VITA – Cade L. Coldren

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EDUCATION

1982	B.S.	Electrical Engineering (Minor in Mathematics)	Texas A&M University, College Station, Texas
1992	M.S.	Wildlife and Fisheries Sciences	Texas A&M University, College Station, Texas
1998	Ph.D.	Wildlife and Fisheries Sciences	Texas A&M University, College Station, Texas

PROFESSIONAL EXPERIENCE

1983 – 1986	*Computer Systems Analyst* Professional Geophysics, Inc., Plano, Texas
1987	*Substitute Teacher* Throckmorton High School, Throckmorton, Texas
1989	*Avian Surveillance Technician* Harris County Mosquito Control District, Houston, Texas
1996 and 1998	*Field Technician* Arkansas Breeding Bird Atlas University of Arkansas, Fayetteville, Arkansas
1998 – 2001	*Ecological Modeler* Shepherd Miller, Inc., Fort Collins, Colorado 80525
2001 – 2006	*Ecological Modeler* MWH Global, Inc., Fort Collins, Colorado 80526
2006 – 2011	*Ecological Modeler* and *Manager* Raven Enterprises, LLC, Fort Collins, Colorado 80526
2011 – 2017	*Research Ecologist* Environmental Laboratory U.S. Army Corps of Engineers, Vicksburg, Mississippi
2017	*Research Scientist* Department of Plant and Soil Science Texas Tech University, Lubbock, Texas 79409, USA
2018 – present	*Assistant Professor of Ecological Modeling* Department of Plant and Soil Science and Department of Natural Resources Management Texas Tech University, Lubbock, Texas 79409, USA

MEMBERSHIP IN PROFESSIONAL, ACADEMIC AND HONOR SOCIETIES

Professional

1. American Ornithological Society; *Member, 2016-present*
2. American Ornithologists' Union; *Member, 1992-2016*
3. Association of Field Ornithologists; *Member, 1996-present*
4. Cooper Ornithological Society; *Member, 1992-2016*
5. Wilson Ornithological Society; *Member, 1992-present*
6. The Wildlife Society; *Member, 2019-present*

Honor Society

1. Sigma Xi Scientific Research Honor Society; *Member, January 1992-present*

RESEARCH INTERESTS AND SPECIAL COMPETENCIES

1. **Co-developer of Ecological Dynamics Simulation Model (EDYS).** EDYS is a general ecosystem model used for evaluating impacts of stressors, both natural and anthropogenic, on ecosystem components, including plants, soils, hydrology, and animals.

2. **Avian ecology and conservation.** (a) Ecology of native and non-native birds in urban settings. (b) Impacts of invasive bird species on native birds, particularly in urban and suburban habitats.

SCIENTIFIC, ACADEMIC AND HONORARY AWARDS

1998 *Outstanding Doctoral Student*
Department of Wildlife and Fisheries Sciences,
Texas A&M University, College Station, Texas

PUBLICATIONS

Refereed Book Chapters:

1. **Coldren, C. L.** 1993. Golden-cheeked Warbler (*Dendroica chrysoparia*). *In* The Texas Breeding Bird Atlas. (K. L. P. Benson and K. A. Arnold, eds.). Texas A&M University System, College Station and Corpus Christi, Texas. https://txtbba.tamu.edu/species-accounts/golden-cheeked-warbler/ (25 February 2021).

2. **Coldren, C. L.** 1993. Tufted Titmouse (*Baeolophus bicolor*). *In* The Texas Breeding Bird Atlas. (K. L. P. Benson and K. A. Arnold, eds.). Texas A&M University System, College Station and Corpus Christi, Texas. https://txtbba.tamu.edu/species-accounts/tufted-titmouse/ (25 February 2021).

3. **Coldren, C. L.** 1996. Chuck-will's-widow (*Caprimulgus carolinensis*). *In* The Texas Breeding Bird Atlas. (K. L. P. Benson and K. A. Arnold, eds.). Texas A&M University System, College Station and Corpus Christi, Texas. https://txtbba.tamu.edu/species-accounts/chuck-wills-widow/ (25 February 2021).

4. **Coldren, C. L.** 1996. Common Poorwill (*Phalaenoptilus nuttallii*). *In* The Texas Breeding Bird Atlas. (K. L. P. Benson and K. A. Arnold, eds.). Texas A&M University System,

College Station and Corpus Christi, Texas. https://txtbba.tamu.edu/species-accounts/common-poorwill/ (25 February 2021).

5. **Coldren, C. L.** 1997. Common Nighthawk (*Chordeiles minor*). *In* The Texas Breeding Bird Atlas. (K. L. P. Benson and K. A. Arnold, eds.). Texas A&M University System, College Station and Corpus Christi, Texas. https://txtbba.tamu.edu/species-accounts/common-nighthawk/ (25 February 2021).

6. **Coldren, C. L.** 1997. Whip-poor-will (*Caprimulgus vociferus*). *In* The Texas Breeding Bird Atlas. (K. L. P. Benson and K. A. Arnold, eds.). Texas A&M University System, College Station and Corpus Christi, Texas. https://txtbba.tamu.edu/species-accounts/whip-poor-will/ (25 February 2021).

7. Simpson, C., G. Perry, C. Cooper, I. Coman, and **C. Coldren**. 2023. Urban vegetation: anthropogenic influences, public perceptions, and wildlife implications. *In* Urban Horticulture: Sustainable Gardening in Cities. IntechOpen Publ. DOI:http://dx.doi.org/10.5772/intechopen.1001155

Original papers in refereed journals:

1. Wilson, B.E., **C. Coldren**, M. Coldren, F. Chavez-Ramirez, and T. Archer. 1993. Behavior of a group of Zone-tailed Hawks. Journal of Raptor Research 27(2):127.

2. **Coldren, C. L.** 1994. Some Common Yellowthroat subspecies in Texas. Bulletin Texas Ornithological Society 27:2-7.

3. Coldren, M. K., **C. L. Coldren**, K. G. Smith, and S. S. Lacy. 1998. First Neotropic Cormorant, *Phalacrocorax brasilianus* (Aves: Phalacrocoracidae) breeding record for Arkansas. Southwestern Naturalist, 43:496-498.

4. Childress, W. M., **C. L. Coldren**, and T. McLendon. 2002. Applying a complex, general ecosystem model (EDYS) in large-scale land management. Ecological Modelling 153:97-108.

