Dr. Lora B. Perkins

Department of Natural Resource Management, South Dakota State University, Brookings SD USA.

Phone: 775-219-8107 Email:perkinslb@gmail.com

https://scholar.google.com/citations?user=w8gEwekAAAAJ&hl=en

Education

2010	PhD, Environmental Science and Health, University of Nevada, Reno
2007	MS, Botany and Plant Pathology, Oregon State University
2004	BS, Environmental Science, New Mexico State University

Professional Experience

	-	_
2024-present	Professor, Department of Natural Resource Management, SDSU	
2024-present	Affiliate Professor, Agronomy, Horticulture & Plant Science, SDSU	
2024-present	Advisory Board Member, Prairie Restoration Initiative	
2023-present	Lead developer of the Northern Great Plains Native Seed Partnership and the Northern	
	Great Plains Native Seed Strategy	
2021-present	Rangeland Ecology and Management Program Lead, SDSU	
2020-present	Board Member, Center of Excellence for Bison Studies	
2019-present	Lead Faculty, The Native Plant Initiative at South Dakota State University	
2019-2024	Affiliate Associate Professor, Agronomy, Horticulture & Plant Science, SDSU	
2018-2024	Associate Professor, Department of Natural Resource Management, SDSU	
2012-2018	Assistant Professor, Department of Natural Resource Management, SDSU	
2012	University Instructor, University of Nevada, Reno	
2011-2012	Postdoctoral Research Associate, University of Nevada, Reno	
2007-2010	Graduate Research and Teaching Assistant, University of Nevada, Reno	
2006-2007	Graduate Research Assistant, United States Geological Survey, Forest and Rangeland	
	Ecosystem Science Center, Corvallis, Oregon	
2005-2006	Graduate Teaching Assistant, Oregon State University	
2003	Undergraduate Laboratory Technician, United States Department of Agriculture-	
	Agricultural Research Service, Jornada Experimental Range	

Editorial Appointments

2024-present	Editor-in-Chief, Native Plants Journal
2016-2024	Contributing Editor at Restoration Ecology
2016-2024	Associate Editor at Biological Invasions
2018-2022	Associate Editor at Rangeland Ecology & Management

Awards

2024	Excellence in Outreach and Engagement, SDSU
2022	Polaris Habitat Stewardship Award from Pheasants Forever SDState Chapter
2019	Bradshaw Medal for Outstanding Contribution by the Society for Ecological Restoration
2017	'Above and Beyond' acknowledgement by SDSU President Dunn
2017	Gamma Sigma Delta Faculty Research Award
2017	Charles E. Bessey Award best paper published in <i>Great Plains Research</i> in 2016

Students and Post-Doctoral Researchers Mentored

Name	Degree	Year	Role
Dr. Bri Lind	Post-doc	2024	Supervisor
Dr. Francis Chaves Rodriguez	Post-doc	2022-2023	Supervisor
Mohammed AL Dhafar	PhD	Expected 2028	Advisor
Bret Lang	PhD	Expected 2024	Advisor
Shiva Torabian	PhD	2023	Advisor
Nate Donato	MS	Expected 2025	Co-Advisor
Joey Cammarano	MS	Expected 2025	Advisor
Rylie Franklin	MS	Expected 2025	Advisor
Ali Karnes	MS	Expected 2025	Advisor
Tyler Geltmacher	MS	Expected 2026	Advisor
Anna Manson	MS	Expected 2025	Advisor
Allison Boehm	MS	Expected 2025	Advisor
Brandon Clark	MS	Expected 2024	Advisor
Alex Kovary	MS	Expected 2025	Advisor
Grace Villmow	MS	2024	Advisor
Greg Cooper	MS	2023	Advisor
Gabi Bolwerk	MS	2023	Advisor
Robin Buterbaugh	MS	2023	Advisor
Abigail Blanchard	MS	2021	Advisor
Marlin Dart*	MS	2021	Co-Advisor
Stuart Fetherston*	MS	2021	Co-Advisor
Jacob Comer	MS	2019	Advisor
Jacob Pecenka*	MS	2017	Co-Advisor
Ming Stephens	MS	2017	Advisor
Joe Bennett	MS	2016	Advisor
Joshua Leonard*	MS	2016	Co-Advisor
Emily Ulrich	MS	2014	Advisor

Peer-Reviewed Publications and Book Chapters

(undergraduates indicated by ^u, graduate students indicated by ^G; note in ecology, the last author denotes papers coming from your lab where you made a significant contribution)

