Soil Nutrients. Abstract presented at Society for Range Management Annual Meeting, Minneapolis, MN. Feb 10-13, 2019.

Teveni, P., R.D. Cox, and R. Sosebee. 2018. Timing of Huisache (*Acacia farnesiana*) Control in South Texas. Abstract presented at Society for Range Management Annual Meeting, Sparks, NV. Jan 28-Feb 2, 2018.

Jimison, Y., and R.D. Cox. 2018. Influence of Smoke on Seed Germination in the Southern Plains. Abstract presented at Society for Range Management Annual Meeting, Sparks, NV. Jan 28-Feb 2, 2018.

Teveni, P., R.D. Cox, and R. Sosebee. 2018. Huisache (*Acacia farnesiana*) Seedling Cotyledon Height and Resprouting Ability. Abstract presented at Society for Range Management Annual Meeting, Sparks, NV. Jan 28-Feb 2, 2018.

Teveni, P.C., and R.D. Cox. 2017. Characterizing Temporal Ecophysiology for Chemical Management of Huisache (*Acacia farnesiana*). Oral Presentation. Society for Range Management Annual Meeting, St. George, Ut.

Webb, A.B., and R.D. Cox. 2016. *Bouteloua gracilis* Competition with *Salsola iberica* in Shortgrass Prairie. Oral Presentation. Texas Section, Society for Range Management, Uvalde, TX. 2nd place winner for the Graduate Student Oral Presentation Competition

Fritts, S.R., B.A. Grisham, R.D. Cox, C.W. Boal, D.A. Haukos, P. McDaniel, A.N. Erickson. 2016. Influence of vegetation structure and composition on lesser prairie-chicken demographics following an intense drought. Texas Chapter of The Wildlife Society Annual Meeting. San Antonio, Texas, USA. Oral Presentation.

Fritts, S.R., B.A. Grisham, R.D. Cox, C.W. Boal, D.A. Haukos, P. McDaniel, A.N. Erickson. 2016. Influence of vegetation structure and composition on lesser prairie-chicken demographics following an intense drought. Texas Chapter of The Wildlife Society Annual Meeting. San Antonio, Texas, USA. Oral Presentation.

Humagain, K, C. Portillo-Quintero, R.D. Cox, and J.W. Cain. 2016. Mapping structural diversity of trees in the Southwest Jemez Mountains of New Mexico using Landsat 8 data. Society for Range Management Annual Meetings, Corpus Christi, TX, USA.

Roberts, C., J.W. Cain, and R.D. Cox. 2016. Fine-scale Temporal Modeling of Elk (*Cervus Canadensis*) habitat Selection. Society for Range Management Annual Meetings, Corpus Christi, TX, USA.

Fritts, S.R., B.A. Grisham, R.D. Cox, C. W. Boal, D. A. Haukos, P. McDaniel. 2016. Hierarchical modeling of lesser prairie-chicken demographic response to weather and grazing. Society of Range Management Annual Conference. Corpus Christi, TX, USA.

Fritts, S.R., B.A. Grisham, R.D. Cox, C.W. Boal, D.A. Haukos, and P. S. McDaniel. 2015. Hierarchical modeling of lesser prairie-chicken abundance, survival, and recruitment in response to grazing and weather. 31st Prairie Grouse Technical Council. Nevada, Missouri, USA.

Humagain, K., R.D. Cox, J. Cain. 2015. Tree distribution patterns in the southwest Jemez Mountains. Abstract presented at Southwest Jemez Mountains Collaborative Forest Landscape Restoration Project, Meeting, March 12, 2015, Santa Fe, NM.

Roberts, C., R.D. Cox, J. Cain, M. Wallace. 2015. Diel and Seasonal Elk Habitat Selection and Use in the Jemez Mountains. Abstract presented at the Southwest Jemez Mountains Collaborative Forest Landscape Restoration Project meeting, March 12, 2015, Santa Fe, NM.

Humagain, K., R.D. Cox, J. Cain. 2014. Vegetation Associations and Restoration. Abstract presented at Southwest Jemez Mountains Collaborative Forest Landscape Restoration Project, Meeting, March 27, 2014, Santa Fe, NM.

Roberts, C., R.D. Cox, J. Cain. 2014. Elk Behavior and Vegetation Selection. Abstract presented at the Southwest Jemez Mountains Collaborative Forest Landscape Restoration Project meeting, March 27, 2014, Santa Fe, NM.