5. Mata-Gonzalez, R., R. G. Hunter, **C. L. Coldren**, T. McLendon, and M. W. Paschke. 2007. Modelling plant growth dynamics in sagebrush steppe communities affected by fire. Journal of Arid Environments 69:144-157.

6. Mata-Gonzalez, R., R. G. Hunter, **C. L. Coldren**, T. McLendon, and M. W. Paschke. 2008. A comparison of modeled and measured impacts of resource manipulations for control of *Bromus tectorum* in sagebrush steppe. Journal of Arid Environments 72:836-846.

7. Sapkota, M., Young, J., **C. Coldren**, L. Slaughter, and S. Longing. 2020. Soil physiochemical properties and carbon sequestration of urban landscapes in Lubbock, TX, USA. Urban Forestry and Urban Greening 56:126847. https://doi.org/10.1016/j.ufug.2020.126847.

8. Singleton, J. J., P. K. Mangat, J. Shim, C. Vavra, **C. Coldren**, and R. B. Angeles-Shim. 2020. Cross-species transferability of *Solanum* spp. DNA markers and their application in assessing genetic variation in silverleaf nightshade (*Solanum elaeagnifolium*) populations from Texas, USA. Weed Science 68:396-404. https://doi: 10.1017/wsc.2020.25.

9. Pabuayon, I. L. B., B. R. Kelly, D. M. McCallister, **C. L. Coldren**, and G. L. Ritchie. 2021. Cotton boll distribution: A review. Agronomy Journal 113:956-970. https://doi.org/10.1002/agj2.20516.

10. Sapkota, M., J. Young, L. Slaughter, V. Acosta-Martinez, and **C. Coldren**. 2021. Soil microbial biomass and composition from urban landscapes in a semiarid climate. Applied Soil Ecology 158:103810. https://doi.org/10.1016/j.apsoil.2020.103810.

11. Turner, N. J., J. Sanchez, C. Vavra, L. K. Dhaliwal, Y. Emendack, **C. Coldren**, and R. B. Angeles-Shim. 2021. Seed germination dynamics of silverleaf nightshade (*Solanum elaeagnifolium* Cav.) and implications for effective weed management. Weed Biology and Management 21:146-155. https://doi.org/10.1111/wbm.12233.

12. Regmi, A., S. Singh, N. Moustaid-Moussa, **C. Coldren**, and C. Simpson. 2022. The negative effects of high rates of biochar on Violas can be counteracted with fertilizer. Plants 11(4), 491. https://doi.org/10.3390/plants11040491.

13. **Coldren, C.** 2022. Citizen science and the pandemic: A case study of the Christmas Bird Count. Citizen Science: Theory and Practice 7(1): 32, pp. 1-9. https://doi.org/10.5334/cstp.473.

14. Tabora-Sarmiento, S., R. Patino, C. Portillo-Quintero, **C. Coldren**. 2022. Air, land, and water variables associated with the first appearance and current spatial distribution of toxic *Prymnesium parvum* blooms in reservoirs of the Southern Great Plains, USA. Science of the Total Environment 836(2022).155567. https://doi.org/10.1016/j.scitotenv.2022.155567.

15. Regmi, A., S. Poudyal, S. Singh, **C. Coldren**, N. Moustaid-Moussa, C. Simpson. 2023. Biochar influences phytochemical concentrations of *Viola cornuta* flowers. Sustainability 2023,15, 3882. https://doi.org/10.3390/su15053882.

16. Sehrish, A., M. Parajulee, S. Vyavhard, **C. Coldren**, H. Laza, and C. R. Simpson. 2024. Effects of neonicotinoid seed treatments on cotton seedling physiology, nutrition, and growth. Agronomy 14, 799. doi.org/10.3390/agronomy14040799.

17. Sehrish, A., S. Vyavhare, M. Parajulee, **C. Coldren**, H. Laza, and C. Simpson. 2025. Longevity of neonicotinoid seed treatments in cotton seedlings under various deficit irrigation levels. Scientific Reports 15:6576. doi: https://doi.org/10.1038/s41598-025-91350-z

18. Farzana, K., **C. Coldren**, C. Simpson, T. G. Cleveland, and J. Young. *In press*. Evaluating the sensitivity of hydrological response to changes in vegetation classification: a case study of St. Charles Bay, Texas, USA. International Journal of Hydrology Science and Technology. DOI: 10.1504/IJHST.2024.10066620

19. Stamm, E.R., **C. Coldren**, C. F. Williams, and C. R. Simpson. *In review*. Uptake, partitioning, and accumulation of high and low rates of carbamazepine in hydroponically grown lettuce. Plants

Non-Refereed Publications:

1. Grisham, B. A., **C. L. Coldren**, P. S. Gipson, J. D. Ray, R. Stubblefield, and W. C. Conway. 2021. A paradigm shifting without a clutch: a six-year evaluation of student engagement and

degree pride in the Department of Natural Resources Management. Texas Wildlife Association. Texas Wildlife 36(10):32-37.

Conference Proceedings (refereed):

1. McLendon, T., W. M. Childress, **C. L. Coldren**, R. Frechette, and F. Bergstrom. 2002. Evaluation of alternative designs for a water-balance cover over tailings at the Mineral Hill Mine, Montana, using the EDYS model. Pages 505-518 *in* Tailings and Mine Waste '02. A. A. Balkema, publisher.

2. Childress, W. M., **C. L. Coldren**, T. McLendon, and N. Pansic. 2005. Simulation modeling of vegetation impacts on barrier island stability during hurricane events using the ECOS^{2}T ecological model. Pages 443-452 *in* Solutions to Coastal Disasters 2005 Conference Proceedings (L. Wallendorf, L. Ewing, S. Rogers, and C. Jones, eds.). American Society of Civil Engineers. Reston, VA.

3. McLendon, T., and **C. L. Coldren**. 2011. Effects of plant succession on the functioning of engineered covers and modeling of long-term successional impacts using the EDYS ecological simulation model. *In* Proceedings of the Workshop on Engineered Barrier Performance Related to Low-level Radioactive Waste, Decommissioning, and Uranium Mill Tailings Facilities. Rockville, Maryland. August 3-5, 2010. U.S. Nuclear Regulatory Commission.

