

## *Curriculum Vitae*

### **I. PERSONAL INFORMATION**

**Jamie Lee Foster, Ph.D., P.A.S.**

*Professor, Forage Agronomy*

*Texas A&M AgriLife Research- Beeville*

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### **II. EDUCATION**

Ph.D., Animal Science and Agronomy Minor, University of Florida, May 2008.

M.S., Agronomy, Texas A&M University, August 2004.

B.S., Animal Science, Tarleton State University, May 2002.

### **III. PROFESSIONAL EXPERIENCE**

Apr. 2009 to Present, Texas A&M University, Texas A&M AgriLife Research Beeville Station  
Adjunct Graduate Faculty, College of Science and Engineering, Texas A&M University-Corpus  
Christi.

Graduate Faculty, Molecular and Environmental Plant Science Program, Texas A&M  
University.

Adjunct Faculty, Plant and Soil Science, Texas A&M University-Kingsville.

May 2008 to Apr. 2009. Postdoctoral Associate, University of Florida, North Florida Research  
and Education Center.

### **IV. TEACHING**

#### **A. Courses**

Guest lecturer

Forage Production and Utilization. Texas A&M University. International Beef Cattle  
Academy Certificate Program. Fall 2018, Fall 2019.

#### **B. Summary of Student Involvement**

<b>Degree</b>	<b>Chair or co-chair</b>	<b>Member</b>
Master of Agriculture		1
Master of Science	3	12
Ph.D.	4	6
Undergraduate student interns	27	NA

### **V. RESEARCH, EXTENSION, AND SERVICE**

#### **A. Summary of Grants and Contracts Awarded**

<b>Type</b>	<b>Total dollars to all PIs</b>	<b>Dollars allocated to program</b>
External	57,103,215	1,887,974
Internal	2,219,603	457,849
Gifts and gifts-in-kind	10,517	10,517
Royalties to program	10,476	10,476

## B. Summary of Scientific and Professional Presentations

Type	Total
International	5
National	15
Regional	22
State	23
Local	34

## C. Summary of Committees and Other Service

Type	Total
Associate Editor	2
Invited Reviews	23
External Reviewer	5
Golden Opportunity Mentor	2
Program Planning Committees	10
CSSA C6 Division Chair	1
University or Departmental Committees	10
Professional Affiliations	14
Community Service Boards	3
Volunteer Service Organizations	3

## VI. PUBLICATIONS AND PROFESSIONAL OUTPUT

### A. Refereed/Peer-Reviewed Publications

*Last three years (41 total)*

1. Norris, A., L.O. Tedeschi, **J.L. Foster**, J.P. Muir, K.D. Casey, and W. Pinchak. 2020. The effect of quebracho (*Schinopsis balansae*) condensed tannin extract fed to steers on seasonal fecal gas flux. *J. Environ. Qual.* (In Press)
2. Smith, W.B., J. Banta, **J.L. Foster**, L. Redmon, T. Machado, L. Tedeschi, and M. Rouquette. 2020. : Evaluation of growth performance and carcass characteristics of beef stocker cattle grazing Tifton 85 bermudagrass supplemented with dried distillers' grains with solubles then finished in feedlot. *Appl. Anim. Sci.* (In Press)
3. Norris, A., L.O. Tedeschi, J.L. Foster, J.P. Muir, W. Pinchak, and M. Fonseca. 2020. Inclusion of Quebracho tannin extract in a high-roughage cattle diet alters digestibility, nitrogen balance, and energy partitioning. *J. Animal Sci.* 93: doi.org/10.1093/jas/skaa047
4. Xu, Y., N. Porter, **J.L. Foster**, J.P. Muir, P. Schwab, B.L. Burson, and R.W. Jessup. 2020. Silica production across candidate lignocellulosic biorefinery feedstocks. *Agronomy.* 10:82. doi.org/10.3390/agronomy10010082
5. Norris, A., L.O. Tedeschi, **J.L. Foster**, J.P. Muir, W. Pinchak, and M. Fonseca. 2020. Influence of quebracho tannin extract fed at differing rates within a high-roughage diet on the apparent digestibility of dry matter and fiber, nitrogen balance, and fecal gas flux. *Animal Feed Science & Technology.* 260: doi.org/10.1016/j.anifeedsci.2019.114365