2024 Nleya, T., Clay, S., L. Perkins., ^GMertz, C. Plant responses to Salt Stress in Salinity and Sodicity: A Growing Global Challenge to Food Security, Environmental Quality and Soil Resilience. Wiley Press

L. Perkins., ^GBlanchard, A., Ehlert, K., Leffler, A. Native Plant Restoration of Salt-Impacted Soils. Salinity and Sodicity: A Growing Global Challenge to Food Security, Environmental Quality and Soil Resilience. Wiley Press

- ^GBolwerk, G. A., ^GCooper, G. A, Leffler, A. J., and **L. Perkins.** Simulated herbicide drift effects on seed germination, seedling emergence, and seedling growth of native plants of the Northern Great Plains. **Environmental Toxicology and Chemistry**. In press
- ^GCooper, G. A., ^GBolwerk, G. A., Leffler, A. J., and **L. Perkins.** Seed dormancy, germination requirements, and implications of herbicides for *Penstemon albidus* and *P. nitidus*. **Restoration Ecology**, In press
- ^uMaynard, J., Hatfield, G., and **L. Perkins.** The effect of multiple fire cures on germination of groundplum milkvetch (Astragalus crassicarpus Nutt). **Native Plants Journal**. 25(1), 22-27
- ^GTorabian, S., Leffler, A.J. and **L. Perkins**., Effects of ivermectin on soil nutrient cycling, plant biomass, and dung beetle abundance. **The Rangeland Journal**. In press
- ^GFetherston, S. C., Lonsinger, R. C., **L. Perkins,** Lehman, C. P., Adams, J. R., & Waits, L. P. Genetic analysis of harvest samples reveals population structure in a highly mobile generalist carnivore. **Ecology and Evolution**, 14(5), e11411.
- ^GTorabian S, Leffler AJ, **L. Perkins.** Importance of restoration of dung beetles in the maintenance of ecosystems services. **Ecological Solutions and Evidence**. 5(1), pe12297
- 2023 Li S, Ulrich-Schad J, Leffler A, Avemegah E, L. Perkins. Dewormers, Dung Beetles, and Decision Making: Understanding Rangeland Livestock Producers' Parasiticide Use. Rangeland Ecology & Management. 90 (1), 13-21.
 - ^GBlanchard A, Clay S, **L. Perkins.** The Good, the Bad, the Salty: Investigation of native plants for revegetation of salt-impacted soil in the northern Great Plains, USA. Journal of Soil and Water Conservation. Accepted for Publication
 - **Perkins L**, ^GBlanchard A, Ehlert K, Leffler A. Native Plant Restoration of Salt-impacted Soils. **Salinity and Sodicity: A Growing Global Challenge to Food Security**. David Clay and Tom DeSutter ed. Accepted for publication by the Alliance of American Society of Agronomy, Soil Science of America, and the Crop Science Society of America.
 - Nleya T, Clay S, **Perkins L**, ^GMertz C. Plants and Salt Tolerance. **Native Plant Restoration of Salt-impacted Soils. Salinity and Sodicity: A Growing Global Challenge to Food Security**. David Clay and Tom DeSutter ed. Accepted for publication by the Alliance of American Society of Agronomy, Soil Science of America, and the Crop Science Society of America.
- ⁶Dart, M., **L. Perkins.**, Jenks, J., Hatfield, G., & Lonsinger, R. C. The effect of scent lures on detection is not equitable among sympatric species. **Wildlife Research**, 50(3), 190-200.
 - ⁶Fiedler, D., Clay, S. A., Westhoff, S., Reese, C. L., Bruggeman, S. A., Moriles-Miller, J., **L. Perkins.** Joshi, D., Marzano, S. & Clay, D. E. Phytoremediation and high rainfall combine to improve soil and plant health in a North America Northern Great Plains saline sodic soil. **Journal of Soil and Water Conservation**, 77(4), 381-388.

