CURRICULUM VITAE

University of Idaho

NAME: Karen L. Launchbaugh DATE: January 21, 2021

RANK OR TITLE: Professor

DEPARTMENT: Forest, Rangeland, and Fire Sciences.

OFFICE LOCATION AND CAMPUS ZIP: CAMPUS CORE, COLLEGE OF NATURAL RESOURCES

BLDG, Room 205 B

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DATE OF FIRST EMPLOYMENT AT UI: September 9, 1996

DATE OF TENURE: February 22, 2002

DATE OF PRESENT RANK OR TITLE: February 2010

EDUCATION BEYOND HIGH SCHOOL:

Ph.D., Range Science, UTAH STATE UNIVERSITY (USU), 1992. Major Professor: Dr. F.D. Provenza

M.S., Range Science, TEXAS A&M UNIVERSITY (TAMU), 1987. Major Professor: Dr. J.W. Stuth

B.S., Botany-Range Management, NORTH DAKOTA STATE UNIVERSITY (NDSU), 1984.

EXPERIENCE:

Academic:

Professor and Director of U-Idaho Rangeland Center: 2010 to present, University of Idaho, College of Natural Resources. Facilitate rangeland research and outreach of faculty affiliated with the Rangeland Center. Conduct research on targeted grazing and ecological implications of herbivory. Teach courses in plant identification, rangeland management, and vegetation assessment.

Professor and Head: 2002-2010, Range Ecology and Management Dept., University of Idaho. Directed research on targeted grazing practices and ecological impacts of grazing. Taught courses in plant identification, habitat assessment, and rangeland management. Led faculty and staff in Rangeland Department as department head from 2003.

Assistant Professor: 1996-02, Range Ecology and Management Dept., University of Idaho. Conducted and directed research on diet and habitat selection, grazing management, and range animal nutrition. Taught a variety of courses on rangeland ecology and planning.

Assistant Professor: 1992-96, Range and Wildlife Management Dept., Texas Tech University. Directed research on diet selection and nutrition of rangeland herbivores. Taught courses in ecology, rangeland management, and rangeland communities.

Research Assistant: 1988-92, Range Science Dept., Utah State University. Conducted basic research on learning mechanisms in diet selection by sheep. Course work focused on grazing ecology, diet and habitat selection, and ruminant nutrition.

Research Associate: 1987-88, Texas Agricultural Experiment Station - Uvalde. Conducted independent research on landscape-use patterns of cattle. Assisted with research on radio-tracking deer, predicting cattle markets, plant response to defoliation, and stocking rate effects.

Research Assistant: 1985-87, Range Science Dept., Texas A&M University. Investigated effects of range site on diet, intake, and grazing behavior of cattle. Collected diet samples, determined diet quality and composition, and estimated forage production.

Field Researcher: Summer 1982 and 1983, North Dakota Agricultural Experiment Station at Dickinson. Collected range resource data: plant cover and density, biomass production, and soil profile characteristics.

Governmental:

Park Ranger: Summer 1984, Theodore Roosevelt National Park. Presented interpretive programs on rangelands and collected plants for park herbarium.

Private Business Sector:

Ranch Manager: 1976-85, Family-owned sheep and cattle ranch in western North Dakota. Responsible for all aspects of operation including livestock marketing, range and livestock management, and hay production.

TEACHING ACCOMPLISHMENTS:

Areas of Specialization:

Grazing Management, Animal Behavior, Habitat Measurement, and Wildland Plant Identification

Courses Taught:

University of Idaho:

Rangeland Principles – Freshman-level (3 credits, 2009-present)

Wildland Plant Identification – Sophomore-level (2 credits, 2004-present)

Wildland Plant Identification Field Studies—Sophomore-level (1 credit, 2004-present)

Integrated Rangeland Management – Senior-level (3 credits, 1997-present)

Foraging Behavior of Herbivores – Graduate-level (2-3 credits, 7 semesters, 1998-present)

Principles of Vegetation Measurement and Assessment - On-line Senior-level (3 credit, 2007-2017)

Rangeland and Riparian Habitat Assessment – Junior-level (3 credits, 9 semesters, 1997-2008)

Rangeland Weed Management – Senior-level (3 credits, 2 semesters, 2003-04)

Opportunities in Range Ecology and Management – Freshman-level (2 credit, 3 semesters, 1999-2007)

Graduate Seminar – Senior/Graduate-level (1 credit, 7 semesters, 1997-20011)

Interdisciplinary Natural Resources Planning – Senior-level (3 credits, 5 semesters, 1997-2002)

Special Topics in Anti-quality Attributes of Forages – Graduate-level (1 credit, 1 semester, 2000)

Rangeland Ecology – Continuing Education (2-3 credits, 8 summer sessions, 2003-2011)

Home on the Range – Continuing Education (1 credits, 1 session, 2006)

Integrated Rangeland Studies - Continuing Education (2-3 credits, 1 summer session, 2004)

Rangelands in the Classroom – Continuing Education (2-3 credits, 1 summer session, 2002)

History of Idaho's Rangelands – Continuing Education (2-3 credits, 1 summer session, 2002)

Rangeland Management - Continuing Education (2-3 credits, 2 summer sessions, 1999 & 2000)

<u>Texas Tech University:</u>

Range Animal Nutrition – Graduate-level (3 credits, 1 semester, 1995)

Range Management Principles and Practices – Junior-level (3 credits, 2 semesters, 1995-1996)

Range, Forest, and Wetland Plants – Junior-level (3 credits, 4 semesters, 1993-1996)

Ecology and Cons. of Natural Resources – Sophomore-level (3 credits, 5 semesters, 1992-1995)

Undergraduate Seminar – Senior-level (1 credit, 8 semesters, 1993-1996)

<u>Utah State University:</u>

Introduction to Range Science – Junior-level (3 credits, 1 quarter, 1992)

Gender Roles in Natural Resource Management - Senior/Graduate-level (1 credit, 1 quarter, 1992)

Students Advised:

Undergraduates: Regularly advise 5-10 undergraduate students and supervise 1-3 internships per year.

