ABIGAIL (ABBY) J. LAWSON, PH.D.

Acting Unit Leader and Affiliate Assistant Professor
U.S. Geological Survey, New Mexico Cooperative Fish and Wildlife Research Unit
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EDUCATION

2019	Ph.D. in Wildlife and Fisheries Biology, Clemson University, Clemson, South Carolina
2012	M.S. in Natural Resources and Environmental Sciences, University of Nevada, Reno
2007	B.S. in Wildlife, Fish, and Conservation Biology, University of California, Davis

PROFESSIONAL HISTORY

2021 – Present	Assistant Unit Leader – Wildlife /Acting Unit Leader (GS-13), U.S. Geological Survey, New Mexico Cooperative Fish and Wildlife Research Unit, New Mexico State University
2020 – 2021	Postdoctoral Research Ecologist (GS-12), U.S. Geological Survey, Patuxent Wildlife Research Center
2019 – 2020	Postdoctoral Fellow, School of Forestry and Wildlife Sciences, Alabama Cooperative Fish and Wildlife Research Unit, Auburn University
2013 – 2019	Graduate Research Assistant, Dept. of Forestry and Environmental Conservation, South Carolina Cooperative Fish and Wildlife Research Unit, Clemson University
2010 –2012	Graduate Research Assistant, Dept. Natural Resources and Environmental Sciences, University of Nevada, Reno

ACADEMIC APPOINTMENTS

2022 – Present	Affiliate Assistant Professor, Department of Biology, New Mexico State University
2021 – Present	Affiliate Assistant Professor, Department of Fish, Wildlife, and Conservation Ecology, New Mexico State University
2021 – Present	Member of the Graduate Faculty, New Mexico State University
2021 – Present	Affiliate Faculty, Department of Ecosystems and Society, Oregon State University

REFEREED PUBLICATIONS († Mentored student or postdoc)

In review or revision

†Yoon, H.S., C.B. Yackulic, **A.J. Lawson**, †C.J. Wagnon, and K. Pregler. Bridging Ecological Inference and Decision Optimization for Endangered Species Conservation Using Artificial Intelligence. *In review*. Preprint doi: 10.64898/2026.08.13.744541

Published and in press

[16] †Christensen, E.M., C.P. McGowan, and **A.J. Lawson**. *In review*. Using value of information and utility theory to evaluate uncertainty for conservation decision making. Conservation Science and Practice.

[15] †Osterhaus, D.M., A.J. Salas, P.L. Cutler, M.E. Weisenberger, K. Mower, **A.J. Lawson**, T.F. Wright, J.M. Fair, and M.J. Desmond. 2026. Mass mortality of avian migrants in New Mexico

following an extreme weather event. Frontiers in Ecology and Evolution 14:1763394. doi: 10.3389/fevo.2026.1763394

[14] †Boland, K.C., **A.J. Lawson**, †D.M. Osterhaus, P.L. Cutler, G.A. Davidson, and M.J. Desmond. 2026. Carcass size and ground substrate drive detection rates of avian carcasses by human and dog surveyors. Global Ecology and Conservation 67:e04148. doi: 10.1016/j.gecco.2026.e0414

[13] †Davis, K.P., M.J. Eaton, E.R. Bjerre, H.M. White, C.W. Boal, J.H. Herner-Thogmartin, O.J. Robinson, and **A.J. Lawson**. 2026. Incorporating parametric uncertainty and iterative scoring into constructed value of information to prioritize management uncertainties for a declining raptor species. Conservation Biology, e70227. doi: 10.1111/cobi.70227

[12] Howell, P.E., **A.J. Lawson**, †K.P. Davis, G.S. Zimmerman, O.J. Robinson, M.A. Boggie, M.J. Eaton, F. Abadi, J.L. Brown, J.A. Heath, J.A. Smallwood, K. Steenhof, T. Swem, B.W. Rolek, C.J.W. McClure, J.F. Therrien, K.E. Miller, and B.A. Millsap. 2026. American kestrel population trend and vital rates at the continental scale. Ecosphere. doi: 10.1002/ecs2.70526

[11] †Osterhaus, D.M., †K.C. Boland, **A.J. Lawson**, K.G. Horton, B.M. Van Doren, P.L. Cutler, T.F. Wright, and M.J. Desmond. 2025. Migrating birds alter behavior around localized artificial light at night. Biological Conservation 311:111441. doi: 10.1016/j.biocon.2025.111441

[10] †Christensen, E.M., **A.J. Lawson**, E. Rivenbark, P.K. London, D. Castellanos, J.C. Culbertson, S.M. DeMay, C. Eakin, B. Firmin, L.S. Pearson, K. Soileau, J.H. Waddle, and C.P. McGowan. 2024. Accounting for multiple uncertainties in a decision-support population viability assessment. Biological Conservation 299:110811. doi: 10.1016/j.biocon.2024.110811

[9] Stantial, M.L., A.M.V. Fournier, **A.J. Lawson**, B. Marcot, M.S. Woodrey, and J.E. Lyons. 2024. Establishment of a resilience-experimentalist adaptive management framework to understand the effects of prescribed fire on threatened and hunted species in high marshes of the Gulf of Mexico. Frontiers in Conservation Science 5. doi: 10.3389/fcosc.2024.1426646.

[8] Dunham, K.D., P.K. Devers, **A.J. Lawson**, J.E. Lyons, C.P. McGowan, and J.A. Royle. 2023. Strategic monitoring to minimize misclassification errors from conservation status assessments. Biological Conservation 286:110260. doi: 10.1016/j.biocon/2023.110260

[7] Stantial, M.L., **A.J. Lawson**, A.M.V. Fournier, P. Kappes, C. Kross, M.C. Runge, M. Woodrey, and J.E. Lyons. 2023. Qualitative value of information: A transparent and repeatable method for prioritizing learning about conservation and management actions. Ecological Applications 33:e2824. doi: 10.1002/eap.2824.