- ^GComer, J., **L. Perkins.** Resistance of the soil microbial community to land-surface disturbances of high-intensity winter grazing and wildfire. **Journal of Environmental Management**. 279, 1-7
 - Avemegah, E., ^GGu, W., Abulbasher, A., Koci, K., Ogunyiola, A., Eduful, J., **L. Perkins.**, & Ulrich-Schad, J. D. (2021). An Examination of Best Practices for Survey Research with Agricultural Producers. **Society & Natural Resources**, 34(4), 538-549.
 - Ulrich-Schad, J., Li, S., Leffler, A., ^GGu, W., Schoon, L., **L. Perkins.** What and Why: South Dakota Rangeland Livestock Producers' Usage of Parasiticides. **Rangeland Ecology & Management**, 79, 190-200
- 2020 Higgins, K., L. Perkins., et al. Vegetation Sampling and Measurement. The Wildlife Techniques Manual, Eighth Edition, Johns Hopkins Press, Nova Silvy ed. pg 409-438
 - Gaskin, J.F., Espeland, E., Johnson, C.D., Larson, D.L., Mangold, J.M., McGee, R.A., Milner, C., Paudel, S., Pearson, D.E., **L. Perkins**, and Prosser, C.W. Managing invasive plants on Great Plains grasslands: A discussion of current challenges. **Rangeland Ecology & Management**. 78, 235-249
- 2019 **L. Perkins.**, K. ^UDucheneaux, G. Hatfield, S. Abella. Badlands, Seed Bank, and Community Disassembly. **Rangeland Ecology and Management** 72:736-741
 - Paschke, M., L. Perkins, K. Veblen. Restoration for Multiple Use. Restoration Ecology 27:701-704
 - ⁶Bennett, J., A. Smart, **L. Perkins**. Using phenological niche separation to improve management in a Northern Glaciated Plains grassland. **Restoration Ecology** 27:745-749
 - **L. Perkins.,** M. Ahlering, D. Larson. Looking to the future: key points for sustainable management of northern Great Plains grasslands. **Restoration Ecology** 27:1212-1219
 - **L. Perkins.** and A. Leffler. Conceptualizing ecological restoration: a concise and adaptable framework for researchers and practitioners. **Restoration Ecology** 26:1024-1028
- **L. Perkins.** and ^GJ. Bennett. A field test of commercial soil microbial treatments on native grassland restoration. **Restoration Ecology** 26:851-857.
 - ^G Henshue, N., ^UC. Mordhorst, and **L. Perkins**. Invasive earthworms in a northern Great Plains prairie fragment. **Biological Invasions** 20:29-32.
- 2017 Espeland, E. and **L. Perkins**. Weed Establishment and persistence after water pipeline installation and reclamation in the mixed grass prairie of western North Dakota. **Ecological Restoration** 35:303-310.
 - ^GBennett, J., and **L. Perkins**. Plant-derived smoke influences germination of native and invasive plant species. **Ecological Restoration** 35:205-208.
 - ^GLeonard, J., ^GW. Inselman, J. Jenks, T. Grovenburg, **L. Perkins**, and D. Lammers. A new approach: Capturing neonatal Bison with a net-gun from a utility terrain vehicle. **Journal of Fish and Wildlife Management**. 8:255-259.

- ^GLeonard, J., **L. Perkins**, and J. Jenks. Are Bison intermediate feeders? Unveiling summer diet selection at the northern fringe of historical distribution. **Rangeland Ecology and Management**. 70:405-410.
- ⁶Dahal, B., **L. Perkins**, and V. Brozel. 2017. Diversity of free-living nitrogen fixing Streptomyces in soils of the Badlands of South Dakota. **Microbiological Research** 195:31-39.
- ⁶Leonard, J., ⁶W. Inselman, J. Jenks, T. Grovenburg, **L. Perkins**, and D. Lammers. Capturing neonate Bison: A novel approach aimed at understanding survival. **The Wildlife Professional** 11:33-35.
- 2016 Higgins, K., D. Parris, E. Stukel, and **L. Perkins**. Development of a multi-phased educational program designed to enhance student and citizen knowledge and awareness of South Dakota's natural history and visual arts collections of plants, animals, and fossils: Inconceivable or not? **Proceedings of South Dakota Academy of Science**. 95:27-40.
 - Smart, A., L. Perkins, T. Schramm, M. Nelson, P. Bauman, S. Clay, and D. Clay. The effects of patch-burn grazing on vegetation structural heterogeneity in the northern tallgrass prairie of South Dakota. **Great Plains Research.** 26:57-70.
 - **L. Perkins.** and G. Hatfield. Can commercial soil microbial treatments remediate plant-soil feedbacks and improve restoration seedling performance? **Restoration Ecology**. 24:194-201.
 - **L. Perkins.**, G. Hatfield, and E. Espeland. Invasive grasses consistently create similar plant-soil feedback types in soils collected from geographically distant locations. **Journal of Plant Ecology**. 9:180-186.
 - Espeland, E., **L. Perkins**, M. Horning, and R. Johnson. Seed source may determine field-specific germination and emergence: the source by planting environment interaction. **Crop Science**. 56:249-258.
- 2015 Higgins, K., D. Parris, E. Stukel, and **L. Perkins**. A century of academy of science publications with relevance to South Dakota's wild vertebrate fauna and fossils. **Proceedings of South Dakota Academy of Science**. 94:53-67.
 - ^USundall, M., **L. Perkins**, and T. Grovenburg. Conversion of smooth brome (*Bromus inermis*) to switchgrass (*Panicum virgatum*) in northwestern lowa. **Ecological Restoration**. 33:355-357.
- ⁶Ulrich, E., and **L. Perkins**. *Bromus inermis* and *Elymus canadensis* but not *Poa pratensis* demonstrate strong competitive effects and all benefit from priority. **Plant Ecology**. 215:1269-1275.
 - **L. Perkins** and G. Hatfield. Competition, legacy, and priority and the success of three invasive species. **Biological Invasions.** 16:2543-2550.
 - ^UJohnson, R., T. Grovenburg, **L. Perkins**, J. Jenks, and C. Swanson. Evaluation of five herbicide treatments to control yellow toadflax (*Linaria vulgaris*). **Ecological Restoration**. 32:137-140.

