CURRICULUM VITA

Diane M. Debinski

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EDUCATION

- 1991 Ph.D. (Biology) Montana State University
- 1986 M.S., cum laude (Resource Policy, Economics and Mgmt.) University of Michigan
- 1984 B.A., magna cum laude (Biology and Environmental Studies) University of Maryland

INTERESTS AND GOALS

I pursue research and teaching in the fields of conservation biology, landscape ecology, and restoration ecology. Areas of research include biodiversity assessment with remote sensing and GIS applications, spatial analysis, metapopulation dynamics, habitat fragmentation, population viability assessment, genetics of small populations, climate change, and prairie restoration. I also conduct research and help implement programs related to recruitment and retention of women and minorities in science and engineering.

EMPLOYMENT

2017-present Montana State University, Bozeman, MT

Professor and Head, Dept. Ecology

- Lead a department of 15 faculty, ~600 undergraduates, and 50 graduate students
- Teach courses on Foundations of Ecology & Management, Grand Challenges in Ecology and Environmental Sciences, and Ecological Responses to Climate Change
- Conduct research on community ecology, population ecology, biodiversity assessment, climate change, and grassland restoration.

1994-2017 Iowa State University, Ames, IA

Professor, Dept. Ecology, Evolution, and Organismal Biology

- Taught Conservation Biology, Women in Science and Engineering, and Biology.
- Conducted research on the effects of global climate change on biodiversity, effects of agriculture on ecological communities, and prairie restoration techniques.
- Chair, Interdepartmental Graduate Program in Ecology and Evolutionary Biology

2012 University of Ottawa, Canada

Distinguished Visiting Researcher, Canadian Facility for Ecoinformatics Research (Sabbatical) August-December, 2012.

2004 Stanford University

Visiting Scientist, Center for Conservation Biology (Sabbatical) July -December, 2004.

1991-1994 University of Kansas, Lawrence, KS

Assistant Professor, Environmental Studies: Taught Field Methods in Environmental Studies, Biological Environmental Impact Analysis and Introduction to Environmental Studies, coordinated Field Methods course, coordinated undergraduate advising.

1991-1994 University of Kansas, Lawrence, KS

Adjunct Assistant Curator, Theoretical Ecology, Museum of Natural History: Conducted research on relationships between species assemblage patterns and environmental parameters using tools such as multivariate statistics, GIS, and remote sensing.

1987-1989 Glacier National Park, West Glacier, MT

Conservation Biologist: Developed sampling and analysis methodology to inventory and monitor biological diversity of birds and butterflies in Glacier National Park.

PUBLICATIONS REFEREED ARTICLES (see Orcid id:0000-0002-7144-4640)

- In Faurot-Daniels, C.R., M. L. Flenniken, and **D.M. Debinski**. Submitted. Declines and variation in butterfly species richness and community composition in a montane protected area after 35 years. *Diversity and Distributions*.
 - Coon, J.J, SB. Maresh Nelson, R.C. Daughtridge, *D.M. Debinski*, W.H. Schacht, and J.R. Miller. 2025. Bird and arthropod response to herbicide and grazing: Trade-offs and time lags in invasive plant management. *Ecosphere*. http://dx.doi.org/10.1002/ecs2.70355
 - Cornelisse, T., D.W. Inouye, R.E. Irwin, S. Jepsen, J.R. Mawdsley, M. Ormes, J. Daniels, *D.M. Debinski*, T. Griswold, J. Klymko, M.C. Orr, L. Richardson, N. Sears, D. Schweitzer, B. E. Young. 2025. Elevated extinction risk in over one fifth of native North American pollinators. *PNAS*. Vol. 122 No. 14 https://doi.org/10.1073/pnas.2418742122
 - **Debinski, D.M.**, N. Warchola, S. Altizer, and E. Crone. 2025. Implications of Summer Breeding Phenology on Demography of Monarch Butterflies. *J. Animal Ecology*. http://doi.org/10.1111/1365-2656.70004
 - Durney, *D.M. Debinski*, and S. Matter. 2025. Montane butterfly developmental life stages as indicators of insect vulnerability to extreme climatic conditions. *Ecosphere*. http://dx.doi.org/10.1002/ecs2.70147
 - Zaman, K., A. McCombs, *D.M. Debinski*, and S.D. Schoville. 2025. Combining multiscale replication in network and landscape genetic analyses to assess functional connectivity and population resilience in Parnassius clodius butterflies. *Journal of Heredity*. Pages esaf033. https://doi.org/10.1093/jhered/esaf033
 - Duff, H., D.M. Debinski, and B.D. Maxwell. 2024. Ecological refugia enhance biodiversity and crop production in dryland grain production systems. Agriculture, Ecosystems and Environment. doi.org/10.1016/j.agee.2023.108751
 - Duff, H., *D.M. Debinski*, and B.D. Maxwell. 2024. Landscape context affects patch habitat contributions to biodiversity in agroecosystems. *Ecosphere*. 2024;15:e4879. https://doi.org/10.1002/ecs2.4879
 - Meinzen, T.C., L.A. Burkle, and *D.M. Debinski*. 2024. Roadside habitat: boon or bane for pollinating insects? *BioScience*.74:54-64 doi.org/10.1093/biosci/biad111
 - Carroll, K.A., Lance, M.J., B.V. Smithers, and *D.M. Debinski*. 2023. Increasing equitable access to graduate education through competitive hiring in the life sciences. *New Directions for Higher Education*. DOI: 10.1002/he.20472
 - Debinski, D.M. 2023. Insects in Grasslands. Chapter In: McNew, L.B., D.K. Dahlgren, and J.L. Beck (eds.). Rangeland Wildlife Ecology and Conservation. Springer Publishers. ISBN: 9783031340390 (Paperback) ISBN: 9783031340369 (Hardback)

- D.M. Debinski. 2022. Make the approach and get the data: Challenges, Teamwork, and
 Cultures of Support for Women who are Scientists and Parents in Field Stations and Marine
 Labs. Chapter In: V. McDermott, J. Gee, and A. May (eds.). Women of the wild: Challenging
 gender disparities in remote field stations and marine laboratories. Lexington Books.
 - Durney, J., A. Engel, *D.M. Debinski*, and L. Burkle. 2022. Earlier spring snowmelt drives
 Balsamorhiza sagittata phenology in montane meadows. *Ecosphere*.
 https://doi.org/10.1002/ecs2.4198
 - McCombs, A.L., *D.M. Debinski*, K. Reinhardt, M. Germino, P. Caragea. 2022. Warming temperatures affect meadow-wide nectar resources, with implications for plant-pollinator communities. *Ecosphere*. https://doi.org/10.1002/ecs2.4162
 - Rice, C.L., *D.M. Debinski*, R.G. Bramblett, S.E. Rubin, M.A. Ivie, J.A. Clark, A.C. Evans, B.V. Smithers, & T.E. McMahon. 2022. Montana State University Vertebrate Museum Fish Collection (Version 1) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.5847350
- Bramblett, R.G., C.L. Rice, J.A. Clark, M.A. Ivie, H.E.D. Stewart, and *D.M. Debinski*. 2021.
 Montana Prairie Fish Collection, Montana State University. Data Publication. https://zenodo.org/record/5585950#.YdzSUo5KhaQ
 - Coon, J.J. N.J. Lyon, E.J. Raynor, *D.M. Debinski*, J.R. Miller, and W.H. Schacht. 2021.
 Using Adaptive Management to Restore Grasslands Invaded by Tall Fescue (*Schedonorus arundinaceus*). *Rangeland Ecology & Management* 76:84-94.
 https://doi.org/10.1016/j.rama.2021.02.001
 - Crees, L. and *D.M. Debinski*. 2021. Natural history observations on *Parnassius clodius altaurus* and *Parnassius smintheus magnus* (Papilionidae) in Grand Teton National Park, WY. *Journal of the Lepidopterists' Society*. 75(1): 70-74 https://doi.org/10.18473/lepi.75i1.a9
 - Lyon, N.J., D.S. Stein, *D.M. Debinski*, J.R. Miller, and W.H. Schacht. 2021. Responses of flowering plant and butterfly communities to experimental herbicide and seeding treatments for native grassland restoration. *Ecological Restoration*. 39(3):168-181. https://doi:10.3368/er.39.3.168
 - Moss, K.E., *D.M. Debinski* and J.S. Durney. 2021. Wings that Make Waves. K-12 iBook summarizing how butterflies can serve as an indicator of climate change. https://books.apple.com/us/book/wings-that-make-waves/id1599810347
 - Raynor, E.J., H.L. Hillhouse, *D.M. Debinski*, J.R. Miller, and W.H. Schacht. 2021. Recoupling cross-scale interactions in tall fescue-invaded tallgrass prairie. *Landscape Ecology* https://doi.org/10.1007/s10980-021-01348-x
 - Raynor, E.J., D.A. McGranahan, J.R. Miller, *D.M. Debinski*, W.H. Schacht and D.E. Engle. 2021. Moderate grazer density stabilizes forage availability more than patch burning in low-stature grassland. *Land* 10(4): 395. https://doi.org/10.3390/land10040395
 - Scasta, J.D., R.L. McCulley, D.M. Engle, and *D.M. Debinski*. 2021. Patch burning tall fescue invaded grasslands alters alkaloids and tiller defoliation with cattle toxicosis implications. *Rangeland Ecology & Management*. 75: 130-140. https://doi.org/10.1016/j.rama.2020.12.009.
- Capozzelli, J.F., J.R. Miller, *D.M. Debinski*, and W.H. Schacht. 2020. Restoring the fire-grazing interaction promotes tree-grass coexistence by controlling woody encroachment. *Ecosphere*. https://doi.org/10.1002/ecs2.2993
 - Garzella, C. and *D.M. Debinski*. 2020. Using Biodiversity Data to Assess Species-Habitat Relationships in Glacier National Park, Montana ver 8. Environmental Data Initiative. https://doi.org/10.6073/pasta/222532f38cb2e996244a60be7d048261 (data publication)
 - Stein, D., *D.M. Debinski*, J. Pleasants, John, A. Toth. 2020. Evaluating Native Bee Communities and Nutrition in Managed Grasslands. *Environmental Entomology*. doi: 10.1093/ee/nvaa009

- Milliman, T., B. Seyednasrollah, A.M. Young, K. Hufkens, M.A. Friedl, S. Frolking, A.D. Richardson, M. Abraha, D.W. Allen, M. Apple, M.A. Arain, J. Baker, J.M. Baker, C.J. Bernacchi ... *D.M. Debinski* ... et al. 2019. PhenoCam Dataset v2.0: Digital Camera Imagery from the PhenoCam Network, 2000-2018. https://doi.org/10.3334/ORNLDAAC/1689
 - Seyednasrollah, B., A.M. Young, K. Hufkens, T. Milliman, M.A. Friedl, S. Frolking... D.M. Debinski ... et al. 2019. PhenoCam Dataset v2.0: Vegetation Phenology from Digital Camera Imagery, 2000-2018. https://doi.org/10.3334/ORNLDAAC/1674
 - Debinski, D.M. 2019. Insects as a Vital Sign in the Greater Yellowstone Ecosystem. *Yellowstone Science* 27(1):58-60.
 - Lyon, N.J., *D.M. Debinski* and Imtiaz Rangwala. 2019. Informing Climate Change-Resilient Grassland Restoration Strategy with Species Distribution Models. *Frontiers in Ecology and Evolution*. Vol 7 Article 33 doi: 10.3389/fevo.2019.00033
- Crees, L. and *D.M. Debinski*. 2018. Observations of Meloe (Coleoptera) Larvae Hitchhiking on *Parnasius clodius* (Papilionidae) in Grand Teton National Park. Journal of the Lepidopterists' Society. 72(3):251-252.
 - Goodman, L., *D.M. Debinski* and N.J. Lyon. 2018. Flowers increase ecosystem biodiversity in Midwestern prairies. *Journal of Student Research*. http://www.jofsr.com/index.php/path/article/view/465
 - Nelson, S.B., J.J. Coon, C.J. Duchardt, J.R. Miller, *D.M. Debinski*, W.H. Schacht. 2018.
 Contrasting impacts of invasive plants and human-altered landscape context on nest survival and brood parasitism of a grassland bird. *Landscape Ecology*. https://doi.org/10.1007/s10980-018-0703-3
 - Pocius, V.M., *D.M. Debinski*, J.M. Pleasants, K.G. Bidne and R.L. Hellmich. 2018. Monarch butterflies do not place all of their eggs in one basket: oviposition on nine Midwestern milkweed species. *Ecosphere* 9(1):e02064. 10.1002/ecs2.2064
 - Pocius, V.M., J.M. Pleasants, *D.M. Debinski*, K.G. Bidne, R.L. Hellmich, S.P. Bradbury, and S.L. Blodgett. 2018. Monarch Butterflies Show Differential Utilization of Nine Midwestern Milkweed Species. *Frontiers in Ecology and Evolution*. doi.org/10.3389/fevo.2018.00169
 - Raynor, E.J., C. Griffith, D. Twidwell, W.H Schacht, C. Wonkka, C. Roberts; C. Bielski, *D.M. Debinski*, and J.R. Miller. 2018. The emergence of heterogeneity in invasive-dominated grassland: a matter of the scale of detection. *Landscape Ecology*. 33:2103–2119 https://doi.org/10.1007/s10980-018-0725-x
 - Szcodronski, K. E., *D.M. Debinski* and R. Klaver. 2018. Occupancy modeling of *Parnassius clodius* butterfly populations in Grand Teton National Park, Wyoming. *Journal of Insect Conservation*. doi: 10.1007/s10841-018-0060-1
- Kane, K., D.M. Debinski, C. Anderson, J.D. Scasta, D.M. Engle, and J.R. Miller. 2017. Using Regional Climate Projections to Guide Grassland Community Restoration in the Face of Climate Change. Frontiers in Plant Science. doi.org/10.3389/fpls.2017.00730
 - Pocius, V.M., *D.M. Debinski*, K.G. Bidne, R. Hellmich, and F.K. Hunter. 2017. Performance of Early Instar Monarch Butterflies (*Danaus plexippus* L.) on Nine Milkweed Species Native to Iowa *Journal of the Lepidopterists Society*. 71(3):153-161. https://doi.org/10.18473/lepi.71i3.a5
 - Pocius, V.M., *D.M. Debinski*, J.M. Pleasants, K.G. Bidne, R. Hellmich, and L.P. Brower. 2017.
 Milkweed Matters: Monarch Butterfly (Lepidoptera: Nymphalidae) Survival and Development
 on Nine Midwestern Milkweed Species *Journal of Environmental Entomology*. 2017, 1–8.
 doi: 10.1093/ee/nvx137.
 - Scasta, D.S. J. Talley, D.M. Engle, and *D.M. Debinski*. 2017. Climate extremes, vegetation change, and de-coupling of interactive fire-grazing processes exacerbate fly parasitism of cattle. *Environmental Entomology* 1-10. doi: 10.1093/ee/nvw171.
 - Sherwood, J.A., *D.M. Debinski*, P.C. Caragea, and M. Germino. 2017. Effects of experimentally reduced snowpack and passive warming on montane meadow plant phenology and floral resources. *Ecosphere*. Volume 8(3) Article e01745. doi.org/10.1002/ecs2.1745

- Delaney, J.T. R A. Moranz, *D.M. Debinski*, D.M. Engle, J.R. Miller. 2016. Exotic-Dominated Grasslands Show Signs of Recovery with Cattle Grazing and Fire. PLoS ONE. DOI: http://dx.doi.org/10.1371/journal.pone.0165758
 - Duchardt, C., J.R. Miller, D.M. Engle, and *D.M. Debinski*. 2016. Adapting the fire-grazing interaction to fragmented landscapes for grassland bird conservation. *Journal of Range Management* 69(4):300-309.
 - Lewthwaite, J.M., *D.M. Debinski* and J.T. Kerr. 2016. High community turnover and dispersal limitation relative to rapid climate change. *Global Ecology and Biogeography*. DOI: 10.1111/geb.12553.
 - McGranahan, D.A., T. Hovick, D. Elmore, D.M. Engle, S.D. Fuhlendorf, S.L. Winter, J.R. Miller, and *D.M. Debinski*. 2016. Temporal variability in aboveground biomass decreases as spatial heterogeneity increases. *Ecology* 97(3):555-560.
 - Scasta, D.S., C. Duchardt, D.M. Engle, J.R. Miller, *D.M. Debinski* and R. Harr. 2016.
 Constraints to restoring fire and grazing ecological processes to optimize grassland vegetation structural diversity. *Ecological Engineering*. DOI: 10.1016/j.ecoleng.2016.06.096
 - Smith, G. W., *D.M. Debinski*, N.A. Scavo, C.J. Lange, J.T. Delaney, R.A. Moranz, J.R. Miller, D.M. Engle, and A.L. Toth. 2016. Bee abundance and nutritional status in relation to grassland management practices in an agricultural landscape. *Environmental Entomology* 1-10.
- Delaney, J.T., K. Jokela and *D.M. Debinski*.2015.Seasonal succession of pollinator floral resources in four grassland types in the tallgrass prairie ecoregion. *Ecosphere*. DOI: 10.1890/ES15-00218.1
 - Jokela, K. **D.M. Debinski**, and R. McCulley.2015.Effects of Tall Fescue and Its Fungal Endophyte on the Development and Survival of Tawny-Edged Skippers (Lepidoptera: Hesperiidae) *Environmental Entomology*. DOI: 10.1093/ee/nvv151
 - Lyons, T.P., J.R. Miller, *D.M. Debinski*, and D.M. Engle.2015.Identifying factors related to predator-specific patterns of nest loss in managed grasslands. *Ecological Applications* 25(6):1596-1605.
 - Vogel, J.S. Shepherd, and *D.M. Debinski*. 2015. An Unexpected Journey: Greater Prairie-chicken Travels Nearly 4000 km After Translocation to Iowa. *American Midland Naturalist*. 174:343-349.
 - Waldman, Rhea and *D.M. Debinski*. 2015. Wind tunnel studies of temperature dependence and behavior of butterflies in the context of habitat edges. *Journal of the Lepidopterists' Society*. 69(2): 125-130.
- Harr, R., L. Wright Morton, S. Rusk, D. Engle, James Miller, *D.M. Debinski*. 2014.
 Landowners' perceptions of risk in grassland management: woody plant encroachment and prescribed fire. *Ecology and Society* 19 (2): 41.
 - McGranahan, D.A., A.L. Daigh, J.J. Veenstra, D.M. Engle, J.R. Miller, and *D.M. Debinski*.
 2014. Connecting Soil Organic Carbon and Root Biomass with Land-Use and Vegetation in Temperate Grassland. *The Scientific World Journal*, Article ID 487563, 9 pages.
 - McGranahan, D.A., D.M. Engle, J.T. Mulloy, J.R. Miller, and *D.M. Debinski*. 2014. Land use
 history and an invasive grass affect tallgrass prairie sedge community composition in upland
 grassland. *Applied Vegetation Science*. DOI: 10.1111/avsc.12136
 - Scasta J., D.M. Engle, R.N. Harr, *D.M. Debinski*. 2014. Fire induced reproductive mechanisms of a *Symphoricarpos* (*Caprifoliaceae*) shrub after dormant season burning. *Botanical Studies*, 55:1 DOI: 10.1186/s40529-014-0080-4