6. **Foster, J.L.**, M.E. Thomas-Moen, K.C. McCuiston, L.A. Redmon, and R.W. Jessup. 2019. Potential of ensiling sorghum without grain pre-treated with enzymes or bacterial inoculants. *Crop Sci.* doi:10.2135/cropsci2019
7. Lewis, K.L., **J.L. Foster**, and F.M. Hons. 2019. Lipid-extracted algae as a soil amendment can increase soil salinization and reduce forage growth. *Sustainability.* 11:1-18. doi:10.3390/su11071946
8. Grichar, W.J., and **J.L. Foster**. 2019. Can nicosulfuron plus metsulfuron combinations effectively control or suppress King Ranch bluestem? *Crop, Forage, and Turfgrass Mngmt.* doi:10.2134/cftm2018.09.0069
9. Xu, Y., **J.L. Foster**, J.P. Muir, B.L. Burson, and R.W. Jessup. 2018. Succinic acid production across candidate lignocellulosic biorefinery feedstocks. *Amer. J. Plant Sci.* doi: 10.4236/ajps.2018.911155
10. **Foster, J.L.**, M.E. Bean, C. Morgan, G. Morgan, R. Mohtar, J. Landivar, and M. Young. 2018. Comparison of two tillage practices in a semi-arid cotton-grain sorghum rotation. *Agron. J.* 110: 4: 1572-1579. doi:10.2134/agronj2017.12.0706

## **B. Editor Reviewed Publications**

### *Last three years (13 total)*

1. Muir, J.P., C. Cooper, V. Olson, and **J.L. Foster**. 2020. Tree legumes as sustainable ecosystem services in sustainable livestock systems. *Proc. XXIV Int. Grasslands Cong.*, Nairobi, Kenya, Oct. 25-30.
2. **Foster, J.L.** 2019. The arboreal legume dilemma: adaptation and weediness. *Legume Perspectives.* 17:30-32.
3. Norris, A.B., L.O. Tedeschi, K.D. Casey, J.C.B. Dubeux, **J.L. Foster**, J.P. Muir, and W.E. Pinchak. 2018. Quebracho (*Schinopsis balansae*) extract in beef cattle fed high-roughage total mixed ration affects manure gas emissions. *International Symposium on the Nutrition of Herbivores*, Clermont-Ferrand, France, Sept. 2-6.

## **C. Scientific Abstracts**

### **Last two years (125 total)**

1. Bekewe, P.E., H.L. Neely, C.B. Neely, **J.L. Foster**, K.L. Lewis, T.W. Boutton, B. Gerrish, and A.J. Gyawali. 2020. Comparing soil health parameters in no-till and conventional tillage farms across three ecoregions in Texas. *ASA-CSSA-SSSA 2020 International Meetings*, Pheonix, AZ, Nov. 8-11. (Abstr.)
2. Dube, N., A. Chang, X. Shen, J. Landivar, and **J.L. Foster**. 2020. Unmanned aircraft system (UAS) based forage biomass prediction using an artificial neural network. *ASA-CSSA-SSSA 2020 International Meetings*, Pheonix, AZ, Nov. 8-11. (Abstr.)

