

Curriculum Vitae

EMPLOYMENT (cont.)

- 1992 Associate Professor, Range Science
Agricultural Research Center-Hays, Kansas State University
Conducted research to evaluate livestock nutrition and performance in forage-based livestock production systems. The mission was to increase the profitability of range livestock production through improved forage conversion efficiency by stocker and reproductive cattle, and improved reproductive efficiency by beef females.
- 1986-1992 Assistant Professor, Range Science
Agricultural Research Center-Hays, Kansas State University
same as above
- 1983-1986 Graduate Research Assistant
Department of Range Science r..pN Tc 0 -1.16 TD(Agricultural Research Center-Hays)Tj-0.0125 T

Professional memberships (cont.)

American Society of Animal Science (cont.)

Member, Western Section Beef Symposium Committee, 1999-2001

Member, Western Section Land Use Committee, 1994-97

Society

Refereed Journal Articles (cont.)

18. Ure, A.L., T.R. Dhiman, M.D. Stern, and **K.C. Olson**. 2005. Treated extruded soybean meal as a source of fat and protein for dairy cows. *Asian-Aust. J. Anim. Sci.* 18:980-989.
19. ZoBell, D.R., E.K. Okine, **K.C. Olson**, R.D. Wiedmeier, L.A. Goonewardene and C. Stonecipher. 2005. Effects of feeding wheat straw and middlings ensiled with whey on digestibility and growth of cattle. *Can. J. Anim. Sci.* 85:69-74.
20. Poulson, C.S., T.R. Dhiman, A.L. Ure, D. Cornforth, and **K.C. Olson**. 2004. Conjugated linoleic acid content of beef from cattle fed diets containing high grain, CLA, or raised on forages. *Livestock Prod. Sci.* 91:117-128.
21. ZoBell, D.R., E.K. Okine, **K.C. Olson**, R.D. Wiedmeier, L.A. Goonewardene, and C. Stonecipher. 2004. The feasibility of feeding high levels of whey silage and effects on production in growing cattle. *J. Anim. and Vet. Advances* 3:804-809.
22. ZoBell, D.R., L.A. Goonewardene, **K.C. Olson**, C. Stonecipher, and R.D. Wiedmeier. 2003. The effect of feeding wheat middlings to beef replacement heifers and growing and finishing steers on production, digestibility, ruminal fermentation and carcass characteristics. *Can. J. Anim. Sci.* 83:551-557.
23. Jensen, K.B., D.A. Johnson, K.H. Asay, and **K.C. Olson**. 2002. Seasonal-accumulated growth and forage quality of range grasses for fall and winter grazing. *Can. J. Plant Sci.*
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24. **Olson, K.C.**
-Early Stocking on Shortgrass Rangeland. *J. Range Manage.* 55:222-
25. ZoBell, D.R., **K.C. Olson**, R.D. Wiedmeier, D. Sass, K.J. Shinnars, and T.A. McAllister. 2002. The effects of mechanical processing of corn silage on subsequent feedlot performance of backgrounded replacement heifers. *Anim. Feed Sci. Tech.* 96:221-228.
26. DelCurto, T., B.W. Hess, J.E. Huston, and **K.C. Olson**

Refereed Journal Articles (cont.)

32. **Olson, K.C.**, J.R. Jaeger, and J.R. Brethour. 1992. Growth and reproductive performance of heifers overwintered in range or drylot environments. *J. Prod. Agric.* 5:72-76.
33. **Olson, K.C.** 1991. Diet sample collection by esophageal fistula and rumen evacuation techniques. *J. Range Manage.* 44:515-519.
34. Perry, R.C., L.R. Corah, R.C. Cochran, J.R. Brethour, **K.C. Olson**, and J.J. Higgins. 1991. Effects of hay quality, breed, and ovarian development on onset of puberty and reproductive performance of beef heifers. *J. Prod. Agric.* 4:13-18.
35. **Olson, K.C.**, G.B. Rouse, and J.C. Malechek. 1989. Cattle nutrition and grazing behavior during short-duration-grazing periods on crested wheatgrass range. *J. Range Manage.* 42:153-158.
36. **Olson, K.C.** and J.C. Malechek. 1988. Heifer nutrition and growth on short duration grazed crested wheatgrass. *J. Range Manage.* 41:259-263.
37. **Olson, K.C.** and J.C. Malechek. 1987. A temporary esophageal cannula that prevents fistula contraction during extrusa collections. *J. Range Manage.* 40:282-283.
38. **Olson, K.C.**, R.S. White, and B.W. Sindelar. 1985. Response of vegetation of the Northern Great Plains to precipitation amount and grazing intensity. *J. Range Manage.* 38:357-361.

Proceedings

1. **Olson, K.C.** 2015. Cow supplementation: Getting the best bang for your buck. p. 163-175. : Proc., Range Beef Cow Symposium XXIV. Loveland, CO.
2. Kincheloe, J.J., **K.C. Olson**, A.D. Blair, K.R. Underwood, M. Gonda, A.A. Harty, and R.N. Funston. 2015. Impact of maternal protein restriction in first calf heifers during mid- to late-gestation on dam and suckling calf performance through weaning. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 66:231-234.
3. Fulton, J.O., **K.C. Olson**, J.J. Kincheloe, A.A. Harty, M.K. Luebke, K.R. Underwood, S.M. Scramlin, and A.D. Blair. 2014. Effects of zilpaterol hydrochloride supplementation on growth performance, carcass characteristics and production economics of steers differing in biological type. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 65:188-191.
4. **Olson, K.C.**, J.A. Walker, and S. Hadrick. 2013. beefSD: An integrated and intensive Extension curriculum for beginning beef cattle producers in South Dakota. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 64:269-272.
5. Hojer, N.L., M.B. Hubert, P.S. Johnson, M.H. Price, and **K.C. Olson**. 2012. Effects of weaning age and winter development environment on heifer grazing distribution. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 63:108-112.
6. Hojer, N.L., M.B. Hubert, P.S. Johnson, M.H. Price, and **K.C. Olson**. 2012. Effects of weaning age and winter development environment on heifer performance. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 63:248-251.
7. **Olson, K.C.** 2011. Relationship between cow size, nutrient requirement, and production capacity. p. 8-12. : Proc., 31st Annual Utah Beef Cattle Field Day.

Proceedings (cont.)

