

## CURRICULUM VITAE

### L. Wayne Greene, Ph.D., PAS, Diplomate ACAS

Professor, Department of Animal Sciences, Auburn University

#### CONTACT INFORMATION:

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#### EDUCATION:

B.S., 1977, Major: Animal Science, Department of Animal Science, North Carolina State University  
M.S., 1979, Major: Animal Science, Department of Animal Science, North Carolina State University  
Ph.D., 1981, Major: Animal Science, Department of Animal Science, Virginia Tech University

#### POSITIONS HELD:

2024 – Present Professor, Department of Animal Sciences, Auburn University  
2005 – 2024 Department Head, Department of Animal Sciences at Auburn University  
1997 – 2005 Professor, Texas A&M University (TAMU) Research Center in Amarillo with the home department in Department of Animal Sciences, TAMU with a joint appointment in the Division of Agriculture at West Texas A&M University and holding an adjunct appointment in the Department of Animal and Food Science at Texas Tech University.  
1981-1997 TAMU Department of Animal Sciences and beginning in 1987 jointly appointed in the Department of Veterinary Anatomy and Public Health  
1981 Assistant Professor  
1987 Associate Professor and Section Leader of Animal Nutrition  
1992 Professor and Section Leader of Animal Nutrition

**Current Position:** Professor, Department of Animal Sciences at Auburn University. In this role, I am teaching graduate and undergraduate classes. I teach a PhD level graduate class ANSC 8410 Minerals and Vitamins. The course delivers basic and applied aspects of mineral and vitamin nutrition affecting food animal species. At the undergraduate level, I teach ANSC 1000 Introduction to Animal Science. This course delivers the foundation principles of food animal production at the freshman level. As Professor, I am reinvigorating my previous research program in the area of beef cattle nutrition and management. This program is being directed toward the applied aspects of nutrition and management of beef cattle that is pertinent to southeastern cattle production. The specific areas of interest are 1) nutritional stressors affecting grazing cattle in a forage based production system, 2) nutritional impact on animal health and 3) nutritional needs for transporting southeastern feeder cattle (pre- and post-transport) to stocker and finishing programs in OK, TX and KS wheat pasture grazing and feedlots.

#### Department of Animal Sciences Department Head

After serving 19.5 years as Department Head in the Department of Animal Sciences at Auburn University (2005-2024), I chose to return to my first love in academics of undergraduate teaching and beef cattle research. During this time, the undergraduate program grew from 280 to 480 undergraduate students

majoring in animal sciences while supporting a rapidly growing student population majoring in Agricultural Sciences in the College of Agriculture. During this time, I led the recruitment and hiring of 90% of the department's faculty. Responsibilities of this position included budget management, supervision of faculty and staff, and development and implementation of innovative programs and policies related to academia, extension, and research in Animal Sciences. Development of stakeholder relations and support for faculty programs received a high priority. In completing these responsibilities I worked to ensure the smooth delivery of programs across blurred boundaries of the three-way mission of the land grant university. As department head, I served as a liaison for the Department of Animal Sciences with the animal agriculture industry of the state, region, and nation. I served on numerous advisory boards for the animal industry throughout the state. As the longest serving department head at Auburn University, I was a member of the Auburn University President's Leadership Council representing all department heads and chairs at Auburn University. Additionally, during the last 5 years in this position, I was the longest serving Department Head of Animal Science in Land Grant Universities across the nation.

*Highlights of key activities as Head, Department of Animal Sciences at Auburn University*

