#### **Curriculum Vitae:**

#### MICHAEL L. WESTENDORF

Rutgers, The State University of New Jersey
Department of Animal Sciences
84 Lipman Drive
New Brunswick, New Jersey 08901-8525
Phone: 848-932-9408 (office), 732-235-1974 (home)
Office Fax: 732-932-6996

### **EDUCATION**

University of Kentucky, Lexington, Kentucky: Ph.D., December 1991

Major: Animal Science

Thesis: Bovine Physiological and Ruminal Responses to Endophyte-Infected Tall Fescue

University of Kentucky, Lexington, Kentucky: M.S., May 1988

Major: Animal Science

Thesis: Bovine Plasma Vitamin A Levels in Response to Large Doses of Vitamin A

University of Idaho, Moscow, Idaho: B.S., May 1980

Major: Animal Science

#### **EXPERIENCE**

Extension Specialist in Animal Sciences (Professor Rank); Rutgers Cooperative Extension, New Jersey Agricultural Experiment Station. Academic department: Department of Animal Sciences, Rutgers School of Environmental and Biological Sciences (the renamed Cook College). Current line split: 60% Extension, 10% research, 30% teaching. Promoted from Associate to Full Professor in July 2016 (joined Rutgers in July 1993 as an Assistant Extension Specialist (promoted to Associate Professor in 2001) with a line split of 70% Extension and 30% research). Development of technical support programs to service livestock producers in the state of New Jersey. Authored technical bulletins. Developed audiovisual materials. Provided leadership to statewide livestock industries. Carried out an applied research program in the areas of by-product utilization and optimization of ruminant animal growth, and conducted nutrition research in the feeding of solid wastes such as food plate waste to swine and ruminant animals. Conducted nutrient and waste management work that included providing leadership for some statewide nutrient management programs, conducting horse manure management research, and developing educational programs about manure management. Outreach program focused on animal nutrition, health, and manure management.

Congressional Science Fellow; United States Congress, Washington, DC, 1992-1993. Worked as a Science Fellow in a program sponsored by the American Association for the Advancement of Science (AAAS). Developed legislative agenda, prepared and delivered speeches, interacted with producers, consumers, industry, staff members, and Congressional Representatives while working for the Department Operations and Nutrition Subcommittee in the U.S. House of Representatives.

Animal Research Laboratory Manager; University of Kentucky, Kentucky, 1989-1992. Supervised and managed animal research laboratory. Oversaw experimental protocols, research techniques, animal care, equipment maintenance, and diet preparation. Ensured compliance with animal welfare guidelines. Interacted with faculty, staff and students.

Beef Cattle Extension Intern; University of Kentucky, Lexington, Kentucky, 1986-1988. Visited farms and gave technical support to cow-calf producers. Assisted with computerized cow-calf management analysis. Spoke to producers, county agents and students. Participated in on-farm research projects such as intensive grazing and mineland reclamation. Authored technical bulletins. Developed multi-media beef cow condition tutorial for extension staff and producers.

Dairy Farm Manager; Tunghai University, Taichung, Taiwan, 1982-1984. Major responsibility for \$250,000 dairy herd development and facilities upgrade: Oversaw importation of Holstein heifers, milking machine, bulk storage tank, tractor loader and silage chopper. Designed milking parlor, calf barn, feed silos and dry lots. Implemented program for ensiling native grasses to ensure forage quality. Managed feeding, breeding, herd-health, calf-management, milking, heat-detection, A.I., and worker training. Taught two university courses: Animal Judging and Dairy Cattle Management.

*Manager Trainee*; Chino Grain and Milling, Chino, California, 1981-1982. Retail feed division: Day-to-day operation of retail stores, feed delivery, and inventories.

### **ACTIVITIES, HONORS, AND AWARDS**

- 1. 2017: New Jersey Association of County Agents. Educators of the Year, Livestock Symposium Team. Mike Westendorf, Carey Williams, Bob Mickel, Clint Burger, Joanne Powell, Felicia Kleiman, and Rebecca Potosky. Rutgers University.
- 2. 2011: eXtension. Outstanding National Community of Practice: Livestock Poultry Environmental Learning Center. eXtension Achievement Award.
- 3. 2011: Scholarship: National Association of County Agricultural Agents. National Finalist. Communications Award: Video. Animal Waste Management Video Training. Rutgers Cooperative Extension. Hlubik, W.T., Bamka, W.J., Komar, S.J., Rice, M., Robert Mickel, Smela, D.T., Weidman, R.B., and Westendorf, M. L.
- 4. 2011: Scholarship: National Association of County Agricultural Agents. State Winner. Search for Excellence in Livestock Production. Animal Waste Management Planning. Rutgers Cooperative Extension. Robert Mickel, Carey Williams, Dave Lee, Jason Berkowitz, Michael Westendorf, Stephen J. Komar, and William Bamka.
- 5. 2010: National Association of County Agricultural Agents. State Winner. Communication Award: Equine Essentials Newsletter. Rutgers Cooperative Extension. Bamka, W.J., Komar, S., Mickel, R., Carleo, J., Sciarappa, W., Williams, C., and Westendorf, M.
- 6. 2010: National Association of County Agricultural Agents. Northeast Regional Finalist. Communications Award: Publication. New Jersey Animal Waste Management Rules. Rutgers Cooperative Extension. R.C. Mickel, Bamka, W., Komar, S., Lee, D., Westendorf, M., and Williams, C.
- 7. 2009: National Association of County Agricultural Agents. Northeast Regional Winner. Search for Excellence in Young, Beginning, or Small Farmers and Ranchers. Self-Certification Program for Farmers to Develop Animal Waste Management Plans for New Jersey. Rutgers Cooperative Extension. R.C. Mickel, Stephen J. Komar, William Bamka, Michael Westendorf, Carey Williams, and David Lee.
- 8. 2006: National Association of County Agricultural Agents. Northeast Regional Finalist. Communications Award: Learning Module. Mid-Atlantic Equine Pasture Initiative. Rutgers Cooperative Extension. Bob Mickel, Donna Foulk, Dan Kluchinski, Bill Sciarappa, Carey Williams, and Michael Westendorf.
- 9. 2005: National Association of County Agricultural Agents. Northeast Regional Winner. Communications Award: Fact Sheet Bulletin E296. Equine Agricultural Management Practices Bulletin. Publication. Rutgers Cooperative Extension. Bob Mickel, Everett Chamberlain, Donna Foulk, Margie Margentino, Michael Westendorf.

- 10. 1999: National Association of County Agricultural Agents. Northeast Regional Finalist for Video. Communications Award: Video. Concepts in Nutrient Management. Rutgers Cooperative Extension. Everett Chamberlain, Robert Mickel, and Michael Westendorf and the Rutgers University Office of Radio and Television.
- 11. 1999: Northeast Regional Research Award for Excellence, Northeast Regional Research Project (NE-132): Environmental and Economic Impacts of Nutrient Management on Dairy Forage Systems, Member of the Technical Committee.
- 12. 1991: Outstanding Ph.D. Student, University of Kentucky College of Agriculture.
- 13. 1979: Jacob Monson Scholarship, University of Idaho.
- 14. 1975: State Farmer Degree Future Farmers of America.
- 15. 1975: Outstanding Vocational Agriculture Student, Gooding High School.

### PROFESSIONAL SOCIETIES

American Society of Animal Science, American Registry of Professional Animal Scientists, Sigma Xi, Gamma Sigma Delta, Alpha Zeta.

### CERTIFICATES AND LICENSES HELD

- 1. Technical Service Provider, Conservation Activity Plan and Comprehensive Nutrient Management Plan Development, USDA Natural Resources Conservation Service, 2009-Present
- 2. Certified Nutrient Management Planner, Maryland Department of Agriculture Certification, 2007-Present
- 3. Professional Animal Scientist Certification, American Registry of Professional Animal Scientists, 1990-Present

### **BOOK**

1. Food Waste to Animal Feed. December 2000 Publication. M. L. Westendorf, ed. Iowa State University Press. Ames, IA.

## **BOOK CHAPTERS**

- 1. Animal Waste Management. In: *The Reporter's Environmental Handbook*. 3<sup>rd</sup> Ed. B. M. West, M. J. Lewis, M. R. Greenberg, D. B. Sachsman, and R. Rogers, *ed.* Rutgers University Press. Piscataway, NJ. August 2003 Publication. Pages 87-95.
- 2. Brewing Byproducts: Their Use As Animal Feeds. In: *Alternative Feeds for Beef Cattle*. G. Rogers and M. Poore, *ed*. The Veterinary Clinics of North America: Food Animal Practice. W. B. Saunders. Philadelphia, PA. July, 2002 Publication. Pages 233-252.
- 3. Food Waste as Animal Feed: An Introduction. In: *Food Waste to Animal Feed*. M. L. Westendorf, *ed*. Iowa State University. Ames, IA. December 2000 Publication. Pages 3-15.
- 4. Food Waste as Swine Feed. In: *Food Waste to Animal Feed*. M. L. Westendorf, *ed*. Iowa State University. Ames, IA. December 2000 Publication. Pages 69-89.

## **PUBLICATIONS (Refereed)**

- 1. N. L. Trottier, R. C. Bott, A. Woodward, E.A. Greene, C. A. Williams, M. L. Westendorf, A. M. Swinker, S.L. Mastellar, and K. M. Martinson. 2016. Gastrointestinal Nitrogen Metabolism of Equids and Impact on Protein Requirement. J. Equine Vet. Sci. 45:78-86. (<a href="http://www.jevs.com/article/S0737-0806(16)30283-0/pdf">http://www.jevs.com/article/S0737-0806(16)30283-0/pdf</a>).
- R. C. Bott, A. Woodward, E.A. Greene, N. L. Trottier, C. A. Williams, M. L. Westendorf, A. M. Swinker, S. L. Mastellar, and K. M. Martinson. 2016. Environmental Implications of Nitrogen Output on Horse Operations: A Review. J. Equine Vet. Sci. 45:98-106. (http://www.j-evs.com/article/S0737-0806(15)00549-3/pdf).

- 3. Westendorf, M.L., C. A. Williams, and L. B. Kenny. 2015. Protection of environmental resources through the implementation of optimum feed management practices on equine farms. Professional Animal Scientist. 31:296-301. (http://pas.fass.org/content/31/3/296.full.pdf+html)
- 4. Westendorf, M.L. and C. A. Williams. 2015. Effects of excess dietary phosphorus on fecal phosphorus excretion and water extractable phosphorus in horses. J. Equine Vet. Sci. 25:495-498. (http://www.sciencedirect.com/science/article/pii/S0737080615000465)
- 5. Westendorf, M.L., J. E. Wohlt, C. J. Sniffen, and R. T. Ward. 2014. Nutrient content of brewers grains produced at a commercial brewery: Variation in protein/nitrogen, fiber, carbohydrate, fat, and minerals. Prof. Anim. Sci. 30:400-406.

  (http://pas.fass.org/content/30/4/400.full.pdf+html)
- 6. Westendorf, M. L., V. Puduri, C. A. Williams, T. Joshua, and R. Govindasamy. 2013. Dietary and manure management practices on equine farms in two New Jersey watersheds. J. Equine Vet. Sci. 33:601-606. (http://www.sciencedirect.com/science/article/pii/S0737080612007848)
- 7. Westendorf, M. L., C. A. Williams, A.O. Burk, N. Trottier, K. Martinson, P. D. Siciliano, A. M. Swinker, E. A. Greene, and R. Bott. June, 2012. Environmental Impacts of Equine Operations: A USDA multi-state project. J. Equine Vet. Sci. Volume 32(6): 324-326. (http://www.sciencedirect.com/science/article/pii/S0737080611007386)
- 8. Komar, S., R. Miskewitz, M. Westendorf, and C. A. Williams. 2012. Effects of bedding type on compost quality of equine stall waste: implications for small horse farms. J. Anim. Sci. 90:1069-1075. (https://www.animalsciencepublications.org/publications/jas/pdfs/90/3/1069)
- 9. Westendorf, M.L., T. Joshua, S.J. Komar, C. A. Williams, and R. Govindasamy. 2010. Effectiveness of Cooperative Extension manure management programs. J. Equine Vet. Sci. 30(6):322-325.
  - (http://www.sciencedirect.com/science/article/pii/S0737080610002108)
- Westendorf, M.L., T. Joshua, S.J. Komar, C. A. Williams, and R. Govindasamy, 2010. Case Study: Manure management practices on New Jersey equine farms. Prof. Anim. Sci. 26:123-129. (http://pas.fass.org/content/26/1/123.full.pdf+html)
- 11. Lynn, B. A., J. E. Wohlt, P. A. Schoknecht, and M. L. Westendorf. 2009. Variation in nutrient content microbrewers grains and effect on performance and carcass composition when fed wet to growing-finishing swine. Prof. Anim. Sci. 25:426-433.

  (http://pas.fass.org/content/25/4/426.full.pdf+html)
- 12. Paul V. Romano, Uta Krogmann, Michael L. Westendorf, and Peter F. Strom. 2006. Small-scale composting of horse manure mixed with wood shavings. Compost Sci. and Utiliz. 14(2):132. (<a href="http://search.proquest.com/docview/214880975/fulltext/72E764DBB2364364PQ/9?accountid=136">http://search.proquest.com/docview/214880975/fulltext/72E764DBB2364364PQ/9?accountid=136</a> 26)
- 13. Jones, J., J. E. Wohlt, and M. L. Westendorf. 2004a. Case Study: Comparison of swine diets containing a food waste product made with wheat middlings and corn or a corn/soybean diet. Prof. Anim. Sci. 20:422-428. (http://pas.fass.org/content/20/5/422.full.pdf+html)
- 14. Westendorf, M. L. 2004b. Case Study: Scientific veal production and opposition legislation in New Jersey. Prof. Anim. Sci. 20:358-364. (http://pas.fass.org/content/20/4/358.full.pdf+html)
- 15. Altizio, B. A., M. L. Westendorf, and P. A. Schoknecht. 2000. Comparison of a corn/soybean diet versus a dried recycled food waste product in swine. Prof. Anim. Sci. 16:254-260. (http://pas.fass.org/content/16/4/254.full.pdf+html)
- 16. Singer, J. W., J. R. Heckman, J. Ingerson-Mahar, and M. L. Westendorf. 2000. Hybrid and nitrogen source effect on European corn borer damage and yield. J. Sustain. Agric. 16(1):5-15.
- 17. Westendorf, M. L., T. Schuler, and E. W. Zirkle. 1999. Nutritional quality of recycled food plate waste in diets fed to swine. Prof. Anim. Sci. 15:106-111. (http://pas.fass.org/content/15/2/106.full.pdf+html)

- 18. Westendorf, M. L., Z. C. Dong, and P. A. Schoknecht. 1998. Recycled cafeteria waste as a feed source for swine: nutrient content, digestibility, growth and meat quality. J. Anim. Sci. 76:2976-2983. (https://www.animalsciencepublications.org/publications/jas/pdfs/76/12/2976)
- 19. Westendorf, M. L. and R. Gordon. 1998. Effect of increasing undegradable intake protein when sheep are fed diets low in protein. Prof. Anim. Sci. 14(1):16-21. (http://pas.fass.org/content/14/1/16.full.pdf+html)
- 20. Westendorf, M. L. and C. Miller. 1998. Public discussion forums for assisting dairy farmers. J. of Ext. October. Volume 36(5). <a href="http://www.joe.org/joe/">http://www.joe.org/joe/</a> 1998 October/iw2.html. (Electronic Publication)
- 21. Simeone, A., Westendorf, M. L., R. E. Tucker, L. P. Bush, and G. E. Mitchell, Jr. 1998. Ammoniation to reduce the toxicity of endophyte-infected tall fescue seed fed to rats. Drug and Chem. Toxicol. 21(1):67-78.
- 22. Westendorf, M. L., E. W. Zirkle, and R. Gordon. 1996. A review: feeding food or table waste to livestock. Prof. Anim. Sci. 12(3):129-137.
- 23. Westendorf, M.L., R. G. Zimbelman, and C. E. Pray. 1995. Science and agriculture policy at Land-Grant Institutions. J. Anim. Sci. 73:1628-1638.