Graduates: Serve on graduate committees of 1-3 students each year.

- University of Idaho (served as major professor for the following):
- Janessa Julson. 2017. Variation in Perennial Grass Height Within Greater Sage-Grouse Nesting Habitat.
- Greg Keilback. 2017. Land Perspective Study: Winnebago County, Illinois. (Non-Thesis Project).
- Molly M. Kaweck. 2016. Impacts of Wild Horses and Grazing Ungulates on Riparian Areas in Idaho.
- Darrell J. Chigbrow. 2016. Efficacy Of Gray Wolf (*Canis lupus*) Rendezvous Site Mapping for Predicting the Spatiotemporal Risk of Domestic Cattle to Wolf Depredation.
- Christopher L. Schachtschneider. M.S., 2016 Targeted Grazing Applied to Reduce Fire Behavior Metrics and Wildfire Spread. (Co-Advise with Eva Strand)
- Jason T. Campbell, M.S., 2013. Effects of a Specifis *Sordaria fimicola* Strain on Fecundity and Herbivory of *Bromus tectorum*.
- Sam Lossing, M.S., 2012. Singleleaf Piñon and Utah Juniper Canopy Interception and Understory Characteristics In Central Nevada.
- Julie A. Finzel, M.S., 2011. Measuring And Simulating Soil Water And Vegetation Dynamics In Sagebrush Steppe Rangelands.
- David D. Patten, M.S., 2009. The Response of a Spotted Knapweed Dominated Community to Selective Defoliation at Different Phenologies.
- Brianna Goehring, M.S., 2009. The Effects of Target Grazing Of Yellow Starthistle by Domestic Goats in Northern Idaho.
- Genyce Hanson, M.S., 2008. Extension of Information about Plants Toxic to Horses from Scientists to Horse Owners.
- Lovina Roselle, M.S., 2007. Effects of Sheep Grazing after Fire and Application of Sheep in Restoration of Annual Grasslands.
- Elyane Hovde, M.S., 2006. Thesis: Grazing by Cattle and Sheep Affect Yellow Starthistle on Idaho Rangelands.
- Rachel Frost, Ph.D., 2005. Age and Body Condition of Goats Influences Consumption of Redberry Juniper (*Juniperus coahuilensis*) and Disposition of Four Monoterpenes.
- Amanda Hancock, M.S., 2005. Potential Uses of Spatial Technologies in Rangeland Management.
- Jennifer Peterson, M.S., 2005. The Use and Evaluation of Computer Technologies to Inform Children and Adults About Rangelands.
- Silvia Lopez, Ph.D., 2002. Nutritional Status, Dietary Preferences, and Response to Toxicosis of Livestock Exposed to Lupine (*Lupinus* spp.).
- Michael Hale, M.S., 2002. Developing Prescription Grazing Guidelines for Controlling Spotted Knapweed with Sheep.
- Juley Hankins, M.S., 2002. A Rangeland Education Program for Idaho's Classrooms.

- Roberto Garcia, M.S., 2002. Elk/cattle Interactions: An Annotated Bibliography for the Internet.
- Edward Reid, Ph.D., 2001. Differential Expression of Herbivore Resistance in Late- and Mid-seral Grasses of the Tallgrass Prairie.
- Merrita Fraker, M.S., 1999. Thesis: Examination of Digestion and Behavioral Mechansisms to Explain Individual Variation in Sagebrush Consumption by Sheep.
- Elizabeth Smith, M.S., 1999. Carbohydrate Availability Impacts Dietary Preferences by Sheep.

<u>Texas Tech University (served as major professor for the following):</u>

- Rene Baptista, M.S., 1996. Nutritional Quality of Mesquite (*Prosopis glandulosa*) and Potential Toxicosis in Sheep.
- Robert Pritz, M.S., 1995. Effects of Early Dietary Experience on Juniper Acceptance by Angora and Spanish Goats.

Materials Developed:

Web Pages:

Wildland Plant Identification (https://learn.landscapetoolbox.org/course/wildland-plant-identification/) Integrated Rangeland Management (https://rangelandmanagement.wordpress.com) Rangeland Principles (https://learn.landscapetoolbox.org/course/rangelandprinciples/) Wrangle the World Rangeland Learning Exchange (https://wrangle.org/)

SCHOLARSHIP ACCOMPLISHMENTS:

Refereed/Adjudicated Journals: (* indicates graduate students under my direction)

- Launchbaugh, K.L. 2021. The Society for Range Management Bridging Gaps and Setting Directions. Rangelands, 43(4), 159-165
- Bailey, D.W., Mosley, J.C., Estell, R.E., Cibils, A.F., Horney, M., Hendrickson, J.R., Walker, J.W., Launchbaugh, K.L. and Burritt, E.A., 2019. Synthesis Paper: Targeted Livestock Grazing: Prescription for Healthy Rangelands. Rangeland Ecology & Management 72(6), pp.865-877.
- Kaweck*, M.M., Severson, J. P., & Launchbaugh, K. L. (2018). Impacts of Wild Horses, Cattle, and Wildlife on Riparian Areas in Idaho. Rangelands, 40(2), 45-52.
- Newcombe, G., Campbell, J., Griffith, D., Baynes, M., Launchbaugh, K., & Pendleton, R. 2016. Revisiting the life cycle of dung fungi, Including *Sordaria fimicola*. PloS one, 11(2), e0147425.
- Finzel*, J. A., Seyfried, M. S., Weltz, M. A., & Launchbaugh, K. L. 2015. Simulation of long-term soil water dynamics at Reynolds Creek, Idaho: implications for rangeland productivity. Ecohydrology. DOI: 10.1002/eco.1666 (http://onlinelibrary.wiley.com/doi/10.1002/eco.1666/epdf)
- Strand, E.K., K.L. Launchbaugh, R.F. Limb, and L.A. Torell. 2014. Livestock Grazing Effects on Fuel Loads for Wildland Fire in Sagebrush Dominated Ecosystems. Journal of Rangeland Applications. 1:35-57
- Svejcar, T., C. Boyd, K. Davies, M. Madsen, J. Bates, J., ... K. Launchbaugh,& K. Havstad (2014). Western land managers will need all available tools for adapting to climate change, including grazing: A critique of Beschta et al. Environmental management, 53(6), 1035-1038.
- Abbott, L.B., K.L. Launchbaugh, and S. Edinger-Marshall. 2012. Range Education in the 21st Century: Striking the Balance to Maintain a Relevant Profession. Rangeland Ecology and Management. 65(6):647–653.

