

## **CURRICULUM VITAE**

### **NAME**

Peel, Richard Kraig

### **ADDRESS**

Animal Sciences  
College of Agricultural Sciences

Animal Sciences  
4040 Campus Delivery

### **PHONE**

(970) 491-6928

### **EDUCATION**

2000 Ph D, Texas A&M University

1997 MS, Texas A&M University

1987 BS, Angelo State University

### **ACADEMIC POSITIONS**

1995 - 1999 Graduate Research / Teaching Assistant, Texas A&M University.

### **OTHER POSITIONS**

2009 - Present Director, Western Center for Integrated Resource Management, Colorado State University.

2007 - Present Assistant Professor, Animal Sciences, Colorado State University.

2000 - 2009 Coordinator, Western Center for Integrated Resource Management, Colorado State University.

2000 - 2001 Assistant Professor, Agricultural Science, Sam Houston State University.

1999 - 2000 Lecturer, Agricultural Science, Sam Houston State University.

1991 - 1995 Ranch Manager, B.E. Wilson Corporation, Del Rio, Texas.

1989 - 1991 Extension Agent, Agriculture, Texas Agricultural Extension Service.

1977 - 1988 General Ranch Hand, U Lazy S Ranch, Post, Texas.

Director

Director

### **PUBLISHED WORKS**

#### **Refereed Journal Articles**

- Ahola, J. K., Whittier, J. C., Seidel, G. E., Peel, R. K. (in press). Administration of a GnRH analogue on day 9 of a 14-day controlled internal drug release insert with timed AI in lactating beef cows. *J Anim Sci manuscript E-2012-5497*.
- Miller, K.E., Whittier, J. C., Peel, R. K., Enns, R. M., Bruemmer, J. E., Umberger, W.J. Case Study: Comparison of Breeding and Marketing Systems for Red Angus Cattle Using an Integrated Computer-Based Spreadsheet. *The Professional Animal Scientist*, 20, 429-436.
- Peel, R. K., Ramsey, W.S., Boleman, C.T. Chilled versus Non-Chilled Evaluation of Ovine Carcasses. *Journal of Animal Science*, 71(Suppl 1), 82.
- Peel, R. K., Ramsey, W.S. Differences in Growth and Carcass Characteristics in Young Goats of Different Genotype. *Journal of Animal Science*, 79(Suppl 1), 97.
- French, J., Ahola, J. K., Whittier, J. C., Giles, R., Frasier, W. M., Enns, R. M., Peel, R. K. (in press). Differences in lifetime productivity of beef heifers conceiving to artificial insemination (AI) vs natural service (NS) as a yearling and among females that were offspring of an AI or NS mating. *Prof Anim Sci manuscript 12-01155*.
- Peel, R. K., Ahola, J. K., Whittier, W.D., Whittier, J. C. Effect of Calf Separation During the 12-Hour Interval Between 2 Prostaglandin F<sub>2</sub>± Injections When Using the 5-Day CO-Synch + Controlled Internal Drug-Release Synchronization Protocol on Pregnancy Rate in Beef Cows. *The Professional Animal Scientist*, 26, 534-539.
- Peel, R. K., Whittier, J. C., Enns, R. M., Grove, A., Seidel, G. E. (in press). Effect of Six versus Twelve Hour Interval between Two Prostaglandin F<sub>2</sub>± Injections Administered with Gonadotropin-Releasing Hormone and Controlled Internal Drug-Release on Pregnancy Rate in Beef Cows. *The Professional Animal Scientist*.
- Effects of Overfeeding Adolescent Ewe Lambs on Progeny Growth. *Journal of Animal Science*, 86(E-Suppl 2), 139.
- Peel, R. K. Effects of overfeeding naturally-mated adolescent ewes on maternal, fetal, and postnatal lamb growth. *Journal of Animal Science*.
- Ahola, J. K., Whittier, J. C., Seidel, G. E., Peel, R. K. (in press). Fixed-time AI in lactating beef cows after GnRH on day 9 of a 14-day controlled internal drug release insert with timed AI in lactating beef cows. *J Anim Sci* 91:1866-1873, 91, 1866-1873.
- Improving Extension by Learning from Outstanding County Agents. *Journal of Extension*, 49(4).
- Boleman, C.T., McKenna, D.R., Ramsey, W.S., Peel, R. K., Savell, J.W. Influence of feeding vitamin D-3 and aging on the tenderness of four lamb muscles. *Meat Science*, 67, 185-190.
- Hyland, A., Seidel, G. E., Enns, R. M., Peel, R. K., Whittier, J. C. Intervals of Five or Seven Days between Controlled Internal Drug-Release Insertion, Gonadotropin-Releasing Hormone and Prostaglandin F<sub>2</sub>α injections: Effects on Pregnancy Rate and Follicular Size. *Professional Animal Scientist*(25), 150-154.
- French, J., Ahola, J. K., Whittier, J. C., Giles, R., Repenning, P., Seidel, G. E., Peel, R. K. Ovarian response and timed artificial insemination pregnancy rates in beef heifers after synchronization of follicular waves and ovulation via a 14-day controlled internal drug release insert estrous synchronization protocol. *Prof Anim Sci manuscript 12-01157 Accepted for Publication 10/29/12*.
- Seabrook, J.L., Peel, R. K., Engle, T. E. The effects of replacing dietary carbohydrate with calcium salts of fatty acids on finishing lamb feedlot performance, blood metabolites, muscle fatty acid composition, and carcass characteristics. *Small Ruminant Res*, doi:10.1016/j.smallrumres.2010.10.009.

- Miller, K.E., Peel, R. K., Kossler, J.C., Batchelder, J.R., Enns, R.M. Western Center for Integrated Resource Management's Master's Degree Program at Colorado State University. *North American Colleges and Teachers of Agriculture*, 47(3), 5-Feb.
- Barcellos, J. O., Costa Jr., J.B. C., Whittier, J. C., Ahola, J. K., Peel, R. K. Post Weaning Beef Heifer Feeding System on Pregnancy rate at 18 months of age. *Springer Journal*.
- Bates, K. E., Weaber, R. L., Bormann, J. M., Moser, D. W., Salak-Johnson, J. L., Chase, C. C. L., Peel, R. K., Van Campen, H., Loneragan, G. H., Wagner, J. J., Boddhireddy, P., Payaga, K., Enns, R. M. Relationships among temperament, immune function, and carcass merit in beef cattle. *Western Section American Society of Animal Science*, 64.
- Peel, R. K., Seabrook, J.L., Seidel, G. E., Whittier, J. C., Grove, A.V., Ahola, J. K. (2013). Effect of gonadotropin-releasing hormone in long-term controlled internal drug release protocols on pregnancy rates in beef heifers artificially inseminated after observed estrus or fixed time. *Professional Animal Scientist*, 29(3), 228-236.
- Repenning, P.E., Ahola, J. K., Callan, R. J., French, J.T., Giles, R.L., Peel, R. K., Whittier, J. C., Fox, J.T., Engle, T. E. (2013). Effects of method of castration and pain mitigation on behavior and feedlot performance in cull beef bulls. *Journal of Animal Science, Proceedings, Western Section, American Society of Animal Sciences, July 16th, 2012: Phoenix, Arizona, 91*, 4975-4983.
- Giles, R.L., Peel, R. K., French, J.T., Repenning, P.E., Ahola, J. K., Whittier, J. C., Seidel, G. E. (2013). Fixed-time AI in lactating beef cows after GnRH on day 9 of a 14-day CIDR estrus synchronization protocol. *Journal of Animal Science, and Proceedings, Western Section, American Society of Animal Sciences, July 16, 2012: Phoenix, Arizona, 91*, 1866-1873.
- Repenning, P., Ahola, J. K., Callan, R. J., French, J., Giles, R., Bigler, B., Coetzee, J.F., Wulf, L.W., Peel, R. K. (2013). Impact of oral meloxicam administration before and after band castration on feedlot performance and behavioral response in weaning beef bulls. *Journal of Animal Science, 91*, 4965-4974.
- Bates, K. E., Weaber, R. L., Bormann, J. M., Moser, D. W., Salak-Johnson, J. L., Chase, C. C. L., Peel, R. K., Van Campen, H., Loneragan, G. H., Wagner, J. J., Boddhireddy, P., Payaga, K., Enns, R. M. (2013). Relationships among temperament, immune function, and carcass merit in beef cattle. *Western Section American Society of Animal Science*, 64.