3. Shen, X, J. Landivar, A. Chang, N. Dube, and **J.L. Foster**. 2020. Identifying botanical composition and accuracy assessment on high-resolution imagery of grassland mixtures. ASA-CSSA-SSSA 2020 International Meetings, Phoenix, AZ, Nov. 8-11. (Abstr.)
4. Cardenas, S., A. Bhandari, A. Umphres, **J.L. Foster**, J. Landivar, and N. Dube. 2020. Response of high yielding cotton (*Gossypium hirsutum* L.) varieties to potassium fertilizer application in dryland south Texas. ASA-CSSA-SSSA 2020 International Meetings, Phoenix, AZ, Nov. 8-11. (Abstr.)
5. Jacobb, P., A.J. Gyawali, A.P. Smith, H. Neely, **J.L. Foster**, and P. Bekewe. 2020. Developing spatial sampling strategies for monitoring microbial exoenzyme activity for soil health. ASA-CSSA-SSSA 2020 International Meetings, Phoenix, AZ, Nov. 8-11. (Abstr.)
6. **Foster, J.L.**, P.E. Bekewe, H.L. Neely, C.B. Neely, L.E. Tomlin, and K.L. Lewis. 2020. Wheat double cropping systems to improve soil health. Soil and Water Conservation International Annual Conference, Des Moines, IA, Jul. 26-29. (Abstr.)
7. Victoria, M., H.R. Leggette, **J.L. Foster**, H. Neely, C. Neely, K. Lewis, P. Bekewe, B.J. Gerrish, and J. Parrella. 2020. Minding the microbes: The adoption of soil health management techniques by Oklahoma wheat producers. Soil and Water Conservation International Annual Conference, Des Moines, IA, Jul. 26-29. (Abstr.)
8. Garcia, A., J.A. McGinty, **J.L. Foster**, G. Schuster, and A. Umphres. 2020. Weed management systems in imidazolinone tolerant grain sorghum in south Texas. Weed Science Society of American Annual Meeting. Maui, HI, Mar 2-5. (Abstr.)
9. Bekewe, P.E., H.L. Neely, C.B. Neely, **J.L. Foster**, K.L. Lewis, B. Gerrish, L.E. Tomlin, and T.W. Boutton. 2020. Building soil health and food security in wheat-based cropping systems in Texas. Soil Survey and Land Resource Workshop, College Station, TX, Feb. 6-7. (Abstr.)
10. Victoria, M., H.R. Leggette, **J.L. Foster**, H. Neely, C. Neely, K. Lewis, P. Bekewe, B.J. Gerrish, and J. Parrella. 2020. Measuring adoption of soil health practices of wheat producers in Texas. National Agricultural Communication Symposium, Louisville, KY, Feb. 2-3. (Abstr.)
11. Garcia, A., J.L. Foster, G. Schuster, A. Umphres, and J.A. McGinty. 2020. Weed management systems in imidazolinone tolerant sorghum (*Sorghum bicolor*) in south Texas. Subtropical Agriculture and Environments Society, Weslaco, TX, Feb. 7. (Abstr.)
12. Bekewe, P.E., H.L. Neely, C.B. Neely, L.E. Tomlin, **J.L. Foster**, K.L. Lewis, T.W. Boutton, and B. Gerrish. 2019. Towards improving soil health in wheat cropping systems in Texas. Texas Plant Protection Conference, College Station, TX, Dec. 10-11. (Abstr.)