Technical Reports:

1. Arnold, K. A., **C. L. Coldren**, and M. L. Fink. 1996. The interactions between avian predators and Golden-cheeked Warblers in Travis County, Texas. Texas Transportation Institute Technical Report TX-96/1983-2.

2. McLendon, T., W. M. Childress, and **C. L. Coldren**. 1998. Preliminary simulation results for Jack's Valley landscapes, U.S. Air Force Academy. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-003.

3. Childress, W. M., D. L. Price, **C. L. Coldren**, and T. McLendon. 1999. A functional description of the Ecological Dynamics Simulation (EDYS) Model, with applications for army and other federal land managers. U.S. Army Corp of Engineers, CERL Technical Report 99/55.

4. Childress, W. M., D. L. Price, **C. L. Coldren**, and T. McLendon. 1999. A functional description of the Ecological Dynamics Simulation (EDYS) model, with applications for army and other federal land managers. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-009.

5. McLendon, T., W. M. Childress, and **C. L. Coldren**. 1999. EDYS-2: First-year validation results for a black grama desert grassland community, Fort Bliss, Texas. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-008.

6. McLendon, T., W. M. Childress, and **C. L. Coldren**. 1999. EDYS-4 preliminary simulation results (95% completion) for Jack's Valley landscape, Air Force Academy. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-014.

7. McLendon, T., W. M. Childress, and **C. L. Coldren**. 1999. First-year validation results for a little bluestem grassland community, Fort Hood, Texas. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-018.

8. McLendon, T., W. M. Childress, and **C. L. Coldren**. 2000. EDYS applications: Two-year validation results for grassland communities at Fort Bliss, Texas and Fort Hood, Texas. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-019.

9. McLendon, T., **C. L. Coldren**, and W. M. Childress. 2000. EDYS Applications: Evaluation of the effects of vegetation changes on water dynamics of the Clover Creek Watershed, Utah, using the EDYS model. Shepherd Miller, Inc., Fort Collins, Colorado. Technical report SMI-ES-020.

10. McLendon, T., **C. L. Coldren**, and W. M. Childress. 2000. EDYS evaluation of effects of precipitation fluctuations, fire, and elk grazing on the water dynamics and vegetation stability of the cover design for the Tailings Storage Facility, TVX Mineral Hill. Report prepared for TVX Mineral Hill. Shepherd Miller Inc. Fort Collins, Colorado. 35 p.

11. **Coldren, C. L.**, T. McLendon, and W. M. Childress. 2001. Application of the EDYS model to a training area landscape at Fort Bliss, Texas. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-024.

12. McLendon, T., **C. L. Coldren**, and W. M. Childress. 2001. Application of the EDYS model to a training area landscape at Fort Hood, Texas. Technical Report SMI-ES-023. Shepherd Miller Inc. Fort Collins, Colorado. 99 p.

13. McLendon, T., W. M. Childress, **C. L. Coldren**, and D. L. Price. 2001. EDYS experimental and validation results for grassland communities. U.S. Army Corp of Engineers, CERL Technical Report ERDC/CERL TR-01-54.

14. McLendon, T., **C. L. Coldren**, and W. M. Childress. 2001. Application of the EDYS model to a training area landscape at Fort Hood, Texas. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-023.

15. McLendon, T., **C. L. Coldren**, and W. M. Childress. 2001. Application of the EDYS model to a training area landscape at Camps Bullis and Stanley, Texas. Technical Report SMI-ES-028. Shepherd Miller Inc., Fort Collins, Colorado. 93 p.

16. McLendon, T., **C. L. Coldren**, and W. M. Childress. 2001. Application of the EDYS model to a training area landscape at 29 Palms MCAGCC, California. Technical Report SMI-ES-026. Shepherd Miller Inc., Fort Collins, Colorado. 89 p.

17. McLendon, T. and **C. L. Coldren**. 2001. Revegetation test plot results and validation of EDYS simulations, TVX Mineral Hill Mine closure. Final Report. Prepared for TVX Mineral Hill Mine. Shepherd Miller Inc., Fort Collins, Colorado. 66 p.

18. Childress, W. M., T. McLendon, and **C. L. Coldren**. 2002. Evaluation of land cover design using the Ecological Dynamics Simulation Model (EDYS). MWH Global, Inc., Fort Collins, Colorado. Technical Report MWH-ES-002.

19. McLendon, T., **C. L. Coldren**, and W. M. Childress. 2002. Application of the EDYS model to a training area landscape at 29 Palms MCAGCC, California. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-026.

20. McLendon, T., **C. L. Coldren**, and W. M.Childress. 2002. Application of the EDYS model to a training area landscape at Camps Bullis and Stanley, Texas. Shepherd Miller, Inc., Fort Collins, Colorado. Technical Report SMI-ES-028.

21. **Coldren, C. L.**, and T. McLendon. 2002. Big Pine local management plan. Volume II. EDYS conceptual model. Report submitted to Los Angeles Department of Water and Power. MWH, Inc. Pasadena, California. 60 p.

22. **Coldren, C. L.**, T. McLendon, and W. M. Childress. 2002. Linkage of the EDYS and TUDM models to a training area landscape at Fort Hood, Texas. Technical Report SMI-ES-029. Shepherd Miller Inc., Fort Collins, Colorado. 33 p.

23. Price, D., T. McLendon, and **C. Coldren**. 2004. Application of an ecological model for the Cibolo Creek watershed. U.S. Army Corps of Engineers, Vicksburg, Mississippi. Water Quality Technical Notes Collection ERDC WQTN-CS-04.

24. McLendon, T., and **C. L. Coldren**. 2005. Validation of the EDYS ecological model using gauged data from the Honey Creek Research Watershed, Texas. Report prepared for US Army Engineer Research and Development Center – Environmental Laboratory. Vicksburg, Mississippi. MWH Inc., Fort Collins, Colorado. 21 p.

25. Johnson, B. E., and **C. L. Coldren**. 2006. Linkage of a physically based distributed watershed model and a dynamic plant growth model. U.S. Army Corps of Engineers, Vicksburg, Mississippi. Technical Report ERDC/EL TR-06-17.

26. McLendon, T., **C. L. Coldren**, and D. L. Price. 2009. Comparison of results from the EDYS and EDYS-L ecological simulation models as applied to vegetation and hydrological dynamics on the Honey Creek Watershed, Texas. SWWRP Technical Notes Collection. ERDC TN-SWWRP-09-7. U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi.