  (https://www.animalsciencepublications.org/publications/jas/pdfs/73/6/1628)
- 24. Munyabagisha, L., M. L. Westendorf, G. E. Mitchell, Jr., N. Gay and R. E. Tucker. 1993. Bovine plasma vitamin A responses to selected nutrients, monensin and endophytic fescue. Int. J. Vit. Nutr. Res. 63(1):77-81.
- 25. Westendorf, M. L., G. E. Mitchell, Jr., R. E. Tucker, L. P. Bush, R. J. Petroski and R. G. Powell. 1993. In vitro and in vivo ruminal and physiological responses to endophyte-infected tall fescue. J. Dairy Sci. 76:555-563. (http://www.journalofdairyscience.org/article/S0022-0302%2893%2977375-0/pdf)
- 26. Westendorf, M. L., G. E. Mitchell, Jr. and R. E. Tucker. 1992. Influence of rumen fermentation on response to endophyte-infected tall fescue seed measured by a bioassay in rats. Drug and Chem. Toxicol. 15(4):351-364.
- 27. Westendorf, M. L., G. E. Mitchell, Jr., N. Gay, R. E. Tucker and N. Bradley. 1990. Plasma Vitamin A levels in response to large doses of vitamin A. Int. J. Vit. Nutr. Res. 60(4):314-319.
- 28. Seman, D. H., D. R. Catherman, M. G. Hayek, D. G. Ely, M. L. Westendorf, D. B. Batson, R. E. Tucker and G. E. Mitchell, Jr. 1989. Comparison of 14<sup>C</sup> decoquinate metabolism between beef heifers and ewe lambs. Sheep Res. J. 5:9-13.
- Seman, D. H., D. R. Catherman, T. Matsui, M. G. Hayek, D. B. Batson, A. H. Cantor, R. E. Tucker, R. B. Muntifering, M. L. Westendorf and G. E. Mitchell, Jr. 1989. Metabolism of decoquinate in chickens and Japanese quail. Poultry Sci. 68:670-675.

### WORKS IN PROGRESS

- 1. Splan, R., M. Spindler, K. Anderson, C. Skelly, M. Westendorf, C. Williams, L. Kenny, and R.C. Bott-Knutson. 2017. Opportunities for equine science student development through the transdisciplinary and global challenges of climate change. Journal of the North American Colleges and Teachers of Agriculture. (NACTA Journal). Submitted for Publication.
- 2. Westendorf, M. L. and Z. R. Helsel. 2017. Validation of Near-Infrared Reflectance Spectral Data for Analyzing Horse Manure. In Progress.
- 3. Nazarenko, Y. Westendorf, M. L., C. A. Williams, and G. Maenelis. 2017. The Effects of Stall Bedding Type on Stall Air Quality and the Potential Consequences for Health and Performance of Horses. J. Equine.Vet. Science. In Progress.

#### REFEREED CONFERENCE PROCEEDINGS

- 1. Krogmann, U., Westendorf, M.L., Rogers, B.F., Romano, P.V.: Best Management Practices for Horse Manure Composting on Small Farms in Monmouth County/New Jersey (USA). Proceedings of the Fourth International Conference of ORBIT Association on Biological Processing of Organics: Advances for a Sustainable Society (Part 1) in Perth/Australia on 30 April 2 May, 2003, published by Centre for Organic Waste Management, Murdoch University, Perth/Australia, pp. 366-374.
- Krogmann, U., Romano, P.V., Westendorf, M.: Reduction of Fecal Streptococci and Strongyle Eggs during Small-Scale Composting of Horse Manure Mixed with Wood Shavings. Proceedings of 2002 International Symposium "Composting and Compost Utilization" in Columbus, OH, on 6-8 May, 2002, published by Ohio State University (CD-ROM).

# **ONLINE eXTENSION FACTSHEETS (Peer-Reviewed Nationally)** eXtension and the Livestock Poultry Environmental Learning Center.

- 1. Westendorf, M.L. 2009. Managing Manure on Horse Farms. http://www.extension.org/pages/19102/managing-manure-on-horse-farms
- 2. Westendorf, M.L. 2009. <u>Stall Waste Production and Management</u>. <u>http://extension.org/pages/Stall</u> Waste Production and Management
- 3. Westendorf, M.L. 2009. <u>Manure Storage on Horse Farms</u>. <u>http://extension.org/pages/Manure Storage on Horse Farms</u>
- 4. Westendorf, M.L. 2009. <u>Spreading Manure on Horse Farms</u>. <u>http://extension.org/pages/Spreading Manure on Horse Farms</u>
- 5. Westendorf, M.L. 2009. <u>Off-Farm Manure Disposal</u>. <u>http://extension.org/pages/Off-Farm Manure Disposal</u>
- 6. Westendorf, M.L. 2009. <u>Exercise or Sacrifice Lots for Horses</u>. <u>http://extension.org/pages/Exercise or Sacrifice Lots for Horses</u>
- 7. Westendorf, M.L. 2009. <u>Pasture Management on Horse Farms</u>. <a href="http://extension.org/pages/Pasture Management">http://extension.org/pages/Pasture Management on Horse Farms</a>
- 8. Westendorf, M.L. 2009. Fencing for Horses. http://extension.org/pages/Fencing for Horses
- 9. Westendorf, M.L. and M. Rice. 2008. Manure Management on Small farms. http://extension.org/pages/Manure Management on Small Farms
- 10. Ogejo, Jactone Arogo and Westendorf, M.L. 2008. Nutrient Planning on Small Farms. <a href="http://extension.org/pages/Nutrient Planning">http://extension.org/pages/Nutrient Planning</a> on Small Farms
- 11. Westendorf, M.L. 2008. Pasture Management on Small Farms. http://extension.org/pages/Pasture Management on Small Farms
- 12. Westendorf, M.L. and C. A. Williams, 2008. Feed Management on Livestock Farms. http://extension.org/pages/Feed\_Management\_on\_Livestock\_Farms

# **ONLINE FREQUENTLY ASKED QUESTIONS (Peer-Reviewed Nationally)**

eXtension and the Livestock Poultry Environmental Learning Center. (eXtension.org)

- 1. How do I prepare a useable map for my farm?
- 2. What are the best animal bedding sources to use on a farm?
- 3. Is wasted feed a nutrient management problem?
- 4. Why do I need a farm map?
- 5. Can pastured animals have access to streams and wetlands?
- 6. In general, what is an appropriate manure storage for a small farm?
- 7. Can animal feeding practices influence nutrient runoff?
- 8. What is a sacrifice or exercise lot for horses?
- 9. Can black walnut wood shavings be used as a bedding source for horses and/or other livestock?

## **OTHER FACTSHEETS (Peer-Reviewed Nationally)**

Westendorf, M. L. 1993. Feeding the Dairy Herd When Forage Supplies Are Limited. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Published in the National Dairy Database (NDD).

### **PUBLICATIONS** (Invited/Non-Refereed)

- 1. Westendorf, M. L. and E. W. Zirkle. 1997. Closing the Loop with Animals. Biocycle: The Journal of Composting and Recycling. 38(4):51-54.
- 2. Westendorf, M. L. 1994. Science Communications: Congressional Science Fellow Shares Policy Insights. August 1994. Food Tech. 48(8):23.

### **REPORTS**

Krogmann, U., Westendorf, M.L., Rogers, B.F.: Best Management Practices for Horse Manure Composting on Small Farms. 63 pages. Final report prepared for NJ Department of Environmental Protection grant, 2005.

### PUBLISHED CONFERENCE PROCEEDINGS

- Westendorf, M.L. Environmental Management on Equine Farms, or the Good, the Bad, and the Ugly. Waste to Worth: Spreading Science & Solutions Conference. Livestock and Poultry Environmental Learning Center. Seattle, Washington. March 31-April 3, 2015. <a href="http://www.extension.org/pages/72866/">http://www.extension.org/pages/72866/</a>
- 2. Westendorf, M.L., Z. Helsel, and C. Williams. Validation and Use of Near-Infrared Reflectance Spectral Data for Analyzing Horse Manure. Waste to Worth: Spreading Science & Solutions Conference. Livestock and Poultry Environmental Learning Center. Seattle, Washington. March 31-April 3, 2015. <a href="http://www.extension.org/pages/72862/">http://www.extension.org/pages/72862/</a>
- 3. Kenney, L., C. Williams, and M.L. Westendorf. Protection of environmental resources through the implementation of optimum feed management practices on equine farms. Waste to Worth: Spreading Science & Solutions Conference. Livestock and Poultry Environmental Learning Center. Seattle, Washington. March 31-April 3, 2015. <a href="http://www.extension.org/pages/72881/">http://www.extension.org/pages/72881/</a>
- 4. Westendorf, M. L., J. Lechner, B.A. Altizio and P.A. Schoknecht, 2000. Use of a Dry, Processed Food Waste Product for Swine and Cows, Proceedings 4th Food Waste Recycling Symposium.
- 5. Westendorf, M. L., Z. C. Dong, S. Parker, and P. Schoknecht. 1997. Nutritional quality of recycled food byproducts. In Proc. 2nd. Food Waste Recycling Symposium. (Westendorf, Zirkle, and Horvath, Ed.) New Jersey Department of Agriculture and Rutgers Cooperative Extension. Trenton and New Brunswick, NJ.
- 6. Westendorf, M. L. 1996. The use of foodwaste as a feedstuff in swine diets. In Proc. 1st. Food Waste Recycling Symposium. (Westendorf and Zirkle, Ed.) New Jersey Department of Agriculture and Rutgers Cooperative Extension. Trenton and New Brunswick, NJ.
- 7. Westendorf, M. L. 1994. Labeling: Real Choice or Confusion. In Proc. The Fourth Annual New England Animal Biotechnology Symposium. (Zinn, Ed). University of Connecticut Department of Animal Sciences. Storrs, CT.

## EXPERIMENT STATION PROJECTS

- 1. Northeast Regional Project. 2009-2015. Environmental Impacts of Equine Operations USDA Multi-State Project. Northeast Regional: NE-1441.
- 2. Northeast Regional Project. 1996-2015. Environmental and Economic Impacts of Nutrient Management in Dairy Forage System. USDA Multi-State Project. Northeast Regional: NE-1044.
- 3. Hatch Project. 2005-2010. The Use of Byproduct Feedstuffs to Optimize Growth, Performance, and Economics In Ruminants.

- 4. Hatch Project. 1999-2004. Use of Wet or Processed Food Byproducts to Optimize Growth and Nutrient Utilization in Animals.
- 5. Hatch Project. 1993-1999. Optimizing Growth and Nitrogen Utilization in the Developing Ruminant.

### **GRANTS RECEIVED**

External Competitive:

- 1. New Jersey Department of Agriculture Animal Waste Management Program. "Best Management Practices Implementation Program." 2015-2017. Grant Amount: \$162,000. Westendorf, M. L. (PI), D. Lee, R. C. Mickel, S. Komar.
- 2. USDA-CSREES. Sub-recipient award from the University of Nebraska, Lincoln. "Development of an Animal Waste and Composting Management Module for Small Farmers." Grant Amount: \$10,206. 2011-2012. Westendorf, M. L. (PI).
- 3. USDA Natural Resource Conservation Service Conservation Innovation Grant. "Protection of Environmental Quality using Improved Feed Management Practices on Equine Farms." Grant Amount: \$74,907. 2009-2013. Westendorf, M. L. (PI), C. Williams, D. Lee, R. C. Mickel, S. Komar, and B. Bamka.
- 4. USDA Natural Resource Conservation Service Conservation Innovation Grant. "Creation of an Environmental Best Management Practices Showcase at the Rutgers University Equine Science Center." 2005-2008. Grant Amount: \$75,000. Williams, C. A. (PI), C. Obropta, M. L. Westendorf (Co-PI), S. Ralston, D. Foulk, R. Mickel, W. Bamka, and M. Fennell.
- 5. USDA-CSREES. Sub-recipient award from the University of Nebraska, Lincoln. "A National Learning Center for Animal Agriculture Water Quality Issues." 2007-2009. Grant Amount: \$7,500. Westendorf, M. L. (PI).
- 6. USDA-CSREES through Cornell University. "Regional Water Quality Coordination in USEPA Region 2 New Jersey." 2003-2004. Grant Amount: \$138,024. Obropta, C. (PI), and M. L. Westendorf, (Co-PI).
- 7. USDA-CSREES through Cornell University. "Regional Water Quality Coordination in USEPA Region 2 New Jersey." 2001-2003. Grant Amount: \$258,579. M. L. Westendorf, (PI).
- 8. State of New Jersey. Department of Environmental Protection. Section 319 (h) Clean Water Act Funding. "Best Management Practices for Horse Manure on Small Farms." 1999-2001. Grant Amount: \$110,000. Krogmann, U. (PI), M. L. Westendorf (Co-PI), T. Shelton, L. Boyles, M. Olohan, and B. Altizio.
- 9. USDA-SARE Program. "Food Waste Feeding Symposium." Atlantic City, New Jersey. January 22-23, 1996. "Grant Amount: \$1,200. Westendorf, M. L (PI).
- 10. United States Department of Agriculture CSREES. A National Program. "TQM Practices in the Dairy Farm." 1995-1996. Grant Amount: \$3,500. Westendorf, M. L. (PI) and D. Lee.

Total External Competitive Dollars: PI/Co-PI Only: \$840,916

#### Other External Grants and Contracts:

1. USDA-Natural Resources Conservation Service. "Contribution Agreement for Services Related to Equine Environmental Management." 2015-2017: Grant Amount: \$36,000. Westendorf, M. L. (PI), C. A. Williams, and L. Kenny. [Idea: 35%; Research: 35%; Budget: 50%].

## New Jersey Department of Agriculture

- 2. New Jersey Department of Agriculture Animal Waste Management Program. "Intensive Nutrient Management Education Program." 2009-2015. Grant Amount: \$150,000. Westendorf, M. L. (PI), D. Lee, R. C. Mickel, S. Komar, K. Malinowski, and D. Kluchinski.
- 3. New Jersey Department of Agriculture Animal Waste Management Program. "Intensive Nutrient Management Education Program." 2008-2011. Grant Amount: \$249,700. Westendorf, M. L. (PI), D. Lee, R. C. Mickel, S. Komar, K. Malinowski, and D. Kluchinski.
- 4. New Jersey Department of Agriculture. "Development of Self-Certifying Management Plans." 2007-2009. Grant Amount: \$13,200. Westendorf, M. L. (PI).
- 5. New Jersey Department of Agriculture. "Development of Self-Certifying Management Plans: production of a program for developing animal waste management programs." 2005-2007. Grant Amount: \$33,000. Westendorf, M. L. (PI).
- 6. New Jersey Department of Agriculture. "Creation of an Environmental Best Management Practices Showcase at the Rutgers University Equine Science Center." 2004-2005. Grant Amount: \$30,000. Williams, C.A. (PI), C. Obropta, S. Ralston, M. Westendorf (CO-PI). D. Foulk, R. Mickel, W. Bamka and M. Fennell. Collaborator.

# **Nutrient Management Planning**

- 1. Morris County Park Commission and the Great Swamp Watershed. "Contract for developing a plan for environmental management on the Seaton-Hackney Horse farm in Morris County." 2012-2014. Grant Amount: \$17,800. Westendorf, M.L. (PI).
- 2. USDA-Natural Resources Conservation Service. "Contribution Agreement with the USDA Natural Resources Conservation Service to assist farmers in the writing of nutrient management plans." 2009-ongoing: Grant Amount: \$37,483. Westendorf, M. L. (PI).
- 3. USDA-Natural Resources Conservation Service. "Contribution Agreement for Services Related to Planning and Applying Comprehensive Nutrient Management Plans (CNMP)." 2003-2008: Grant Amount: \$47,754. Westendorf, M. L. (PI). and Z. Helsel. 2007-2008. From 2003-2007, the PI on this project was Z. Helsel.

### Miscellaneous

- US Environmental Protection Agency. Sub-recipient award from North Carolina State University. "CAFO Permit Writer and Inspector Training." 2007-2008. Grant Amount: \$30,338. Westendorf, M. L. (PI) and J. Potent.
- 5. New Jersey Department of Environmental Protection and the North Jersey Resource Conservation and Development Council. "Agriculture Non-point Intervention Project." 2005-2006. Grant Amount: \$15,249. Lee, D. (PI) and M. L. Westendorf. Co-PI. [Idea: 30%; Research: 30%; Budget: 30%]

- 6. New Jersey Pork Producers Council. "Food Waste Feeding Research." 1996-1998. Grant Amount: \$2,750. Westendorf, M. L. (PI).
- 7. New Jersey Pork Producers Council. "Food Waste Recycling Symposium." 1996-1998. Grant Amount: \$5,000. Westendorf, M. L. (PI) and E. W. Zirkle.