[6] **Lawson, A.J.**, P.G.R. Jodice, T.R. Rainwater, K.D. Dunham, M. Hart, J.W. Butfiloski, P.M. Wilkinson, K.W. McFadden, and C.T. Moore. 2022. Hidden in plain sight: Integrated population models to resolve partially observable latent population structure. Ecosphere 13:e4321. doi: 10.1002/ecs2.4321

[5] **Lawson, A.J.**, K. Kalasz, M.C. Runge, A.C. Schwarzer, M.L. Stantial, M. Woodrey, and J.E. Lyons. 2022. Application of qualitative value of information to prioritize conservation actions for eastern black rail population recovery. Conservation Science and Practice 4:e12732. doi: 10.1111/csp2.12732

[4] **Lawson, A.J.**, B. Folt, A.M. Tucker, F.T. Erickson, and C.P. McGowan. 2021. Decision context as an essential component of population viability assessment. Conservation Biology 35:1683–1685. doi: 10.1111/cobi.13818

[3] **Lawson, A.J.**, C.T. Moore, T.R. Rainwater, P.M. Wilkinson, F.M. Nilsen, L.J. Guillette Jr., R.H. Lowers, K.W. McFadden, and P.G.R. Jodice. 2020. Minimum age predicts non-linear mercury bioaccumulation patterns in adult American alligators. Science of the Total Environment 707:135103. doi: 10.1016/j.scitotenv.2019.135103

[2] **Lawson, A.J.**, J.S. Sedinger, and E.J. Taylor. 2017. Identifying demographic and environmental drivers of recruitment and population growth in a cavity nesting sea duck population. Journal of Avian Biology 48:1394–1405. doi: 10.111/jav.001359

[1] **Lawson, A.J.**, J.S. Sedinger, and E.J. Taylor. 2017. Life history patterns, individual heterogeneity, and density dependence in breeding common goldeneyes of the northern boreal forest. Journal of

Avian Biology 48:597–610. (***Cover Article***) doi: 10.1111/jav.00975

In prep

McGowan, C.P., D. Doran-Myers, **A.J. Lawson**, D. Fitzgerald, and M.C. Runge. Incorporating expert judgements into predictive ecological simulation models.

Lawson, A.J., †J.B. Lee, †C.R. Vennum, M.A. Boggie, C. Cardinal, and J.B. Bulger. Initial outcomes of a southern white-tailed ptarmigan translocation in New Mexico.

Lawson, A.J., A.D. Smith, K. Kellner, and J.E. Lyons. Evaluating statistical power and model fit failure among metapopulation design-based survey methods.

THESES AND BOOK CHAPTERS

Lawson, A.J. 2019. Reducing uncertainties in conservation decision-making for American alligators. Dissertation. Clemson University, Clemson, SC, USA. 233 pp.

Lawson, A.J., B.A. Strickland, and A.E. Rosenblatt. 2018. Patterns, drivers and effects of alligator movement behavior and habitat use. *In* American Alligators: Habitats, Behaviors, and Threats. S.E. Henke and C.B. Eversole, Editors. Nova Science Publishers, Hauppauge, NY, USA.

Lawson, A.J. 2012. Life history patterns and population dynamics of Common Goldeneyes in the northern boreal forest. Thesis. The University of Nevada, Reno. Reno, NV, USA. 136 pp.

PEER-REVIEWED GOVERNMENT REPORTS

Christensen, E.M., **A.J. Lawson**, and C.P. McGowan. *In press*. Appendix I. Alligator snapping turtle future conditions model methods and results. *In* U.S. Fish and Wildlife Service, Species status assessment report for the alligator snapping turtle (*Macrochelys temminckii*), Version 1.3. Atlanta, GA, USA.

Watson, W.A., C. Borgman, S. Cox, **A.J. Lawson**. 2025. Inferring Brown-Capped Rosy-Finch demography and breeding distribution trends from long-term wintering data in New Mexico. Final Report to the New Mexico Department of Game and Fish, Share with Wildlife Program. 31 pages. Link.

Lawson, A.J. 2021. Appendix E. Future conditions and population viability of the alligator snapping turtle. *In* U.S. Fish and Wildlife Service, Species status assessment report for the alligator snapping turtle (*Macrochelys temminckii*), Version 1.2. Atlanta, GA, USA. Document ID: FWS-R4-ES-2021-0115-0002

Lawson, A.J. 2021. Appendix C. Future conditions and population viability of the Suwannee alligator snapping turtle. *In* U.S. Fish and Wildlife Service, Species status assessment report for the Suwannee alligator snapping turtle (*Macrochelys suwanniensis*), Version 1.1. Atlanta, GA, USA. Document ID: FWS-R4-ES-2021-0007-0002

DATA AND SOFTWARE RELEASES

[9] Godar, A., **A.J. Lawson**, and J.E. Lyons. 2026. Expert judgment data for Bayesian Decision Networks to support habitat management for Eastern Black Rails along the Atlantic coast. U.S. Geological Survey data release, https://doi.org/10.5066/P14BTKSV

[8] Davis, K.P., E.J. Bjerre, and **AJ. Lawson**. 2025. Elicited constructed value of information scores for American kestrel uncertainties in the United States from a 2023 structured decision making workshop. U.S. Geological Survey data release, https://doi.org/10.5066/P1FIJFIA

[7] Howell, P.E., Zimmerman, G. S., Millsap, B.A., and **A.J. Lawson**. 2025. A continental-scale integrated population model for the American kestrel. U.S. Geological Survey software release, https://doi.org/10.5066/P1FDMI2L

[6] Howell, P.E., Brown, J.L. Heath, J.A., Smallwood, J.A., Steenhof, K., Swem, T., Miller, K.E., McClure, C.J.W., Zimmerman, G. S., Millsap, B.A., and **A.J. Lawson**. 2025. Demographic data

and population indices for American kestrels in the United States, 1986-2019. U.S. Geological Survey data release, https://doi.org/10.5066/P1J2NXWL

[5] Christensen, E.M., **A.J. Lawson**, C.P. McGowan. 2024. Alligator snapping turtle population simulation model developed in support of the Species Status Assessment. Version 1.0.0; U.S. Geological Survey software release. Reston, VA. https://doi.org/10.5066/P1LHWZFU

[4] **Lawson, A.J.**, K.D. Dunham, and C.T. Moore. 2022. American alligator growth simulation and integrated population model for Georgetown County, South Carolina, USA. U.S. Geological Survey software release, https://doi.org/10.5066/P92I95YE

