VICTORIA J. DREITZ

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EDUCATION

- 2000 Ph.D. Department of Biology, University of Miami, Coral Gables, Florida.

 Dissertation Title: *The Influence of Environmental Variation on the Snail Kite Population in Florida*.
- 1994 B.S. Biological Science, Colorado State University, Fort Collins, Colorado.
 Undergraduate Research Thesis: *An artificial perch method for obtaining repeated body mass measurements on raptors without retrapping.*

WORK EXPERIENCE

2022-	Professor & Avian Science Center Director, Wildlife Biology Program,
	Department of Ecosystems and Conservation Sciences, W.A. Franke College of
	Forestry and Conservation, University of Montana, Missoula, Montana
2023-2024	Interim Wildlife Biology Program Director, Full Professor & Avian Science
	Center Director, Wildlife Biology Program, Department of Ecosystems and
	Conservation Sciences, W.A. Franke College of Forestry and Conservation,
	University of Montana, Missoula, Montana
2017-2022	Associate Professor & Avian Science Center Director, Wildlife Biology Program,
	Department of Ecosystems and Conservation Sciences, W.A. Franke College of
	Forestry and Conservation, University of Montana, Missoula, Montana
2013-2017	Assistant Professor & Avian Science Center Director, Wildlife Biology Program,
	Department of Ecosystems and Conservation Sciences, W.A. Franke College of
	Forestry and Conservation, University of Montana, Missoula, Montana
2011-2013	Research Assistant Professor, Wildlife Biology Program, Department of
	Ecosystems and Conservation Sciences, W.A. Franke College of Forestry and
	Conservation, University of Montana, Missoula, Montana
2004-2013	Faculty Affiliate, Department of Fish, Wildlife, and Conservation Biology,
	Colorado State University, Fort Collins, Colorado
2010-2012	Faculty Affiliate, Department of Geography, University of Denver
2003-2011	Research Scientist, Colorado Division of Wildlife, Fort Collins, Colorado
2002-2003	Research Associate, Colorado Natural Heritage Program and US Geological
	Survey-Biological Resources Division, Fort Collins, Colorado

2001-2002	Post-Doctoral Research Associate, Natural Resource Ecology Laboratory,
	Colorado State University, Fort Collins, Colorado
2000-2001	Post-Doctoral Research Associate, Florida Cooperative Fish and Wildlife
	Research Unit and the University of Florida, Gainesville, Florida

TEACHING EXPERIENCE

Teach 3-8 credits per academic year of courses in the Wildlife Biology Program at the University of Montana. I renovated and expanded the core curriculum of undergraduate courses to provide the knowledge basis required for students to be competitive in the contemporary job market for wildlife biologists. I taught an entry graduate-level on Research Design that includes educating students on commonly used statistical software in Wildlife Biology. In addition, I co-developed a graduate-level course with US Fish and Wildlife Service personnel (WILD 595) that provides technical skill training and professional development, working side-by-side with natural resource professionals.

- Careers in Natural Resources (NRSM 180–2 credits)
- Careers in Wildlife Biology (WILD 180–2 credits)
- Fish and Wildlife Interest Group (WILD 170–1 credit, 3 sections)
- Introduction to Biostatistics/Honors (WILD 240 3 credits)
- Wildlife Habitat Conservation and Management (WILD 370–3 credits, expanded to 4 credits)
- Senior Wildlife Seminar (WILD 494 1 credit, 3 sections)
- Research Design Laboratory (WILD 541 1 credit)
- Professional Development Series Google Earth Engine for systems ecology and conservation design (WILD 595–2 credits)

PUBLICATIONS

Graduate Students, postdocs, and research associates advisees denoted in **bold** (undergraduates are also *italics*)

Journal articles published

- **Simpson, E.G.**, L. I. Berkeley, **S. P. Coons**, D. Messmer, M. Szczypinski, and V.J. Dreitz. *In Review.* Interannual variation in greater sage-grouse hen survival driven by climate in the working landscape. *Ecological Applications*.
- **Helm, J.E., E.G. Simpson**, L.I. Berkeley, **S.P. Coons**, M. Szczypinski, V.J. Dreitz. *In Review*. The influence of a conservation-based grazing program on greater sage-grouse habitat selection across temporal scales. *Conservation Science and Practice*.
- **Reintsma, K.M.**, M. Szczypinski, S.W. Running, **S.P. Coons**, and V.J. Dreitz. 2024. Sagebrush steppe productivity, environmental complexity, and grazing: insights from remote sensing and mixed-effect modeling. *Rangeland Ecology and Management* 95:20-29. doi.org/10.1016/j.rama.2024.04.001

- Berkeley, L.I., M. Szczypinski, **S.P. Coons**, V.J. Dreitz, and J.A. Gude. 2024. Greater sagegrouse chick mortality risk relative to livestock grazing management, environmental factors, and morphometric measurements. *Journal of Wildlife Management* 88: 88:e22596. doi.org/10.1002/jwmg.22596
- Coons, S.P., K.M. Reintsma, and V.J. Dreitz. 2024. Co-occurrence and nest success of thick-billed and chestnut-collared longspurs in a central Montana rangeland. *Western North American Naturalist* 84:219-224. doi.org/10.3398/064.084.0206
- **Ruth, K.A.**, L.I. Berkeley, **K.M. Strickfaden**, and V.J. Dreitz. 2023. Density dependence of songbird demographics in grazed sagebrush steppe. *PLoS ONE* 18: e0289605. doi.org/10.1371/journal.pone.0289605
- **Fagre, D.A., W.M. Janousek**, and V.J. Dreitz. 2022. Avian species richness and abundance shows stronger response to bison grazing intensity than ecosystem productivity. *Ecosphere* 13:e4299. doi.org/10.1002/ecs2.4299
- **Reintsma, K.M., M.M. Delamont**, L.I. Berkeley, and V.J. Dreitz. 2022. Thick-billed longspur (*Rhynchophanes mccownii*) reproduction shows minimal short-term response to conservation program grazing regime. *Wilson Journal of Ornithology* 34: 365-372. doi.org/10.1676/21-00074.
- Donnelly, J. P., S. L. King, J. Knetter, J. H. Gammonley, V.J. Dreitz, B. A. Grisham, M. C. Nowak, and D. P. Collins. 2021. Migration efficiency sustains connectivity across agroecological networks supporting sandhill crane migration. *Ecosphere* 12(4) e03543. doi.org/10.1002/ecs2.3543
- **Janousek, W.M.**, and V.J. Dreitz. 2020. Testing Huston's dynamic equilibrium model along fire and forest productivity gradients using avian monitoring data. *Diversity and Distributions* 26(12): 1715-1726. doi.org/10.1111/ddi.13164
- Stickfaden, K.M., D.A. Fagre, J.D. Golding, A.H. Harrington, K.M. Reintsma, J.D. Tack, and V.J. Dreitz. 2020. Dependent double-observer method reduces false-positive errors in auditory avian survey data. *Ecological Applications* 30(2): e02026. doi.org/10.1002/eap.2026
- *Reintsma*, *K.M.*, A.H. Harrington, and V.J. Dreitz. 2019. Validation of a novel time-to-event nest density estimator on passerines: An example using Brewer's sparrows (Spizella breweri). *PLoS ONE* 12:e0227092. doi.org/10.1371/journal.pone.0227092
- **Janousek, W.M.**, J.A. Hicke, A.J.H. Meddens, and V.J. Dreitz. 2019. The effects of mountain pine beetle outbreaks on avian communities in lodgepole pine forests across the greater Rocky Mountain region. *Forest Ecology and Management* 44:374-381. doi.org/10.1016/j.foreco.2019.04.047
- Donnelly, J.P., D.E. Naugle, D.P. Collins, B.D. Dugger, B.W. Allred, J.D. Tack, and V.J. Dreitz. 2019. Synchronizing conservation to seasonal wetland hydrology and waterbird migration in semi-arid landscapes. *Ecosphere* 10(6):e02758. doi.org/10.1002/ecs2.2758
- **Janousek, W.M.**, B.A. Hahn, and V.J. Dreitz. 2019. Disentangling monitoring programs: design, analysis, and application considerations. *Ecological Applications* 29(5): e01922. doi.org/10.1002/eap.1922 (top 10% downloaded article between Jan 2018 and Dec 2019)
- Donnelly, J.P., B.W. Allred, D. Perret, N.L. Silverman, J.D. Tack, V.J. Dreitz, J.D. Maestas, and D.E. Naugle. 2018. Seasonal drought in North America's sagebrush biome structures