- Under my leadership, federal and state competitive research funding increased significantly for faculty in the Department of Animal Sciences at Auburn University. I developed and provided oversight for the management of \$872,000 annual funding in a Federal line-item USDA-ARS partnership for Beef-Forage research, a \$250,000 annual line item from Alabama State Legislation for Livestock Evaluation and \$125,000 annual line item from Alabama State Legislation for state-wide youth livestock programming.
- I managed the Department of Animal Science teaching, research and extension budget for 19 faculty members and 4 animal related teaching, research and extension facilities (Swine, Beef, Equine animal units and Meats Laboratory).
- Developed and maintained the partnership between the Department of Animal Sciences at Auburn University with sister departments inside and outside of Alabama in support of food animal production.
- In 2022, I organized, planned and led a study tour of the southeastern U.S. beef cattle industry for 13 embassy delegates representing 11 European Union countries, and New Zealand and Australia to present the sustainability of the beef industry and the research programming contributed by the faculty in the Department of Animal Sciences at Auburn University that ensured continued sustainability of the cattle industry in forage-based environments.
- In 2022, College Factual listed my department as the best program for animal science in the southeast region and 5<sup>th</sup> in the nation for students pursuing a BS degree in Animal Science.
- The development of regional programming was initiated in the formation of a SERA project (USDA-Southern Extension Research Activity and grew into the current project SERA 041. This project involves Experiment Station and Extension faculty from the 13 southeastern states. The SERA was formalized in February 2007 with the election of officers for the group and has continued to evolve into a major venue for scientists and specialists to develop joint programming across the southeast.
- During my tenure of service at Auburn University, significant accomplishments were made to re-connect the departmental programs to our supporting clientele groups. I work closely with leaders in Alabama Farmers Federation, Alabama Cattlemen's Association, Beef Cattle Improvement Association, and Alabama Feed and Grain Association to bring significant clientele support to our programs as I worked with faculty to ensure their research programs were pertinent to food animal production systems in Alabama.
- Faculty tours/retreats at 18 month intervals were conducted to keep faculty introduced to our production environment. During these tours, time was allotted for 1) departmental discussion of program effectiveness, decision-making on departmental issues and internal partnerships across teaching, research, and extension, 2) a tour of Alabama animal agriculture up close and personal, 3) a face-to-face meeting with animal agriculture livestock personnel (producers and industry leaders) over

meals and social hours, and 4) social interaction of the faculty with each other. The outcome of the tour consists of industry recognition of the department being engaged with our stakeholders, the development of new teaching, research, and extension programming ideas, and most importantly, positive interaction between faculty members in a stress-free non-competitive environment.

- Enhanced research and teaching facilities through development supported departmental programs. A covered equestrian arena and support for laboratory and classroom renovations in animal science occurred in this era. During my tenure, I brought the Swine Research and Education Center from groundbreaking through the completion of its construction phase.
- At every opportunity, as Head, Department of Animal Sciences, I presented the department at conventions, field days, summer camps, expos, fairs, conferences and various outreach events and programs across the state, region and nation.
- Service in leadership roles in professional societies and organizations in the state, region and nation brought recognition to our program.
- I worked to continue positive relations with our sister Alabama Land Grant Alliance institutions. Partnering with Alabama A&M University animal science faculty, Alabama A&M Cooperative Extension Faculty, and Tuskegee University animal science faculty in joint programming across our Land Grant universities in Alabama developed a strong partnership across all of our institutions.
- Partnerships with Allied Industry continue to be a high priority in the development and delivery of teaching, research and extension programs.

#### **PRIOR ADMINISTRATIVE EXPERIENCE:**

- 1997 – 2005 Beef Cattle Program Leader Texas AgriLife Research at Amarillo, TX. I managed budgets, provided leadership and coordinated feedlot and stocker beef cattle research in Amarillo, TX across 10 faculty and associated staff/graduate students from Texas AgriLife Research, Texas AgriLife Extension, West Texas A&M University, USDA-ARS-Bushland and Texas Tech University. I provided leadership to develop the Beef Cattle Research in Texas (BCRT) working group, Consortium for Cattle Feeding and Environmental Sciences (CCFES) and Consortium for Research, Extension and Education Traingle (CREET-Bushland, Amarillo, Canyon).
- 1987 – 1997 Beef Cattle Nutrition Section Leader, Department of Animal Sciences, Texas A&M University. I coordinated the animal nutrition academic program, supervised animal nutrition research laboratories and field facilities, and provided communication to animal nutrition Extension for 25 College of Agriculture and Life Sciences, Texas AgriLife Research and Texas AgriLife Extension faculty and their associated staff/graduate students.