27. **Coldren, C. L.** 2010. Optimization of brush management treatments in the Cibolo Creek Watershed using the EDYS model. Final Report to U.S. Army Corps of Engineers, Fort Worth District. Raven Enterprises, Fort Collins, Colorado.

28. **Coldren, C. L.**, T. McLendon, and W. M. Childress. 2011. Ecological DYnamics Simulation Model (EDYS) user's guide, version 5.1.0. KS2 Ecological Field Services, LLC, Fort Collins, Colorado.

29. **Coldren, C. L.**, T. McLendon, W. M. Childress, D. L. Price, and M. R. Graves. 2011. Ecological DYnamics Simulation Model – Light (EDYS-L): User's Guide Version 4.6.4. U.S. Army Corps of Engineers, Vicksburg, Mississippi. System-Wide Water Resources Program Final Report ERDC-EL SR-11-1.

30. McLendon, T., C. R. Pappas, **C. L. Coldren**, E. B. Fish, M. J. Beierle, A. E. Hernandez, K. A. Rainwater, and R. E. Zartman. 2012. Application of the EDYS decision tool for modeling of target sites for water yield enhancement through brush control. Report prepared for the

Texas State Soil and Water Conservation Board. Water Resources Center. Texas Tech University. Lubbock. 35 p.

31. McLendon, T., J. D. Booker, **C. L. Coldren**, C. R. Pappas, and J. A. Swinehart. 2015. Development of an EDYS ecological model of the Central San Antonio River Watershed: Karnes and Wilson Counties. Report prepared for San Antonio River Authority. Texas Tech University, KS2 Ecological Services, and U.S. Army Corps of Engineers. Lubbock and Anton, Texas, and Vicksburg, Mississippi. 223 p.

32. McLendon, T., J. D. Booker, **C.L. Coldren**, and C. R. Pappas. 2016. Development of an EDYS model for Goliad County, Texas. Report prepared for the San Antonio River Authority and the Texas State Soil and Water Conservation Board. Texas Tech University and US Army Corps of Engineers. Lubbock, Texas and Vicksburg, Mississippi. 232 p.

33. McLendon, T., J. D. Booker, **C. L. Coldren**, C. R. Moberly, and K. A. Rainwater. 2018. Development of an EDYS ecological model for Victoria County, Texas. Report prepared for the San Antonio River Authority and the Texas State Soil and Water Conservation Board. Texas Tech University. Lubbock, Texas. 277 p.

34. Rainwater, K., and **C. Coldren**. 2018. Site installation for Goliad County Groundwater Conservation District Recharge Study. Report prepared for Goliad County Groundwater Conservation District. Texas Tech University. Lubbock, Texas. 7 p.

35. Rainwater, K., and **C. Coldren**. 2018. Goliad County recharge evaluation, preliminary report December 2018. Report prepared for Goliad County Groundwater Conservation District. Texas Tech University. Lubbock, Texas. 23 p.

36. **Coldren, C.**, K Rainwater, L. Richarte-Delgado, and J. D. Booker. 2019. Conceptual approach to temperature in the EDYS model. Final report to San Antonio River Authority. Texas Tech University, Lubbock, Texas. 24 p.

37. McLendon, T., **C. L. Coldren**, K. S. Stanley, K. D. Stanley, and L. Richarte-Delgado. 2019. Validation results, San Antonio Bay EDYS model: progress report for 2018. Report prepared for San Antonio River Authority. Texas Tech University, Lubbock, Texas. 152 p.

38. McLendon, T., **C. L. Coldren**, K. S. Stanley, K. D. Stanley, and L. Richarte-Delgado. 2019. Validation results, San Antonio Bay EDYS model: progress report for 2019. Report prepared for San Antonio River Authority. Texas Tech University, Lubbock, Texas. 159 p.

39. Rainwater, K., and **C. Coldren**. 2019. Goliad County recharge evaluation: summary of field data collection as of June 2019. Report prepared for Goliad County Groundwater Conservation District. Texas Tech University. Lubbock, Texas. 9 p.

40. **Coldren, C.**, A. Asadi, T. Cleveland, and K. Rainwater. 2020. Coupling EDYS and TELEMAC-2D for ecohydrological and hydrodynamic simulation of San Antonio Bay. Report prepared for San Antonio River Authority. Texas Tech University, Lubbock, Texas. 61 p.

41. McLendon, T., **C. L. Coldren**, and K. Rainwater. 2021. St. Charles Bay Marsh Restoration Modelling Project. Report prepared for San Antonio River Authority. Texas Tech University, Lubbock, Texas. 54 p.

42. McLendon, T., **C. L. Coldren**, A. Chavez, and K. Rainwater. 2021. San Antonio Bay EDYS Model Validation Study: Model Results 2014-2020. Report prepared for San Antonio River Authority. Texas Tech University, Lubbock, Texas. 105 p.

43. Rainwater, K., and C. Coldren. 2022. Goliad County recharge evaluation: Summary of field data collection for September 2022. Report prepared for Goliad County Groundwater Conservation District. Texas Tech University. Lubbock, Texas. 15 p.

PRESENTATIONS AND LECTURES

Invited talks and lectures:

1. **Coldren, C**. 2022. The status of the Inca Dove in Texas: Hope or no hope? Houston Ornithology Group, given virtually. 7 November 2022.

2. **Coldren, C.** 2025. Ecological modeling at Texas Tech using EDYS, a general ecosystem model. Google Corporate Modeling Seminar, CA, given virtually. 6 May 2025.

Poster and oral presentations in conferences:

1. **Coldren, C. L.** 1995. The songs of the Tufted and Black-crested Titmice. Texas Ornithological Society, 11 November, College Station, Texas.

2. **Coldren, C. L.** 1996. A comparison of the songs of the Tufted and Black-crested Titmice. Acoustical Society of America, 16 May, Indianapolis, Indiana.

3. **Coldren, C. L.** 1998. Land Use Effects on breeding Golden-cheeked Warblers. North American Ornithological Conference, 8 April, St. Louis, Missouri.

4. Childress, W. M., T. McLendon, and **C. L. Coldren**. 2000. Applying a complex, general ecosystem model (EDYS) in large-scale land management. Modelling Complex Systems Conference, 31 July – 2 August, Montreal, Quebec.