## Refereed Proceedings or Transactions

- Giles, R., French, J., Repenning, P., Ahola, J. K., Whittier, J. C., Seidel, G. E., Peel, R. K. (in press). *Administration of GNRH on Day 9 of a 14-day CIDR with Co-Synch 72H in Lactating Beef Cows* (vol. 62, pp. 3). Proceedings, WSASAS.
- Peel, R. K., Costa Jr., J.B.G. *Assessing reticulo-rumen temperature change and ovulation in lactating dairy cows*. Brazilian Society of Animal Science.
- Costa, J.B.G., Whittier, J. C., Diaz, I.D.P.S., Canellas, L., Peripolli, V., Ahola, J. K., Peel, R. K. *Body Condition score and heart girth change between 7 and 18 months of age to estimate pregnancy probability of Hereford heifers mated at 18 months of age to estimate pregnancy probability of Hereford heifers mated at 18 months of age*. Proceedings, Western Section, American Society of Animal Sciences, July 16: Phoenix, Arizona.
- Batchelder, J.R., Peel, R. K. *Challenges of Objectively Assessing Thought Process*. NACTA Annual Conference Proceedings June 22-23 Gainesville, Florida, pp 7.
- Bigler, B.J., French, J.T., Ahola, J. K., Whittier, J. C., Frasier, W. M., Seidel, G. E., Enns, R. M., Peel, R. K. *Comparing the lifetime productivity of beef females initially conceiving to, or sired by artificial insemination*

or natural service. Proceedings, Western Section, American Society of Animal Sciences, July 16, 2012: Phoenix, Arizona.

Peel, R. K., Costa Jr., J.B.G. *Detection of parturition using passive monitoring of reticulorumen temperature in dairy heifers.*. Brazilian Society of Animal Science.

Priest, M.K., Peel, R. K., Whittier, J. C., Enns, R. M., Seidel, G. E. *Effect of 6-H VS 12-H Interval Between Two Prostaglandin Injections in Beef Cows Synchronized for Ovulation Using the 5-D Co-Synch +Cidr Protocol* (vol. 60, pp. 245-247). Proceedings, Western Section, American Society of Animal Science.

Yager, A.L., Ahola, J. K., Callan, R. J., Whittier, J. C., Peel, R. K., Coetzee, J.F. *Effect of ketamine-stun and meloxicam on behavior and performance associated with band castration in cull beef bulls.*. Western Section, American Society of Animal Sciences.

Berrett, C.J., Seabrook, J.L., Ahola, J. K., Seidel, G. E., Whittier, J. C., Ahola, J. K., Peel, R. K. *Effect of two, four, and six-hour intervals between two prostaglandin F2a injections administered with five-day CO-Synch + CIDR protocol on pregnancy rate in beef cows.* Proceedings, Western Section, American Society of Animal Sciences, July 16, 2012: Phoenix, Arizona.

Seabrook, J.L., Peel, R. K., Engle, T. E. *Effects of Calcium Salts of Fatty Acids on Finishing Lamb Feedlot Performance and Carcass Characteristics.* Poster presented at the 2009 Joint Annual Meeting of ADSA, CSAS, and ASAS, July 15, 2009: Montreal, Quebec, Canada.

Bigler, B., Ahola, J. K., Whittier, J. C., Peel, R. K. *Effects of monensin sodium and plant extracts containing cinnamaldehyde, capsicum, and eugenol on days to puberty, gain, pregnancy rate, and feed efficiency in developing beef heifers receiving a high roughage diet.*. Western Section, American Society of Animal Sciences.

Seabrook, J.L., Peel, R. K., Seidel, G. E., Whittier, J. C. *Efficacy of Day 23 GnRH for CIDR-Select Estrus Synchronization for Beef Heifers Bred 12 Hours After Estrus or by Fixed- Time AI.* Joint Annual Meeting ADSA, PSA, AMPA, CSAS, WSASAS, ASAS, July 12, 2010: Denver, CO.

Costa Jr., J.B.G., Barcellos, J.O.J., Whittier, J. C., Diaz, I.D.P.S., Canellas, L., Peripolli, V., Ahola, J. K., Peel, R. K. *Evaluation of weight gain pattern between 7 and 18 months of age of Hereford heifers and reproductive performance when mated at 18 months of age.* Proceedings, Western Section, American Society of Animal Sciences, July 17th, 2012: Phoenix, Arizona.

Seabrook, J.L., Peel, R. K., Seidel, G. E., Whittier, J. C. *Fixed-Time AI Conception Rates in Beef Cows Resulting from Reduced 2-Shot Prostaglandin Intervals on Day 5 of a 5-d CIDR-Co- Synch Estrus Synchronization.* Joint Annual Meeting ADSA, PSA, AMPA, CSAS, WSASAS, ASAS, July 14, 2010: Denver, CO.

McAllister, C.M., Brigham, B.W., Speidel, S.E., Peel, R. K., Wagner, J. J., Van Campen, H. (in press). *Genetic Associations Between Bovine Respiratory Disease, Carcass Traits in Feedlot Steers* (vol. 62, pp. 89). Proceedings, WSASAS.

Brigham, B.W., McAllister, C.M., Enns, R. M., Peel, R. K. (in press). *Genetic parameters associated with feedlot bovine respiratory disease complex morbidity and mortality.* Western Section, American Society of Animal Sciences.

French, J.T., Giles, R.L., Repenning, P.E., Ahola, J. K., Whittier, J. C., Seidel, G. E., Peel, R. K. (in press). *Improving Timed AI Pregnancy Rates in Beef Heifers by Synchronizing Follicular Waves with GnRH on D9 of a 14-day CIDR plus Co-Synch Protocol* (vol. 62, pp. 26). Proceedings, WSASAS.

Boleman, C.T., Savell, J.W., Ramsey, W.S., Peel, R. K. *Mechanisms of Vitamin D3 on Tenderness of Lamb* (vol. 2, pp. 367). Proceedings of the 54th Annual Reciprocal Meat Conference.