- **Debinski, D.M.,** J.C. Caruthers, D. Cook, J. Crowley and H. Wickham. 2013. Gradient-based habitat affinities predict species vulnerability to climate change. *Ecology* 94(5):1036-1045.
 - Moranz, R.A., *D.M. Debinski*, L. Winkler, J. Trager, D.A. McGranahan, D.M. Engle and J.R. Miller. 2013. Effects of grassland management practices on ant functional groups in central North America. *Journal of Insect Conservation* DOI: 10.1007/s10841-013-9554-z
 - McGranahan, D.A., D. M. Engle, S. D. Fuhlendorf, S.L. Winter, J.R. Miller, and
 D.M. Debinski. 2013. Inconsistent outcomes of heterogeneity-based management underscore importance of matching evaluation to conservation objectives. Environmental Science and Policy. 31:53-60.
- Bjarnholt, N.,M. Nakonieczny, A. Kędziorski, *D.M. Debinski*, S.F. Matter, C.E. Olsen, M. Zagrobelny. 2012. Occurrence of sarmentosin and other hydroxynitrile glucosides in *Parnassius* butterflies and their food plants. *Journal of Chemical Ecology*. 38(5):525-37
 - Hovick T.J., J.R. Miller, S.J. Dinsmore, D.M. Engle, and *D.M. Debinski*, S.D. Fuhlendorf. 2012. Effects of Fire and Grazing on Grasshopper Sparrow Nest Survival. *Journal of Wildlife Management* 76(1): 19–27.
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- Hellmich, R.L., *Debinski, D.M.* and Pocius, V.M., 2016. Monarch Oviposition and Larval Survival on Nine Native Milkweed Species. Farm Progress Reports, 2015(1), p.165.
- Orlofske, J. M. 2008. *Prairie Investigators: Using plants and animals to uncover the mystery of the prairie.* Iowa State University Extension Publication SP 321 (J. Orlofske was one of my M.S. students)
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GRANTS FUNDED

- PENDING: Identifying conservation needs and land management opportunities for pollinators in the Greater Yellowstone Ecosystem. Greater Yellowstone Coordinating Committee. (\$85,506)
- 2022-2022 *Meg and Bert Raynes Wildlife Fund.* Butterflies as Bioindicators in the Greater Yellowstone Ecosystem (*D.M. Debinski*, \$5000).
- Sitka Ecosystem Grant: Roadside Pollinator Ecology and Conservation (T. Meinzen and **D.M. Debinski**, \$1070).
- 2020-2023 Idaho Transportation Department: An Evaluation of Idaho Roadside Habitats, Their Use by Monarch Butterflies and Other Pollinators, and Their Management. (D.M. Debinski, L. Burkle, and R. Ament, \$144,208).
- Teton Conservation District: Butterflies as Bioindicators in the Greater Yellowstone Ecosystem (**D.M. Debinski**, \$5000).
- 2021-2023 MSU Research Expansion Funds, FY 2021: Quantifying Temporal Changes in Alpine Pollinator Communities Using Traditional vs. eDNA-based Methods (**D.M. Debinski** and Michelle Flenniken, \$30,000).
- 2021-2022 Sitka Ecosystem Grant: (T. Meinzen and D.M. Debinski, \$\$2,578).
- Sitka Ecosystem Grant: Effects of Shifting Seasonal Patterns on Three Native Plants and the Effect on Native Pollinators in the Greater Yellowstone (J. Durney and **D.M. Debinski**, \$650).
- Council on Library and Information Resources (CLIR): From the Mountains to the Prairies, From Trout to Dace: Revealing Climate and Population Impacts on Culture, Ecology, and Economy in Montana's Fisheries (J. Clark, J. Thull, **D.M. Debinski**, R. Bramblett, M. Ivie, \$302,419)
- Walt Disney Foundation Conservation Fund: Parnassius butterflies: Conservation and Education (**D.M. Debinski** and K.E. Moss, \$50,000).
- Department of Defense Strategic Environmental Research and Development Program
 (DOD SERDP): Will climate-mediated phenological shifts affect population viability? A
 test with butterflies on Department of Defense lands (E. Crone, C. Schultz, *D.M. Debinski*, S. Altizer \$2,136,945; \$357,969 to Debinski).
- Agriculture and Food Research Initiative (AFRI): Adaptive management of invasive species to enhance agro-ecosystem services in grasslands. (J. Miller, **D.M. Debinski**, W. Schacht and L.W. Morton, \$439,000).
- Leopold Center for Sustainable Agriculture: Climate Change Adaptation in Grassland Ecosystem (**D.M. Debinski**, C. Anderson, H. Feng, J. Miller, \$90,000).
- 2016-2019 National Conservation Innovation Grant (NRCS): Enhancing Monarch Butterfly
 Conservation in Iowa (S. Blodgett, S. Bradbury, **D.M. Debinski**, R. Hartzler, J.
 Pleasants, \$760,897).
- 2015-2016 *Iowa NRCS:* Integrating Nutrient Reduction and Monarch Conservation (S. Blodgett, S. Bradbury, R. Hartzler, J. Pleasants *D.M. Debinski*, T. Isenhart, and R. Schultz, \$74,451).
- 2015-2017 *DOI-U.S. Geological Survey (USGS):* Monitoring Phenology in the North Central Region of the U.S. (*D.M. Debinski* and K. Kane, \$6,916).

- University of Wyoming-National Park Service Research Center: Simulating expected changes in pollinator resources as a function of climate change. (**D.M. Debinski**, \$5,000).
- 2013-2018 U.S. Fish and Wildlife Service: Adaptive Management in Working Landscapes to Provide Habitat for Species of Greatest Conservation Need (K. Reeder, J.R. Miller, D.M. Debinski, and L. Wright-Morton, \$498,891).
- 2012-2015 U.S.G.S.: Regional Extreme Climate Events: Gaining understanding through Past and Present Observations and Modeling. (C.J. Anderson and **D.M. Debinski**, \$120,227).
- 2013-2015 *Iowa Department of Natural Resources:* Conservation, Habitat Requirements, Genetic Diversity, and Survival of a Translocated Population of Greater Prairie-chickens in Iowa. (J. Vogel and *D.M. Debinski*, and S. Shepherd, \$129,812).
- *Iowa Science Foundation:* Seasonal succession of floral resources and butterfly community responses in different grassland habitats: Implications for pollinator conservation in the tallgrass prairie region of the USA. (*D.M. Debinski* and J. Delaney, \$5,000).
- Leopold Center for Sustainable Agriculture: The Complex Role of Tall Fescue in Grassland Ecology (**D.M. Debinski**, R. McCulley, D. Engle, and J.D. Scasta, \$86,333).
- 2012-2013 University of Wyoming-National Park Service Research Center: Temporal Trajectories of Reproductive Phenology: A Window into Understanding Climate Change Effects.
 (D.M. Debinski and J. Sherwood, \$4,500).
 - University of Ottawa, Canada: Distinguished Visiting Researcher, Canadian Facility for Ecoinformatics Research (J. Kerr and D.M. Debinski, \$9375).
- 2012-2012 Iowa NASA EPSCoR: Iowa NASA Travel Award. (D.M. Debinski, \$1,933).
- U.S. Fish and Wildlife Service: The Use of Fire and Grazing to Improve Grassland Habitats for Species of Greatest Conservation Need (D. Harr, **D.M. Debinski**, J. Miller, D. Engle, L. Wright-Morton, and R. Harr, \$732,904).
- *Iowa Native Plant Society:* Effects of fire and grazing on reintroduction of prairie violet (*Viola pedatifida*) to Iowa grasslands (*D.M. Debinski*, R. Moranz, J. Delaney, \$500).
- 2010-2012 Iowa Department of Natural Resources: Testing the Use of Patch-Burn Grazing to Provide
 Grassland Habitat for Species of Greatest Conservation Need (D.M. Debinski, D. Engle
 and R. Harr, \$116,716).
- Center for Global and Regional Environmental Research: Climate Change Effects on Trophic Interactions in Montane Meadow Systems. (**D.M. Debinski** and J. Sherwood, \$30,000).
- 2009-2010 University of Wyoming-National Park Service Research Center: An Examination of Reproductive Phenology with Implications for Understanding Climate Change Effects. (D.M. Debinski and J. Sherwood, \$5,000).
- *Iowa Department of Natural Resources:* Examining Changes in Vegetation Structure
 Through Time in a Restored Tallgrass Prairie Ecosystem and the Implications for Avian
 Diversity (*D.M. Debinski* and B. Olechnowski, \$28,500).
 - ISU Provost's Office Minigrant: Seminar series for promising post-doctoral fellows and future faculty in the basic life sciences (Powell-Coffman, J, Ambrosio, L., and D.M. Debinski, \$2,500).

- 2007-2008 Iowa Science Foundation: Examining Changes in Vegetation Structure Through Time in a Restored Tallgrass Prairie Ecosystem and the Implications for Avian Diversity (D.M. Debinski and B. Olechnowski, \$5,000).
 - Iowa Department of Natural Resources: Examining Changes in Vegetation Structure Through Time in a Restored Tallgrass Prairie Ecosystem and the Implications for Avian Diversity (D.M. Debinski and B. Olechnowski, \$2,500).
- 2006-2010 USDA NRI-51.9 Biology of Weedy and Invasive Species; Restoration of Evolutionary Firegrazing Interactions to Limit Invasion of Exotic Forages in the Central Grasslands (S. Fuhlendorf, K. Hickman, D. Engle, J. Miller and *D.M. Debinski*, \$499,000).
 - Iowa Department of Natural Resources: The Use of Cattle-Grazing and Fire as Management Tools To Maintain Biodiversity on Grassland Reserves in Southern Iowa (J. Miller, D. Engle and *D.M. Debinski*, \$428,039).
- 2006-2012 NSF ADVANCE Institutional Transformation Program: ISU's Comprehensive Institutional Intervention Strategy (S. Carlson, S. Bird, B. Bowen, J. Bystydzienski, D.M. Debinski and J. Vance, \$3,300,000).
- 2006-2007 Iowa Science Foundation: Development of an Invertebrate-based Terrestrial Index of Biotic Integrity for Tall Grass Prairie Ecosystems (*D.M. Debinski* and J. Orlofske, \$5,000).
 - Iowa Department of Natural Resources: Development of an Invertebrate-based Terrestrial Index of Biotic Integrity for Tall Grass Prairie Ecosystems (**D.M. Debinski** and J. Orlofske, \$2,500).
- 2005-2008 NSF Long-Term Research in Environmental Biology (LTREB): Quantifying Early Indicators of Global Climate Change. (D.M. Debinski, \$72,500 including 2 REUs, 1 in 2006, 1 in 2007).
- 2005-2006 NSF Long-Term Research in Environmental Biology (LTREB): Quantifying Early Indicators of Global Climate Change REU. (D.M. Debinski, \$6,500).
 - University of Wyoming-National Park Service Research Center: Montane Meadows as a Microcosm for Predicting Global Climate Change. (D.M. Debinski, \$2,500).
- 2005-2005 ISU Center for Excellence in the Arts and Humanities. Marshes & Muskrats, People & Places: The Landscape of Paul Errington's Work (*D.M. Debinski* and J. Pritchard, \$9,800).
- 2004-2005 Pheasants Forever: Farm Scale Effects of Herbicide Tolerant Crops on Avian Habitat and Populations (D.M. Debinski and W. Clark, \$60,000).
 - Iowa Department of Transportation Living Roadways Trust Fund: Sustaining Pollinator Diversity in a Fragmented Landscape: The Role of Roadsides and Railway Right-ofways (D.M. Debinski and S. Hendrix, \$21,000).
- 2004-2007 Iowa Department of Natural Resources: Effects of Prairie Restoration Using Fire and Grazing Regimes on the Bird and Butterfly Communities of Iowa's Loess Hills (D.M. Debinski, R. Koford and J. Miller, \$98,500).
- 2004-2004 National Park Service: Terrestrial Insects as a Vital Sign in the Greater Yellowstone Network (*D.M. Debinski*, \$2,500).
- 2003-2005 Iowa State University: Faculty Women in Science Math, Engineering, and Technology at Iowa State University: Investigating the Present and Investing in the Future. (J. Litt and **D.M. Debinski**, \$62,500).
 - · University of Wyoming-National Park Service Research Center: Trophic Cascades and Biodiversity in Grand Teton National Park. (D.M. Debinski, \$4,000).
 - Denver Zoo Foundation: Trophic Cascades and Biodiversity in Grand Teton National Park. (D.M. Debinski, \$8,000).

- 2002-2003 Center for Global and Regional Environmental Research: Sustaining Pollinator Services in a Fragmented Landscape: What Landscape Features and Scales Affect Pollinator Diversity? (S. Hendrix and *D.M. Debinski*, \$19,975).
 - ISU SPRIG Grant: Sustaining Pollinator Services in a Fragmented Landscape: What Landscape Features and Scales Affect Pollinator Diversity? (*D.M. Debinski*, \$15,050).
 - Iowa Space Consortium: Using Remotely-sensed Habitat Classification to Determine Ecological Vulnerability to Climate Change (**D.M. Debinski**, \$10,000).
 - · University of Wyoming-National Park Service Research Center: Songbird Communities in the Greater Yellowstone Ecosystem: Species Distribution Relative to Habitat Type, Vegetation Structure, and Landscape Context. (D.M. Debinski, \$4,000).
- 2002-2002 National Fish and Wildlife Foundation & Neal Smith National Wildlife Refuge: Butterflies as Indicators of the Prairie Restoration Success at Neal Smith National Wildlife Refuge, Iowa (D.M. Debinski and P. Drobney, \$13,800).
- 2001-2004 Wildlife Habitat Management Institute Buffer Management Options for Nontraditional Wildlife Species in the Midwest (D.M. Debinski, \$75,000).
- 2001-2003 Grand Teton Natural History Association: Long-term Monitoring of Montane Meadow Biodiversity in the Greater Yellowstone Ecosystem (**D.M. Debinski**, \$12,500).
- 2001-2002 Iowa State Preserves Board: Inventory of Butterflies in Iowa State Preserves (**D.M. Debinski**, \$5,115).
 - Wisconsin Dept. of Natural Resources: Butterfly Biodiversity in Iowa Prairies (**D.M. Debinski**, \$5,000).
- 1999-2001 The Nature Conservancy David H. Smith Postdoctoral Fellowship program: Refining the use of Remote Sensing and Geographic Information Systems for Coarse-filter Biodiversity Protection (J. Jaros-Su, P.I. and *D.M. Debinski*, mentor/Co-P.I., \$164,540).
 - NSF Postdoctoral Research Fellowship in Biological Informatics: Refining the use of Remote Sensing and Geographic Information Systems for Biodiversity Protection: Testing the Predictions and Assumptions of the National Gap Analysis Project (J. Jaros-Su, P.I. and **D.M. Debinski** mentor/Co-P.I., \$100,000. Granted and declined due to Nature Conservancy grant).
 - Neal Smith National Wildlife Refuge: Restoring a Butterfly Community in the Context of Restoring a Complex Tallgrass Prairie Community: Fire as a Management Tool (**D.M. Debinski**, \$13,800).
- 1997-2000 Environmental Protection Agency (Ecological Indicators Panel): Modeling Spatial and Temporal Dynamics of Montane Meadows and Biodiversity in the Greater Yellowstone Ecosystem (**D.M. Debinski**, M. Jakubauskas and K. Kindscher, \$709,640).
- 1997-1999 National Park Service: Effects of Size, Fragmentation and Management of Prairie Remnants on Butterfly Diversity and Abundance (D.M. Debinski, \$55,998 subcontract from Kansas State University).
- 1993-1998 National Science Foundation (Long Term Ecological Research program): Long Term Population and Community Dynamics in an Experimentally Fragmented Landscape (R. Holt, *D.M. Debinski*, P. Rich, R. Pierotti and K. Price, \$270,000).
- 1997-1998 Iowa Department of Transportation: Determining the Conservation Value of Roadside Vegetation (*D.M. Debinski* and L. Ries, \$12,000).

- 1996-1997 ISU University Research Grant: Exploring Food Limitation as a Probable Cause of Decline in Iowa Regal Fritillary (Speyeria idalia) Populations (D.M. Debinski, \$11,680).
 - Iowa Academy of Science: Exploring Food Limitation as a Probable Cause of Decline in Iowa Regal Fritillary (Speyeria idalia) Populations (D.M. Debinski, \$4,720).
 - · Iowa State Preserves Board: Exploring Food Limitation as a Probable Cause of Decline in Iowa Regal Fritillary (Speyeria idalia) Populations (D.M. Debinski, \$8,070).
 - University of Wyoming National Park Service Research Station: Predicting Biodiversity in Montane Meadows of the Greater Yellowstone Ecosystem (*D.M. Debinski*, \$4,500).

1995-1997 • Wisconsin Dept. of Natural Resources: Partners in Wildlife Prairie Obligate Study (**D.M. Debinski**, \$3,000).