5. McLendon, T., W. M. Childress, and **C. L. Coldren**. 2000. Simulation of multi-pathway ecological dynamics using the EDYS model. Society for Range Management, Boise, Idaho.

6. McLendon, T., W. M. Childress, **C. L. Coldren**, F. Bergstrom, and R. Frechette. 2002. Evaluation of Alternative Designs for a Water-balance Cover Over Tailings at the Mineral Hill Mine, Montana, Using the EDYS Model. Mine Tailings and Waste Conference, 28 January, Fort Collins, Colorado.

7. Price, D., T. McLendon, and **C. L. Coldren**. 2004. Using the Ecological Dynamics Simulation (EDYS) model with watershed hydrology models for ecological restoration, watershed planning and management. Ecological Society of America, 3 August, Portland, Oregon.

8. Moberly, C., R. Mata-Gonzalez, **C. Coldren**, P. Hubbard, and D. Martin. 2004. Evaluation of Revegetation Strategies in Arid Environments Using the EDYS Model. Society for Ecological Restoration, 24 August, Victoria, British Columbia, Canada.

9. Childress, T., **C. L. Coldren**, and T. McLendon. 2005. Application of the ECOS^{2}T-Aquatic Model to the San Antonio River System. Texas Bays and Estuaries Conference, 21-22 April, hosted by University of Texas Marine Sciences Institute, Port Aransas, Texas.

10. Childress, M. W., **C. L. Coldren**, T. McLendon, and N. Pansic. 2005. Simulation Modeling of Vegetation Impacts on Barrier Island Stability During Hurricane Events Using the ECOS^{2}T Ecological Model. Solutions to Coastal Disasters, American Society of Civil Engineers, 10 May, Charleston, South Carolina.

11. McLendon, T., **C. L. Coldren**, and W. M. Childress. 2005. EDYS: A mechanistic approach to small scale to regional integrated ecological modelling. Ecological Modelling Seminar Series. US Army Corps of Engineers. Waterways Experiment Station, Vicksburg, Mississippi. 14 December.

12. Gowdish, L. C., **C. L. Coldren**, R. Munoz-Carpena, D. L. Price, T. McLendon, G. Kiker, and R. Bucklin. 2005. Improvement of ecological projections by improved hydrological dynamics in an ecological model. American Society of Agricultural and Biological Engineers, 17-20 July, Tampa, Florida.

13. Mata-Gonzalez, R., R. G. Hunter, T. McLendon, **C. L. Coldren**, and M. W. Paschke. 2006. Simulating long-term impacts of methods of control of *Bromus tectorum* at Yakima Training Center. Poster presentation. Society for Range Management, 12-17 February, Vancouver, Canada.

14. McLendon, T., and **C. L. Coldren**. 2007. Uses of the EDYS ecological model as a grazing and range management tool. Annual Meeting of the California-Pacific and Nevada Sections of the Society for Range Management. Bishop, California. 2 November.

15. Martin, D. W., T. McLendon, **C. Coldren**, M. Childress, and J. Trlica. 2009. Development of a simulation modeling tool to evaluate ecological impacts of livestock grazing in the Eastern Sierra of California. 62nd Annual Meeting of the Society for Range Management. Albuquerque, New Mexico. 8-13 February.

16. Price, D., T. McLendon, **C. Coldren**, M. Childress, R. Newman, and D. W. Martin. 2009. Ecological Dynamics Simulation Model: A Restoration Tool. Third National Conference on Ecological Restoration. Los Angeles, California. 20-24 July.

17. McLendon, T., and **C. L. Coldren**. 2010. Effects of plant succession on the functioning of engineered covers and modeling of long-term successional impacts using the EDYS ecological simulation model. U.S. Nuclear Regulatory Commission Workshop on Engineered Barrier Performance Related to Low-level Radioactive Waste, Decommissioning, and Uranium Mill Tailings Facilities, 3-5 August, Rockville, Maryland.

18. McCarthy, T., S. Jorat, and **C. L. Coldren**. 2011. A linked groundwater and ecologic model to improve model accuracy and evaluate management alternatives in the Owens Valley, California. MODFLOW and More, 2011: Integrated Hydrologic Modeling Conference, 5-8 June, Golden, Colorado.

19. McLendon, T., and **C. L. Coldren**. 2012. Development of an EDYS ecological simulation model for San Antonio Bay and adjacent ecosystems. Texas Water Development Board and Texas Department of Parks and Wildlife. Austin. 4 May.

20. **Coldren, C. L.** 2018. Using a general ecosystem model to evaluate management of aridlands under multiple stressors. International Aridlands Conference, 13-14 August, Lubbock, Texas.

21. Riley, M., **C. Coldren**, K. Rainwater, V. Acosta-Martinez, and L. C. Slaughter. 2019. Soil microbial community dynamics in semi-arid ephemeral playas of the Southern High Plains. Ecological Society of America, poster session, 16 August, Louisville, Kentucky.

22. Riley, M., V. Acosta-Martinez, **C. Coldren**, K. Rainwater, and L. Slaughter. 2019. Soil microbial ecosystem dynamics of semi-arid wetlands under differing land-use. American Society of Agronomy, Crop Science Society of America and Soil Science Society of America International Annual Meeting, 12 November, San Antonio, Texas.

23. **Coldren, C. L.** Snowy Owl irruption patterns and the potential impact of climate change. North American Ornithological Congress, 11 August 2020, San Juan, Puerto Rico, given virtually.

24. Regmi, A., C. Simpson, S. Singh, **C. Coldren**, and N. Moustaid-Moussa. Effect of biochar on phytochemicals in Viola. American Society for Horticultural Science, 7 August 2021, Denver, Colorado. Poster presentation.

25. Regmi, A., **C. Coldren**, S. Singh, N. Moustaid-Moussa, and C. Simpson. 2022. Fertilization can reduce the stress of biochar. Lone Star Horticulture Forum, College Station, TX, 10 January. Poster presentation.

26. Sehrish, A., M. Parajulee, S. Vyavhare, **C. Coldren**, H. Echevarria Laza, and C. Simpson. 2022. Effect of seed treatments on physiology and nutrition of cotton seedlings. Lone Star Horticulture Forum, College Station, TX, 10 January. Poster presentation.