- dynamic mesic resources for sage-grouse. *Ecology and Evolution* 8:12492-12505. doi.org/10.1002/ece3.4614
- **Powell, J.**, B. Martin, V.J. Dreitz, and B.W. Allred. 2018. Grazing preferences and vegetation feedback of the fire-grazing interaction in the Northern Great Plains. *Rangeland Ecology and Management* 71(1) 45-52. doi.org/10.1016/j.rama.2017.09.003
- Pavlacky, D.C. Jr., P.M. Lukacs, J.A. Blakesley, R.C. Skorkowsky, D.S. Klute, B.A. Hahn, V.J. Dreitz, T.L. George, and D.J. Hanni. 2017. A statistically rigorous sampling design to integrate large-scale monitoring and wildlife management of bird conservation regions. *PLoS ONE* 12(10): e0185924. doi.org/10.1371/journal.pone.0185924
- **Golding, J.D.** and V.J. Dreitz. 2017. Songbird response to rest-rotation and season-long cattle grazing in a grassland sagebrush ecosystem. *Journal of Environmental Management* 204: 605-612. doi.org/10.1016/j.jenvman.2017.09.044
- **Golding, J.D.**, J.J. Nowak, and V.J. Dreitz. 2017. A multispecies dependent double-observer model: A new method for estimating multispecies abundance. *Ecology and Evolution* 7:3425–3435. doi.org/10.1002/ece3.2946
- Dreitz, V.J., **L.T. Stinson**, B.A. Hahn, **J.D. Tack**, and P.M. Lukacs. 2017. A large-scale perspective for managing prairie avifauna assemblages across the western US: influences of habitat, land ownership and latitude. *PeerJ* 5:e2879. doi.org/10.7717/peerj.2879
- Donnelly, J.P., **J.D. Tack**, K.E. Doherty, D.E. Naugle, B.W. Allred, and V.J. Dreitz. 2017. Extending conifer removal and landscape protection strategies from sage-grouse to songbirds, a range-wide assessment. *Rangeland Ecology and Management* 70:95-105. doi.org/10.1016/j.rama.2016.10.009
- **Golding, J.D.** and V.J. Dreitz. 2016. Comparison of removal-based methods for estimating abundance of five species of prairie songbirds. *Journal of Field Ornithology* 87:417-426. doi.org/10.1111/jofo.12176
- Hauer, F.R., H. Locke, V.J. Dreitz, M. Hebblewhite, W.H. Lowe, C.C. Muhlfeld, C.R. Nelson, M.F. Proctor, and S.B. Rood. 2016. Gravel-bed river floodplains are the ecological nexus of glaciated mountain landscapes. *Science Advances* 2,e1600026. doi.org/10.1126/sciadv.1600026
- Walsh, D.P., V.J. Dreitz, and D. Heisey. 2015. Integrated survival analysis using an event-time approach in a Bayesian framework. *Ecology and Evolution*. 5:769-780. doi.org/10.1002/ece3.1399
- **Riordan, M.M.**, P.M. Lukacs, K.P. Huyvaert, and V.J. Dreitz. 2015. Evaluating offspring early stage sex ratios in mountain plover. *Avian Ecology and Conservation* [online]. doi.org/10.5751/ACE-00772-100203
- Stinson, L.T. and V.J. Dreitz. 2014. Within-season nest reuse by mountain plovers (*Charadrius montanus*) in eastern Colorado. *Western North American Naturalist* 74:130-132. doi.org/10.3398/064.074.0114
- Dreitz, V.J., R.Y. Conrey, and S.K. Skagen. 2012. Drought and cooler temperatures are associated with higher nest survival in mountain plovers. *Avian Conservation and Ecology*: [online]. doi.org/10.5751/ACE-00519-070106
- Dreitz, V.J., L.A. Baeten, T. Davis, and M.M. Riordan. 2011. Testing radio transmitter attachment techniques on chicks of galliforms. *Wildlife Society Bulletin* 35:475-480. doi.org/10.1002/wsb.73

- Dreitz, V.J. 2010. Mortality of parental mountain plovers (*Charadrius montanus*) during the post-hatching stage. *Avian Conservation and Ecology*: [online]. doi.org/10.5751/ACE-00374-050104
- Dinsmore, S.J., M.B. Wunder, V.J. Dreitz, and F.L. Knopf. 2010. An assessment of factors affecting population growth of the Mountain Plover. *Avian Conservation and Ecology*: [online]. doi.org/10.5751/ACE-00378-050105
- Dreitz, V.J. 2009. Parental behavior of a precocial species: implications for juvenile survival. *Journal of Applied Ecology* 46:870-878. doi.org/10.1111/j.1365-2664.2009.01658.x
- **Tipton, H.C.,** P.F. Doherty, Jr., and Dreitz, V.J. 2009. Abundance and density of mountain plover (*Charadrius montanus*) and burrowing owl (*Athene cunicularia*) in eastern Colorado. *Auk* 126:493-499. doi.org/10.1525/auk.2009.07172
- Augustine, D.J., S.J. Dinsmore, M.B. Wunder, V.J. Dreitz, and F.L. Knopf. 2008. Response of mountain plovers to plague-driven dynamics of black-tailed prairie dog colonies. *Landscape Ecology* 23:689-697. doi.org/10.1007/s10980-008-9230-y
- **Tipton, H.C.**, V.J. Dreitz, and P.F. Doherty, Jr. 2008. Occupancy of mountain plover and burrowing owl in Colorado. *Journal of Wildlife Management* 72:1001-1006. doi.org/10.2193/2007-168
- Muths, E., and V.J. Dreitz. 2008. Monitoring programs to assess reintroduction efforts: a critical component in recovery. *Animal Biodiversity and Conservation* 31.1:47-56. abc.museucienciesjournals.cat/files/ABC-31-1-pp-47-56.pdf
- Dreitz, V.J. and F.L. Knopf. 2007. Mountain plovers and the politics of research on private lands. *BioScience* 8:681-687. doi.org/10.1641/B570808
- Dreitz, V.J. 2006. Issues in species recovery: an example based on the Wyoming toad. *BioScience* 56:765-771. doi.org/10.1641/0006-3568(2006)56[765:IISRAE]2.0.CO;2
- Dreitz, V.J., P.M. Lukacs, and F.L. Knopf. 2006. Monitoring low density avian population: an example using mountain plovers. *Condor* 108:700-706. doi.org/10.1093/condor/108.3.700
- **Mettenbrink, C.W.**, V.J. Dreitz, and F.L. Knopf. 2006. Nest success of mountain plover relative to anthropogenic edges in eastern Colorado. *Southwest Naturalist* 51:191-196. doi.org/10.1894/0038-4909(2006)51[191:NSOMPR]2.0.CO;2
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- Lukacs, P.M., V.J. Dreitz, F.L. Knopf., and K.P. Burnham. 2004. Estimating survival probabilities of unmarked dependent young when detection is imperfect. *Condor*. 106:927-932. doi.org/10.1650/7583
- Dreitz, V.J., W.M. Kitchens, and D.L. DeAngelis. 2004. The effects of natal dispersal and environmental state on survival of juvenile snail kites in Florida. *Auk* 121:894-903. doi.org/10.1093/auk/121.3.894
- Wolfe, L.L., M.M. Conner, T.H. Baker, V.J. Dreitz, K.P. Burnham, E.S. Williams, N.T. Hobbs, and M.W. Miller. 2002. Evaluation of antemortem sampling to estimate chronic wasting disease prevalence in free-ranging mule deer. *Journal of Wildlife Management* 66:564-573. doi.org/10.2307/3803124

- Bennetts, R.E., W.M. Kitchens, and V.J. Dreitz. 2002. Influence of an extreme high water event on survival, reproduction, and distribution of snail kites in Florida, USA. *Wetlands*: 366-373. IoAEHW]2.0.CO;2.pdf
- Dreitz, V.J., J.D. Nichols, J.E. Hines, R.E. Bennetts, W.M. Kitchens, and D.L. DeAngelis. 2002 The use of resighting data to estimate the rate of population growth of the snail kite in Florida. *Journal of Applied Statistics* 29:609-623. doi.org/10.1080/02664760120108854
- Dreitz, V.J., R.E. Bennetts, B. Toland, W.M. Kitchens, and M.W. Collopy. 2002. Snail kite nest success and water levels: a reply to Beissinger and Snyder. *Condor* 104:218-222. doi.org/10.1093/condor/1041.216
- Pine, W.E., M.S. Allen, and V.J. Dreitz. 2001. Population viability of the Gulf of Mexico sturgeon: Inferences from capture-recapture and age-structured models. *Transactions of the American Fisheries Society* 130:1164-1174. doi.org/10.1577/1548-8659(2001)130<1164:PVOTGO>2.0.CO;2
- Dreitz, V.J., R.E. Bennetts, B. Toland, W.M. Kitchens, and M.W. Collopy. 2001. Spatial and temporal variability in nest success of snail kites in Florida: a meta-analysis. *Condor* 103:502-509. doi.org/10.1093/condor/103.3.502
- Dreitz, V.J. and J.A. Duberstein. 2001. The use of red mangrove as nesting substrate for snail kites in Florida. *Florida Field Naturalist* 29:49-50. scholarworks.umt.edu/wildbio pubs/59/
- Bennetts, R.E., V.J. Dreitz, W.M. Kitchens, J.E. Hines, and J.D. Nichols. 1999. Annual survival of snail kites in Florida: radio telemetry versus capture-resighting data. *Auk* 116:435-447. doi.org/10.2307/4089377
- Dreitz, V.J. and M.R. Shannon. 1998. The occurrence of snail kite nests with four fledglings in Florida. *Florida Field Naturalist* 26:122-123. scholarworks.umt.edu/wildbio_pubs/58/
- Bennetts, R.E., K. Golden, V.J. Dreitz, and W.M. Kitchens. 1998. The proportion of snail kites attempting to breed and the number of breeding attempts per year in Florida. *Florida Field Naturalist* 26:77-108. scholarworks.umt.edu/wildbio-pubs/57/
- Bennetts, R.E. and V.J. Dreitz. 1997. Possible use of wading birds as beaters by snail kites, boattailed grackles, and limpkins. *Wilson Bulletin* 109:169-173. scholarworks.umt.edu/wildbio-pubs/63

