

Byron Clark Housewright, PhD

1. Academic Degrees

University of Tennessee, Knoxville, Ph.D. 1994, Ruminant Nutrition - Alterations of energy metabolism in ruminants supplemented with lasalocid.

University of Tennessee, Knoxville, M.S. 1990, Ruminant Nutrition - Byron Housewright.
M.S. 1990. Portal drained viscera, hepatic and lower hindquarter net flux of nitrogen and energy metabolites in ruminants fed protein supplements containing increasing amounts of bound nitrogen and structural carbohydrates.

Texas Tech University, B.S., Animal Science

2. Professional Experience

Frank Phillips College, Director, Department of Agriculture, August 2015 - present

Sul Ross State University, Assistant Professor, Fall 2012 – July 2015

Tennessee Tech University, Instructor, Cookeville, TN, Fall 2011 – August 2012

Nutrition Service Company, Pulaski, WI, Director of Nutrition, December 2007 – July 2011

Texas A&M University-Commerce, Assistant Professor of Animal Science, Fall 2001 to May 2008

Texas A&M University-Commerce, Ad-Interim Professor of Animal Science, Fall 2000

Northeast Texas Farmers COOP, Sulphur Springs, TX, Senior Nutritionist, August 1999 to August 2000

ConAgra Feed Company, Augusta, GA, Nutrition Services Manager, March 1998 to August 1999

Lundquist and Associates, Sarasota, FL, Consulting Nutritionist, February 1996 to February 1998

Monsanto Company, St. Louis, MO, Senior Technical Services Representative, January 1994 to February 1996

University of Tennessee, Knoxville, TN, Graduate Research Assistant, 1988 to 1994

3. Undergraduate and Graduate Instruction

Sul Ross State University

ANSC 1419 – General Animal Science – 4h

ANSC 2306 – Small Animal Management – 3h

ANSC 3201 – Advanced Live Animal Evaluation – 2h

ANSC 3301 – Clinical Pathology – 3h

ANSC 3303 – Pharmacology – 3h

ANSC 3309 – Sheep and Goat Production – 3h

ANSC 3310 – Anatomy and Physiology of Domestic Animals – 3h

ANSC 3313 – Equine Nutrition – 3h

ANSC 3315 – Behavior and Management of Domestic Animals – 3h

ANSC 3316 – Feed Manufacturing and Formulation – 3h

ANSC 3317 – Livestock and Wildlife Nutrition – 3h

ANSC 4306 – Livestock and Wildlife Diseases – 3h

ANSC 5303 – Advanced Ration Formulation – 3h
ANSC 5309 – Advanced Animal Nutrition – 3h
ANSC 5324 – Advanced Physiology and Biochemistry of Domestic Animals – 3h
ANSC 5329 – Animal Breeding and Genetics

Tennessee Tech University

ANS 1210 - Introduction to Animal Science Lab – 1h
ANS 2020 - Livestock Management - 3h
ANS 2110 - Livestock Evaluation - 3h
ANS 3010 - Animal Nutrition - 3h
ANS 3020 - Feeds and Feeding - 3h
ANS 4120 - Swine Production – 3h
ANS 4940 - Special Topics-Anatomy and Physiology - 3h

Texas A&M University-Commerce

AnS 118 - Introduction to Animal Science - 4h
AnS 205 - Livestock Selection and Evaluation - 3h
Ans 307 - Animal Feeding - 3h
AnS 316 - Dairying - 3h
AnS 319 - Anatomy and Physiology of Domestic Animals - 3h
AnS 412 - Beef Cattle Production - 3h
AnS 413 - Swine Management - 3h
Ans 497 - Animal Behavior - 3h
Ans 497 - Scenario Based Livestock Selection - 3h
AnS 597 - Advanced Ration Balancing - 3h
AnS 597 - Nutritional Biochemistry - 5h
AG 300 - Writing for Publication - 1h
AG 392 - Applied Agricultural Ethics - 3h
AG 400 - Senior Seminar - 1h
EQSC 342- Equine Nutrition - 3h
FdSc 318-Meats Evaluation - 3h