- 1995-1996 *Iowa Academy of Science:* Incorporating the Insect Community into Prairie Restoration Efforts: A Case Study of the Regal Fritillary Butterfly (Speyeria idalia) at Neal Smith Wildlife Refuge in Iowa (*D.M. Debinski*, \$3,000).
 - Iowa Dept. of Natural Resources: Regal Fritillary Butterfly (Speyeria idalia) Distribution in Southeast Iowa (*D.M. Debinski*, \$4,000).
 - ISU Start-Up Grant: Genetic Diversity and Agroecosystems: Establishment of a Molecular Genetics Laboratory in Animal Ecology (D.M. Debinski, \$4,000).
- 1993-1995 University of Wyoming National Park Service Research Station: A Remote Sensing and GIS-based Model of Habitat as a Predictor of Biodiversity (*D.M. Debinski*, \$5,500).

Note: all investigators listed in order of contribution

PROFESSIONAL PRESENTATIONS

Invited Presentations

- **Debinski, D.M.** 2025. Grassland management for pollinators in a working landscape. University of North Texas, Denton, TX. March 28, 2025.
- **Debinski, D.M.** 2024. Keynote Presentation: Staying Curious: Finding a Life in Ecology. MSU STEAM Day, Montana State University, Bozeman, MT. April 13, 2024.
- **Debinski, D.M.** 2023. Reduced snowpack and passive warming effects on montane meadow plant growth, phenology, floral productivity, and nectar characteristics. Holt Seminar (presented via Zoom), University of Florida, Gainesville, Gainesville, FL. Nov. 6, 2023.
 - Nakonieczny M. and *D.M. Debinski*. 2023. A look at the protection of the Pieniny population
 of the Apollo butterfly through the prism of American experiences from Yellowstone National
 Park and Grand Teton National Park. 12th Scientific Conference Scientific research in the
 Pieniny Mountains 2023 The Apollo butterfly research, protection and monitoring,
 Pieniny National Park, Poland, Oct. 19-20, 2023.
 - Faurot-Daniels, C. and *Debinski, D.M.* Assessing biodiversity using traditional and eDNA based approaches. Guest lecture for Introduction to Biotechnology (BIOB 105), Montana State University, Bozeman, MT. Dec. 1, 2023.
 - Debinski, D.M. 2023. Montane Meadow Communities as Indicators of Environmental Change

 Traditional Surveys and eDNA Assessments. Land Resources and Environmental
 Science, Montana State University, Bozeman, MT. April 10, 2023.
 - Debinski, D.M. 2023. Field and lab-based research experiences for undergraduate and graduate students in Ecology. MSU Didactic Opportunities and Achievements – Biological, Geographical and Geological Sciences - MSU Faculty Symposium. July 18, 2023, Bozeman, MT
 - Debinski, D.M. 2023. Butterflies in Montane Meadows as Indicators of Climate Change. Minds on Mountains Workshop 2023. Montana State University, Bozeman, MT. April 14, 2023.
 - Debinski, D.M. 2023. Montane Meadow Communities as Indicators of Environmental Change

 Traditional Surveys and eDNA Assessments. Land Resources and Environmental
 Sciences Seminar. Montana State University, Bozeman, MT. April 10, 2023.
 - Meinzen, T., *D.M Debinski*, L. Burkle and R. Ament. Bee and butterfly communities in roadside habitats: Identifying patterns, protecting monarchs, & informing management. Idaho Transportation Dept. Final Presentation. WebEx. May 9, 2023.
- Debinski, D.M. Working Scientists Panel. Greater Yellowstone's next 150 years: Expanding the scope of science together. Greater Yellowstone Biennial Science conference, Bozeman, MT, May 15-18, 2022.
 - Debinski, D.M. Assessing biodiversity using traditional and eDNA based approaches. Guest lecture for Introduction to Biotechnology (BIOB 105). Montana State University, Bozeman, MT. Oct. 7, 2022.
- Debinski, D.M. 2021. Grassland management for pollinators in a working landscape:
 Ecological and sociological perspectives. Aaniiih Nakoda College Seminar. Sept. 17, 2021.

- **Debinski, D.M.** Chasing down Biodiversity Patterns and Processes. Applied Mathematics Seminar, Montana State University, Bozeman, MT, Jan. 17, 2019.
 - **Debinski, D.M.** Butterfly and plant responses to climatic variation in montane meadows of the Greater Yellowstone Ecosystem. Museum of the Rockies. Bozeman, MT. Oct. 23, 2019.
 - Sherwood, J., *D.M. Debinski*, and M. Germino. Experimentally Simulating Warming and Snow Loss in a Mountain Meadow Systems. 10th International Association of Landscape Ecology World Congress, Milano, Italy, July 1-5, 2019.
- Debinski, D.M. 2018. Butterfly and plant responses to climate change in montane meadows
 of Grand Teton National Park, Hank and Marianne Harlow Memorial Seminar Series,
 University of Wyoming National Park Service Research Center. Grand Teton National Park,
 WY, July 5, 2018.
- Debinski, D.M. Combining Observational and Experimental Studies to Examine Plant and Insect Responses to Climate Change. NOROCK EcoLunch Seminar Series, U.S. Geological Sciences Northern Rocky Mountain Science Center (NOROCK). Nov. 28 2017.
 - **Debinski, D.M.** Combining Observational and Experimental Studies to Examine Plant and Insect Responses to Climate Change. University of Illinois. Dept. of Natural Resources and Environmental Sciences. March 3, 2017.
 - Debinski, D.M. Combining Observational and Experimental Studies to Examine Plant and Insect Responses to Climate Change. Montana State University. Ecology Dept. Jan 26, 2017.
 - Lyon, N, *D.M. Debinski*, J. Miller, W. Schact, and D. Stein. Adaptive Management for Prairie Plants and Pollinators in Midwestern Working Landscapes. Iowa Invasive Species Conference, Midwest Invasive Plant Network, Moravia, IA, March 2017.
 - Lyon, N.J, *D.M. Debinski*, J. Miller, W. Schact, and D. Stein. Grazing, Burning, and Butterflies. *Iowa Urban Tree Council*, Des Moines, IA, April 2017.
 - Pocius, V.M., Bidne, K.G., Hellmich, R., *Debinski, D.M*, and Pleasants, J.M. Which native milkweeds are acceptable host plants for larval monarch butterflies (*Danaus plexippus*) within the Midwestern U.S. Reiman Gardens, Day of Insects. Ames, IA. April 2017.
- Debinski, D.M. Landscapes for Monarch Conservation. Entomology Dept. Seminar, Iowa State University, Ames, IA. March 28, 2016.
 - Debinski, D.M., C. Anderson, H. Feng, J. Miller, and N. Lyon. Climate Change Adaptation in Grassland Ecosystems. Iowa Climate Science Educators Forum. North Central Climate Science Center Meeting, Fort Collins, CO. Oct. 12-14, 2016.
 - Pocius V.M., Bidne, K.G., and *Debinski, D.M.* Which native milkweeds are acceptable host plants for larval monarch butterflies (*Danaus plexippus*) within the Midwestern U.S.? Iowa Chapter of the Wildlife Society. Ames, Iowa. Feb. 18, 2016.
 - Pocius V.M., *Debinski, D.M.*, Hellmich, R., Blodgett, S., and Bradbury, S.P. 2016. Milkweed and Monarchs in the Agricultural Landscape: An Examination of Milkweed Persistence and Monarch Use (Invited Talk). Board of Center for Global and Regional Environmental Research, University of Iowa. May 20, 2016.

- Debinski, D.M., L. Ries, J. Petersen, R. Moranz, K. Reeder, S. Shepherd, J. Delaney, and J. Vogel. Landscapes for Monarch Conservation. Entomological Society of America. Minneapolis, MN. Nov. 15-18, 2015.
 - **Debinski, D.M.** Working with landowners to manage and conserve tallgrass prairie biodiversity: Ecological and sociological challenges and successes. Invited presentation. University of Michigan School of Natural Resources and Environment. Ann Arbor, MI. Jan. 23, 2015.
 - **Debinski, D.M.** Combining Observational and Experimental Studies to Examine Plant and Insect Responses to Climate Change. Invited presentation. Kansas State University. Invited Popenoe lecture, KSU Entomology Dept. April 17, 2015.
 - Debinski, D.M. Combining Observational and Experimental Studies to Examine Plant and Insect Responses to Climate Change. Invited presentation. North Carolina State University. Sept. 17, 2015.
 - **Debinski, D.M.**, J.R. Miller, W. Schacht and L. Wright-Morton. 2015. Adaptive Management in Working Landscapes to Provide Habitat for Species of Greatest Conservation Need. Invited presentation. The Nature Conservancy's Dunn Ranch, Eagleville, MO. May 7-8, 2015.
 - **Debinski, D.M.** J.R. Miller, W. Schacht and L. Wright-Morton. 2015. Adaptive Management in Working Landscapes to Provide Habitat for Species of Greatest Conservation Need. Invited presentation. Iowa Dept. of Natural Resources, Boone, Iowa. June 15, 2015.
 - Debinski, D.M. Grassland management for pollinators in a working landscape: Ecological and sociological perspectives. Invited presentation. Lakeside Laboratory, Milford, Iowa. June 17, 2015.
 - **Debinski, D.M.**, J.T. Kerr, and M. Larrivee. Species Traits as Filters of Climate-Induced Range Expansion. Montana State University. Bozeman, MT. March 17, 2015.
 - Delaney, J.T., *D.M. Debinski*, R.A. Moranz, D.M. Engle, and J.R. Miller. 2015. A synthesis on insect responses to fire: Questions, concerns, implication, and future research needs. Tallgrass Prairie and Oak Savanna Regional Fire Conference, Decorah, IA.
 - J.T. Kerr, *D.M. Debinski*, A. Taylor-Pindar, P. Galpern and M. Larrivee. 2015. Climate change and land use change impacts on pollinator conservation: Looking forward by looking back. Canadian Society for Ecology and Evolution Annual meeting - Genomes to Biomes. Concordia University, Quebec, Canada. January, 2015.
- Debinski, D.M., J. Delaney, R. Moranz, J. Miller, D. Engle, and L. Wright Morton. 2014.
 Grassland management for pollinators in a working landscape: Ecological and sociological challenges and successes. Invited presentation in symposium on Global Grand Challenges and Opportunities in Grassland Entomology. Entomological Society of America. Portland, OR. Nov. 15-19, 2014.
 - Debinski, D.M. 2014. Working with landowners to manage and conserve tallgrass prairie biodiversity: Ecological and sociological challenges and successes. Invited presentation. Grinnell College. Nov. 7, 2014.
 - J.T. Kerr, *D.M. Debinski*, A. Taylor-Pindar, and P. Galpern. Human footprint, climate change, and rapid pollinator population losses in North America and Europe. Canadian Society for Ecology and Evolution Annual meeting - Genomes to Biomes. Montreal, Canada. May 26, 2014.
- D.M. Debinski. Transforming institutions for recruitment and retention of women in science, technology, engineering, and math. University of Ottawa, Ottawa, ON, March 6, 2013.
 - **D.M. Debinski**. Working with landowners to manage and conserve tallgrass prairie biodiversity: Ecological and sociological challenges and successes. University of Colorado, Boulder, CO. August 30, 2013.
 - **D.M. Debinski**. Combining Observational and Experimental Studies to Examine Plant and Insect Responses to Climate Change in Montane Meadows. University of Alberta, Edmonton. March 2013.
 - Miller, J.R., L.W. Morton, D.M. Engle, *D.M. Debinski*, R.N. Harr, S.R. Rusk. Both sides now: Forging links between grassland conservation on protected areas and private lands. 98th Annual Meeting of the Ecological Society of America, Minneapolis, Minnesota, August 2013.

- D.M. Debinski. Linking Field Research with Spectral Data to Quantify Interannual Variation in Productivity and Phenology in Grassland Communities. NASA Goddard Space Flight Center, Biospheric Sciences Seminar, Greenbelt, MD, June 1, 2012.
 - **D.M. Debinski**. Studying Climate Change Effects on Plant and Insect Populations: A field research oriented approach, University of Ottawa, Ottawa, ON, April 23, 2012.
 - D.M. Debinski. Prairie Management for Invertebrates, Iowa Association of County Conservation Board Employees 35th annual Winterfest Training Workshop, Waterloo, IA, Jan 25th, 2012.
- D.M. Debinski. Simulating Climate Change Effects on Plant and Insect Populations in Grand Teton National Park. <u>Keynote address</u> for National Park Service Resource Symposium. Moran, WY, Sept. 8, 2011.
 - **D.M. Debinski**. Effects of prescribed fire and grazing on insect populations. Iowa prescribed fire conference. 2011 Prescribed Fire Conference, Feb. 22-23, Johnston, Iowa.
 - D.M. Debinski. Prairie Restoration: Putting the Pieces Back Together to Achieve A
 Functioning Ecosystem. <u>Annual Borlaug lecture</u>, Indian Hills Community College, Ottumwa,
 October 11, 2011.
- D.M. Debinski, H. Wickham, K. Kindscher, J. Caruthers and M.J. Germino. Montane meadow change during drought varies with background hydrologic regime and plant functional group regime and plant functional group. Ecological Society of America, Pittsburgh, PA, Aug. 6, 2010.
 - **D.M. Debinski**. Butterfly Movement and Habitat Use in Highly Fragmented Landscapes. Symposium: Butterfly dispersal linking ecology to conservation, linking observation to theory. 6th International Conference on the Biology of Butterflies, Edmonton, Alberta, June 29, 2010.
 - D.M. Debinski. Butterfly Movement and Habitat Use in Highly Fragmented Landscapes. Iowa Pollinator Conservation Short Course. Reiman Gardens and Xerces Society, Ames, IA. Aug. 10, 2010.
 - D.M. Debinski. Montane Meadow Biodiversity Changes During Drought: A Window into Understanding Possible Effects of Climate Change? Dept. of Geology and Atmospheric Sciences, Iowa State University, Ames, IA Aug. 24, 2010.
 - **D.M. Debinski**. Butterfly community responses to land use management in native and restored prairies. Natural Resources Ecology and Management. ISU, Ames, IA, Jan. 29, 2010.
- Debinski, D.M., J. Caruthers, and H. Wickham. Butterflies as indicators of environmental change in montane meadows. VIth International Conference on Arthropods: Chemical, Physiological, Biotechnological and Environmental Aspects, Ochotnica Dolna, Poland, June 21-26, 2009.
 - **Debinski, D.M.**, L. Merrick, R. Moranz, D. Engle, R. Harr, and J. Miller. Insect responses to Patch-Burn Grazing in Prairie Ecosystems. Iowa Chapter of The Wildlife Society, Ames, IA Jan 28, 2009.
 - D.M. Debinski, M. Germino, and D. Demshar. Effects of Experimental Snow Removal on Soil Moisture and Plant Communities in Montane Meadows. International Association for Landscape Ecology meeting, Snowbird, UT, April 12-16, 2009.
 - **Debinski, D.M.** Interviewing for Landscape Ecology Jobs. Workshop at the International Association of Landscape Ecologists meeting, Snowbird, UT, April 12-16, 2009.
 - **Debinski, D.M.** Butterfly community responses to land use management in native and restored prairies. Symposium on Pollinator Diversity in Urban, Agricultural and Native Landscapes. Entomological Society of America. Indianapolis, Indiana. Dec. 13-16, 2009.

- Debinski, D.M. Butterfly Communities in Remnant and Reconstructed Prairies. Biology Dept., Kansas State University, Manhattan, KS, May 2, 2008.
 - **Debinski, D.M.** Montane meadows as indicators of climate change. Idaho State University, March 6, 2008.
 - **Debinski, D.M.** Montane meadows as indicators of climate change. Big Sky Institute, Montana State University, July 8, 2008.
 - **Debinski, D.M.** Butterfly Communities in Remnant and Reconstructed Prairies. Tallgrass Prairie Center, University of Northern Iowa, Cedar Rapids, Iowa March 26, 2008.
 - **Debinski, D.M.** Care for Individuals or Populations? Panel discussion for Symposium on the Ethics of Wildlife Research. Iowa State University, Ames Iowa February 15, 2008.
 - **Debinski, D.M.** What can wildlife tell us about our changing world? Panel discussion for Fourth Annual Symposium on Wildness, Wilderness and the Creative Imagination. Earth-Animal-Oracle. Ames Iowa. February 17-19, 2008.
 - Olechnowski, B. and *D.M. Debinski*. Temporal Shifts in avian diversity and community structure through stages of restoration of a tall-grass prairie, Neal Smith National Wildlife Refuge. Neal Smith National Wildlife Refuge Research Reporting Symposium, Prairie City, IA, March 6, 2008.
 - Orlofske, J.W. Ohnesorg, and *D.M. Debinski*. Terrestrial arthropod indicators of biotic integrity for prairie ecosystems. Neal Smith National Wildlife Refuge Research Reporting Symposium, Prairie City, IA, March 6, 2008.
- D.M. Debinski. Quantifying interannual variation in ecological communities: a window to
 understanding potential effects of climate change in the Greater Yellowstone Ecosystem.
 Roundtable Meeting on Climate Change and Conservation in the Greater Yellowstone
 Ecosystem, sponsored by The Greater Yellowstone Coalition and the Wildlife Conservation
 Society, Bozeman, MT, May 6, 2007.
 - **Debinski, D.M.** Climate change plant and animal responses. U.S. Fish and Wildlife Endangered Species Coordinators meeting Des Moines, IA., Oct 1, 2007.
 - **Debinski, D.M.** Detecting climate change in the Yellowstone Ecosystem. Invited seminar, Shear Symposium on Global Climate Change, Marshalltown Community College, Mar. 21, 2007.
- **Debinski, D.M.** Montane meadows as indicators of global environmental change. Illinois State University, Invited seminar, Aug. 31, 2006.
 - Debinski, D.M. Quantifying ecological effects of climate change. Invited panelist for symposium on using remote sensing to detect climate change, Mountain Climate (MTNCLIM 2006) meeting, Mount Hood, OR. Sept. 19-22, 2006.
 - **Debinski, D.M.** Linking prairie restoration with functional Lepidopteran communities. Invited panelist for symposium on "Pollinators, the forgotten wildlife," *The Wildlife Society* annual meeting, Anchorage, AK. Sept. 24-27, 2006.
 - **Debinski, D.M.** Montane meadows as indicators of climate change. Big Sky Institute, Montana State University, Big Sky, MT. July 5, 2006.
- Debinski, D.M. and J. Su. Beyond Species Richness: Community Similarity for Coarse-Filter
 Conservation. Symposium on Bridging the Divide: Bringing Theory into Practice in Forest
 Biodiversity Conservation Ecological Society of America, Montreal, Canada. August 7-12,
 2005.
 - **Debinski, D.M.** Panel on Climate Change, Environment, and Agriculture. For After Kyoto: Ethics and Global Climate Change. 2005 Summer Bioethics Workshop. Iowa State University, Ames, IA. Aug. 19, 2005.
 - **Debinski, D.M.** ISU Advance Program. Symposium for Women in the Biological Sciences. ISU EEOB Department, Ames, IA. April 2, 2005.
 - **Debinski, D.M.** Butterfly Communities in Remnant and Reconstructed Prairies. Departmental Seminar, University of South Dakota, Vermillion, SD. Sept. 26, 2005.