# Other External Dollars: PI/Co-PI Only: \$651,994

# Internal Competitive:

## NJAES Competitive Grants Program

- 1. Rutgers NJAES Multi-State assistance grant. "Environmental Impact of Equine Operations." 2017-2018. Grant Amount: \$35,867. Williams, C.A. (Co-PI) and M.L. Westendorf. (Co-PI). NE-1441, Environmental Impact of Equine Operations.
- 2. Rutgers NJAES Multi-State assistance grant. "Environmental Impact of Equine Operations." 2016-2017. Grant Amount: \$36,770. Williams, C.A. (Co-PI) and M.L. Westendorf. (Co-PI). NE-1441, Environmental Impact of Equine Operations.
- 3. Rutgers NJAES Multi-State assistance grant. "Environmental Impact of Equine Operations." 2015-2016. Grant Amount: \$38,628. Williams, C.A. (Co-PI) and M.L. Westendorf. (Co-PI). NE-1441, Environmental Impact of Equine Operations.
- 4. Rutgers NJAES Multi-State assistance grant. "Environmental Impact of Equine Operations." 2014-2015. Grant Amount: \$29,374. Williams, C.A. (Co-PI) and M.L. Westendorf. (Co-PI). NE-1441, Environmental Impact of Equine Operations.
- 5. Rutgers NJAES Multi-State assistance grant. "Environmental Impact of Equine Operations." 2013-2014. Grant Amount: \$28,462. Westendorf, M.L (Co-PI) and C.A. Williams (Co-PI). NE-1441, Environmental Impact of Equine Operations.
- 6. Rutgers NJAES Multi-State assistance grant. "Environmental Impact of Equine Operations." 2012-2013. Grant Amount: \$26,310. Westendorf, M.L (Co-PI) and C.A. Williams (Co-PI). NE-1441, Environmental Impact of Equine Operations.

## New Jersey State Equine Initiative

- 7. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Environmental Impacts of Equine Operations." 2009-2010. Grant Amount: \$37,797. Westendorf, M. L. (PI), C. A. Williams, G. Maenelis, D. Gimenez, and S. Komar, C. Obropta, and S. Murphy.
- 8. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Influence of diet and bedding characteristics on manure excretion, manure characteristics and air quality." 2008-2009. Grant Amount: \$11,600. Westendorf, M. L. (PI), C. A. Williams, G. Maenelis, and S. Komar.
- 9. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Training for People Working on Small New Jersey Livestock Farms." 2007-2008. Grant Amount: \$17,000. Westendorf, M. L. (PI) and J. Potent.

- 10. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Managing Manure on New Jersey Horse Farms: Adapting Near Infrared Reflectance (NIR) Spectroscopy for Rapid Horse Manure Analysis." 2007-2008. Grant Amount: \$11,250. Westendorf, M. L. (PI), Z. Helsel, M. Purcell, D. Wunderlich, and F. Kelly.
- 11. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Managing Manure on New Jersey Horse Farms: Adapting Near Infrared Reflectance (NIR) Spectroscopy for Rapid Horse Manure Analysis." 2006-2007. Grant Amount: \$9,850. Westendorf, M. L. (PI), Z. Helsel, M. Purcell, D. Wunderlich, and F. Kelly.
- 12. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Creation of an Environmental Best Management Practices Showcase at the Equine Science Center." 2006-2007. Grant Amount: \$50,000. Williams, C. A. (PI), C. Obropta, M. L. Westendorf (Co-PI), S. Ralston, D. Foulk, R. Mickel, W. Bamka and M. Fennell.
- 13. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Manure Management Assistance Program for New Jersey Farmers." 2005-2007. Grant Amount: \$12,000. Westendorf, M. L. (PI), U. Krogmann, and J. Heckman. PI.. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University.
- 14. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Creation of an Environmental Best Management Practices Showcase at the Equine Science Center." 2005-2006. Grant Amount: \$50,000. Williams, C. A. (PI), C. Obropta, M. L. Westendorf (Co-PI), S. Ralston, D. Foulk, R. Mickel, W. Bamka and M. Fennell.
- 15. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Creation of an Environmental Best Management Practices Showcase at the Equine Science Center." 2004-2005. Grant Amount: \$50,000. Williams, C. A. (PI), C. Obropta, M. L. Westendorf (Co-PI), S. Ralston, D. Foulk, R. Mickel, W. Bamka and M. Fennell.
- 16. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Manure Composting Practices for Horse Farms." 2001-2005. Grant Amount: \$22,500. Westendorf, M. L. (PI) and U. Krogmann.
- 17. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Manure Composting Practices for Horse Farms." 2000-2001. Grant Amount: \$11,000. Krogmann, U. (PI), M. L. Westendorf (Co-PI) and M. Fennell.
- 18. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Manure Composting Practices for Horse Farms." 1999-2000. Grant Amount: \$15,000. Westendorf, M. L. (PI), U. Krogmann, M. Fennell, J. Wohlt.
- 19. New Jersey State Equine Initiative. New Jersey Agricultural Experiment Station. Rutgers University. "Manure Composting Practices for Horse Farms." 1998-1999. Grant Amount: \$41,200. Westendorf, M. L. (PI), U. Krogmann, M. Fennell, J. Wohlt and M. Sukhdeo.

## **Experiment Station Initiatives**

20. New Jersey Agricultural Experiment Station Research Infrastructure Grant. "Calibration and Use of a Near Infrared Reflectance Spectroscopic (NIRS) Analyzer." 2007. Grant Amount: \$20,250. Westendorf, M. L. (PI), S. Bonos, and Z. Helsel.

- 21. New Jersey Agricultural Experiment Station Sustainable Agriculture Research and Education Proposals. "Processing Food Wastes to Create New Animal Feedstuffs. Rutgers University." 1997-1998. Grant Amount: \$13,500. Westendorf, M. L. (PI), M. Karwe, E. W. Zirkle, and R. C. Mickel.
- 22. New Jersey Agricultural Experiment Station Sustainable Agriculture Research and Education Proposals. "Processing Food Wastes to Create New Animal Feedstuffs. Rutgers University." 1997-1998. Grant Amount: \$21,479. Westendorf, M. L. (PI), M. Karwe, E. W. Zirkle, and R. C. Mickel.
- 23. New Jersey Agricultural Experiment Station. Special Initiative Funding for Solid Waste Management. "Food Waste Feeding Research." 1994-1996. Grant Amount: \$24,402. Westendorf, M. L. (PI), J. Wohlt, G. Nieswand, D. Derr, and B. Mickel. Rutgers University.
- 24. New Jersey Agricultural Experiment Station. Special Initiative Funding for Integrated Crop Management. "Optimizing Nutrient Utilization in the Livestock/Soil/Plant Environment." 1994-1996. Grant Amount: \$20,000. Westendorf, M. L. (PI), E. Chamberlain, D. Lee, B. Mickel, J. Ingerson-Mahar, and M. Huffaker.
- 25. New Jersey Agricultural Experiment Station. Snyder Farm Research and Extension Special Local Needs Grants. "Influence of Spreading Manure on Corn Yield and Pest Populations of Corn." 1995-1998. Grant Amount: \$4,600. Westendorf, M. L. (PI), J. Heckman, J. Ingerson-Mahar, D. Kluchinski, and B. Bamka.
- 26. New Jersey Agricultural Experiment Station. Snyder Farm Research and Extension Special Local Needs Grants. "Effect of Harvest Date on the Nutritional Quality of Timothy Grass." 1995-1996. Grant Amount: \$1,200. Westendorf, M. L. (PI), and M. Henninger.

# Total Internal Competitive Dollars: PI/Co-PI Only: \$567,402

## Other Experiment Station Funding

- 27. New Jersey Agricultural Experiment Station . USDA Multi-State Project. Northeast Regional: NE-1041/1441. "Environmental Impacts of Equine Operations." 2009-ongoing: Grant Amount: \$35,000.
- 28. New Jersey Agricultural Experiment Station . USDA Multi-State Project. Northeast Regional: NE-1044. "Whole farm dairy and beef systems: gaseous emissions, P management, organic production, and pasture based production." 2010-2015: Grant Amount: \$25,000.
- 29. New Jersey Agricultural Experiment Station Project/Hatch. "The Use of Byproduct Feedstuffs to Optimize Growth, Performance, and Economics In Ruminants." 2005-2011. Grant Amount: \$18,700.
- 30. New Jersey Agricultural Experiment Station Project/Hatch. "Use of Wet or Processed Food Byproducts to Optimize Growth and Nutrient Utilization in Animals." 1999-2005. Grant Amount: \$13,250.
- 31. New Jersey Agricultural Experiment Station Startup and Initial Hatch Project. "Optimizing Growth and Nitrogen Utilization in the Developing Ruminant." 1993-1999. Grant Amount: \$31,825.

Total Experiment Station/Multi-State Funding: \$691,177

Total Funding, all Sources (not counting collaborations): \$2,184,087

### **CONFERENCE PRESENTATIONS**

- 1. Westendorf, M.L. The Good, the Bad, and the Ugly: Best Management Practices on Equine Farms. Pennsylvania State University. Equine Audience. August 13, 2013.
- 2. Westendorf, M.L. Best Management Practices for Horse Operations. Southern States. Advanced Equine Feedmaster Program. Technical Training Program. Richmond, VA. February 5-7, 2013.
- 3. Westendorf, M.L. Environmentally Friendly Manure Management. University of Minnesota Equine Audience. August 24, 2010.
- 4. Westendorf, M.L. Nutrient Management on Small Farms. Waste to Worth: Spreading Science & Solutions Conference. Livestock and Poultry Environmental Learning Center. Denver, Colorado, April 1–5, 2013. <a href="http://www.extension.org/67636">http://www.extension.org/67636</a> [For details, see eXtension webcasts, p. 23]
- 5. Westendorf, M. L. 2008. Manure Production (volume, nutrient values, diet and feed management). Animal Waste Management on Small Livestock Farms. A USEPA / Land Grant University Training Course. March 11 13, 2008. New Brunswick, NJ.
- 6. Westendorf, M. L. 2005. Horse Manure Management. Mid-Atlantic Equine Pasture Initiative Training. In-Service for SARE Program. December 15, 2005. Lancaster County Extension Office. Lancaster, PA.
- 7. Westendorf, M. L. 2005. Horse Manure Management. Mid-Atlantic Equine Pasture Initiative Training. In-Service for SARE Program. December 8, 2005. Hunterdon County Extension Office. Flemington, NJ.
- 8. Westendorf, M. L. 2005. Manure Generation. Technical Fundamentals of CAFOs for Permit Writers and Inspectors. EPA Region 1 & 2. October 25, 2005. Albany, NY.
- 9. Westendorf, M. L. 2004. Nitrogen and Sulfur Air Emissions from Dairy Farms. Mid-Atlantic Consortium: Dairy Extension In-Service. June 9, 2004. Mid-Atlantic Consortium, Animal Science Subgroup. Hagerstown, MD.
- Westendorf, M. L. and J. Potent. 2003. Introduction: The Value of Regional Coordination. USDA-CSREES EPA Region 2 Water Quality Coordination Project Annual Meeting. June 11, 2003. New Brunswick, NJ.
- 11. Westendorf, M. L. 2000. The Big Picture in Animal Feed. Food Residuals Management Conference. August 29, 2000. EPA Region 2 and Biocycle Magazine. Burlington, VT.
- 12. Westendorf, M. L. 2000. Role of Extension in Environmental Management. Environmental Management of Dairy Farms: A Training for Extension Educators and Other Professionals. June 5, 2000. Mid-Atlantic Consortium, Animal Science Subgroup. Hagerstown, MD.
- 13. Westendorf, M. L. 2000. Market Development for Food Residuals. National Recycling Market Development Roundtable. March 30, 2000. EPA Region 2 Offices. New York, NY.
- 14. Westendorf, M.L. 2000. Nutrient Management for Horses. American Horse Council. February 26, 2000. Minneapolis, MN.
- 15. Westendorf, M. L. Nutritional Quality of Recycled Food Plate Waste in Diets Fed to Swine. Proc. 5th. Food Waste Recycling Symposium. January 31, 2000. Atlantic City, NJ.
- 16. Westendorf, M. L. Use of a Dry, Processed Food Waste Product for Swine and Cows. Proc. 4th. Food Waste Recycling Symposium. February 1, 1999. Atlantic City, NJ.
- 17. Westendorf, M. L. Federation of Animal Science Societies Congressional Science Fellow Panel Discussion. American Society of Animal Science National Meeting. July 28, 1998. Denver, CO.
- 18. Westendorf, M. L. Converting Organics to Animal Feed. Biocycle: 27th Annual Conference on Composting and Recycling. May 1, 1997. Philadelphia, PA.

- 19. Westendorf, M. L. Food Byproducts Impact on Carcass Quality. New York Pork Producers: Pork Progress/Annual Meeting. January 25, 1997. Victor, NY.
- Westendorf, M. L. The Effect of Pasteurization on the Destruction of *Mycobacterium* paratuberculosis. Northeast Regional Paratuberculosis Meeting. April 22, 1996. Frederick, Maryland.
- 21. Westendorf, M. L. Nutritional Quality of Recycled Food Byproducts. Proc. 2nd. Food Waste Recycling Symposium. January 20, 1997. Atlantic City, NJ.
- 22. Westendorf, M. L. The Use of Foodwaste as a Feedstuff in Swine Diets. Proc. Food Waste Recycling Symposium. January 22, 1996. Atlantic City, NJ.
- 23. Westendorf, M. L. New Jersey Paratuberculosis Report. Northeast Regional Paratuberculosis Meeting. April 24, 1995. Grantville, Pennsylvania.
- 24. Westendorf, M.L. Scientific Issues: Transmissible Diseases of Swine. US Animal Health Association Meetings. October 31, 1994.
- 25. Westendorf, M.L. How Can Science Prevail in Federal Policy on Food Safety? Institute of Food Technologists National Meeting. June 26, 1994. Atlanta, Georgia.
- 26. Westendorf, M.L. Labeling: Real Choice or Confusion. The Fourth Annual New England Animal Biotechnology Symposium. April 20, 1994. Storrs, Connecticut.
- 27. Westendorf, M.L. Research Funding at USDA. American Society of Animal Science National Meeting. July 9, 1993. Spokane, Washington.
- 28. Westendorf, M.L. Restructuring the United States Department of Agriculture: Challenges and Opportunities. American Society of Animal Science National Meeting. July 9, 1993. Spokane, Washington.
- 29. Westendorf, M.L. Food Safety Issues in the 103rd Congress. American Society of Animal Science National Meeting. July 7, 1993. Spokane, Washington.
- 30. Westendorf, M.L. USDA Reorganization. Comments made to the Council of Administrative Heads of Agriculture (CAHA) of the National Association of State and University Land Grant Colleges (NASULGC). February 22, 1993. Washington, D.C.
- 31. Westendorf, M.L. Agriculture Research: Relevance and Accountability. Texas Agricultural Forum. March 22, 1993. Austin, Texas.

# **ABSTRACTS (Technically Reviewed)**

- 1. Bott, R.C., M.K. Spindler, K.P. Anderson, C.K. Skelly, C.A. Williams, M.L. Westendorf, L. Gladney, and R. K Splan. Climate change and the horse industry: Student interest in a sophomore-level hybrid learning program offered at the national level. National Association of Equine Affiliated Academics Annual Meeting. June 24-28, 2014. Innovations in Equine and other Related Disciplines.
- 2. Nazarenko, Y., M.L. Westendorf, and G. Maenelis. 2013. The effect of horse bedding type on air quality in an equine farm. Am. Ass. Aerosol Res. 32 Annual Conference. Sept. 30 Oct. 4, 2013. Abstr. # 574.
- 3. Swinker, A. M., C. Williams, A. O. Burk, K. Anderson, C. Skelly and M.L. Westendorf. Nutrient Management Regulations and the Equine Industry. Waste to Worth: Spreading Science & Solutions Conference. Livestock and Poultry Environmental Learning Center. Denver, Colorado, April 1–5, 2013.http://www.extension.org/67710.
- 4. Williams, C., A. M. Swinker, A. O. Burk, K. Anderson, C. Skelly and M.L. Westendorf. Currently Used Manure Management Practices of Equine Operations. Waste to Worth: Spreading Science & Solutions Conference. Livestock and Poultry Environmental Learning Center. Denver, Colorado, April 1–5, 2013. http://www.extension.org/67737.
- 5. Westendorf, M. L. and C. Williams. 2011. Effects of Excess Dietary Phosphorus on Fecal Phosphorus Excretion and Water Extractable Phosphorus in Horses. J. Equine Vet. Sci. 31:306.