- 2013 **L. Perkins.**, R. Blank, ^GS. Ferguson, D. Johnson, **B. Rau, and W**. Lindemann. Quick start guide to soil methods for ecologists. **Perspectives in Plant Ecology, Evolution, and Systematics.** 4:237-244.
 - **L. Perkins.** and R. Nowak. Invasions syndromes: beyond individual invasion hypotheses. **Journal of Arid Lands**. 5:275-283 Special issue Symposium for Invasive Species and Global Change, Urumqi China.
 - Espeland, E., and **L. Perkins**. Annual cover crops do not inhibit early growth of perennial grasses on a disturbed restoration soil in the Northern Great Plains. **Ecological Restoration**. 31:69-78.
 - **L. Perkins.** and R. Nowak. Native and non-native grasses generate common types of plant–soil feedbacks by altering soil nutrients and microbial communities. **Oikos**. 122:199-208.

Other publications

- 2024 GCooper, G., K. Ehlert, L. Perkins. A Quick Start Guide to Selling Native Seeds. SDState Extension Puetz, E., R. Buterbaugh, K. Lang, A. Bachmann, L. Perkins. Native Plants to Know: Prairie Smoke (Geum triflorum). SDState Extension
 - ^GPuetz, E., R. Buterbaugh, K. Lang, A. Bachmann, **L. Perkins**. Native Plants to Know: Small-flowered Columbine (*Aquilegia brevistyla*). SDState Extension
 - ^GPuetz, E., R. Buterbaugh, K. Lang, A. Bachmann, **L. Perkins**. Native Plants to Know: Thimbleweed (*Anemone cylindrica*) SDState Extension
 - ^GLang, B., R. Buterbaugh, K. Lang, and **L. Perkins**. Plant Look-alikes: What's the Difference Between Fireweed and Purple Loosestrife? SDState Extension
 - ^GLang, B., R. Buterbaugh, K. Lang, and **L. Perkins**. Plant Look-alikes: What's the Difference Between Golden Alexander and Wild Parsnip? SDState Extension
 - Ehlert, K., ^GG. Villmow, ^GB. Lang, and L. Perkins. SDSU Native Plant Initiative Strengthens Conservation and Supply of Native Plants. SDState Extension
- ^GLang, B., K. Lang, and **L. Perkins**. Plant Look-alikes: What's the Difference Between Phlox and Dame's Rocket? SDState Extension
 - ⁶Villmow, G., K. Lang, A. Bachmann, **L. Perkins**. Generalist Host Plants in South Dakota. SDState Extension
 - ⁶Villmow, G., K. Lang, A. Bachmann, **L. Perkins**. Landscaping Best Practices for Pollinators and Beyond. SDState Extension
 - ⁶Villmow, G., K. Lang, A. Bachmann, **L. Perkins**. Planting for Specialist Butterflies. SDState Extension
 - ^GClark, B., F. Rodriguez, M. Ahlering, M. Latvis, K. Ehlert, **L. Perkins**. How do we describe biodiversity? It's Multimensional! SDState Extension
- 2022 Ehlert, K. and **L. Perkins**. Range Roundup: SDSU's Native Plant Initiative. SDState Extension Ehlert, K., ^GB. Lang, ^GG. Bolwerk, **L. Perkins**. Common Flowering Plants (Forbs) of South Dakota. SDState Extension
 - ^GVillmow, G., K. Ehlert, **L. Perkins**. Five Range Management Principles: #3 Ecosystem Biodiversity. SDState Extension
 - ^GVillmow, G., K. Lang, A. Bachmann, D. Graper, **L. Perkins**. Garden-friendly Milkweeds to Plant in South Dakota. SDState Extension
- 2021 Varenhorst, A., P. Rozenboom, A. Bachmann, P. Wagner, K. Lang, J. Ball, and L. Perkins. Should I