27. Stamm, E., C. Williams, **C. Coldren**, and C. Simpson. 2022. Impacts of carbamazepine rates on lettuce (*Lactuca sativa* var. *capitata*) growth in hydroponic systems. Southern Region American Society of Horticultural Sciences, New Orleans, LA, 10-13 February.

28. Farzana, K., and **C. Coldren**. 2022. Impact of invasive dove species on the native avifauna of Lubbock. Graduate Student Research Poster Competition. Texas Tech University.

29. Tabora-Sarmiento, S., R. Patino, C. Portillo-Quintero, and **C. Coldren**. 2022. Air, land, and water variables associated with the first appearance and current spatial distribution of toxic *Prymnesium parvum* blooms in reservoirs of the Southern Great Plains, USA. Graduate Student Research Poster Competition, Texas Tech University.

30. Dawsey, J., and **C. Coldren**. 2022. Competitive ability in silverleaf nightshade, an invasive weed. Undergraduate Research Conference, Texas Tech University. March 2022.

31. Dawsey, J., and **C. Coldren**. 2022. Competitive ability in silverleaf nightshade, an invasive weed. Student Research Symposium, Department of Plant and Soil Science. Texas Tech University. April 2022. Poster presentation.

32. Stamm, E., **C. Coldren**, C. Williams, and C. Simpson. 2022. Impacts of carbamazepine rates on lettuce (*Lactuca sativa* var. *capitata*) growth in hydroponics systems. American Society of Horticultural Sciences, Chicago, IL, July 2022. Poster presentation.

33. Stamm, E., **C. Coldren**, C. Williams, and C. Simpson. 2022. Impacts of carbamazepine rates on lettuce (*Lactuca sativa* var. *capitata*) growth in hydroponics systems. American Society of Horticultural Sciences, Chicago, IL, July 2022. Oral presentation.

34. Sehrish, A., S. Vyavhare, M. Parajulee, **C. Coldren**, H. Laza, and C. Simpson. 2022. Effect of water stress on physiology and different neonicotinoid compound concentrations in treated cotton seeds. American Society of Horticultural Sciences, Chicago, IL, July 2022. Oral presentation.

35. **Coldren, C.** 2023. The rise and fall of the Inca Dove in Texas. Texas Chapter of The Wildlife Society, Houston, TX, 23 February. Oral presentation.

36. Rivera, A., L. Schilder, J. Rogosch, **C. Coldren**, and C. Boal. 2023. Alterations to avian and plant community structure in response to habitat restoration of pinyon-juniper woodlands in eastern New Mexico. Texas Chapter of The Wildlife Society, Houston, TX, 23 February. Oral presentation.

37. Riney, S., and **C. Coldren**. 2024. Influence of fluctuating water levels on shorebird use of playas in West Texas. Texas Academy of Science, Midland, TX, 2 March. Oral presentation.

38. Riney, S., and **C. Coldren**. 2024. Influence of fluctuating water levels on shorebird use of playas in West Texas. Texas Tech University, NRM Research Day, Lubbock, TX, 24 April. Poster presentation.

39. Ramsey, M., W. Conway, C. Ramsey, C. B. Dabbert, and **C. Coldren**. 2025. The impacts of Imidacloprid exposure on Ring-necked Pheasant growth and survival. Texas Chapter of The Wildlife Society, Denton, TX, 19 February. Poster presentation.

40. Shammaa, A., C. W. Boal, B. Bibles, D. James, **C. Coldren**, and P. Smith. 2025. Occupancy and habitat associations among owls on the Texas Coastal Bend region. Texas Chapter of The Wildlife Society, Denton, TX, 20 February. Oral presentation.

41. Arcelay-Sanchez, D., K. Jagadish, **C. Coldren**, S. Deb, and L. C. Slaughter. 2025. Impact of agriculture land uses on soil properties of ephemeral playas. Texas Tech University, PSS Graduate Student Symposium, Lubbock, TX, 25 April. Oral presentation.

42. Fung, C., and **C. Coldren**. 2025. Changes in select bird ranges and abundances with regards to Climate Change. Texas Tech University, TRUe Scholars Undergraduate Research Competition, Lubbock, TX, 2 April. Poster presentation.

43. Casas, J., **C. Coldren**, C. Fung, and D. Frazier. 2025. Tracking avian range shifts: using Breeding Bird Surveys to explore northward expansion in response to climate change in the southwestern United States. Texas Tech University, NRM Research Day, Lubbock, TX, 28 April. Poster presentation.

44. Frazier, D., **C. Coldren**, C. Fung, and J. Casas. 2025. Tracking avian range shifts with eBird in a changing climate. Texas Tech University, NRM Research Day, Lubbock, TX, 28 April. Poster presentation.

45. Fung, C., **C. Coldren**, J. Casas, and D. Frazier. 2025. Changes in select bird ranges and abundances with regards to climate change. Texas Tech University, NRM Research Day, Lubbock, TX, 28 April. Poster presentation.

46. Hawke, S., W. C. Conway, D. T. Saalfeld, C. L. Ramsey, and C. L. Coldren. 2025. Spatial ecology of gray wolves in southcentral Alaska. Texas Tech University, NRM Research Day, Lubbock, TX, 28 April. Poster presentation.

47. Hondrick, K. M., W. C. Conway, **C. L. Coldren**, and C. Xu. 2025. Estimation of avian species occurrence and land cover change along the Texas and Louisiana Gulf Coast using remote sensing imagery and Christmas Bird Count data. Texas Tech University, NRM Research Day, Lubbock, TX, 28 April. Poster presentation.

48. Olivas, C. M., W. C. Conway, **C. L. Coldren**, and C. L. Ramsey. 2025. Genetic relatedness and influence of male plumage variability on Snowy Plover (*Anarhynchus nivosus nivosus*) subpopulations in Texas, New Mexico, and Oklahoma. Texas Tech University, NRM Research Day, Lubbock, TX, 28 April. Poster presentation.

49. Ramsey, M., W. Conway, C. Ramsey, **C. Coldren**, and C. Brad Dabbert. 2025. The impacts of imidacloprid exposure on Ring-necked Pheasant growth and survival. Texas Tech University, NRM Research Day, Lubbock, TX, 28 April. Poster presentation.

50. Rainey, S., A. Norris, C. Coldren, and C. Cooper-Norris. 2025. Initial trends in avian diversity on a juniper/mesquite encroached grassland. Texas Tech University, NRM Research Day, Lubbock, TX, 28 April. Poster presentation.