- 6. Williams C. and M. L. Westendorf. 2011. Dietary protein affects Nitrogen and Ammonia Excretion in Horses. J. Equine Vet. Sci. 31:305-306.
- 7. Williams, C. A., M. Westendorf, C. Oborpta, S. Ralston, W. Bamka and K. Malinowski. 2009. Development of an equine best management practice demonstration working horse farm. J. Equine Vet. Sci. 29:467-468.
- 8. Westendorf. M. L.\*, T. Joshua, S. J. Komar, C. Williams, and R. Govindasamy. 2009. Manure Management Practices on Equine Farms. J. Anim. Sci. Vol. 87, E-Suppl. 2:243.
- 9. Wohlt, J. E., H. D. Hafs, and M. L. Westendorf. 2006. A century of dairy research, teaching and extension. J. Dairy Sci. Vol. 89(Suppl. 1):464.
- Mickel, R. C., D. L. Foulk, D. Kluchinski, W. Sciarappa, C. Williams, and M. Westendorf. 2006.
   Mid-Atlantic Pasture Initiative. National Association of County Agricultural Agents. Proc. 91<sup>st</sup> Ann. Meeting. July 23-27, 2006. Cincinnati, Oh. Page 159.
- 11. Jones, J., J. E. Wohlt, and M.L. Westendorf. 2004. Comparison of a Diet Containing Food Waste with a Corn/Soybean Diet Fed to Swine. J. Anim. Sci. 82(Suppl.):173.
- 12. Krogmann, U., Westendorf, M.L., Rogers, B.F., Romano, P.V. 2004. Best Management
- 13. Practices for Horse Manure Composting on Small Farms in Monmouth County/New Jersey. Abstracts of the Northeastern Branch of American Society of Agronomy, July 11-14, 2004.
- Peters, R. R., M. L. O 'Connor, L. J. Hutchinson, M. L. Westendorf, E. A. Claypoole, G. W. Anderson, D. P. Marcinkowski, W. E. Graves, S. M. Andrew, W. L. Shockey, P. S. Erickson, and J. W. Barlow. 2003. Regionalization of dairy Extension in-service training in the Mid-Atlantic and Northeast states. J. Dairy Sci. 86(Suppl. 1):359.
- 15. Altizio, B. W., J. Wohlt, P. A. Schoknecht, and M. L. Westendorf. 2000. Replacement value of wet microbrewery grains in swine finishing diets. J. Anim. Sci. 78(1):130.
- 16. Singer, J. W., J. R. Heckman, J. Ingerson-Mahar, and M. L. Westendorf. 1999. Hybrid and nitrogen source effect yield and European corn borer damage. Agronomy Abstracts. pp. 104.
- 17. Lechner, J. J., B. A. Altizio, and M. L. Westendorf. 1999. In situ degradability of processed kitchen wastes. J. Anim. Sci. 77(Suppl. 1):254-255.
- 18. Chamberlain, E. A., R. C. Mickel, and M. L. Westendorf. 1999. New Jersey Johne's Control Program. National Association of County Agricultural Agents. National Meeting. September 12-16, 1999. Omaha, NE.
- 19. Altizio, B. A., P. A. Schoknecht, and M. L. Westendorf. 1998. Growing swine prefer a corn/soybean diet over dry, processed food waste. J. Anim. Sci. 76(Suppl.1):185.
- 20. Westendorf, M. L. and Z. C. Dong. 1997. Recycled cafeteria food waste as a feed for swine and its influence upon, growth, digestibility and meat quality. J. Anim. Sci. 75(Suppl. 1):197.
- 21. Westendorf, M. L. and R. Gordon. 1995. Effect of increasing dietary protein degradability on diets marginal in protein. J. Anim. Sci. 73(Suppl. 1):272.
- 22. Bode, J. W., C. James, F. Shank, W. M. Layden, C. Riemenschneider, and M. L. Westendorf. 1994. How Can Science Prevail in Federal Policy on Food Safety? Institute of Food Technologists. Annual Meeting Abstracts:77.
- 23. Stenholm, C. W. and M. L. Westendorf. 1993. Research Funding at USDA. 1993. J. Anim. Sci. (Suppl.1) 71:108.
- 24. Geasler, M., D. K. Waggoner, M. L. Westendorf, and T. L. Nipp. 1993. Restructuring the United States Department of Agriculture: Challenges and Opportunities. J. Anim. Sci. (Suppl.1) 71:108.
- 25. Simeone, A., M. L. Westendorf, R. E. Tucker, L. P. Bush, and G. E. Mitchell, Jr. 1993. Effect of ammoniation on reducing the toxicity of endophyte-infected tall fescue seed to rats. J. Anim. Sci. (Suppl.1) 71:184.
- 26. Westendorf, M. L., G. E. Mitchell, Jr., R. E. Tucker and L. P. Bush. 1992. Ruminal and physiological responses to endophyte-infected tall fescue. J. Anim. Sci. 70(Suppl. 1):291.

- 27. Westendorf, M. L., G. E. Mitchell, Jr., L. P. Bush, R. E. Tucker and K. A. Dawson. 1991. Influence of rumen fermentation on endophyte-infected tall fescue seed measured by a bioassay in rats. J. Anim. Sci. 69(Suppl. 1):394.
- 28. Munyabagisha, L., M. L. Westendorf, K. R. McLeod, K. J. Karr, G. E. Mitchell, Jr., N. Gay and R. E. Tucker. 1991. Bovine plasma Vitamin A responses to selected nutrients, monensin, and endophytic fescue. J. Anim. Sci. 69(Suppl. 1):151.
- 29. Karangwa, E., M. L. Westendorf, K. A. Dawson, R. E. Tucker and G. E. Mitchell, Jr. 1990. Degradation of 4-methyl imidazole by ruminal microbes. J. Dairy Sci. 73(Suppl. 1):267.
- 30. Westendorf, M. L., N. Gay and G. E. Mitchell, Jr. 1989. The effects of feed restriction and dietary monensin on feedlot and carcass performance of crossbred beef steers. J. Anim. Sci. 67(Suppl.2):31.
- 31. Westendorf, M. L., N. W. Bradley, N. Gay and G. E. Mitchell, Jr. 1988. Response of cattle plasma to large oral doses of Vitamin A. J. Anim. Sci. 66(Suppl. 1):30.
- 32. Seman, D. H., T. Matsui, D. R. Catherman, M. G. Hayek, D. B. Batson, R. E. Tucker, R. B. Muntifering, M. L. Westendorf and G. E. Mitchell, Jr. 1987. Metabolism of 14<sup>C</sup> decoquinate in beef heifers. J. Anim. Sci. 65(Suppl. 1:)24.
- 33. Seman, D. H., T. Matsui, M. G. Hayek, D. R. Catherman, D. B. Batson, A. H. Cantor, R. E. Tucker, R. B. Muntifering, D. G. Ely, M. L. Westendorf and G. E. Mitchell, Jr. 1987. Comparison of decoquinate metabolism between major and minor species of animals. J. Anim. Sci. 65(Suppl. 1):1.
- 34. Seman, D. H., T. Matsui, M. G. Hayek, D. R. Catherman, D. B. Batson, A. H. Cantor, R. E. Tucker, M. L. Westendorf and G. E. Mitchell, Jr. 1987. Metabolism of 14<sup>C</sup> decoquinate in chickens. J. Anim. Sci. 65(Suppl. 1):33.
- 35. Seman, D. H., T. Matsui, M. G. Hayek, D. R. Catherman, D. B. Batson, R. E. Tucker, D. G. Ely, M. L. Westendorf and G. E. Mitchell, Jr. 1987. Metabolism of 14<sup>C</sup> decoquinate in ewe lambs. J. Anim. Sci. 65(Suppl. 1):25.
- 36. Seman, D. H., T. Matsui, M. G. Hayek, D. R. Catherman, A. H. Cantor, R. E. Tucker, M. L. Westendorf and G. E. Mitchell, Jr. 1987. Metabolism of 14<sup>C</sup> decoquinate in Japanese quail. Poultry Sci. 66(Suppl. 2):39.

# FACTSHEETS AND BULLETINS

- 1. Westendorf, M. L., R. C. Mickel, and C. A. Williams. 2016. Recommended Guidelines for Home Animal Agriculture in Residential Areas. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Bulletin E353. (This Factsheet is currently undergoing revision).
- 2. Westendorf, M. L. and M. Purcell. 2015. Livestock Mortality and Butcher Waste Composting: Rutgers Recommended Practices. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. <a href="http://njaes.rutgers.edu/pubs/fs1194/nj-livestock-drought-mgmt-plan.asp">http://njaes.rutgers.edu/pubs/fs1194/nj-livestock-drought-mgmt-plan.asp</a>. Bulletin E347.
- 3. Westendorf, M., Ali, M., Dey, S., and Lee, D. 2013. New Jersey Livestock Drought Management Plan. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. <a href="http://njaes.rutgers.edu/pubs/fs1194/nj-livestock-drought-mgmt-plan.asp">http://njaes.rutgers.edu/pubs/fs1194/nj-livestock-drought-mgmt-plan.asp</a>. FS1194.
- 4. Westendorf, M. and J. Arogo-Ojego. 2013. Managing Manure on Horse Farms: Spreading and Off-Farm Disposal. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. FS1193. <a href="http://njaes.rutgers.edu/pubs/fs1193/">http://njaes.rutgers.edu/pubs/fs1193/</a>
- 5. Kelly, F. and M. Westendorf. 2013. Storing Manure on Small Horse and Livestock Farms. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. FS1192. <a href="http://njaes.rutgers.edu/pubs/fs1192/">http://njaes.rutgers.edu/pubs/fs1192/</a>
- 6. Westendorf, M. and Williams, C. 2013. Can animal feeding practices influence nutrient runoff?

- Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. <a href="http://njaes.rutgers.edu/pubs/fs1191/">http://njaes.rutgers.edu/pubs/fs1191/</a>. FS1191.
- 7. Westendorf, M., & Williams, C. 2013. Managing Manure on Horse Farms: Exercise or Sacrifice Lots for Horses. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. <a href="http://njaes.rutgers.edu/pubs/fs1190/managing-manure-on-horse-farms.asp.">http://njaes.rutgers.edu/pubs/fs1190/managing-manure-on-horse-farms.asp.</a> FS1190.
- 8. Westendorf, M. 2013. Why Do I Need a Farm Map? How to Prepare a Usable Map for Your Farm. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. <a href="http://njaes.rutgers.edu/pubs/fs1189/why-do-i-need-a-farm-map.asp">http://njaes.rutgers.edu/pubs/fs1189/why-do-i-need-a-farm-map.asp</a>. FS1189.
- 9. Westendorf, M. L. 2013. (Rev.). New Jersey Livestock Farmer Survey: Is my farm environmentally friendly? Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. <a href="http://njaes.rutgers.edu/pubs/fs1047/">http://njaes.rutgers.edu/pubs/fs1047/</a>. FS1047.
- 10. Westendorf, M. and Krogmann, U. 2013 (Rev.). Horses and Manure. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. <a href="http://njaes.rutgers.edu/pubs/fs036/horses-and-manure.asp">http://njaes.rutgers.edu/pubs/fs036/horses-and-manure.asp</a>. FS036.
- 11. Westendorf, M. and Krogmann, U. 2013 (Rev.). Horse Manure Management: Bedding Use. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. http://njaes.rutgers.edu/pubs/fs537/horse-manure-mgmt-bedding-use.asp. FS537.
- 12. Westendorf, M. and Williams, C. 2013 (Rev.). Nutrient Management on Livestock Farms: Tips for Feeding. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. <a href="http://njaes.rutgers.edu/pubs/fs1064/tips-for-feeding.asp">http://njaes.rutgers.edu/pubs/fs1064/tips-for-feeding.asp</a>. FS1064.
- 13. Komar, S. K. and M. L. Westendorf. 2009. Calibrating Manure Spreaders Using the Tarp Method. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet. Series. FS1103. http://njaes.rutgers.edu/pubs/publication.asp?pid=FS1103
- 14. Westendorf, M. L. and C. A. Williams. 2007. Nutrient Management on Livestock Farms: Tips for Feeding. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet. Series. FS1064.
- 15. Westendorf, M. L. 2006. New Jersey Livestock Farmer Survey: Is my farm environmentally friendly? Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS1047.
- 16. Westendorf, M. L. and U. Krogmann. 2006. Horse Manure Management: Bedding Use. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS537.
- 17. Westendorf, M. and Krogmann, U. 2004. Horses and Manure. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. FS036.
- 18. Krogmann, U., M. L. Westendorf, and B. F. Rogers. 2006. Best Management Practices for Horse Manure Composting on Small Farms. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Bulletin Series. <a href="http://njaes.rutgers.edu/pubs/publication.asp?pid=E307">http://njaes.rutgers.edu/pubs/publication.asp?pid=E307</a> E307.
- 19. Foulk, D. L., R. C. Mickel, E. A. Chamberlain, M. Margentino, and M. Westendorf. 2004. Agricultural Management Practices for Commercial Equine Operations. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Bulletin Series. <a href="http://njaes.rutgers.edu/pubs/publication.asp?pid=E296">http://njaes.rutgers.edu/pubs/publication.asp?pid=E296</a>. E296.
- 20. Westendorf, M. L. and D. Lee. 2004. Feeding Nitrate Containing Forages. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Bulletin Series. <a href="http://njaes.rutgers.edu/pubs/publication.asp?pid=E291">http://njaes.rutgers.edu/pubs/publication.asp?pid=E291</a>. E291.
- 21. Westendorf, M. L. and R. O. Myer. 2004. Feeding Food Wastes to Swine. IFAS Extension. Institute of Food and Agricultural Sciences. University of Florida. Original publication date May 17, 2004. See EDIS Web Site at <a href="http://edis.ifas.ufl.edu">http://edis.ifas.ufl.edu</a>. AS 143.

- 22. Westendorf, M. L. and R. O. Myer. 2003. Feeding Food Wastes to Swine. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. http://njaes.rutgers.edu/pubs/publication.asp?pid=FS016. FS016.
- 23. Altizio, B. and M. L. Westendorf. 2000. Deer and Elk Farming. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Bulletin Series. E259.
- 24. Altizio, B. and M. L. Westendorf. 1999. Bison Husbandry. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS945.
- 25. Altizio, B. and M. L. Westendorf. 1998. Llamas and Alpacas. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS917.
- 26. Westendorf, M. L. and B. Altizio. 1997. Ostrich, Emu, and Rhea Production. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS886.
- 27. Westendorf, M. L. and D. Lee. 1997. Heat Stress and Feeding Management. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS884.
- 28. Westendorf, M. L., D. Lee, and E. W. Zirkle. 1995. Quality Assurance in the Animal Industries: Critical to Your Survival. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS818.
- 29. Westendorf, M. L., H. Hafs, and E. Zirkle. 1994. Johne's Disease Control and Management Plan. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS782.
- 30. Westendorf, M. L., H. Hafs, and E. Zirkle. 1994. Johne's Disease. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS781.
- 31. Westendorf, M. L. and R. C. Mickel. 1994. Beef Cow Condition Scoring. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS764.
- 32. Westendorf, M. L. 1994. Biotechnology and Animal Agriculture. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS762.
- 33. Westendorf, M. L. 1994. Will Bovine Somatotropin be Profitable for You? Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS755.
- 34. Westendorf, M. L. 1994. Suggestions for Bovine Somatotropin Use. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS754.
- 35. Nelson, T. M., E. T. Mallinson, P. Y. Brunet, P. J. Clauer, C. T. Larsen, P. A. Dunn, J. Kelly, K. Kesharvarz, B. Lucio-Martinez, D. C. Kradel, D. H. Palmer, P. H. Patterson, R. D. Reynells, C. W. Ritz, J. W. Satterfield, J. H. Schwartz, H. W. Towers, Jr., C. J. Wabeck, and M. L. Westendorf. 1994. **GOOD NEIGHBORS:** A Health Program for Small and Specialty Poultry Flocks. **MACE**. Mid-Atlantic Cooperative Extension. Poultry Health and Management Unit.
- 36. Westendorf, M. L. 1993. Feeding the Dairy Herd When Forage Supplies are Limited. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS749.
- 37. Westendorf, M. L. 1993. BST and our Milk Supply. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University. Factsheet Series. FS746.
- 38. Westendorf, M., C. Absher, N. Gay, J. Johns, R. Burris and D. Miksch. 1988. Scoring Beef Cow Condition. ASC-110. Cooperative Extension Bulletin. University of Kentucky. College of Agriculture.

#### **NEWSLETTERS**

Twenty-four newsletters edited or contributed to, including the following publications:

- 1. Equine Essentials Newsletter, New Jersey Agricultural Experiment Station.
- 2. New Jersey Livestock News. New Jersey Agricultural Experiment Station
- 3. New Jersey Holstein-Fresian Association Newsletter.
- 4. Mid-Atlantic Dairy Letter. Rutgers and the University of Delaware Cooperative Extension. New Jersey Agricultural Experiment Station.

## POPULAR PRESS ARTICLES

## **National Publications**

- 1. Westendorf, M. L. and E. W. Zirkle. Management checklist will get you started controlling Johne's disease. <u>Hoard's Dairyman</u>. August 10, 1995. pp. 509.
- 2. Westendorf, M. L. and E. W. Zirkle. There are no Johne's disease quick fixes. <u>Hoard's Dairyman</u>. July, 1995. pp. 470.