#### **TEACHING EXPERIENCE:**

##### ***Auburn University***

- 2025 Taught undergraduate Introduction to Animal Sciences
- 2025 Taught graduate level Minerals and Vitamins
- 2023 - 2024 Taught component parts of Large Animal Nutrition in College of Veterinary Medicine
- 2022-2024 Taught undergraduate Careers in Animal Science
- 2022 Taught graduate level Ruminant Nutrition
- 2022 Taught undergraduate level Beef Production
- 2008 – 2018 Developed and taught Freshman Learning Community ‘Success Strategies’
- 2008 – 2022 Developed and taught Study/Travel in Animal Sciences
- 2015 – 2016 Taught graduate level Advanced Animal Nutrition
- 2016 – 2020 Taught undergraduate level Metabolism and Nutrition

##### ***Texas AgriLife Research Center- Amarillo***

- 1998-2004 Taught Advanced Animal Nutrition from Amarillo to multiple universities via Trans Texas Video Network

1998-2004 Taught Mineral Nutrition from Amarillo to multiple universities via Trans Texas Video Network

***Department of Animal Science – Texas A&M University***

1981 – 1996 Taught undergraduate nutrition ‘Principles of Animal Nutrition’  
 1981 – 1984 Taught graduate nutrition ‘Animal Experimentation’  
 1984 – 1987 Taught graduate nutrition ‘Mineral Nutrition’  
 1987 – 1996 Taught graduate nutrition ‘Advanced Animal Nutrition’

**RESEARCH EXPERIENCE:**

2024 – present Beef Cattle Nutrition and Management  
 2005 – 2024 Auburn University. Department Head, Department of Animal Sciences  
 Supervise and support department faculty in the solicitation of grants, the conduct of research and subsequent publication of data.  
 1997 – 2005 Texas AgriLife Research & Extension Center in Amarillo, TX. Beef Cattle Research Leader. Conducted research focused on feedlot and stocker cattle production systems. Research highlighted environmental nutrition and nutrient management for cattle health and increased efficiency. A joint research appointment with West Texas A&M University and adjunct appointment at Texas Tech University led to significant partnerships across academic institutions.  
 1981-1997 Texas A&M University Department of Animal Sciences and 1987-1997 jointly appointed to Department of Veterinary Anatomy and Public Health. Experiment Station research focused on mineral nutrition of food animal species for health and efficient production of meat products. Also supported and partnered with the equine nutrition research program in the Department of Animal Sciences.

**EXTENSION EXPERIENCE:**

2005 – Present Auburn University. Department Head, Department of Animal Sciences  
 Supervise state-wide merged Animal Science Extension Specialist assigned to the Department of Animal Sciences in the delivery of systems approach animal science - related programming. I provide leadership/oversight for numerous on-campus outreach programs for adults and youth.  
 1987 – 1997 Texas A&M AgriLife Extension 25% appointment as state-wide Extension Specialist. Delivered programming focused on the mineral nutrition of grazed cattle in improved and native pasture environments across Texas. Worked with Regional Extension Specialist on the delivery of extension programming focused on mineral nutrition of grazing livestock.

***Highlights of previous extension experience***

Beginning in 1987 I accepted a 25% Texas AgriLife Extension appointment within the TAMU System to work with State and Regional Extension Specialists in Beef Cattle Extension Programming. Prior to this time I had unofficially interacted with Extension programs in beef cattle production systems, especially programs related to mineral nutrition of beef cattle throughout Texas. The official 1987 appointment with Extension continued until 1996. After relocating to Texas AgriLife Research Center in Amarillo I continued to work closely with Extension Specialists at the Research and Extension Center in Amarillo

and across the state on programming in the beef cattle arena. While in Amarillo, a state-wide coalition of ‘Beef Cattle Workers of Texas’ was developed that aided in the coordination of research and Extension programs state-wide. I also worked with others to form the Consortium for Cattle Feeding and Environmental Sciences which merged research and Extension efforts across 4 regional universities in Texas and New Mexico incorporating both research and Extension faculty.