get rid of my dandelion. SDState Extension

Ehlert, K., ^GA. Blanchard, and **L. Perkins**. An Introduction to Salt-Impacted Soils in South Dakota. SDState Extension

Ehlert, K., ^GA. Blanchard, and **L. Perkins**. Revegetation of Salt-Impacted Soils in South Dakota. SDState Extension

- 2020 Ehlert, K. and L. Perkins. Range Roundup: SDSU's Native Plant Initiative. SDState Extension
- 2017 ^GPrice, P. and **L. Perkins**. Russian Olive in South Dakota. South Dakota Grassland Coalition Newsletter article.
- 2016 ^GDouville, B and **L. Perkins**. Crownvetch. South Dakota Grassland Coalition Newsletter article.
- 2015 L. Perkins. Cheatgrass. South Dakota Grassland Coalition Newsletter article.
 - L. Perkins. Medusahead. South Dakota Weed and Pest Districts Newsletter article.

Grants Awarded

di ants Awar ded				
2024-2027	Northern Great Plains Biocontrol Project. Department of the Interior, National Park Service.			
	PI with Dr. Martens. <u>\$270,000</u>			
2024-2025	Regional Native Plant Materials Program. United States Department of Agriculture, Forest			
	Service. PI. \$148,000			
2023-2026	Developing Native Plant Materials for the Northern Great Plains. Department of the Interior,			
	National Park Service. PI with Dr. Ehlert. \$900,000			
2023-2025	The Effects of Storage Conditions on Native Seeds. Department of Interior, Bureau of Land			
	Management. PI \$ <u>90,982</u>			
2023-2025	Variation in germination requirements among populations of high-priority native forbs.			
	Department of Interior, Bureau of Land Management. PI \$63,130			
2023-2026	Evaluating current and future distributions of invasive Russian olive in Wyoming. Bureau of			
	Land Management. \$89,126. Co-PI with C. Cheek, J. Ball, M. Maimaitijiang.			
2021-2024	Determining germination requirements for high priority native plants. United States			
	Department of Interior, Bureau of Land Management. <u>\$99.997</u> . PI with Dr. A. Leffler			
2021-2024	Deciphering diversity for landowners: identifying restoration targets to best support soil			
	health and pollinators in the Northern Great Plains. <i>United States Department of Agriculture</i>			
	Natural Resources Conservation Service. <u>\$654,336</u> . PI with Dr. M. Latvis, Dr. D. Larson			
	(USGS), and Dr. M. Ahlering (The Nature Conservancy)			
2021-2026	Flower Fields and Soil Health. United States Department of Agriculture, National Institute of			
	Food and Agriculture. <u>\$495,000</u> . PI			
2020-2025	Monarchs and Milkweeds: Determining preference among native milkweed species. <i>United</i>			
	States Department of Agriculture, McIntire-Stennis. <u>\$175,000</u> . PI			
2018-2023	Environmental Sustainability of Rangeland Livestock Production: Decomposition, Dung			
	Beetles, and Decision Making. <i>United States Department of Agriculture, National Institute</i>			
	of Food and Agriculture. <u>\$486,000</u> . PI with Dr. A. Leffler			
2018-2021	Competitive ability of two emerging invasive plants in Mixed-grass Prairie. <i>United</i>			
	States Department of Agriculture, Hatch. \$120,000. PI			
2016-2021	Distribution and ecological impacts of Russian Olive in South Dakota. <i>United States</i>			
	Department of Agriculture, McIntire-Stennis. <u>\$175,000</u> . PI			
2017-2021	Strategic livestock grazing to develop rangeland heterogeneity for improved			
	ecosystem services. United States Department of Agriculture, National Institute of Food			
	and Agriculture. \$500,000. Co-PI with Dr. P. Johnson, Dr. A. Smart, Dr. K. Olson			