- Debinski, D.M. and J.D. Davis. A Review of the Application of Landscape Ecology Theory to Entomology: A Lepidopteran Perspective. Departmental Seminar, Center for Conservation Biology, Stanford University, Palo Alto, CA. November 11, 2004.
 - **Debinski, D.M.** and J.D. Davis. Plenary Symposium: Insects in the Landscape. A Review of the Application of Landscape Ecology Theory to Entomology: A Lepidopteran Perspective. 54th Annual Meeting of the Entomological Society of Canada, Charlottetown, Prince Edward Island, Canada. October 15-18, 2004.
 - **Debinski, D.M.** Montane meadows as indicators of global environmental change in the Greater Yellowstone ecosystem. Grand Teton Resource Workshop 2004, Grand Teton Research Center at the AMK Ranch, Moran, WY. September 14-15, 2004.
- Debinski, D.M. Montane meadows as indicators of global environmental change in the Greater Yellowstone ecosystem. Seminar Series at University of Wyoming National Park Service Research Center, Moran, WY. June 19, 2003.
 - **Debinski, D.M.** Butterflies as indicators of global environmental change. 54th Annual Meeting of the Lepidopterists' Society, Olds, Canada. July 23-27, 2003.
 - Debinski, D.M. Invited Panelist on Environmental Research Frontiers 2003-2012: Shaping the ISU Agenda: A workshop on complexity and the environment. Discussion Themes: Coupled Biological and Physical Systems—Biodiversity and Ecosystem Dynamics. Ames, IA. July 16, 2003.
- Debinski, D.M. Butterflies as indicators of prairie restoration success. U.S. Fish and Wildlife Service Mississippi Headwaters/Tallgrass Prairie Resource Coordination Meeting. Neal Smith National Wildlife Refuge, IA. August 20, 2002.
 - **Debinski, D.M.** and J.A. Pritchard. Butterflies of the Greater Yellowstone ecosystem. University Wyoming National Park Service Research Center, Moran, WY. July 4, 2002.
- Debinski, D.M. Biodiversity patterns relative to patch size, landscape context, and habitat structure in the Greater Yellowstone ecosystem. University of Montana, MT. March 15, 2001.
 - **Debinski, D.M.** Habitat fragmentation experiments: A global survey and overview. University of Northern Iowa, IA. October 10, 2001.
- Debinski, D.M. Low elevation montane meadow biodiversity and associated implications of environmental change in the Rocky Mountains. National Workshop to Assess Climate Change Effects on Rocky Mountain Terrestrial Ecosystems. National Center for Atmospheric Research, Boulder, CO. July 29-30, 2000.
- Debinski, D.M. Performance of roadside habitats and native prairie for various butterfly species. Monarch Butterfly Research Symposium (sponsored by the Agricultural Biotechnology Stewardship Working Group). Chicago, IL. Nov. 2, 1999.
 - **Debinski, D.M.** Conservation value of roadside prairie restoration to butterfly populations. 13th Annual Roadside Conference on Integrated Roadside Vegetation Management. Ames, IA. Sept. 2-3, 1999.
 - **Debinski, D.M.** The science of global climate change: A symposium on the state-of-the-science. Sponsored by the Center for Global and Regional Environmental Research and the Iowa Division of the United Nations Association—USA. Iowa City, IA. March 5, 1999.
 - Debinski, D.M., M.E. Jakubauskas and K. Kindscher. Modeling spatial and temporal dynamics of montane meadows and biodiversity in the Greater Yellowstone Ecosystem. U.S. EPA Ecological Indicators meeting, San Francisco, CA. April 6-9, 1999 (published abstract).
- Debinski, D.M., M.E. Jakubauskas and K. Kindscher. Modeling spatial and temporal dynamics of montane meadows and biodiversity in the Greater Yellowstone Ecosystem U.S. EPA Ecological Indicators meeting, Las Vegas, NV. Feb. 2-5, 1998 (published abstract).

- Debinski, D.M. and E. Saveraid. The influence of patch size and landscape context on butterfly diversity in montane meadows of the Greater Yellowstone Ecosystem. Society of Conservation Biology meeting, symposium entitled: Considerations of Reserve Design: Core Reserves, Buffer Zones, and Connecting Habitat. Victoria, B.C. June 6-9, 1997 (published abstract).
 - **Debinski, D.M.** Incorporating insects into prairie restoration. Iowa Prairie Conference, Prairie Learning Center, Neal Smith National Wildlife Refuge, IA. July 19, 1997.
- Holt, R.D. and *D.M. Debinski*. Landscape experiments and ecological theory: Tools for the study of habitat fragmentation. IAI-AMIGO workshop entitled Landscape Alteration Effects on Fauna in the Americas: Establishing a Basis for Analysis Across Biomes. Maintencillo, Chile. Dec. 9-13, 1996.
- Debinski, D.M. Genetic diversity assessment in a metapopulation of the butterfly, Euphydryas gillettii. The Wildlife Society 2nd Annual Conference, Portland, OR. Sept. 12-17. 1995 (published abstract).
- Holt, R.D., *D.M. Debinski*, J. Diffendorfer, M. Gaines, E. Martinko, G. Robinson and G. Ward. Perspectives from an experimental study of habitat fragmentation in an agroecosystem.
 13th Long Ashton International Symposium—Arable Ecosystems for the 21st Century, The University of Bristol, England. September 14-16, 1993.
 - Debinski, D.M. Using remote sensing and GIS to predict biodiversity. Ecosystem
 Management Workshop for the Hebgen Lake Ecosystem, U.S. National Forest Service,
 Gallatin National Forest, West Yellowstone, MT. June 1993.
- **Debinski, D.M.** Biodiversity assessment as an ecological indicator. International Symposium on Ecological Indicators, U.S. EPA, Fort Lauderdale, FL. Oct. 1990 (published abstract).

Contributed Presentations

- Faurot-Daniels, C.R., M. L. Flenniken, *D.M. Debinski*. Monitoring butterflies of Glacier National Park using traditional and molecular techniques. Montana Pollinator Research Summit. Missoula, MT, April 24-25,2024.
- **D.M. Debinski**, S. Durney, J. Sherwood, A. McCombs, M. Germino, K. Reinhardt, L. Burkle, and P. Caragea. Reduced snowpack and passive warming effects on montane meadow plant growth, phenology, floral productivity, and nectar characteristics. Ecological Society of America, Portland, OR, Aug. 7, 2023.
- Durney, J.S., *D.M. Debinski*, and S. Matter. Population dynamics of Parnassius clodius butterflies under a changing climate. Entomological Society of America & Canada Joint Annual Meeting, Vancouver, B.C., Canada, November 13-16, 2022.
 - Meinzen, T.C., *D.M. Debinski*, L. Burkle, and R. Ament. Butterflies and bees in unlikely landscapes: Patterns of roadside pollinator diversity in southern Idaho. Plant-Insect Ecosystems: Pollinators. Entomological Society of America & Canada Joint Annual Meeting, Vancouver, B.C., Canada, November 13-16, 2022. (awarded second place in the Student Competition for the Pollinators category)
 - Moss, K.E., *D.M. Debinski*, and J.S. Durney. Enfolding the public into the "Parnassius Story" to connect them with a bioindicator of climate change through vivid graphics, videos, and engaging interactive content in an iBook. Entomological Society of America & Canada Joint Annual Meeting, Vancouver, B.C., Canada, November 13-16, 2022.
 - **Debinski, D.M.,** K.E. Moss, and J.S. Durney. Innovating STEM Storytelling to More Effectively Communicate GYE Science. Greater Yellowstone's next 150 years: Expanding the scope of science together. Greater Yellowstone Biennial Science conference, Bozeman, MT, May 15-18, 2022.

- **D.M. Debinski**, E. Crone, N. Warchola, and S. Altizer. Will climate-mediated phenological shifts affect population viability? A test with monarch butterflies on Department of Defense lands. Ecological Society of America annual meeting (online). August 2-6, 2021.
 - Morrow, N., *D.M. Debinski*, and K. King. Phenological Shifts in Monarch Nectar Resources. National Conference on Undergraduate Research. Online Conference. April 14, 2021.
- Durney, J.S. *D.M. Debinski*, A. Engel. Spring snowmelt and warming shift arrowleaf balsamroot flowering in montane meadows. Ecological Society of America, Virtual Meeting, August, 2020.
- D.M. Debinski and J.A. Sherwood. Butterfly and plant responses to climate change in montane meadows. 15th Biennial Conference of Science & Management on the Colorado Plateau and Southwest Region. Flagstaff, AZ, Sept. 9-12, 2019.
 - Lyon, N.J. and D.M. Debinski. Butterfly and floral community composition vary differently among management types. Ecological Society of America, Louisville, KY, August 14, 2019.
- D.M. Debinski. Enhancing Public Understanding of Science in the Greater Yellowstone Ecosystem. Tracking the Human Footprint, 14th Biennial Science Conference of the Greater Yellowstone Ecosystem. Sept. 13, 2018.
 - **D.M. Debinski**, N.J. Lyon, H. Feng, J. Miller and J. Coon. Climate Change Adaptation in Grassland Agroecosystems. Report out meeting for Leopold Center for Sustainable Agriculture grant, Iowa State University Extension, Mt. Ayr, Iowa, May 24, 2018.
 - **D.M. Debinski**, A. McCombs, K. Reinhardt and M. Germino. Contrasting the responses of two montane meadow forbs to experimental warming Ecological Society of America, New Orleans, LA, Aug. 9, 2018.
 - **D.M. Debinski**, A. McCombs, K. Reinhardt and M. Germino. Contrasting the responses of two montane meadow forbs to experimental warming. International Association for Vegetation Science, Bozeman, MT, July 27, 2018.
 - Lyon, N.J. and *D.M. Debinski*. Butterfly and Nectar-Producing Plant Response to Invasive Grass Management. Graduate Research in Ecology and Evolutionary Biology Symposium, Iowa State University. Ames, IA. February 3, 2018.
 - Lyon, N.J., *D.M. Debinski*, J. Miller, and W. Schact. Plant and Pollinator Response to Adaptive Management. Iowa State University Graduate and Professional Student Research Conference, Ames IA, April 2018.
 - Lyon, N.J., *Debinski, D.M.*, Miller, and J., Schact, W. Native Plant and Pollinator Response to Adaptive Management. Ecological Society of America, New Orleans LA, August 2018.
- Lyon, N. J., *D.M.Debinski*, and I. Rangwala. Species Distribution Modeling to Predict Prairie Restoration Success under Climate Change. Ecological Society of America, Portland OR, August 2017.
 - Pocius, V.M., *D.M Debinski*, R. Hellmich, K.G. Bidne, J.M.Pleasants, S. Blodgett, S., Bradbury, R. and Hartzler. Milkweed Matters: Survival and Maturation of Monarch Butterfly (Danaus plexippus) Larvae on Nine Asclepias Species. Ecological Society of America. Portland, OR, USA. August 2017.
 - Pocius, V.M., K.G. Bidne, R. Hellmich, R., *D.M. Debinski*, and J.M. Pleasants. All Milkweeds
 Are Not Created Equal: A summary of oviposition preference tests for monarch butterflies
 (*Danaus plexippus*). Iowa Chapter of the Wildlife Society. Ames, IA, USA. February 15,
 2017.
 - Stein, D., D.M. Debinski, J. Pleasants, J. Miller, W. Schact, and N. Lyon. Butterfly and Flowering Plant Community Responses to Invasive Grass Control through Herbicide Treatments. Iowa Chapter of the Wildlife Society. Ames, IA, USA. February 15, 2017.

- Debinski, D.M., C. Anderson, H. Feng, J. Miller, and N. Lyon. Climate Change Adaptation in Grassland Ecosystems. Iowa Climate Science Educators Forum. Des Moines Area Community College, Des Moines, IA. Oct. 7, 2016.
 - Debinski, D.M., L. Ries, J. Petersen, R. Moranz, K. Reeder, S. Shepherd, J. Delaney, and J. Vogel. Landscapes for Monarch Conservation. Society for Conservation Biology North American Chapter. Madison, Wl. July 17-20, 2016.
 - McCombs, A., *D.M. Debinski*, M. Germino, K. Reinhardt, and P. Caragea. Simulating
 expected changes in pollinator resources as a function of climate change. 13th Biennial
 Scientific Conference of the Greater Yellowstone Ecosystem. October 5, 2016. Jackson,
 WY.
 - Pocius, V.M., Bidne, K.G., Hellmich, R., *Debinski, D.M.*, and Pleasants, J.M. "All Milkweeds
 Are Not Created Equal: A summary of oviposition preference tests for monarch butterflies
 (*Danaus plexippus*)". International Congress of Entomology. Orlando, FL. September 2016.
- McCombs, A., *D.M. Debinski*, K. Szcodronski, T. Proescholdt, M. Germino, and K. Reinhardt. Anticipating climate Change effects on floral resources for pollinators. Entomological Society of America. Minneapolis, MN. Nov. 15-18, 2015.
 - Debinski, D.M., J.T. Kerr, and M. Larrivee. Species Traits as Filters of Climate-Induced Range Expansion. Ecological Society of America. Baltimore, MD. Aug. 9-14, 2015.
 - Debinski, D.M., J.T. Kerr, and M. Larrivee. Species Traits as Filters of Climate-Induced Range Expansion. Iowa Climate Science Educators Forum. Des Moines, IA. Oct. 10, 2015.
 - McCombs, A. *Debinski, D.M.*, K. Szcodronski, T. Proescholdt, M. Germino, and K. Reinhardt. 2015. Climate change effects on floral resources for pollinators. Iowa Climate Science Educators Forum. Des Moines, IA. Oct. 10, 2015.
 - Reinhardt K., L. Curran, K. McAbee, M. Germino, and *D.M. Debinski*. How will climate change affect physiology and structure of dominant shrubs in water-limited ecosystems? Leaf- to community-scale evidence from long-term, experimental manipulations. Conference of Experimental Plant Biology, Czech Republic, 2015.
 - Waldman, J.R., R.M. Waldman, L. L. Sullivan, H. Hu, S.W. Harpole and *D.M. Debinski*, 2015.
 Applying wind tunnel studies and aerodynamics to movement ecology. Ecological Society of America. Baltimore, MD. Aug 9-14, 2015.
 - Moranz, R.A., *D.M. Debinski*, D.M. Engle, and J.R. Miller. 2015. Effects of time since fire on flower production of a key nectar source, butterfly milkweed (*Asclepias tuberosa*). Ecological Society of America. Baltimore, MD. Aug 9-14, 2015.
 - McGranahan, D.A., T. Hovick, S.D. Fuhlendorf, D. Elmore, D.M. Engle, S.L. Winter, J.R. Miller, and *D.M. Debinski*. Patchiness reduces temporal variability in aboveground biomass: Landscape-level diversity—stability in rangeland. Ecological Society of America. Baltimore, MD. Aug 9-14, 2015.
 - Debinski, D.M., J.T. Kerr, and M. Larrivee. 2015. Species Traits as Filters of Climate-Induced Range Expansion. Ecology and Evolutionary Biology Symposium. Ames, IA. Feb., 2015.
 - Debinski, D.M., Sherwood, J., P. Caragea, R. Fahrenholtz, and M.Germino. Experimentally Simulating Climate Change in a Montane Meadow Via Reduced Snowpack and Passive Warming: soil and plant responses. 2015 Open Science Conference: Integrating research and management of change from the mountains to the plains. Colorado State University, Fort Collins, CO, May 20-22, 2015.
 - Delaney, J.T., K.J. Jokela, *D.M. Debinski*. 2015. Seasonal changes in pollinator floral resource availability in four types of grasslands. Iowa Academy of Sciences, Iowa City, IA, April 18, 2015.

- Debinski, D.M., J.T. Kerr, and M. Larrivee. 2014. Species Traits as Filters of Climate-Induced Range Expansion. International Biology of Butterflies Meeting. Turku, Finland. Aug., 2014.
 - Miller, J.R., C.J. Duchardt, T.J. Hovick, T.P. Lyons, F.C. Pillsbury, *D.M. Debinski*, and D.M. Engle. Avian response to the fire-grazing interaction in grasslands of the upper Midwest. Annual meeting of the American Ornithologists' Union (132nd Stated Meeting), the Cooper Ornithological Society (84th Stated Meeting), and the Society of Canadian Ornithologists, Estes Park, Colorado. September, 2014.
- Debinski, D.M., R.A. Moranz, J.T. Delaney, J.R Miller, and D.M. Engle. Insect responses to grassland restoration using fire and grazing: Short and longer-term perspectives. 98th Annual Meeting of the Ecological Society of America, Minneapolis, Minnesota, August, 2013.
 - McGranahan, D.A., D.M. Engle, S.D. Fuhlendorf, S.L. Winter, J.R. Miller, *D.M. Debinski*.
 Spatially-heterogeneous fire regimes increase habitat diversity and reduce temporal variability in production on working rangeland. Grassland Society of Southern Africa, Molimolle, South Africa. 16 July 2013.
 - Sherwood, J., *D.M. Debinski*, P. Caragea, R. Fahrenholtz, M. Germino. Experimentally Simulating Climate Change in a Montane Meadow Via Reduced Snowpack and Passive Warming: soil and plant responses. 98th Annual Meeting of the Ecological Society of America, Minneapolis, Minnesota. August, 2013.
- R.A. Moranz, *D.M. Debinski*, J.T. Delaney, D.M. Engle and J.R. Miller. Monitoring butterflies in America's heartland: new techniques help reveal increasing populations of prairiedependent species. Lepidopterists Society, Denver, CO, July 26, 2012.
 - Miller, J.R. L.W. Morton, D.M. Engle, *D.M. Debinski* and R.N. Harr. Nature Reserves as Catalysts for Landscape Change. North America Congress for Conservation Biology, Oakland, California. July 15-18, 2012,
 - Delaney, J.T., R.A. Moranz, *D.M. Debinski*, J.R. Miller and D.M. Engle. Butterfly communities
 of degraded tallgrass prairie remnants show signs of initial recovery following five years of
 burning and grazing treatments. The Wildlife Society Iowa Chapter. Des Moines, Iowa.
 January 6-7, 2012.
- Olechnowski, B, *D.M. Debinski*, P. Drobney, K. Viste-Sparkman, and W. Reed. Changes in vegetation structure through time in a tallgrass prairie and implications for avian diversity and community composition. US-International Association for Landscape Ecology IALE Symposium, Portland, Oregon, April 3-7, 2011.
 - Moranz, R. *D.M. Debinski*, D. Engle, S. Fuhlendorf, and J. Miller. A matter of ecological context: The response of tallgrass prairie butterflies to fire. Society for Range Management, Billings, Montana. February 6-10.
 - Sherwood, J., *D.M. Debinski*, and M. Germino. Experimentally Simulating Climate Change Effects on Trophic Interactions in Montane Meadow Systems. 72nd Midwest Fish and Wildlife Conference, Des Moines, IA. Dec. 4-7, 2011.