- Culbertson, M.M., Speidel, S. E., Cockrum, R.R., Peel, R. K., Crews, D., Enns, R. M. *Optimum performance testing periods for determining feed efficiency and its parameters in beef cattle.* Western Section, American Society of Animal Sciences.
- Batchelder, J.R., Peel, R. K. *Recruiting Expansion for Agricultural Education.* NACTA Annual Conference Proceedings June 22-23 Gainesville, Florida, pp 58.
- Repenning, P.E., Ahola, J. K., Peel, R. K., Giles, R.L., French, J.T., Whittier, J. C., Crews, D. (in press). *Relationship Between Behavioral Traits, Feedlot Performance in Finishing Steers* (vol. 62, pp. 23). Proceedings, WSASAS.
- Bates, K.E., Weaber, R.L., Bormann, J.M., Moser, D.W., Salak-Johnson, J.L., Chase, C.C., Peel, R. K. *Relationships among temperament, immune function, and carcass merit in beef cattle.* Western Section, American Society of Animal Sciences.
- Pepper, A.R., Enns, R. M., Weaber, R.L., Van Campen, H., Loneragan, G.H., Salak-Johnson, J.L., Chase, C.C.L., Peel, R. K. *Relationships of Exit Velocity and Average Chute Score with Carcass Traits in Feedlot Steers* (vol. 60, pp. 34-36). Proceedings, Western Section, American Society of Animal Science.
- Neary, J.M., Peel, R. K., Holt, T.N., Garry, F.B. *The alveolar-arterial oxygen pressure gradient of pre-weaned beef calves.* Western Section, American Society of Animal Sciences.
- Bigler, B., Ahola, J. K., Whittier, J. C., Sis, M.V., Adams, A.E., Peel, R. K. *The effect of a 7-d CIDR-based pre-synchronization protocol on response to GnRH at the start of 7-d co-synch and pregnancy rate following timed AI in yearling beef heifers.* Western Section, American Society of Animal Sciences.
- Austin, K.J., Seabrook, J.L., Engle, T. E., Peel, R. K., McAllister, C.M., Brigham, B.W. *The Effect of Morbidity on Feedlot Performance and Carcass Quality in Feedlot Steers.* Joint Annual Meeting ADSA, PSA, AMPA, CSAS, WSASAS, ASAS, July 11: Denver, CO.
- Brigham, B.W., McAllister, C.M., Peel, R. K., Van Campen, H., Weaber, R.L., Loneragan, G.H. *The Relationship of Bovine Respiratory Disease and Carcass Ultrasound Measures.* Joint Annual Meeting ADSA, PSA, AMPA, CSAS, WSASAS, ASAS, July 12: Denver, CO.
- Costa Jr., J.B.G., Barcellos, J.O.J., Whittier, J. C., Diaz, D.P.S., Canellas, L., Peripolli, V., Ahola, J. K., Peel, R. K. *Use of body weight gain at different ages to evaluate the pregnancy probability and the change in the pregnancy chance of Hereford heifers mated at 18 months of age.* Proceedings, Western Section, American Society of Animal Sciences, July 16, 2012: Phoenix, Arizona.
- Hyland, A., Whittier, J. C., Seidel, G. E., Enns, R. M., Peel, R. K. *Variations in Interval Between GnRH and Prostaglandin F2 Alpha Injections and CIDR insertion for 5 or 7 days on Pregnancy Rate and Follicular Response* (vol. 59, pp. 277-280). Proceedings, Western Section, American Society of Animal Science.
- Miller, K.E., Peel, R. K., Whittier, J. C., Niswender, G.D. *Western Center for Integrated Resource Management's Dynamic Approach to a Master's Program at Colorado State University* (vol. 53, pp. 317-319). WSASAS Proceedings.
- Speidel, S. E., S., Cockrum, R., Salak-Johnson, J. L., Chase, C. C. L., Thomas, M., Peel, R. K., Enns, R. M. (2014). Genetic analysis of receiving weight, ultrasound back fat, ultrasound rib eye area, ultrasound percent intramuscular fat, and bovine respiratory disease in feedlot cattle. *10th World Congr. Appl. Livestock Prod. WCGALP.*  
[https://asas.org/docs/default-source/wcgalp-posters/519\\_paper\\_8807\\_manuscript\\_253\\_0.pdf?sfvrsn=2](https://asas.org/docs/default-source/wcgalp-posters/519_paper_8807_manuscript_253_0.pdf?sfvrsn=2)

## Non-Refereed Journal Articles

Ahola, J. K., Peel, R. K. Determination of the appropriate delivery of PGF2a in the 5-day CO-synch + CIDR protocol in suckled beef cows. *Journal of Animal Science August, 10.2527/jas.2011-4880.*

Culbertson, M. M., Speidel, S. E., Peel, R. K., Cockrum, R., Thomas, M., Enns, R. M. (2015). Optimum measurement period for evaluating feed intake traits in beef cattle. *J. Anim. Sci., 93, 1-9.*

Speidel, S. E., Peel, R. K., Crews, D., Enns, R. M. (2015). Random regression models for the prediction of days to weight, ultrasound rib eye area and ultrasound back fat depth in beef cattle. *Journal of Animal Science.*

Cockrum, R. R., Speidel, S. E., Salak-Johnson, J., Chase, C., Peel, R. K., Weaber, R. L., Loneragan, G. H., Wagner, J. J., Boddhireddy, P., Thomas, M., Prayaga, K., DeNise, S., Enns, R. M. Genetic parameters estimated at receiving for circulating cortisol, immunoglobulin G, interleukin 8, and incidence of bovine respiratory disease in feedlot beef steers. *Journal of Animal Science.*

### **Non-Refereed Proceedings or Transactions**

Markwood, M., Peel, R. K., Ahola, J. K., Seidel, G. E., Funston, G. E. *Effect of delaying time AI based on ESTROTECT patch status on pregnancy rates of nursing beef cows.* American Society of Animal Science.

Fischer, M. C., Ahola, J. K., Bigler, B. J., Whittier, J. C., Peel, R. K. *Effects of monensin sodium and plant extracts containing cinnamaldehyde, eugenol and capsicum oleoresin on days to puberty, average daily gain and feed efficiency in developing beef heifers receiving a high roughage diet.* American Society of Animal Science.

Lippolis, K., Whittier, J. C., Linton, K., Peel, R. K., Ahola, J. K. *Effects of QuietWean nose flap devices applied to calves on cow and calf performance.* American Society of Animal Science.

(in press). *Can DNA marker technology improve feedlot growth promotion management decisions to ultimately improve the consumer's beef eating experience?.* Colorado Nutrition Roundtable Poster Presentation.

*Creating a Price Index for By-Product Feeds.* Colorado State University, Western Center for Integrated Resource Management.

Neuhold, K.L., Grubb, P.T., Wagner, J. J., Engle, T. E., Peel, R. K., Schroeder, A.L. *Effectiveness of Ractopamine When Fed as a Top Dress in Beef Steers.* Joint Annual Meeting ADSA, PSA, AMPA, CSAS, WSASAS, ASAS, July 11, 2010: Denver, CO.

*External Parasites in Beef Cattle.* Progressive Cattlemen Magazine <http://www.progressivecattle.com/index>.

*Genetics and Reproduction in Beef Cattle.* Progressive Cattlemen Magazine <http://www.progressivecattle.com/index>.

*Immunity in Beef Cattle.* Progressive Cattlemen Magazine <http://www.progressivecattle.com/index>.

*National Needs Fellowship Program.* Poster presented at the 2009 NNF/MSP Project Directors and Beneficiaries Meeting, October 21, 2009: Washington, DC.

*Quantification of Range Improvement Practices.* Colorado State University, Western Center for Integrated Resource Management.

*Reintroduction of Red Wolves Economic Impact.* Colorado State University, Western Center for Integrated Resource Management.

*Southeast Colorado Fed Beef Program.* Animal Sciences Department, Colorado State University, Animal Sciences Department.

*Storage Losses from Dried Distillers Grains.* Colorado State University, Western Center for Integrated Resource Management.

Ahola, J. K., Aznarez, V.A., Seidel, G. E., Peel, R. K., Whittier, J. C. *Superimposing Melengestrol Acetate Pre-Feeding and/or Controlled Intravaginal Drug Release on the Select Synch Estrous Synchronization Protocol in Beef Cows* (vol. 62, pp. 241). Proceedings, WSASAS.

*Technology in Beef Production.* Progressive Cattlemen Magazine <http://www.progressivecattle.com/index>.

Wagner, J. J., Brigham, B., Peel, R. K. (in press). *The effect of morbidity on longissimus muscle area and subcutaneous and intramuscular adipose deposition in feedlot steers* (vol. 15, pp. 116). Plains Nutrition Council Texas Agrilife Research and Extension Pub AREC.

*What are Carbon Credits? Should You Sell Them to a New York Salesman?.*  
<http://brianallmerradionetwork.wordpress.com/>.

*Wind Energy Lease Agreements: What Landowners Should Know.* <http://brianallmerradionetworkwordpress.com/>.

## **Abstract**

Hoffman, T. W., Belk, K. E., Tatum, J. D., Delmore, R., Peel, R. K., Levalley, S. B., Pendell, D. L., Zerby, H. N., English, L. F., Moeller, S. J., Fluharty, F. L. (2015). *Preferences associated with American lamb quality in retail & foodservice markets* (vol. 112, pp. 138). Meat Science.