- Finzel, J.A., M.S. Seyfried, M.A. Weltz, J.F. Kinery, V. M.V. Johnson, and K.L. Launchbaugh. 2012. Indirect Measurement of Leaf Area Index in Sagebrush-Steppe Rangelands. Rangeland Ecology and Management. 65(2):208-212.
- Goehring*, B.J., K.L. Launchbaugh and L.M. Wilson. 2010. Late-season targeted grazing of yellow starthistle (*Centaurea solstitialis*) with goats in Idaho. *Invasive Plant Science and Management*. 3:148-154.
- Roselle*, L., S.S. Seefeldt and K.L. Launchbaugh. 2010. Delaying sheep grazing after wildfire in sagebrush steppe may not affect vegetation recovery. *International Journal of Wildland Fire*. 19:115-122.
- Ganguli, A.C., M.B. Hale* and K.L. Launchbaugh. 2010. Seasonal nutritional value of spotted knapweed and preference by sheep. *Small Ruminant Research*. 89:47-50.
- Frost*, R.A., L.M. Wilson, K.L. Launchbaugh and E.M.Hovde*. 2008. Seasonal change in forage value of rangeland weeds in North Idaho. *Invasive Plant Science and Management* 1:343-351.
- Wallace, J.M., L.M. Wilson and K.L. Launchbaugh. 2008. The effect of targeted grazing and biological control on yellow starthistle (*Centaurea solstitialis*) in Canyon Grasslands of Idaho. *Rangeland Ecology and Management* 61:314–320.
- Frost*, R.A., K.L. Launchbaugh and C.A. Taylor, Jr. 2008. Age and body condition of goats influence consumption of juniper and monoterpene-treated feed. *Rangeland Ecology and Management* 61:48-54.
- Lopez-Ortiz*, S., J.A. Pfister, K.L. Launchbaugh and C.C. Gay. 2007. Forage availability and body condition affect intake of lupine (*Lupinus leucophyllus*) by Grazing Cattle. *The Professional Animal Scientist* 23:450-466.
- Fraker-Marble*, M.J., K.L. Launchbaugh and J.W. Walker. 2007. Differences in food ingestion and digestion among sheep classified as high or low sagebrush consumers. *Rangeland Ecology and Management* 60:191-194.
- Peterson*, J., K. Launchbaugh, M. Pickering and S. Hollenhorst. 2006. A comparison of computer-assisted instruction and field-based learning for youth rangeland education. *Journal of Natural Resources and Life Sciences Education* 35:174-182.
- Launchbaugh, K.L. and L.D. Howery. 2005. Understanding landscape use patterns of livestock as a consequence of foraging behavior. *Rangeland Ecology and Management* 57:58:99-108.
- Lopez-Ortiz*, S., K.E. Panter, J.A. Pfister and K.L. Launchbaugh. 2004. The effect of body condition on disposition of alkaloids from silvery lupine (*Lupinus argenteus* Pursh) in sheep. *Journal of Animal Science* 82: 2798-2805.
- Pfister, J.A., F.D. Provenza, K.E. Panter, B.L. Stegelmeier and K.L. Launchbaugh. 2002. Risk management to reduce livestock losses from toxic plants. *Journal of Range Management* 55:291-300.
- Walker, J.W., S.D. McCoy, K.L. Launchbaugh, M.J. Fraker* and J. Powell. 2002. Calibrating fecal NIRS equations for predicting botanical composition of diets. *Journal of Range Management* 55:374-382.
- Launchbaugh, K.L., F.D. Provenza and J.A. Pfister. 2001. Animal response to anti-quality attributes in forages. *Journal of Range Management* 54:431-440.
- Baptista*, R. and K.L. Launchbaugh. 2001. Nutritive value and aversive feedback of honey mesquite leaves (*Prosopis glandulosa*) fed to sheep. *Journal of Range Management* 54:82-88.
- Snowder, G.D., J.W. Walker, K.L. Launchbaugh and L.D. VanVleck. 2001. Genetic and phenotypic parameters for dietary selection of mountain big sagebrush (*Artemisia tridentata* spp. *vaseyana*) in Rambouillet sheep. *Journal of Animal Science* 79:486-492.

- Pritz*, R.K., K.L. Launchbaugh and C.A. Taylor. 1997. Effects of early dietary experience on acceptance and metabolism of juniper by angora and Spanish goats. *Journal of Range Management* 50:600-606.
- Launchbaugh, K.L., F.D. Provenza and M.J. Werkmeister. 1997. Overcoming feed neophobia by domestic ruminants through addition of a familiar flavor and repeated exposure to novel foods. *Applied Animal Behaviour Science* 54:327-334.
- Launchbaugh, K.L., F.D. Provenza and E.A. Burritt. 1994. The effect of flavor intensity and toxin dose on the formation and generalization of flavor aversions in sheep. *Journal of Animal Science* 72:10-13.
- Launchbaugh, K.L. and F.D. Provenza. 1993. Can plants practice mimicry to avoid grazing by mammalian herbivores? *Oikos* 66:501-504.
- Launchbaugh, K.L. and F.D. Provenza. 1993. How herbivores track variable environments: Response to variability of phytotoxins. *Journal of Chemical Ecology* 19:1047-1056.
- Launchbaugh, K.L. and P.J. Urness. 1992. Mycophagy (mushroom consumption) by North American cervids. *Great Basin Naturalist* 52:321-327.
- Owens, M.K., K.L. Launchbaugh and J.W. Holloway. 1991. Pasture characteristics affecting spatial distribution of grazing cattle in mixed brush communities. *Journal of Range Management* 44:118-123.
- Launchbaugh, K.L., J.W. Stuth and J.W. Holloway. 1990. Influence of range site on the diet selection and nutrient intake of cattle. *Journal of Range Management* 43:109-115.