[3] **Lawson, A.J.**, P.G.R. Jodice, T.R. Rainwater, K.D. Dunham, M. Hart, J.W. Butfiloski, P.M. Wilkinson, and C.T. Moore. 2022. American alligator demographic and harvest data from Georgetown County, South Carolina, 1979–2017. U.S. Geological Survey data release, https://doi.org/10.5066/P9AEXW1Z

[2] **Lawson, A.J.**, and Lyons, J.E. 2022, Elicited qualitative value of information scores for eastern black rail uncertainties on the Atlantic Coast from a 2020 adaptive management workshop. U.S. Geological Survey data release, https://doi.org/10.5066/P9FUQ7VT

[1] **Lawson, A.J.**, and Jodice, P.G.R., 2019, Mercury concentrations in American alligators in South Carolina, 2010-2017. U.S. Geological Survey data release, https://doi.org/10.5066/P98XHBCY

RESEARCH GRANTS AND CONTRACTS (AS PI, CO-PI, OR AUTHOR: >$3.80M AWARDED)

Grant source, Title, Years Active, Role

State Water Contractors. *Applying the constructed value of information to identify priorities for competitive research funding to support water management in the San Francisco-Bay Delta*. 2026–2028. Principal Investigator. $7000

U.S. Fish and Wildlife Service, Migratory Bird Management, Southwest Region. *Ducks in the desert: Behavioral interactions and space use of wetlands by Mexican Ducks and Mallards in the arid Southwest.* 2024–2026. Principal Investigator; Co-PI: Tim Wright. $36,924

Tracy Aviary. *Investigating population structure and effects of recreational disturbance on vocal activity in Rosy-Finches*. 2024–2026. Principal Investigator; Co-author: Whitney Watson. $14,000

U.S. Bureau of Reclamation. *Decision support tools to guide environmental flows and habitat management in the middle Rio Grande River*. 2024–2028. Principal Investigator; Co-PI: Kasey Pregler. $797,480

U.S. Fish and Wildlife Service, Ecological Services, Southwest Region. *Conservation of imperiled species in New Mexico*. 2023–2028. Principal Investigator. $45,342

U.S. Fish and Wildlife Service, Migratory Bird Management, National Raptor Program. *Modeling raptor population status, trends, and take rates*. 2023–2025. Co-PI with: Fitsum Abadi (PI) and Jay Gedir. $625,538

U.S. Fish and Wildlife Service, Ecological Services, Southeast Region. *Developing and evaluating tools for expert elicitation integration with population viability models.* 2023–2027. Co-PI with Conor McGowan (PI). $250,514

National Park Service. *Developing an evaluation framework to inform NPS coastal infrastructure investment decisions*. 2023. Co-PI with: Mitch Eaton, Karen Jenni, Simeon Yurek. (Received as subaward via U.S. Geological Survey Southeast Climate Adaptation Science Center)	$11,275
New Mexico Department of Game and Fish, Share With Wildlife. *Inferring Brown-capped Rosy-Finch demography and breeding distribution trends from long-term wintering data in New Mexico*. 2023–2024. Principal Investigator; Co-PIs: Corrie Borgman, Steve Cox.	$81,368
U.S. Geological Survey, South Central Climate Adaptation Science Center. *Decision Support for Sustainable Raptor Take Limits in a Changing Climate*. 2023–2025. Principal Investigator; Co-PIs: Paige E. Howell, Brian A. Millsap, Mitch Eaton, Orin J. Robinson, Imtiaz Rangwala. (Total includes $60K in matching funds from NMSU)	$292,972
U.S. Fish and Wildlife Service, Migratory Bird Management, Southwest Region. *Inferring Rosy-Finch demography and breeding distribution trends from long-term wintering data in New Mexico*. 2022–2026. Principal Investigator; Co-PIs: Corrie Borgman, Steve Cox.	$41,225
U.S. Fish and Wildlife Service, Ecological Services. *Reconciling range-wide uncertainties in alligator snapping turtle population viability using expert elicitation*. 2022–2024. Principal Investigator; Co-PI: Conor McGowan.	$138,601
U.S. Department of Agriculture-National Institute of Food and Agriculture Hispanic Serving Institutions Education Grants Program. 2022–2026. *Prepping for disaster ecology: HSI-based training for managing climate change impacts on migratory birds*. Co-PI with: Timothy F. Wright (PI), Martha Desmond, Jeanne Fair.	$270,000
Turner Ecoagriculture Institute. *Survivorship and habitat use of reintroduced Bolson tortoises in southern New Mexico*. 2022–2025. Principal Investigator; Co-PIs: Carter, Kruse, Christiane Wiese, L. Scott Hillard, Shawn Sartorius, Debra Hill, Vance Wolf.	$172,000
U.S. Fish and Wildlife Service, Science Support Partnerships. *Identifying environmental and demographic drivers of American kestrel population declines to inform conservation actions*. 2022–2023. Principal Investigator; Co-PIs: Paige E. Howell, Matthew A. Boggie, Brian A. Millsap, Guthrie S. Zimmerman, Kristin Madden, and Orin J. Robinson.	$147,719
U.S. Fish and Wildlife Service, Science Applications. *Identifying Mechanisms of Reintroduction Outcomes: White-tailed Ptarmigan in New Mexico.* 2021–2024, Principal Investigator.	$98,175
New Mexico Department of Game and Fish, *Reintroduction Ecology at a Species Distributional Boundary: White-tailed Ptarmigan in New Mexico*, 2021–2024, Principal Investigator.	$181,700
U.S. Fish and Wildlife Service, *Evaluating Survey Protocols and the Influence of Management and Ecological Drivers on Eastern Black Rail Abundance and Occupancy*, 2020–2021, Co-Principal Investigator (Co-PI: Jim E. Lyons)	$40,000