8. **Olson, K.C.** 2011. Matching your cattle to your environment. p. 24-28. : Proc., 33rd Annual Arizona/Utah Range Livestock Workshops.
9. **Olson, K.C.**, J. Waggoner, and J. Jaeger. 2011. Cow side of producing a 1,000 lb feeder, cow size and expenses. p. 76-83.

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Proceedings (cont.)

22. Dahl, C.J., **K.C. Olson**, C.A. Stonecipher, and L.G. Wood. 2005. Influence of energy

Proceedings (cont.)

48. Christensen, D.E., R.D. Wiedmeier, H.T. Shenton, B.R. Bowman, and **K.C. Olson**. 1994. Effects of graded levels of dietary lasalocid on performance of Holstein cows during early lactation. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 45:328-329.
49. Meneses, R., R.D. Wiedmeier, H.T. Shenton, J.L. Walters, and **K.C. Olson**. 1994. Nutrient value of harvested and ammoniated standing mature pasture grass remaining after moderate grazing by sheep. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 45:213-215.
50. Shenton, H.T., R.D. Wiedmeier, B.R. Bowman, D.P. Cornforth, and **K.C. Olson**. 1994. Heifer versus bull calves in a slaughter weight calf production system. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 45:195-196.
51. Stenquist, N.J., R.D. Wiedmeier, and **K.C. Olson**. 1994. By-pass protein and implants in beef cattle. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 45:192-194.
52. **Olson, K.C.**, J.R. Jaeger, C.W. Peters, and L.R. Corah. 1993. Rumen-degradable or rumen-escape lipid supplementation to stimulate puberty or fertility in yearling beef heifers. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 44:375-377.
53. **Olson, K.C.**, and G.D. Sunvold. 1991. Predicting digestibility of mixed cool- and warm-season grass diets with internal markers. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 42:197-200.
54. **Olson, K.C.**, R.L. Senft, and J.C. Malechek. 1986. A predictive model of cattle ingestive behavior in response to sward characteristics. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 37:259-262.

Abstracts of Invited Scientific Presentations

1. **Olson, K.C.**, and H. Carroll. 2015. Extension programming in South Dakota to improve livestock handling. *J. Anim. Sci. Suppl.* (Western Section ASAS abstract).
2. **Olson, K.C.**, J.J. Kincheloe, J.R. Brennan, and B. Hauptman. 2015. Effect of grazing on rangeland with prairie dog colonies on cattle nutrition and performance. : Symposium: Native American Forum, Renewal on the Standing Rock Reservation: Knowledge and Opportunities. *Soc. Range Manage. Ann. Meeting Abstr.* 68:327.
3. Schauer, C.S., C. Clark, and **K.C. Olson**. 2015. Beef cattle management on prairie dog colonies. : Symposium: Native American Forum, Renewal on the Standing Rock Reservation: Knowledge and Opportunities. *Soc. Range Manage. Ann. Meeting Abstr.* 68:329.
4. **Olson, K.C.**, and B.L. Waldron. 2008. Forage-based systems for beef production: Western regional challenges and opportunities. *J. Anim. Sci.* 86(E-Suppl. 2):310.
5. **Olson, K.C.** 2004. Range management to mitigate livestock response to drought. *Soc. Range Manage. Ann. Meeting Abstr.* p. 156.
6. **Olson, K.C.**, J.A. Walker, B.R. Bowman, C.E. Foley, C.A. Stonecipher, and D.G. Eddington. 1999. Management influences on gaseous energy losses from grazing beef cattle. *J. Anim. Sci.* 77(Suppl. 1):204.

Abstracts of Volunteered Scientific Presentations

1. Kincheloe, J.J., **K.C. Olson**, and J.R. Brennan. 2015. Rate of degradation of cattle diet samples collected on and off prairie dog colonies. *Soc. Range Manage.* 68:300.
2. Fulton, J.O., K.N. Kerns, A.A. Harty, J.J. Kincheloe, M.K. Luebbe, **K.C. Olson**, K.R. Underwood, S.M.S. Zuelly, A.D. Blair. 2015. Effects of zilpaterol hydrochloride supplementation on carcass characteristics and meat quality characteristics of steers differing in breed type. *Amer. Meat. Sci. Assoc. Abstr. AMSA2015-1038.*
3. Sorensen, K.L., V.L. Anderson, K.R. Maddock-Carlin, C.L. Engel, C.S. Schauer, **K.C. Olson**, and R.J. Maddock. 2014. Effects of dietary forage concentration in finishing diets on growth and carcass characteristics of beef steers. *J. Anim. Sci.* 92, Suppl. 2:135.
4. Hojer, N.L., M.B. Hubert, P.S. Johnson, M.H. Price, and **K.C. Olson**. 2012. Effects of weaning age and winter development environment on heifer grazing distribution. *J. Anim. Sci.* 90, Suppl. 3:155.
5. Hojer, N.L., M.B. Hubert, P.S. Johnson, M.H. Price, and **K.C. Olson**. 2012. Effects of weaning age and winter development environment on heifer performance. *J. Anim. Sci.* 90, Suppl. 3:334.
6. Lupo, C., J.J. Stone, **K. Olson**, and D. Clay. 2012. Estimating potential environmental impacts associated with beef cattle production in the Northern Great Plains, US using life cycle assessment. p. 42. : 2012 Western South Dakota Hydrology Conference, Rapid City, SD.
7. Walker, J.A., G.A. Perry, and **K.C. Olson**. 2012. Effect of propionate salt inclusion in postpartum supplementation on young cow reproductive performance. *J. Anim. Sci.* 90, Suppl. 3:333.
8. Greenhalgh, L.K., D.R. ZoBell, B.L. Waldron, and **K.C. Olson**. 2011. Forage kochia for western rangelands in the United States. p. 534. : Proc. IX International Rangeland Congress, Rosario, Argentina.
9. Hojer, N.L., M.B. Hubert, D.L. Gay, V.N. Owens, A.D. Ressett, R.H. Pritchard, K. Karges, and **K.C. Olson**. 2011. Value of a novel distiller's grain as a protein supplement for gestating beef cows. *J. Anim. Sci.* 89, E-Suppl. 2:152.
10. Hojer, N.L., M.B. Hubert, D.L. Gay, V.N. Owens, A.D. Ressett, R.H. Pritchard, K. Karges, and **K.C. Olson**. 2011. Response of beef cows and calves after supplementation with a novel distiller's grain during gestation. *J. Anim. Sci.* 89, E-Suppl. 2:211.
11. Walker, J.A., G.A. Perry, and **K.C. Olson**. 2011. Influence of propionate salt levels on young cow reproductive performance. *J. Anim. Sci.* 89, E-Suppl. 1:602.
12. Walker, J.A., C.S. Schauer, R. Salverson, P. Nester, G.A. Perry, **K.C. Olson**, and J.E. Held. 2011. Evaluating glycerin supplementation on reproductive performance of sheep. *J. Anim. Sci.* 89, E-Suppl. 2:190.
13. Fang, X., L.A. Hoff, J.A. Walker, **K.C. Olson**, G.A. Perry, J.X. Wu, C. Maltecca, and M.G. Gonda. 2010. No evidence for association between leptin polymorphism C.73 C>T and Bovine Viral Diarrhea Virus (BVDV) vaccine response. *J. Anim. Sci.* 88, E-Suppl. 2:42.