### **PROFESSIONAL AWARDS and RECOGNITIONS:**

- 2024 Distinguished Professional Animal Scientist – This award was presented based on lifetime contributions to the American Registry of Professional Animal Scientist
- 2022 Fellow American Society of Animal Science – This award is presented by the American Society of Animal Science in recognition of outstanding contributions in Administration to the livestock industry and the society. One Award in Administration was presented nationwide.
- 2017 Distinguished Service Award of Southern Section American Society of Animal Science – This award was presented in recognition for outstanding service to the livestock industry through beef cattle and management. The southern section represents the 13 southeastern states.
- 2011 Father of the Year, Alabama Cattlemen’s Association – Presented for work with the development of collegiates and youth as future leaders for agriculture.
- 2011 Honorary State FFA Degree in Alabama
- 2010 Above and Beyond Award – This award was presented by the US Department of Defense National Committee for Employer and Support of the Guard and Reserve for outstanding service and continuing support to National Defense.
- 2010 Patriot Award – Awarded by the US Department of Defense National Committee for Employer Support of the Guard and Reserve for contributing to the national security and protecting liberty and freedom by supporting employee participation in America’s National Guard and Reserve Force.
- 2008 Awarded Honorary Member of Southeast Livestock Exposition
- 2003 Regents Fellow Service Award, Texas A&M University System. The designation of Regents Fellow is based on research accomplishments in research of beef cattle nutrition and management, and is the highest System-wide (11 universities and eight state agencies) honor bestowed on faculty.
- 2003 Texas AgriLife Research Faculty Fellow, Texas A&M University System. The Texas AgriLife Faculty Fellow titles are permanent and go to senior-level faculty who have demonstrated exceptional leadership and impact in their research programs.
- 1991 Young Animal Scientist – Research Award. This award is presented by the Southern Section of the American Society of Animal Sciences to honor research faculty in the 13 southeastern states for outstanding early-career achievements.
- 1981 First Place Graduate Student Competition Paper Southern Section American Society of Animal Science. *J. Anim. Sci.* 52:1477 Effect of potassium level on site of magnesium absorption in ruminants.

### **PROFESSIONAL SERVICE LEADERSHIP:**

#### International

- 2000 Mexican Animal Nutritionists Association/Brazilian Animal Nutrition Association-Served as coordinating advisor for the merger of these associations for increased efficiency in serving stakeholders in Mexico, Central and South America.

#### National

- 2002 Plains Nutrition Council-Served as 2<sup>nd</sup> Vice President, 2000, 1<sup>st</sup> Vice President, 2001, President, 2002 and Past President, 2003.

2008 President-American Registry of Professional Animal Scientists, Southern Director 2000 to 2003, Treasurer 2003 to 2006, President Elect 2007, President 2008, Past President, 2009  
 1981 – present American Society of Animal Science-Served on numerous award committees, program committees, academic quadathralon committee, and Journal of Animal Science editorial board.  
 2004 - 2010 Professional Animal Auditors Certification Organization Board of Directors

### Regional

President - Southern Section American Society of Animal Science. Secretary Elect, 2010, Secretary, 2011, President Elect, 2012, President, 2013, Past President, 2014  
 Southern Section Departments of Animal Science Department Head Council Chair, 2013-2017, Secretary 2011-13

### Local and State (highlights) ALABAMA

Member, Southeastern Livestock Exposition – As a member of Southeastern Livestock Exposition I have provided service on multiple committees in support of the development of the next generation of agricultural leaders.

Member, Alabama Cattlemen’s Association – As a member of the Alabama Cattlemen’s Association I have served on numerous committees and in many activities supporting the Board of Directors, Staff and Officers to ensure that beef cattle production in Alabama remains in the forefront.

President - Alabama Coalition of Farm Animal Care and Well-Being: Founded this Coalition in Alabama consisting of all animal agriculture related associations, councils, federations and agencies in Alabama to provide legislators and the public information on animal care and well-being issues and to be proactive for animal agriculture.