## **Article in Popular or Trade Magazine**

McGrew, A. K., Peel, R. K., Ballweber, L. R. (2015). *Determining which GI nematodes are in your herd* (vol. March, pp. 70-72). Progressive Cattleman.

## **Instructor's Manual**

Parsons, J., Negumbo, B., Peel, R. K. (2013). *Méthodes d'analyse officielles de l'AOAC International: Traduction française d'une sélection de protocoles d'essais pour l'alimentation animale.* (pp. 51). Western Center for Integrated Resource Management.

## **Magazine/Trade Publication**

Peel, R. K. *Basic Steps for Healthy Horse Treatment.* Progressive Cattlemen Magazine, March 2013.  
[www.progressivecattle.com/index.php?option=com\\_content&view=article&id=4590:kraig-peel&catid=120:herd-health&Itemid=159](http://www.progressivecattle.com/index.php?option=com_content&view=article&id=4590:kraig-peel&catid=120:herd-health&Itemid=159)

## **NNF/MSP Project Directors Meeting**

Austin, K.J., Peel, R. K. *The Effect of Morbidity in Feedlot Cattle on Carcass Quality and Subsequent Carcass Value.* Poster presented at the 2009 NNF/MSP Project Directors and Beneficiaries Meeting, October 21, 2009: Washington, DC.

## **PERFORMANCES, EXHIBITS, PRODUCTIONS (Visual/Performing Arts):**

2011, Updated and redeveloped Integrated Resource Management  
Graduate online courses; AGRI 630 and AGRI 633

2008, Developed Integrated Resource Management Graduate Courses for online delivery: AGRI 630 and AGRI 633

## **PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS**

July 14, 2015, "Preferences and Complaints Associated With American Lamb Quality and Retail Outlets", American Lamb Board, American Lamb Board, peer-reviewed/refereed.

February 6, 2015, "All Heifers and No Cows; Can we reduce our carbon footprint?", Nick Petry Short Course, National Western Stock Show, National Western Complex, Denver, CO.

August 18, 2014, "Genetic Analysis of receiving weight, ultrasound back fat, ultrasound rib eye area, ultrasound percent intramuscular fat, and bovine respiratory disease in feedlot cattle.", 10th World Congress of Genetics Applied to Livestock Production, (Presenter) Speidel, S. E., Vancouver, British Columbia, Canada, peer-reviewed/refereed.

2013, "Sustainable Agriculture Short Course, Niman Ranch Employees and Affiliates, 45 people".

October 3, 2013, "Research and Training Opportunities", Global One Health Leadership Colloquium, Office of International Programs, CSU, (Presenter) Peel, R. K., Lory Student Center.

August 11, 2013, "Goat Nutrition Seminar", Larimer County 4-H Event, Larimer County, Colorado 4-H, (Presenter) Peel, R. K., The Ranch, Loveland, CO.

July 26, 2013, "Ultrasound Demonstration", Larimer County Goat Show, Larimer County, (Presenter) Peel, R. K., Larimer County Fairgrounds.

July 7, 2013, "Cortisol, interleukin 8, and immunoglobulin G ratios predict treatment for bovine respiratory disease in feedlot cattle.", Joint Annual meetings, American Society of Animal Science, (Presenter) Speidel, S. E., Indianapolis, IN, peer-reviewed/refereed.

July 7, 2013, "Heritability and correlations of immune response parameters in cattle treated for bovine respiratory disease.", Joint Annual meetings, American Society of Animal Science, (Presenter) Cockrum, R. R., Indianapolis, IN, peer-reviewed/refereed.

July 7, 2013, "The effect of Aspergillus oryzae extract on feedlot performance and carcass merit in yearling steers fed steam-flaked corn based finishing diets.", Joint Annual Meetings, American Society of Animal Science, (Presenter) White, K. A., Indianapolis, IN, peer-reviewed/refereed.

2012, "Invited Presentation and Discussion, "Defining Sustainable Agriculture", Niman Ranch Beef Production Tour and Partners Meeting, 105 People. Boise, ID".

2012, "Invited presentation, "American Meat" Panel Discussion Member, Sustainable Food Film Series, Denver Botanic Gardens, 155 people."

2012, "Invited Presentation, "Estrous Synchronization in Beef Cattle – Will it Pay?" Colorado Ranch Practicum, 12 People. Spruce Mountain Ranch, Larkspur, CO".

2012, "Invited Presentation, "How genetics can change input costs", Colorado Beef Profit Alliance, 21 People.



ARDEC Campus, Fort Collins, CO".

2012, "Invited Presentation, "Next Steps for a Sustainable Future", Niman Ranch Tour and Pork Production Sales Meeting, 110 People. Des Moines, IA".

2012, "Invited Presentation, "Ultrasound Use in Beef Production", Colorado Ranch Practicum, 12 People. Spruce Mountain Ranch, Larkspur, CO".

2012, "Invited Supervision and Advisory Trip with PCI Global's grassroots efforts in La Paz, Bolivia.".

2012, "Local, Sustainable and Realistic, Niman Ranch Partners Meeting, Boise, ID".

2012, "Uses of Reproductive Ultrasound" Jr. Angus Association, 15 Students".

2011, "Administration of GNRH on day 9 of a 14-day CIDR with co-synch 72 hours of lactating beef".

2011, "Genetic associations between bovine respiratory disease and carcass traits in feedlot steers".

2011, "Genex Artificial Insemination School".

2011, "Heart Dissection: Demonstration".

2011, "Plains Nutrition Council Graduate Student Poster Competition".

2011, "The Future of Sustainable Agriculture, Farmer Appreciation Dinner, Niman Ranch.".

2011, "The Need for Locally Sourced and Processed Beef, Origin Meat Company".

2011, "The Value of Locally Grown Food Sources".

2011, "Use of Ultrasound in Beef Cattle".

2010, "Carcass Evaluation Using Ultrasound".

2010, "Environmental Stewardship, Lost Valley Ranch".

2010, "Estrous Cycle, AI School".

2010, "Estrous Synchronization, AI School".

2010, "Goat Reproduction Weld County Goat Extravaganza.".

2010, "Integrated Resource Management, Recruitment talk at University of Wyoming".

2010, "Meat Goats 101 Weld County Goat Extravaganza."

2010, "Ovarian Scanning to Determine Cyclicity in Beef Cows, University of Missouri".

2010, "Sheep in Medical Research".

2010, "Surgery Preparation for Woolled Sheep".

2010, "USDA Training of Georgian Veterinarians, Animal Handling and Individual Animal ID for Disease Surveillance."

2010, "USDA Training of Georgian Veterinarians, Brucellosis Vaccination and Disease Monitoring in the Republic of Georgia."

2010, "Utilizing Ultrasound in Commercial Beef Cattle".

2010, "Veterinary Application of Ultrasound (Repro and Carcass)".

2010, "Veterinary Uses of Ultrasound".

2008, "Panhandle Meat Goat Symposium and Show. Sire Evaluation in Meat Goats."

2008, "Regional Meat Goat Sire Evaluation: Results, Performance, and Lessons Learned."

2008, "Weld County Goat Extravaganza. Meat Goats 101.", peer-reviewed/refereed.

2007, "Las Animas Tri County Goat Feeding and Showmanship Clinic."

2006, "Las Animas County Goat Nutrition and Management."

2006, "Mesa County Sheep Carcass Evaluation."

2005, "Managing Oneself National Block and Bridle Convention."

2004, "Colorado State University, Meat Goat

Production in Colorado."

2004, "NACTA Annual Conference, Challenges of Objectively Assessing Thought Processes.", peer-reviewed/refereed.

2004, "NACTA Annual Conference, Recruitment of non-ag students to Vocational Agriculture Programs.", peer-reviewed/refereed.

2004, "University of Belgrade, Serbia. Integrated Beef Cattle Management".

2004, "University of Novi Sad, Serbia. Integrated Beef Cattle Management."

2003, "AGR Leadership Forum, Lifelong Leadership."