Greenville Zoo Conservation Fund, *Long-term American alligator foraging behavior in coastal South Carolina*, 2018, Author and co-investigator (PI Patrick G.R. Jodice)	$1,000
Belle Baruch Foundation, *American alligator home range and movement patterns in coastal South Carolina*, 2016–2017, Co-author and co-investigator (PI Thomas R. Rainwater)	$3,800
Georgia Cooperative Fish & Wildlife Research Unit, United States Geological Survey, *Developing innovative methods to survey alligator populations in complex habitat*, 2015, Co-author and co-investigator (PI Clinton T. Moore)	$2,500
Yawkey Foundation I, *Habitat selection of an opportunistic predator in a fragmented landscape: American alligator movement ecology in coastal South Carolina*, 2015, Author, co-investigator (PI Patrick G.R. Jodice)	$24,000
South Carolina Department of Natural Resources, *Coastal South Carolina American alligator movement ecology*, 2014–2016, Author, co-investigator (PI Kate W. McFadden)	$98,600

FELLOWSHIPS, HONORS, AND AWARDS

2022	USGS Group STAR Award, Digital Measures Working Group
2018	Travel Grant, Biometrics Working Group, The Wildlife Society ($700)
2017–18	Wade Stackhouse Fellowship, Clemson University ($15,000)
2017–18	Marion E. Bailey Assistantship, Clemson University ($7000)
2013–18	Professional Enrichment Grants, Clemson University (8 total: $8,923)
2017	Stephen L. Potts Memorial Award, Clemson University ($1000)
2017	Graduate Student Scholarship, South Carolina Wildlife Federation ($500)
2014–16	Travel Grants, Clemson Natural Resources Graduate Student Association (2 total: $350)
2014	First Place, Poster Presentation Life Science, Clemson University ($300)
2014	First Place, PhD Research in Progress Poster, The Wildlife Society Annual Conference
2012	Student Travel Award, Sixth North American Duck Symposium and Workshop ($700)
2011–12	Travel Grants, University of Nevada, Reno Graduate Student Association (2 total: $900)
2011	Travel Grant, The Wildlife Society, Western Section ($300)
2007	Outstanding Graduating Senior Leadership Award, University of California, Davis

TEACHING EXPERIENCE

Graduate Courses

Model Selection and Multimodel Inference in Ecology (FWCE 535: 1 CR), New Mexico State University, Spring 2024 (6 students)

Structured Decision Making in Fish and Wildlife Management (FWCE 535: 3 CR), New Mexico State University, Spring 2023 (5 students), Spring 2026 (4 students)

Undergraduate Courses

Introduction to Natural Resources (ENR 1010: 1 CR), Clemson University, Fall 2017 (94 students)

Invited Guest Lectures

Wildlife of the Southwest (FWCE XXX), New Mexico State University. Conservation of alpine species in New Mexico. April 2026.

Wildlife Techniques and Analysis (FWCE 355), New Mexico State University. Monitoring animal movement and diets with stable isotopes. April 2025.

Value-Added Conservation: Qualitative Value of Information to Prioritize Uncertainties in Avian Conservation, U.S. Fish and Wildlife Service, Introduction to Structured Decision Making. September 2022.

Bayesian Modeling for Conservation Science (WILD 8370), University of Georgia. Hidden in Plain Sight: Identifying Latent Population Structure with Bayesian Population Models. April 2020, 2022.

Population Ecology, Cesar Kleberg Wildlife Research Institute, Texas A&M University. Species Status Assessments: Applied Population Ecology and Decision Analysis. April 2021.

Graduate Seminar in Natural Resources (FNR 8080, 1 credit), Clemson University. Science Communication and Social Media in Graduate School. October 2017, April 2018.

Natural Resource Measurements (ENR 3020, 2 credits), Clemson University. South Carolina American Alligator Population Ecology. March 2017, 2018.

Applied Population Dynamics (WFB 8610, 3 credits), Clemson University. Management of Harvested Populations. March 2014.

Short Courses

Decision Analysis: Tools – Online (ALC3191). National Conservation Training Center, U.S. Fish and Wildlife Service. March 2026.

Introduction to Structured Decision Making (ALC3171). National Conservation Training Center, U.S. Fish and Wildlife Service. September 2024, July 2025.

Fundamentals of Structured Decision Making (ALC3170). National Conservation Training Center, U.S. Fish and Wildlife Service. Virtual, March 2025

Workshop Instructor

Productivity and Time Management in Graduate School, New Mexico State University. November 2024. In collaboration with Dr. Jeanne Fair.

Quantitative Techniques for Species Status Assessments, USFWS Training Course. December 2019.

How to Successfully Apply for a Professional Enrichment Grant. Natural Resources Graduate Student Association, Clemson University. August 2016.

STUDENT AND POST-DOCTORAL ADVISING

Graduate Students – As Advisor

Current

[2] Erik Yukl, M.S. Student, New Mexico State University, August 2026 – Present

[1] Whitney Watson, Ph.D. Student, New Mexico State University, January 2023 – Present

Completed

[2] Coral Matos-Sepulveda (co-advised with Tim Wright), M.S. Student, New Mexico State University, January 2023 – October 2026

[1] Heather Zimba, M.S. Student, New Mexico State University, May 2022 – July 2026

Post-Doctoral Associates

Current

[2] Dr. Chad Palmer (co-advised with Kasey Pregler), February 2026 – Present

[1] Dr. Casey Wagnon (co-advised with Kasey Pregler), January 2025 – Present

Completed

[4] Dr. Hyun Seok Yoon (co-advised with Kasey Pregler), August 2024 – December 2025

[3] Dr. Chris Vennum, April 2023 – October 2025; Currently a postdoc at New Mexico State University

[2] Dr. Kristin Davis, October 2022 – July 2024; Currently a postdoc at the University of California, Berkeley

[1] Dr. Erica Christensen, October 2022 – January 2024; Currently a postdoc at New Mexico State University

Graduate Student Committee Service

Completed

[7] Osher Ostroff. Productivity, stability, and community composition of monocultures and consortia in rotating algal biofilms. New Mexico State University. Completed: 2026.

[6] Dylan Osterhaus. Avian migration in the Anthropocene: anthropogenic impacts, methodological approaches, and new directions. Ph.D. dissertation, New Mexico State University. Completed: 2025.

[5] Aaron Stewart. Associativity in operads. M.S. Thesis, New Mexico State University, Completed: 2025.

[4] Kelley Boland. An evaluation of avian mortality on White Sands Missile Range and carcass survey techniques. M.S. Thesis, New Mexico State University. Completed: 2024.