Book Chapters & Invited Papers

- **Fagre, D.A.**, **W.M. Janousek**, and V.J. Dreitz. 2023. Avian community responses to bison grazing in the northern range of Yellowstone National Park. *In* Yellowstone's birds: diversity and abundance in the world's first national park. D.W. Smith, L.E. Walker, K.E. Duffy (eds). (Book Chapter)
- **Haines, D.B.**, D.W. Smith, T.E. Katzner, and V.J. Dreitz. 2023. The haunting raptor: Yellowstone's golden eagles. *In* Yellowstone's birds: diversity and abundance in the world's first national park. D.W. Smith, L.E. Walker, K.E. Duffy (eds.). (Book Chapter)
- Bishop, C.J. and V.J. Dreitz. 2022. Capture and monitoring techniques used to study and manage wildlife. *In* Introduction to wildlife management and conservation in North America. E. Gomez, C. Bishop, J. Organ, and T.J. Rider (eds). (Book Chapter)

- Knopf, F.L. and V.J. Dreitz. 2008 (Published 2011). Population and politics of a Plover. *Endangered Species Update:* 110-114. (Invited Paper)
- Dreitz, V.J. 2010. Transmitters for tiny chicks. Wildlife Professional 4:71 (Invited paper)
- Lukacs, P.M., and V.J. Dreitz. 2009. Young survival from marked adults. *In* Program MARK: a gentle introduction, E.Cooch and G.C. White (eds.).
 - http://www.phidot.org/software/mark/docs/book/ (Book Chapter)

Graduate Student Thesis

- Euclide, M. 2024. Navigating conservation planning for a small land trust. Professional MS, University of Montana.
- Helm, J.E. 2023. Greater sage-grouse in a grazed landscape: habitat selection, demographic rates, and population trends in central Montana. PhD Dissertation, University of Montana.
- Reintsma, K.M. 2023. Sagebrush steppe songbird conservation: inferences using remote sensing data and a novel reproduction model. PhD Dissertation, University of Montana.
- Coons, S.P. 2021. Monitoring the wetland landscape: White-Faced Ibis (*Plegadis chihi*) breeding habitat as a model assemblage. MS Thesis, University of Montana.
- Haines, D.B. 2020. Golden Eagle resource selection and environmental drivers of reproduction in the northern range of Yellowstone National Park. MS Thesis, University of Montana.
- Ruth, K.A. 2019. Population and breeding ecology of sagebrush steppe songbirds. MS Thesis, University of Montana.
- Janousek, W.M. 2018. Evaluating population trends and species richness-disturbance relationship using avian monitoring data. PhD Dissertation, University of Montana.
- Fagre, D.A. 2018. Avian community responses to bison grazing in North American Intermountain Grasslands. MS Thesis, University of Montana.
- Golding, J.D. 2015. Assessing changes in avian communities. MS Thesis, University of Montana.
- Messinger, Lindsey. 2012. Inter-species interactions: effects of spatial proximity of breeding burrowing owls (*Athene cunicularia*) and mountain plovers (*Charadrius montanus*) on mountain plover nest success. MS Thesis, University of Denver (co-advisor)
- Tipton, H.C. 2007. Occupancy, abundance and density of Colorado breeding grassland birds: estimation and habitat correlations, MS Thesis, Colorado State University (co-advisor).

GENERATED FUNDING

While at the University of Montana, I have generated external funding totals of \$7,655,000 from grant generation and philanthropic initiatives.

Philanthropic Capacity Building Awards:

- 2017 \$150K, Pheasants Forever, Inc., in support of post-doctoral research associate.
- 2017 \$100K, Yellowstone Forever, in support of graduate research assistant.
- 2016 \$15K, Ducks Unlimited, in support of research associate.
- 2015 \$51K, Bill Gabriel Avian Center Endowed Scholarship, in support of undergraduate students.

Research Grants (listed by end date)

- 06/2024-05/2027. Influence of conservation decisions on common loons in the Greater Yellowstone Ecosystem: An integrated population approach. Ricketts Conservation Foundation (\$200K). PI: V.J. Dreitz
- 11/2022-12/2025. Informing Multi-scale Strategic Habitat Conservation for Priority Grassland Birds in the Northern Great Plains. Institute for Wetland and Waterfowl Research and US Fish and Wildlife Service (\$210K). PI: V.J. Dreitz
- 01/2024-05/2029. Interplay of bison and invasive plants on songbird diversity. Jackson Fork Ranch (\$465K). PIs: A. Faist and V.J. Dreitz
- 01/2024-05/2029. Yellowstone cutthroat trout and osprey: how do we conserve migratory native species in an ecosystem undergoing unprecedented change? Jackson Fork Ranch (\$735K). PIs: A. Whiteley and V.J. Dreitz.
- 12/2023-12/2025. Conserving freshwater ecosystems by integrating with avian populations through AI. Franke Fresh Water Conservation Initiative. Franke College of Forestry and Conservation (\$25K). PI: V.J. Dreitz
- 07/2021-06/2024. Sage-grouse, songbird and insects in sagebrush systems. Montana, Fish, Wildlife and Parks and US Fish and Wildlife Service Wildlife and Sport Fish Restoration Program (\$336K). PIs: V.J. Dreitz, L. Berkeley, J. Mitchell, and M. Mitchell.
- 08/2020-08/2024. Ecological Modeling and Monitoring to Inform Avian Conservation in the Intermountain West Phase II. US Fish and Wildlife Service Migratory Bird Program and Intermountain West Joint Venture (\$625K). PI: V.J. Dreitz
- 08/2020-09/2024. Demographic and movement ecology of eagles in Alaska (\$88K). US Fish and Wildlife Service Migratory Bird Monitoring. PI: V.J. Dreitz.
- 04/2016-03/2022. Songbird community response to rest-rotation grazing. Montana, Fish, Wildlife and Parks and US Fish and Wildlife Service Wildlife and Sport Fish Restoration Program (\$830K). PIs: V.J. Dreitz, L. Berkeley, and M. Mitchell.
- 09/2018-06/2022. Win-win for agricultural and wildlife; developing a wetland conservation model for white-faced ibis on private lands in the Intermountain West. USDA-Natural Resource Conservation Service Idaho (\$38K). PI: V.J. Dreitz.
- 09/2018-06/2022. Sage-grouse demographics and grazing study. Montana, Fish, Wildlife and Parks and US Fish and Wildlife Service Wildlife and Sport Fish Restoration Program (\$170K). PIs: V.J. Dreitz, L. Berkeley, and M. Mitchell.
- 05/2020-06/2021. State of Washington wetland landscape assessment and prioritization. Washington Department of Fish and Wildlife (60K). PI: V.J. Dreitz
- 06/2015-08/2020. Linking patterns of rural land-use change and wetland condition to trends in greater sandhill crane demographics. Idaho Department of Fish and Game (\$15K). PI: V.J. Dreitz.
- 09/2018-06/2019. Win-win for agricultural and wildlife; developing a wetland conservation model for white-faced ibis in the Intermountain West. US Fish and Wildlife Service Migratory Bird Program and Intermountain West Joint Venture (\$15K). PI: V.J. Dreitz.
- 08/2014-06/2019. Water Scarcity and working lands: Colorado wetlands. US Fish and Wildlife Service Intermountain West Joint Venture (\$108K). PIs: V.J. Dreitz and D. Naugle.