2018-2020 Improving Ecosystem Services in Non-irrigated Sodium Degraded Soils: Switching from soil amendments to vegetative remediation. United States Department of Agriculture, National Institute of Food and Agriculture. \$480,000. Co-PI Dr. S. Clay and D. Clay 2017-2020 Seeding Northern Great Plains Degraded Saline/Sodic Soils to Perennial Plants. United States Department of Agriculture Natural Resources Conservation Service. \$1,351,758. **Co-PI** with Dr. Sharon Clay and Dr. David Clay 2012-2017 Plant Invasion Syndromes and South Dakota Grasslands. United States Department of Agriculture, Hatch. \$120,000. PI 2016-2017 Wetland plants at Fort Pierre National Grassland. United States Forest Service. \$5000. PI 2013-2018 Precision techniques for improved drought resilience, United States Department of Agriculture, Natural Resources Conservation Service. \$713,019. Co-PD Co-PI with Dr. A. Smart, Dr. S.Clay, Dr. D. Clay, Dr. T. Trooien, Dr. W. Schacht (UNL) Evaluating vegetation and predator-bison relationships in aspen dominated habitats in 2013-2016 Canada. Olson Bison Conservation Ranches Ltd. \$92,961. Co-PD Co-PI with Dr. J. Jenks and Dr. T. Grovenberg 2013-2014 Remediation of plant-soil feedback to improve restoration success at Kulm Wetland Management District North Dakota. US Fish and Wildlife Service. \$23,000. Co-PI with Dr. C. Swanson (USFWS) and Dr. T. Grovenberg

Research Awards

- 2023 Martin, J., **L. Perkins**, M. Hildreth. Wallowing in the mire: Bison wallows may have disproportionately large role for "low-tech", nature-based solutions to ecological restoration and cultural recoupling of prairie ecosystems. Wokini Challenge Grant 2023. \$9,974
- ^UKnofczynski, A., **L. Perkins**. Effects of Smoke and Stratification Treatments in Three Native Species. Joseph F. Nelson Award for Undergraduate Research. SDSU Honors College. <u>\$2,000</u>
- ^USzymanski, K., **L. Perkins**. The Establishment of Native Wildflowers Using Mulch vs. No-Mulch. Joseph F. Nelson Award for Undergraduate Research. SDSU Honors College. \$2,000
- ^UChipley, B., **L. Perkins**. Assessment of Pollinator Preference of Native and Nonnative Perennial Flowering Plants in South Dakota's Grasslands. ABS Undergraduate Research Award. <u>\$3,000</u>
- UChampion, J., L. Perkins, and A. Leffler. Intra-specific variation in plant-soil feedback of *Echinacea purpurea*. ABS Undergraduate Research Award. \$3,000
 Undour, R., T. Grovenburg, L. Perkins, and J. Jenks. Predator corridor use in an aspen dominated (*Populus spp.*) forest at the Olson's Bison Conservation Ranches, Manitoba, Canada. Orville and Enolia Bentley Undergraduate Research Award. \$3,000
- USundall, M. and L. Perkins. The use of different elimination methods for smooth brome grass and the response of planted switchgrass on an unplowed site in northwestern Iowa. ABS Undergraduate Research Award. \$3,000
 UJohnston, W. and L. Perkins. The effects of smoke on native tallgrass prairie plant establishment. ABS Undergraduate Research Award. \$3,000
- ^UDucheneaux, K. and **L. Perkins**. Badlands National Park as a model system to investigate habitat fragmentation. SDSU Academic and Scholarly Excellence Funds Undergraduate Research. <u>\$4,546</u>

Popular Presentations (2 years only)

- 2024 L. Perkins. "SDSU Native Plant Initiative makes stop in Huron" Dakota News Now
- 2023 **L. Perkins**. "SDSU profs work to restore native plants" **Brookings Register and Mitchell Daily Republic**