Member – Alabama Animal ID Taskforce – Work cooperatively with the Alabama State Veterinarian to develop manageable strategies for the identification of cattle movement inside and outside of the state.

### Local and State (highlights) TEXAS

Vice Chairman - University Lab Animal Care and Use Committee: Served on the Texas A&M University Laboratory Animal Care Committee for a period of 6 years and served as Vice-Chairman for a period of 2 years.

Agricultural Animal Care and Use Committee: Served on the Texas A&M University Agricultural Animal Care and Use Committee for a period of 8 years.

Chairman - CREET Animal Care Committee: Initiated the development and served as chairman of this multi-agency/university committee to ensure optimal animal welfare of research animals used in Cooperative Research, Education, and Extension Team (CREET) animal facilities.

Ph.D. Proposal Writing Committee-West Texas A&M University: Served on the Ph.D. Proposal writing committee for the development of the first Ph.D. program at West Texas A&M University. Through the work of this committee, the Texas Higher Education Coordinating Board granted approval for the first Ph.D. program to be offered at West Texas A&M University.

Executive Committee, Faculty of Nutrition, Texas A&M University: Founding member of the Faculty of Nutrition and served on the Executive Committee for the faculty for the first six years of the faculties existence and until relocating to an off-campus center.

Texas Beef Cattle Workers’ Group: In partnership with colleagues initiated the development of the Texas Beef Cattle Workers’ Group.

Managed the following facilities for teaching and research programs within the Texas A&M University System

- James E. Bush Research Farm, Texas AgriLife Research and Extension Center, Amarillo, 1997-2005
- Texas AgriLife Research/USDA-ARS Research Feedlot - Bushland 1997-2005.
- Department of Animal Science Laboratory Animal Vivarium 1987-1996.
- Nutrition Field Laboratory, Department of Animal Science, 1987-1996.

-Health and Safety Coordinator for Department of Animal Science, 1987-1996. Assisted in acquiring funding for refurbishment of heating ventilation air conditioning to prevent laboratory fumes from entering non-laboratory spaces in Kleberg Building, Texas A&M University.

#### THESIS AND DISSERTATION COMMITTEES CHAIRED:

<u>Name</u>	<u>Degree</u>	<u>Year</u>	<u>Title</u>
David Kirk	M.S.	1984	The effects of monensin on mineral metabolism, and tissue and rumen fluid mineral levels in lambs.
Julie Poe	M.S.	1984	Effects of dietary potassium and sodium on magnesium and potassium balance in lambs.
Norbert Chirase	Ph.D.	1987	Studies of mineral metabolism in the presence of an ionophore in an in vitro continuous culture fermentation system, sheep mineral balance and cow-calf grazing experiments.
Linda Kapusniak	M.S.	1987	Mineral interactions and absorption in the equine digestive tract: Calcium, phosphorus, and magnesium interaction with aluminum, and calcium digestibility of alfalfa in ponies.
Leigh Anne Hurley	M.S.	1988	The determination of the bioavailability and the site of absorption in lambs fed different sources of magnesium.
Sheila Rodriguez	Ph.D.	1989	The effects of active somatostatin immunization on growth, feed efficiency, digesta passage rate and nutrient digestibility in rats, pigs and lambs.
Stephen Blezinger	M.S.	1989	The effects of ionophores and ionophore rotation systems with various dietary cations on microbial metabolism in the rumen.
John Doyle II	Ph.D.	1989	Trace mineral interaction on reproductive performance of beef cattle under range conditions in Edwards and McCulloch counties, Texas.
Christopher Heddins	Ph.D.	1990	The effects of level of dietary cations on growth, feed efficiency, mineral balance and serum constituents in steers fed ionophores.
Paul Hardt	M.S.	1990	Animal performance on small grain pastures with and without sulfur fertilizer.
John Hutcheson	M.S.	1991	The effects of zeranol and two dietary levels of calcium and phosphorus on performance, carcass and bone characteristics, and calcium status in feedlot lambs.
Douglas Hufstedler	M.S.	1991	Effects of zeranol on mineral status, bone characteristics, carcass characteristics and performance in growing wether lambs.
Paul Hardt	Ph.D.	1992	Serum and milk mineral concentrations and milk yield of beef cows of three breed types.
Daniel F. Villamar	Ph.D.	1992	Nutrient delivery to larval penaeid shrimp.
Nancy D. Turner	Ph.D.	1995	Regulation of protein, lipid, and bone accretion in steers treated with zeranol or transgenic mice expressing mutant bovine growth hormone genes.
Jim Sprinkle	Ph.D.	1995	Adipose tissue dynamics of grazing, limited-fed, and full-fed beef cattle differing in adaptation to heat.
Wade L. Menges	Ph.D.	1995	Effects of supplemental escape protein on dry matter intake, body condition and performance of mature beef cows grazing native range.