- 07/2015-06/2019. Boom, bust: linking patterns of rural land-use change and wetland condition to trends in greater sandhill crane demographics. Idaho Department of Fish and Game (\$65K). PI: V.J. Dreitz and M. Mitchell
- 07/2015-06/2019. Ecological modeling and monitoring to inform avian conservation in the Intermountain West (SONEC). US Fish and Wildlife Service Migratory Bird Program and Intermountain West Joint Venture (\$80K). PI: V.J. Dreitz.
- 07/2015-06/2019. Boom, bust: linking patterns of rural land-use change and wetland condition to trends in greater sandhill crane demographics. US Fish and Wildlife Service Migratory Bird Program and Intermountain West Joint Venture (\$85K). PI: V.J. Dreitz.
- 07/2015-06/2019. Quantifying Sage Grouse Initiative outcomes. US Fish and Wildlife Service Migratory Bird Program and Intermountain West Joint Venture (\$46K). PI: V.J. Dreitz and B. Allred.
- 07/2015-06/2019. Decision support for sage grouse conservation through range wide mapping of scarce wetland resources. US Fish and Wildlife Service Intermountain West Joint Venture (\$240K). PI: V.J. Dreitz.
- 08/2014-06/2019. Water Scarcity and working lands: hitting a moving conservation target in dynamic wetland landscapes of the Intermountain West. US Fish and Wildlife Service Intermountain West Joint Venture (\$108K). PIs: V.J. Dreitz and D. Naugle.
- 06/2017-05/2019. Following the water: unlocking patterns of long-term seasonal hydrology in Idaho's natural and agricultural wetland landscapes. Idaho Department of Fish and Game (\$10K). PI: V.J. Dreitz.
- 05/2017-12/2018. The importance of contemporary bison grazing for sustaining grassland avifauna. Grand Teton Natural History Association (\$8K). PIs: V.J. Dreitz and D. Fagre.
- 06/2017-10/2018. Effects of livestock grazing on greater sage-grouse and songbirds in sagebrush habitat of central Montana. Safari Club International Foundation (\$50K). PIs: L. Berkeley and V.J. Dreitz (funds distributed to Montana Fish, Wildlife and Parks).
- 09/2013-09/2018. Technical assistance with development of monitoring protocols and analysis of monitoring data. US Fish and Wildlife Service National Bison Range (\$105K). PI: V.J. Dreitz.
- 08/2012-09/2018. Assessing migratory avifauna responses to managed land use practices in a sagebrush/grassland system. Bureau of Land Management (\$30K). PIs: V.J. Dreitz and M. Mitchell.
- 02/2014-07/2018. Bird inventory on the Charles M. Russell National Wildlife Refuge. US Fish and Wildlife Service Charles M. Russell National Wildlife Refuge (\$61K). PI: V.J. Dreitz.
- 07/2014-4/2018. Public lands: decision support for sage grouse conservation through range wide mapping of scarce wetland resources. Bureau of Land Management (\$50K). PI: V.J. Dreitz and D. Naugle.
- 05/2013-04/2018. Migratory bird response to managed land use practices in a sagebrush ecosystem. Bureau of Land Management (\$28K). PI: V.J. Dreitz.
- 03/2016-03/2018. Development of a study to determine if military aircraft noise influences sagegrouse nest success. US Army Corps of Engineers (\$277K). PIs: V.J. Dreitz and F.R. Hauer.

- 07/2016-10/2017. Effects of livestock grazing on greater sage-grouse and songbirds in sagebrush habitat of central Montana. Safari Club International Foundation (\$50K). PIs: V.J. Dreitz and L. Berkeley.
- 04/2016-06/2017. Unlocking the relationship between irrigated working lands, historic conditions and ecological value in Colorado's dynamic wetland landscapes. Colorado Parks and Wildlife (\$46K). PI: V.J. Dreitz.
- 07/2014-04/2017. Private waters: decision support for sage grouse conservation through range wide mapping of scarce wetland resources. USDA Natural Resources Conservation Service (\$250K). PI: V.J. Dreitz and D. Naugle.
- 06/2012-09/2016. Assessing land use practices on the ecological characteristics of sagebrush ecosystems: multiple migratory bird responses. US Fish and Wildlife Service Plains and Prairie Pothole-Landscape Conservation Cooperative (\$420K). PI: V.J. Dreitz and M. Mitchell.
- 05/2012-12/2015. Monitoring in the southwest Crown of the Continent. US Forest Service (\$10K). PI: V.J. Dreitz, co-PIs: J. Burchfield, J. Belsky, T. Morgan, C. Nelson, and A. Larson.
- 04/2014-09/2015. Using integrated monitoring in bird conservation regions to understand avian assemblages. US Forest Service Northern Region (\$97K). PI: V.J. Dreitz.
- 07/2013-09/2015. Rangewide sampling design for population size and trend estimation in Greater Sage-Grouse. Western Association of Fish and Wildlife Agencies (\$150K). PI: P.M. Lukacs and V.J. Dreitz.
- 08/2012-7/2015. Analysis of bird monitoring data at the region. US Forest Service Northern Region (\$218K). PI: V.J. Dreitz.
- 04/2014-03/2015. Ecological research in western Montana. MPG Ranch (\$274K). PI: V.J. Dreitz.
- 03/2013-03/2015. Restoration outcomes: bird monitoring of O'Dell Creek tributary of the Madison River. Montana Pennsylvania Power and Light (\$25K). PI: V.J. Dreitz.
- 02/2013-02/2014. Statewide bird monitoring program. US Forest Service Northern Region (\$114K). PI: V.J. Dreitz.
- 03/2014-02/2015. Intermountain est Joint Venture grid based monitoring. Ducks Unlimited (\$30K). PI: V.J. Dreitz.
- 08/2012-7/2015. Analysis of bird monitoring data at the region and Black Hills National Forest. US Forest Service Northern Region (\$73K). PI: P.M. Lukacs and V.J. Dreitz.
- 05/2014-11/2014. Engaging private landowners in ecosystem conservation. World Wildlife Fund (\$55K). PI: V.J. Dreitz.
- 03/2014-10/2014. Statewide bird monitoring in Montana. Montana Fish, Wildlife and Parks (\$31K). PI: V.J. Dreitz
- 07/2013-06/2014. Bird monitoring and banding. Montana Department of Justice (\$22K). PI: V.J. Dreitz.
- 12/2012-06/2014. Sagebrush and grassland bird responses to a rest-rotation grazing management strategy: Graduate Student support. Montana Fish, Wildlife and Parks (\$10K). PI: V.J. Dreitz and M. Mitchell.

- 07/2012-06/2014. Bird banding and education. Montana's Natural Resource Damage Program (NRD) via Montana Tech (\$71K). PI: V.J. Dreitz, E. Greene and H. Langner.
- 07/2012-06/2014. Milltown education project. Montana's Natural Resource Damage Program (NRD) via Montana Tech (\$19K). PI: V.J. Dreitz.
- 05/2013-04/2018. Riparian bird monitoring. Bureau of Land Management (\$126K). PI: V.J. Dreitz.
- 02/2013-02/2014. MPG Ranch: ecological and education research in western Montana. MPG Ranch (\$77K). PI: V.J. Dreitz.
- 07/2011-06/2013. Factors influencing survival of mountain plover chicks in eastern Colorado. Colorado Parks and Wildlife. (\$90K) PIs: V.J. Dreitz, P. M. Lukacs, and M. Mitchell.

Grants prior to position at University of Montana

- 2009-2011. Experimental habitat manipulations to improve management of scaled quail in southeast Colorado. Colorado Division of Wildlife, Fort Collins, Colorado (\$60K). PI: V.J. Dreitz.
- 2008-2011. Using rangewide information on chick survival of mountain plovers (*Charadrius montanus*) to inform management strategies. Colorado Division of Wildlife, Fort Collins, Colorado (\$320K). PI: V.J. Dreitz. Funds distributed to Dr. Kathryn P. Huyvaert at Colorado State University.
- 2009-2010. Implications of climate change for avian conservation in the Great Plains landscapes. US Fish and Wildlife Service Great Plains Landscape Conservation Cooperative (\$100K). PI: S.K. Skagen. Co-PIs: V.J. Dreitz, R.C.Y. Conrey, L. Burris, and G. Albanese.
- 2008-2010. Factors influencing rangewide survival of mountain plover (*Charadrius montanus*) chicks. US Fish and Wildlife Service Neotropical Migratory Bird Conservation Act Grant (\$103K). PI: V.J. Dreitz, Co-PIs: S.J. Dinsmore, K.P. Huyvaert.
- 2008-2009. Ecology and control of plague in grassland systems: applications to mountain plover conservation. Colorado Division of Wildlife, Fort Collins, Colorado (\$60K). PI: M.W. Miller, Co-PI: V.J. Dreitz.
- 2007-2008. Cause-specific mortality of mountain plover chicks in eastern Colorado: phase II. A continuation of a captive study. Colorado Division of Wildlife, Fort Collins, Colorado (\$50K). PI: V.J. Dreitz, Co-PIs: T. Davis and L. Baeten.
- 2007-2008. Testing the longevity of 100% Polyurethane clear elastic material to attach radio transmitters. Colorado Division of Wildlife, Fort Collins, Colorado (\$10K). PI: V.J. Dreitz, Co-PIs: T. Davis and L. Baeten.
- 2006-2007. Cause-specific mortality of mountain plover chicks in eastern Colorado: Phase I. A laboratory study. Colorado Division of Wildlife, Fort Collins, Colorado (\$20K). PI: V.J. Dreitz, Co-PIs: T. Davis and L. Baeten.
- 2003-2006. Comparative recruitment rates of mountain plovers (*Charadrius montanus*) across eastern Colorado. Colorado Division of Wildlife, Fort Collins, Colorado (\$360K). PI: V.J. Dreitz.
- 2003-2006. Occupancy, density and richness of Colorado breeding birds: estimation and habitat correlations. Colorado Division of Wildlife, Fort Collins, Colorado (\$300K). PI: V.J. Dreitz. Funds distributed to Dr. Paul F. Doherty at Colorado State University.