Sorensen, G.E., D.W. Kramer, C. Taylor, M. Wallace, P. Gipson, R.D. Cox, S. Liley, W. Armacost. 2014. Forage quality and nutritional condition of adult-female mule deer following habitat enhancements in north-central New Mexico. Abstract presented at the Texas Chapter of The Wildlife Society Annual meeting, February 21, 2014 Austin, Texas.

Taylor, C.A., G.E. Sorensen, D.W. Kramer, P. Gipson, M.C. Wallace, R.D. Cox. 2014. Dam-Fawn behaviour following parturition in mule deer across treated and untreated habitat types. Abstract presented at the Society for Range Management Annual Meeting February 11, 2014, Orlando, Florida.

Ott, J. N., Shaw, R.D. Cox, M. Pellant, B. Roundy. 2014. Comparison of Native Plant Seeding Techniques on Burned Wyoming Big Sagebrush Sites. Abstract presented at the Society for Range Management Annual Meeting, February 10, 2014 Orlando, FL.

Sorensen, G.E, D.W. Kramer, C.A. Taylor, M.C. Wallace, P.S. Gipson, and R.D. Cox. 2013. Survival and Nutritional Condition of Adult-Female Mule Deer Following Habitat Enhancements in North-Central New Mexico. Oral presentation at the Tenth Biennial Western States and Provinces Deer and Elk Workshop May 6-9th 2013, Missoula, MT.

Chen, Y., and R.D. Cox. 2013. Effects of Plant-derived Smoke Products on Seed Germination. Poster presented at the National Native Seed Conference, 2013 April 8-11 Santa Fe, NM.

Ott, J., N. Shaw, R.D. Cox, M. Pellant, B. Roundy, and D. Eggett. 2013. Comparison of Native Plant Seeding Techniques in Burned Wyoming Big Sagebrush Communities. Poster presented at the National Native Seed Conference, 2013 April 8-11 Santa Fe, NM.

Kramer, D., G. Sorensen, C. Taylor, R.D. Cox, and P. Gipson. 2013. The Effects of Thinning and Ungulate Exclusion on Conifer Understory Vegetation and Key Mule Deer Forage Species in Northeastern New Mexico, USA. Warnell Graduate Student Symposium; 2013 Feb 13-15. Athens, Georgia.

Taylor, C, G. Sorensen, D. Kramer, R.D. Cox, P. Gipson, M. Wallace, and W. Armacost. 2013. Habitat types associated with adult and neonate mule deer mortalities in north-central New Mexico. Society for Range Management Annual Meeting, 2013 Feb 2-8 Oklahoma City, OK.

Cox, R.D., Y.F. Chou, and D. Wester. 2013. Germination of shortgrass prairie species influenced by smoke in the glasshouse. Society for Range Management Annual Meeting, 2013 Feb 2-8 Oklahoma City, OK.

Shaw N., R.D. Cox, A. Hild and M. Taylor. 2012. Native plant seedlings as a tool for post-fire restoration of sagebrush systems. Fifth International Fire Ecology and Management Congress: Uniting Research, Education and Management. 2012 3-7 December, Association for Fire Ecology, Portland, Oregon, USA.

Shaw, N.L., R.D. Cox, M. Pellant, L. St. John, J. Truax, A. Ganguli and A. Hild. 2012. Equipment and Strategies to Enhance Post-wildfire Establishment of Great Basin Native Plants. Society for Range Management Annual Meeting, 2012 Jan 29-Feb 3 Spokane, WA.

Fisk, M., E. Denney, R.D. Cox and N.L. Shaw. 2012. Post-fire Native Seeding Strategies: Results from a Wyoming Big Sagebrush Site in Northern Nevada. Society for Range Management Annual Meeting, 2012 Jan 29-Feb 3 Spokane, WA.

Kramer, D. and R.D. Cox. 2012. Drought-Year Vegetation Does Not Respond to Conifer Removal but Does to Ungulate Exclusion. Society for Range Management Annual Meeting, 2012 Jan 29-Feb 3 Spokane, WA.

McEwen, M., R.D. Cox and E. Johnson. 2012. A Vegetation Survey and Soil Seed Bank Analysis at the Lubbock Lake Landmark During the Drought of 2011. Society for Range Management Annual Meeting, 2012 Jan 29-Feb 3 Spokane, WA.

Chou, Y. and R.D. Cox. 2011. Effects of Liquid Smoke on Seed Germination of Shortgrass Prairie Plant Species. Society for Range Management Annual Meeting, 2011 February 7-11, Billings, MT.

Johns, B. and R.D. Cox. 2011. Reducing Cholla Infestation in SE New Mexico, USA. Society for Range Management Annual Meeting, 2011 February 7-11, Billings, MT.