- L. Perkins. "Restoring native plants to South Dakota's National Parks" Rapid City Journal
- L. Perkins. "Beautify Spearfish hosted native plant initiative expo" KEVN Black Hills Fox.
- ⁶Bolwerk, G., L. Perkins. Introduction to the Native Plant Initiative. SDSU Extension Garden Hour.
- ⁶Bolwerk, G. Villmow⁶, **L. Perkins**. Pollinators and native plants. **Dakota Prairie Elementary School**, Brookings, SD.
- ^GBolwerk, G., A. Leffler, **L. Perkins**. Effect of agricultural chemicals on native plants in the Dakotas. SDSU Native Plant Initiative Research Update Webinar through **SDSU Extension**.
- ^GLang, B., **L. Perkins**. Guide to Planning Native Plant Garden. **Master Gardener** Lunch & Learn.
- ^GLang, B., **L. Perkins**. Native Plant Initiative Update. **Black Hills Area Botany & Ecology Workshop**.
- ^GCooper, G., A.J. Leffler, and **L. Perkins**. Determining germination requirements for native plants of the Northern Great Plains. SDSU NPI Research Update Webinar through **SDSU Extension**.
- ⁶Lang, B., **L. Perkins**. The Important Relationship Between Native Plants and Birds. Brookings County Birding Club March Chapter Meeting, Brookings, SD.
- ^GLang, B., **L. Perkins**. Intra- and Inter-Annual Changes in Soil Health with Native Plant Monocultures. SDSU NPI Research Update Webinar through **SDSU Extension**.
- ⁶Villmow, G., **L. Perkins**. Monarch Butterfly Oviposition Preferences on Native Milkweeds of the Northern Great Plains. **SDSU Extension** Webinar.
- ^GVillmow, G., **L. Perkins**. Monarchs and Gardening for Native Butterflies. **Dakota Prairie Master Gardener's Association** Annual Spring Fling, Miller, SD.
- ⁶Villmow, G., **L. Perkins**. Butterflies and Native Landscaping. **Beautify Spearfish Native Plant Expo**, Spearfish, SD.
- ⁶Villmow, G., **L. Perkins**. Butterflies and Pollinators in South Dakota. **South Dakota State Fair**, Huron, SD.
- ⁶Buterbaugh, R. L. Perkins. 2023. Native Plants in Home Landscaping. **South Dakota State University Extension Seminar**. Sioux Falls, SD.
- 2022 **L. Perkins.** "How these state scientists plan to restore some prairie grasslands" on **In the Moment** on South Dakota Public Broadcasting
 - L. Perkins. "Native Plant Sale" on Keloland This Morning
 - ^GBolwerk, G. et al. "Seed bombs and native plants". **4-H Event** with the Ag Heritage Museum
 - ^GButerbaugh, R., **L. Perkins**. "Native Plants for local Food Forest". **Luv to Grow Expo**. Luvern, MN
 - ^GButerbaugh, R., et al. "Native Plants". **Brookings High School** Horticulture Class
 - ^GLang, **B. et al. "Ab**out the Native Plant Initiative". **South Dakota Soil and Water Conservation Society**
 - ⁶Lang, B., ⁶G. Villmow, et al. SDState NPI Seed Production Tour for **Custer Garden Club** Ulrich-Schad, J., et al. "Ranchers' Use of Livestock Pest Products." **South Dakota Ranchers' Workshop**, White River, SD.

Scholarly Presentations (2 years only)

⁶Bolwerk, G., A. Leffler, **L. Perkins**. Determining the effect of agricultural chemicals on native plants of the Dakotas. SER 10th World Conference on Ecological Restoration.