- 2003. Understanding the dynamics of mountain plovers in eastern Colorado. Colorado Division of Wildlife, Fort Collins, Colorado (\$114K). PI: V.J. Dreitz, Co-PI: M. Wunder
- 2003. Mountain plovers on private lands. Colorado Division of Wildlife, Fort Collins, Colorado (\$50K). PI: V.J. Dreitz, Co-PI: M. Wunder
- 2001-2005. Mountain plovers on private lands. U.S. Geological Survey, Fort Collins, Colorado (\$500K). PI: V.J. Dreitz, Co-PI: M. Wunder.
- 2000-2003. Estimation of critical parameters of the Florida snail kite population. U.S. Geological Survey, Gainesville, Florida, USA. (\$120K) PI: V.J. Dreitz, Co-PI: W.M. Kitchens.
- 2000-2003. Estimation of critical parameters in conjunction with monitoring the snail kite population. U.S. Army Corps of Engineers, Jacksonville, Florida, USA (\$180K) PI: V.J. Dreitz, Co-PI: W.M. Kitchens.
- 2000-2002. Monitoring the population of snail kites in Florida. St. Johns River Water Management District, Florida, USA. (\$40K) PI: V.J. Dreitz, Co-PI: W.M. Kitchens.
- 1999. Estimation of critical parameters in conjunction with monitoring the snail kite population. St. Johns River Water Management District, Florida, USA. (\$20K) PI: V. J. Dreitz.

PRESENTATIONS

Students, postdocs, and research associates advisees denoted in **bold** Presenter denoted by *

Contributed Oral Presentations

- Dreitz, V.J., D. A. Fagre, W.M. Janousek. Avian species richness and abundance show stronger responses to bison grazing intensity than to ecosystem productivity, 16th Biennial Scientific Conference on the Greater Yellowstone Ecosystem, Big Sky, MT, Sep 3-5, 2024 (presentation).
- Haines, D.B.*, V.J. Dreitz, T.E. Katzner and D.W. Smith. Golden Eagle Resource Selection at Multiple Spatial and Temporal Scales in Yellowstone National Parks Northern Range.
 Raptor Research Foundation Annual Conference, Albuquerque, NM, Oct 17-21, 2023. (poster)
- **Coon, T.** V.J. Dreitz, **S.B. Lewis***, and S. Painter. Advancing methods of diet analysis: a case study using degraded Merlin prey remains. Raptor Research Foundation Annual Conference, Albuquerque, NM, Oct 17-21, 2023. (presentation)
- Coon, T.* V.J. Dreitz, S.B. Lewis, and S. Painter. Advancing methods of diet analysis: a case study using degraded Merlin prey remains. American Ornithological Society (141st Stated Meeting) & Society of Canadian Ornithologists, London, Ontario, Aug 8-12, 2023 (presentation)
- Kovalenko, V., L. Bates, J. Doser, V.J. Dreitz, C. Nelson, and D. Six. Whitebark pine and Clark's nutcracker abundance in Glacier National Park. Montana Chapter of The Wildlife Society 61st Annual Conference, Butte, Montana, Feb 14-17, 2023. (presentation)
- **Reintsma, K.M.***, M. Szczypinski, and V.J. Dreitz. Rangeland response to grazing: connecting field and remotely sensed data for a flexible framework. The Wildlife Society 29th Annual Conference, Spokane, Washington, Nov 6-10, 2022. (poster)

- Pifer, J.*, **J. Helm**, J. Rockweit, V.J. Dreitz, and C. Nelson. Do wildfire-mitigation treatments affect the conservation of sensitive owls? The Wildlife Society 29th Annual Conference, Spokane, Washington, Nov 6-10, 2022. (poster)
- Berkeley, L.I.*, **J. Helm**, D.J. Messmer*, M. Szczypinski, V.J. Dreitz, and J. Gude. Impact of grazing management on vital rates of greater sage-grouse in central Montana. The 34th Prairie Grouse Technical Council Biennial Meeting, Lewistown, Montana, Oct 3-6, 2022. (presentation)
- **Reintsma, K.M.*,** M. Szczypinski., and V.J. Dreitz. Ongoing work to quantify grazing influence on rangeland productivity using remote sensing. Montana Chapter of The Wildlife Society 60th Annual Conference, Virtual Conference, Feb 23-26, 2022, (presentation)
- Berkely, L.I.*, M. Szczypinski, V.J. Dreitz, **J.Helm**, and J. Gude. Greater sage-grouse chick survival as a function of grazing management, morphometric, and habitat variables in central Montana. Montana Chapter of The Wildlife Society 60th Annual Conference, Virtual Conference, Feb 23-26, 2022, (presentation)
- Haines, D.B.*, V. J. Dreitz, T.E. Katzner and D.W. Smith. Environmental Drivers of Reproduction by Golden Eagles in the Northern Range of Yellowstone National Park. Raptor Research Foundation Annual Conference, Virtual Conference, Oct 8-14, 2021. (presentation).
- Coons, S.*, J.P. Donnelly, and V.J. Dreitz. Wetland dynamics and conservation across the Intermountain West: relationships with white-faced ibis (Plegadis chichi). Idaho Chapter of the Wildlife Society 2020 Annual Conference, Moscow, Idaho, Mar 9-12, 2020. (presentation)
- **Helm, J.***, L.I. Berkeley, V.J. Dreitz. Modeling the effects of habitat, livestock grazing, and climate on greater sage-grouse population dynamics in central Montana. Montana Chapter of The Wildlife Society 58th Annual Conference, Butte, Montana, Feb 4-7, 2020. (presentation)
- **Ruth, K.A.***, L.I. Berkeley, and V.J. Dreitz. Investigating the relationships between breeding and density of sagebrush steppe songbirds. Oregon Chapter of The Wildlife Society 58th Annual Conference, Eugene, Oregon, Feb 5-7, 2020. (presentation)
- **Reintsma, K.M.***, L.I. Berkeley, V.J. Dreitz. Application of novel nest density estimator: an example using sagebrush-steppe songbirds. The 137th Annual Meeting of the American Ornithological Society, Anchorage, Alaska, Jun 24-Jun28, 2019. (presentation)
- **Dreitz, V.J.***, K.A. Ruth, L.I. Berkeley. Population demographics, breeding ecology, and responses to grazing of Montana sagebrush steppe songbirds. The 137th Annual Meeting of the American Ornithological Society, Anchorage, Alaska, Jun 24-Jun28, 2019. (presentation)
- **Haines, D.B.***, V.J. Dreitz, D.W. Smith, and T.E. Katzner. Testing the utility of step selection functions to evaluate winter resource selection of golden eagles at multiple spatial scales in Yellowstone National Park. Raptor Research Foundation Conference, Fort Collins, Colorado, Nov 5-10, 2019.
- Ruth, K.A.*, L.I. Berkeley, and V.J. Dreitz. Investigating the relationships between breeding and density of sagebrush steppe songbirds. American Fisheries Society and The Wildlife Society 2019 Joint Annual Conference, Reno, Nevada, Sep 27-Oct 4, 2019. (presentation)