Parkinson, H., C. Zabinski, N. Shaw and R.D. Cox. 2010. Assessing the Effects of Grass Competition on Great Basin Forbs. Poster presented at the workshop “Seed Production of Native Grasses and Forbs”, Ontario, Oregon.

Cox, R.D., N.L. Shaw and M. Pellant. 2009. The effectiveness of rangeland and minimum-till seed drills for large-scale restoration of sagebrush wildlands. Presented at the annual meetings of the Ecological Society of America, Albuquerque, New Mexico.

Cox, R.D., N.L. Shaw and M. Pellant. 2008. Reestablishing Diverse Native Wyoming Big Sagebrush Communities: a Comparison of Seeding Equipment. Presented at the annual meetings of the Society for Range Management/American Forage and Grassland Council, Louisville, Kentucky.

Cox, R.D. and E.B. Allen. 2007. Soil seedbanks in southern California coastal sage scrub and adjacent exotic grassland: implications for management. Presented at the annual meetings of the Society for Range Management, Reno, Nevada.

Cox, R.D., E.B. Allen and M.F. Allen. 2006. Distribution of rare plants in Riverside County, California. Presented at the annual meetings of the Botanical Society of America, Chico, California.

Cox, R.D. and E.B. Allen. 2004. Influence of time since weed control on exotic and native species in Southern California coastal sage scrub. Presented at the annual meetings of the Ecological Society of America, Portland, Oregon.

Cox, R.D. and E.B. Allen. 2001. Managing annual weeds in coastal sage scrub: what works? Presented at the annual California Invasive Pest Plant Council meetings, San Diego, California.

Cox, R.D. and V.J. Anderson. 2000. Assisted succession using crested wheatgrass for community restoration. Presented at the annual meetings of the Society for Range Management, Boise Idaho.

Cox, R.D., V.J. Anderson and J. Martin. 1999. Reseeding of a sagebrush-bunchgrass community on cheatgrass (*Bromus tectorum*) and crested wheatgrass (*Agropyron cristatum*) rangelands at the Dugway Proving Ground. Presented at the annual US Army ITAM meetings, St. Cloud, Minnesota.

Funded Grant Proposals

Cox, R.D. 2022. Plant/Vegetation Monitoring and Ecosystem Restoration in the Monahans Area. Exxon/Mobile Upstream Research. \$12,633. 100% Credit.

Cooper, C., A. Norris, K. Lange, R.D. Cox. 2021. Demonstrating Companion and Cover Crops, Seeding Rates, and Establishment Methods to Optimize Success of Range Plantings and Soil Health. USDA Natural Resources Conservation Service. \$197,617. 5% Credit.

Grisham, B., C. Cooper, A. Norris, R.D. Cox, J. Villalobos, S. Collins, and W. Conway. 2022. Vegetation Monitoring and Management. 1687 Foundation. \$369,750. 10% Credit.

Cox, R.D. 2020. Finding Forage in the Trees. USDA-Natural Resources Conservation Service. \$74,038.00.

Kahl, S., Portillo, C., Cox, R.D., McIntyre, N., and G. Perry. 2019. Landscape Assessment of West and South Texas Grasslands to Inform Conservation of Two Native Reptile Species of Concern in Texas. Texas Comptroller of Public Accounts. \$869,745. 15% Credit.

Cox, R.D., Barnes, M., and G. Perry. 2019. Methods for Creating or Enhancing Habitat for Dunes Sagebrush Lizard. Atlas Sand Company, LLC. \$178,218.

Perry, G., Barnes, M., and R.D. Cox. 2019. Captive Breeding at the Dallas Zoo. Atlas Sand Company, LLC. \$41,869.

Barnes, M., G. Perry and R.D. Cox. 2019. Locating the Dunes Sagebrush Lizard with Environmental DNA. Atlas Sand Company, LLC. \$80,565.

Sharma, J., K. Griffis-Kyle, C. Portillo, and R.D. Cox. 2018. MGT Wetland/Floodplain, Coyote Springs Salt Cedar Removal and Restoration for Natural Resources, Kirtland Air Force Base, Albuquerque, New Mexico. DOD-Army Corps of Engineers. \$30,383.

Verble, R., R.D. Cox, and W. Conway. 2017. Resilient Landscapes: Forest Thinning and Fire Impacts on Wildlife-habitat Interactions, Phase I: Restoration Effects on Non-native Invasive Plant Species. DOI-National Park Service. \$31,974.