Workshops:

1. Fort Collins, Colorado, 2001. Two-day workshop on EDYS, covering general information, algorithms, application building, and hands-on demonstrations. Given along with T. McLendon and W. M. Childress to staff from USACE, U. S. Army, and NRCS.

2. San Antonio, Texas, 2005. Application of the EDYS ecological model as a watershed management tool in the Edwards Plateau. Given along with T. McLendon to members of Bexar Regional Watershed Management Group.

3. Fort Worth, Texas, 2010. Two-day workshop on EDYS-L, covering general information, algorithms, inputs, outputs, application building, and hands-on demonstrations. Given to staff of Fort Worth District, USACE.

4. Los Angeles, California, 2011. One-day workshop on EDYS, covering general information, details on applications in Owens Valley, CA, and hands-on demonstrations. Given to staff from Los Angeles Department of Water and Power (LADWP) and MWH Global.

5. Los Angeles, California, 2011. One-day workshop on MODFLOW, specifically targeted to MODFLOW applications in Owens Valley linked to EDYS, and including details on those applications, along with hands-on demonstrations. Given along with T. McCarthy to staff from LADWP and MWH Global.

6. Los Angeles, California, 2011. One-day workshop on EDYS-MODFLOW linked applications, including details on the linkage and hands-on demonstrations. Given along with T. McCarthy to staff from LADWP and MWH Global.

7. Lubbock, Texas, 2012. One-day workshop on the EDYS application in Gonzales County, Texas, including general information, specific details on the application, and hands-on demonstrations. Given along with T. McLendon to staff from Texas State Soil and Water Conservation Board and Texas Tech University.

8. San Antonio, Texas, 2014. EDYS workshop: Karnes and Wilson Counties EDYS models. Given along with T. McLendon to staff from San Antonio River Authority.

9. Melbourne, Florida, 2015. Three-day workshop on the EDYS-HYDRUS 1-D linkage, including general information, details on the linkage, inputs, outputs, and hands-on demonstrations of the linked models. Given along with J. Gerald and B. Johnson to staff of ENSCO and Air Force Technical Applications Center (AFTAC).

10. San Antonio, Texas, 2016. Two-day workshop on the EDYS application for Goliad County, including general information, specific details of the application, algorithms, inputs, outputs, and hands-on demonstrations. Given along with T. McLendon, E. Bernard, and J.D. Booker to staff of SARA and Texas Tech University.

11. Melbourne, Florida, 2017. Two-day workshop on the second phase of the EDYS-HYDRUS 1-D linkage, focusing on the modifications to the models and the linkage, and including hands-on demonstrations. Given along with B. Johnson and T. Swaneck to staff of ENSCO and AFTAC.

GRADUATE STUDENT COMMITTEES

Completed:

Chaired:

M.S.

1. Crysler, Shelby. M.S. non-thesis. December 2022.

2. Dickson, Cindy. M.S. non-thesis. December 2023.

Ph.D.

1. Farzana, Kaniz. PhD Dissertation. Assessing hydrological sensitivity to vegetation classifications through integrated modeling and sensitivity analysis: a case study of the St. Charles Bay watershed, Texas. December 2023.

Co-chaired:

M.S.

1. Ana Chavez. M.S. non-thesis. May 2021.

Ph.D.

1. Asadi, Alireza. PhD Dissertation. Application of advanced modeling techniques in groundwater, surface water, and wastewater treatment. May 2022.

Committee member:

M.S.

1. Helen Scott. M.S. Thesis. Optimal acclimation of C_4 photosynthesis indicated limited long-term response to elevated temperature and CO_2. May 2019.

2. Joshua Singleton. M.S. Thesis. Role of genetic diversity in the adaptive success of silverleaf nightshade (*Solanum elaeagnifolium*) under variable environmental pressures. August 2019.

3. Manish Sapkota. M.S. Thesis. Soil health variability among residential landscapes impact urban water conservation. December 2019.

4. Berry, Laura. M.S. non-thesis. May 2019.

5. Delaney Foster. M.S. Thesis. Crop response, weed management systems, and tank mix partners with isoxaflutole in HPPD tolerant cotton. May 2021.

6. Abishkar Regmi. M.S. Thesis. Effect of different production systems on productivity and phytochemical contents of *Viola spp*. August 2021.

7. Shisbeth Tabora. M.S. Thesis. Long-term trends in water quality, land cover, and pesticide use in watersheds of the Southern Great Plains and their association with *Prymnesim parvum*. December 2021.

8. Norton, Andrea. M.S. Thesis. Exploring local and landscape drivers of plastic abundance in urban lake zones. May 2023.

9. Stamm, Emily Rose. M.S. Thesis. Uptake, partitioning, and growth effects of carbamazepine rates on hydroponic lettuce (*Lactuca sativa*). August 2023.

10. Revollo Cadima, Susana. M.S. Thesis. Identifying areas of conservation importance based on spatial patterns of evolutionary diversity: non-volant small mammals in the Andean Puna. December 2023.

11. Rivera, Ariana. M.S. Thesis. Changes in avian and plant community structure in response to habitat restoration of pinyon-juniper woodlands. August 2023.

12. Davidson, Tucker. M.S. Thesis. Nest survival and nest-site characteristics of pinyon-juniper woodland birds at Fort Stanton-Snowy River Cave National Conservation Area in south-central New Mexico. August 2023.

13. Mahulkar, Sai Sidhartha. M.S. interdisciplinary studies portfolio. December 2023

14. Gonzales, Michael. M.S. non-thesis. May 2023.

15. Hyde, Maxwell. M.S. non-thesis. May 2023.

16. Long Harris, Jenny. M.S. non-thesis. May 2023.

17. Mixson, Jon. M.S. Thesis. Palmer amaranth management and crop response following topramezone in HPPD tolerant cotton. May 2024.

18. Marapalli, Anjani. M.S. interdisciplinary studies report. Utilizing bioremediation techniques for soil restoration and sustainable crop production. May 2024.

19. Tadiboina, Bhanu. M.S. interdisciplinary studies report. Assessing the impact of climate variability on the physiological response and yield of crop species. May 2024.

20. Akers-Campbell, Holt. M.S. non-thesis. May 2025.

21. Seelam, Sai Keerthi. M.S. non-thesis. May 2025.

Ph.D.