14. Kessler, K.L., **K.C. Olson**, C.L. Wright, K.J. Austin, K.M. Cammack. 2010. Changes in hepatic gene expression in steers administered high-S water with or without supplemental Mo. *J. Anim. Sci.* 88, E-Suppl. 2:11.
15. Kessler, K.L., **K.C. Olson**, C. L. Wright, K. J. Austin, P. S. Johnson, and K. M. Cammack. 2010. Effect of supplemental molybdenum on forage-fed steers receiving high-sulfur water. *J. Anim. Sci.* 88, E-Suppl. 3:74.

Abstracts of Volunteered Scientific Presentations (cont.)

16. Olenich, S.A., X. Fang, L.A. Hoff, J.A. Walker, **K.C. Olson**, G.A. Perry, and M.G. Gonda. 2010. Partial characterization of bovine Complement Receptor-2 (CR2) in Angus cattle. *J. Anim. Sci.* 88, E-Suppl. 2:42.
17. Greenhalgh, L.K., **K.C. Olson**, D.R. ZoBell, B.L. Waldron, A.R. Moulton, and B.W. Davenport. 2009. Perennial forage kochia for improved winter grazing. 62nd Society for Range Management Annual Meeting. Paper No. 60-3.
18. Greenhalgh, L.K., D.R. ZoBell, B.L. Waldron, **K.C. Olson**, A.R. Moulton, and B.W. Davenport. 2009. Perennial forage kochia for increased production of winter grazed pastures. *J. Anim. Sci.* 87(E-Suppl. 2):225.
19. Kessler, K.L., **K.C. Olson**, C.L. Wright, K.J. Austin, P.S. Johnson, and K.M. Cammack. 2009. Effects of high-sulfur water and clinoptilolite on growth performance and gene expression of steers fed forage-based diets. *J. Anim. Sci.* 87(E-Suppl. 3):72.
20. Kessler, K.L., **K.C. Olson**, C.L. Wright, K.J. Austin, K. McInnerney, P.S. Johnson, and K.M. Cammack. 2009. Effects of high-sulfur water on growth performance and gene expression of steers fed forage-based diets. *J. Anim. Sci.* 87(E-Suppl. 2):533.
21. Landblom, D.G., **K.C. Olson**, P. Johnson, R. Gates, M.K. Beutler, M. Hubert, G.A. Perry, S.W. Fausti, R.R. Salverson, S. Furman, and J. Vasconcelos. 2009. Beef system methods impact backgrounding and finishing net returns. *J. Anim. Sci.* 87(E-Suppl. 3):165.
22. Perry, B.L., J.A. Walker, C.L. Wright, **K.C. Olson**, and G.A. Perry. 2009. Influence of heifer development method on post-AI blood metabolites. *J. Anim. Sci.* 87(E-Suppl. 2):73.
23. Peterson, J.M., M. Hubert, A. Gearhart, **K.C. Olson**, C. Schauer, P.S. Johnson, and D.T. Booth. 2009. Geospatial analysis of aerial photography to identify patterns of grazing on Northern Great Plains rangelands. 62nd Society for Range Management Annual Meeting. Paper No. 2060-27.
24. Richter, H.A., **K.C. Olson**, P.S. Johnson, and C. Wright. 2009. Clinoptilolite as a supplement to reduce the toxic effects of high sulfate water. 62nd Society for Range Management Annual Meeting. Abstract No. 2030-18.
25. Wall, A.R., **K.C. Olson**, C.A. Stonecipher, M. Stuart, M.A. Maughn, and J.C. Malechek. 2006. Estimation of digesta kinetics of forage kochia and tall wheatgrass using Yb and Dy when fed alone or mixed together. *J. Anim. Sci.* 84(Suppl. 2):140.
26. ZoBell, D.R., **K.C. Olson**, R.D. Wiedmeier, C. Stonecipher, and C.K. Chapman. 2006. The effect of feeding whey silage to beef cows under maintenance conditions. *J. Anim. Sci.* 84(Suppl. 2):168.

27. Dahl, C., **K. Olson**, C. Stonecipher, and L. Wood. 2005. Influence of energy supplementation and monensin on forage digestibility and intake. *J. Anim. Sci.* 83(Suppl. 2):125.
28. Stonecipher, C., **K. Olson**, M. Buck, and J. Malechek. 2005. Digesta kinetics of steers fed forage kochia () in a low quality forage diet. *J. Anim. Sci.* 83(Suppl. 2):130.

Abstracts of Volunteered Scientific Presentations (cont.)