4. Animal Health Experience

Conducted multiple surgical procedures during graduate school including

- Hepatic and portal vein catheterizations
- Mesenteric artery and vein catheterizations
- Femoral artery and vein catheterizations
- Rumen cannulations in mature animals
- Rumen cannulations in infant calves
- Small intestine cannulations in infant calves
- Jugular vein chronic indwelling catheters

Use of injection based anesthesia

Use of inhaled anesthesia

Heart rate and respiration monitors during surgery

Completed surgical procedures course at University of Tennessee
Experienced in multiple normal livestock health procedures including
Subcutaneous and intramuscular injections
Intravenous injections, blood draws and chronic catheter placement
Castration on all livestock species
Dehorning procedures with various techniques

5. Service Activities

a. University – Sul Ross State University

University Curriculum Council
University Research Council
Title V Post Baccalaureate Fellowship Committee
University Technology and Library Committee
Chair – IACUC
Athletic Committee
Scholarship Committee

Texas A&M-Commerce

Morris Scholarship Committee, Spring 2002-Selection of outstanding M.S. and Ph.D. candidates
Faculty Senate Representative, 2002-2005- Department of Agricultural Sciences
University Honors Committee, 2002-2006
Academic Life Committee, 2002-2003 Co-Chairman-2004-2005
Athletic Council, 2005-2007

b. College – Sul Ross State University

Faculty Advisor – ANRSreps – Recruiting and Speaking student group for college
Faculty Supervisor for all species on college ranch
Responsible for equine facilities

Texas A&M-Commerce

Member Dean's Star Society
Sigma Xi Member and Fall 2001 Keynote Speaker
Charter Member of Animal Care and Use Committee

c. School – Tennessee Tech University

Director of Block and Bridle Bull Sale – December 2011
Co-Advisor – Block and Bridle Club
Co-Advisor – Pre-Veterinary Club
Faculty Liason to Oakley Sustainable Agriculture and Research Farm

d. Department – Sul Ross State University

Chairman – Search Committee for Exotic Ranch Management Faculty
Chairman – Search Committee for Ranch Manager

Faculty Advisor – Sul Ross State University Pre-Vet Club
Faculty Advisor – Sul Ross State University Ranch Horse Team

Texas A&M-Commerce

Started and Coached Intercollegiate Livestock Judging Team
Advisor Alpha Gamma Pho Fraternity
Faculty/Student Mentor Program Participant
Started and advisor for Ag-Ambassadors recruiting group
Member of Recruitment, Retention and Alumni Relations Committee
Contest Superintendent for Area 5 and 6 FFA Livestock Contests
Contest Superintendent for Districts 3 and 4 4-H Livestock Contest

e. Community

Board Member – Putnam County Cattleman’s Association – Cookeville, TN
Featured Speaker at 2011 Great Plains Dairy Symposium
Spoke and published at Alltech International Nutrition Symposium, 2008
Judged 68 FFA/4-H livestock Shows
Assisted local producers with dairy and beef nutrition questions
Member Cookeville Noon Lions Club – Cookeville, TN
Member Commerce Lions, Club-Vice-President 2004-2005
Assisted local 4-H with show projects and judging teams
Associate Superintendent
 Open Beef Cattle Show, State Fair of Texas, 2002
Superintendent
 Junior Steer Show, State Show, State Fair of Texas, 2003-2006
Spoke at Putnam Co. Cattleman’s Meeting and Directors Meeting
Charter Member Northeast Texas Goat Raisers Association and Dept. Columnist
Member of Hunt County Beef Committee
Spoke at 2001 Hunt County Beef Exposition
Speaker at 2002-2005 East Texas Youth Beef Camp
Speaker at 2003 Anderson County Youth Beef Camp

6. Professional Association Memberships

American Society of Animal Science
Southern Association of Animal Science
Equine Science Society
Member of Agricultural By-Product Coalition of America