[3] Guilio Del Piccolo, Habitat Use, Movement, and Population Viability of the Chihuahua Chub in the Mimbres River, New Mexico. M.S. Thesis, New Mexico State University. Completed: 2023.

[2] John Smith. Evaluation of Sampling Designs for the Long-term Monitoring of Crayfish in Lentic and Lotic Systems. M.S. Thesis, New Mexico State University. Completed: 2023; Thesis:

[1] Anthony Ciocco. Structured decision making for Bureau of Indian Affairs Agricultural Resource Management Plans. M.N.R. Capstone, Oregon State University. Completed: 2022.

Undergraduate Research Fellows

Completed

[2] Abigail Thompson, New Mexico State University, August 2026 – Present

[1] Shyla Soffera, New Mexico State University, August 2026 – Present

Completed

[4] Katie Stansell, New Mexico State University, 2025 – 2026; *Validating inference from autonomous recording units in alpine environments.*

[3] Kadence Presser, New Mexico State University, 2024 – 2025; *Inter-feather variation of hydrogen stable isotope ratios in Rosy-finch feathers*

[2] Leona Crowl, New Mexico State University, 2023 – 2024; *Drivers of nest defense in American kestrels*

[1] Cynthia Dunkleberger, New Mexico State University, 2023; *Intra-feather variation of hydrogen stable isotope ratios in Brown-capped Rosy-finch feathers*; Currently a biologist with USFWS Valle de Oro National Wildlife Refuge

INVITED RESEARCH SEMINARS

Lawson, A.J. 2026. Living on the edge: species reintroductions at their distributional limits. New Mexico Technical University; 13 April, 2026.

Lawson, A.J. 2022. Confronting uncertainty in wildlife conservation with decision support science for data deficient species. Department of Biological Sciences, New Mexico State University; 13 October, 2022.

Lawson, A.J. 2020. Uncertainty is inevitable, suffering is optional: application of ecological theory and statistical modeling to improve management decision making. Department of Fish, Wildlife, and Conservation Ecology, New Mexico State University, Virtual; 20 November, 2020.

SCIENTIFIC CONFERENCE PRESENTATIONS – Last five years

Invited Presentations (Presenter underlined if not first author, † student or postdoc author)

Valente, J.J., G. DiRenzo, D. Fowler, M.S. Jones, **A.J. Lawson**, E.F. Stuber, D. Sullins, and C.S. Teitelbaum. 2026. A horizon scan for the U.S. Geological Survey's Cooperative Research Unit Program from the perspective of (relatively) new scientists. *The Wildlife Society Annual Conference*; Des Moines, IA. November 1–5, 2026.

Piovesana, E., V. Wolf, S. Sartorius, S. Vassallo, **A.J. Lawson**. 2026. Evaluating early post-release behavior and growth of Bolson tortoises (*Gopherus flavomarginatus*) on federal lands. *Desert Tortoise Council Annual Symposium*; Las Vegas, NV, February 24–27, 2026.

Lawson, A.J., C. Cardinal, E. Duvuvuei, M.A. Boggie, †W.A. Watson, J.B. Bulger. 2025. Initial Survival and Reproduction in a Translocated Southern White-tailed Ptarmigan Population at the Range Periphery. *The Wildlife Society Annual Conference;* Edmonton, Alberta. October 6–9, 2025.

Lawson, A.J. 2025. Constructed value of information to prioritize critical uncertainties. *Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region*; Flagstaff, Arizona. September 8–10, 2025.

†Yoon, H.S., C. Yackulic, T. Archdeacon, M. Osborne, T. Turner, **A.J. Lawson**, †C. Wagnon, K.C. Pregler. 2025. Using dynamic programming with deep reinforcement learning to inform hatchery supplementation strategies for Rio Grande Silvery Minno. *Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region*; Flagstaff, Arizona. September 8–10, 2025.

†Vennum, C.R., M.J. Eaton, P.E. Howell, E.R. Bjerre, I. Rangwala, O.J. Robinson, **A.J. Lawson**. 2025. Creating a decision support tool for setting sustainable raptor take limits under future environmental nonstationarity. *Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region*; Flagstaff, Arizona. September 8–10, 2025.

Desmond, M.J., A.J. Salas, C. Arthur, M. Weisenberger, P.L. Cutler, **A.J. Lawson**, J. Fair, T.F. Wright. 2025. Mass mortality of migratory songbirds in New Mexico following an extreme weather event. *American Ornithological Society Annual Conference*; St. Louis, Missouri. August 11–15, 2025.

Wolf, V., S. Sartorius, S. Vassallo, **A.J. Lawson**. 2025. Bolson Tortoise Safe Harbor Agreement and Exploring Translocation Potential Habitat on Nearby National Wildlife Refuges. *Desert Tortoise Council Annual Symposium*; Las Vegas, NV, February 25–28, 2025.

Lawson, A.J., and M.C. Runge. 2024. Constructed value of information to prioritize critical uncertainties. *The Wildlife Society Annual Conference*; Baltimore, Maryland. October 19–23, 2024.

Lyons, J.E., M.L. Stantial, **A.J. Lawson**, A. Fournier, M.C. Runge, M. Woodrey. 2024. Constructed Value of Information in the Context of Adaptive Management: Reducing Uncertainty About Prescribed Fire and Birds in Salt Marshes of the Gulf of Mexico. *The Wildlife Society Annual Conference*; Baltimore, Maryland. October 19-23, 2024.

†Watson, W.A., C.C. Borgman, S.C. Cox, E. Duvuvuei, T.F. Wright, **A.J. Lawson**. 2024. Inferring

Breeding Origins of Rosy-finches Overwintering in Northern New Mexico Using Stable Hydrogen Isotopes. *American Ornithological Society Annual Conference*; Estes Park, Colorado. October 1–5, 2024.

Lawson, A.J., E. Rivenbark, C.P. McGowan. 2022. Reconciling and propagating uncertainty from expert elicited data into decision support population viability analyses. *The Wildlife Society Annual Conference*; Spokane, Washington. November 6–10, 2022.

McGowan, C.P., **A.J. Lawson**, B.A. Crawford, R.A. Katz. 2022. Application of expert elicitation to inform conservation decision making. *The Wildlife Society Annual Conference*, Spokane, Washington. November 6–10, 2022.