29. Waldron, B.L., D.R. ZoBell, **K.C. Olson**, K.B. Jensen, and D.L. Snyder. 2005. Using stockpiled forage kochia and crested wheatgrass to maintain beef cows during winter. ASA-CSSA Ann. Meeting Abstr.
30. Wayment, H., R. Wiedmeier, **K. Olson**, D. Snyder, and P. Schmidt. 2005. Long-term use of low-quality forages in beef cow nutritional management: Effects on productivity and economics. *J. Anim. Sci.* 83(Suppl. 2):106-107.
31. Atwood, S.B., F.D. Provenza, and **K.C. Olson**. 2004. Intake and performance of lambs offered one of three iso-energetic and iso-nitrogenous foods or all three foods simultaneously. *Soc. Range Manage. Ann. Meeting Abstr.* p. 8.
32. Stonecipher, C. A., **K. C. Olson**, J. C. Malechek, and D. D. Carter. 2004. Intake and digestibility response to forage kochia () in a low quality forage diet. *J. Anim. Sci.* 82(suppl. 2):124.
33. Ure, A.L. T.R. Dhiman, M.D. Stern, and **K.C. Olson**. 2004. Treated extruded soybean meal as a source of fat and protein for dairy cows. *J. Anim. Sci.* 82(suppl. 1):51.
34. Waldron, B.L., T.A. Monaco, **K.C. Olson**, and D.R. Zobell. 2004. Forage kochia: A plant for wildfire control and winter grazing. *Soc. Range Manage. Ann. Meeting Abstr.* p. 212.
35. Wiedmeier, R.D., P.R. Schmidt, D.M. Meek, A.J. Young, **K.C. Olson**, D.R. ZoBell, and K.R. Wiedmeier. 2004. Comparative productivity of five cool-season pasture grasses under intermittent flood irrigation and grazed by beef cow-calf pairs using management intensive grazing practices. *J. Anim. Sci.* 82(suppl. 2):124.
36. ZoBell, D.R., B.L. Waldron, **K.C. Olson**, R.D. Harrison, and H. Jensen. 2004. Utilization of forage kochia for fall/winter grazing. *J. Anim. Sci.* 82(suppl. 2):123.
37. Porter, S.F., T.R. Dhiman, R.D. Wiedmeier, **K.C. Olson**, D.P. Cornforth, B.R. Bowman, and N.D. Luchini. 2003. Conjugated linoleic acid in tissues from beef cattle fed different lipid supplements. *J. Anim. Sci.* 81(suppl. 2):110.
38. Wood, L.G., **K.C. Olson**, R.D. Wiedmeier, and J.E. Bowns. 2003. Livestock response to rest-rotation, deferred-rotation, or continuous grazing systems on forested rangeland. *J. Anim. Sci.* 81(suppl. 2):36.
39. Jaeger, J.R., **K.C. Olson**, T. DelCurto, and A. Qu. 2002. Predicting the time of parturition in spring calving beef cows. *J. Anim. Sci.* 80(Suppl. 2):110.
40. Wiedmeier, R.D., **K.C. Olson**, B.A. Kent, and P.R. Schmidt. 2002. Utilization of low-quality forage as affected by beef cow body condition score. *J. Anim. Sci.* 80(Suppl. 2):139.

69. Meneses, R., R.D. Wiedmeier, H.T. Shenton, J.L. Walters, and **K.C. Olson**. 1994. Nutrient value of harvested and ammoniated standing mature pasture grass remaining after moderate grazing by sheep. *J. Anim. Sci.* 72(Suppl. 2):

Abstracts of Volunteered Scientific Presentations (cont.)

70. **Olson, K.C.**, R.D. Wiedmeier, J.E. Bowns, and R.L. Hurst. 1994. Cattle and sheep response to common and deferred-rotation grazing on southern Utah forested rangeland. *Soc. Range Manage. Ann. Meeting Abstr.* p. 37.
71. Shenton, H.T., R.D. Wiedmeier, B.R. Bowman, D.P. Cornforth, and **K.C. Olson**. 1994. Heifer versus bull calves in a slaughter weight calf production system. *J. Anim. Sci.* 72(Suppl. 2):110.
72. Stenquist, N.J., R.D. Wiedmeier, and **K.C. Olson**. 1994. By-pass protein and implants in beef cattle. *J. Anim. Sci.* 72(Suppl. 2):110.
73. **Olson, K.C.**, J.R. Jaeger, C.W. Peters, and L.R. Corah. 1993. Rumen-degradable or rumen-escape lipid supplementation to stimulate puberty or fertility in yearling beef heifers. *J. Anim. Sci.* 71(Suppl. 1):247.
74. **Olson, K.C.** 1992. Shortgrass range vegetation response to nine years of intensive-early stocking. *Soc. Range Manage. 45th Annual Meeting Abstr.* No. PO68.
75. Jaeger, J.R., **K.C. Olson**, and L.R. Corah. 1991. Estrus response of postpartum cows to prostaglandin or prostaglandin and melengestrol acetate. *J. Anim. Sci.* 69(Suppl. 1):127.
76. Jaeger, J.R., **K.C. Olson**, L.R. Corah, and J.R. Brethour. 1991. Reproductive response of virgin heifers exposed to a 10 or 14-day melengestrol acetate-prostaglandin system. *J. Anim. Sci.* 69(Suppl. 1):447.
77. **Olson, K.C.**, J.R. Jaeger, and J.R. Brethour. 1991. Schedule of energy supplementation to heifers on dormant native range. *J. Anim. Sci.* 69(Suppl. 1):78.
78. **Olson, K.C.**, and G.D. Sunvold. 1991. Predicting digestibility of mixed cool- and warm-season grass diets with internal markers. *J. Anim. Sci.* 69(Suppl. 1):275.
79. Jaeger, J.R., L.R. Corah, J.C. Whittier, J.C. Meiske, and **K.C. Olson**. 1990. Reproductive response of virgin heifers exposed to a melengestrol acetate-prostaglandin system. *J. Anim. Sci.* 68(Suppl. 1):448.
80. Jaeger, J.R., **K.C. Olson**, L.R. Corah, J.R. Brethour, and W.E. Beal. 1990. Postpartum prostaglandin therapy in the anestrous beef cow. *J. Anim. Sci.* 68(Suppl. 1):122.
81. **Olson, K.C.**, J.R. Brethour, J.R. Jaeger, and R.C. Cochran. 1990. Effect of winter environment (range vs. drylot) on replacement heifer development and behavior. *Soc. Range Manage. 42nd Ann. Meeting Abstr.* No. 156.
82. **Olson, K.C.**, and J.L. Launchbaugh. 1989. Steer growth and nutritional response to intensive-early stocking of shortgrass rangeland. *Soc. Range Manage. 42nd Ann. Meeting Abstr.* No. 247.
83. Houghton, P., and **K.C. Olson**. 1987. Native range-complementary forage grazing systems for reproductive cattle. p. 108. *In: Fort Hays Branch Station 1987 Field Day and Roundup. Kansas Agric. Exp. Stn. Rep. of Prog.* 525.
84. Houghton, P., and **K. Olson**. 1987. Native range-complementary forage grazing systems for reproductive cattle. *Kansas Agric. Exp. Stn./Coop. Ext. Serv. Ann. Conf. Abstr.* No. 71.