Refereed/Adjudicated (in press or submitted):

Peer Reviewed/Evaluated Journals:

- Kaweck, M.K., John P. Severson, and K.L. Launchbaugh. 2018. Impacts of Wild Horses, Cattle, and Wildlife on Riparian Areas in Idaho. Rangelands. 40:(2)45-52.
- Amy C. Ganguli and Karen L. Launchbaugh. 2013. The Evolving Role of Women as Rangeland Educators and Researchers in Colleges and Universities and in the Society for Range Management. *Rangelands* 35 (6):15-21.
- Tanaka, J., B. Hutchinson, M. Fraker-Marble, R. Frost, K. Launchbaugh, and M. George. 2012. Using Rangelands on the Web as a Teaching Resource. *Rangelands* 34(3):39-40.
- Launchbaugh, K., S. Bestelmeyer, and G. Hyde. 2012. Rangelands in the Classroom: Increasing Rangeland Understanding of Students and Teachers. *Rangelands* 34(3):49-52.
- Hancock*, A., E. Strand and K.L. Launchbaugh. 2006. Wish upon a satellite: Applying GPS to rangeland management. *Rangelands* 29:51–56.
- Hankins*, J., K. Launchbaugh and G. Hyde. 2004. Rangeland education as a tool for science education. *Rangelands* 26:28-32.
- Frost*, R.A. and K.L. Launchbaugh. 2003. Prescription grazing for rangeland weed management: A new look at an old tool. *Rangelands* 25:43-49.
- Brown, J.R., T. Svejcar, M. Brunson, J. Dobrowolski, E. Fredrickson, U. Krueter, K. Launchbaugh, J. Southworth and T. Thurow. 2002. Range sites: Are they the appropriate spatial unit for measuring and managing rangelands? *Rangelands* 24:7-12.
- Launchbaugh, K.L., C.A. Taylor and S.D. Hohensee. 1997. Do different breeds of livestock have different dietary preferences? *Women in Natural Resources* 18:22-24.
- Launchbaugh, K.L. 1997. Livestock: A powerful wildlife management tool. *Idaho Forester. Magazine of Natural Resources*. 1997:14-15.

- Launchbaugh, K.L., I.M. Ortega and F.C. Bryant. 1996. Providing habitat for domestic and wild herbivores: Cows, wildlife and man. *The Cattleman* 83:88-97.
- Launchbaugh, K.L. and F.D. Provenza. 1991. Learning and memory in grazing livestock: Application to diet selection. *Rangelands* 13:242-244.
- Launchbaugh, K.L. and L.D. Howery. 1993. Book review of Grazing Management: An Ecological Perspective. Edited by R.K. Heitschmidt and J.W. Stuth (1991). *Ecology* 74:271-272.
- Mastel, K.L. and J.W. Stuth. 1987. Book review of Experimental Behavioral Ecology and Sociobiology. By B. Holldobler and M. Lindauer (1985). *Journal of Range Management* 40:190.

Books (Peer Reviewed/Evaluated):

Launchbaugh, K.L., R.J. Daines, and J.W. Walker [Eds.] 2006. Targeted Grazing: A Natural Approach to Vegetation Management and Landscape Enhancement. Published by the American Sheep Industry Association. Centennial, CO. Available at: https://targetedgrazing.org/other-resources/targetedgrazing/

Book Chapters (Peer Reviewed/Evaluated):

- Launchbaugh, K.L. 2020. Grazing Animal Behavior. Chapter 46. In: K.J. Moore, M. Collins, C.J. Nelson, and D.D. Redfearn [Eds.]. Forages, Volume 2: The Science of Grassland Agriculture. Wiley-Blackwell
- Launchbaugh, K.L., J.A. Pfister, S. Lopez-Ortiz* and R.A. Frost*. 2007. Body condition affects blood alkaloid and monoterpene kinetics and voluntary intake of chemically-defended plants by livestock. pg. 461-467. In: K.E. Panter, T.L. Wierenga, and J.A. Pfister [Eds.]. Poisonous Plants: Global Research and Solutions. CABI Publishing, Wallingford, Oxon, UK. 570 p.
- Launchbaugh, K.L. and C.T. Dougherty. 2007. Grazing Animal Behavior. Chapter 45. In: R.F. Barnes, C.J. Nelson, K.J. Moore and M. Collins [Eds.]. Forages: The Science of Grassland Agriculture. Iowa State Press, Ames, IA.
- Launchbaugh, K.L. and J.W. Walker. 2006. Targeted Grazing, A New Paradigm for Livestock Management (Chapter 1, pp. 2-9). In: Targeted Grazing: A Natural Approach to Vegetation Management and Landscape Enhancement. Published by the American Sheep Industry Association. Centennial, CO.
- Olson, B.E. and K.L. Launchbaugh. 2006. Managing Herbaceous Broadleaf Weeds with Targeted Grazing (Chapter 7, pp. 57-66). In: Targeted Grazing: A Natural Approach to Vegetation Management and Landscape Enhancement. Published by the American Sheep Industry Association. Centennial, CO.
- Launchbaugh, K.L. 1996. Biochemical Aspects of Grazing Behavior. In: J. Hodgson and A.W. Illius [Eds.], The Ecology and Management of Grazing Systems. CAB International, Wallingford, United Kingdom.

Extension Publications (Peer Reviewed/Evaluated):

- Launchbaugh, K.L. [Ed.]. 2001. Anti-Quality Factors in Rangeland and Pastureland Forages. Univ. of Idaho, Forest, Wildlife and Range Exp. Sta. Bull # 73, Moscow, Idaho. Available at: www.cnr.uidaho.edu/range/pubs/Anti-quality bulletin.pdf.
- Launchbaugh, K.L., K.D. Sanders, and J.C. Mosley (eds.). 1999. Grazing Behavior of Livestock and Wildlife. Univ. of Idaho, Forest, Wildlife and Range Exp. Sta. Bull # 70, Moscow, Idaho. Available at: www.cnr.uidaho.edu/range/Projects/GrazingBehaviorofLivestock.htm.