## New Jersey Publications

- 1. Westendorf, M. L. Animal Science Update: Feeding and waste mnagement. <u>New Jersey</u> Farmer. November 15, 2017. Page 6.
- 2. Westendorf, M. L. Animal Science Update: Organic dairy production. <u>New Jersey Farmer</u>. October 15, 2017. Page 6.
- 3. Westendorf, M. L. Animal Science Update: Veterinary Feed Directive. <u>New Jersey Farmer</u>. September 15, 2017. Page 6.
- 4. Westendorf, M. L. Animal Science Update: Animal waste budgeting input and output. New Jersey Farmer. June 15, 2017. Page 6.
- 5. Westendorf, M. L. Animal Science Update: Learn the basics of pasture management. <u>New Jersey Farmer</u>. May 15, 2017. Page 6.
- 6. Westendorf, M. L. Animal Science Update: Climate change and ruminants.. <u>New Jersey Farmer</u>. April 15, 2017. Page 6.
- 7. Westendorf, M. L. Animal Science Update: Learn the basics of feed, forage testing. <u>New Jersey Farmer</u>. February 15, 2017. Page 6.
- 8. Westendorf, M. L. Animal Science Update: Water most abundant, least understood of nutrients. New Jersey Farmer. December 15, 2016. Page 6.
- 9. Westendorf, M. L. Animal Science Update: Animal science program at Rutgers catching on. <u>New Jersey Farmer</u>. November 15, 2016. Page 6.
- 10. Westendorf, M. L. Animal Science Update: The ever-evolving dairy industry. <u>New Jersey Farmer</u>. October 15, 2016. Page 6.
- 11. Westendorf, M. L. Animal Science Update: Byproduct feeding. New Jersey Farmer. September 15, 2016. Page 6.
- 12. Westendorf, M. L. Animal Science Update: Spontaneous combustion. <u>New Jersey Farmer</u>. August 15, 2016. Page 6.
- 13. Westendorf, M. L. Animal Science Update: Can feeding practices influence nutrient runoff? New Jersey Farmer. July 15, 2016. Page 6.
- 14. Westendorf, M. L. Animal Science Update: Hay storage. New Jersey Farmer. June 15, 2016. Page 6.
- 15. Westendorf, M. L. Animal Science Update: Hackettstown Livestock Auction: a revered tradition. New Jersey Farmer. May 15, 2016. Page 6.

- 16. Westendorf, M. L. Animal Science Update: Horses and environmental research. <u>New Jersey Farmer</u>. April 15, 2016. Page 6.
- 17. Westendorf, M. L. Animal Science Update: Misperceptions about meat. <u>New Jersey Farmer</u>. February 15 2016. Page 6.
- 18. Westendorf, M. L. Animal Science Update: Manure composting. <u>New Jersey Farmer</u>. January 15, 2016. pp. 6.
- 19. Westendorf, M. L. Animal Science Update: Nutrient management on livestock farms. <u>New Jersey Farmer</u>. December 1, 2016. pp. 6.
- 20. Westendorf, M. L. Animal Science Update: Nutrient requirements. <u>New Jersey Farmer</u>. October 1, 2015. pp. 6.
- 21. Westendorf, M. L. Animal Science Update: Nitrates in forage. New Jersey Farmer. September 1, 2015. Page 6.
- 22. Westendorf, M. L. Animal Science Update: Manure management for pastured horses. <u>New Jersey Farmer</u>. August 1, 2015. Page 6.
- 23. Westendorf, M. L. Animal Science Update: Managing summer slump. <u>New Jersey Farmer</u>. July 1, 2015. Page 6.
- 24. Westendorf, M. L. Animal Science Update: Keeping up with animal waste management. <u>New Jersey Farmer</u>. May 1, 2015. Page 6.
- 25. Westendorf, M. L. Animal Science Update: Water not an element to be ignored. New Jersey Farmer. March 1, 2015. Page 6.
- 26. Westendorf, M. L. Animal Science Update: A Gold Medal Horse Farm. <u>New Jersey Farmer</u>. February 1, 2015. Page 6.
- 27. Westendorf, M. L. Animal Science Update: Saving Dairying. New Jersey Farmer. June 1, 1999. pp. 12.
- 28. Westendorf, M. L. Animal Science Update: Food waste organization. <u>New Jersey Farmer</u>. March 15, 1999. pp. 13.
- 29. Westendorf, M. L. Animal Science Update: Waste not. <u>New Jersey Farmer</u>. January 15, 1999. pp. 16.
- 30. Westendorf, M. L. Animal Science Update: Water in winter. New Jersey Farmer. November 15, 1998. pp. 15.
- 31. Westendorf, M. L. Animal Science Update: Horse manure management. <u>New Jersey Farmer</u>. September 15, 1998. pp. 15.
- 32. Westendorf, M. L. Animal Science Update: Manure management. New Jersey Farmer. July 15, 1998. pp. 10.
- 33. Westendorf, M. L. Animal Science Update: Fescue blues. <u>New Jersey Farmer</u>. May 15, 1998. pp. 15.
- 34. Westendorf, M. L. Animal Science Update: Nutrition 101. New Jersey Farmer. March 15, 1998. pp. 16.
- 35. Westendorf, M. L. Animal Science Update: Dairying in the Northeast is a plus. <u>New Jersey Farmer</u>. January 15, 1998. pp 7.
- 36. Westendorf, M. L. Animal Science Update: Waste not, want not. <u>New Jersey Farmer</u>. March, 1997. pp. 30.
- 37. Westendorf, M. L. Animal Science Update: Milk futures. <u>New Jersey Farmer</u>. September, 1996. pp. 30.
- 38. Westendorf, M. L. Animal Science Update: Biosecurity. New Jersey Farmer. June, 1996. pp. 23.
- 39. Westendorf, M. L. Animal Science Update: Mad cow disease. New Jersey Farmer. May, 1996. pp. 25.
- 40. Westendorf, M. L. Animal Science Update: Work for that high quality forage. New Jersey Farmer. April, 1996. pp. 30.

- 41. Westendorf, M. L. Animal Science Update: Forging a dairy future. <u>New Jersey Farmer</u>. March, 1996. pp. 18.
- 42. Westendorf, M. L. Animal Science Update: It's food, not garbage. New Jersey Farmer. February, 1996. pp. 10.
- 43. Westendorf, M. L. Animal Science Update: Remember livestock needs in winter. <u>New Jersey Farmer</u>. January, 1996. pp. 20.
- 44. Westendorf, M. L. Animal Science Update: Budgeting input and output. <u>New Jersey Farmer</u>. December, 1995. pp. 30.
- 45. Westendorf, M. L. Animal Science Update: Food waste as nutrients. <u>New Jersey Farmer</u>. November, 1995. pp. 26.
- 46. Westendorf, M. L. Animal Science Update: Plan now for droughty silage. <u>New Jersey Farmer</u>. October, 1995. pp. 25.
- 47. Westendorf, M. L. Animal Science Update: Vesicular stomatitis. <u>New Jersey Farmer</u>. September, 1995. pp. 20.
- 48. Westendorf, M. L. Animal Science Update: Your old gray mare. <u>New Jersey Farmer</u>. August, 1995. pp. 20.
- 49. Westendorf, M. L. Animal Science Update: Moving on. New Jersey Farmer. July, 1995. pp. 19.
- 50. Westendorf, M. L. Animal Science Update: Eat safe and go to school. New Jersey Farmer. June, 1995. pp. 34.
- 51. Westendorf, M. L. Animal Science Update: Quality control. New Jersey Farmer. May, 1995. pp. 15.
- 52. Westendorf, M. L. Animal Science Update: Horses and animal welfare. New Jersey Farmer. April, 1995. pp. 20.
- 53. Westendorf, M. L. Animal Science Update: Making methane. New Jersey Farmer. March, 1995. pp. 22.
- 54. Westendorf, M. L. Animal Science Update: BST on its 1st anniversary. New Jersey Farmer. February, 1995. pp. 28.
- 55. Westendorf, M. L. Animal Science Update: Manure a resource? <u>New Jersey Farmer</u>. January, 1995. pp. 30.
- 56. Westendorf, M. L. Animal Science Update: Johne's disease. New Jersey Farmer. December, 1994. pp. 20.
- 57. Westendorf, M. L. Animal Science Update: Food-waste recycling. New Jersey Farmer. November, 1994. pp. 22.
- 58. Westendorf, M. L. Animal Science Update: Forage content must be tested. New Jersey Farmer. October, 1994. pp. 12.
- 59. Westendorf, M. L. Animal Science Update: Biotech at work on the farm. New Jersey Farmer. September, 1994. pp. 14.
- 60. Westendorf, M. L. Animal Science Update: Summer slump. <u>New Jersey Farmer</u>. August, 1994. pp. 20.
- 61. Westendorf, M. L. Animal Science Update: Stepping up disease watch. <u>New Jersey Farmer</u>. July, 1994. pp. 20.
- 62. Westendorf, M. L. Animal Science Update: Quality forage essential for milk. New Jersey Farmer. June, 1994. pp. 18.
- 63. Westendorf, M. L. Animal Science Update: Animal rights vs. animal welfare. New Jersey Farmer. May, 1994. pp. 24.
- 64. Westendorf, M. L. Animal Science Update: Positive steps for dairy industry. <u>New Jersey Farmer</u>. April, 1994. pp. 26.
- 65. Westendorf, M. L. Animal Science Update: Forage quality makes a difference. New Jersey Farmer. March, 1994. pp. 26.

- 66. Westendorf, M. L. Animal Science Update: Water, water everywhere. <u>New Jersey Farmer</u>. February, 1994. pp. 17.
- 67. Westendorf, M. L. Animal Science Update: Don't waste valuable manure. New Jersey Farmer. January, 1994. pp. 18.
- 68. Westendorf, M. L. Animal Science Update: A shortage of forage? New Jersey Farmer. December, 1993. pp. 23.
- 69. Westendorf, M. L. Animal Science Update. New Jersey Farmer. November, 1993. pp. 26.

## Miscellaneous

1. Westendorf, M. L. Ag has lost nation's understanding. Magic Valley Weekly. May 15, 1993.

### MISCELLANEOUS PUBLICATIONS

- 1. Westendorf, M. L., D. Lee and S. P. Dey. 2008. Agriculture Water Use Guide Drought Management Plans: Livestock. Prepared in coordination with Agriculture Water User Groups, Rutgers Cooperative Extension, and the New Jersey Department of Agriculture. July 2008.
- 2. Brennan, Margaret, David Specca, Brian Schilling, David Tulloch, Steven Paul, Kevin Sullivan, Zane Helsel, Priscilla Hayes, Jacqueline Melillo, Bob Simkins, Caroline Phillipuk, A.J. Both, Donna Fennell, Stacy Bonos, Mike Westendorf and Rhea Brekke. "Assessment of Biomass Energy Potential in New Jersey." New Jersey Agricultural Experiment Station Publication No. 2007-1. Rutgers, the State University of New Jersey, New Brunswick, NJ. July, 2007.
- 3. Agricultural Waste Management Practices: A Guide for New Jersey Livestock Farms. Rutgers University and the New Jersey Agricultural Experiment Station. 2009.
- 4. Westendorf, M. Nutrient Waste Management. Horses 2007. Farm and Land Management Short Course.
- 5. Westendorf, M. L. and J. Rabin. Meeting Challenges of Animal Waste Management on Small Livestock Farms. Sustaining Farming on the Urban Fringe. New Jersey Agricultural Experiment Station. November, 2007.
- 6. Heckman, J. R., U. Krogmann, and M. L. Westendorf. 2005. Results From a Survey for Yard Waste Management and a Proposal for Composting. Rutgers Cooperative Extension and the Rutgers Turfgrass Center. 2005 Rutgers Turfgrass Proceedings. Page 177.
- 7. Wohlt, J. and Westendorf, M. Rutgers Continues to Serve Dairy Producers and the Industry. Page 84 in National Holstein Convention Program. Holstein World, East Syracuse, NY.
- 8. Westendorf, M. L. 2001. Foot and Mouth Disease Briefs. Plant and Pest Advisory: Field Crops/Livestock Edition. May 24, 2001. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University.
- 9. Westendorf, M. L. 2001. Foot and Mouth Disease Briefs. Plant and Pest Advisory: Field Crops/Livestock Edition. May 10, 2001. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University.
- 10. Westendorf, M. L. 2000. Calculating Feed Value. Plant and Pest Advisory: Field Crops/Livestock Edition. July 20, 2000. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University.
- 11. Westendorf, M. L. and B. A. Altizio. 2000. Dairy and Beef Cattle Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 12. Westendorf, M. L. 1999. Nitrate and Lethal Silo Gases. Plant and Pest Advisory: Field Crops/Livestock Edition. August 19, 1999. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University.

- 13. D. Wunderlich and M. L. Westendorf. 1999. Nitrate Worksheet. Plant and Pest Advisory: Field Crops/Livestock Edition. August 5, 1999. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University.
- 14. Westendorf, M. L. 1999. Forage Substitutes. Plant and Pest Advisory: Field Crops/Livestock Edition. July 30, 1999. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University.
- 15. Westendorf, M. L. 1999. Managing Heat Stress in Livestock. Plant and Pest Advisory: Field Crops/Livestock Edition. July 30, 1999. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University.
- 16. Ingerson-Mahar, J., Heckman, J., and M. L. Westendorf. 1998. The First Year Results of Including BT Corn in the Corn/Manure study. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University. NJ Grain and For. J. 5:26-29.
- 17. Westendorf, M. L. 1998. Horse Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 18. Westendorf, M. L. 1998. Dairy and Beef Cattle Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 19. Westendorf, M. L. 1998. Poultry Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 20. Westendorf, M. L. Corn Silage Harvest Using Harvester Mounted Kernel or Crop Processors. Plant and Pest Advisory: Field Crops/Livestock Edition. September 18, 1997. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University.
- 21. Westendorf, M. L. Livestock: Spring and Summer Feeding. Plant and Pest Advisory: Field Crops/Livestock Edition. May 29, 1997. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 22. Heckman, J., M. L. Westendorf, and J. Ingerson-Mahar. 1997. Corn Fields Well Beyond the Barn Benefit Most from Manure. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University. NJ Grain and For. J. 4:21-23.
- 23. Westendorf, M. L. 1997. Horse Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 24. Westendorf, M. L. 1997. Dairy and Beef Cattle Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 25. Westendorf, M. L. 1997. Poultry Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 26. Westendorf, M. L. Grazing Delivers Premium Feed at Low Cost. Plant and Pest Advisory: Field Crops/Livestock Edition. June 27, 1996. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 27. Westendorf, M. L. Ensiling to Produce Quality Forages. Plant and Pest Advisory: Field Crops/Livestock Edition. June 13, 1996. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 28. Westendorf, M. L. Feed Evaluation. Plant and Pest Advisory: Field Crops/Livestock Edition. May 30, 1996. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.