Patricia L. Scott	M.S.	1995	Effects of zeranol on plasma concentrations of growth hormone, IGF-1, and metabolites and on carcass composition of lambs fed at two levels of intake.
Mark Faulkenberry	M.S.	1995	Effects of humic acid on forage digestibility in ruminants
Brian Covington	M.S.	1997	Effects of humate on in vitro digestibility, performance, carcass characteristics, and mineral status of wether lambs.
Greg Eckert	M.S.	1997	Effects of level and source of copper on the copper status of ewes.
Dawn Niemann	M.S.	1998	Mineral status, bone characteristics, and performance of feed-lot lambs implanted with zeronal
Greg Nunnery	M.S.	1998	Effects of source and level of zinc on feedlot performance and carcass characteristics in steers
Kehe Xie	M.S.	1998	The effects of sulfate fertilization and high levels of sulfate and salt drinking water on the growth and mineral status of ruminants.
Antonio Garcia	Ph.D.	1999	Use of saccaromyces cervasie in beef cattle diets.
Robin Simon	M.S.	1999	Glutamine and zinc methionine supplementation to dairy calves.
Marty Vahlenkamp	M.S.	1999	The effects of dietary cation-anion balance and varying calcium concentrations in the diet on the serum calcium of feedlot steers.
Kevin McBride	M.S.	2000	Influence of dietary Agrado on performance, health status, ammonia emissions and antioxidant capacity of feedlot steers.
Larry D. Herd	Ph.D.	2000	Effects of copper supplementation on performance and immune response in calves.
Damon George	M.S.	2001	Beef cattle manure phosphorus and nitrogen conservation practices and their effects on the environment.
Douglas Hufstedler	Ph.D.	2001	The stability and nutritional adequacy of suspended liquid supplements used in beef cattle feedlots and rangeland diets.
Robert Barrett	M.S.	2001	Effect of level of dietary calcium and phosphorus on the site of absorption and utilization of phosphorus in gestating and lactating ruminants.
Guillermo Scaglia	Ph.D.	2002	Effect of delaying implant and programmed rate of gain on performance and carcass characteristics of beef steers.
Jason Williams	Ph.D.	2003	Dietary cation anion balance in receiving cattle to reduce the incidence of shipping stress
Kevin McBride	Ph.D.	2003	Nitrogen and phosphorus balance in steers fed different levels and sources of protein
Brock Hough	M.S.	2004	Pen surface nitrogen and phosphorus concentrations from steers fed different levels and sources of protein
Judson Vasconcelos	M.S.	2004	Phase feeding of steers to effect the excretion of nitrogen and phosphorus onto the pen surface.
Randa Owen	M.Ag	2012	Alabama Guidelines: Agricultural Animal Care and Well-Being

**PROFESSIONAL, SCIENTIFIC, COMMODITY AND HONOR SOCIETIES/ASSOCIATIONS:**

Alpha Zeta –North Carolina State Chapter, Censor; Texas Alpha Chapter, Advisor  
 American Registry of Professional Animal Scientist – Board certified in American College of  
 Animal Science  
 American Society of Animal Science