- **Ruth, K.A.***, L.I. Berkeley, and V.J. Dreitz. Relationships between songbird populations and productivity in sagebrush-steppe of Montana. The Wildlife Society 25th Annual Conference, Cleveland, Ohio, Oct 7-11, 2018. (poster)
- J. Golding, J.J. Nowak, K. Strickfaden, and V.J. Dreitz. A new method for estimating multispecies abundance using dependent double-observer surveys. The Wildlife Society 25th Annual Conference, Cleveland, Ohio, Oct 7-11, 2018. (presentation)
- **Janousek, W.M.** * and V.J. Dreitz. Effects of beetle-inducted tree death on forest songbird diversity in the Western U.S. The Wildlife Society 24th Annual Conference, Albuquerque, New Mexico, Sept 23-27, 2017. (presentation)
- **Fagre, D.A.** *, and V.J. Dreitz. Prairie songbird responses to bison grazing at the National Bison Range and Yellowstone National Park. The Wildlife Society 24th Annual Conference, Albuquerque, New Mexico, Sept 23-27, 2017. (presentation)
- Dreitz, V.J. *, J.D. Golding, and J.J. Nowak. A multispecies dependent double-observer model: A new method for estimating multispecies abundance. The 102nd Annual Meeting of the Ecological Society of America, Portland, Oregon, August 6-11, 2017. (presentation).
- **Janousek, W.M.** * and V.J. Dreitz. Effects of beetle-inducted tree death on forest songbird diversity in the Western U.S. Montana Chapter of The Wildlife Society 55th Annual Conference, Helena, Montana, Mar 6-10, 2017. (presentation)
- **Ruth, K.***, L. Berkeley, V.J. Dreitz. Responses of songbird populations to cattle grazing regimes in sagebrush-steppe of eastern Montana. Montana Chapter of The Wildlife Society 55th Annual Conference, Helena, Montana, Mar 6-10, 2017. (presentation)
- Naugle, D. *, J. Tack, P. Donnelly, K. Doherty, B. Allred, and V.J. Dreitz. Extending conifer removal and landscape protection strategies from sage-grouse to songbirds, a west-wide assessment. The 70th Annual Society of Range Management Meeting, St. George, Utah, Jan 28-Feb 2, 2017.
- **Fagre, D.A.** *, and V.J. Dreitz. Investigating the relationship between bison grazing and abundance of prairie songbirds. The 13th Biennial Scientific Conference on the Greater Yellowstone Ecosystem, Grand Teton National Park, Wyoming, Oct 2016. (poster)
- **Fagre, D.***, and V.J. Dreitz. Investigating the effects of bison grazing on grassland songbirds. Montana Chapter of The Wildlife Society 54th Annual Conference, Missoula, Montana, Feb 23-26, 2016. (presentation)
- **Golding, J.D.***, and V.J. Dreitz. Assessing grazing as a conservation tool in sagebrush and grassland ecosystems. Montana Chapter of The Wildlife Society 54th Annual Conference, Missoula, Montana, Feb 23-26, 2016. (presentation)
- **Janousek, W.M.***, B.A. Hahn, and V.J. Dreitz. An assessment of current statewide avian monitoring programs for Montana and beyond. Montana Chapter of The Wildlife Society 54th Annual Conference, Missoula, Montana, Feb 23-26, 2016. (presentation)
- **Fagre, D.***, and V.J. Dreitz. Investigating the effects of bison grazing on grassland songbirds. 7th Research Symposium of the Montana Chapter of the Society of Conservation Biology, Missoula, Montana, Nov 18-20, 2015. (presentation)
- **Golding, J.D.***, and V.J. Dreitz. Assessing grazing as a conservation tool in sagebrush and grassland ecosystems. 7th Research Symposium of the Montana Chapter of the Society of Conservation Biology, Missoula, Montana, Nov 18-20, 2015. (presentation)

- **Janousek, W.M.***, Hahn, B.A. and V.J. Dreitz. An assessment of current statewide avian monitoring programs for Montana. 7th Research Symposium of the Montana Chapter of the Society of Conservation Biology, Missoula, Montana, Nov 18-20, 2015. (presentation)
- **Perret, D.***, P. Donnelly, **C. Wiggins**, **B. Hoover**, **M. Johnson**, and V.J. Dreitz. A spatial-temporal dataset of mesic resources in the mountain west sage-steppe. 7th Research Symposium of the Montana Chapter of the Society of Conservation Biology, Missoula, Montana, Nov 18-20, 2015. (poster)
- **Reintsma, K.M.***, **A.H. Harrington**, and V.J. Dreitz. Testing the effectiveness of a novel approach to estimate nest density of Brewer's Sparrow (*Spizella breweri*). 7th Research Symposium of the Montana Chapter of the Society of Conservation Biology, Missoula, Montana, Nov 18-20, 2015. (poster undergraduate)
- Skagen, S.K.*, V.J. Dreitz, R. Conrey, A. Yackel Adams, and A.O. Panjabi. Vulnerability of shortgrass prairie bird assemblages to climate change. America's Grasslands Conference: Partnerships for Grassland Conservation, Sept 29- Oct 1, 2015 (presentation)
- Skagen, S.K.*, V.J. Dreitz, R. Conrey, A. Yackel Adams, A.O. Panjabi, and D.J. Augustine. Vulnerability of shortgrass prairie bird assemblages to climate change. American Ornithologist Union/Cooper Ornithological Society Annual Meeting, Norman, Oklahoma, July 28-Aug 1, 2015. (presentation)
- Dreitz, V.J.*, **L.T. Stinson**, B.A. Hahn, and P.M. Lukacs. A multi-scale perspective for managing prairie avifauna assemblages across the Western US. Annual meeting of Integrated Monitoring in Bird Conservation Regions, Fort Collins, CO, January 2015. (presentation)
- Walsh, D.P.*, V.J. Dreitz, and D.M. Heisey. Integrated survival analysis using an event-time approach in a Bayesian framework. The 21st Annual Conference of The Wildlife Society, Pittsburgh, Pennsylvania, Oct 25-30, 2014. (presentation)
- **Golding, J.D.*** and V.J. Dreitz. Assessing land use practices in sagebrush and grassland ecosystems: multiple migratory bird responses. 2nd Annual North America Congress for Conservation Biology, Missoula, Montana, July 13-16, 2014. (presentation)
- **Golding, J.D.*** and V.J. Dreitz. Assessing land use practices on the ecological characteristics of sagebrush ecosystems: multiple migratory bird responses. 4th Annual Matador Ranch Science and Land Management Symposium, Dodson, Montana, June 18, 2014. (presentation)
- **Golding, J.D.*** and V.J. Dreitz. Assessing land use practices on the ecological characteristics of sagebrush ecosystems: multiple migratory bird responses. 6th Annual Research Symposium of the Montana Chapter of the Society for Conservation Biology. Bozeman, Montana, Nov 6-8, 2013. (presentation)
- **Golding, J.D.*** and V.J. Dreitz. A comparison of avian survey methods in arid environments. 6th Annual Research Symposium of the Montana Chapter of the Society for Conservation Biology. Bozeman, Montana, Nov 6-8, 2013. (poster presentation)
- **Golding, J.D.*** and V.J. Dreitz. A comparison of two avian survey methods and the implications for conservation monitoring in arid environments. International Congress for Conservation Biology. Baltimore, Maryland, July 21-25, 2013. (poster presentation)

- Riordan, M. M.*, V. J. Dreitz, and P. M. Lukacs. 2013. Examining sex ratio bias in mountain plovers (*Charadrius montanus*). Colorado Chapter of The Wildlife Society Annual Conference, Colorado Springs, Colorado. (poster presentation)
- Kendall, K.C.*, A.C. Macleod, K.S. McKelvey. J.A. Royle, V.J. Dreitz, and P.M. Lukacs. Estimating bear population growth rates from detections at unbaited rub sites. The 21st International Conference of Bear Research and Management, New Delhi, India, November 2012. (presentation)
- Riordan, M.M.*, P.M. Lukacs, K. Huyvaert, and V.J. Dreitz. Examining what life stage male bias arises in Mountain Plovers (*Charadrius montanus*). The 5th North American Ornithological Conference, Vancouver, August 2012. (presentation)
- **Harrington, A.***, and V.J. Dreitz. Foraging frequency of juvenile Mountain Plovers among three Colorado habitat types. The Western Student Conclave The Wildlife Society, Moscow, ID, March 2012 ((presentation-best student research award).
- Conrey, R.Y.*, S.K. Skagen, and V.J. Dreitz. Implications of climate change for avian conservation in Great Plains landscapes: grasslands. Meeting of the Great Plains Landscape Conservation Cooperative Steering Committee, Fort Robinson, NE, June 2011. (presentation)
- Conrey, R.Y.*, S.K. Skagen, and V.J. Dreitz. Precipitation and temperature influence nest survival of shortgrass prairie birds. Joint meeting of the Wilson Bulletin, Association of Field Ornithologists, and the Cooper Ornithological Society. March 2011. (presentation)
- Dreitz, V.J.* Parental behavior of a shortgrass prairie precocial species: implications for juvenile survival. Cooper Ornithological Society, American Ornithological Union, and the Society of Canadian Ornithologists Joint Meeting, August 2008, Portland, Oregon. (presentation)
- Dreitz, V.J.* and F.L. Knopf. Mountain plovers and the politics of research on private lands. Cooper Ornithological Society, American Ornithological Union, and the Society of Canadian Ornithologists Joint Meeting, August 2008, Portland, Oregon. (presentation)
- Dreitz, V.J.* and F.L. Knopf. Mountain plovers and the politics of research on private lands. Colorado Chapter of the Wildlife Society Annual Conference, January 2008, Denver, Colorado. (presentation)
- Dreitz, V.J.*, L. Baeten, and T. Davis. Cause-specific mortality of mountain plover chicks in eastern Colorado: Phase I. A laboratory study. Colorado Chapter of the Wildlife Society Annual Conference, January 2008, Denver, Colorado. (poster).
- **Tipton, H.C.***, V.J. Dreitz, and P.F. Doherty, Jr. Estimation of breeding grassland birds: application of novel monitoring methodologies. Southeastern Partners in Flight, February 2007, Memphis, Tennessee. (presentation)
- Dreitz, V.J.* Comparative brood-rearing behavior of mountain plovers in eastern Colorado. The 125th Stated Meeting of the American Ornithologist's Union, August 2007, Laramie, Wyoming. (presentation)
- Dreitz, V.J.*, P.M. Lukacs, and F.L. Knopf. Estimating abundance of mountain plovers from occupancy data. Colorado Division of Wildlife and Colorado State University, March 2007, Fort Collins, Colorado. (presentation)
- **Tipton, H.C.***, V.J. Dreitz, and P.F. Doherty, Jr. Estimating abundance of grassland birds with double-observer sampling. Bird monitoring and detectability: understanding and