- 2010 D.M. Debinski, H. Wickham, K. Kindscher, J. Caruthers and M.J. Germino. Montane Meadow Biodiversity Changes During Drought: A Window into Understanding Possible Effects of Climate Change? 10th Biennial Scientific Conference on the Greater Yellowstone Ecosystem: Questioning Greater Yellowstone's Future Climate, Land Use, and Invasive Species. Yellowstone National Park, WY. Oct. 11-13, 2010.
 - **D.M. Debinski**, J. Carruthers and H. Wickham. 2010. Montane Meadow Biodiversity Changes During Drought: A Window into Understanding Possible Effects of Climate Change? Climate Change in Mountains, Perth, Scotland, Sept. 27-30, 2010.
 - Hovick, T.J., J.R. Miller, D.M. Engle, and *D.M. Debinski*. 2010. Effects of fire and grazing on grasshopper sparrow nest survival in a fragmented landscape. Midwest Ecology and Evolution Conference. Ames, IA. March 27, 2010.
 - McGranahan, D.A. D.M. Engle, J.R. Miller, and *D.M. Debinski*. 2010. Disturbance history and dominant invaders affect exotic-native plant diversity in a grassland system. Midwest Ecology and Evolution Conference. Ames, IA. March 27, 2010.
 - Miller, J., L. Morton, D. Engle, *D.M. Debinski*, R. Harr. Reserves-as-Catalysts Model: Expanding the Influence of Public Lands. Society for Range Management and Weed Science Society of America, Denver, Colorado, February 7-11, 2010.
 - McGranahan, D., D. Engle, S. Fuhlendorf, J. Miller, and *D.M. Debinski*. Grazing history, soil
 carbon, and invasion by an exotic cool-season grass explain extraordinary community
 diversity in a working prairie landscape. Society for Range Management and Weed Science
 Society of America, Denver, Colorado, February 7-11, 2010.
- Hohman, W.L., *D.M. Debinski*, N.M. Davros, and K. Reeder. Restoration of Biological Functions to Conservation Buffers in Intensive Agricultural Regions of the Upper Midwest. 2009 National Conference on Ecosystem Restoration (NCER '09), Los Angeles, CA USA July 20-24, 2009.
 - Hovick, T.J., J.R. Miller, D.M. Engle, and *D.M. Debinski*. Nesting success of Grasshopper Sparrows (*Ammodramus savannarum*) in southern lowa grasslands managed with fire and grazing. 71st Annual Midwest Fish and Wildlife Conference, Springfield, Illinois. December 2009.
 - Pillsbury, F.C., J.R. Miller, *D.M. Debinski*, and D.M. Engle. Changes in avian community structure in grasslands managed using a fire-grazing interaction. 71st Annual Midwest Fish and Wildlife Conference. Springfield, Illinois. December 2009.
 - Engle, D.M., J.R. Miller, L.W. Morton, *D.M. Debinski*, and R.N. Harr. 2009. A model for returning prescribed burning to working lands of the Midwest. Fourth International Congress on Fire Ecology and Management: Fire as a Global Process. Savannah, GA, USA. Nov. 30-Dec. 4, 2009.
 - **Debinski, D.M.**, L. Merrick, R. Moranz, D. McGranahan, D. Engle, J. Miller, and R. Harr. Landscape Memory and the Assessment of Fire and Grazing Effects on Prairie Insect Biodiversity. International Association for Landscape Ecology, Snowbird, UT, April 12-16, 2009.
 - Miller, J.R., L. Wright Morton, D. Engle. *D.M. Debinski*, R. Harr. Ecological restoration as a catalyst for landscape change. U.S. Regional Association of the International Association for Landscape Ecology 24th Annual Symposium, Snowbird, Utah. April 2009.

- Caruthers, J. *Debinski, D.M.*, and Wickham, H. Montane meadow butterfly community compositional changes as a function of time and meadow type. International Association of Landscape Ecologists. Madison, WI, April 6-10, 2008.
 - Bowen, B.S. and *D.M. Debinski*. Working across disciplines to meet project objectives and goals. NSF ADVANCE annual P.I. meeting, Washington, D.C. May 11-13, 2008.
 - Debinski, D.M., Wickham, H. and J. Caruthers. Quantifying ecological effects of changing precipitation on plant communities in montane meadows. International Association of Landscape Ecologists. Madison, WI, April 6-10, 2008.
 - Olechnowski, B.F.M., W.T. Reed, and *D.M. Debinski*. Temporal Shifts in Avian Diversity and Community Structure through Stages of Restoration of a Tall-Grass Prairie, Neal Smith National Wildlife Refuge Iowa Academy of Sciences Annual Meeting, Kirkwood Community College, Cedar Rapids, IA, April 11-12, 2008.
 - Pillsbury, F., J. Miller, *D.M. Debinski*, D. Engle, S. Svehla. 2008. Assessing the ability of a fire-grazing interaction to mediate trophic relationships in a grassland ecosystem. International Association of Landscape Ecologists. Madison, WI, April 6-10, 2008.
- Debinski, D.M. Quantifying interannual variation in ecological communities: a window to
 understanding potential effects of climate change in the Greater Yellowstone Ecosystem. Iowa
 State University Chapter of the Society of Conservation Biology meeting. February, 2007.
 - Engle, D.M., J.R. Miller, *D.M. Debinski*, and R.R. Harr. Opportunities and Barriers to Prescribed Fire in the Prairie Peninsula. 60th Annual Meeting of the Society for Range Management. Reno, Nevada. February 9-16, 2007.
 - Orlofske, J. and *D.M. Debinski*. Development of an invertebrate-based terrestrial index of biotic integrity of Iowa tallgrass prairie. Iowa Academy of Science, Central College, Pella, IA April 27-29, 2007.
 - Orlofske, J., W. Ohnesorg, and *D.M. Debinski*. Terrestrial arthropod indicators of biotic integrity for prairie ecosystems. 17th Annual Prairie Invertebrate Conference, Luther College, Decorah, IA, October 20, 2007.
- Debinski, D.M., R.E. VanNimwegen and M.E. Jakubauskas. Quantifying relationships between community shifts and environmental change. Society of Conservation Biology annual meeting—Session moderator and contributed paper for symposium on global climate change, San Jose, CA. June, 2006.
 - Vogel, J., *D.M. Debinski*, R. Koford and J. Miller. Grassland butterfly responses to prairie restoration: Effects of prescribed fire and grazing. 20th North American Prairie Conference, Kearney, NE. July 23-25, 2006 (published abstract).
- Debinski, D.M., R.E. VanNimwegen and M.E. Jakubauskas. Linking effects of landscape change with changes in ecological communities. 20th Annual Symposium of the United States Regional Chapter of the International Association for Landscape Ecology, Syracuse, NY. March 12-16, 2005.
 - Ries, L., J. Calabrese, W. Fagan, S. Matter, *D.M. Debinski* and D. Roy. The consequences of reproductive asynchrony on the ecology of small populations. Ecological Society of America, Montreal, Canada. August 7-12, 2005.
 - Davis, J.D. and *Debinski, D.M.* Sustaining pollinator diversity in a fragmented landscape: Local and landscape effects. 20th Annual Symposium of the United States Regional Chapter of the International Association for Landscape Ecology, Syracuse, NY. March 12-16, 2005.
 - Davis, J.D. and *D.M. Debinski*. Butterfly diversity in a fragmented landscape: The role of railroad rights-of-way. Iowa Academy of Science annual meeting. Cornell College, Mt. Vernon, IA. April 29-30, 2005.

- Debinski, D.M., M.E. Jakubauskas and K. Kindscher. Montane meadows as indicators of global environmental change. Society of Conservation Biology Annual Meeting, Duluth, MN. June 28-July 2, 2003.
 - Reeder, K., D.M. Debinski and B. Danielson. Butterfly use of conservation filter strips in southwestern Minnesota. USDA Natural Resources Conservation Service/ISU Research Coordination meeting, Ames, IA. Feb. 12, 2003.
 - Reeder, K., **D.M. Debinski** and B. Danielson. Butterfly use of filter strips. 64th Midwest Fish and Wildlife Conference, Kansas City, MO. Dec. 7-10, 2003.
 - Shepherd, S. and *D.M. Debinski*. The utility of butterflies as indicators of prairie reconstruction, development, and success. Society of Conservation Biology Annual Meeting, Duluth, MN. June 28-July 2, 2003.
- Debinski, D.M. A modest proposal (for retention of women faculty in academia). Retaining
 Women in early academic Science, Math, Engineering and Technology Careers (NSFSponsored). Iowa State University, Ames, IA. October 17-20, 2002.
 - **Debinski, D.M.**, K. Kindscher and M.E. Jakubauskas. How many habitats does a landscape contain? A cross-taxonomic perspective. 17th Annual Symposium of the International Association for Landscape Ecology, Lincoln, NE. April 23-27, 2002. (published abstract).
- Peterson, D.L., M.E. Jakubauskas, K. Kindscher and D.M. Debinski. Hyperspectral remote sensing of nonforested montane vegetation communities. The 4th International Forestry and Agriculture Remote Sensing Conference and Exhibition, Denver, CO. November 4-7 2001.
 - Shepherd, S. and **D.M. Debinski**. Using butterflies as indicators of prairie restoration success. 11th Annual Prairie Invertebrate Conference, Decorah, IA. Nov. 3, 2001.
- **Debinski, D.M.** Montane meadows as indicators of climate change. Yellowstone Center for Resources, Mammoth, WY. June 30, 2000.
 - Jaros-Su, J.C., *D.M. Debinski*, M.E. Jakubauskas and K. Kindscher. Vegetation map class as a surrogate for community composition: A test at three scales. Society for Conservation meeting, Missoula, MT. June 9-12, 2000 (published abstract).
- Debinski, D.M. and R. Holt. Habitat fragmentation experiments: A global survey and overview.
 Society for Conservation meeting, College Park, MD. June 17-21, 1999 (published abstract).
 - Jakubauskas, M.E., *D.M. Debinski* and K. Kindscher. Montane meadows as indicators of environmental change. U.S. EPA Ecological Indicators meeting, San Francisco, CA. April 6-9, 1999. (published abstract).
 - Mahady, S.J., *D.M. Debinski*, J. Cully, and A. Cully. Habitat fragmentation: The influences of historical and current land use on butterfly communities. Fifth World Congress of the International Association of Landscape Ecology, Snowmass Village, CO. July 20-Aug. 3, 1999 (published abstract).
 - Ries, L., *D.M. Debinski* and M. Wieland. The conservation value of roadside prairie restoration to butterfly populations. Society for Conservation Biology meeting, College Park, MD. June 17-21, 1999 (published abstract). **This paper received a third place award for the best student presentation.
- Debinski, D.M., E. Saveraid, M.E. Jakubauskas and K. Kindscher. Landscape effects on butterfly community structure. Ecological Society of America Annual meeting, Baltimore, MD. Aug 2-6, 1998 (published abstract).
 - Jakubauskas, M.E., K. Kindscher and *D.M. Debinski*. Relationships between biophysical factors and spectral reflectance patterns of Greater Yellowstone montane meadows. Association of American Geographers Annual Meeting, Boston, MA. Mar. 25-29, 1998 (published abstract).
 - Ries, L. and *D.M. Debinski*. Quantifying isolation in fragmented landscapes: Butterfly behavior at prairie edges. 13th Annual Conference of the International Association of Landscape Ecology, East Lansing, MI. March 17-21, 1998 (published abstract).

- Kindscher, K., A. Fraser, M. Jakubauskas and *D.M. Debinski*. Vegetation differences in remotely-sensed wetlands of the Grand Teton National Park. Society of Wetland Scientists, Bozeman, MT. June 1-6, 1997 (published abstract).
 - Kelly, L. and *D.M. Debinski*. Decline of lowa populations of Regal Fritillary (*Speyeria idalia*).
 Iowa Academy of Sciences symposium entitled Perspectives on Iowa's declining flora and fauna, Decorah, IA. April 25-26, 1997 (published abstract).
- Jakubauskas, M.E., D.M. Debinski and K. Kindscher. Integration of multispectral and ecological data for characterizing montane meadow communities in the Greater Yellowstone Ecosystem. International Geoscience and Remote Sensing Society Symposium, Lincoln, NE. 1996 (published abstract).
- **Debinski, D.M.** and K. Kindscher. Plugging the gaps in Gap Analysis. Society of Conservation Biology, Fort Collins, CO. June 7-10, 1995 (published abstract).
 - **Debinski, D.M.** Using remote sensing to predict species assemblage patterns at a landscape level. Tenth Annual Conference of the International Association of Landscape Ecology, Minneapolis, MN. April 22-26, 1995 (published abstract).
 - Jakubauskas, M.E. and *D.M. Debinski*. An integrated spectral and ecological approach to mapping forest and meadow communities of the Greater Yellowstone Ecosystem. Association of American Geographers Annual Meeting, Chicago, IL. Mar. 14-18, 1995 (published abstract).
- Debinski, D.M. A remote sensing and GIS-based model of habitat as a predictor of biodiversity. 7th Annual Society for Conservation Biology Meetings, Tempe, AZ. June 9-13, 1993 (published abstract).
- McLaughlin, J.F., S.B. Weiss, P.M. Rich and *D.M. Debinski*. Roles of GIS in conservation.
 12th Annual Environmental Systems Research Institute User Conference, Palm Springs, CA. June 8-12, 1992 (published abstract).
 - Rich, P.M., S.B. Weiss and *D.M. Debinski*. Physiographic inventory of a tropical reserve. Twelfth Annual Environmental Systems Research Institute User Conference, Palm Springs, CA. June 8-12, 1992 (published abstract).
- Debinski, D.M. Interpretation of biodiversity data: Case study—Glacier National Park, MT.
 AIBS/Society for Conservation Biology meeting University of Toronto, Canada. August 1989
 (published abstract).
 - Debinski, D.M. Refining and validating a model of metapopulation persistence.
 Metapopulation Dynamics meeting, Nordic Council for Ecology, Lammi Biological Station, Finland. September 1989.
- 1988 **Debinski, D.M.** Inventory and monitoring of biodiversity in Glacier National Park. AIBS/Society for Conservation Biology meeting, UC Davis, CA. August 1988 (published abstract).
- Debinski, D.M. Using decision analysis to improve recovery planning for endangered species.
 AIBS/Society for Conservation Biology meeting, Montana State University, Bozeman, MT.
 June 1987 (published abstract).

Posters presented

- **Debinski, D.M.** and E. Fleishman. Responses of butterfly and plant communities in mesic ecosystems to aridification of the western United States. Greater Yellowstone Biennial Science conference, Big Sky, MT, Sept. 3-5, 2024.
- Faurot-Daniels, C., D.M. Debinski, and M. Flenniken. Collection and preservation methods of wildflowers for eDNA metabarcoding of insects. Entomological Society of America & Canada Joint Annual Meeting, Vancouver, B.C., Canada, November 13-16, 2022.