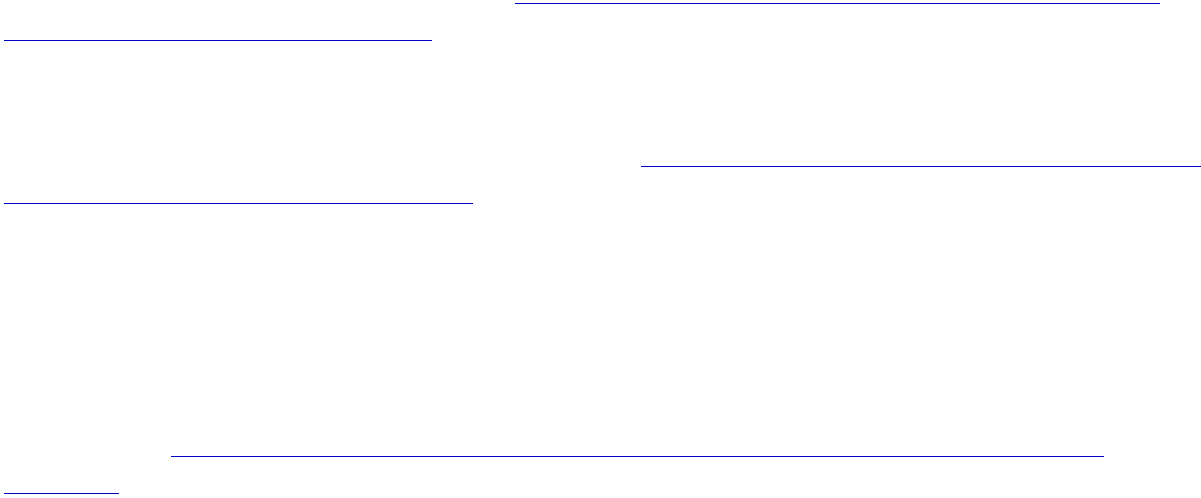
85. **Olson, K.C.** 1987. Intensive-early stocking of western Kansas shortgrass rangeland. Kansas Agric. Exp. Stn./Coop. Ext. Serv. Ann. Conf. Abstr. No. 105.

Abstracts of Volunteered Scientific Presentations (cont.)

86. Bushnell, J.L., and **K. Olson**. 1986. The use of near infrared spectrophotometry for managing crested wheatgrass ranges - a predictive model of cattle ingestive behavior in response to sward characteristics. West. Soc. Crop Sci. Ann. Meeting Abstr. p.11.
87. **Olson, K.C.**, and J.C. Malechek. 1986. Ingestive behavior in relation to changing sward structure under rapid defoliation. Soc. Range Manage. 39th Ann. Meeting Abstr. No. 399.
88. **Olson, K.C.**, and J.C. Malechek. 1986. Nutritional response of heifers to short duration grazing. Soc. Range Manage. 39th Ann. Meeting Abstr. No. 99.
89. **Olson, K.C.**, R.L. Senft, and J.C. Malechek. 1986. A predictive model of cattle ingestive behavior in response to sward characteristics. J. Anim. Sci. 64(Suppl. 1):486.
90. **Olson, K.C.**, R.S. White, and B.W. Sindelar. 1983. Effect of precipitation and stocking rate on plant cover on Northern Great Plains grasslands. Bull. Ecol. Soc. of Amer. 64:88.
91. **Olson, K.C.**, R.S. White, and B.W. Sindelar. 1982. Effect of precipitation on mixed grass plant communities of Southeastern Montana and its implications to grazing intensity. Soc. Range Manage. 35th Ann. Meeting Abstr.

Technical Reports

1. Fulton, J.O., **K.C. Olson**, J.J. Kincheloe, A.A. Harty, M.K. Luebbe, K.R. Underwood, S.M. Scramlin, and A.D. Blair. 2015. Effects of zilpaterol hydrochloride supplementation on growth performance, carcass characteristics and production economics of steers differing in breed composition. p. 46-52. : (E. Grings, ed.) 2015 South Dakota Beef Report. <http://www.sdstate.edu/ars/species/beef/beef-reports/upload/09-Fulton-Effects-of-zilpaterol-hydrochloride-spplementation.pdf>
2. Hojer, N.L., M.B. Hubert, P.S. Johnson, M.H. Price, **K.C. Olson**. 2012. Effects of weaning age



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18. **Olson, K.C.** 1995. Improving livestock production efficiency from beef cattle grazing irrigated meadows. Final Report to USU Vice President for Research - Utah Mineral Lease Fund Grants.

Technical Reports (cont.)

19. **Olson, K.C.** 1995. Livestock production from irrigated pastures in the Intermountain West. In: Utah Pasture Grazing Lands Research and Development: Technical White Paper. Unpublished Report. Utah Agricultural Experiment Station, Utah State University, Logan.
20. **Olson, K.C.**, R.D. Wiedmeier, and R. Banner. 1995. Reducing methane emissions from beef

Extension Publications (cont.)

7. Wright, C., J. Walker, and **K. Olson**. 2010. Nutrient requirements of beef cows. South Dakota State University Cooperative Extension Service Extension Extra 2072. Available at: http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx2072.pdf. Accessed September 14, 2010.
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12. Wiedmeier, R.D., D.R. ZoBell, D.L. Snyder, and **K.C. Olson**. 2005. Biological and economic aspects of an accelerated, value-added cow-calf production system utilizing improved irrigated farm land. Utah State University Extension Publication AG/beef/09. Available at: <http://extension.usu.edu/files/publications/BiologicalEconomicAspects.pdf>. Accessed October 26, 2005.
13. **Olson, K.C.**, C.A. Stonecipher, J.C. Malechek, and D.D. Carter. 2004. Intake and digestibility response to forage kochia () in a low quality forage diet. p. 39-43. : Proc., Forage Kochia Workshop and Tour, November 9-10, 2004. Logan, UT.
14. ZoBell, D.R., B.L. Waldron, **K.C. Olson**, R.D. Harrison, K. Jensen, and H. Jensen. 2004. The use of forage kochia by beef cows for fall/winter grazing. p. 30-34. : Proc., Forage Kochia Workshop and Tour, November 9-10, 2004. Logan, UT.
15. Wiedmeier, R.D., D. Meek, D.L. Snyder, D. ZoBell, K. Jensen, A.J. Young, T.C. Griggs, and **K.C. Olson**. 2004. Cow-calf production and profitability on irrigation pastures composed of forage mixtures or monocultures during the first year after establishment. Utah State University Extension Publication AG/Beef/2004-05. Available at: <http://extension.usu.edu/files/factsheets/ag2004-beef05.pdf>. Accessed October 26, 2005.