13. Garcia, A., **J.L. Foster**, A. Umphres, G. Schuster, and J.A. McGinty. 2019. Weed management systems in imidazolinone tolerant sorghum (*Sorghum bicolor*) in south Texas. Texas Plant Protection Conference, College Station, TX, Dec. 10-11. (Abstr.)
14. Clayton, M., **J.L. Foster**, A. Chang, M. Starek, X. Shen, N. Dube, and D. Gonzalez. 2019. Using drones to support management decisions on rangelands and pastures. Texas Plant Protection Conference, College Station, TX, Dec. 10-11. (Abstr.)
15. Bekewe, P.E., H.L. Neely, C.B. Neely, L. Tomlin, **J.L. Foster**, K.L. Lewis, and T.W. Boutton. 2019. Can double cropping provide similar soil health benefits as cover crops? ASA-CSSA-SSSA 2019 International Meetings, San Antonio, TX, Nov. 10-13. (Abstr.)
16. Bekewe, P.E., H.L. Neely, C.B. Neely, L. Tomlin, **J.L. Foster**, K.L. Lewis, and T.W. Boutton. 2019. The impact of reduced tillage and double cropping on soil moisture dynamics. ASA-CSSA-SSSA 2019 International Meetings, San Antonio, TX, Nov. 10-13. (Abstr.)
17. Flynn, K., P.W. Tracy, D. Liptzin, G.M. Bean, S. Cappellazzi, M. Cope, K.L. Hoegenauer, E. Rieke, C. Norris, C.W. Honeycutt, C.L.S. Morgan, and **NAPSHM Collaborators**. 2019. Slakes smartphone application to quantify aggregate stability: Performance across a range of soil types and managements. ASA-CSSA-SSSA 2019 International Meetings, San Antonio, TX, Nov. 10-13. (Abstr.)
18. Garcia, A., J.A. McGinty, **J.L. Foster**, and G. Schuster. 2019. Weed management systems in imidazolinone tolerant sorghum (*Sorghum bicolor*) in south Texas. ASA-CSSA-SSSA 2019 International Meetings, San Antonio, TX, Nov. 10-13. (Abstr.)
19. Hoegenauer, K.L., G.M. Bean, S. Cappellazzi, M. Cope, D. Liptzin, C. Norris, E. Reike, P.W. Tracy, K. Flynn, C.W. Honeycutt, J.A. Howe, C.L.S. Morgan, and **NAPSHM Collaborators**. 2019. Comparing aggregate stability analyses to evaluate soil health across North America. ASA-CSSA-SSSA 2019 International Meetings, San Antonio, TX, Nov. 10-13. (Abstr.)
20. Morgan, C.L.S., P.W. Tracy, G.M. Bean, M. Cope, S. Cappellazzi, K.L. Hoegenauer, D. Liptzin, C. Norris, E. Rieke, **NAPSHM Collaborators**, and C.W. Honeycutt. 2019. Measurements to assess soil health indicators and link them to soil ecosystem services. ASA-CSSA-SSSA 2019 International Meetings, San Antonio, TX, Nov. 10-13. (Abstr.)
21. Pintar, J., P. Smith, H.L. Neely, C.B. Neely, **J.L. Foster**, K.L. Lewis, P.E. Bekewe, A.J. Gyawali, and J. Desrochers. 2019. Developing spatical sampling strategies for monitoring microbial activity for soil health. ASA-CSSA-SSSA 2019 International Meetings, San Antonio, TX, Nov. 10-13. (Abstr.)
22. Stufflebeam, A., H.L. Neely, P.E. Bekewe, K.L. Lewis, **J.L. Foster**, and C.B. Neely. 2019. Comparing the impact of short-term soil health practices on aggregate stability

across Texas. ASA-CSSA-SSSA 2019 International Meetings, Baltimore, MD, Nov. 10-13. (Abstr.)

23. Bekewe, P.E., H.L. Neely, C.B. Neely, **J.L. Foster**, K.L. Lewis, B. Gerrish, and T.W. Boutton. 2019. The impact of double cropping and tillage systems on cropping systems productivity in three ecoregions in Texas. Small Grains Workers Meeting, College Station, TX, Aug. 28. (Abstr.)
24. Norris, A.B., L.O. Tedeschi, **J.L. Foster**, J.P. Muir, and B.E. Pinchak. 2019. Effects of feeding different levels of Quebracho (*Schinopsis balansae*) in a high-roughage total mixed ration on seasonal manure gas emissions. American Society of Animal Science-Canadian Society of Animal Science Annual Meeting, Austin, TX, Jul. 8-11. (Abstr.)
25. Norris, A.B., L.O. Tedeschi, **J.L. Foster**, J.P. Muir, and B.E. Pinchak. 2019. Influence of Quebracho (*Schinopsis balansae*) tannin extract fed at differing rates in a high-roughage diet on energy partitioning in beef steers. American Society of Animal Science-Canadian Society of Animal Science Annual Meeting, Austin, TX, Jul. 8-11. (Abstr.)
26. Bekewe, P.E., H.L. Neely, C.B. Neely, **J.L. Foster**, K.L. Lewis, and T.W. Boutton. 2019. The impact of double cropping and tillage systems on soil health in wheat cropping systems in three ecoregions in Texas. Soil Survey and Land Resource Workshop, College Station, TX, Feb. 7 – 8. (Abstr.)
27. Young, M., **J.L. Foster**, J. McGinty, S. Klose, and A. Maeda. 2019. No-till farming practices offer cost savings and more profit to cotton and grain sorghum producers. Southern Agricultural Economics Association Annual Meeting, Birmingham, AL, Feb. 2-5. (Abstr.)
28. Bekewe, P.E., H.L. Neely, C.B. Neely, L.E. Tomlin, **J.L. Foster**, and K.L. Lewis. 2019. Towards improving soil health in wheat cropping systems in Texas. Soil Science Society of America Meetings, San Diego, CA, Jan. 6-9. (Abstr.)
29. Maeda, A., J. Landivar, **J.L. Foster**, A. Ashapure, J. Yeom, M. Maeda, A. Chang, and J. Jung. 2018. Evaluation and quantification of environmental sustainability of different tillage treatments in South Texas. ASA-CSSA-SSSA 2018 International Meetings, Baltimore, MD, Nov. 4-7. (Abstr.)
30. Falk, A.D., K.A. Pawelek, F.S. Smith, J.P. Muir, **J.L. Foster**, L. Herzberger, T. Farthing, and W.P. Kuvlesky, Jr. 2018. Bermudagrass control and restoration of native prairie for Northern Bobwhites. Texas Section Society for Range Management, Lubbock, TX, Oct. 11-12. (Abstr.)
31. Norris, A.B., W.L. Crossland, L.O. Tedeschi, **J.L. Foster**, J.P. Muir, and W.E. Pinchak. 2018. Effect of differing rates of Quebracho (*Schinopsis balansae*) extract fed in a limit fed high roughage TMR upon digestibility and nitrogen balance. American Society of