- 29. Westendorf, M. L. Feed Price Squeeze. Plant and Pest Advisory: Field Crops/Livestock Edition. May 16, 1996. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 30. Westendorf, M. L. Profits for Grass Farmers. Plant and Pest Advisory: Field Crops/Livestock Edition. April 18, 1996. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 31. Westendorf, M. L. and S. Race. 1996. Horse Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 32. Westendorf, M. L. and S. Race. 1996. Dairy and Beef Cattle Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 33. Westendorf, M. L. and S. Race. 1996. Poultry Insect Pest Management Recommendations. Pesticides for New Jersey. Coord. by G. C. Hamilton and A. B. Gould. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Cook College. Rutgers University.
- 34. Simeone, A., M. L. Westendorf, R. E. Tucker, G. E. Mitchell, Jr. and L. P. Bush. 1993. Effect of Ammoniation on Reducing the Toxicity of Endophyte-infected Tall Fescue Seed to Rats. University of Kentucky. College of Agriculture. Beef Cattle Research Reports. PR353:7-9.
- 35. Munyabagisha, L., M. L. Westendorf, G. E. Mitchell, Jr. and R. E. Tucker. 1991. Bovine Plasma Vitamin A Responses to Selected Nutrients, Monensin, and Endophytic Fescue. University of Kentucky. College of Agriculture. Beef Cattle Research Reports:37.
- 36. Westendorf, M. L., L. P. Bush and G. E. Mitchell, Jr. 1991. Rat Bioassay of Endophyte-infected Fescue Seed Incubated in Rumen Fluid for 0 or 24 Hours. University of Kentucky. College of Agriculture. Beef Cattle Research Reports:40.
- 37. Westendorf, M. L., G. E. Mitchell, Jr. and R. E. Tucker. 1991. Influence of Cattle Breed on Toxicity of Endophyte-infected Tall Fescue. University of Kentucky. College of Agriculture. Beef Cattle Research Reports:9.
- 38. Westendorf, M. L., N. Gay and G. E. Mitchell, Jr. 1990. Feedlot Performance and Carcass Quality in Beef Steers on Feed Restriction and Monensin. University of Kentucky. College of Agriculture. Beef Cattle Research Reports:67.
- 39. Westendorf, M. L., G. E. Mitchell, Jr., N. Gay, R. E. Tucker and N. Bradley. 1990. Plasma Vitamin A Levels in Cattle in Response to Large Doses of Vitamin A. University of Kentucky. College of Agriculture. Beef Cattle Research Reports:65.
- 40. Absher, C. W., L. W. Turner, J. K. Evans, C. T. Dougherty, J. T. Johns, E. M. Smith, J. Wilson, P. Deaton, D. Adams, M. Westendorf and R. Barnes. 1988. Graze-more-beef: Application of Controlled Grazing Principles. University of Kentucky. College of Agriculture. Beef Cattle Research Reports:90.
- 41. Catherman, D. R., D. H. Seman, T. Matsui, M. G. Hayek, D. G. Ely, M. L. Westendorf, D. B. Batson, R. E. Tucker and G. E. Mitchell, Jr. 1988. Clearance of 14<sup>C</sup>- decoquinate by Beef Heifers. University of Kentucky. College of Agriculture. Beef Cattle Research Reports:82.
- 42. Seman, D. H., D. R. Catherman, T. Matsui, M. G. Hayek, D. G. Ely, M. L. Westendorf, D. B. Batson, R. E. Tucker and G. E. Mitchell, Jr. 1988. 14<sup>C</sup>-decoquinate Clearance by Ewes. University of Kentucky. College of Agriculture. Sheep Profit Day Reports:9.
- 43. Westendorf, M. L., N. W. Bradley and G. E. Mitchell, Jr. 1988. A Procedure for the Determination of Vitamin A Status in Cattle Receiving Different Diets. University of Kentucky. College of Agriculture. Beef Cattle Research Reports:77.
- 44. Combs, E., C. Absher, T. Crawford, C. C. Mickey, D. Hodge and M. Westendorf. 1987. IRM Cow-Calf Management Demonstration. Cooperative Extension Service. University of Kentucky. College of Agriculture.

#### **AUDIOVISUAL MATERIALS**

# Website Developed

1. Rutgers University Animal Waste Management program website can be found at: <a href="http://njaes.rutgers.edu/animal-waste-management/">http://njaes.rutgers.edu/animal-waste-management/</a>. This site and the associated Rutgers Cooperative Extension sites have been viewed over 19,000 times since 2011. I developed most (>75%) of the content for this site. This is the portal for all of our animal waste management information can be valuable for individuals writing Animal Waste Management Plans.

## eXtension Webcasts

- 1. April, 2013: Nutrient management on small farms webcast. April 4, 2013. 20 minute Webcast sponsored by eXtension and the Livestock Poultry Environmental Learning Center. Talk about how to do nutrient management planning on small farms. Presentation part of the 2013 Waste to Worth conference held in Denver, CO. Approximately 75 people in attendance. Can be viewed online at: <a href="http://www.extension.org/pages/67636/">http://www.extension.org/pages/67636/</a> [also listed under Conference Presentations, p. 121
- 2. June, 2008: Managing Manure on Small Farms Webcast. June 20, 2008. 74 minute. (1,005 views since 2008). Webcast sponsored by eXtension and the Livestock Poultry Environmental Learning Center. What is a small farm and why should we be concerned about nutrient management on small-scale operations? This webcast presentation included an overview of electronically available resources for small farm nutrient management, a description of small farms, and an overview of how to develop a nutrient management plan for a small farm. Nearly 150 were in attendance. The archived version continues to be viewed online. http://connect.extension.iastate.edu/p34399556/.

## **Audiovisual Materials**

- 1. 2011-ongoing: Video Series: A six video series about nutrient management on livestock farms including information about storing, disposal, and processing of animal manures. Also includes information about soil health and pasture management. As of 07/01/15 over 800 video disks have been submitted and over 65,000 views on YouTube. These are available for viewing at: https://www.youtube.com/playlist?list=FL7JeKQv2XGl9sbokyWGTJBQ.
- 2. 1997: Westendorf, M. L., E. A. Chamberlain, and R. C. Mickel. Concepts in nutrient management. Video Tape. 20 min. Rutgers University Office of TV and Radio. Rutgers Cooperative Extension. New Jersey Agricultural Experiment Station. Rutgers University.
- 3. 1988: Westendorf, M. L. A beef cow condition scoring system. Cooperative Extension Service. University of Kentucky. College of Agriculture. Audiovisual instructional tutorial (16 min.).

# Computer Programs/Materials

- 1. 2014-ongoing: Audio program for Rutgers Animal Farm self-guided tour. The Rutgers University Animal Farm and environmental best management practices walking tour. This audio program allows people to take a walking tour and with the aid of a hand-held device (I-Phone, I-Pad, Smart-Phone, etc.). At each site in the walking tour, the participant opens to the self-guided tour and clicks on the link for each site. They will get an audio description of what they are seeing. This can be linked at: http://farmtours.rutgers.edu/tour/index.htm.
- 2. 2014-ongoing: Composting Course available online as a self-certification program for farmers in New Jersey and throughout the US for compost managers. The State of New Jersey requires a regular certification for farmers who compost waste on their farms. This course is based on a two-day compost management symposium held December 13-14, 2010. This course can be viewed (Guest Log In) at: <a href="http://campus.extension.org/course/view.php?id=897">http://campus.extension.org/course/view.php?id=897</a>. A password is required to take the course for certification credit.

3. 2009-ongoing: Computer Program for use by landowners to manage the wastes produced on their acreages. This is particularly used by livestock farmers who must submit Animal Waste Management Plans to comply with New Jersey State Requirements. This is available by compact disk or is available for download at: <a href="http://njaes.rutgers.edu/animal-waste-management/preparing-your-awmp.asp">http://njaes.rutgers.edu/animal-waste-management/preparing-your-awmp.asp</a>.

**EXTENSION PRESENTATIONS (Extension Teaching)** 

LAIL	STON I RESERVE ATTOMS (Extension Teaching)	
10/11/17		An evening of wine and equine:
		Feed/Manure Management on New Jersey Horse Farms
10/4//17	USDA/NRCS Program Meeting, Trilogy Farm, Chesterfield, NJ	An evening of wine and equine: Feed/Manure Management on New Jersey Horse Farms
6/27/17		An evening of wine and equine: Feed/Manure Management on New Jersey Horse Farms
6/29/17	USDA/NRCS Program Meeting, Dorsett Arabians, Swedesboro, NJ	An evening of wine and equine: Feed/Manure Management on New Jersey Horse Farms
3/19/17	Horses 2017 Conference, Rutgers University, Piscataway, NJ	The Scoop on Poop: Manure Management Basics
3/19/17		Black Gold: Creating a Manure Management Plan
3/19/17		Keynote: Ask the Experts
6/15/16		An evening of wine and equine:
		Environmental stewardship on New Jersey Horse Farms
6/2/16	USDA/NRCS Program Meeting, Journeyman Farm, Pittsgrove Township, Salem County, NJ	An evening of wine and equine: Environmental stewardship on New Jersey Horse Farms
5/26/16	USDA/NRCS Program Meeting, Rick's Saddle Shop and Birch Creek Farm,	
# /1 O /1 C		Environmental stewardship on New Jersey Horse Farms
5/19/16	USDA/NRCS Program Meeting, Rick's Saddle Shop and Birch Creek Farm,	
2/0/16		Environmental stewardship on New Jersey Horse Farms
2/9/16	$2016\ \mathrm{NJ}$ Agricultural Convention and Trade Show, Harrah's Resort, Atlantic City, $\mathrm{NJ}$	Climate and Weather in Livestock Animals
03/28/15	New Jersey Junior Breeder Symposium. Rutgers University. New Brunswick, NJ	Roaming the Rumen
03/05/15	Climate Change and Agriculture in New Jersey. Rutgers Eco-Complex, Bordentown, NJ	
05/19/14		Equine Management Education
		Manure Management BMP's
-		Manure Management BMP's
11/19/13		Gold Medal Horse Farm
03/23/13	New Jersey Junior Breeder Symposium. Rutgers University. New Brunswick, NJ	
01/15/13		Equine Regional Surveys
-		Gold Medal Horse Farm
_		Horse Diet Management
10/10/12		Equine Farm Digester
10/04/12		Horse Diet Management
08/15/12		Composting Horse Manure
	Equine Science Update, New Brunswick, NJ	"Love Your Horse: Love the Environment" Keeping it
12/06/11		Green
06/08/11	USDA-NRCS State Technical Meeting, Morris County, NJ	Implementing Feed Management Practices
06/29/11	Pasture Walk, Califon, NJ	Manure Utilization on Pasture
06/23/11	Pasture Walk, Gloucester County, NJ	Manure Utilization on Pasture
01/28/11	Compost Marketing Workshop, Hillsborough, NJ	NJDA Regulations: What they mean for compost operations
12/14/10	Equine Science Update, New Brunswick, NJ	"The Scoop on Poop" - Update on Animal Waste Management
04/15/10		Feeding to reduce nutrient excretion
04/14/10		Feeding to reduce nutrient excretion
03/25/10		Animal Waste Management
03/20/10	New Jersey Junior Breeder Symposium. Rutgers University. New Brunswick, NJ	2
09/08/09	New Jersey Horse Council. Hunterdon County Extension Center. Flemington, NJ	
04/21/09	Horseman's Association of Millstone Township, NJ. Millstone Community Center	
04/7/09		Animal Waste Management
0 11 11 07	p memo may a to a memorabe	- IIIIIII - Tubio Itiuliugolilolli

03/19/09	Horse Management Series, Blackwood, NJ	Manure management and How the Regulations Will Work.
03/12/09	Ricks Saddle Shop. Cream Ridge, NJ	Animal Waste Management Rule
01/21/09	Equine Advisory Board. Cream Ridge, NJ	Self-Certified Nutrient Management Plans
		Nutrient Management
05/15/08	Farm and Land Management Short Course. Pittstown, NJ	Nutrient Management
12/11/07	Equine Science Update. New Jersey Museum of Agriculture. New Brunswick, NJ	Manure Management Plans: Training for New Jersey Horse Farmers
11/01/07	Animal Agricultural Alliance. Allentown, NJ	Self-Certified Nutrient Management Plans
	Horseman's Association of Millstone Township, NJ. Millstone Community	
04/01/07		Nutrient Waste Management – Manure Disposal Options
		Nutrient Waste Management – Manure Disposal Options
	New Jersey Junior Breeder Symposium. Rutgers University. New Brunswick, NJ	
	New Jersey Junior Breeder Symposium. Rutgers University. New Brunswick, NJ	
	Meat Goat Production School and Marketing Program. Gloucester Extension Office	
02/22/07	Meat Goat Production School and Pilot Marketing Program. Hunterdon Extension Office	Goat Nutrition
12/12/06	Equine Science Update, New Brunswick, NJ	Manure Management in New Jersey: The Truth about Poop
11/02/06	Hopewell Animal Group. Hopewell Township, NJ	Animal Feeding Operations Rules and Manure Management
10/12/06	New Jersey Horse Council. Rick's Saddleshop. Cream Ridge, NJ	Animal Feeding Operations Rules and Manure Management
09/16/06	Northeast Small Farm Expo. New Jersey State Fairgrounds, Sussex County, NJ	Manure Management
07/19/06	Equine Advisory Board. Freehold Gardens. Freehold, NJ	Animal Feeding Operations Rules for Manure Management.
07/19/06	Animal Agricultural Alliance. Snyder Farm. Pittstown, NJ	Animal Waste Management Rules
06/27/06	Sussex County Agriculture and Water Quality Summit. Newton, NJ	Animal Waste Regulations and Planning
06/05/06		Manure Management and Animal Waste Management
		Regulations.
05/13/06	Hunterdon Horse Expo. Hunterdon County, NJ Fairgrounds.	Animal Waste Regulations
05/10/06	Northeast Organic Farming Association (NOFA). Rutgers, New Brunswick, NJ.	Practical Skills for Livestock – Animal Identification
	New Jersey Junior Breeder Symposium. Rutgers University. New Brunswick, NJ	Nutrition
	New Jersey Junior Breeder Symposium. Rutgers University. New Brunswick, NJ	
02/16/06	Gloucester County Horse Management Educational Series. Clayton, NJ	Horse Manure and Manure Management and New Regulations
12/13/05		Nutrient Management Plans for New Jersey Horse Farms
10/27/05		Self-Certified Nutrient Management Plans for New Jersey Farmers
10/22/05	Cape May County Disaster Preparedness Seminar. Cape May 4-H Center	Emergency Management: Considerations for Livestock Owners
05/17/05	Animal Agricultural Alliance. Rutgers Snyder Farm, Pittstown, NJ	Odors and Air Emissions in Agriculture
05/12/05	New Jersey Department of Agriculture. Broadway Grange, Asbury, NJ	Animal Farms and the New Jersey Animal Waste Management Rule
05/11/05	New Jersey Department of Agriculture. Woodstown, NJ	Animal Farms and the New Jersey Animal Waste Management Rule
05/04/05	New Jersey Department of Agriculture. Burlington Eco-Complex, NJ	Animal Farms and the New Jersey Animal Waste Management Rule
05/01/05	New Jersey Department of Agriculture. Salem County Extension Office	Animal Farms and the New Jersey Animal Waste Management Rule
02/08/05		Self-Certified Nutrient Management Plans for New Jersey Farmers
11/01/04	Garden State Sheep Breeders. Flemington, NJ	Animal Farms and the New Jersey Animal Waste Management Rule
10/19/04	Animal Agriculture Alliance. Allentown, NJ	Agriculture Management Practice (AMP) for Equine Management
		pvianagement
	Horse Manure Management Presentation. Woodstown, NJ	Horse Manure Management
06/29/04	Horse Manure Management Presentation. Woodstown, NJ	_
06/29/04 06/22/04	Horse Manure Management Presentation. Woodstown, NJ	Horse Manure Management

11/01/02	Manage Manage Manage Manage Miles and Miles Allege Miles Miles Miles Manage Miles Miles Manage Miles Manage Miles Manage Miles Manage Miles Manage M	II M M
11/01/03		Horse Manure Management
09/27/03		Sheep Nutrition and Management
		Nutrient Waste and Environmental Management
03/30/03	Horses 2003. New Brunswick, NJ	The Scoop on Poop: Managing Your Manure
12/07/02	Equine Research Update. New Brunswick, NJ	Manure Composting Practices for Horse Farms. With U. Krogmann
08/19/02	Equine Pasture Management Seminar. Showplace Farm, Monmouth County	Animal Waste and Environmental Responsibility
03/17/02	Annual Horse Management Seminar. Rutgers. New Brunswick, NJ	Waste management legislation. for horse farms
02/24/02	New Jersey Junior Breeder Symposium. New Egypt, NJ	Manure Management
02/23/02	New Jersey Junior Breeder Symposium. Hackettstown, NJ	Manure Management
11/05/01	Garden State Sheep Breeders. Hunterdon County Extension	Waste Management for Sheep
08/21/01	Equine Pasture Management Seminar. Showplace Farm, Monmouth County	Foot and Mouth Disease Update
08/21/01	Equine Pasture Management Seminar. Showplace Farm, Monmouth County	On-Farm Composting of Horse Manure
03/12/01	4-H Youth. Farmingdale United Methodist Church. Monmouth County	Composting Horse Manure
02/22/01	RCE/NJDA Johne's Disease Workshop. Salem County Extension Office	The New Jersey Johne's Management Program.
02/21/01	RCE/NJDA Johne's Disease Workshop. Tranquility Methodist Church, Allamuchy, NJ	
02/14/01	Staff Training. Longstreet Farm. Holmdel, NJ	Basic Nutrition Fundamentals
12/09/00		Manure Composting Practices for Horse Farms
05/17/00		Composting Horse Manure
03/06/00		Biosecurity Practices on Dairy Farms
11/20/99	Equine Research Update. New Brunswick, NJ	Manure Composting Practices for Horse Farms.
11/11/99	Salem County Extension Office. Woodstown, NJ	Use of By-Product Feeds as Forage Replacements
11/09/99		Use of By-Product Feeds as Forage Replacements
09/29/99	NJAES, and Rutgers, The State University of New Jersey VIP Tour. New	0 1
09129199	Brunswick, NJ	Annual Science Food waste Research and Extension
03/01/99	Garden State Sheep Breeders, Inc. Producers. Flemington, NJ	Trace Mineral Feeding for Sheep
12/10/98	Somerset County Board of Agriculture. Somerville, NJ	Cook College Dairy Plans
07/17/98		Reproductive Technologies and How They Influence Our Lives
04/01/98	Equine National Animal Health Monitoring Service Training. New Brunswick, NJ	Pasture Quality and types in New Jersey
03/08/98	RCE and the New Jersey Hereford Association. Somerset Extension Office	Johne's Disease and Cattle Productivity
02/27/97	Milking for Profit School. Penn-Jersey Extension Program. Belvidere, NJ	Concepts of Mastitis: Immune Defense System, and Nutrition
04/01/96	Presentation to High School science students. Dover High School. Dover, NJ	Bovine Somatotropin and Milk Safety
02/14/96	RCE Extension Business Management Seminar for NJ Farmers. Allamuchy, NJ	Heat Stress Management for Dairy Cattle
11/20/95		Forage Quality for Horses
11/14/95		Overview of Nutrient Management Project on the Smith
		Farm
08/10/95	Snyder Farm Field Crop Twilight Meeting. Pittstown, NJ	Manure Management and Corn Fertilization
03/18/95		Forage Quality for Horses
03/09/95		Role of Johne's Disease in Dairy Cattle Productivity
_		Role of Johne's Disease in Dairy Cattle Productivity
03/04/95		Beef Cow Condition Scoring
02/2,9,16/ 95	Pennsylvania State Dairy Nutrition Teleconference. Newton, NJ	Dairy Cattle Nutrition
01/26/95		Managing Dairy Farms for Profit
01/23/95	Livestock Waste Management Conference. Department of Agriculture. Atlantic City, NJ	
12/06/94	Mid-Atlantic Cooperative Extension Meeting: Biosecurity for Poultry. Newark, DE	Rodent Control Video Presentation
11/16/94	RCE/NJDA Training Meeting. Trenton, NJ	Johne's Disease and Management Training
10/26/94	Rutgers Cooperative Extension. East Brunswick Grange Hall. East Brunswick, NJ	Bovine Somatotropin and Milk Safety
09/27/94	Rutgers Cooperative Extension. Flemington, NJ	Forage Quality for Horse Production
07/16/94	RCE. Pennsylvania/New Jersey Ayrshire Breeders Association. Harrisonville, NJ	Forage Quality for Dairy Production
07/07/94	Rutgers Cooperative Extension. Northampton County, PA	Managing Forage Quality
07/06/94		Managing Forage Quality
04/05/94	Animal Welfare In-Service Training. RCE. Somerset County Extension Office, NJ	
03/17/94		Forage Quality for Dairy Production