- applying appropriate methods. Colorado Division of Wildlife and Colorado State University, March 2007, Fort Collins, Colorado. (presentation)
- **Garrison-Tipton, H.***, V.J. Dreitz, and P.F. Doherty, Jr. Occupancy of Colorado breeding grassland birds: estimation and habitat correlations. The Fourth North American Ornithological Conference, September 2006, Veracruz, Mexico. (poster presentation).
- Dreitz, V.J.*, F.L. Knopf, K. Morgan, R. Morgenweck, T. Sexson, and L. Nelson. The mountain plover model for ESA conservation on private lands. Invited presentation for the Bird Conservation of North American Shrublands, Grasslands, and Pasturelands symposium at The Wildlife Society 12th Annual Conference, September 2005, Madison, Wisconsin. (presentation)
- **Garrison-Tipton, H.***, V.J. Dreitz, and P.F. Doherty, Jr. Occupancy, density and richness of Colorado breeding birds: estimation and habitat correlations. The Wildlife Society 12th Annual Conference, September 2005, Madison, Wisconsin. (presentation)
- **Garrison-Tipton, H.***, V.J. Dreitz, and P.F. Doherty, Jr. Occupancy, density and richness of Colorado breeding birds: estimation and habitat correlations. The Colorado Chapter of the Wildlife Society Conference, January 2005, Fort Collins, Colorado. (presentation).
- Dreitz, V.J.*, N.T. Hobbs, L.L. Wolfe, K.P. Burnham, M.M. Conner, and M.W. Miller. Land-use impacts on the prevalence of chronic wasting disease in Colorado mule deer populations. The Wildlife Society 9th Annual Conference, September 20002, Bismarck, North Dakota. (presentation).
- Dreitz, V.J.*, N.T. Hobbs, L.L. Wolfe, K.P. Burnham, M.M. Conner, and M.W. Miller. Land-use impacts on the prevalence of chronic wasting disease in Colorado mule deer populations. Preparing for Emerging Diseases, 51st Annual Meeting of the Wildlife Diseases Association, July 2002, Arcata, California. (presentation).
- Wolfe, L.L.*, M.M. Conner, T.H. Baker, V.J. Dreitz, K.P. Burnham, E.S. Williams, N.T. Hobbs, and M.W. Miller. Evaluation of tonsillar biopsy data for estimating chronic wasting disease prevalence in free-ranging mule deer. Preparing for Emerging Diseases, 51st Annual Meeting of the Wildlife Diseases Association, July 2002, Arcata, California. (presentation).
- Pine, W.E.*, M.S. Allen, and V.J. Dreitz. Population viability of the Gulf of Mexico sturgeon in the Suwannee River, Florida. American Fisheries Society, August 2001, Phoenix, Arizona. (presentation).
- Kitchens, W.M.*, R.E. Bennetts, V.J. Dreitz, and D.L. DeAngelis. Linkages between the snail kite population and wetland dynamics in a highly fragmented south Florida hydroscape. Greater Everglades Ecosystem Restoration Science Conference, December 2000, Naples, Florida. (presentation).
- Dreitz, V.J.*, J.D. Nichols, J.E. Hines, R.E. Bennetts, W.M. Kitchens, and D.L. DeAngelis. The use of resighting data to estimate the rate of population growth of the snail kite in Florida. EURING 2000, October 2000, Point Reyes, California. (presentation).
- Kitchens, W.M., V.J. Dreitz*, R.E. Bennetts, and D.L. DeAngelis. Linkages between the snail kite population and wetland dynamics in a highly fragmented south Florida hydroscape. 15th Annual Symposium of the International Association for Landscape Ecology and the 2nd Conference of the Walt Dineen Society, April 2000, Fort Lauderdale, Florida. (presentation).

- Dreitz, V.J.*, R.E. Bennetts, W.M. Kitchens. Spatial and temporal variability in reproductive parameters of snail kites (*Rostrhamus sociabilis*) in central and southern Florida. Meeting of the Colonial Waterbird Society and Flamingo Specialist Group, October 1998, Miami, Florida. (presentation).
- Dreitz, V.J.*, R.E. Bennetts, B. Toland, W.M. Kitchens. Estimation of temporal and spatial variation of reproductive parameters of the snail kite (*Rostrhamus sociabilis*) population in central and southern Florida. Society of Ecological Restoration 9th Annual International Conference, November 1997, Fort Lauderdale, Florida. (presentation).
- Dreitz, V.J.*, R.E. Bennetts, B. Toland, W.M. Kitchens. Estimation of temporal and spatial variation of reproductive parameters of the snail kite (*Rostrhamus sociabilis*) population in central and southern Florida, Raptor Research Foundation Annual Meeting. October/November 1997, Savannah, Georgia. (presentation).
- Bennetts, R.E.*, V.J. Dreitz, and W.M. Kitchens. Annual survival of snail kites in Florida with comparisons between radio telemetry and capture-resighting data. Raptor Research Foundation Annual Meeting, October/November 1997, Savannah, Georgia. (presentation).
- Dreitz, V.J.*, R.E. Bennetts, and W.M. Kitchens. Sources of variation in annual count data used to estimate the number of snail kites in Florida. American Ornithologists' Union and the Annual Meeting of the Raptor Research Foundation, August 1996, Boise, Idaho. (presentation).
- Dreitz, V.J. * An artificial perch method for obtaining repeated body mass measurements on raptor without retrapping. Student Ecology Symposium, Colorado State University, October 1994, Fort Collins, Colorado. (Outstanding Undergraduate Presentation).

Invited Oral Presentations

- 2021 The effects of grazing on greater sage-grouse and their habitat in central Montana. Saskatchewan Prairie Conservation Action Plan, Native Prairie Speaker Series (Webinar).
- 2018 Intermountain grassland songbird responses to bison grazing on the National Bison Range and Yellowstone National Park, US. Ecology and Conservation of Grassland Birds, International Ornithological Congress, Vancouver, Canada
- 2015 Understanding factors driving avian assemblages across the western U.S. Five Valleys Audubon Society, Missoula, Montana
- 2015 Using avian species to inform ecosystem state. Montana Natural History Center, Missoula, Montana
- 2015 Assessing land use practices on the ecological characteristics of sagebrush ecosystems: multiple migratory bird responses. Plains and Prairie Pothole Landscape Conservation Cooperative Connections II Workshop, Billings, Montana.
- Assessing land use practices on the ecological characteristics of sagebrush ecosystems: multiple migratory bird responses. Sage Steppe Partner Forum (*webinar*).
- 2013 Mountain plover breeding demography in North America agricultural lands. Western Hemisphere Shorebird Group, Santa Marta, Columbia.
- 2010 Invited Speaker. Mountain plover research in eastern Colorado. Aiken Audubon Society, Colorado Springs, Colorado.

- An update on mountain plover research in eastern Colorado. Audubon Society of Greater Denver, Denver, Colorado.
- 2008 Cause-specific mortality of mountain plover chicks. Colorado Division of Wildlife, Denver, Colorado.
- 2008 Using structured decision-making to inform management and conservation strategies for mountain plovers. Colorado Division of Wildlife, Denver, Colorado.
- 2008 Mountain plover research in eastern Colorado. Audubon Society of Greater Denver, Denver, Colorado.
- 2007 Comparative recruitment rates of mountain plovers (*Charadrius montanus*) across eastern Colorado. Departmental seminar, Department of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, Colorado.
- 2007 Mountain plover research in eastern Colorado. Audubon Society of Greater Denver, Denver, Colorado.
- 2005 Chick survival of mountain plovers in eastern Colorado. Audubon Society of Greater Denver, Denver, Colorado.
- 2004 Comparative movements and home range of mountain plovers in three Colorado landscapes. Audubon Society of Greater Denver, Denver, Colorado.
- 2003 Survival and home range of mountain plover chicks on the eastern plains of Colorado. Audubon Society of Greater Denver, Denver, Colorado.
- 2000 Understanding the influence of habitat quality on the snail kite population in Florida. Department of Wildlife Ecology Seminar series, University of Maine, Orono, Maine.
- 2000 The impacts of habitat quality on the snail kite population in Florida. Department of Natural Resources Seminar series, University of New Hampshire, Durham, New Hampshire.
- The use of resighting data to estimate population size and the rate of population change in the snail kite population in Florida. Netherlands Institute of Ecology, Netherlands.
- 1999 The influences of environmental variability on the demography of snail kites in Florida. Special Symposium on Watershed Management to Protect Declining Species, American Water Resources Association, Seattle, Washington.