7. Graduate Student Committee Involvement

Sul Ross State University

Major Advisor

Clayton Gillespie – Expected Graduation May 2015

Committee Member

Martin Smith – Completed May 2014

Jon Brooks – Expected Completion December 2014

Jacob Haile – Expected Completion December 2014

Rebecca Nogler – Expected Completion December 2014

Kelly Thompson – Expected Completion December 2014

Lauren Anders – Expected Completion May 2015

Nicholas Inserra – Expected Completion May 2015

Melissa Petersen – Expected Completion May 2015

Texas A&M - Commerce

Major Advisor

Lea Ann Kinman-M.S. Spring 2001

Synchronization of Estrus and Fixed-time Insemination in Virgin Heifers

Heather Richardson-M.S. August 2002

The Effects of Serum Copper and Selenium Levels on Antibody Titers of Stocker Calves Injected with Leptospiriosis

Nicole McGovern-M.S. August 2002

Effect of Injection Site on Immune Response to Vaccine Challenge

Roger Skipper-M.S. May 2004

Effects of Serum Levels of Copper and Zinc on Antibody Titers of Stocker Calves Injected with *Leptospiriosis* Sp. Vaccine and Drenched with a Balanced Mineral Supplement

K. Wayne. Davenport-M.S. May 2005

John Cody Barnes-M.S. August 2005

Lisa Pickering-M.S. December 2006

Chris Ellason-M.S. August 2007

Effects of Plane of Nutrition on Kid Size, Body Weight, and Body Condition Score on Late Gestating Mature Boer Goats

Committee Member

Jennifer Dixon-M.S. December 2004

Tommy Phillips-M.S. May 2004

Tracy Stewart-M.S. December 2002

Jeremy Dicken-M.S. December 2002

Nathan Melson-M.S. May 2002
Mindy Morris-M.S. December 2001
Steven Gowin-M.S. December 2001

8. Undergraduate Honors Instruction

K. Wayne Davenport-B.S. May 2003

9. Research Projects as PI

Effects of Transport on Heart Rate and Physiological Parameters in Horses – B.C. Housewright, Research Enhancement Grant – Funded for \$5800 – Fall 2014

Cardiac and Metabolic Responses to Addition of Dietary Zeolite in Quarter Horses During a Sprint Training Regimen. B.C. Housewright, Research Enhancement Grant – Funded for \$6544 – Fall 2013

Effect of Plane of Nutrition of Dystocia, Kid Size and Incidence of Pregnancy Toxemia in Mature Boer Goats
Texas A&M University-Commerce- Mini grant- \$600.00

Effect of injection Site on Immune Response to Vaccine Challenge
Houston Livestock Show and Rodeo- \$1000.00 completed 2002

Effects of Increased Trace Mineral Supplementation of Immune Response in Steers to *Leptospiriosis Pomona* Vaccination
Houston Livestock Show and Rodeo- \$4000 completed 2002

Effects of Feeding Regimen on Equine Salivary pH
Houston Livestock Show and Rodeo-\$4000.00 completed 2002

Effects of Fatty Acid and Quality of Raw Soybeans on Digestibility and Grains in Feeder Calves
Texas Soybean Board-\$3180-completed 2003

Effects of Fatty Acid Profile of Raw Soybeans on Rumen Nitrogen and Free Fatty Acid Levels *In Vitro*
Graduate School, Texas A&M University-Commerce-\$475-completed 2003

Economic and Production Impacts of Supplemental Raw Soybeans on Parlor Fed Dairy Cows
Texas Soybean Board-\$2800.00-completed 2004

Digestive Tract and Portal Blood Disappearance of Trace Minerals
Houston Livestock Show and Rodeo-\$5000.00

The Effect of Trace Mineral Supplementation of Antibody Titers of Stocker Calves Challenged With *Leptospiriosis Pomona* Vaccine
Houston Livestock Show and Rodeo- \$4000.00