03/10/94	Bovine Somatotropin Workshop. Rutgers Cooperative Extension. Belvidere, NJ	Economic Considerations in Using BST
03/08/94	Bovine Somatotropin Workshop. Rutgers Cooperative Extension. Sussex, NJ	Economic Considerations in Using BST
02/24/94	Pennsylvania State Dairy Nutrition Teleconference, Piscataway, NJ	Dairy Cattle Nutrition
02/17/94	Pennsylvania State Dairy Nutrition Teleconference, Piscataway, NJ	Dairy Cattle Nutrition
02/10/94	Pennsylvania State Dairy Nutrition Teleconference. Piscataway, NJ	Dairy Cattle Nutrition
02/01/94	North New Jersey Dairy Summit. Tranquility, NJ	Rutgers Cooperative Extension Dairy Management Program
01/21/94	Bovine Somatotropin Workshop. Rutgers Cooperative Extension. Woodstown, NJ	Economic Considerations in Using BST
01/04/94	South New Jersey Dairy Summit. Pole Tavern, NJ	Rutgers Cooperative Extension Dairy Management
		Program

### MISCELLANEOUS PRESENTATIONS

## **Miscellaneous Presentations**

- 1. Regional Research Committee Report. August 14, 2014. Regional Research Committee, NE-1041. State College, PA.
- 2. Program Moderator Waste-to-Worth. Waste to Worth: Spreading Science & Solutions Conference. Livestock and Poultry Environmental Learning Center. Denver, Colorado, April 1–5, 2013.
- 3. Regional Research Committee Report. October 30, 2013. Regional Research Committee, NE-1044. Lexington, KY.
- 4. Regional Research Committee Report. August 13, 2013. Regional Research Committee, NE-1041. State College, PA.
- 5. Regional Research Committee Report. August 14, 2012. Regional Research Committee, NE-1041. Burlington, VT.
- 6. Regional Research Committee Report. August 7, 2011. Regional Research Committee, NE-1041. Hammond, LA.
- 7. Regional Research Committee Report. August, 24 2010. Regional Research Committee, NE-1041. St. Paul, MN.
- 8. Regional Research Committee Report. November 17, 2009. Regional Research Committee, NE-1024. Minneapolis, MN.
- 9. Regional Research Committee Report. October 10, 2009. Regional Research Committee, NE-1041. New Brunswick, NJ.
- 10. Regional Research Committee Report. October 27, 2008. Regional Research Committee, NE-1024. Tillamook, OR.
- 11. Animal Husbandry. USDA Foreign Agricultural Service. International Cooperation and Development. People's Republic of China Team #7. "High-Tech Application in Agricultural Production." January 7, 2004. Rutgers University. New Brunswick, NJ.
- 12. New Technologies in Reproductive Management Session Moderator. 5<sup>th</sup> Annual Middle Atlantic Consortium Dairy Extension In-service Training. Mid-Atlantic Consortium Animal Sciences Sub Group. June 13, 2002. Wilkes-Barre, PA.
- 13. Nutrition and Herd Health Session Moderator. 4<sup>th</sup> Annual Middle Atlantic Consortium Dairy Extension In-service Training. Mid-Atlantic Consortium Animal Sciences Sub Group. June 11, 2002. Wilkes-Barre, PA.
- 14. Program Moderator. Implementing Competitive Business Strategies. Mid-Atlantic Dairy Management Conference. March 7-8, 2001. Camp Hill, PA.
- 15. Moderator. Sixth Food Waste Recycling Symposium. New Jersey Department of Agriculture. February 5-6, 2001.
- 16. Moderator. Fifth Food Waste Recycling Symposium. New Jersey Department of Agriculture. January 31, 2000.
- 17. Session Moderator. Regional Dairy Quality Management Alliance Workshop. RDQMA. October 26, 1999.

- 18. Program Moderator. Water Quality Issues. Animal Waste Initiative. October 18, 1999. Kansas City, MO.
- 19. Johne's Disease Session Moderator. Cattle Health Assurance Training for Educators in the Northeast. Mid-Atlantic Consortium Animal Sciences Sub Group. June 3, 1999. New Paltz, NY.
- 20. Session Moderator. Building a Northeastern Alliance. Regional Dairy Quality Management Conference. March 16-17, 1999. Ithaca, NY.
- 21. Program Moderator. Systematic Approach to Dairying in the Next Millenium. Mid-Atlantic Dairy Management Conference. February 24 25, 1999. Camp Hill, PA.
- 22. Moderator. Fourth Food Waste Recycling Symposium. New Jersey Department of Agriculture. February 1, 1999. Atlantic City NJ.
- 23. Moderator. Third Food Waste Recycling Symposium. New Jersey Department of Agriculture. February 2, 1998. Atlantic City NJ.
- 24. Program Moderator. Thriving in a Global Economy. Mid-Atlantic Dairy Management Conference. February 28 March 1, 1997. Hershey, PA.
- 25. Moderator. Second Food Waste Recycling Symposium. New Jersey Department of Agriculture. January 20, 1997. Atlantic City NJ.
- 26. Moderator. First Food Waste Recycling Symposium. New Jersey Department of Agriculture. January 22, 1996. Atlantic City NJ.
- 27. Moderator for Food Safety and Emergency Diseases Program. Mid-Atlantic Cooperative Extension Meeting. Tenth Regional Meeting on Practical Biosecurity for Poultry. December 5, 1995. Newark, Delaware.
- 28. Strategic Planning for the Dairy Industry Session Chair. Rutgers Cooperative Extension Business Management Seminar for NJ Farmers. February 21, 1995. Allamuchy, NJ.
- 29. Strategic Planning for the Dairy Industry Session Chair. Rutgers Cooperative Extension Business Management Seminar for NJ Farmers. February 20, 1995. Pole Tavern, NJ.
- 30. Group Facilitator. Deer Management Workshop. Sponsored by Rutgers Cooperative Extension. July 8, 1994. New Brunswick, NJ.
- 31. Moderator. Livestock Waste Management Conference. New Jersey Department of Agriculture. January 24, 1994. Atlantic City NJ.

## **MEDIA PRESENTATIONS**

- 1. Environmental Impacts of Equine Operations. April 12, 2016. Rural Media Group. RFD-TV, Rural Radio.
- 2. Horses in the Morning. Manure Digester. April 29, 2015. <a href="http://www.horsesinthemorning.com/hitm-for-04-29-2015-derby-trivia-manure-digester-dean-reeves-on-derby-2015/">http://www.horsesinthemorning.com/hitm-for-04-29-2015-derby-trivia-manure-digester-dean-reeves-on-derby-2015/</a>
- 3. Horses in the Morning. Horse Manure Management. May-28-2014. <a href="http://www.horsesinthemorning.com/hitm-for-04-29-2015-derby-trivia-manure-digester-dean-reeves-on-derby-2015/">http://www.horsesinthemorning.com/hitm-for-04-29-2015-derby-trivia-manure-digester-dean-reeves-on-derby-2015/</a>
- 4. News 12 New Jersey. Foot and Mouth Disease in New Jersey. News 12 Evening News. March 15, 2001.
- 5. New Jersey Network. Johne's Disease. NJN Public Television. Channel 52. Evening News. March 9, 2001.
- 6. New Jersey Times. New Jersey Agriculture. 2 Hour Magazine. Radio Program. April 2000.
- 7. NBC News 4. Risk of Nitrates in Drought-Stricken Corn Silage. Evening News at 6:00. August 20, 1999
- 8. News 12 New Jersey. Food Waste as Swine Feed. News 12 Morning Edition. May 21, 1999.
- 9. News 12 New Jersey. Dairy Compact. News 12 Evening News. May 4, 1999.
- 10. UPN-9. Bovine Somatotropin. UPN-9 Evening News. January 31, 1996.

- 11. WMGM-NBC. Farmers Week, Food Waste Recycling. WMGM-NBC Evening News, Channel 40. January 22, 1996.
- 12. TKR Cable. "New Jersey Exchange." Animals and New Jersey Agriculture. September 1995.
- 13. CNBC. Beef Pricing/Supply and Demand. NBC Cable Network Television. May 31, 1994.
- 14. New Jersey Public Television. Bovine Somatotropin. Public Television. Channel 13. 5:30 pm. April 4, 1994.
- 15. Saturday Magazine. Bovine Somatotropin and its Influence on the Presence of Antibiotics in Milk. Flagship 1330. Call-in show. Erie, Pennsylvania. 8:00 am. March 26, 1994.
- 16. Access. Bovine Somatotropin and its Influence upon the Safety of the Milk Supply. WCBS. Roundtable Discussion. 8:30 pm. February 26, 1994.
- 17. New Jersey Network Live. Bovine Somatotropin and its Influence upon the Safety of the Milk Supply. Channel 53. Public Television Call-In Show. 7:30 pm. February 9, 1994.

#### **PUBLIC HEARINGS**

New Jersey State Government Public Hearings

- 1. 01/2008: State of New Jersey Division of Dairy and Commodity Regulation. Public Hearing on Farm Milk Pricing. January 4, 2008. Rutgers University. Eco Complex, Columbus, NJ.
- 2. 07/2006: State of New Jersey Division of Dairy and Commodity Regulation. Public Hearing on Farm Milk Pricing. July 24, 2006. Rutgers University. New Brunswick, NJ.
- 3. 01/2003: Testimony before the New Jersey State Legislative Assembly Environment and Solid Waste Committee. Public Hearing on Assembly Bill 1948 that would Mandate Certain Practices in the Raising of Veal Calves. January 16, 2003. Trenton, NJ.
- 4. 11/1997: State of New Jersey Division of Dairy and Commodity Regulation. Public Hearing on Farm Milk Pricing. November 20, 1997. Trenton, NJ.
- 5. 05/1994: New York City Committee on Consumer Affairs. Resolution No. 194: Synthetic Growth Hormone Label on certain Dairy Products. Public Hearing. May 3, 1994. New York, New York.

## **UNIVERSITY INSTRUCTION (Excluding Extension Teaching)**

Undergraduate

- 1. Farm Productivity Analysis **11:067:406** (Taught since Spring 1996). <u>This</u> is a course for Jr./Sr. Production Animal Science students. Full responsibility for this course.
- 2. Production Animal Management Course and Laboratory **11:067:336, 338** (Taught since Spring 2011). This is a course for Jr./Sr. Production Animal Science students. Full responsibility for this course.
- 3. Dairy Cattle Insemination 11:067:322 (Since Spring 2011). This is a Jr./Sr. course for Production Animal Science and Pre-Veterinary Medicine students. It consists of a 3-day field trip taken over Spring Break every year.
- 4. Lecture every Fall in Animal Evaluation and Selection. **11:067:260**. 2 or 3 lectures or laboratories on the subject of animal evaluation. (Since Fall 2013).
- 5. Lecture every year (Fall and Spring) in Animal Science Principles **11:067:142**. 2 or 3 lectures or laboratories on the subjects of dairy production and animal waste management. (Since Fall 1993).
- 6. Previously or currently lecture in the following courses:
  - Livestock Production Management & Laboratory II 11:067:336, 338. (Spring, 2000-2010).
  - Livestock Production Management & Laboratory I 11:067:335, 337. (Fall, 1998-2009).
  - Entrepreneurial Agriculture **11:015:442.** (2013-2016).
  - Soil Fertility **11:776:440**. (Fall 2003, 2005).
  - Nutrient Management for Agriculture and Environment **11:776:496:95.** (2003.).
  - Solid Waste Management and Treatment 11:375:307. (Fall 1994-1998).
  - Economics of Production 11:373:321. (Spring 1995-1996).
  - Beef/Sheep Production and Management 11:067:383. (Fall 1995).

- Swine Production and Management **11:067:386**. (Spring 1995).
- Dairy Cattle Production and Management **11:067:321** (Fall 1994)
- Animal Science Principles for Graduate Students 16:067:501. (Fall 1993).
- Dairy Marketing **ANSC 404 University of Delaware.** (May 12, 1999).

## **COURSES DEVELOPED**

- 1. Revision of existing course: PRODUCTION ANIMAL MANAGEMENT 11:067:336 (3 credit lecture); 11:067:338 (2 credit laboratory). Until 2010, this course was taught as a two semester sequence (11:067:335 and 11:067:337; 11:067:336, 11:067:338) titled "Livestock Production Management." These courses gave an overview of livestock production in New Jersey and the United States. They were combined into this one-semester course, 11:067:336 and 11:067:338, titled Production Animal Management. This is similar to the previous courses but consolidated into one-semester focusing on preparing interested students about production animal science careers. This course is taught every other spring and is rotated with 11:067:406, Farm Productivity Analysis in the Animal Sciences, described below. I teach both of these courses and the laboratory, these are all required courses for our Production Animal Science students. This two year program gives our students a broad approach to classroom exercises, an on-farm research project, and visits to New Jersey Farms.
- 2. Course developed: FARM PRODUCTIVITY ANALYSIS IN THE ANIMAL SCIENCES 11:067:406 (3 credits). I initially introduced this course in the spring of 1996 and it has been offered every spring semester from 1998 through 2010, since 2010 taught every other spring. This course includes case studies of New Jersey farms, and focuses on the productivity of livestock farms. Course includes onfarm visits, problem solving, diagnostic analysis and the development of producer recommendations. Course includes exposure to different kinds of systems, including locally produced, organic, conventional, and pasture-based all in an urban fringe environment. Junior and Senior students have opportunity in this course to work with Rutgers Cooperative Extension professionals in making management recommendations for farms. The ability to solve problems and think critically are skills required for graduating students to be effective in their careers. This course was originally offered as a CASE (Citizenship and Service Education) course, a program encouraging Rutgers University students to participate in experiential and service-based learning.
- 3. Course developed: ANIMAL EVALUATION AND SELECTION 11:067:260. This is a revision of a course not taught in recent years. Dr. Westendorf and other faculty revived this course in 2013 to increase student understanding of the livestock industries and also to prepare students to participate in regional animal selection competitions. The class (1) Provides students with instruction and practice in identifying various livestock breeds; (2) Develops student appreciation for the value of livestock judging skills; (3) Teaches students the skills necessary to excel as a livestock judge; (4) Provides students with instruction and training in examining and placing animals (and in giving oral reasons for class placing); and (5) Provides students with opportunities to practice livestock judging skills. The course is made up of a balance of classroom activities and field trips to New Jersey livestock farms.