Gamma Sigma Delta  
 Sigma Xi  
 Southeastern Livestock Exposition  
 National Cattlemen's Beef Association  
 Alabama Cattlemen's Association  
 North Carolina Cattlemen's Association  
 Florida Cattlemen's Association  
 Alabama Feed and Grain Association – Advisor to the Board of Directors

## **PUBLICATIONS:**

### **Recent popular press articles**

Alabama Cattleman Magazine - 192 articles published as Head, Department of Animal Sciences  
 National Cattlemen Magazine -

Article title - Beef for Generations, Feb 2022 This article presents the sustainability of beef production in the United States and the impact of providing high quality protein for a world population

Article title - Convention connections lead to tour of southeastern U.S. beef production systems. Dec 2022 This article presents the development and tour for delegates representing 11 European delegates from Australia and New Zealand to present the sustainability of beef cattle production systems in the Southeast.

### **Scientific Refereed Journal Articles (n=88)**

- Greene, L. W., J. P. Fontenot and K. E. Webb, Jr. 1983. Effect of dietary potassium on absorption of magnesium and other macro elements in sheep fed different levels of magnesium. *J. Anim. Sci.* 56:1208.
- Greene, L. W., K. E. Webb, Jr. and J. P. Fontenot. 1983. Effect of potassium level on site of magnesium and other macro element absorption in sheep. *J. Anim. Sci.* 56:1214.
- Greene, L. W., J. P. Fontenot and K. E. Webb, Jr. 1983. Site of magnesium and other macro element absorption in steers fed high levels of potassium. *J. Anim. Sci.* 57:503.
- Robinson, E. H., S. D. Rawles, H. E. Yette and L. W. Greene. 1984. An estimate of the dietary calcium requirement of fingerling Tilapia Aurea reared in calcium-free water. *Aquaculture.* 41:389.
- Greene, L. W., P. G. Harms, G. T. Schelling, F. M. Byers, W. C. Ellis and D. J. Kirk. 1985. Growth and estrous activity of rats fed adequate and deficient levels of phosphorus. *J. Nutr.* 115:753.
- Greene, L. W., D. J. Kirk, F. M. Byers and G. T. Schelling. 1985. Mineral and energy balance in rats fed different levels of phosphorus. *Nutr. Rep. Int.* 32:539.
- Kirk, D. J., L. W. Greene, G. T. Schelling and F. M. Byers. 1985. Effects of monensin on monovalent ion metabolism and tissue concentrations in lambs. *J. Anim. Sci.* 60:1479.
- Kirk, D. J., L. W. Greene, G. T. Schelling and F. M. Byers. 1985. Effects of monensin on Mg, Ca, P and Zn metabolism and tissue concentrations in lambs. *J. Anim. Sci.* 60:1485.
- Wylie, M. J., J. P. Fontenot and L. W. Greene. 1985. Absorption of magnesium and other macrominerals in sheep infused with potassium in different parts of the digestive tract. *J. Anim. Sci.* 61:1219.
- Poe, J. H., L. W. Greene, G. T. Schelling, F. M. Byers and W. C. Ellis. 1985. Effects of dietary potassium and sodium on magnesium utilization in sheep. *J. Anim. Sci.* 60:578.
- Lochmiller, R. L., E. C. Hellgren, W. E. Grant, L. W. Greene and C. W. Dill. 1985. Description of collared peccary (*Tayassu tajacu*) milk composition. *Zoo Biology* 4:375.
- Lochmiller, R. L., E. C. Hellgren, L. W. Varner, L. W. Greene, M. S. Amoss, S. W. Seages and W. E. Grant. 1985. Physiological responses of the adult male collared peccary, *Tayassu tajacu* (*Tayassuidae*) to severe dietary restriction. *Comp. Biochem. Physiol.* 82A:49.