PROFESSIONAL ACTIVITIES, AWARDS, AND MEMBERSHIPS

Synergistic Activities

Inclusion	
2022-2024	Values-based Academic Leadership Trajectories for Women in Science
	(VAuLTS) program
2019-2024	Expert lecturer – University of Montana – Big Sky Aphasia Program
2021-2023	Pod Coordinator, Missoula Chapter of 500 Women Scientists
2022	Indigenous Mentoring Program Workshop
2022	Nurture New STEM Scholars: Mentor your Graduate Students for Success and
	Wellbeing

Scientific Mentorship

2023	Expert reviewer. US Fish and Wildlife Service – Species Status Assessment Reviewer – Snail Kites. Reviewed Federal Register documents outlining the			
	current assessment of a species of conservation concern.			
2023	Student Presentation Committee and Judge for the American Ornithological			
2021-present	Society Conference. Committee Member, Davidson Honors Scholarship Selection Committee for Presidential Leadership Scholarship, Provost's Honors Scholarship, and Dean's Leadership Scholarship			
2021-2022	Participant, Fundamentals in Western Conservation Leadership			
2018-2022	Judge, University of Montana – Conference on Undergraduate Research			
2020-2021	Scientific Teaching Fellow - Mobile Summer Institutes on Scientific Teaching			
2019	Co-Instructor - Smithsonian Mason School of Conversation – Estimating Animal Abundance and Occupancy			
2018-2019	Member, University of Montana, Undergraduate Research Committee			
2012	Instructor, University of Montana – Wildlife Habitat Management and			
~	Conservation (junior-level course)			
Service				
2022	External Reviewer tenure and promotion faculty package – University of Hawaii			
2021	Co-Develop, University of Montana – COVID-19 Guidelines for Off-campus			
	Field Research			
2018-2021	Associate Editor - Rangeland Ecology and Management			
2018	Member, Sagebrush Conservation Strategy Technical Working Group, Association of Fish and Wildlife Agencies			
2016	Panel Member – USFWS Habitat and Population Evaluation Team, Hi-Line Region			
2012	Statistical Consultant, Northern Divide Grizzly Bear Project.			
2012	Hierarchical models for abundance, distribution and species richness in spatially structured populations using <i>unmarked</i> and WinBUGS/JAGS. Patuxent Wildlife			
	Research Center; participant			
2005-2011	Lois Webster Fund of the Audubon Society of Greater Denver; grants committee.			
2006-2010	State of Colorado, Colorado Division of Wildlife Animal Care and Use Committee.			
2008	USFWS/USGS Structured Decision Making Workshop, National Conservation Training Center, Shepherdstown, WV.			
•	Vorkshop Organizer			
2019	Lead organizer, Bayesian Integrated Population Modeling Workshop, guest instructors Drs. Marc Kéry and Michael Schaub, Swiss Ornithological Institute.			
2019	Lead organizer, Community-based Conservation, lead efforts to engage undergraduate and graduate students in Private Lands Partners Days annual conference (co-hosted by U.S. Fish and Wildlife Service and Partnerscapes).			
2018	Scientific Program Committee – 2018 American Ornithological Society Conference, Tucson, AZ, April 9-18, 2018.			

Lead organizer, Science Communication Workshop; special gues	t Randy Olson
author of "Don't be such a scientist"; Symposium co-organizer, The American Ornithologists' Union (1 Meeting) and Cooper Ornithological Society (85 th Stated Meeting Oklahoma, Norman, Oklahoma, July 28-Aug 2, 2015. Title: <i>Economic conservation of grassland birds: A tribute to the work of Fritz L.</i>	g), University of logy and
2012-2015 The 2 nd North America Congress for Conservation Biology, Society Conservation Biology; local organization committee; co-chair.	10
2010-2011 Conference chair: 2011 Joint Conference of The Colorado Chapte Society and the Colorado/Wyoming Chapter of the American Fish Conference Theme: <i>From the Cradle to the Grave: Recruiting an</i>	heries Society.
Natural Resources Recreationists. 2006-2007 Bird monitoring and detectability workshop, Colorado Division o Department Fish, Wildlife, and Conservation Biology, Colorado S Collins, CO; co-chair	
2005-2006 Wind energy and Colorado wildlife symposium, Colorado Divisio Fort Collins, CO; steering committee.	on of Wildlife,
2004-2005 Great Plains grasslands symposium, Colorado Division of Wildlit CO; steering committee.	fe, Fort Collins,
<u>Awards</u>	
University of Montana, W.A. Franke College of Forestry and Cons Wambach Faculty Service Award	servation –
2023 University of Montana, W.A. Franke College of Forestry and Cons Student Service Award	servation –
Award: "Best Lesson Learned", Factors Influencing Rangewide S Mountain Plover (Charadrius montanus) Chicks. Western Hemis	•
Species Initiative. 2005 Award recipient for the Department of Interior Conservation Serv Colorado Farm Bureau and the Colorado Department of Natural I	
<u>Membership</u>	
2016-present American Association for the Advancement of Science	
2018-present American Association of University Women	
2016-present Association of Ecological Society of America	
2017-present Association of Ecological Society of America Theoretical Ecology and Statistical Ecology Section (since 201 Pielou Award Committee (since 2017)	17)
2011-present Montana Bird Conservation Partnership.	
2012-present Society for Conference Biology	
1999-present The Wildlife Society Montana Chapter (since 2011)	

Colorado Chapter (2001-2011) – served as President, President-Elect & Northeast Representative

2019-2023 500 Women Scientists

Missoula Chapter, Pod Coordinator

1996-2016 Cooper Ornithological Society

Board of Directors & Chair, Young Professional Award (2011-2014)

ADVISEES

Postdoctoral

M. Colter Chitwood (2020) Elizabeth Simpson (2023-2024) Joseph Smith (2016-2018) Jason Tack (2015-2016)

Current Graduate Students

Christian Dupree, M.S. (2022 - present) – Wildlife Bio. (University of Montana) Stephen Lewis, PhD. (2020 - present) – Wildlife Bio. (University of Montana)

Previous Graduate Students

Shea Coons, M.S. (2021) – Wildlife Bio. (University of Montana)

David Haines, M.S. (2020) – Wildlife Bio. (University of Montana)

Kayla Ruth, M.S. (2019) – Wildlife Bio. (University of Montana)

Megan Euclide, Professional M.S. (2024) – Wildlife Bio. (University of Montana)

Danielle Fagre, M.S. (2018) – Wildlife Bio. (University of Montana)

Jessie D. Golding, M.S. (2015) – Wildlife Bio. (University of Montana)

Jennifer Helm, Ph.D. (2023) – Wildlife Bio. (University of Montana)

William Janousek, Ph.D. (2018) – Wildlife Bio. (University of Montana)

Lindsey Messinger, M.S. (2013) – Dept. Geography (University of Denver); co-advisor

Kaity Reintsma, Ph.D. (2023) – Wildlife Bio. (University of Montana)

Heather C. Tipton, M.S. (2007) -Wildlife Bio. (Colorado State University); co-advisor

<u>Undergraduate Advisees (Research)</u>

Katia Chavez (2024 to present) – Wildlife Bio. (University of Montana)

Taylor Coon (2021 to present) – Wildlife Bio. (University of Montana)

Kari Eneas (completed 2013) – Wildlife Bio. (University of Montana)

Amelia Evavold (completed 2023) – Wildlife Bio. (University of Montana)

Kate Gilmore (completed 2006) – Biological Sciences (Colorado State University); co-advisor

Zoe Glas (completed 2013) – Wildlife Bio. (University of Montana)

Alan H. Harrington (completed 2012) – Wildlife Bio. (Colorado State University); co-advisor

Tyler Kelly (completed 2014) – Wildlife Bio. (University of Montana)

Kaitlyn Reinstma (completed 2016) – Wildlife Bio. (University of Montana)

Miles Scheuering (completed 2021) – Wildlife Bio. (University of Montana)

Julie Schultz (2021 to present) – Wildlife Bio. (University of Montana)

Kaitlyn Strickfaden (completed 2018) – Wildlife Bio. (University of Montana)