- Rice, C.L., B. Watson, J.A. Clark, *D.M. Debinski*, and M.A. Ivie. Digitizing the Daniel L.
 Gustafson Aquatic Invertebrates Collection in the Montana Entomology Collection at
 Montana State University. Entomological Society of America. Oct. 31-Nov. 3, Denver, CO.
- Goodman, L., N.J. Lyon, and *D.M. Debinski*. Effect of Flowering Plant Species Richness on Arthropod Order Richness in a Grassland Ecosystem. Graduate Research in Ecology and Evolutionary Biology Symposium. Iowa State University. Ames. IA, February 3, 2018.
 - Goodman, L.M., *D.M. Debinski*, and N. Lyon. Flowers increase ecosystem biodiversity in Midwestern prairies. Poster presentation. National Conference on Undergraduate Research. Edmond, OK. April 2018.
 - Goodman, L.M., *D.M. Debinski*, and N. Lyon. Flowers increase ecosystem biodiversity in Midwestern prairies. Poster presentation. Iowa State University Symposium on Undergraduate Research & Creative Expression. Ames, IA. April 2018.
- Miller, J.R., D.M. Debinski, L. Wright Morton, and W.H. Schacht. Adaptive management of invasive species to enhance agro-ecosystem services in grasslands. USDA-NIFA Bioeconomy Agroecosystems Annual PD Meeting. October 2017, Tampa, Florida.
 - Shryock, N.L. V.M Pocius and *D.M. Debinski*. Does Marking With DayGlo ECO Aurora Pink Pigment Powder Affect the Development or Survival of Monarch Caterpillars? ISU Ecology and Evolutionary Biology Graduate Program Research Symposium, Ames, IA. February 11, 2017.
 - Shryock, N.L. V.M Pocius and *D.M. Debinski*. Does Marking With DayGlo ECO Aurora Pink Pigment Powder Affect the Development or Survival of Monarch Caterpillars? Iowa Chapter of the Wildlife Society. Ames, IA, USA. February 15, 2017.
- Shryock, N.L. V.M Pocius and *D.M. Debinski*. Does Marking With DayGlo ECO Aurora Pink Pigment Powder Affect the Development or Survival of Monarch Caterpillars? ISU Agricultural Endowment Board, Ames, IA. December 8, 2016.
 - Shryock, N.L., V. Pocius and *D.M. Debinski*. Does Marking With DayGlo ECO Aurora Pink Pigment Powder Affect the Development or Survival of Monarch Caterpillars? ISU Science With Practice. December 7, 2016.
- Curran, L, K. Reinhardt, M.L. Germino and *D.M. Debinski*. 2015. Low sagebrush responses to passive warming and snowpack removal. Ecological Society of America. Baltimore, MD. Aug 9-14, 2015.
 - Jokela, K., *D.M. Debinski* and R. McCulley. 2105. Effects of Endophyte---infected Tall Fescue on The Growth and Survival of Tawny---edged Skippers (*Polites themistocles*). Ecology and Evolutionary Biology Symposium. Ames, IA. Feb., 2015.
 - Pocius V.M., Bidne, K.G., and *Debinski, D.M.* 2015. Entomological Society of America. 2015. Which native milkweeds are acceptable host plants for larval monarch butterflies (*Danaus plexippus*) within the Midwestern U.S.? Entomological Society of America. Minneapolis, MN. Nov. 15-18, 2015.
 - Waldman, J.R.S., M.R. Muell, M.E. Salsbery, *D.M. Debinski*, D.C. Adams. Ways to wing it: correlation of wing shape with habitat preferences, toxicity and migration in butterflies. Iowa Academy of Science 127th annual meeting, Iowa City, IA, April 18, 2015.
- Duchardt, C.J., J.R. Miller, *D.M. Debinski*, and D.M. Engle. Nesting Grassland Birds and Pyric-Herbivory in the Grand River Grasslands. 131st Meeting of The American Ornithologists' Union. Chicago, IL. August 2013.
 - Kane K., *D.M. Debinski*, C. Anderson, J.D. Scasta, D.M. Engle, and J.R. Miller. 2013. The projected effects of climate change on plant species distributions in grasslands of Iowa. 98th Annual Meeting of the Ecological Society of America, Minneapolis, Minnesota, August 2013.

- D.M. Debinski and B.S. Bowen. Increasing The Number Of Women Academics In Conservation Biology: Lessons Learned From NSF ADVANCE At Iowa State University. North America Congress for Conservation Biology, Oakland, California. July 15-18, 2012.
 - Scavo, N., C. Lange, *D.M. Debinski*, and A. Toth. Effect of Grassland Management Practices on Bee Nutrition and Abundance. Iowa Academy of Sciences, April, 2012.
 - Scasta, J.D., D.M. Engle, *D.M. Debinski*. Applying patch-burn grazing in tallgrass prairie
 rangeland invaded by an exotic cool-season grass. Society for Range Management 65th
 Annual Meeting, Spokane, Washington, January 29-February 3, 2012.
- Lange, C., A. Toth, and *D.M. Debinski*. Effect of Grassland Management Practices on Abundance and Size of Bees. Science With Practice, Iowa State University. Ames, IA. Spring, 2011.
- B.S. Bowen, *D.M. Debinski* and F.J. Janzen. Evolution of institutional cultures to diversify the professoriate. Organized Poster session on Improving Recruitment and Retention of Women Faculty in Ecology: A Focus on NSF-Funded ADVANCE Programs. Ecological Society of America, Pittsburgh, PA, Aug. 4, 2010.
 - Winkler, L., *D.M. Debinski*, D.M. Engle, and J.R. Miller. 2010. The Effect of Patch-Burn Grazing on Ant Diversity in Southern Iowa Grasslands. Midwest Ecology and Evolution Conference. Ames, IA. March 27, 2010.
 - McGranahan, D., D. Engle, S. Fuhlendorf, J. Miller, and *D.M. Debinski*. An invasive grass creates fuelbed heterogeneity and reduces fire intensity. Midwest Ecology and Evolution Conference. Ames, IA. March 27, 2010.
 - McGranahan, D., D. Engle, S. Fuhlendorf, J. Miller, and *D.M. Debinski*. An invasive grass creates fuelbed heterogeneity and reduces fire intensity. Society for Range Management and Weed Science Society of America, Denver, Colorado, February 7-11, 2010.
- 2009 Rausch, M., *D.M. Debinski*, L. Merrick, R. Moranz, D. Engle, R. Harr, and J. Miller.
 - Assessing Effects of Fire and Grazing on Prairie Insect Biodiversity. Research in the Capitol Undergraduate Research Symposium, March 9, 2009.
 - Rausch, M., *D.M. Debinski*, L. Merrick, R. Moranz, D. Engle, R. Harr, and J. Miller. Assessing Effects of Fire and Grazing on Prairie Insect Biodiversity. Iowa Academy of Science meeting, Des Moines, IA, April 17, 2009.
 - Todd, Robert and D.M. Debinski. Coleopteran Response to Fire and Grazing in Grassland Systems. Science with Practice poster presentation, Iowa State University, Ames, IA, December, 2009.
 - Winkler, L., L. Merrick and *D.M. Debinski*. Patch-Burn Grazing Project. Science with Practice poster presentation, Iowa State University, Ames, IA, April 22, 2009.
 - Winkler, L., and *D.M. Debinski*. Ant Responses to Patch-Burn Grazing Treatments In Iowa Grasslands. Science with Practice poster presentation, Iowa State University, Ames, IA, December, 2009.
 - Carlson, S., S. Bird, B. Bowen, *D.M. Debinski*, C. Fehr, S. Gahn, F. Hamrick. Iowa State
 University ADVANCE Program Iowa State University ADVANCE Program's Connections
 with Professional Societies. ADVANCE PI meeting, Arlington, VA, Oct. 29-30, 2009.

- Carlson, S., B. Bowen, S. Bird, *D.M. Debinski*, F. Hamrick, C. Fehr, F. Laanan, S. Gahn, C. Heising, M. Larsen, K. Constant, F. Janzen, J. Powell-Coffman, J. Thompson, C. Glatz, and L. Larson. Iowa State University ADVANCE Program Advancing Women Faculty in STEM Fields. ADVANCE PI meeting, Washington, D.C., May 11-13, 2008.
 - Bowen, B., F. Janzen, and *D.M. Debinski*, lowa State ADVANCE Program: Multiple
 approaches to recruit and retain a diverse faculty. Annual meeting of the Society for the
 Study of Evolution, Minneapolis, MN, June 20-24, 2008.
 - Olechnowski, B.F.M. and *D.M. Debinski*. Response of Songbirds to Willow Habitat Structure in the Greater Yellowstone Ecosystem. International Association of Landscape Ecologists. Madison, WI, April 6-10, 2008.
 - Reed, W.T., B.F.M. Olechnowski, and *D.M. Debinski*. The Use of Flyover Data in Avian Landscape Ecology: A Case Study Involving Swallows and Birds of Prey at Neal Smith National Wildlife Refuge. Iowa Academy of Sciences Annual Meeting, Kirkwood Community College, Cedar Rapids, IA, April 11-12, 2008.
- Carlson, S., B. Bowen, S. Bird, *D.M. Debinski*, F. Hamrick, C. Fehr, F. Laanan, S. Gahn, C. Heising, Larsen, M., K. Constant, F. Janzen, J. Powell-Coffman, J. Thompson, C. Glatz, and L. Larson. Iowa State University ADVANCE Program. NSF ADVANCE Annual Investigators meeting, Washington D.C. June, 2007.
- Debinski, D.M., R.E. VanNimwegen and M.E. Jakubauskas. Using remotely sensed habitat classification and species distribution patterns to define ecological indicators of climate change. National Council for Science and the Environment (NCSE) 5th National Conference on Science Policy and the Environment. "Forecasting Environmental Changes," Washington D.C., February 3-4, 2005.
- Davis, J.D. and *D.M. Debinski*. Sustaining pollinator diversity in a fragmented landscape: What landscape features and scales affect pollinator diversity? ISU GIS Day, Ames, IA. Nov. 17, 2004.
 - Reeder, K., D.M. Debinski and B. Danielson. Fringe benefits of agricultural conservation policy: Filter strips and butterflies. ISU College of Agriculture Agroecology conference, Ames, IA. Aug, 2004.
- Reeder, K., D.M. Debinski and B. Danielson. Fringe benefits of agricultural conservation policy: Filter strips and butterflies. Society of Conservation Biology Annual Meeting, Duluth, MN. June 28-July 2, 2003.
- Peterson, D.L., M.E. Jakubauskas, K. Kindscher and D.M. Debinski. 2001. Hyperspectral remote sensing of nonforested montane vegetation communities. The 4th International Forestry and Agriculture Remote Sensing Conference and Exhibition, Denver, CO. November 4-7 2001.
- Debinski, D.M., M. Borgognone, M.E. Jakubauskas and K. Kindscher. Testing the predictability of species-habitat relationships in a butterfly community. Predicting Species Occurrences: Issues of Scale and Accuracy Symposium, Snowbird, UT. Oct. 18-22, 1999 (published abstract; chapter in book).
 - Saveraid, E.H., *D.M. Debinski*, M.E. Jakubauskas and K. Kindscher. The accuracy of using satellite imagery to predict bird communities in the Greater Yellowstone Ecosystem. Predicting Species Occurrences: Issues of Scale and Accuracy Symposium, Snowbird, UT. Oct. 18-22, 1999 (published abstract).
- Ries, L., *D.M. Debinski* and M.L. Wieland. The effect of roadside habitat restoration on butterfly communities. Ecological Society of America Annual Meeting, Baltimore, MD. Aug 2-6, 1998 (published abstract).
 - **Debinski, D.M.**, E. Saveraid, M.E. Jakubauskas and K. Kindscher. Butterfly species richness relative to landscape context in montane meadows. Thirteenth Annual Conference of the International Association of Landscape Ecologists, East Lansing, MI. March 17-21, 1998 (published abstract).

• **Debinski, D.M.** Genetics and demography of Lepidopteran metapopulations. Conservation Biology and Genetics Workshop, Medora, ND. March 1995 (published abstract).

ORGANIZED SYMPOSIA

- MSU Didactic Opportunities and Achievements Biological, Geographical and Geological Sciences. Montana State University, Bozeman MT, July 17th – 26th 2023 (Primary Organizer bringing 10 faculty from the University of Silesia to MSU for 10 days.)
- 15th Biennial Scientific Conference on the Greater Yellowstone Ecosystem Expanding the Scope of Science Together. May 15-18, 2022, Montana State University in Bozeman, Montana. (Program Committee, Speakers Committee)
- Miller, J.R. and *D.M. Debinski*. Moving Beyond Fortress Conservation: New Approaches for a Changing World. North America Congress for Conservation Biology, Oakland, California. July 15-18, 2012.
- Debinski, D.M. and B.S. Bowen. Improving Recruitment and Retention of Women Faculty in Ecology: A Focus on NSF-Funded ADVANCE Programs. Organized Poster session at the Ecological Society of America, Pittsburgh, PA, Aug. 4, 2010.
- **Debinski, D.M.** Landscape-Level Approaches to Experimentally Studying Plant and Animal Responses to Climate Change. Symposium at the International Association of Landscape Ecologists meeting in Snowbird, UT, April 12-16, 2009.
- **Debinski, D.M.** Chaired Conservation Issues Concerning Global Climate Change at Society for Conservation Biology Annual Meeting, San Jose, CA. June, 2006.
- **Debinski**, **D.M.** Chaired session on Conservation Issues Concerning Global Climate Change at Society for Conservation Biology Annual Meeting, Duluth, MN. June 28-July 2, 2003.
 - **Debinski, D.M.** and L. Best. Riparian symposium on Wildlife Use of Conservation Buffers at the 64th Midwest Fish and Wildlife Conference, Kansas City, MO. Dec. 7-10, 2003.
- 1999 Debinski, D.M. Chaired Conservation Section, Iowa Academy of Science, 1999.
 - Debinski, D.M. Chaired Reconstructed Landscapes Symposium, lowa Academy of Science, 1999.

MEDIA COVERAGE OF RESEARCH, DISSEMINATION AND EXTENSION:

- National Wildlife Federation journal "Monarchs Delay Fall Migration" article summarizing my *Journal of Animal Ecology* publication findings. Summer 2025.
- Yellowstone Public Radio interview "A Struggling Butterfly Species Could See Federal Protections" https://www.ypradio.org/government-politics/2024-08-07/a-struggling-butterfly-species-could-see-federal-protections August 7, 2024.
- Journal publishes Montana State scientists' paper on pollinators in roadside habitats. March, 2024
 https://www.montana.edu/news/23615/journal-publishes-montana-state-scientists-paper-on-pollinators-in-roadside-habitats
- "Roadside Habitat: Boon or bane for pollinating insects?" Pollinator Week (agisamerica.org) June 2024 https://agisamerica.org/pollinator-week/
- "BioScience Talks" podcast on January Editor's Choice for Meinzen, T.C., Burkle, L., *Debinski, D.M.* (2024) Roadside habitat: boon or bane for pollinating insects? https://bioscience-talks.aibs.org/episodes/pollinator-roadside-habitat-with-thomas-meinzen-diane-debinski-and-laura-burkle
- Polish professors visit Montana State for experiential learning workshop. MSU News, July 26, 2023. https://www.montana.edu/news/23039/polish-professors-visit-montana-state-for-experiential-learning-workshop

- Exhibit, Museum of the Rockies, Bozeman, MT. "Wings That Make Waves." Moss, K., *D.M. Debinski*, and J. S. Durney. May 2022-Nov. 2023.
- Podcast: Todays Voices of Conservation Science 2022 Thomas Meinzen Can Roadside Lands Save the Pollinators? https://conservationscience.buzzsprout.com/144534/11208909-thomas-meinzen-can-roadside-lands-save-the-pollinators
- Podcast: Todays Voices of Conservation Science 2022 Cayley Faurot-Daniels Hi-Tech Science: Using eDNA to Find Pollinators https://conservationscience.buzzsprout.com/144534/11924629-cayley-faurot-daniels-hi-tech-science-using-edna-to-find-pollinators
- Vox News: Grass is good. Lawns are terrible. Sep 10, 2021. https://www.vox.com/down-to-earth/22662490/grasslands-better-than-lawns-yard
- MSU Communications: Cayley Faurot-Daniels receives prestigious NSF research fellowship. April 9, 2021. https://www.montana.edu/news/21058/cayley-faurot-daniels-receives-prestigious-nsf-research-fellowship
- MSU Communications: Montana State research ties butterfly population to mountain systems ecology.
 Oct. 15, 2018. https://www.montana.edu/news/18096/montana-state-research-ties-butterfly-population-to-mountain-systems-ecology
- Cottage Life magazine coverage of Monarch butterfly Sept. 2018.
 https://cottagelife.com/outdoors/you-might-not-know-this-about-monarch-butterflies/
- Sierra Club magazine coverage of Regal Fritillary research Nov. 2, 2017. http://www.sierraclub.org/sierra/why-splendid-butterfly-disappearing
- NRCS Webinar *Debinski, D.M.* and Leslie Ries. Landscapes for Butterfly Conservation. March 23, 2016.

 http://www.conservationwebinars.net/webinars/landscapes-for-butterfly-conservation
 (Attendance Total 626, USDA 170, Private, University, Other government 456, Number of states, territories, other represented 52)
- **Debinski, D.M.** 2015. Combining Observational and Experimental Studies to Examine Plant and Insect Responses to Climate Change. Invited presentation. North Carolina State University. Sept. 17, 2015. Webinar of talk found here: http://globalchange.ncsu.edu/secsc/resources/media/
- Phenocam daily images of my long-term research sites went live in summer 2015 and are now part of the AmericaView http://www.americaview.org/ national phonological imagery network.
 Grand River Grasslands of Iowa: http://phenocam.sr.unh.edu/data/latest/grandrivergrass.jpg
 Grand Teton National Park: http://phenocam.sr.unh.edu/data/latest/grandteton.jpg
- Murie Center interview video (upcoming). Summary of research in the Greater Yellowstone Ecosystem supported by Boyd Evison Grant.
- University of Wyoming TV YouTube video of research: Wyoming Signature Feature: Butterfly Research at AMK Ranch (UW/NPS Research Station) http://www.youtube.com/user/wyomingvideos?feature=mhee#p/c/14/4t4azEa34Vk
- NPR Talk of Iowa at Neal Smith National Wildlife Refuge, Aug. 23, 2011: http://iowapublicradio.org/news/news/story.php?story=2968
- ISU News Service: "Changing climate could alter meadows' ecosystems, says ISU researcher" http://www.news.iastate.edu/news/2010/jul/debinski July 2010.
- Leopold Center for Sustainable Agriculture video describing patch-burn grazing in the Grand River Grasslands of southern Iowa. http://www.leopold.iastate.edu/research/eco-files/patchburncomm.html Spring 2010
- NPR Interview of Debinski on Climate Change: "Purple Snail May Be Climate Change Casualty" by John Nielsen All Things Considered, August 8, 2007 http://www.npr.org/templates/story/story.php?storyId=12600707
- "Buffer Advice: Go Wide." by Nathan Betts. Western Farmer Stockman. Oct. 2007. www.WesternFarmerStockman.com
- "Wider buffers benefit wildlife." by Nathan Betts. The Farmer Stockman. Oct. 2007.
 www.TheFarmerStockman.com
- Making the Best of What Remains of Shrinking Habitats By SAM HOOPER SAMUELS, The New York Times, Jan 8, 2002
 - http://query.nytimes.com/gst/fullpage.html?res=9A07EEDC1E30F93BA35752C0A9649C8B63
- "Effort on to lure rare butterfly back to lowa" by Matt Kelley Radio lowa July 3, 2000 http://www.radioiowa.com/gestalt/go.cfm?objectid=CF1B95FB-2C8B-4783-8C2C9EF27810AE2D

TEACHING			
Course	Title	Credits	Year
LRES 593	Grand Challenges in Ecology and Environment	1	21-25
BIOE494	Seminar	1	20
BIOE554	Foundations of Ecology & Mgmt.	1	19-25
BIOE375	Ecological Responses to Climate Change	3	18-19
BIOL 211	Principles of Biology	3	94-16
BIOL/WS 307	Women in Science and Engineering	3	05-16
BIOL/AECL471	Introductory Conservation Biology	3	06-16
EEOB/AECL531	Conservation Biology	3	95-17
AECL 365	Vertebrate Biology	3	95-03
AECL 110	Orientation in Animal Ecology	R	95-01
EEB 585	Ecology and Evolutionary Biology Fieldtrip—Yellowstone	2	99,13
EVRN 148	Principles of Environmental Studies (KU)	3	93-94
EVRN 300	Biological Environmental Impact Assessment (KU)	2	92
EVRN 460	Field Methods in Environmental Studies (Field Ecology)	3	91-93
	Endangered Wildlands (Wildlands Studies Program, SFSU)	3	90-94
	Biodiversity Assess. Tech. (Wildlands Studies Program, SFSU)	3	93

FACULTY MENTORING & REVIEW

Assistant Professors

- Dr. Haldre Rogers—Ecology, Evolution, and Organismal Biology (2015-present), Chair Special Review Committee for Assistant Professor
- Dr. Tracy Heath—Ecology, Evolution, and Organismal Biology (2015-present), Special Review Committee for Assistant Professor
- Dr. Amy Toth—Ecology, Evolution, and Organismal Biology (2013-2015), Special Review Committee for Assistant Professor
- Dr. Anne Bronikowski—Ecology, Evolution, and Organismal Biology (2015), Special Review Committee for Associate Professor
- Karen Abbott—Ecology, Evolution, and Organismal Biology (2011-2012), Special Review Committee for Assistant Professor
- Dr. Jim Miller—Tenure Mentor, Natural Resource Ecology and Management and Landscape Architecture.
- Dr. Steve Dinsmore—Tenure Mentor, Natural Resource Ecology and Management.