Technical Reports (Peer Reviewed/Evaluated):

Launchbaugh, K.L., B. Brammer, M.L. Brooks, S.C. Bunting, P. Clark, J. Davison, M. Fleming, R. Kay, M. Pellant, D. Pyke and B. Wylie. 2008. Interactions among livestock grazing, vegetation type, and fire behavior in the Murphy Wildland Fire Complex in Idaho and Nevada, July 2007: U.S. Geological Survey Open-File Report 2008-1214, 42 p. Available online at: http://www.cnr.uidaho.edu/range/MurphyFireComplex/

Presentations at Professional Meetings and Workshops:

- Invited Oral Presentations More than 50 presentations delivered at professional meetings, symposia and workshops. Including: 22 in local/state; 20 in regional/national; and 7 international venues (including the Canada, the U.S., and Mexico).
- Fifty-five contributions to professional meetings (oral and poster presentations). Many of these presentations were given by graduate students and colleagues.

Abstracts (Not Peer Reviewed):

Fifty-five contributions to professional meetings as abstracts and presentations. Many of these presentations given by graduate students and colleagues.

Proceedings (Not Peer Reviewed):

- Launchbaugh, K.L., J.W. Walker, D. Bradford and R. Holes. 2007. Targeted grazing A new paradigm for livestock management. In: Grazinglands Gateway to Success. *Proceedings of the Third National Conference on Grazing Lands*. (St. Louis, MO).
- Launchbaugh, K.L. 2004. Managing grazing behavior to accomplish livestock production and environmental goals. In: Harmonize with America's Grazing Lands. *Proceedings of Second National Conference on Grazing Lands*. (Nashville, TN).
- Launchbaugh, K.L. and J. Hendrickson. 2001. Prescription grazing for *Centaurea* control on rangelands. pg. 27-32. In: L. Smith [Ed.]. Proceedings of *The First International Knapweed Symposium of the Twenty-First Century*. (Coeur d'Alene, ID).
- Launchbaugh, K.L. and C.W. Hunt. 2000. New approaches for enhancing grazing productivity: Meeting the challenges of variable environments. *Proc. Western Sec. Am. Soc. Anim. Sci.* (Davis, CA).
- Launchbaugh, K.L., J.W. Walker and C.A. Taylor. 1999. Foraging behavior: Experience or inheritance? pg. 28-35. In: K.L. Launchbaugh, K.D. Sanders and J.C. Mosley [Eds.] *Grazing Behavior of Livestock and Wildlife*. Univ. of Idaho, Forest, Wildlife and Range Exp. Sta. Bull # 70, (Moscow, ID).
- Provenza, F.D. and K.L. Launchbaugh. 1999. Foraging on the edge of chaos. pg. 1-12 In: K.L. Launchbaugh, K.D. Sanders and J.C. Mosley [Eds.] *Grazing Behavior of Livestock and Wildlife*. Univ. of Idaho, Forest, Wildlife and Range Exp. Sta. Bull # 70, (Moscow, ID).
- Launchbaugh, K.L., C.A. Taylor, E. Straka and R.K. Pritz. 1997. Juniper as forage: An unlikely candidate? In: 1997 Juniper Symposium, Texas Agr. Exp. Station Tech. Rep. 97-1. (San Angelo, TX)
- Taylor, C.A. K.L. Launchbaugh, E. Huston, and E. Straka. 1997. Improving the efficacy of goating for biological juniper management. In: 1997 Juniper Symposium, Texas Agr. Exp. Station Tech. Rep. 97-1. (San Angelo, TX).
- Launchbaugh, K.L. 1995. Effects of neophobia and aversions on feed intake: Why feedlot cattle sometimes refuse to eat nutritious feeds. In: F.N. Owens [Ed.], *Symposium: Intake by Feedlot Cattle*. Oklahoma Agric. Exp. Station Pub. No. P-942. (Stillwater, OK).

Grants and Contracts Awarded:

- 2021 Technology to Manage Livestock Location Within RANGE and REALITY. Launchbaugh, KL (PI) with Co-Investigators T.D. Hudson, J.W. Karl, K.D. Lee, G.K. Murdoch, D.W. Shrestha, J.E. Sprinkle. USDA- National Institute of Food and Agriculture. 01-Jul-2022 through 30-Jun- 2023. Total award \$981,000
- 2018 Deploying CERT: Integrating satellite and field measures for improved grazingland management at ranch scales. USDA Natural Resources Conservation. (J. Karl et al. K. Launchbaugh just a small part of this grant. \$661,117)
- 2018 National Grazingland Information System: Expanding GlobalRangelands.org Through a Grazingland Thesaurus and Mobile Content Access. USDA Natural Resources Conservation. (J. Karl et al. K. Launchbaugh just a small part of this grant. \$616,586)