Stantial, M.L., A.M.V. Fournier, A. Godar, **A.J. Lawson**, J.E. Lyons. 2022. Using an expert-based Bayesian network to inform the use of prescribed fire in high marshes of the Gulf of Mexico. *The Wildlife Society Annual Conference*; Spokane, Washington. November 6–10, 2022.

Lawson, A.J., J.H. Gardner, M.L. Stantial, and C.S. Rushing. 2022. Value-added conservation: prioritizing critical uncertainties for rosy-finch conservation in a warming world. *Institute for Operations Research and Management Sciences*; Indianapolis, Indiana. October 16–19, 2022.

Stantial, M.L., **A.J. Lawson**, A.M.V. Fournier, P. Kappes, C. Kross, M.C. Runge, M. Woodrey, J.E. Lyons. 2022. Application of qualitative value of information for identifying critical uncertainties regarding the use of prescribed fire in the Gulf of Mexico. *Institute for Operations Research and Management Sciences*; Indianapolis, Indiana. October 16–19, 2022.

Lawson, A.J., J.H. Gardner, J.E. Lyons, C.S. Rushing, M.L. Stantial, M.C. Runge. 2022. Value-added conservation: Prioritizing critical uncertainties in avian conservation using value of information. *Wilson Ornithological Society*, Santa Fe, New Mexico. July 17–20, 2022.

Contributed Presentations (Presenter underlined if not first author, † student or postdoc author)

Lawson, A.J., †H. Zimba, S. Hillard, C. Wiese, M. McCaffery. 2026. Initial Settlement Patterns in Released Juvenile Bolson Tortoises in the Chihuahuan Desert. *The Wildlife Society Annual Conference*; Des Moines, IA. November 1–5, 2026.

†Watson, W.A., C.J. Campbell, C.C. Borgman, S. Cox, E. Duvuvuei, T. Brown, E. Zavaleta, T.F. Wright, **A.J. Lawson**. 2026. Inferring spatiotemporal trends in migratory connectivity of Rosy-Finches overwintering in New Mexico using stable hydrogen isotope analysis. *American Ornithological Society Annual Conference*; Amherst, Massachusetts. August 3–5, 2026.

†Matos-Sepulveda, C., D.P. Collins, P.L. Lavretsky, T.F. Wright, **A.J. Lawson**. 2025. Seasonal Home Range of Mexican Ducks and Mallards in Southeast Arizona. *The Wildlife Society Annual Conference*; Edmonton, Canada.

†Watson, W.A., F. Abadi, S. Cox, C.C. Borgman, E. Duvuvuei, T.F. Wright, **A.J. Lawson**. 2025. Estimating demographic rates of Rosy-Finches in New Mexico using Bayesian robust design. *The Wildlife Society Annual Conference;* Edmonton, Canada.

Stantial, M.L., A.M.V. Fournier, **A.J. Lawson**, B. Marcot, M.S. Woodrey, J.E. Lyons. 2025. Co-Production of an Adaptive Management Framework for Prescribed Fire to Benefit Wildlife in Marsh Ecosystems in the Gulf. *Annual Meeting of the Waterbird Society*; Traverse City, Michigan.

Stantial, M.L., **A.J. Lawson**, A.M.V. Fournier, A.J. Godar, C. Kross, M. Woodrey, J. Lyons. 2025. Co-Production of an Adaptive Management Framework for Prescribed Fire to Benefit Wildlife in Marsh Ecosystems of the Gulf of Mexico. *Waterbirds Society Annual Conference*; San Jose, Costa Rica, January 6–9, 2025.

†Vennum, C.R., M.J. Eaton, P.E. Howell, B.A. Millsap, I. Rangwala, O.J. Robinson, **A.J. Lawson**. 2024. Incorporating Climate Uncertainty into Integrated Population Models for Raptors with Contrasting Migration Strategies. *Raptor Research Foundation*; Charlotte, North Carolina.

October 22-27, 2024.

Lawson, A.J., J.H. Gardner, M.L. Stantial, T. Regan, C.S. Rushing. 2024. Value added conservation: prioritizing critical uncertainties for collaborative conservation of Rosy-Finches in a warming world. *The Wildlife Society Annual Conference*; Baltimore, Maryland. October 19-23, 2024.

†Vennum, C.R., M.J. Eaton, P.E. Howell, B.A. Millsap, I. Rangwala, O.J. Robinson, **A.J. Lawson**. 2024. Incorporating Climate Uncertainty into Integrated Population Models for Raptors with Contrasting Migration Strategies. *The Wildlife Society Annual Conference*; Baltimore, Maryland. October 19-23, 2024.

†Boland, K.C., P.L. Cutler, G.A. Davidson, **A.J. Lawson**, †D.M. Osterhaus, M.J. Desmond. 2024. Comparing detection methods to quantify mass avian mortality on the White Sands Missile Range. *American Ornithological Society Annual Conference*; Estes Park, Colorado. October 1–5, 2024.

†Osterhaus, D.M., K.C. Boland, **A.J. Lawson**, K.G. Horton, D.M. Van Doren, T.F. Wright, M.J. Desmond. 2024. Small lights, big problems? Behavioral alteration in migrating birds around artificial light at night. *American Ornithological Society Annual Conference*; Estes Park, Colorado. October 1–5, 2024.

†Watson, W.A., C.C. Borgman, S. Cox, T.F. Wright, **A.J. Lawson**. 2024. Rosy-finch survival estimation based on long-term wintering data in New Mexico. *Joint Annual Meeting of Arizona/New Mexico Chapters of The Wildlife Society*; Flagstaff, Arizona. February 1–3rd, 2024.

†Zimba, H., M. McCaffery, C. Wiese, S. Hillard, **A.J. Lawson**. 2024. Burrow site selection of translocated juvenile Bolson tortoises. *Joint Annual Meeting of Arizona/New Mexico Chapters of The Wildlife Society*; Flagstaff, Arizona. February 1–3rd, 2024.

†Vennum, C.R., M.J. Eaton, P.E. Howell, B.A. Millsap, I. Rangwala, O.J. Robinson, and **A.J. Lawson**. 2023. Incorporating Dynamic Climate Effects into Decision Support Models to Inform Raptor Take Limits for Swainson's Hawks in the Central Flyway. *Chihuahuan Desert Conference*; El Paso, Texas. November 15–17, 2023.