2003, "Minorities in Agriculture and Natural Resources and Related Sciences National Convention. The Future of Management in Agriculture.", peer-reviewed/refereed.

2002, "BEEF Symposium, Integrated Resource Management at CSU."

2002, "Brigham Young University, Integrated Resource Management at CSU."

2002, "Native American Tribal College Teacher Training. Integrated Resource Management at CSU."

2002, "Texas A&M University, Integrated Resource Management at CSU."

2002, "Vocational Agriculture Teachers Winter Training. Integrated Resource Management at CSU."

2001, "Colorado State University, Integrated Resource Management and the Relationship to Animal Breeding."

2001, "Department of Range Science, Colorado State University. Integrated Resource Management at CSU."

2001, "Graduate Seminar, Department of Animal Science. Colorado State University".

2001, "Senior Seminar, Department of Soil and

Crop Science. Integrated Resource Management, Developments at CSU."

2001, "Texas Association of Vocational Agricultural Teachers Winter Meeting. Texas A&M University, Meat Goats as a Vocational Agriculture Project."

2000, "Sam Houston State University Goat Camp, Nutritional Challenges for Meat Goat Nutrition."

2000, "Sam Houston State University Goat Camp, Parasite Management in Meat Goats."

2000, "Texas A&M University Livestock Judging Camp, Texas A&M University, Evaluation of Breeding Sheep."

2000, "Texas A&M University Livestock Judging Camp, Texas A&M University, Sheep Evaluation Criterion."

1999, "Cow Camp. Texas Junior Livestock Association, Getting Started with the Beef Project. C.T. Boleman, and A. Butler."

#### **OTHER ACTIVITIES/ACCOMPLISHMENTS – PUBLICATIONS/SCHOLARLY RECORD**

(January 13, 2015 - May 1, 2015). Faculty Internship, "Faculty Institute for Inclusive Excellence," CSU, Fort Collins, CO, United States. Approximate Number of Hours Spent Per Year: 18.

#### **TEACHING:**

<b><u>Year</u></b>	<b><u>Semester</u></b>	<b><u>Course No./Title</u></b>	<b><u>Cr. Hrs.</u></b>	<b><u>Enrollment</u></b>
2016	Summer	AGRI695 - Independent Study	12	0
2016	Summer	AGRI587A - Internship: Domestic	12	0
2016	Summer	AGRI587A - Internship: Domestic	12	0
2016	Summer	AGRI632 - Managing for Ecosystem Sustainability	3	1
2016	Summer	AGRI632 - Managing for Ecosystem Sustainability	3	8
2016	Summer	AGRI698 - Research	6	0
2016	Summer	AGRI633 - Understanding and Managing Animal Resources	3	0
2016	Summer	AGRI633 - Understanding and Managing Animal Resources	3	24
2016	Spring	AGRI634 - Animal Production Systems	3	21
2016	Spring	ANEQ310 - Animal Reproduction	3	84
2016	Spring	ANEQ101 - Food Animal Science	4	78
2016	Spring	ANEQ101 - Food Animal Science - Lab	0	30
2016	Spring	ANEQ101 - Food Animal Science - Lab	0	27
2016	Spring	ANEQ101 - Food Animal Science - Lab	0	21
2016	Spring	AGRI695 - Independent Study	12	1
2016	Spring	AGRI695 - Independent Study	12	1
2016	Spring	AGRI630 - Integrated Decision Making/Management Skills	3	9
2016	Spring	AGRI640 - Integrated Resource Management Plan	3	14

2016	Spring	AGRI587A - Internship: Domestic	12	0
2016	Spring	AGRI587A - Internship: Domestic	12	5
2016	Spring	AGRI632 - Managing for Ecosystem Sustainability	3	21
2016	Spring	AGRI639 - Products to Profit	3	11
2016	Spring	AGRI698 - Research	6	0
2016	Spring	ANEQ384 - Supervised College Teaching	5	22
2016	Spring	ANEQ784 - Supervised College Teaching	18	31
2016	Spring	AGRI637 - Understanding Policy and Emerging Issues	3	20
2015	Fall	AGRI636 - Analyzing and Managing the Business	3	14
2015	Fall	ANEQ310 - Animal Reproduction	3	31
2015	Fall	ANEQ312 - Animal Ultrasonography	2	24
2015	Fall	ANEQ312 - Animal Ultrasonography -Lab	0	24
2015	Fall	AGRI631 - Building the Business	3	28
2015	Fall	ANEQ101 - Food Animal Science	4	172
2015	Fall	ANEQ101 - Food Animal Science - Lab	0	23
2015	Fall	ANEQ101 - Food Animal Science - Lab	0	26
2015	Fall	ANEQ101 - Food Animal Science - Lab	0	26
2015	Fall	ANEQ101 - Food Animal Science - Lab	0	24
2015	Fall	ANEQ101 - Food Animal Science - Lab	0	23
2015	Fall	ANEQ101 - Food Animal Science - Lab	0	26
2015	Fall	ANEQ101 - Food Animal Science - Lab	0	24
2015	Fall	ANEQ101 - Food Animal Science - Lab	0	0
2015	Fall	AGRI695 - Independent Study	12	2
2015	Fall	AGRI695 - Independent Study	12	0
2015	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	20
2015	Fall	AGRI635 - Integrated Forage Management	3	19
2015	Fall	AGRI640 - Integrated Resource Management Plan	3	6
2015	Fall	AGRI587A - Internship--Domestic	12	6
2015	Fall	AGRI587A - Internship: Domestic	12	0
2015	Fall	AGRI632 - Managing for Ecosystem Sustainability	3	7
2015	Fall	AGRI639 - Products to Profit	3	5
2015	Fall	AGRI698 - Research	6	0
2015	Fall	AGRI684 - Supervised College Teaching	2	0
2015	Fall	ANEQ384 - Supervised College Teaching	5	27
2015	Fall	ANEQ784 - Supervised College Teaching	18	29
2015	Summer	AGRI695 - Independent Study	12	0
2015	Summer	AGRI587A - Internship--Domestic	12	0
2015	Summer	AGRI587A - Internship--Domestic	12	1
2015	Summer	AGRI632 - Managing for Ecosystem Sustainability	3	13
2015	Summer	AGRI698 - Research	6	0
2015	Summer	AGRI633 - Understanding and Managing Animal Resources	3	27
2015	Spring	AGRI634 - Animal Production Systems	3	19
2015	Spring	ANEQ310 - Animal Reproduction	3	70
2015	Spring	ANEQ101 - Food Animal Science	3	56
2015	Spring	AGRI695 - Independent Study	2	0
2015	Spring	AGRI630 - Integrated Decision Making/Management Skills	3	8
2015	Spring	AGRI640 - Integrated Resource Management Plan	3	15
2015	Spring	AGRI640 - Integrated Resource Management Plan	3	19
2015	Spring	AGRI587A - Internship--Domestic	12	0
2015	Spring	AGRI587A - Internship--Domestic	12	11
2015	Spring	AGRI632 - Managing for Ecosystem Sustainability	3	11
2015	Spring	AGRI639 - Products to Profit	3	14
2015	Spring	AGRI698 - Research	6	0
2015	Spring	ANEQ792F - Seminar: Livestock Management Systems	1	0
2015	Spring	ANEQ384 - Supervised College Teaching	5	18