- 2017 Effects of spring cattle grazing on greater sage-grouse. USDI Bureau of Land Management (C. Conway & K. Launchbaugh. \$530,000).
- 2017 Collegiate Teams for Idaho Rangeland Assessment. USDA Natural Resources Conservation Service. (K. Launchbaugh & A. Hulet. \$180,796.79)
- 2017 Effects of cattle grazing on greater sage-grouse. UDSA-Forest Service (K. Launchbaugh & C. Conway; \$31,348)
- 2017 Idaho Cattle Foundation Rock Creek and Sage-Grouse Interns (K. Launchbaugh. \$20,950)
- 2016 Effects of Spring Grazing on Sage-Grouse. (C. Conway & K. Launchbaugh. \$263,000)
- 2015 Effects of Spring Grazing on Sage-Grouse. (C. Conway & K. Launchbaugh. \$180,000).
- 2014 Evaluate the influence of livestock grazing on sage-grouse populations. Idaho Department of Fish & Game. (C. Conway and K. Launchbaugh. \$49,100 in January and \$56,200 in July.)
- 2014 Effects of cattle grazing on sagebrush-obligate and sagebrush-dependent birds. Western Association of Fish and Wildlife Agencies (C. Conway & K. Launchbaugh. \$131,269)
- 2014 Developing Grazing Guidelines for Fuels Management in Sagebrush Ecosystems: Implications for Wildlife Habitat and Soil Conservation. USDA Natural Resources Conservation. (E. Strand, K. Launchbaugh, S. Jensen. \$65,706).
- 2014 BLM Rangeland Collegiate Teams. USDA BLM. (JD. Wulfhorst and K. Launchbaugh. \$39,464; Launchbaugh portion was \$22,984) And, Continuation of BLM Rangeland Collegiate Teams. USDA BLM. (K. Launchbaugh. \$19,999).
- 2014 Natural Resource Inventory Summer Research Teams 2014. USDA Natural Resources Conservation Service (K. Launchbaugh with extensive assistance from L. Roselle. \$294,311).
- 2013 Collegiate Teams for Natural Resource Inventory. USDA Natural Resources Conservation Service. (K. Launchbaugh PI with extensive assistance by L. Roselle \$268,500)
- 2012 Effectiveness Vegetation Monitoring, Mountain Home AFB. Karen Launchbaugh. Department of Defense. \$24,460. (K. Launchbaugh)
- 2012 Collegiate Teams for NRCS Project. USDA Natural Resources Conservation (K. Launchbaugh PI with extensive assistance by L. Roselle \$153,579.80)
- 2010 Repositioning Rangeland Education for a Changing World. USDA Higher Education Challenge Grant. \$495,077 in support plus \$495,077 institutional match. (U-Idaho is lead institution with 6 partners at Humboldt State University, New Mexico State University, Oklahoma State University, South Dakota State University, University of California-Davis, and Utah State University.)
- 2010 Rangeland Ecosystems Dynamics Reviewing the Scientific Basis for Rangeland Management Decisions. Special Research Grant Program. National Institute of Food and Agriculture/USDA. \$279,200 (on behalf of the Owyhee Initiative).
- 2009 Partnerships to Enhance Rangeland Education and Career Interest: Charting a Path for Secondary Agricultural Programs in the West. USDA Secondary Education, Two-Year Postsecondary Education and Agriculture in the K-12 Classroom (SPECA) Challenge Grants Program. \$46,915 (K. Crane and K. Launchbaugh).
- 2008 Integrating Natural Resource Technologies into High School Classrooms to Support Student Persistence and Access to Natural Resource Degree Programs. Technology Incentive Grant Program, Idaho State Board Of Education. \$34,200 (E. Strand and K. Launchbaugh).

- 2007 to 2011 Literature Review Fire, Grazing, and Invasives. Bureau of Land Management. \$20,000 (E. Strand, K. Launchbaugh, C. Anderson, and G. Newcombe).
- 2007 to 2009 Targeting Grazing to Control Yellows Starthistle in Canyon Grasslands of Northern Idaho. UI David Little Livestock Range Management Endowment. \$19,246 awarded in 2007 and \$19,380 in 2008. (K. Launchbaugh).
- 2008 Establishing an Academic Foundation for Restoration of Sage Steppe Habitat in Idaho. Cooperative grant from Bureau of Land Management, Idaho Department of Agriculture, and Idaho Fish and Game, \$145,500 (K. Launchbaugh).
- 2005-2006 Advancing Rangeland Education and Research in Idaho. Donations solicited from the Idaho Rangeland Resources Commission and Private Landowners to support the work of the UI Rangeland Ecology and Management Department, \$37,500. (K. Launchbaugh).
- 2006 Enhancing spatial heterogeneity of grazed landscapes: implications to the fire fuel matrix and avian and insect communities. CNR McIntire-Stennis, \$180,000. (K. Vierling, S. Cook, E. Strand, S. Bunting, and K. Launchbaugh).
- 2005 Evaluating Herding Combined with Supplement to Modify Riparian Habitat Use Patterns of Cattle Grazing Mountain Rangelands. UI David Little Livestock Range Management Endowment, \$18,505. (K. Launchbaugh and S. Williams).
- 2005 Using Livestock Grazing to Manage Rangeland Weeds in Idaho: What We First Need to Know. UI David Little Livestock Range Management Endowment, \$12,101. (L. Wilson, Lead P.I. and K. Launchbaugh).
- 2004 Prescribed Grazing for Vegetation Management. The National Sheep Industry Improvement Center, \$46,234. (K. Launchbaugh and J. Walker).
- 2003 Developing a Handbook for Utilizing Livestock as a Tool in Noxious Weed Control in Nine Western States. USDA-SARE Professional Development Program, a \$27,734 subcontract of an \$89,398 total budget. (J. Davidson, Lead P.I. with E. Smith, L. Wilson, and K. Launchbaugh).
- 2003 Building Knowledge of Sustainable Rangeland Management. USDA-SARE Professional Development Program, \$91,847. (K. Launchbaugh and B. Hutchinson).
- 2003 How GIS/GPS and Remote Sensing Could be Used in Ranching Operations. UI David Little Livestock Range Management Endowment, \$4,000. (K. Launchbaugh and A. Hancock).
- 2003 Bringing rangeland into Idaho's classrooms. UI David Little Livestock Range Management Endowment, \$13,635. (K. Launchbaugh and J. Hankins).
- 2002 Integrating Biological Control and Prescribed Grazing to Manage Yellow Starthistle on Idaho Rangelands. USDA-CSREES-Western Reg. Integrated Pest Management Program, \$155,611. (L. Wilson, Lead P.I. with K. Launchbaugh and M. Schwarzlaender).
- 2002-2005 Role of Grazing in Plant Response to Fire in Sagebrush Communities. UI Harold Heady Endowment for Rangeland Ecology, \$12,000 to \$15,000 per year. (K. Launchbaugh).
- 2001 Cattle and Sheep Grazing to Control Yellow Starthistle and Implications to Biological Control. UI David Little Livestock Range Management Endowment, \$14,620. (K. Launchbaugh with L. Wilson and T. Ott).
- 2001 Managing Livestock Diet Selection to Mitigate the Ecological and Social Costs of Invasive Plant Species. USDA-IFAFS part of \$4.5 million collaborative grant submitted by Utah State University, \$229,253. (K. Launchbaugh with K. Sanders).
- 2001 Long-term Vegetation Study Idaho National Engineering and Environmental Laboratory. Department of Energy, \$98,212. (S. Bunting and K. Launchbaugh, Co P.I.s).
- 2001 Enhancing the Teaching Herbarium for Rangeland Plant Identification and Ecology. UI Stillinger Funds for Forestry and Botanical Research, \$1,050. (K. Launchbaugh with J. Kingery and S. Heide).