†Watson, W.A., C.C. Borgman, S. Cox, T.F. Wright, **A.J. Lawson**. 2023. Inferring demographic trends of Rosy-finches from long-term wintering data in New Mexico. *Chihuahuan Desert Conference*; El Paso, Texas. November 15–17, 2023.

†Zimba, H., M. McCaffery, C. Wiese, S. Hillard, **A.J. Lawson**. 2023. Daily Activity Patterns and Home Range of Translocated Bolson Tortoises. *Chihuahuan Desert Conference*; El Paso, Texas. November 15–17, 2023.

†Christensen, E., C.P. McGowan, D. Castellanos, J. Culbertson, C. Eakin, B. Firmin, P.K. London, L. Pearson, E. Rivenbark, **A.J. Lawson**. 2023. Evaluating Sensitivity of Expert Elicited Parameters Within Decision Support Population Viability Analyses. *The Wildlife Society Annual Conference*; Louisville, Kentucky. November 5–9, 2023.

†Davis, K.P., E.R. Bjerre, C.W. Boal, M.A. Boggie, M.J. Eaton, J.H. Herner-Thogmartin, P.E. Howell, K. Madden, B. Millsap, O.J. Robinson, H. White, G. Zimmerman, **A.J. Lawson**. 2023. Collaborative Research Prioritization to Evaluate Potential Drivers of Population Declines for the American Kestrel in North America. *The Wildlife Society Annual Conference*; Louisville, Kentucky. November 5–9, 2023.

Lawson, A.J., M. Correll, K.D. Dunham, A.D. Smith, M.L. Stantial, and J.E. Lyons. 2023. Accounting for model convergence failure when evaluating tradeoffs in meta-population monitoring program designs for cryptic species. *The Wildlife Society Annual Conference*; Louisville, Kentucky. November 5–9, 2023.

†Davis, K.P., E.R. Bjerre, C.W. Boal, M.A. Boggie, M.J. Eaton, J.H. Herner-Thogmartin, P.E. Howell, K. Madden, B. Millsap, O.J. Robinson, H. White, G. Zimmerman, **A.J. Lawson**. 2023. Collaborative Research Prioritization to Evaluate Potential Drivers of Population Declines for the American Kestrel in North America. *Raptor Research Foundation*; Albuquerque, New Mexico.

October 17–22, 2023.

Howell, P.E., †K.P. Davis, G. Zimmerman, H. White, **A.J. Lawson**, M.J. Eaton, M.A. Boggie, O.J. Robinson, K. Madden, B. Millsap. 2023. Estimating American Kestrel population vital rates at a broad geographic scale. *Raptor Research Foundation*; Albuquerque, New Mexico. October 17–22, 2023.

†Boland, K.C., **A.J. Lawson**, M.J. Desmond. 2023. Comparing detection methods to quantify mass avian mortality on the White Sands Missile Range. *New Mexico Ornithological Society*; Carlsbad, New Mexico. April 29-30, 2023.

†Lee, J.B., D.J. Vargo, J. Bulger, E. Goldstein, M.A. Boggie, **A.J. Lawson**. 2022. Reintroduction of white-tailed ptarmigan in New Mexico. *Wilson Ornithological Society Meeting*; Virtual. July 2022.

Stantial, M.L., A.M.V. Fournier, A.J. Godar, **A.J. Lawson**, P.K. Kappes, C.S. Kross, M.S. Woodrey, J.E. Lyons. 2022. Informing the use of prescribed fire in an adaptive management framework for Gulf of Mexico high marshes using an expert-based Bayesian decision network. *Gulf of Mexico Conference*; Baton Rouge, Louisiana. April 25-28, 2022.

†Lee, J.B., D.J. Vargo, J. Bulger, E. Goldstein, M.A. Boggie, **A.J. Lawson**. 2022. Reintroduction of white-tailed ptarmigan in New Mexico. *New Mexico Ornithological Society Meeting*; Virtual. March 2022.

Contributed Posters (Presenter underlined if not first author, † student or postdoc author)

†Crowl, L.S. †K.P. Davis, **A.J. Lawson**. 2024. Is nest defense behavior in American Kestrels is positively associated with higher nest success? *American Ornithological Society Annual Conference*; Estes Park, Colorado. October 1–5, 2024.

†Matos-Sepulveda, C., T.F. Wright, D.P. Collins, P. Lavretsky, **A.J. Lawson**. 2024. Movement and home range of Mexican Ducks and Mallards in southeastern Arizona. *American Ornithological Society Annual Conference*; Estes Park, Colorado. October 1–5, 2024.

†Presser, K., †W.A. Watson, C.C. Borgman, S. Cox, E. Duvuvuei, **A.J. Lawson**. 2024. Intra-feather variation in stable hydrogen isotopes of rosy-finch feathers. *American Ornithological Society Annual Conference*; Estes Park, Colorado. October 1–5, 2024.

Wright, T.F., **A.J. Lawson**, J.M. Fair, M.J. Desmond. 2024. Prepping for disaster ecology: the Avian Migration Program at New Mexico State University. *American Ornithological Society Annual Conference; Estes Park, Colorado*. October 1–5, 2024.

Fair, J.M., **A.J. Lawson**, T.F. Wright, M.J. Desmond. 2024. Ecological Security and Ecological Disasters: Defining the Fields and Applications for the Future Environmental and Climate Resilience. *Symposium on Climate Security*; Santa Fe, New Mexico. June 26-27, 2024.

†Matos-Sepulveda, C., T.F. Wright, D.P. Collins, and **A.J. Lawson**. 2023. Stock tank use by Mallard and Mexican Ducks in arid southeastern Arizona. *Chihuahuan Desert Conference*; El Paso, Texas. November 15-17, 2023.