Post Tenure Review

- Dr. John Downing-Ecology, Evolution, and Organismal Biology (2009), Post Tenure Review
- Dr. William Clark—Ecology, Evolution, and Organismal Biology (2013), Post Tenure Review
- Dr. William Crumpton—Ecology, Evolution, and Organismal Biology (2011), Post Tenure Review
- Dr. Arnold Van der Valk—Ecology, Evolution, and Organismal Biology (2011), Post Tenure Review
- Dr. Ralph Ackerman—Ecology, Evolution, and Organismal Biology (2010), Post Tenure Review
- Dr. Jim Colbert—Ecology, Evolution, and Organismal Biology (2010), Post Tenure Review

POSTDOCTORAL ASSOCIATES

Name	Торіс		Year
Rhea von Busse	Butterfly flight relative to environmental conditions and landscape composition	Postdoc	2013-2016
Kristin Kane	The projected effects of climate change on plant species distributions in grasslands of lowa.	Postdoc	2012-2014
Gina McAndrews	Quantifying long-term plant community changes in the Greater Yellowstone Ecosystem	Postdoc	2006
Jeff Jaros-Su	Refining the use of remote sensing and geographic information systems for coarse-filter biodiversity protection	Postdoc	1999-2001
Raymond Moranz	Evaluating the use of patch-burn grazing on prairie invertebrates	Postdoc	2009-2015
Joe Veldman	Ancient grasslands and wind dispersal of fire dependent species	Postdoc	2014-2016
Jen Vogel	Reintroduction of prairie chickens to southern Iowa	Postdoc	2012-2016

GRADUATE ADVISING - MAJOR PROFESSOR

Student	Thesis/Dissertation Topic	Degree Major	Year
Cayley Faurot-Daniels	Traditional vs. eDNA-based Methods of Quantifying Temporal Changes in Alpine Pollinator Communities	M.S.	2024
Thomas Meinzen	An Evaluation of Idaho Roadside Habitats, Their Use by Monarch Butterflies and Other Pollinators, and Their Management	M.S.	2023
J. Simone Durney	Parnassius butterfly responses to interannual variation and nectar plant resources	Ph.D.	2023
Nick Lyon	Multi-trophic adaptive management in Midwestern working landscapes	M.S.	2019
Victoria Pocius	Monarch biology and population declines	Ph.D.	2018
Hilary Haley	A Comparison Study of Bee Use on Prairie Remnants, Reconstructions, and CP-42 Plantings	M.S.	2018
David Stein	Comparison of Nutritional Factors and Species Abundance of Bee Species among Grassland Types in Southern Iowa and Northern Missouri	M.S.	2016
Karin Jokela	An examination of the complex ecological role of tall fescue in grassland restoration (Research Excellence Award 2016)	M.S.	2015
Kim Szcodronski	Assessing population status and identifying key habitat requirements for Parnassian butterflies in Grand Teton National Park, WY	M.S.	2014

John Delaney	Using novel grasslands for the conservation and restoration of butterflies and other pollinators in agricultural ecosystems	Ph.D.	2014
Jill Sherwood	Experimentally simulating environmental change a montane meadow system via reduced snowpack and passive warming: soil and plant responses	M.S. EEB	2013
Brian Olechnowski	An examination of songbird avian diversity, abundance trend, and community composition in two endangered temperate ecosystems: riparian willow habitat in the Greater Yellowstone Ecosystem and a restored tallgrass prairie ecosystem, Neal Smith National Wildlife Refuge	Ph.D. EEB	2009
Jessica Orlofske	Terrestrial arthropod community and indicators of biotic integrity for lowa tallgrass prairie ecosystems	M.S. EEB	2008
Jennet Caruthers	Butterfly community temporal trends and responses to resource availability along a hydrological gradient of montane meadows	M.S. EEB	2008
Adam Martin-Schwarze	GIS Certificate–landscape ecology of Neal Smith National Wildlife Refuge and Red Rock Lake	GIS Cert.	2006
Jennifer Vogel	Effects of prairie restoration using fire and grazing regimes on butterfly communities in Iowa's Loess Hills (co-advised with Rolf Koford)	M.S. EEB	2006
Jessica Davis	Sustaining pollinator services in a fragmented landscape: What landscape features and scales affect pollinator diversity?	M.S. EEB	2005
Ron VanNimwegen	Landscape-level predictors of songbird nesting success in willow habitats	M.S. EEB	2004
Kathleen Reeder	Riparian filter strips for non-traditional wildlife (co-advised with Brent Danielson)	M.S EEB	2004
Stephanie Shepherd	Restoration techniques for reintroduction of prairie endemic insects	M.S. EEB	2003
Amanda Hetrick	Patterns of distribution among selected birds within two regions of the Greater Yellowstone Ecosystem—A comparative study	M.S. A Ecl	2002
Julia Auckland	Demographics, movement and resource use of the American Apollo butterfly <i>Parnassius clodius</i> (Papilionidae) in Grand Teton National Park, Wyoming, USA	M.S. EEB	2001
Bill Norris	The effect of forest quality on neotropical migrant breeding bird diversity and abundance in Northeastern lowa forests. (co-advised w/ Don Farrar, Botany)	Ph.D. EEB	1999
Scott Mahady	Conservation of tallgrass prairie butterfly species in a highly fragmented landscape	M.S. EEB	1999
Erica H. Saveraid	Using satellite imagery and landscape variables to predict bird communities in montane meadows of the Greater Yellowstone Ecosystem	M.S. EEB	1999

Leslie Ries	Butterflies in highly fragmented prairies of central lowa: How the landscape affects population isolation	M.S. EEB	1998
Liesl Kelly	Exploring larval food limitation as a probable cause of decline in Iowa populations of a butterfly, <i>Speyeria idalia</i> (Lepidoptera: Nymphalidae)	M.S. EEB	1996

GRADUATE ADVISING – COMMITTEE MEMBER

Student	Thesis Topic	Department	Degree	Year
Malia Naumchik	Efficacy of Pollinator Restoration Plantings on the Abundance/Diversity of Bees	Ecology	M.S.	Current
Lauren Gedlinske	Floral Traits as Mediators of Plant-Pollinator Interactions	Ecology	Ph.D.	Current
Hannah Duff	Effects of Habitat Heterogeneity on Crop Yield and Biodiversity	LRES	Ph.D.	2023
Kristen Switzer	Landscape Analysis of Native Bee Community Composition and Plant-Bee Interactions in Yellowstone National Park	Ecology	M.S.	2022
Mary Levandowski	Using automated recording units to increase our understanding of the effects of hydroperiod, spatial isolation, and phenology on species richness in wetlands	Ecology	M.S.	2022
David Loney	Community Assembly of Ants in Old-growth and Secondary Grasslands	EEB	Ph.D.	Withdr.
Peter Billman	Assessing Alternative Drivers of Abundance, Occupancy, and Elevational Range Retraction at the Range Core of a Climate-Sensitve Mammal	Earth Sci.	M.S.	2020
Teresa Blader	Does density of host plant (Asclepias spp.) and surrounding habitat influence monarch butterfly (Danaus plexippus) oviposition?	ENT	M.S.	2018
Rebecca Polich	Exploring the effects of non-lethal anthropogenic stressors using an ectothermic vertebrate model	EEB	Ph.D.	2017
Shane Patterson	Habitat Associations and Effects of Landscape Characteristics on Birds and Butterflies in Iowa	NREM	M.S.	2016
Lakshmi Attigala	Phylogenetic relationships, Population Genetics and Biogeography of the Native <i>Arundinaria</i> species in Sri Lanka	EEB	Ph.D.	2015
Brenna Towery	Modeling Canada goose breeding pairs in lowa based on aerial survey and National Wetland Inventory data	NREM	M.S.	2015
Peter Eyheralde	Bison-Mediated Seed Dispersal in a Tallgrass Prairie Reconstruction	EEB	Ph.D.	2015

John Doudna	Natural history in novel ecosystems: How a native small mammal provides (and can continue to provide) economically valuable services in intensive row-crop agriculture	EEB	Ph.D.	2014
Kurt Illerbrun*	Plant-herbivore interactions across an alpine meadow gradient	Biology U. of Alberta	Ph.D	2013
Rene Hessel	Classical and conservation biological control of pest insects within prairie and crop systems	ENT	M.S.	2013
Eddie Shea	Songbird community response to variable overstory retention treatments	NREM	M.S.	2013
Anna MacDonald	Avian community composition and habitat uses within watersheds of contrasting annual-perennial vegetation configurations	NREM	MS	2012
Tyler Harms	Distribution and abundance of secretive marsh birds in Iowa	NREM	M.S.	2011
Dustin Baker	Understanding Differences in Leadership Interest and Confidence	Psychology	M.S.	2012
Rene Hessel	Conservation biological control to enhance the abundance of natural enemies	Entomology	M.S.	Withdr. 2011
Natalie Randall	Prevalence of West Nile Disease in Peridomestic Avian species along a land use gradient in central Iowa	NREM	M.S.	2011
Gregory Cory	Status and reproductive ecology of the long- billed curlew in Nebraska	NREM	M.S.	2011
Jason Crowley	Environmental trend analysis – using Graphical User Interfaces for R	Statistics	M.S.	2011
Annie Binder	Creative writing and the environment	English	M.S.	2011
Devan McGranahan	Species richness, fire spread, and structural heterogeneity in tallgrass prairie	EEB	Ph.D	2011
Kumudan Grubh	Providing an historical context for oak ecosystem restoration in the Midwest Driftless area	NREM	M.S.	2009
Dustin Farnsworth	Determining ecological reference conditions for the Loess Hills	NREM	M.S.	2009
Ross Connover	Associations between grassland birds and managed habitat, row-crop agriculture	NREM	Ph.D.	2009
Wayne Ohnesorg	Soybean aphid ecology	Entomology	M.S.	2008
Miriam Lopez	Bt-resistent European corn borers and Nosema pyrausta; Implications for resistance development	Entomology	M.S.	2008
Jeramie Strickland	Predation of painted turtle (<i>Chrysemys picta</i>) nests: examining potential attractants and deterrence on a habitat scale	EEB	M.S.	2008

Andrea Barbknecht	Brucellosis seroprevalence and rates, spatial distribution, and site-selection of abortion and paturition in female elk of feedground and winter free-ranging populations.	NREM	M.S.	2008
Jenny O'Neill	Environmental writing	English	M.A.	2007
Lindsay Carrol	Turtle conservation & genetics	EEB	M.S.	2007
Zsolt Gemesi	Plumbing agricultural landscapes for water quality improvement: Coexisitence of intensive agriculture and good water quality.	EEB	M.S.	2007
Anna Rudroff	Success in the sciences: The impact of role- modeling relationships and achievement motivation on women's career aspirations.	Psychology	M.S.	2007
Danielle DeBruyne	Do butterflies use color as a cue for finding suitable habitat on the landscape?	EEB	M.S.	2006
Nicole Davros	Grassland songbird use of filter strips in the Minnesota River Basin Conservation Reserve Enhancement Program (CREP) Project Area	NREM	M.S.	2006
Embere Hall	Habitat use and nest success of birds in restored and remnant prairie complexes in Northwest Iowa	NREM	M.S.	2005
Kutlwano Mulale	A comparative study of the organization and performance of community-based natural resources management projects in Botswana	Sociology	Ph.D.	2005
Tracy Walker	Response of grassland songbirds to management practices in prairie landscapes of the Loess Hills, lowa	NREM	M.S.	2005
Andy Wiewel	Assessing small mammal populations and Habitat Associations in North Dakota Prairies	EEB	M.S.	2003
Kevin Drees	The evolving mission of modern zoos and aquariums: An internal appraisal	Animal Ecology	M.S.	2002
Nusha Keyghobadi*	Population genetic structure of the Alpine butterfly <i>Parnassius smintheus</i> : Influence of landscape at small and large spatial scales	Biology U. of Alberta	Ph.D.	2001
Michael Phillips	Effect of habitat fragmentation on predator movement and nesting success of grassland birds	Animal Ecology	Ph.D.	2001
Anthony Boughton	Recombinant baculoviruses: The risks associated with their use	Entomology	Ph.D.	2000
Steven Clark	Factors affecting the distribution of Topeka Shiners in Iowa	Animal Ecology	M.S.	2000
Cathy Mabry	Dispersal, establishment, and persistence of understory plants in Iowa woodlands	Botany	Ph.D.	2000

Mark Pegg	Effects of thermal and hydrological variation on abundance and growth of benthic fishes in the Missouri river	Animal Ecology	Ph.D.	2000
Liessa Thomas	Bird communities and restoration of Walnut Creek Wildlife Refuge	Animal Ecology	M.S.	1999
Maria Borgognone	Statistical methods for habitat classification using butterfly abundance data	Statistics	M.S.	1999
Don Wirth	Great Oasis Culture Settlement Pattern in the Des Moines Drainage	Anthropology	M.S.	1999
Tamara Ross	Genetic diversity in the Iowa Pleistocene snail	Zoology and Genetics	Ph.D.	1998
Kathryn Tuxbury	Genetic variation of microsatellite loci in populations of the freshwater mussel Lampsilis radiata siliquoidea	Animal Ecology	M.S.	1997

^{*}I was the external examiner for University of Alberta Department of Biological Sciences Ph.D. defense.

GRADUATE STUDENT AND POSTDOCTORAL MENTORING - PREPARING FUTURE FACULTY

- Wendy Sparks Ph.D. Student in the Genetics program—Preparing Future Faculty Mentor. 2008
- Finn Pillsbury, Ph.D. Student in NREM program—Preparing Future Faculty Mentor. 2009
- Paul Skrade, Ph.D. Student in NREM program—Preparing Future Faculty Mentor. 2010
- Erika Mudrak, Postdoc —Preparing Future Faculty Mentor. 2011
- Simone Soso, Ph.D. Student in Environmental Science program—Preparing Future Faculty Mentor. 2013

UNDERGRADUATE ADVISING

Honors/Independent study students/High School Teachers as Interns

Sarah Lane	Decadal Temporal Changes in Butterfly Communities in Glacier National Park: An Independent Study (2024)
Kaylee Guajardo	Traditional and eDNA Surveys of Biodiversity in Glacier National Park (2023)
Sagan Simmons	Traditional and eDNA Surveys of Biodiversity in Glacier National Park (2022)
Kaylee Guajardo	Parnassius butterflies as bioindicators (2022)
Haley Buckbee	Parnassius butterflies as bioindicators (2022)
Olivia Jakabosky	Monarch phenological shifts (2020)
Nathan Morrow	Phenological Shifts in Monarch Butterfly Nectar Availability (2020)
Arden Engel	Impacts of passive heating and snowpack reduction in a montane meadow on flower abundance and phenology of a perennial forb, <i>Balsamorhiza sagittata</i> (2019)
Nancy Shryock	Monarch butterfly biology (Independent Study, Science With Practice, 2016), selected for poster presentation to ISU AG Endowment Board (2016).
Anna Broderick	Bee biodiversity and systematics (Independent Study, 2016)
Alex Karnish	Fire tolerance and leaf dispersal (Independent Study, 2015)

Callie Erwin	Fire tolerance and leaf dispersal, Monarch biology (Independent Study, 2015)
Mark Bouska	Fire tolerance and leaf dispersal. (NSF RET High School Teacher Intern Program, Summer 2015, West Monona High School, Onawa, Iowa)
Erich Sneller	Fire tolerance and leaf dispersal. (NSF RET High School Teacher Intern Program, Summer 2015 Harrisonburg High School, Virginia)
Logan Crees	Monarch biology (Science With Practice, Best Poster Award winner 2015) Moth Diversity in the Grand River Grasslands of Southern Iowa (Undergraduate Research Symposium, 2016), Parnassius climate change research (Field technician, Greater Yellowstone Ecosystem 2016), Selected for ISU Science at the Capital Presentation (2017)
Alison Volk	Monarch biology (Honors Student, 2015)
Miranda Salsbery	Butterfly morphometrics and flight (Honors Student, 2015).
Morgan Muell	Butterfly morphometrics and flight (Honors Student, 2015).
Allison Volk	Monarch butterfly biology and host plant distribution (Honors Student, 2015).
Logan Crees	Butterfly flight and morphometrics (Independent Study, 2015)
Savannah Putnam	Cascading effects of Thomisidae in a tri-trophic interaction network (Honors Student, 2014)
Griffin Smith	Effect of grassland management practices on bee nutrition and abundance. (Independent Study, 2013)
Toni Proescholdt	Butterfly trait analysis for climate change analysis (Honors Student, 2012, 2013, 2014). Selected for poster presentation for ISU Science at the Capital (2014)
Nicole Scavo	Effect of grassland management practices on bee nutrition and abundance (Independent Study, 2012)
Erin Toohey	Butterfly trait analysis for climate change analysis (Honors Student, 2012).
Corey Lange	Bee nutritional responses to management of prairies. (Science With Practice 2011 – two semesters).
Laura Winkler	Responses of ant species to patch-burn-grazing management in prairies. (Independent Study 2010, 2011, Science With Practice 2009).
Rob Todd	Responses of invertebrates to patch-burn-grazing management in prairies. (Research assistant, Science With Practice 2009).
Emily Steinweg	Responses of invertebrates to patch-burn-grazing management in prairies. (Honors Student, 2009).
Breanna King	Responses of invertebrates to patch-burn-grazing management in prairies. (Honors Student, 2009).
MJ Hatfield	Responses of invertebrates to patch-burn-grazing management in prairies. (Research assistant, 2007-2010).
Mike Rausch	Responses of invertebrates to patch-burn-grazing management in prairies. (Independent study, 2007-2009).
Will Reed	Songbird responses to vegetation structure changes over a decade of prairie restoration. (Independent study, 2007-2009).