Consumption of Free Choice Mineral in Varying Forms by Mature Horses Consuming Hay *ad libitum*

11. Funded research as Collaborator

- a. Winter grazing regimes and mineral supplementation effects on follicular waves and puberty in prepuberal beef heifers
Houston Livestock Show and Rodeo- \$5500.00
- b. Variety and Soil Fertility Options for Improving Yield and Quality of Soybean Hay in North Texas
Houston Livestock Show and Rodeo- \$2000.00

12. Proposals Not Funded

- a. Soil Amendments as a Means for Improving Growth and Sustainability of Grain Crops in North Texas.
Southern Region SARE-\$45000.00
- b. New Food and Animal Waste Composting Technology-A National Outreach/Technology Transfer Initiative
Chancellor Federal Initiative- \$2,500,000
- c. Science Education to Combat Waterborne Terrotism
Chancellor or Federal Initiative- \$1,300,000
- d. The Effects of Corn Derived Aflatoxin and Fumonisin on Days to First Estrus in Ruminants
Texas Corn Producers Board- \$8400.00
- e. The Effects of Floating Teeth on Weight Gains and Feed Digestibility in Horses from Weanling to Yearling.
Archer Daniels Midland/AIN Inc.-approximately \$3000.00
- f. Effects of Preconditioning Regime on Subsequent Feedlot Performance of Calves
Northeast Texas Beef Improvement Organization-\$2572.00
- g. Rumen Environment and Digestion Changes in Goats Supplemented with Two Commercially Available Live Yeast Cultures.
Western Yeast Inc.- \$4500.00

13. Refereed Abstracts

Estep, C. M., Housewright, B. C., & Bennett, M. R. (2013). The development of best practices in mentoring undergraduate research [Abstract]. *NACTA Journal*, 57(supplement 1), 43

Effect of supplemental molasses on equine salivary pH subsequent bacterial acid production. 2003. B.C. Housewright*, E.L. Swain, J. Hamra, L.L. Richardson and D.B. Crenshaw. Texas A&M University Commerce. J. Anim. Sci., 71(Suppl. 1).

Effect of fatty acid profile on *in situ* and *in vitro* digestibility of raw soybean in grazing cattle. 2003. B.C. Housewright*, L.L. Pickering, H.L. Richardson, D.D. Kee, J. Heitholt, V. Pantalone, and K.W. Davenport, Texas A&M University-Commerce, Texas Cooperative Extension Service, Texas Agricultural Experiment Station-Dallas, University of Tennessee, Knoxville. J. Anim. Sci., 71(Suppl. 1).

Effects of serum Cu and Se levels on antibodies titers of stocker calves exposed to *Leptospiriosos Pomona* vaccine. 2003. H.L. Richardson, B.C. Housewright and D.B. Crenshaw. J. Anim. Sci., 71(Suppl. 1).

Housewright, B.C., R. N. Heitmann, J.C. Waller, L.A. Caldwell, and R.E. Towns. 1989. Effect of corn distillers dried grains with soluble on rumen, post-gastric, and hepatic net fluxes of energy metabolites. J. Anim. Sci. 67(Suppl. 1):543

Housewright, B.C., R. N. Heitmann, J.C. Waller, L.A. Caldwell, and R.E. Towns. 1989. Effect of corn distillers dried grains with soluble on rumen, post-gastric, and hepatic net fluxes of energy metabolites. J. Anim. Sci. 67(Suppl. 1):543

Housewright, B.C., J.C. Waller, J.C. Waller, J.C. Forcherio, and H.A. Fribourg. 1989. Comparison of two forage systems on subsequent cow-calf performance during spring. J. Anim. Sci. 67(Suppl. 2):64.