- ^GTorabian, S., A. Leffler, **L. Perkins**. The resistance and resilience of different plant communities against different concentrations of fungicide and parasiticide. Ecological Society of America Annual Meeting, Portland, OR.
- ^GLang, B, **L. Perkins**. Changes in Soil Health within Native Plants Monocultures. Ecological Society of America Annual Meeting, Portland, OR.
- ^oTorabian, S., A. Leffler, **L. Perkins**. Comparison of residual Effects of Ivermectin as a parasiticide on soil nutrient cycling, plant biomass, and dung beetle abundance. Society for Range Management Conference, Boise, ID.
- ⁶Torabian, S., A. Leffler, **L. Perkins**. The principal framework of dung beetle restoration. Society for Range Management Conference, Boise, ID.
- **L. Perkins**, **B. Lang**^e, **M.** Ahlering, **B. Clark**^e, **F.** Chaves, D. Larson, M. Latvis. Minding the Gap: Seed Availability in the Northern Great Plains. The 2023 National Native Seed Conference, Washington, DC.
- ⁶Lang, B, M. Ahlering, **B. Clark⁶, F.** Chaves, D. Larson, M. Latvis, **L. Perkins**. Minding the Gap: Seed Availability in the Northern Great Plains. The 2023 National Native Seed Conference, Washington, DC.
- ⁶Clark, B., H. Moradi, **L. Perkins**, and M. Latvis. Using phylogenetic diversity to improve seed-based restoration of prairies. National Native Seed Conference, Washington, D.C.
- ⁶Cooper, G., A. Leffler, and **L. Perkins**. Examining phenology and pretreatments to promote germination success in Northern Great Plains forbs. National Native Seed Conference, Washington, D.C.
- ⁶Villmow, G., Puetz, E.⁶, **L. Perkins**. The Effects of Fire as a Seed Cleaning Method on Four Species of Milkweed. National Native Seed Conference, Washington, D.C.
- Chaves F. Lang, B^c, M. Ahlering, **B. Clark^c**, **D.** Larson, M. Latvis, **L. Perkins**. Deciphering biodiversity for landowners: identifying restoration targets to best support soil health and pollinators in the Northern Great Plains. Black Hills Area Botany and Ecology Workshop 2023.
- ^GLang, B, M. Ahlering, **B. Clark^G, F.** Chaves, D. Larson, M. Latvis, **L. Perkins**. Minding the Gap: Seed Availability in the Northern Great Plains. TheNorth America Prairie Conference, Des Moines, IA.
- ^GLang, B., **L. Perkins**. Creating a Native Plant Initiative for South Dakota. The 2023 North America Prairie Conference, Des Moines, IA.
- 2022 Latvis, M., et al. Introducing the SDState Native Plant Initiative. Botany Society Annual Meeting, Anchorage Alaska
 - ^GChen, Y., M. Latvis, **L. Perkins**, A. J. Leffler, M. Johnson. The Macroevolution of a Smoke-induced Seed Germination. Botany Society Annual Meeting, Anchorage Alaska
 - ^GTorabian, S., Leffler, J., **L. Perkins.** Residual Effects of Ivermectin as a Parasiticide on Soil Nutrient Cycling, Plant Biomass, and Dung Beetle Abundance, 2022, Society for Range Management annual meeting. Online
 - Ulrich-Schad, J., S. Li, A. J. Leffler, W. Gu, L. Schoon, and **L. Perkins**. "Rangeland Livestock Producers' Usage of Parasiticides." International Symposium on Society and Research Management; Virtual.

Instructional Activities

Courses taught:

2020-pesent Graduate reading courses

2012-present RANG 105/L & 205/L, Introduction to Range Management

2013-present RANG 400, Range Judging

2015-present EES 430/530/L, Biological Invasion

2016-present EES 425/525/L, Disturbance and Restoration Ecology 2013-present Undergraduate and Graduate Independent Studies

2013-present
 2014
 ABS 475, Senior Capstone
 NRM 440, Restoration Ecology
 GSE 790, Graduate Seminar

Service

Professional:

2014- Panelist for United States Department of Agriculture and National Science Foundation

2010- Member of 3 professional organizations (the Ecological Society of America, the Society for Range Management, and the Society for Ecological Restoration)

	South Dakota S University	State University:	2024	Director of Communications Search
	2022 2021- present	Academic Affairs Committee Public Art Committee	2016- present	West River Resource Allocation Committee
	2020-2021	Faculty Senate Executive Committee	2016- present	Gamma Sigma Delta Honor Society Poster Contest Judge
	2018- present 2017-2022	Chair Bee Campus USA Faculty Senate	2015-2017	Dean's Advisory Committee
	2012-2022	NRM Library representative		
	2014-2015	Food Service Committee	Department of	Agronomy, Horticulture and Plant
	2017	SDSU Research/ Scholarship	<u>Science</u>	
		Support Fund reviewer	2024	Weed Ecologist Search Chair
	2017-2019	Chair Environmental Stewardship	2018	Greenhouse Coordinator Search
		and Sustainability Committee	2014	Oilseed Pathologist Search Committee
	Department of	Natural Resource Management	2015- present	Greenhouse Committee
	2012-present	Space and Use Committee Chair		
	2012- present	Range Judging Coach		
	2013-2018	Curriculum Committee		
	2020- present	Scholarship Committee (Chair		
	2020-2022)			
	2013-2022	Student Assessment Committee		
	2014	Department Head Search		
	2014	NRM Instructor Search		
	2014	Grassland Ecologist Search		
	2015	REM reaccreditation team		
	2016	Herbarium Director Search		
	2016	NRM Field Specialist Search		
2017 and 2019 Wildlife Ecologist Search				
	2019	Conservation Planning and Park		
		Management Search Chair		

College of Agriculture and Biological Science

Cultural Ecologist Search Chair

Plant Conservation Search Chair

2021

2023