Popular Press Publications

1. **Olson, K.C.** 2015. Is Creep Feeding a Paying Option This Year? Tri-State Livestock News. May 30.
2. **Olson, K.C.** 2015. Prussic Acid Poisoning. Tri-State Livestock News. August 22.
3. **Olson, K.C.** 2015. Selecting Replacement Heifers This Fall. Tri-State Livestock News. October 3.
4. **Olson, K.C.** 2015. Criteria for culling cows. Tri-State Livestock News. November 14.
5. **Olson, K.C.** 2015. Year-End Review and 2016 Planning. Tri-State Livestock News. December 26.
6. **Olson, K.C.** 2014. Adding Value to Beef Cows Through Genetic Improvement. Tri-State Livestock News. January 18.
7. **Olson, K.C.** 2014. Alternative Feeds for Beef Cows. Tri-State Livestock News. March 1.
8. **Olson, K.C.** 2014. Cow Nutrition From Calving to Breeding. Tri-State Livestock News. April 12.
9. **Olson, K.C.** 2014. Tips for Cow Herd Rebuilding. Tri-State Livestock News. May 24.
10. **Olson, K.C.** 2014. Mixing Livestock and Farming. Tri-State Livestock News. July 5.
11. **Olson, K.C.**

Popular Press Publications (cont.)

24. **Olson, K.C.** 2012. Generational transition on family ranches. Tri-State Livestock News. February 4.
25. **Olson, K.C.** 2012. Do we need to be concerned about drought? Tri-State Livestock News. March 17.
26. **Olson, K.C.** 2012. Fly control considerations. Tri-State Livestock News. April 28.
27. **Olson, K.C.** 2012. Some tips for making good hay. Tri-State Livestock News. June 9.
28. **Olson, K.C.** 2012. Supplementation to save forage during drought. Tri-State Livestock News. July 21.
29. **Olson, K.C.** 2012. Cattle diet quality during drought. Tri-State Livestock News. September 1.
30. **Olson, K.C.** 2012. Non-protein nitrogen in protein supplements for beef cows. Tri-State Livestock News. October 13.
31. **Olson, K.C.** 2012. Managing and Marketing Cull Cows. Tri-State Livestock News. November 24.
32. **Olson, K.C.** 2011. Managing calving to coincide with forage availability. Tri-State Livestock News. January 22.
33. **Olson, K.C.** 2011. Relationship between cow size and nutrient requirements. Tri-state livestock news. March 5.
34. **Olson, K.C.** 2011. Matching your cattle to your environment. Tri-State Livestock News. April 16.
35. **Olson, K.C.** 2011. Does your stocking rate fit your cow size? Tri-State Livestock News. May 28.
36. **Olson, K.C.** 2011. Livestock water quality in wet years. Tri-State Livestock News. July 9.
37. **Olson, K.C.** 2011. Opportunity for Beginning Ranchers. Tri-State Livestock News. August 20.
38. **Olson, K.C.** 2011. Selecting heifers to keep as replacements. Tri-State Livestock News. October 1.
39. **Olson, K.C.** 2011. Alfalfa hay as a protein supplement. Tri-State Livestock News. November 12.
40. **Olson, K.C.** 2011. Self-Fed Cattle Supplements. Tri-State Livestock News. December 24.
41. **Olson, K.C.** 2010. Reducing Costs of Delivering Feed to Cattle – Supplementation Frequency. Tri-State Livestock News. January 9.
42. **Olson, K.C.** 2010. Calving Season with Snow on the Ground. Tri-State Livestock News. February 20.
43. **Olson, K.C.** 2010. Breeding Season Nutrition for Yearling Replacement Heifers. Tri-State Livestock News. April 3.

Popular Press Publications (cont.)

44. **Olson, K.C.** 2010. Thinking Ahead to Marketing. Tri-State Livestock News. May 15.
45. **Olson, K.C.** 2010. Hay Making Challenges in Wet Weather. Tri-State Livestock News. June 26.
46. **Olson, K.C.** 2010. End of Breeding Season - Bull Management. Tri-State Livestock News. August 7.
47. **Olson, K.C.** 2010. Options for replacement heifer management this fall and winter. Tri-State Livestock News. September 18.
48. **Olson, K.C.** 2010. Plan Replacement Heifer Growth Rates to Increase Value as Cows. Tri-State Livestock News. October 30.
49. **Olson, K.C.** 2010. Snow as a Water Source for Cattle. Tri-State Livestock News. December 11.
50. **Olson, K.C.** 2009. Body Condition Scoring Beef Cows. Tri-State Livestock News. February 7.
51. **Olson, K.C.** 2009. Management of the Bull Battery. Tri-State Livestock News. March 21.
52. **Olson, K.C.** 2009. Think about pinkeye prevention for the coming summer. Tri-State Livestock News. May 9.
53. **Olson, K.C.** 2009. Sweet Clover poisoning. Tri-State Livestock News. June 13.
54. **Olson, K.C.** 2009. Planning Ahead for Fall Cow Herd Management. Tri-State Livestock News. July 25.
55. **Olson, K.C.** 2009. Valuable Information in Cattle Records. Tri-State Livestock News. September 5.
56. **Olson, K.C.** 2009. Nutrition and potential toxicity of sweet clover hay. Tri-State Livestock News. October 17.
57. **Olson, K.C.** 2009. Mineral Nutrition for Grazing Beef Cows. Tri-State Livestock News. November 28.
58. **Olson, K.C.** 2009. Valuable Information in Cattle Records. South Dakota Cattleman's Association Magazine. December 8.
59. **Olson, K.C.** 2008. Reproductive Management Planning for the Upcoming Breeding Season. Tri-State Livestock News. January 26.
60. **Olson, K.C.** 2008. What Might We Expect From The Weather This Spring? Tri-State Livestock News. March 8.
61. **Olson, K.C.** 2008. High Sulfate Livestock Water. Tri-State Livestock News. April 19.
62. **Olson, K.C.** 2008. Considerations on pasture rental costs. Tri-State Livestock News. May 31.
63. **Olson, K.C.** 2008. Planning for Winter Feed Needs. Tri-State Livestock News. July 12.

Popular Press Publications (cont.)