Housewright, B.C., R.N. Heitmann, J.C. Waller, and J.E. Wells. 1990. Portal-drained viscera(PDV), hepatic(HEP) and total splanchnic(TSP) nitrogen flux in sheep feed increasing ADFN. FASEB. 4(3):A385

Forcherio, J.C., J.C. Waller, R.E. Towns, and B.C. Housewright. 1990 Effects of increasing levels of soy meal feed in corn in corn silage based growing diets on steer performance in feedlot. J.Anim.Sci. 68(Suppl. 1):477

Housewright, B.C., J.C. Waller, R.N. Heitmann, J.D. Quigly, and J.E. Wells. 1990. Portal-drained viscera(PDV), hepatic(HEP), and hindquarter(RUMP) VFA flux in sheep fed increasing concentrations of structural carbohydrates, J. Anim. Sci. 68 (Suppl. 1):512

Housewright, B.C., R.E. Towns, and J.C. Waller. 1991. Rumen-escape protein and energy supplements for starting calves on feed. J.Anim. Sci. 70(Suppl. 1): 31

Thompson, R.W., J.C. Waller, H.A. Fribourg, A.B. Chestnut, and B.C. Housewright. 1992. Steer performance from tall fescue pastures free fescue pastures free of fungal entophyte or infested at two levels. J. Anim. Sci. 70(Suppl. 1):21

Waller, J.C., B.C. Housewright, and M.A. Battrell. 1992. A comparison of chromic oxide, lignin and indigestible acid detergent fiber as markers to determine digestibility of feedlot diets. J. Anim. Sci. 71(Suppl. 1):314

Housewright, B.C., R.N. Heitmann, J.C. Waller, L.N. Lembo, and Campbell. 1993 Alterations of energy metabolite fluxes in sheep fed a high forage diet, with or without supplemental ionophore. J. Anim. Sci. FASEB J. 7:A841

Housewright, B.C., R.N. Heitmann, J.C. Waller, L.N. Lembo, and Campbell. 1993 Alterations of energy metabolite fluxes in sheep fed a high forage diet, with or without supplemental ionophore. J. Anim. Sci. (Suppl. 1):267

Housewright, B.C., R.N. Heitmann, J.C. Waller, L.N. Lembo, and Campbell. 1993 Alterations of energy metabolite fluxes in sheep fed a high forage diet, with or without supplemental ionophore. J. Anim. Sci. (Suppl. 1):191

Housewright, B.C., R.N. Heitmann, J.C. Waller, L.N. Lembo, and Campbell. 1993 Alterations of energy metabolite fluxes in sheep fed a high forage diet, with or without supplemental ionophore. J. Anim. Sci. (Suppl. 1):190

14. Refereed Articles

Effects of serum levels of copper and zinc on antibody titers of two breeds of stocker calves injected with *Leptospirosis sp.* vaccine and drenched with an organic mineral supplement. 2011. Housewright, B.C., R. Skipper, D. Crenshaw, and C.P. Bagley. TX J Agric and Nat Resour. 23:90-96.

Formulating Phosphorus in Dairy Diets, A New Way of Thinking, Byron Housewright, Texas A&M-Commerce, 2008, Alltech 24th Nutrition Symposium.

Horse Preference and Digestion Rates of Hays as Influenced by Bermudagrass Variety and Harvest time. 2005. M.L. Foster, C.P. Bagley and B.C. Housewright. American Forage and Grasslands Conference

Injecting Anhydrous Ammonia into Polyethylene Silage Bags to Enhance Forage Quality Attributes and Measure Silage Preference by Heifers. 2005. W.D. Becker, C.P. Bagley, B. Housewright and D. Harp. American Forage and Grasslands Conference.

Influence of Depigmentation of Peral Millet(*pennisetum glaucum L.*) on Sensory Attributes, Nutrient Composition and In vitro Digestibility of Biscuits. 2004. Rathi, A., A. Kawatra, S. Sehgal and B. Housewright. Food Science and Technology/LWT. 37(2):187

Managing Fescue Pasture for Horses. David Kee and Byron Housewright. Texas A&M University, Cooperative Extension Publication, 2003

15. Newspapers and Magazines

Managing Fescue Pasture for Horses. David Kee ,Byron Housewright and Erin Swain. Country World.

16. Reference Information

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