- 2001 to 2006 Sheep Grazing for Noxious Rangeland Weed Management in Idaho. USDA-Hatch project, \$4,000 per year. (K. Launchbaugh)
- 2001 Deferment of Grazing after Fire as it Affects Weed Infestations and Sagebrush Recruitment. UI David Little Livestock Range Management Endowment, \$23,585. (K. Launchbaugh with S. Seefeldt).
- 2000 Role of Herbivore Nutritional Status on Consumption of Chemically Defended Plants. University of Idaho Seed Grant, \$7,405. (K. Launchbaugh)
- 1999 Developing Prescription Grazing Guidelines for Spotted Knapweed Control on Rangeland. USDA-CSREES-Western Reg. Integrated Pest Management. Program, \$165,939. (K. Launchbaugh with J. Hendrickson and H. Blackburn).
- 1998 Anti-quality Agents in Pastureland and Rangeland Forages: Symposium development. USDA-Natural Resources Conservation Service, \$21,000. (K. Launchbaugh).
- 1998 Manipulating Vegetation and Sheep Physiology to Improve Range and Flock Productivity. USDA-ARS Sheep Experiment Station, \$16,718. (K. Launchbaugh).
- 1997 Nutrient Dilution: a Potential Herbivory Resistance Mechanism in Grasses. University of Idaho Seed Grant, \$5,984. (K. Launchbaugh).
- 1997 Manipulating Vegetation and Sheep Physiology to Improve Range and Flock Productivity. USDA-ARS Sheep Experiment Station, \$16,719. (K. Launchbaugh).
- 1995 New Options for Managing Mesquite. Houston Livestock Show and Rodeo, \$4,500. (K. Launchbaugh).
- 1995 A Functional Interpretation of Herbivory Resistance in Mesic Grasslands. USDA-Cooperative State Research Service, \$270,000. (D.D. Briske, Lead P.I. and K. Launchbaugh).
- 1994 Life after Juniper Invasion. Houston Livestock Show and Rodeo, \$5,000. (K. Launchbaugh).
- 1994 Vegetation Survey of Lubbock Lake Landmark. Texas Park and Wildlife, \$2,608. (K. Launchbaugh).
- 1993 Role of Plant Secondary Chemicals and Herbivory on Desertification. Texas Tech Environmental Enhancement Fund, \$4,824. (E.A. Laca, Lead P.I. and K. Launchbaugh).
- 1993 Small Ruminant Production host country expenditures (Bolivia). U.S. Aid for International Development, \$155,000. (F.C. Bryant, Lead P.I. and K. Launchbaugh).

Thesis and Dissertations:

- Launchbaugh, K.L. 1992. Dissertation: The formation and generalization of conditioned flavor aversions by sheep: Role of flavor intensity and illness variation.
- Mastel, K.L. 1987. Thesis: The influence of range site on diet selection, nutrient intake and grazing behavior of cattle.

SERVICE:

Major Committee Assignments:

University of Idaho:

Search Committees of Dean (3), Department Head (2), Faculty (10), and Staff (2)

CNR Faculty Secretary, 2010-2013

Member of College Petitions Committee, 2005-2013

Member of College Curriculum Committee, 1997-2013 (Chair from 1997-2001)

Member of Stillinger Herbarium Task Force, 2006-2008

Department Merger Committee for Rangeland and Forest Ecosystems, 2005-2006

Member of College Planning/Redesign Committee, 2003

Member of College Laboratory Assessment Committee, 1998

Member of College Core Curriculum Review Committee, 1997

Utah State University:

Association for Women in Science, Northern Utah Seminar Committee Chair, 1990-92

Graduate Student Representative to Range Science Faculty Meetings, 1990-91

University Research Council Member, 1990-91

Faculty Senate, Graduate Student Representative, 1989-90

Graduate Council Member, 1989-90

President, Graduate Student Senate, 1989-90

Graduate Student Senate, Department Representative, 1988-89

Texas A&M University:

Executive Officer of Texas A&M Range Science Graduate Student Club, 1986

North Dakota State University:

Chapter President, Range Club, 1984

Chapter President, Mortar Board National Honor Society, 1983-84

Professional and Scholarly Organizations:

Society for Range Management officer 2020-2023; President 2022-2023

Planning Committee for 2021 International Meeting Virtual Chair 2020-2021

Targeted Grazing Committee Chair, Society for Range Management, 2013-2014

Chair of Society for Range Management, Program Accreditation Committee, 2011-2013

Targeted Grazing Committee Member, American Sheep Industry Association, 2006-2013

Planning Committee for 2012 International SRM Meeting, 2009-2012

Co-Chair Information and Education Committee Society for Range Management, 2008-2010

Chair of Idaho SRM Student Activities Committee, 1997-2010

Chapter President, UI Sigma Xi Scientific Research Society, 2006-2009

Officer of Range Science Education Council, 2006-2009

Member of SRM National Board of Directors, 2005-2008

President, Idaho Section of SRM, 2001-02

Planning Committee for 2000 International SRM Meeting, 1997-2000

National Chair of SRM Professional Affairs Committee, 1995-96

Texas Section, SRM College Activities Committee Chair, 1994-95

SRM Professional Women's Breakfast Committee Chair, 1994-95

Texas Section, SRM Research and Education Committee Chair, 1993-94

Outreach Classes, Workshops, Seminars, and Tours Organized:

Judges Field Tour Focusing on Rangeland Management. 2007. Tour was organized by Idaho US Attorneys' office. Primary participant included Judge L. Winmill and his staff attorney David Metcalf. Total of 15 participants including land managers, lawyers, and Judge Winmill. Worked with Dr. Steve Bunting to deliver a 2-hour pre-tour lecture and then conducted a 1-day field tour.