Tyler Harms	Songbird responses to vegetation structure changes over a decade of prairie restoration. (Independent study, 2008-2009).
Lisa Stream	The use of cattle-grazing and fire as management tools to maintain biodiversity in prairies. (Science With Practice, 2007 & 2008).
Anna MacDonald	The use of cattle-grazing and fire as management tools to maintain biodiversity in prairies. (Science With Practice, 2006 & 2007).
Heather Gilleland	The use of cattle-grazing and fire as management tools to maintain biodiversity in prairies. (Research assistant, spring 2007).
Jacque Smith	The use of cattle-grazing and fire as management tools to maintain biodiversity in prairies. (Independent study, Summer 2006).
Dawn Goshorn	Greater Yellowstone Biodiversity project. (Science with Practice, Spring 2006).
Julie Perrett	Montane meadows as indicators of global climate change. (Independent study, 2005).
Carly Swanson	Terrestrial insects as a vital sign in the Greater Yellowstone Network. (Independent study, 2005).
Stephanie Hacker	Program for Women in Science and Engineering, 2003. Riparian filter strips for non-traditional wildlife
Lisa Young	Monarch butterfly migration patterns. (Honors student, 2001).
Michelle Wieland	Analysis of population trends of giraffes in Tanzania. (Honors student, 1998).
Danielle Slatery	Butterflies of Yellowstone National Park. (Honors student, 1998).
Garth Atchison	Butterfly species richness relative to patch size in an experimentally fragmented agroecosystem. (Honors student, KU, 1997).
Lauren Bone	Butterfly species distribution patterns relative to host plant availability in an experimentally fragmented agroecosystem. (Honors student, KU, 1997).
Nazi Zanjani	An analysis of birth control methods available in Iran from 1960 to the present. (Independent study, 1996).
Stanley Sheldon	Natural history and behavior of alpine butterflies. (Independent study,1995).
Angela Babbit	Correlations between habitat and butterfly species composition in native prairie and four experimental habitats (burned, grazed, mowed, and control) in Kansas. (Honors student, KU 1993).
Stephanie Kearny	Analysis of relationships between remotely sensed data and bird and butterfly species assemblages in the Greater Yellowstone Ecosystem. (Research assistant, KU, 1993).
Camille King	A gradient analysis of tree, bird, amphibian and reptile distributions in Kansas. (Research assistant, KU, 1993).

AWARDS AND HONORS

- 2025 First-Generation Champion Award, Montana State University
- Research Report RP 291 Bees and Butterflies in Roadside Habitats High Value Research award for the American Association of State Highway Officials (AASHTO) western region
- 2017 Iowa State University Plaza of Heroines

2016	WISE Champion for ISU Program for Women in Science and Engineering
2012	 Margaret Sloss Gender Equity Award Distinguished Visiting Researcher, University of Ottawa, Canada Fulbright Fellowship - Research Chair in Environmental Science, University of Winnipeg, Winnipeg, Canada (declined to go to University of Ottawa)
2008	Faculty Award for Diversity Enhancement, College of Agriculture and Life Sciences
2007	 Pollinator Advocate Award Honorable Mention from the North American Pollinator Protection Campaign
2006	Nominated for ISU VEISHEA Professor the Year
2005	 Awarded a Carrie Chapman Catt "Women Impacting ISU" award Invited to be a member of the ISU Women's Studies Program
2004	Visiting Scientist (sabbatical), Stanford University, Center for Conservation Biology
2003-2004	Big XII Faculty Fellowship to visit University of Kansas, Kansas Applied Remote Sensing Program
2002	 Elected to Fellow status in the Iowa Academy of Science Appointed as an Adjunct Associate Professor in the Dept. of Biological Science at the University of Iowa
2001	Shared Leadership for Institutional Change (invited participant)
1998-1999	 Big XII Faculty Fellowship to visit University of Kansas, Kansas Applied Remote Sensing Program
1997-1999	Nominated for Anna Lydia Pate Mentoring Award
1997	Nominated for ISU College of Agriculture Teaching AwardCertificate of Appreciation, ISU Office of Minority Programs
1996	Nominated for ISU VEISHEA Professor the Year
1995	Nominated for NSF Presidential Faculty Fellowship
1994	Nominated for NSF Presidential Faculty Fellowship
1986	Pack Award for essay on "Maintaining Minimum Viable Populations" (University of Michigan)
1985-1986	University of Michigan Rackham Fellowship
PROFESS	SIONAL SERVICE
MT Agricultuı MT Agricultuı EEB Curricul	re Experiment Station Project Review Committee (Beaver)
EEOB Execu EEOB Execu EEOB Promo	tive Committee
_	gic Planning Committee02-03, 07-08

EEOB Field Facilities Committee		.04-08
EEOB Search Committee		05, 07
A ECL Restructuring Committee		.01-02
Academic Advising		.95-99
Awards Committee (chair 00-01, 06-09)98	8-01,	05-01
GIS Committee		.95-00
Departmental Strategic Planning Discovery (Research) Chair		.00-01
Errington Lecture Committee99	5-01,	05-06
Committee Chair		.95-98
ISU Student Chapter of Society of Conservation Biology, Faculty Advisor		.04-09
Curriculum Committee		.94-96
Course Committee (AECL 231, AECL 311, AECL 325)		.95-01
Interpretation Curriculum Option Committee		.95-98
FWB Club		.95-98
Advisor		.95-96
Co-advisor		.96-98
Animal Ecology Council Secretary		.94-95
The Niche (Animal Ecology student newsletter) Advisor		.94-95
College committees		
MSU CLS Department Head Council (Co-Leader)		
Cohort Hiring Task Force MSU CLS		
Associate Dean Search committee MSU CLS		
Workload Policy committee MSU CLS		
Diversity Committee ISU		.99-01
University committees		
MSU College of Letters and Sciences Assistant to the Dean Search Committee		25
MSU loE Envisioning Team		
MSU Representative to the Rocky Mt. Cooperative Ecosystems Services Unit		
MSU Search Committee – Dean of the Library		
MSU President's Commission on the Status of University Women		
MSU iChange Committee for diversity and inclusivity of faculty (NSF supported)		
National Conference on Undergraduate Research Abstract Reviewer – MSU		
ISU Strategic Planning Task Force—subtopic of "Be a Magnet for Attracting World-Class Faculty		. 13-20
and Staff Task force		10
Search committee for Director of ISU Women's Studies Program		
ISU Faculty Senate Committee to monitor the proposed merger of Curriculum and Instruction		
and Educational Leadership and Policy Studies Departments in the College of Human Sciences	3	10
NSF ADVANCE Institutional Transformation co-PI		
ISU University Committee on Women		.02-05
Provost's Task Force on Part-Time Tenure Track Appointments		
ISU Women in Science and Engineering		
Council Member		
Panel Member		
ISU Women's Studies Faculty appointment		
ISU Strategic Planning Task Force	•	
Restructuring Committee for Education Leadership and Policy Studies and Curriculum and		
Instruction Depts		.10-11

Professional organizations

National Academy of Sciences Panel on Enhancing the Value and Sustainability of Biologi	ical
Field Stations and Marine Laboratories in the 21st Century.	2013-14
Society for Conservation Biology	life membe
Candidate for Board of Directors	
Ecological Society of America	life membe
Entomological Society of America	
The Wildlife Society	
International Association for Landscape Ecology	
American Institute of Biological Sciences	
Sigma Xi, Membership Committee	02-05
The Lepidopterists' Society	
North Dakota Natural Science Society	96-98
Iowa Academy of Science	96-presen
IA Academy of Science Grants Selection Committee	08-09
Center for Global and Regional Environmental Research	98-17

Reviewer of grants

USDA NRI Managed Ecosystems Panel Review

NSF Grant Review Panels

NASA Terrestrial Program Panel Review

National Science Foundation

NSERC Natural Sciences and Engineering Research Council of Canada

ISU University Research grants

National Geographic Society

U.S. Fish and Wildlife - Species Survival Assessment

U.S. Forest Service

Iowa Academy of Sciences

CGRER—Center for Global and Regional Environmental Research

IA Academy of Science Grants Selection Committee 2008-2011

ISU Experiment Station grant review

Xerces Society—DeWind Graduate Student Grant Panel 2010-2015 (chair, 2012)

Editing/Review of manuscripts

Arctic, Antarctic, and Alpine Research

BioScience

BIOLOGIA (Bratislava)

Conservation Biology

Biological Conservation

Ecography

Ecological Applications

Ecology

Global Change Biology

Journal of Applied Ecology

Journal of Insect Behavior

Journal of Insect Conservation

Landscape Ecology

Landscape and Urban Planning

Nature

Nature Communications

Nature - Scientific Reports

OPUS

Oryx

Prairie Naturalist

Proceedings of the National Academy of Science

Restoration Ecology

Science of the Total Environment

Western North American Naturalist

Wildlife Society Bulletin

Review of Fred Van Dyke's Conservation Biology text (3rd edition)

External Reviews

Annually I conduct multiple faculty reviews for P&T external to MSU and within MSU external to L&S Montana State University Dept. of Earth Sciences 2025
University of Wyoming Dept. of Zoology and Physiology 2020
Montana State University Dept. of Animal and Range Sciences 2020

Public organizations/committees

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Pollinators in the Greater Yellowstone Ecosystem - Committee member	2024-2025		
Reviewer for U.S. Fish and Wildlife Service Species Status Assessment for the eastern (Argynnis idalia			
idalia) and western (A. i. occidentalis) subspecies of the regal fritillary (Argynnis (Speyer			
NatureServe U.S. butterfly species conservation status review			
Montana Cooperative Fisheries & Wildlife Research Units Coordinating Committee			
National Academy of Sciences Committee on Stations, Marine Labs, and Nature Reserves	2013-2014		
North Central Climate Science Center Univ. Consortium—ISU Director	2014-present		
Iowa DNR committee—Iowa Butterfly Distribution and Abundance	2009-2012		
Iowa DNR committee—Global Climate Change	2009-2012		
Hines Emerald Dragonfly Recovery Team	1996-1999		
Resource for Senator Harkin's Staff	1997-1999		
IA DNR: Assisted updating endangered and threatened species list	1998		
American Wildlands Board of Directors	1994-1998		
Corridors of Life-Scientific Advisory Board	1994-1998		
Flathead Transboundary Council Scientific Advisory Board	1995-1996		
Kansas Ecological Reserves-Scientific Advisory Board	1995-1996		
Training and Workshop Participation			
Training and Workshop Participation	40.0004		
ADVANCEGeo Montana State Bystander Training			
American Indian Education for All	. •		
Center for Faculty Excellence - Activity Insight and Your Annual Review - Panelist			
Center for Faculty Excellence - Indigenous Mentoring Program Faculty Workshop	2018		
Other Teaching/Presentations			
Guest Lecturer ENGL 550 - Ecohumanities Seminar	Feb. 27, 2025		
	,		

Departmental Expectations and Annual Reviews - Center for Faculty ExcellenceDec.11, 2024 Guest Lecturer - Introduction to Biotechnology (BIOB 105) - Assessing biodiversity using traditional and

Workshop Organization

SELECTED PUBLIC PRESENTATIONS

- Butterflies as Ecological Indicators. March 23, 2022. MSU Alumni Foundation Retirees Association. https://www.msuaf.org/s/1584/index.aspx?sid=1584&gid=1&pgid=5117
- * KGVM Radio Program "Science Matters." Butterflies as Ecological Indicators, Oct. 26, 2019. http://kgvm.org/show/butterflies-as-ecological-indicators/
- 2019 Butterflies as Ecological Indicators. Museum of the Rockies, Bozeman, MT. Oct. 23, 2019.
- Butterfly and plant responses to climate change in montane meadows of the Greater Yellowstone Ecosystem. Aspen Pointe, Bozeman, MT. Jan 31, 2019.
- 2018 How to be a PI: Women in STEM/SBS Lunch. Oct. 2, 2018
- 2018 MSU Graduate School Professional Development Workshop. Oct. 18. 2018.
- The value of buffers and riparian filter strips to pollinators. NRCS Training Workshop. Ames, IA. August 5, 2015.
- 2014 KHOI radio interview on Butterflies and Climate Change. Ames, IA Sept. 17, 2014.
 - Monarch Conservation Working Group, Ames IA. July 28, 2014.
 - Conservation, Climate and Rural Iowa's Future, Drake Community Library, Grinnell, IA. July 1, 2014.
- EEOB Graduate Student Organization Discussion Panel. "Networking and Collaboration" Dec. 4, 2013.
 - Bio 110/BEST Faculty Panel, 2013
- 2012 Butterfly Walk, Ada Hayden Heritage Park, Ames, Iowa, July 2012.
- 2011 Butterfly Walk, Iowa Prairie Network, Lovilia, IA, 23 July 2011.
- "Butterfly Movement and Habitat Use in Highly Fragmented Landscapes" lowa Pollinator Conservation Short Course, Meeting sponsored by the Xerces Society.
 - Reiman Gardens, Ames, IA Aug. 10, 2010.
 - "Invertebrates of the Prairie" Missouri Grasslands Coalition Meeting, Dunn Ranch, Eagleville, Missouri, June 23, 2010.
 - "Invertebrate Training" Missouri Grasslands Coalition Meeting, Dunn Ranch Headquarters, Eagleville, Missouri, June 23, 2010.
 - "Restoring Butterflies in Iowa Prairies" ISU Women's Club 24 Feb. 2010.
 - "Restoring Butterflies in Iowa Prairies" Environmental Science Club, March 9, 2010.
- "Restitching that Torn Fabric of the Prairie" ISU University Relations Speaker for Des Moines Westminster Presbyterian Church Tuesday Fellowship Club April 7, 2009.
 - "Rachel Carson" Unitarian Universalists March 29, 2009.
 - Neal Smith NWR Land Management and Research Demonstration Research Field Day Sept. 19, 2009.

- "Discovering the Mysteries of the Prairie" Ames Middle School Oct. 7, 2009.
- 2008 "Butterflies in Your Garden" Marshalltown Garden Club, Marshalltown, IA, August 20, 2008.
- 2007 Ames Elementary School insect program May 2007.
 - Ames Elementary School butterfly program Sept. 26, 2007.
- "Restoration of the Regal Fritillary Butterfly on Iowa Prairies" Reiman Gardens Butterfly House. Ames, IA. April 5th, 2006.
 - "Butterfly Communities in Remnant and Reconstructed Prairies", Iowa. Association of County Conservation Board Employees, 35th annual Winterfest Training Workshop, Waterloo, IA, January 23- 25, 2006.
- "Butterfly Communities in Remnant and Reconstructed Prairies", Ames Middle School, Ames, IA. Sept. 28th, 2005.
- "The Spirituality of Work." Discussion of fieldwork and training students. Unitarian Universalist Fellowship of Ames, Ames, IA, 2005.
- Several "Butterflies of Iowa" presentations Unitarian Universalist Fellowship of Ames, IA. May 4, 2003; Sawyer Elementary School, May 13, 2003.
- "Natural History and Taxonomy of Iowa Butterflies", Ames Audubon Society. Ames, IA, 2002.
- "Natural History and Taxonomy of Iowa Butterflies", Des Moines Audubon Society. Des Moines, IA, 2001.
- Visiting Professor Program "Restoring Iowa's Prairies" I made visits to several high schools in Iowa, 2000.
 - Butterfly Workshop at Neal Smith National Wildlife Refuge, Natural History and "Taxonomy of lowa Butterflies", Prairie City, IA, 2000.
- 1999 Butterfly Workshop at Neal Smith National Wildlife Refuge, Natural History and Taxonomy of Iowa Butterflies, 1999.
- 1998 Butterfly Workshop at Neal Smith National Wildlife Refuge, Natural History and Taxonomy of Iowa Butterflies. Prairie City, IA, 1998.
- 1997 Prairie management panel discussion. Sponsored by Iowa Preserves Board. Ames, IA, 1997.
 - Use of GPS and GIS as it Relates to Natural Resources. Precision Agriculture Research at ISU. Ames, IA, 1997.
- 1996 "Butterflies of Iowa" public evening seminar at Lakeside Lab. Prairie City, IA, 1996.
 - "Butterflies of Iowa" presentation to Story County Conservation Board Older, Wiser, and Livelier Seniors (OWLS) group. Ames, IA, 1996.
- Endangered species population viability analysis workshops for U.S. Bureau of Land Management (Feb. in Riverside, CA, and March in Worland, WY), 1995.
 - Big Bluestem Audubon Society Seminar: "Birds, Butterflies, and Biodiversity in Yellowstone", Ames, IA, 1995.
 - Ames Public Library program entitled "Let's Talk About It:" Discussion of Annie Dillard's book Pilgrim at Tinker Creek. Ames, IA, 1995.
 - MacFarland Park Prairie Day presentation: "Insects of the Prairies", Ames, IA, 1995.
 - Prairie restoration and planting day at Neal Smith National Wildlife Refuge. Prairie City, IA, 1995.
- "Assessing Biodiversity in Prairie Ecosystems" lecture for Story County Conservation Board. Ames, IA, 1994.