PROFESSIONAL ACTIVITIES

Invited Reviewing

Journals:	Animal Conservation, Avian Conservation and Ecology, Biological Conservation, BioScience, Chelonian Conservation and Biology, Chemosphere, Conservation Science and Practice, Ecological Applications, Ecology, Ecosphere, Endangered Species Research, Fire Ecology, Global Ecology and Conservation,

	Hydrobiologia, Journal of Animal Ecology, Journal of Applied Ecology, Journal of Avian Biology, Journal of Fish and Wildlife Management, Journal of Wildlife Management, Ornithological Applications, Restoration Ecology, Royal Society Open Science, Scientific Reports. I also provide internal review for the U.S. Geological Survey and U.S. Fish and Wildlife Service Species Status Assessments.
Conferences:	The Wildlife Society (2014–present), North American Congress for Conservation Biology (2016–present)
Fellowships:	U.S. Fish and Wildlife Service Sea Duck Joint Venture Graduate Student Fellowship (2021), Graduate Women in Science (2020, 2025)
Grants	Minnesota's Environment and Natural Resources Trust Fund (2027)

Technical Advising

2026 – Present	Western Association of Fish and Wildlife Agencies, Lesser prairie-chicken interstate working group
2023 – Present	USFWS Bolson tortoise technical working group
2019 – 2024	USFWS Species Status Assessments for the alligator snapping turtle and Suwannee alligator snapping turtle
2016 – 2026	Crocodile Specialist Group, Species Survival Coalition, International Union for the Conservation of Nature
2013 – 2015	American alligator public harvest program structured interagency working group

Organized Symposia

2024 Value of information: tools to identify the uncertainties that matter to decision makers. The Wildlife Society Annual Conference, Baltimore, Maryland

2022 Ask the experts: Applications and future directions of using expert elicitation to improve wildlife management decisions. The Wildlife Society Annual Conference, Spokane, Washington

Moving the needle on avian conservation in the southwestern US: grand challenges and opportunities, Wilson Ornithological Society Annual Conference, Santa Fe, New Mexico

2021 Ecology and conservation of Eastern Black Rail: Road to recovery through management. The Wildlife Society Annual Conference, Virtual

2019 Merging Practice & Life-history Theory for Gamebird Populations: Applied and Basic Solutions to Complex Management Problems. The Wildlife Society Annual Conference, Reno, Nevada

2017 Structured Decision Making: A Vehicle for Navigating the Crossroads of Cultures in Wildlife Management. The Wildlife Society Annual Conference. Albuquerque, New Mexico

2016 Applications of Decision Analysis in Wildlife Population Management. The Wildlife Society Annual Conference. Raleigh, North Carolina

Facilitation and Decision Coaching

Lead coach, State Water Contractors structured decision making to identify high-priority study topics for research funding. August, September 2026.

Facilitator, Horizon scan of ecological and conservation issues in the southwest U.S. New Mexico State University, May 2026.

Lead coach, Rio Grande silvery minnow structured decision making rapid prototyping workshop. Albuquerque, New Mexico, August 2025.

Co-coach, Cape Sable Seaside Sparrow research and monitoring prioritization. Everglades National Park, July 2025.

Lead coach, American kestrel research prioritization using constructed value of information. Albuquerque, New Mexico, February 2023.

Lead coach, Rosy-Finch Interagency Working Group research prioritization using constructed value of information. Multiple virtual workshops 2022–2023.

Co-coach, National Park Service, Development of evaluation criteria for coastal infrastructure investments. Multiple virtual workshops 2022–2023.

Co-coach, NOAA Firebird Gulf of Mexico adaptive management workshops. Virtual, September 2020, 2022.

Co-coach and co-organizer, Atlantic Coast Eastern Black Rail Adaptive Management Workshops. Titusville, Florida, January 2020, March 2021.

Co-coach, U.S. Fish and Wildlife Service - Adaptive management double-loop review workshop. USGS Upper Midwest Environmental Science Center, La Crosse, Wisconsin, February 2020.

University Service

2025 – Present	**Member, Seminar Committee**, Dept. of Fish, Wildlife, and Conservation Ecology, New Mexico State University
2024 – Present	**Member, Graduate Curriculum Committee**, Dept. of Fish, Wildlife, and Conservation Ecology, New Mexico State University
2024 – 2025	**Chair, Diversity, Equity, Inclusion, and Justice, Committee**, Dept. of Fish, Wildlife, and Conservation Ecology, New Mexico State University
2022	**Search Committee for Assistant Unit Leader–Fisheries**, USGS New Mexico Cooperative Fish and Wildlife Research Unit, New Mexico State University
2022	**Search Committee for Wildlife Ecologist Faculty**, Dept. of Fish, Wildlife, and Conservation Ecology, New Mexico State University
2013 – 2019	**Graduate student seminar coordinator**, Speaker Series in Ecology and Natural Resources, Clemson University
2017	**Graduate Student Representative**, Search Committee for Fisheries Ecologist Faculty, Clemson University
2015 – 2017	**Poster Judge**, Clemson Biological Sciences' Annual Student Symposium
2015 – 2017	**Poster Judge**, Undergraduate Research Symposium, Clemson University
2015 – 2016	**Secretary of Communication**, Clemson University Graduate Student Government

2015 – 2015 **Dean's Graduate Student Advisory Board**, College of Agriculture, Forestry, and Environmental Sciences, Clemson University

2013 **Moderator**, Biology Bowl, South Carolina High School Biology Merit Exam

Professional Service

2025–Present **Publication Awards Committee**, The Wildlife Society Annual Conference

2024 **Invited Panel Member**, Fitting in with the feds: How we became U.S. federal employees (and how you can too!), The Wildlife Society Annual Conference

2022–2023 **Member,** Digital Measures Working Group, U.S. Geological Survey Cooperative Research Unit Program

2021–2024 **Chair-Elect/Chair/Past-Chair**, Biometrics Working Group, The Wildlife Society

2021, 2022 **Invited Panel Member**, A Future PI Training Session: How Do I get the Job, And What Do I do Once I have it, The Wildlife Society Annual Conference

2021 **Interview Panel Member**, USFWS Branch of SSA Science Support cluster hire

2019–2020 **Board Member**, Biometrics Working Group, The Wildlife Society

2016 **Social Media Policy Committee**, USGS South Carolina Cooperative Research Unit

2013 **Session Moderator**, Conservation and Management of Birds. The Wildlife Society Annual Conference. Milwaukee, WI

2011 **Judge**, Nevada State Waterfowl Junior Stamp Competition, U.S. Fish and Wildlife Service