Prescriptive Grazing – A New Landscape Management Opportunity for Livestock Owners. 2006. Organized a ½ day symposium held at the 3rd National Conference on Grazing Lands in St. Louis, MS.

Prescribed Herbivory for Vegetation Management. 2006. Organized a ½ day symposium held at the Annual Meeting of the Society for Range Management at Vancouver, BC.

Prescribed Grazing – A Tool for Weed Management. 2006. Proposed and directed a ½ day workshop at the 5th Annual Integrated Pest Management Symposium, St. Louis, MO.

Review of Targeted Grazing. 2006. Organized a 2-day workshop with contract graziers and land managers from across the west. Workshop was held in Boise, ID.

Sustainable Rangeland Management – On the Cutting Edge. 2005. Directed a 2-day workshop conducted at Boise, ID as part of a SARE Professional Development Grant.

Harnessing Animal Behavior for Vegetation Management. 2004. Co-directed a 3-day workshop with Dr. Ken Sanders in Twin Falls, ID.

Land Management at Craters of the Moon. 2002. Summer tour of Idaho Section of the Society for range management. Organized and Co-Led 1½ day field tour near Arco, ID.

Ecologically Sustainable Ranching: Tools for the Changing West. 2001. Created and supervised a 1-day symposium in Boise, ID sponsored by the Idaho Section of the Society for Range Management and the Idaho Rangeland Resource Commission.

Grazing Behavior of Livestock and Wildlife. 1999. Organized a 2-day symposium as part of the Pacific Northwest Range Shortcourse series held on the University of Idaho campus, Moscow, ID.

Anti-Quality Factors in Rangeland and Pastureland Forages. 1999. Organized a 1-day symposium conducted at a joint meeting of the American Forage and Grassland Council and Society for Range Management in Omaha, NE.

Newsletter Articles:

Launchbaugh, K.L. 2007. The Future is Here - Who Will be Managing the Changing Landscape? *Rangeland News - International Newsletter of the Society for Range Management.* October Issue.

Launchbaugh, K.L. 2006. One Acre, One Mind, One Student at a Time. *Member Resource News-International Newsletter of the Society for Range Management.* June Issue.

Launchbaugh, K.L. 2005. When Scientists and Managers Mingle. *Member Resource News - International Newsletter of the society for Range Management.* September Issue.

Web Pages:

Rangeland Center at the University of Idaho – Department Web Page (http://www.rangelandcenter.org/)

Targeted Grazing: A Natural Approach to Vegetation Management (http://targetedgrazing.wordpress.com)

Review Activities:

2012 – National panel for review of USDA ARS programs for grazing projects in the plains states. (Team Member)

2007-08 - Chaired Review Team for Effects of Grazing on the Murphy Complex Wildfire called by Idaho State Director of BLM (Team Leader)

2008 - CSREES National Review Panel for Small Farm and Ranch Program. (Team Member)

2006 – Second Scientific Review Team for Slickspot Peppergrass called by the U.S. Fish and Wildlife Services (Team Member)

2005 – Idaho Science Review Team for Risk Factors for Sage Grouse called by the Idaho State Director of BLM (Team member)

2004 - CSREES Program Review of NMSU rangeland research and education program

2003 - Scientific Review Team for Slickspot Peppergrass called by the U.S. Fish and Wildlife Services (Team Member)

2002 - Review of USDA-ARS Forage Science Programs in the United States (Team Member)

2000 – CSREES National Review Panel for Managed Ecosystems Program (Team Member)

HONORS AND AWARDS:

U of I, Interdisciplinary and Collaborative Efforts Excellence Award (2020)

United States Agricultural Information Network Honorary Membership Award (2016)

US Professor of the Year for Idaho (2014)

U of I, Excellence in Teaching (2014)

U of I, College of Natural Resources Outstanding Advisor (2013 & 2014)

Range Science Education Council – Outstanding Undergraduate Teaching (2013)

Utah State University – Outstanding Alumni Achievement (2012)

Society for Range Management - Outstanding Achievement in Research/Academia (2010)

U of I, College of Natural Resources Outstanding Teacher (2011)

U of I, Excellence in Outreach (2009)

Idaho Section, Society for Range Management, President's Award (2006)

Honorary State Future Farmers of America Degree (2001)

Idaho Section, Society for Range Management Top Hand Award (2000)

U of I, College of Nat. Resources, Outstanding Continuing Education & Service Award (1999)

Gamma Sigma Delta Excellence in Teaching Undergraduate Students Award (1998)

Society for Range Management Outstanding Young Professional (1996)

Texas Tech Ex-Students Association New Faculty Award (1995)

Don Dwyer Award for Excellence in Graduate Range Research (1993)

Outstanding Graduate Student in the College of Natural Resources (1992)

2nd Place in Society for Range Management Graduate Paper Competition (1992)

Seely-Hinkley Fellowship for College of Graduate Studies (1990)

USU Winner of Sigma Xi Student Scientific Poster Competition (1990)

Graduate Council Award for Outstanding Service to USU (1990)

Associated Students Award for Outstanding Contribution to USU (1990)

Women's National Farm and Garden Association Fellowship (1985)

Warren C. Whitman Outstanding Botany Student Scholarship (1984)

Blue Key Outstanding Botany Student Scholarship (1984)

"Chubs" Orton Outstanding Range Management Student Scholarship (1983)

American Farmer Degree in the Future Farmers of America (1982)

Soil Conservation Society of America Scholarship (1982)

North Dakota Future Farmers of America Public Speaking Champion (1978)