2015	Spring	ANEQ784 - Supervised College Teaching	18	28
2015	Spring	ANEQ699 - Thesis	18	9
2015	Spring	AGRI633 - Understanding and Managing Animal Resources	3	16
2015	Spring	AGRI633 - Understanding and Managing Animal Resources - Lab	0	16
2015	Spring	AGRI637 - Understanding Policy and Emerging Issues	3	27
2014	Fall	AGRI634 - Animal Production Systems	3	18
2014	Fall	AGRI634 - Animal Production Systems-Lab	0	18
2014	Fall	ANEQ310 - Animal Reproduction	3	27
2014	Fall	ANEQ310 - Animal Reproduction	3	0
2014	Fall	ANEQ312 - Animal Ultrasonography	2	24
2014	Fall	ANEQ312 - Animal Ultrasonography -Lab	0	24
2014	Fall	AGRI631 - Building the Business	3	20
2014	Fall	ANEQ101 - Food Animal Science	3	166
2014	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	17
2014	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	16
2014	Fall	AGRI635 - Integrated Forage Management	3	25
2014	Fall	AGRI587A - Internship--Domestic	12	0
2014	Fall	AGRI587A - Internship--Domestic	12	1
2014	Fall	AGRI632 - Managing for Ecosystem Sustainability	3	5
2014	Fall	AGRI639 - Products to Profit	3	9
2014	Fall	AGRI698 - Research	6	0
2014	Fall	AGRI684 - Supervised College Teaching	2	0
2014	Fall	ANEQ384 - Supervised College Teaching	5	26
2014	Fall	ANEQ784 - Supervised College Teaching	18	27
2014	Fall	ANEQ699 - Thesis	18	9
2014	Summer	AGRI695 - Independent Study	12	0
2014	Summer	AGRI587A - Internship--Domestic	12	1
2014	Summer	AGRI587A - Internship--Domestic	12	0
2014	Summer	ANEQ487A - Internship: Animal	6	36
2014	Summer	AGRI632 - Managing for Ecosystem Sustainability	3	13
2014	Summer	AGRI698 - Research	6	0
2014	Summer	AGRI633 - Understanding and Managing Animal Resources	3	24
2014	Spring	AGRI634 - Animal Production Systems	3	27
2014	Spring	ANEQ310 - Animal Reproduction	3	55
2014	Spring	AGRI631 - Building the Business	3	5
2014	Spring	ANEQ101 - Food Animal Science	3	63
2014	Spring	AGRI695 - Independent Study	12	0
2014	Spring	ANEQ495 - Independent Study	18	8
2014	Spring	AGRI630 - Integrated Decision Making/Management Skills	3	12
2014	Spring	AGRI635 - Integrated Forage Management	3	7
2014	Spring	AGRI640 - Integrated Resource Management Plan	3	7
2014	Spring	AGRI640 - Integrated Resource Management Plan	3	7
2014	Spring	AGRI587A - Internship--Domestic	12	0
2014	Spring	AGRI587A - Internship--Domestic	12	6
2014	Spring	ANEQ487A - Internship: Animal	6	35
2014	Spring	AGRI632 - Managing for Ecosystem Sustainability	3	12
2014	Spring	AGRI639 - Products to Profit	3	8
2014	Spring	AGRI639 - Products to Profit	3	16
2014	Spring	AGRI698 - Research	6	0
2014	Spring	ANEQ792F - Seminar: Livestock Management Systems	1	4
2014	Spring	ANEQ384 - Supervised College Teaching	5	32
2014	Spring	ANEQ784 - Supervised College Teaching	18	23
2014	Spring	AGRI633 - Understanding and Managing Animal Resources	3	6
2014	Spring	AGRI633 - Understanding and Managing Animal Resources	0	6

		- Lab		
2014	Spring	AGRI637 - Understanding Policy and Emerging Issues	3	15
2013	Fall	AGRI636 - Analyzing and Managing the Business	3	7
2013	Fall	AGRI636 - Analyzing and Managing the Business	3	14
2013	Fall	AGRI634 - Animal Production Systems	3	7
2013	Fall	AGRI634 - Animal Production Systems-Lab	0	7
2013	Fall	ANEQ310 - Animal Reproduction	3	67
2013	Fall	ANEQ312 - Animal Ultrasonography	2	24
2013	Fall	ANEQ312 - Animal Ultrasonography -Lab	0	24
2013	Fall	AGRI631 - Building the Business	3	33
2013	Fall	ANEQ101 - Food Animal Science	3	160
2013	Fall	AGRI695 - Independent Study	12	1
2013	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	11
2013	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	19
2013	Fall	AGRI635 - Integrated Forage Management	3	25
2013	Fall	AGRI640 - Integrated Resource Management Plan	3	4
2013	Fall	AGRI587A - Internship--Domestic	12	0
2013	Fall	AGRI587A - Internship--Domestic	12	1
2013	Fall	ANEQ487A - Internship: Animal	6	14
2013	Fall	AGRI632 - Managing for Ecosystem Sustainability	3	7
2013	Fall	AGRI632 - Managing for Ecosystem Sustainability - Lab	0	8
2013	Fall	AGRI639 - Products to Profit	3	13
2013	Fall	AGRI698 - Research	6	0
2013	Fall	AGRI684 - Supervised College Teaching	2	0
2013	Fall	ANEQ384 - Supervised College Teaching	5	23
2013	Fall	ANEQ784 - Supervised College Teaching	18	21
2013	Fall	AGRI637 - Understanding Policy and Emerging Issues	3	7
2013	Summer	ANEQ487 - Internship	18	22
2013	Summer	ANEQ487 - Internship	18	32
2013	Summer	AGRI587A - Internship--Domestic	12	0
2013	Summer	AGRI587A - Internship--Domestic	12	2
2013	Summer	AGRI698 - Research	6	0
2013	Summer	AGRI698 - Research	6	1
2013	Summer	AGRI633 - Understanding and Managing Animal Resources	3	27
2013	Spring	AGRI634 - Animal Production Systems	3	26
2013	Spring	ANEQ310 - Animal Reproduction	3	71
2013	Spring	AGRI631 - Building the Business	3	14
2013	Spring	AGRI638 - Ecosystem Services on Agricultural Lands	3	0
2013	Spring	ANEQ101 - Food Animal Science	3	64
2013	Spring	AGRI695 - Independent Study	12	0
2013	Spring	ANEQ495 - Independent Study	18	11
2013	Spring	AGRI630 - Integrated Decision Making/Management Skills	3	16
2013	Spring	AGRI635 - Integrated Forage Management	3	16
2013	Spring	AGRI640 - Integrated Resource Management Plan	3	15
2013	Spring	ANEQ487 - Internship	18	22
2013	Spring	AGRI587A - Internship--Domestic	12	1
2013	Spring	AGRI639 - Products to Profit	3	15
2013	Spring	ANEQ384 - Supervised College Teaching	5	24
2013	Spring	ANEQ784 - Supervised College Teaching	18	22
2013	Spring	ANEQ699 - Thesis	18	9
2013	Spring	AGRI633 - Understanding and Managing Animal Resources	3	17
2013	Spring	AGRI633 - Understanding and Managing Animal Resources	0	17
		- Lab		
2012	Fall	AGRI636 - Analyzing and Managing the Business	3	17
2012	Fall	AGRI634 - Animal Production Systems	3	16