1. Sehrish, Aqeela. PhD Dissertation. The effects of seed treatments and drought on the interaction of cotton (*Gossypium hirsutum*) and thrips species (*Frankliniella occidentalis* and *Thrips parvispinus*). May 2024.

2. Turner, Nathaniel. PhD Dissertation. Genetic and genomic studies towards breeding for the utilization of Texas wintergrass (*Nasella leucotricha*) as a cool season forage grass. May 2025.

3. Ghimire, Bishnu. PhD Dissertation. Application of crop modeling for climate-resilient agriculture and remote sensing for high-throughput plant phenotyping. May 2025.

In progress:

Co-Chair:

M.S.

1. Arcelay-Sanchez, Diego. M.S. Thesis. Anticipated May 2026.

2. Faigenblat, Jennifer. M.S. Thesis. Anticipated December 2025.

3. Mize, Laken. M.S. Thesis. Anticipated May 2026.

4. Newcomb, Grace. M.S. Thesis. Anticipated May 2026.

Ph.D.

1. Castilleja, Andrew. PhD Dissertation. Anticipated May 2027.

2. Olivas, Corin. PhD Dissertation. Anticipated December 2027.

Committee Member:

M.S.

1. Barina, Leela. M.S. Thesis. Anticipated May 2026.

2. Fryar, Kevin. M.S. Thesis. Anticipated December 2025.

3. Hawke, Seth. M.S. Thesis. Anticipated December 2026.

4. Herrera, Omar. M.S. Thesis. Anticipated May 2026.
5. Hondrick, Karen. M.S. Thesis. Anticipated December 2025.
6. Knodel, Kassidy. M.S. Thesis. Anticipated December 2025.
7. McCollum, William. M.S. Thesis. Anticipated May 2026.
8. Morales, Ivette. M.S. Thesis. Anticipated August 2025.
9. Ramsey, Madison. M.S. Thesis. Anticipated December 2025.
10. Savalapurapu, Adithi. M.S. non-thesis. Anticipated December 2025.
11. Shammaa, Amaris. M.S. Thesis. Anticipated December 2025.

Ph.D.

1. Munoz, Sonia. PhD Dissertation. Anticipated May 2026.
2. Newcomb, Benjamin. PhD Dissertation. Anticipated May 2026.
3. Patrick, Angela. PhD Dissertation. Anticipated May 2027.
4. Rainey, Shaelyn. PhD Dissertation. Anticipated May 2027
5. Shrestha, Avinash. PhD Dissertation. Anticipated August 2025.

Did not complete:

MS (thesis option):

1. Riley, Meagan. M.S. Thesis. Left in 2019.
2. Boyd, Dylan. M.S. Thesis. Left in 2020.
3. Harrington, Melody. M.S. Thesis. Left in 2024. – Chair of Committee

UNDERGRADUATE RESEARCHERS ADVISED:

2018-2020	Bacchu, Suhas (Undergraduate Research work supervision) Mohak Kant (Undergraduate Research work supervision)
2019	Boyd, Dylan (Undergraduate Research work supervision) Matson, Thomas (Undergraduate Research work supervision) Meier, Maggie (Undergraduate Research work supervision) Sanchez, Emma (Undergraduate Research work supervision) Yadav, Dipendra (Undergraduate Research work supervision) Jirovsky, Alex (Undergraduate Research work supervision)
2020	Ohrendorff, Amarissa (Undergraduate Research for course credit)

	Okei, Samuel (Undergraduate Research work supervision)
2021	Dawsey, Justin (Davis College Undergraduate Research Grant)
2023	Riney, Sarah (Davis College Undergraduate Research Grant) Cross, Neely (Undergraduate Research for course credit) Jendrzey, Jacob (Undergraduate Research for course credit) Fell, Gillian (Nebraska Ag Extension internship) Giberson, Nathaniel (South Plains Wildlife Rehab Center internship)
2024	Duke, Keeli (South Plains Wildlife Rehab Center internship) Gardner, William (South Plains Wildlife Rehab Center internship)
2024-2025	Fung, Camylle (TRUe Scholar)
2025	Casas, Jaden (Undergraduate Research for course credit) Frazier, Dalton (Undergraduate Research for course credit) Boucher, Whitney (South Plains Wildlife Rehab Center internship)

TEACHING RESPONSIBILITIES

1. PSS 5302: Statistical Applications in Natural Resources (3 credits; 100% responsibility)
    - Fall 2018 – Total of 26 students
    - Spring 2019 – Total of 11 students
    - Spring 2020 – Total of 18 students
    - Spring 2021 – Total of 19 students
    - Spring 2022 – Total of 23 students
    - Fall 2022 – Total of 23 students
    - Spring 2023 – Total of 17 students
    - Fall 2023 – Total of 23 students
    - Spring 2024 – Total of 24 students
    - Fall 2024 – Total of 22 students
    - Spring 2025 – Total of 25 students

2. NRM 4314: Watershed Planning (3 credits; 100% responsibility)
    - Fall 2018 – Total of 28 students
    - Spring 2019 – Total of 35 students
    - Fall 2019 – Total of 30 students
    - Spring 2020 – Total of 35 students
    - Fall 2020 – Total of 36 students
    - Summer 2021 – Total of 23 students
    - Fall 2021 – Total of 32 students
    - Summer 2022 – Total of 22 students
    - Fall 2022 – Total of 35 students
    - Summer 2023 – Total of 24 students
    - Fall 2023 – Total of 33 students
    - Summer 2024 – Total of 26 students
    - Fall 2024 – Total of 34 students

3. NRM 5317: Watershed Management (3 credits; 100% responsibility)
    - Spring 2019 – Total of 3 students
    - Fall 2019 – Total of 2 students
    - Spring 2020 – Total of 6 students
    - Fall 2020 – Total of 5 students
    - Fall 2021 – Total of 10 students
    - Fall 2022 – Total of 3 students
    - Fall 2023 – Total of 5 students
    - Fall 2024 – Total of 4 students

4. NRM 4301/4308

    As 4301: Applied Ornithology
    - Spring 2023 – Total of 36 students
    - Spring 2024 – Total of 32 students

    As 4308: Avian Ecology and Management
    - Fall 2024 – Total of 10 students

5. NRM 6002: Ecological Modeling
    - Spring 2025 – Total of 5 students