64. **Olson, K.C.** 2008. Adding Value to Calves Before Selling This Fall. Tri-State Livestock News. August 23.
65. **Olson, K.C.** 2008. Evaluating Winter Feed Needs. Tri-State Livestock News. October 4.
66. **Olson, K.C.** 2008. Cold weather and cattle nutrient requirements. Tri-State Livestock News. November 15.
67. **Olson, K.C.** 2008. Concerns with Energy Supplements with Low Quality Forages. Tri-State Livestock News. December 27.
68. **Olson, K.C.** 2008. Replacement Heifer Growth Rates. South Dakota Cattleman's Association Magazine. February 2, 2008.
69. **Olson, K.C.** 2007. Supplemental Feedstuffs for Low Quality Forages. Tri-State Livestock News. January 12, 2007.
70. **Olson, K.C.** 2007. Beef Cow Nutrition during Late Pregnancy and Early Lactation. Tri-State Livestock News. February 23, 2007.
71. **Olson, K.C.** 2007. Grass Tetany: Beware of the Risk!!. Tri-State Livestock News. April 5, 2007.
72. **Olson, K.C.** 2007. Creep Feeding Options. Tri-State Livestock News. May 17, 2007.
73. **Olson, K.C.** 2007. Evaluating the Value of Creep Feeding. South Dakota Cattleman's Association Magazine. June 9, 2007.
74. **Olson, K.C.** 2007. Growth Implants in Heifer Calves. Tri-State Livestock News. June 30, 2007.
75. **Olson, K.C.** 2007. Potential for High Nitrate Levels in Droughty Forages. Tri-State Livestock News. August 11, 2007.
76. **Olson, K.C.** 2007. Feeding Wheat Straw and Other Crop Residues to Beef Cows. Tri-State Livestock News Cattle Journal. August 17, 2007.
77. **Olson, K.C.** 2007. Sampling Feeds for Nutrient Analysis. Tri-State Livestock News. September 22, 2007.
78. **Olson, K.C.** 2007. Potential for High Nitrate Levels in Droughty Forage. Cattle Business Weekly. September 27, 2007.
79. **Olson, K.C.** 2007. Cull Cow Feeding Options. Tri-State Livestock News. November 3, 2007.
80. **Olson, K.C.** 2007. New Ideas about Replacement Heifer Growth Rates. Tri-State Livestock News. December 15, 2007.
81. **Olson, K.C.** 2006. Fall Drought Management. Tri-State Livestock News. August 31, 2006.
82. **Olson, K.C.** 2006. Replacement Heifer Management after Weaning. Tri-State Livestock News. October 19, 2006.
83. **Olson, K.C.** 2006. Corn Price Implications. Tri-State Livestock News. December 1, 2006.

Popular Press Publications (cont.)

84. **Olson, K.C.** 2006. Crossbreeding Cattle: A powerful tool to improve efficiency of production in a herd. Tri-State Livestock News Cattle Journal. December 6, 2006.
85. **Olson, K.C.** 2004. Proper management during, after drought important. Feedstuffs 76(29):11-13.

EXTENSION PRESENTATIONS

- 2014 After the Storm: What's Next? Extension Program, Cow Share Arrangements Can Create Win-Win Alternatives, Hot Springs, February 20.
- Range, Soils, and Beef Day, Grazing Steer Response to Level of Prairie Dog Colonization on Native Prairie, NDSU Hettinger Research and Extension Center, March 12.
- Nitrate Quick Test Initial Training and Certification, webinars, 2 presentations, April 15 and 21.
- Nitrate Quick Test Annual Recertification Training, webinars, 2 presentations, April 15 and 21.
- Montana Nutrition Conference, October 2013 Blizzard in South Dakota: Ramifications, Bozeman, MT, April 23.
- Sitting Bull College Sustainable Agriculture Conference, Grazing Steer Response to Level of Prairie Dog Colonization on Native Prairie, Ft. Yates, ND, April 25.
- beefSD class 2, Cow Nutrition and BCS, Wall, SD, June 12.
- beefSD class 2, Elevator Speeches, Chicago, IL, July 14.
- Hot Springs Rancher Seminar, Mineral Nutrition for Cows and Calves, Hot Springs, SD, September 10.
- SD Grazing School, Seasonality of Grazing Nutrition, Chamberlain, SD, September 17.
- SD Grazing School, Mineral Nutrition Needs of Livestock, Chamberlain, SD, September 17.
- 2013 Pine Ridge Area Farm and Ranch Day, Drought Issues – Range Management/Stocking Rate, Rocky Ford, SD, January 9.
- Tri-County Ranchers Workshop, Livestock Nutrition and Water Quality, Winner, SD, January 16.
- South Dakota Department of Agriculture, Next Generation of Livestock Production, Martin, SD, January 23.
- Sitting Bull College Sustainable Agriculture Conference, Grazing Livestock Nutrition, Ft. Yates, ND, April 5.
- Nitrate Quik Test Initial Training and Certification, webinars, 2 presentations, May 4 and May 7.
- Nitrate Quik Test Annual Recertification Training, webinars, 2 presentations, May 4 and May 7.
- beefSD class 2, How to Develop a Marketing Plan, Pierre, SD, August 28.

Cottonwood Laboratory Grand Opening and Tri-County Ag Day, High Sulfate Water Research, 2 presentations, Cottonwood Research Station, September 7.

SD Grazing School, Seasonality of Grazing Nutrition, Chamberlain, SD, September 11.

SD Grazing School, Mineral Nutrition Needs of Livestock, Chamberlain, SD, September 11.

beefSD class 2, Feedlot Cattle Finishing Management, Sturgis, SD, November 5.

EXTENSION PRESENTATIONS (cont.)

After the Storm: What's Next? Extension Program, Cattle Nutrition and Health, 4 presentations: Faith, New Underwood, Union Center, and Newell, December 17-18.

2012 Perkins County Livestock Improvement Association, Relationship Between Cow Size, Nutrient Requirement, and Production Capacity, Bison, SD, January 10.

8th Annual Cattleman's Workshop, "Size Does Matter" in Cow/Calf Production Systems: Cow Size and Corresponding Nutrient Demands, La Grande, OR, January 21.

Rancher's Workshop, Dietary Supplements for Winter Grazing, Miller, SD, January 26.

AgCEO, Supplementation Basics, Rapid City, SD, February 21.

AgCEO, Mineral Programs for Grazing Animals, Faith, SD, February 22.

AgCEO, Chilean Learning Communities, Rapid City, SD, March 6.

South Dakota Rangeland Days, High Sulfate Water Research, Cottonwood, SD June 19

South Dakota Agriculture Exchange, Hay and Forage: Nutrition Saved is Nutrition Earned, 2 presentations, Pierre, SD, June 28-29.

Nitrate Quik Test Training and Certification, webinars, 2 presentations, July 25 and August 9

Drought Program, Before the Snow Flies, How Cow/Calf Producers Can Prepare, Chamberlain, September 10.