2012	Fall	AGRI634 - Animal Production Systems-Lab	0	16
2012	Fall	ANEQ310 - Animal Reproduction	3	69
2012	Fall	ANEQ312 - Animal Ultrasonography	2	21
2012	Fall	ANEQ312 - Animal Ultrasonography -Lab	0	21
2012	Fall	ANEQ101 - Food Animal Science	3	122
2012	Fall	AGRI695 - Independent Study	12	1
2012	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	13
2012	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	28
2012	Fall	ANEQ487 - Internship	18	6
2012	Fall	AGRI587A - Internship-Domestic	12	5
2012	Fall	AGRI632 - Managing for Ecosystem Sustainability	3	16
2012	Fall	AGRI632 - Managing for Ecosystem Sustainability - Lab	0	16
2012	Fall	AGRI698 - Research	6	0
2012	Fall	AGRI684 - Supervised College Teaching	2	0
2012	Fall	ANEQ384 - Supervised College Teaching	5	16
2012	Fall	ANEQ784 - Supervised College Teaching	18	21
2012	Fall	AGRI637 - Understanding Policy and Emerging Issues	3	15
2012	Summer	ANEQ487 - Internship	18	22
2012	Summer	AGRI587A - Internship-Domestic	12	4
2012	Summer	AGRI698 - Research	6	0
2012	Summer	AGRI633 - Understanding and Managing Animal Resources	3	19
2012	Spring	AGRI634 - Animal Production Systems	3	24
2012	Spring	AGRI631 - Building the Business	3	14
2012	Spring	AGRI638 - Ecosystem Services on Agricultural Lands	3	16
2012	Spring	ANEQ101 - Food Animal Science	3	77
2012	Spring	AGRI695 - Independent Study	12	0
2012	Spring	AGRI695 - Independent Study	12	2
2012	Spring	ANEQ495 - Independent Study	18	6
2012	Spring	AGRI630 - Integrated Decision Making/Management Skills	3	17
2012	Spring	AGRI635 - Integrated Forage Management	3	18
2012	Spring	AGRI640 - Integrated Resource Management Plan	3	16
2012	Spring	ANEQ487 - Internship	18	20
2012	Spring	AGRI587A - Internship--Domestic	12	0
2012	Spring	AGRI639 - Products to Profit	3	16
2012	Spring	ANEQ784 - Supervised College Teaching	18	18
2012	Spring	ANEQ699 - Thesis	18	10
2012	Spring	AGRI633 - Understanding and Managing Animal Resources	3	15
2012	Spring	AGRI633 - Understanding and Managing Animal Resources - Lab	0	15
2011	Fall	AGRI636 - Analyzing and Managing the Business	3	14
2011	Fall	AGRI634 - Animal Production Systems	3	16
2011	Fall	AGRI634 - Animal Production Systems-Lab	0	16
2011	Fall	ANEQ312 - Animal Ultrasonography	2	20
2011	Fall	ANEQ312 - Animal Ultrasonography -Lab	0	20
2011	Fall	ANEQ101 - Food Animal Science	3	154
2011	Fall	AGRI695 - Independent Study	12	1
2011	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	18
2011	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	13
2011	Fall	AGRI632 - Managing for Ecosystem Sustainability	3	16
2011	Fall	AGRI632 - Managing for Ecosystem Sustainability - Lab	0	16
2011	Fall	AGRI698 - Research	6	0
2011	Fall	ANEQ384 - Supervised College Teaching	5	31
2011	Fall	ANEQ784 - Supervised College Teaching	18	22
2011	Fall	ANEQ699 - Thesis	18	13
2011	Fall	AGRI637 - Understanding Policy and Emerging Issues	3	14



2011	Summer	AGRI695 - Independent Study	12	1
2011	Summer	ANEQ495 - Independent Study	18	6
2011	Summer	ANEQ487 - Internship	18	20
2011	Summer	AGRI698 - Research	6	0
2011	Summer	AGRI633 - Understanding and Managing Animal Resources	3	11
2011	Spring	AGRI634 - Animal Production Systems	3	20
2011	Spring	ANEQ310 - Animal Reproduction	3	47
2011	Spring	AGRI631 - Building the Business	3	14
2011	Spring	AGRI638 - Ecosystem Services on Agricultural Lands	3	16
2011	Spring	ANEQ101 - Food Animal Science	3	78
2011	Spring	AGRI695 - Independent Study	12	3
2011	Spring	ANEQ495 - Independent Study	18	25
2011	Spring	AGRI635 - Integrated Grazing Managements	3	13
2011	Spring	AGRI640 - Integrated Resource Management Plan	3	14
2011	Spring	AGRI587A - Internship--Domestic	12	0
2011	Spring	AGRI639 - Products to Profit	3	14
2011	Spring	ANEQ784 - Supervised College Teaching	18	23
2011	Spring	ANEQ699 - Thesis	18	8
2011	Spring	AGRI633 - Understanding and Managing Animal Resources	3	11
2011	Spring	AGRI633 - Understanding and Managing Animal Resources - Lab	0	11
2010	Fall	AGRI636 - Analyzing and Managing the Business	3	16
2010	Fall	AGRI634 - Animal Production Systems	3	16
2010	Fall	AGRI634 - Animal Production Systems-Lab	0	16
2010	Fall	ANEQ312 - Animal Ultrasonography	2	22
2010	Fall	ANEQ312 - Animal Ultrasonography -Lab	0	22
2010	Fall	ANEQ101 - Food Animal Science	3	121
2010	Fall	AGRI695 - Independent Study	12	1
2010	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	14
2010	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	16
2010	Fall	ANEQ487 - Internship	18	5
2010	Fall	AGRI698 - Research	6	0
2010	Fall	ANEQ784 - Supervised College Teaching	18	27
2010	Fall	AGRI632 - Understanding and Managing the Land	3	14
2010	Fall	AGRI632 - Understanding and Managing the Land-Lab	0	14
2010	Fall	AGRI637 - Understanding Policy and Emerging Issues	3	16
2010	Summer	ANEQ495 - Independent Study	18	1
2010	Summer	ANEQ487 - Internship	18	16
2010	Summer	AGRI698 - Research	6	0
2010	Summer	AGRI633 - Understanding and Managing Animal Resources	3	12
2010	Spring	AGRI634 - Animal Production Systems	3	7
2010	Spring	ANEQ310 - Animal Reproduction	3	59
2010	Spring	AGRI631 - Building the Business	3	12
2010	Spring	ANEQ101 - Food Animal Science	3	69
2010	Spring	ANEQ495 - Independent Study	18	15
2010	Spring	AGRI635 - Integrated Grazing Managements	3	11
2010	Spring	AGRI635 - Integrated Grazing Managements - Lab	0	11
2010	Spring	AGRI640 - Integrated Resource Management Plan	3	11
2010	Spring	AGRI587 - Internship	12	1
2010	Spring	AGRI638 - Monitoring for Success	3	12
2010	Spring	AGRI638 - Monitoring for Success - Lab	0	12
2010	Spring	AGRI639 - Products to Profit	3	11
2010	Spring	ANEQ500 - Recent Developments	6	8
2010	Spring	ANEQ384 - Supervised College Teaching	5	31
2010	Spring	ANEQ784 - Supervised College Teaching	18	23

2010	Spring	ANEQ699 - Thesis	18	15
2010	Spring	AGRI633 - Understanding and Managing Animal Resources	3	11
2010	Spring	AGRI633 - Understanding and Managing Animal Resources - Lab	0	11
2009	Fall	AGRI636 - Analyzing and Managing the Business	3	11
2009	Fall	AGRI634 - Animal Production Systems	3	11
2009	Fall	AGRI634 - Animal Production Systems	3	5
2009	Fall	AGRI634 - Animal Production Systems-Lab	0	11
2009	Fall	ANEQ312 - Animal Ultrasonography	2	20
2009	Fall	ANEQ312 - Animal Ultrasonography -Lab	0	20
2009	Fall	ANEQ101 - Food Animal Science	3	100
2009	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	13
2009	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	6
2009	Fall	ANEQ500 - Recent Developments	6	5
2009	Fall	AGRI698 - Research	6	0
2009	Fall	ANEQ784 - Supervised College Teaching	18	21
2009	Fall	ANEQ699 - Thesis	18	16
2009	Fall	AGRI633 - Understanding and Managing Animal Resources	3	3
2009	Fall	AGRI632 - Understanding and Managing the Land	3	13
2009	Fall	AGRI632 - Understanding and Managing the Land-Lab	0	13
2009	Fall	AGRI637 - Understanding Policy and Emerging Issues	3	11
2009	Summer	ANEQ487 - Internship	18	17
2009	Summer	AGRI698 - Research	6	0
2009	Spring	AGRI636 - Analyzing and Managing the Business	3	2
2009	Spring	ANEQ310 - Animal Reproduction	3	54
2009	Spring	AGRI631 - Building the Business	3	19
2009	Spring	ANEQ101 - Food Animal Science	3	32
2009	Spring	AGRI630 - Integrated Decision Making/Management Skills	3	2
2009	Spring	AGRI635 - Integrated Grazing Managements	3	21
2009	Spring	AGRI635 - Integrated Grazing Managements - Lab	0	21
2009	Spring	AGRI640 - Integrated Resource Management Plan	3	18
2009	Spring	ANEQ487 - Internship	18	12
2009	Spring	AGRI638 - Monitoring for Success	3	19
2009	Spring	AGRI638 - Monitoring for Success - Lab	0	19
2009	Spring	AGRI639 - Products to Profit	3	19
2009	Spring	ANEQ384 - Supervised College Teaching	5	37
2009	Spring	ANEQ784 - Supervised College Teaching	18	20
2009	Spring	ANEQ699 - Thesis	18	14
2009	Spring	AGRI633 - Understanding and Managing Animal Resources	3	20
2009	Spring	AGRI633 - Understanding and Managing Animal Resources - Lab	0	20
2009	Spring	AGRI632 - Understanding and Managing the Land	3	6
2008	Fall	AGRI636 - Analyzing and Managing the Business	3	19
2008	Fall	AGRI634 - Animal Production Systems	3	19
2008	Fall	AGRI634 - Animal Production Systems-Lab	0	19
2008	Fall	ANEQ310 - Animal Reproduction	3	49
2008	Fall	ANEQ312 - Animal Ultrasonography	2	19
2008	Fall	ANEQ312 - Animal Ultrasonography -Lab	0	19
2008	Fall	AGRI695 - Independent Study	12	1
2008	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	18
2008	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	10
2008	Fall	AGRI698 - Research	6	0
2008	Fall	ANEQ784 - Supervised College Teaching	18	24
2008	Fall	ANEQ699 - Thesis	18	12
2008	Fall	AGRI633 - Understanding and Managing Animal Resources	3	4