- Greene, L. W., J. C. Solis, F. M. Byers and G. T. Schelling. 1986. Apparent and true digestibility of magnesium in mature cows of five breeds and their crosses. *J. Anim. Sci.* 63:189.
- Greene, L. W., G. R. Bratton, J. Zmudzki, G. T. Schelling and F. M. Byers. 1986. Effect of dietary potassium and sodium on magnesium balance in rats fed different concentrations of magnesium. *Nutr. Rep. Int.* 33:235.
- Greene, L. W., G. T. Schelling and F. M. Byers. 1986. Effects of dietary monensin and potassium on apparent absorption of magnesium and other macro elements in sheep. *J. Anim. Sci.* 63:1960.
- Robinson, E. H., S. D. Rawles, P. B. Brown, H. E. Yette, and L. W. Greene. 1986. Dietary calcium requirement of channel catfish *Ictalurus punctatus*, reared in calcium-free water. *Aquaculture* 53:263-270.
- West, J. W., C. E. Coppock, D. H. Nave, J. M. Labore, L. W. Greene and T. W. Odom. 1987. Effects of potassium carbonate and sodium bicarbonate on rumen function in lactating Holstein cows. *J. Dairy Sci.* 70:81.
- Boerner, B. J., F. M. Byers, G. T. Schelling, C. E. Coppock and L. W. Greene. 1987. Trona and sodium bicarbonate in beef cattle diets: Effects on site and extent of digestion. *J. Anim. Sci.* 65:303.
- Boerner, B. J., F. M. Byers, G. T. Schelling, C. E. Coppock and L. W. Greene. 1987. Trona and sodium bicarbonate in beef cattle diets: Effects on pH and volatile fatty acid concentrations. *J. Anim. Sci.* 65:309.
- Turner, N. D., G. T. Schelling, P. G. Harms, L. W. Greene and F. M. Byers. 1987. A comparison of the protein requirements for growth and reproduction in the rat. *Nutr. Rep. Int.* 36:73.
- Greene, L. W., W. E. Pinchak and R. K. Heitschmidt. 1987. Seasonal dynamics of minerals in forages at the Texas Experimental Ranch. *J. Range Manage.* 40:502.
- Chirase, N. K., L. W. Greene, G. T. Schelling and F. M. Byers. 1987. Effect of magnesium and potassium on microbial fermentation in a continuous culture fermentation system with different levels of monensin or lasalocid. *J. Anim. Sci.* 65:1633.
- Chirase, N. K., L. W. Greene, D. K. Lunt, J. F. Baker and R. E. Knutson. 1988. Serum and ruminal fluid parameters of beef cows grazing oat pastures and supplemented with or without lasalocid. *J. Anim. Sci.* 66:1746.
- Solis, J. C., F. M. Byers, G. T. Schelling and L. W. Greene. 1988. Maintenance requirements and energetic efficiency of cows of different breeds. *J. Anim. Sci.* 66:764.
- Warrington, B. G., F. M. Byers, G. T. Schelling, D. W. Forrest, J. F. Baker and L. W. Greene. 1988. Gestation nutrition, tissue exchange and maintenance requirements of heifers. *J. Anim. Sci.* 66:774.
- Benz, D. A., F. M. Byers, G. T. Schelling and L. W. Greene. 1988. Ionophore, diet, nutritional state and level of intake: Effects on vital organ mass and hepatic fructose 2, 6 bisphosphate levels in growing animals. *Nutr. Rep. Int.* 38:57.
- Greene, L. W., D. K. Lunt, F. M. Byers, N. K. Chirase, C. E. Richmond, R. E. Knutson and G. T. Schelling. 1988. Performance and carcass quality of steers fed additional zinc from zinc methionine or zinc oxide. *J. Anim. Sci.* 66:1818.
- Kapusniak, L. J., L. W. Greene and G. D. Potter. 1988. Calcium, magnesium and phosphorus absorption from the small and large intestine of ponies fed elevated amounts of aluminum. *J. Equine Vet. Sci.* 8:305.
- Greene, L. W., B. J. May, G. T. Schelling and F. M. Byers. 1988. Site and extent of apparent magnesium and calcium absorption in steers fed monensin. *J. Anim. Sci.* 66:2987.
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