SD Grazing School, Seasonality of Grazing Nutrition, Chamberlain, SD, 2 presentations, September 11 and 13.

SD Grazing School, Mineral Nutrition Needs of Livestock, Chamberlain, SD, 2 presentations, September 11 and 13.

beefSD, Alternative Feedstuffs in This Drought, Pierre, November 6.

beefSD, Grazing Nutrition, Managing by BCS, Apps for Ration Analysis, Pierre, November 6.

beefSD, Managing and Marketing Cull Cows, Pierre, November 7.

Extension Meeting in Chile, Options to Improve Beef Production in Extensive Systems, Punta Arenas, Chile, December 6.

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31st Annual Utah Beef Cattle Field Day, Relationship Between Cow Size, Nutrient Requirement, and Production Capacity, Provo, UT, February 8.

33rd Annual Arizona/Utah Range Livestock Workshops, Matching Your Cattle to Your Environment, 2 presentations, St. George and Kanab, UT, April 5-6.

Range Beef Cow Symposium, Cow Side of Producing a 1000 lb. Feeder: Cow Size and Expenses, Mitchell, NE, November 30.

EXTENSION PRESENTATIONS (cont.)

2010 SASSY (Sustaining Annie's Project) Workshop, Mineral Nutrition in Gestating Cows, Buffalo, SD, January 27.

Bullnanza, Delivering Supplements on Rangeland, Winner, SD, February 12.

SDSU Winter Range Camp, Winter Feed Requirements for Cattle, 2 presentations, Isabel and Bison, SD, March 3.

Rapid City Rotary Club, Live Animal to Carcass Evaluation, Rapid City, SD, February 2.

South Dakota State Extension Advisory Board, Overview of Master Range Cattle Manager Program, Rapid City, SD, February 5.

Haakon County Pasture Walk, Effect of Grasshoppers on Stockpiled Forage, Philip, SD,

EXTENSION PRESENTATIONS (cont.)

Montana Winter Grazing Seminar, Evaluating Alternative Strategies f

EXTENSION PRESENTATIONS (cont.)

Wells Fargo Crop Insurance meeting, Beef Production Systems that Enhance Profitability and Support Rural Economies, Union Center, SD.

Forage Based Field Day for NRCS, Effect of Early Weaning and Winter Feeding on Cow Performance, Dickinson, ND.

Forage Based Field Day for NRCS, Beef System Adjustments due to the Effect of Ethanol Production, Dickinson, ND.

Antelope Research Station Field Day, Alternative Beef Cattle Management Systems, Buffalo, SD.

Vitalix Seminar: Nutrition and Immunity Relations in Beef Cattle, Effect of Nutrition on Immunity in Beef Cattle, Rapid City, SD.

Corn, Cattle and Energy, Ranch Labor Issues (team presentation with Stacy Hadrick), Rapid City, SD.

Range Beef Cow Symposium, Delivery of Supplements on Rangelands, Fort Collins, CO.

2006: South Dakota Annual Extension Conference, Educator In-Service Training, OSU Cowculator and NRC2002 ration analysis programs, Brookings, SD.

2005: Arizona-Utah Range Livestock Workshop, 2 presentations, Kanab and St. George, UT.

Universidad de Magallanes, 2 presentations, Animal Production Class and Seminar, Punta Arenas, Chile.

Chilean Livestock Producer Technical Group, Punta Arenas, Chile.

2004

GRANSTMANSHIP (cont.)

12. **Olson, K.C.**, C. Clark, A. Harty, and M. Lemke. Nitrate Quiktest training, Dakota SARE Mini-Grants Program, 4/2008-3/2009, \$2000
13. Johnson, P.S., **K.C. Olson**, R.N. Gates, T. Nleya, S. Fausti, M.K Beutler, and G. Perry.
K.C. Olson

26. **Olson, K.C.**, Characterization of protein quality in potential forages for irrigated pastures in the Intermountain West, USU Vice President for Research, 1998, \$20,000
27. **Olson, K.C.**, B.E. Norton, J.E. Bowns, and R.D. Wiedmeier, Evaluation of livestock and vegetation responses to grazing systems on southern Utah forested rangelands, USU Vice President for Research, 1998, \$15,000
28. **Olson, K.C.**, Suckling beef calf performance response to supplementation with Crystalyx soft molasses creep blocks, Hubbard Milling Company, 1997, \$10,432
29. **Olson, K.C.**, B.E. Norton, J.E. Bowns, and R.D. Wiedmeier, Evaluation of livestock and vegetation responses to grazing systems on southern Utah forested rangelands, Utah Department of Agriculture and Food/Utah Mineral Lease Fund, 1997, \$12,300
30. **Olson, K.C.**, R.D. Wiedmeier, and R. Banner, Addendum to reducing methane emissions from beef cow herds in range based management systems, EPA Ruminant Livestock Efficiency Program, 1995, \$36,557
31. **Olson, K.C.**, R.D. Wiedmeier, and R. Banner, Reducing methane emissions from beef cow herds in range based management systems, EPA Ruminant Livestock Efficiency Program, 1994, \$524,695
32. **Olson, K.C.**, Beef cattle grazing management to improve production efficiency from irrigated meadows, Utah Department of Agriculture and Food/Utah Mineral Lease Fund, 1994, \$15,000
33. **Olson, K.C.**, Grazing livestock management for meadows, Utah Department of Agriculture and Food/Utah Mineral Lease Fund, 1993, \$12,000
34. **Olson, K.C.**, Grazing livestock management for meadows, USU Faculty Research Grants, 1993, \$14,875

MENTORING OF GRADUATE STUDENTS

1. Rodrigo Rollim. MS in Animal Science, Animal Nutrition
Thesis title: Evaluation of the production potential for cow/calf operations grazing Utah high-elevation irrigated meadows.
Completed 1995
2. Raul Lira. MS in Animal Science, Animal Nutrition
Thesis title: Influence of type of supplemental carbohydrate on ruminal responses and methane output from ruminants consuming low-quality forage.
Completed 2000
3. Rebecca Sannes. MS in Dairy Science, Animal Nutrition
Thesis title: The influence of ruminally degradable carbohydrates and nitrogen on microbial protein synthesis and protein efficiency of lactating Holstein cows
Completed 2000
4. Matt Palmer. MS in Animal Science, Animal Management
Thesis title: Influence of supplemental protein degradability on nutrient utilization and methane output by beef cows on dormant, cool-season forages.
Completed 2000