Perry, G., P. Smith, S. Kahl, and R.D. Cox. 2016. Independent Verification of the Dunes Sagebrush Lizard. Texas Comptroller of Public Accounts. \$2,169. 25%.

Sharma, J., K. Griffis-Kyle, C. Portillo, and R.D. Cox. 2016. MGT Wetland/Floodplain, Coyote Springs Salt Cedar Removal and Restoration for Natural Resources, Kirtland Air Force Base, Albuquerque, New Mexico. DOD-Army Corps of Engineers. \$29,944.

Longing, S., R.D. Cox, N. McIntyre, C. McKinney, and C. West. 2015. Demonstration of pollinator conservation practices and a framework for regional implementation on the Southern High Plains. USDA-Natural Resources Conservation Service. \$380,579.

Sharma, J., K. Griffis-Kyle, C. Portillo, and R.D. Cox. 2015. MGT, Wetland/Floodplain, Coyote Springs Salt Cedar Removal and Restoration for Natural Resources, Kirtland Air Force Base, Albuquerque, New Mexico. DOD-Army. \$29,500.

Cox, R.D. 2015. Physiological Ecology of Huisache Control. Welder Wildlife Foundation. \$38,323.

Verble, R. R.D. Cox, and W. Conway. 2015. Resilient Landscapes: Forest thinning and fire impacts on wildlife-habitat interactions, Phase I: Restoration effects on non-native invasive plant species. DOI - National Park Service. \$42,300.

Cox, R.D. 2014. Natural Resources Management Herbarium Digitization Project. Texas Tech Alumni Association. \$10,000.00.

Perry, G., P.N. Smith, S.S. Kahl and R.D. Cox. 2014. Independent Verification of the Dunes Sagebrush Lizard. Texas Comptroller of Public Accounts. \$31,617.

Grisham, B. C. Boal and R.D. Cox. 2014. Identification of conservation actions needed to preserve lesser prairie chicken populations in context of land management practices and environmental variation. Center for Excellence for Hazardous Materials Management. \$149,838.70.

Cox, R.D., and J. Cain. 2014. Forest Restoration Effects on Elk Forage Production. Rocky Mtn Elk Foundation. \$6000.

Cox, R.D. 2014. Physiological Ecology of Huisache Control. Welder Wildlife Foundation. \$51,035.00.

Perry, G., S. Kahl, R.D. Cox, and P. Smith. 2013. Independent Verification of the Dunes Sagebrush Lizard. Texas Comptroller of Public Accounts. \$31,617.

Gipson, P.S., S. Ghosh and R.D. Cox. 2013. Innovative actions to help swift foxes flourish on the plains of West Texas. USDA-Natural Resources Conservation Service. \$73,541.

Arsuffi, T., R. Stubblefield, R.D. Cox and D. Schwilk. 2012. TTU Riparian, Upland and Llano River Land and Habitat Improvements Projects. \$150,703.

Cox, R.D. 2012. Physiological Ecology of Huisache Control. Welder Wildlife Foundation. \$19,200.

Cox, RD. 2012. Methods for Restoration of *Sceloporus arenicolus* Habitat. New Mexico Sand Dune Lizard CCA. \$32,547.

Cox, R.D. 2011. Physiological Ecology of Huisache Control. Welder Wildlife Foundation. \$19,200.

Cox, R.D. 2011. Revegetation Equipment Catalog. Great Basin Native Plant Selection and Increase Project. \$5,416.

Cox, R.D. 2011. Huisache Physiological Ecology and Control. Coastal Prairies GLCI. \$218,597.

Cox, R.D. 2010. Physiological Ecology of Huisache Control. Welder Wildlife Foundation. \$19,200.

Cox, R.D. 2010. Restoration of Habitat for *Sceloperus arenicolus*. New Mexico Sand Dune Lizard CCA. \$4,537.

Cox, R.D. 2010. Smoke-induced Germination of Great Basin Native Forbs. Great Basin Native Plant Selection and Increase Project. \$24,000.

Cox, R.D. 2010. Revegetation Equipment Catalog. Great Basin Native Plant Selection and Increase Project. \$2,050.

Cox, R.D. 2009. Revegetation Equipment Catalog. Great Basin Native Plant Selection and Increase Project. \$1,950.

Shaw, N.L., R.D. Cox, M. Pellant and D.A. Pyke. 2007. Equipment and Strategies to Enhance the Post-wildfire Establishment and Persistence of Great Basin Native Plants. Joint Fire Sciences Proposal AFP 2007-1. \$364,967.

Professional Memberships

The Ecological Society of America
 The Society for Ecological Restoration
 The Society for Range Management