2008	Fall	AGRI632 - Understanding and Managing the Land	3	18
2008	Fall	AGRI632 - Understanding and Managing the Land-Lab	0	18
2008	Fall	AGRI637 - Understanding Policy and Emerging Issues	3	20
2008	Summer	ANEQ487 - Internship	18	19
2008	Summer	AGRI698 - Research	6	0
2008	Summer	AGRI383 - U.S. Travel-Integrated Resource Management	2	0
2008	Summer	AGRI383 - U.S. Travel-Integrated Resource Management - Recitation	0	0
2008	Spring	ANEQ310 - Animal Reproduction	3	46
2008	Spring	AGRI631 - Building the Business	3	11
2008	Spring	ANEQ101 - Food Animal Science	3	44
2008	Spring	AGRI695 - Independent Study	12	1
2008	Spring	AGRI635 - Integrated Grazing Managements	3	13
2008	Spring	AGRI635 - Integrated Grazing Managements-Laboratory	0	13
2008	Spring	AGRI640 - Integrated Resource Management Plan	3	13
2008	Spring	ANEQ487 - Internship	18	24
2008	Spring	AGRI638 - Monitoring for Success	3	12
2008	Spring	AGRI638 - Monitoring for Success-Laboratory	0	12
2008	Spring	AGRI639 - Products to Profit	3	11
2008	Spring	AGRI633 - Understanding and Managing Animal Resources	3	12
2008	Spring	AGRI633 - Understanding and Managing Animal Resources	0	12
2008	Spring	VM623 - Veterinary Nutrition and Metabolism	2	136
2007	Fall	AGRI634 - Animal Production Systems	3	10
2007	Fall	AGRI634 - Animal Production Systems-Lab	0	10
2007	Fall	ANEQ310 - Animal Reproduction	3	51
2007	Fall	ANEQ480 - Animal Ultrasonography	2	21
2007	Fall	ANEQ480 - Animal Ultrasonography - Lab	0	21
2007	Fall	AGRI630 - Integrated Decision Making/Management Skills	3	12
2007	Fall	ANEQ487 - Internship	18	14
2007	Fall	AGRI698 - Research	6	1
2007	Fall	AGRI632 - Understanding and Managing the Land	3	11
2007	Fall	AGRI632 - Understanding and Managing the Land-Lab	0	11

## **Tenure and Promotion Evidence of Teaching Effectiveness (Tenure and Promotion Input)**

### **Development of New Courses**

ANEQ 312 - Unique course in animal ultrasonography

AGRI 630 - Translated resident instruction course to nontraditional format using unique video formatting and interactive techniques

AGRI 633 - Translated resident instruction course to nontraditional format using personally developed animations to enhance interactive opportunities

AGRI 634 - Translated resident instruction course to nontraditional format

### **Development of New Teaching Techniques**

I have utilized animations in increasing numbers in order to reinforce biological concepts in animals. These animations have helped students to understand the full body impact of small hormonal changes within the endocrine system of the animal.

Additionally, I have used interactive slide and video presentations in online courses AGRI 633, 634 and 630 in order to better engage online students and help create a sense of them being 'present' in the course.

### **Integration of Service Learning**

### **Conference/Workshop Assessments**

### **Participation in Professional Development Activities Related to Teaching**

Ranch assessment for privately owned ranches has helped keep me informed of practices currently being utilized in the professional ranching sector. This informs me for my own development as an Animal Scientist, and also assists in my teaching efforts.

#### **Professional Consultation Related to Teaching**

Dairy advisement and consultation has helped to enhance my personal knowledge of current business practices, which in turn, helps to inform my teaching for those students potentially interested in the field. It also enhances general knowledge teaching in courses such as ANEQ 101.

Consultation and Ranch assessment for privately owned ranches has helped keep me informed of practices currently being utilized in the professional ranching sector. This informs me for my own development as an Animal Scientist, and also assists in my teaching efforts.

#### **Other Evidence**

### **COMMITTEES**

Faculty Advisor for CSU Live Mascot.

Ranching Legacy Fellowship Program.

Faculty Advisor for CSU Live Mascot.

Ranching Legacy Fellowship Program.

Faculty Advisor for CSU Live Mascot.

Ranching Legacy Fellowship Program.

CSU/Maxwell Ranch Foundation, (December 2015).

Expert Testimony, (July 2013).

Expert Testimony, (June 2012).

### **PROFESSIONAL AFFILIATIONS AND ACTIVITIES**

Colorado Cattlemen's Association.

Federation of Animal Science Societies.

NACTA.

Western Section of FASS Graduate Student Competition.

Member, Agricultural Extension Education Advisory Committee.

Member, ARDEC Management Team.

Member, Beef Advisory Committee.

Committee Chair, College of Agricultural Sciences Strategic Initiative.

Member, CRSP Advisory Committee.

Committee Chair, CRSP Award Committee.

CSU Alumni Association- faculty advisor for CAM the ram program.

CSU Feed Intake Unit.

Member, Ethnic Studies Departmental Review Committee.

Faculty Advisor for CSU Live Mascot.

Member, Faculty Insights Panel.

Member, Federation of Animal Science Societies.

Member, IACUC Representative for ARDEC.

Member, Management Team, Institute for Livestock and the Environment.

Meeting to discuss interaction between Animal Sciences Department and the agricultural arm of the Mormon Church, Desert Ranch.

Member, NACTA.

Committee Chair, Nick Petry Workshop Planning Committee.

Niman Ranch, Fort Collins, CO.

Member, President's Ag Advisory Committee.

Ranching Legacy Fellowship Program.

Committee Chair, Search Committee, Research Facility Coordinator.

Sheep Unit, ARDEC.

Member, Strategic Team on Water Initiative.

Member, Student Awards Committee.

Member, Undergraduate Award Committee.

Member, Undergraduate Award Committee.

Member, University Review Committee.

Western Section of FASS.

Member, Western Section of FASS Graduate Student Competition.

**OTHER ACTIVITIES/ACCOMPLISHMENTS – SERVICE/OUTREACH**

Maxwell Ranch - CSU Foundation.

Faculty Advisor for CAM the Ram, CSU Alumni Association, Fort Collins, CO, United States. (January 1, 2009 - Present).

Christian Core Academy.

Colorado Cattlemen's Association.

Colorado Ranch Practicum.

Maxwell Ranch.

National Western Stock Show.

National Western Stock Show.

National Western Stock Show.

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