Animal Science-Canadian Society of Animal Science Annual Meeting, Vancouver, Canada, Jul. 8-12. (Abstr.)

32. Norris, A.B., L.O. Tedeschi, K.D. Casey, J.C.B. Dubeux, **J.L. Foster**, J.P. Muir, and W.E. Pinchak. 2018. Effects of feeding different levels of quebracho (*Schinopsis balansae*) extract in a high-roughage total mixed ration on manure gas emissions. ASAS Southern Section Meeting, Fort Worth, TX, Feb. 3-6. (Abstr.)

#### **D. Book Chapters**

1. Jennings, J., and **J.L. Foster**. 2020. Legume Structure and Morphology. In: D. Redfearn, et al., editors, Forages: The Science of Grassland Agriculture. Vol. II, 7<sup>th</sup> ed., Wiley-Blackwell, Hoboken, NJ.

### **VII. PROFESSIONAL HONORS AND AWARDS**

#### **A. Honors**

Texas A&M AgriLife Research, AgriLife Advanced Leadership Program Cohort IV Participant. 2016-2018.

Syngenta Leadership at its Best Program Graduate. 2007.

#### **B. Awards**

Matthew Bean, M.S. Student, 2<sup>nd</sup> Place Oral Presentation Contest, 53<sup>rd</sup> Annual Soil Survey and Land Resource Workshop. 2016.

Katie Rothlisberger-Lewis, Ph.D. Student, 3<sup>rd</sup> Place Graduate Student Poster Competition in Soils, Agronomy Society of America 2014 Southern Branch Meeting

Katie Rothlisberger-Lewis, Ph.D. Student, 3<sup>rd</sup> Place Graduate Student Poster Competition Agronomy Society of America Soil Carbon and Greenhouse Gas Emissions Community, ASA-CSSA-SSSA 2013 International Meetings

Reagan Noland, M.S. Student, 1<sup>st</sup> Place Graduate Student Poster Competition in Crops, Agronomy Society of America 2013 Southern Branch Meeting

Corpus Christi 40 Under 40. 2011. Recognizes 40 professionals under 40 years of age for their professional success and commitment to the community.

First Place, Robert F. Barnes Graduate Student Competition, International Crop Science Society of America Meetings, 2006

### **VIII. PROFESSIONAL AFFILIATIONS**

Alpha Chi, National Honor Society

Alpha Zeta, National Agriculture Honor Society

American Agri-Women

American Forage and Grassland Council

American Registry of Professional Animal Scientists

American Society of Agronomy  
American Society of Animal Science  
Crop Science Society of America  
Florida Agri-Women (2006-2009)  
Gamma Sigma Delta, University of Florida Agricultural Honor Society  
Phi Kappa Phi, Oldest and Largest All-Discipline National Honor Society  
Sigma Alpha, Professional National Agriculture Organization for Women  
Texas Forage and Grassland Council  
Texas Pasture & Forage Work Group