## **REGIONAL PROJECTS**

1. Environmental Impacts of Equine Operations. USDA-NIFA multi-state project. 5-year duration. Project No. NE-1441. <a href="http://nimss.umd.edu/lgu\_v2/">http://nimss.umd.edu/lgu\_v2/</a>

[This is a USDA-NIFA multi-state project. Project No. NE-1441.] This project was developed as NE-1041 was ending. It was approved as a five year regional research project from 2014-2019. The project builds on previous work and moves the focus to pasture management and new disposal technologies. In addition, the project focuses more on smaller farms and how best to encourage the adoption of low-cost best management practices on equine farms. The project home page can be accessed at

- http://nimss.umd.edu/lgu\_v2/. Contribution 50% of idea, 70% of writing, recruitment, review, and follow-up]
- 2. Environmental Impacts of Equine Operations. USDA-NIFA multi-state project. 5-year duration. Project No. NE-1041. <a href="http://nimss.umd.edu/lgu\_v2/">http://nimss.umd.edu/lgu\_v2/</a>
  - [This is a USDA-NIFA multi-state project. Project No. NE-1041.] This project was developed and submitted to the USDA for peer-review. It was approved as a five year regional research project from 2009-2014. The project incorporates the best available data about animal use, feed, manure storage and disposal, pasture/cropping management, soil and environmental quality, erosion control, and site characteristics to meet the goal of minimizing negative environmental impacts of equine operations on soil, water, and air quality. The project home page can be accessed at http://nimss.umd.edu/lgu\_v2/. Contribution 90% of idea, writing, recruitment, review, and follow-up.
- 3. Whole farm dairy and beef systems: gaseous emissions, phosphorus management, organic production, and pasture based production USDA-NIFA multi-state project. 5-year duration. Project No. NE-1044. <a href="http://nimss.umd.edu/lgu\_v2/">http://nimss.umd.edu/lgu\_v2/</a>

[This is a USDA-NIFA multi-state project. Project No. NE-1044.] 2010-2015, currently up for renewal, I have participated in this ongoing project since about 1995. Livestock farms face a number of environmental concerns including both water and air quality issues. These potential impacts are interrelated, so regulations to reduce one environmental problem may aggravate another. The scope of this work requires a multi-state approach because the needed technical expertise is not present at any one location and because livestock production systems vary across the country. The products and tools developed will be used by a wide range of audiences including service and supply dealers, producers, nutrient management planners, policy makers, and extension and university educators.

## PROFESSIONAL SERVICE

## Contributions to the advancement of the academic profession

- 1. 1995-ongoing: Proposal Review. Review of Research Funding Proposals for USDA-CSREES, EPA-SBIR program, USDA-SBIR program, and Agriculture Canada. 10-15 proposals reviewed.
- 2. 1994-ongoing: Reviewer for Miscellaneous Journals. XX Manuscripts Reviewed. Veterinary Research, etc.
- 3. 1993-ongoing: ASAS. Reviewer for the Journal of Animal Science. 8 Manuscripts Reviewed. Contemporary Issues and other sections. American Society of Animal Science.
- 4. 2002: USDA-SBIR. Animal Waste Proposal Review Committee. Washington, DC. April, 2002.

## **Experiment Station Projects**

- 1. 2010-2015: Northeast Regional Project. Whole Farm Dairy and Beef Systems for Environmental Quality. USDA Multi-State Project. Northeast Regional: NE-1024.
- 2. 2014-2019: Northeast Regional Project. Environmental Impacts of Equine Operations USDA Multi-State Project. Northeast Regional: NE-1441.
- 3. 2009-2014: Northeast Regional Project. Environmental Impacts of Equine Operations USDA Multi-State Project. Northeast Regional: NE-1041.
- 4. 2005-2010: Northeast Regional Project. Whole Farm Dairy and Beef Systems for Environmental Quality. USDA Multi-State Project. Northeast Regional: NE-1024.
- 5. 2005-2010: Hatch Project. The Use of Byproduct Feedstuffs to Optimize Growth, Performance, and Economics in Ruminants.
- 6. 1999-2004: Hatch Project. Use of Wet or Processed Food Byproducts to Optimize Growth and Nutrient Utilization in Animals.

- 7. 1996-2005: Northeast Regional Project. Environmental and Economic Impacts of Nutrient Management in Dairy Forage System. USDA Multi-State Project. Northeast Regional: NE-1032
- 8. 1993-1999: Hatch Project. Optimizing Growth and Nitrogen Utilization in the Developing Ruminant.

## Participation in Organizing or Chairing Conferences, Workshops, and Organizations

- 1. 2015: Waste-to-Worth National Animal Waste Management Conference. Committee Organization and Program Chair.
- 2. 2013: Waste-to-Worth National Animal Waste Management Conference. Committee Organization and Program Chair.

## Membership on Editorial Boards of Scholarly or Professional Journals

1. 1999-2008: ARPAS. Editorial Board Member for the Professional Animal Scientist Journal. 31 Manuscripts Reviewed since 1999.

# Membership/Offices Held in Scholarly and Professional Societies

- 1. 2012-ongoing: Alpha Zeta. Honorary Society, Rutgers University. Initiated 2012.
- 2. 2009-ongoing: National Association of County Agricultural Agents. 2009.
- 3. 1987-ongoing: American Society of Animal Science. Member since 1987.
- 4. 1991-ongoing: American Registry of Professional Animal Scientists (ARPAS). Member since 1991.
- 5. 1992-ongoing: Sigma Xi Professional Organization, University of Kentucky. Member since 1992.
- 6. 1991-ongoing: Gamma Sigma Delta. Agriculture Honorary, University of Kentucky. Member since 1991.
- 7. 2000-2002: FFRANA. President. Food Recovery and Recycling Association of North America.
- 8. 1999-2000: FFRANA. President-Elect. Food Recovery and Recycling Association of North America.
- 9. 1999-2000: NE-ADSA. Past-President. Northeast American Dairy Science Association.
- 10. 1998-1999: NE-ADSA. President. Northeast American Dairy Science Association.
- 11. 1996-1997: NE-ADSA. Secretary-Treasurer. Northeast American Dairy Science Association.
- 12. 1997-1998: NE-ADSA. Vice-President. Northeast American Dairy Science Association.
- 13. 1995: NE-ADSA. Candidate for Secretary-Treasurer. Northeast American Dairy Science Association.

# Service to Professional Societies

- 1. 2010-ongoing: Livestock and Poultry Environmental Learning Center. Small Farmer Outreach Committee.
- 2. 2007-ongoing: Livestock and Poultry Environmental Learning Center. Leadership Committee.
- 3. 2003-2007: ASAS. Animal Health Committee. American Society of Animal Science.
- 4. 1999-2002: ADSA. West Agro. Inc., Award Selection Committee.
- 5. 1998-2001: ASAS. Public Information Committee. American Society of Animal Science.
- 6. 1996-1998: ASAS. Resolutions Committee. American Society of Animal Science.
- 7. 1995-1996: ASAS. Contemporary Issues Program Committee Chair. Responsibilities included review of section abstracts and coordination of National Meeting Symposium. American Society of Animal Science.
- 8. 1995-1996: ASAS. Contemporary Issues Program Committee. American Society of Animal Science.

# <u>Contributions to the effective operation of the University, including contributions to the department, school or college</u>

- 1. 2014-ongoing: School of Environmental and Biological Science Structure and Governance Committee
- 2. 2013: Northeast Student Affiliate Animal Science Club. Rutgers University. Annual Regional Competition. Program Assistance and Scoring.
- 3. 2009-ongoing: Extension Specialists Council Representative to the Director of Extension Administrative Council. The Extension Specialists Council meets regularly to provide and solicit input about Specialists' issues.
- 4. 2007-ongoing: New Jersey Agriculture Experiment Station Raw Milk Working Group.
- 5. 1993-ongoing: Animal Science Working Group. Rutgers Cooperative Extension Strategic Plan Initiative. New Jersey Agricultural Experiment Station.
- 6. 2007-2008: Equine/Forage Extension Specialist Search Committee. Rutgers University Cooperative Extension and the Department of Animal Science.
- 7. 2008: Equine Session Chair. George H. Cook Scholars Presentations. April 25<sup>,</sup> 2008. Cook Campus Center. New Brunswick, NJ.
- 8. 2005-2007: Cook College Rules of Procedure Committee. Cook College Committee. Chair of Committee.
- 9. 2004-ongoing: Animal Waste Working Group. Coordination of activities related to Animal Waste Management in New Jersey.
- 10. 2002-2003: Equine Extension Specialist Search Committee. Rutgers University Cooperative Extension and the Department of Animal Science.
- 11. 1999-2005: Graduate Curriculum Committee. Rutgers University. Department of Animal Science.
- 12. 1999-2002: New Brunswick Faculty Council. Rutgers Cooperative Extension Representative on the Council.
- 13. 1998-1999: New Jersey Solid Waste Policy Group. Waste Management Policy Discussion Group. 1998. New Jersey Agricultural Experiment Station and the EcoPolicy Center.
- 14. 1996: Field and Forage Crops Working Group. Rutgers Cooperative Extension Strategic Plan Initiative. New Jersey Agricultural Experiment Station.
- 15. 1996-1999: Department: Librarian, Department of Animal Sciences.
- 16. 1996: USDA National Sheep Referendum. Rutgers Cooperative Extension and New Jersey State liaison for the National Sheep Referendum.
- 17. 1995: Proposal Review Committee. Cook College Sustainable Agriculture Initiative. New Jersey Agricultural Experiment Station.
- 18. 1994-ongoing: Rutgers University Agriculture Field Day. Judging Competition: Announcer for the Dairy Show. Cook College.
- 19. 1994-1996: Nominating Committee. Department of Extension Specialists. Rutgers Cooperative Extension.
- 20. 1994: Associate Director Search Committee. Office of Communications and Public Affairs. New Jersey Agricultural Experiment Station.
- 21. 1994: Proposal Review Committee. Cook College Distinguished Lecturer Series. New Jersey Agricultural Experiment Station.
- 22. 1993: Rutgers Cooperative Extension Strategic Planning. Sponsored by Rutgers Cooperative Extension. December 6-7, 1993. Bernardsville, New Jersey.
- 23. 1993: Legislative Affairs Committee. Ad hoc Committee for Legislative Activities. New Jersey Agricultural Experiment Station.

### **Graduate Program Affiliations**

24. Associate Member: Department of Endocrinology and Animal Biosciences

<u>Contributions to society at large (significant contributions to local, national, or international communities that have not been listed elsewhere)</u>

# Miscellaneous Professional Service

- 1. 2009-2010: Northeast Regional Multi-State Project: NE-1024, "Dairy and Beef Forage Systems." Project secretary and coordinator,.
- 2. 2009-ongoing: Northeast Regional Multi-State Project: NE-1041, "Environmental Impacts of Equine Operations." Project author, meeting coordination, and group facilitator.
- 3. 2008-ongoing: Northeast Regional Multi-State Project: NE-1024/NE-1044, "Dairy and Beef Forage Systems." Project participant and contributor.
- 4. 2006-2008: Small Farms EPA/Land Grant Training Conference. Preparation of information for a nutrient management training conference to be held in New Jersey on March 11-13, 2008 and to be made available to all EPA regions as a national pilot project.
- 5. 2007-ongoing: Small Farms Manure Management Team Leader for the Livestock Poultry Environmental Stewardship (LPES) eXtension Outreach Program. Coordination of a team of between 10 and 15 agriculture scientists in the development of web-based manure management information. Member of LPES eXtension National coordination team.
- 6. 1995-2005: U.S. Fed. Gov: Member, National Johne's Working Group, US Animal Health Association, task force for the development of national programs for the control of the disease.
- 7. 1998-ongoing: ECOP. Animal Waste Initiative Policy Group. National Association of State and University Land-Grant Colleges. Extension Committee on Organization and Policy.
- 8. 1994: National Extension Strategic Framework Conference. United States Department of Agriculture Extension Service. August 2-3, 1994. Pittsburgh, Pennsylvania.

## **Industry Service**

- 1. 2014: Mid-Atlantic Nutrition Conference. Timonium, MD. March 26-27, 2014. Dairy Program Coordinator.
- 2. 2013-ongoing: *Gold Medal Horse Farm Program;* Selection Committee. This Environmental Stewardship Award, referred to as a Gold Medal Equine Farm, given by the Rutgers University Equine Science Center and the New Jersey Department of Agriculture gives recognition to the most outstanding equine farms and their environmental sustainability and management.
- 3. 2008: Drought Management Plan Development Team. Guidelines submitted to NJDEP for water supply management plan.
- 4. 2009-2014: Animal Waste Management Producer Education Program. Project leader and coordinator.
- 5. 2005-ongoing: Junior Breeder Symposium. Help to Coordinate Rutgers University sponsorship and hosting of the Annual Youth Symposium sponsored by Rutgers Cooperative Extension and the New Jersey Department of Agriculture.
- 6. 2001-ongoing: Animal Feeding Operations Working Group. Develop guidelines for the New Jersey Department of Agriculture Animal Waste Management Rule, N.J.A.C. 2:91.
- 7. 1999-ongoing: Animal Agricultural Alliance (AAA). An ad hoc state organization representing numerous state animal and livestock groups. The group is committed to enhancing and maintaining the economic and environmental sustainability of New Jersey livestock farms.
- 8. 2003-2005: Equine AMP. Agriculture Management Practice document for the State Agriculture Development Committee. Manure Management. Rutgers Cooperative Extension.
- 9. 2001-2005: Animal Emergency Working Group (AEWG). Development of animal emergency management procedures to be implemented in case of a disaster. Member of Coordinated Committee and Appraisal, Transportation, and Public Relations Subcommittees. Overseen by the state Department of Agriculture Division of Animal Health.
- 10. 2000-2005: Humane Standard Guidelines Taskforce. Development of animal care guidelines to ensure all animals receive minimum standards of care. Guidelines will be used to train Animal Control Officers. Taskforce overseen by the state Department of Agriculture Division of Animal Health.

- 11. 2003: Veal Informational Materials. Response to the New Jersey State Legislature about Assembly Bill 1948/Senate Bill 1478 that mandates procedures for the raising of veal calves. Education of New Jersey producer groups and a literature review prepared for the state Department of Agriculture.
- 12. 2003-ongoing: Scholarship and Breed Improvement Committees. New Jersey State Holstein Association.
- 13. 2002: National Holstein Convention. Hosted by the New Jersey Holstein Association. June 23-28, 2002. Atlantic City, New Jersey. Registration, Tours, and Youth Competitions Service and Support for the National Holstein Convention held in Atlantic City, NJ.
- 14. 2001: Foot and Mouth Disease Task Force. Committee convened by the State Secretary of Agriculture to coordinate New Jersey Foot and Mouth Disease programs in response to the European outbreak. New Jersey Agricultural Experiment Station representative.
- 15. 1997-ongoing: Northeast Dairy Extension Training Group. Initial funding from the W. K. Kellogg Foundation and the Mid-Atlantic Consortium (MAC) Animal Sciences Sub-Group.
- 16. 2001: Mid-Atlantic Dairy Management Conference. Planning committee and program moderator. March 7 8, 2001. Harrisburg, PA.
- 17. 1999: Mid-Atlantic Dairy Management Conference. Planning committee and program moderator. February 24 25, 1999. Harrisburg, PA.
- 18. 1997: Mid-Atlantic Dairy Management Conference. Planning committee and program moderator. February 28 March 1, 1997. Hershey, PA.
- 19. 1996-2001: Food Waste Recycling Symposium. Program planning, development and coordination of proceedings for six national/food waste as animal feed recycling symposia. Rutgers University, Cook College and the New Jersey Department of Agriculture.
- 20. 1998-2007: Regional Dairy Quality Management Alliance. (Ongoing). Alliance of 13 Northeastern States focused on developing training and certification materials for use by the dairy industry within the Northeast Region. Rutgers Cooperative Extension Representative.
- 21. 1995-2005: National Johne's Working Group. United States Animal Health Association. *Mycobacterium paratuberculosis* or Johne's disease task force for the development of National Programs for the control of the disease.
- 22. 1994-2000: Extension Poultry Coalition. Mid-Atlantic Region Cooperative Extension. Rutgers Cooperative Extension Representative.
- 23. 1994-2010: Publications Committee. New Jersey State Holstein Association.
- 24. 1994-ongoing: New Jersey State Holstein Association. Rutgers Cooperative Extension Representative.
- 25. 1993-ongoing: Dairy Practices Council. Industry and Regulatory Coalition for Milk Quality and Sanitation. Rutgers Cooperative Extension Representative. .
- 26. 1993-1999: Garden State Milk Council. New Jersey State Dairy Industry Council. Rutgers Cooperative Extension Representative.

# Miscellaneous Industry Service

- 1. 2002-ongoing: Judge. State Holstein Association Dairy Quiz Bowl and Jeopardy Contest. Monmouth County Extension Office.
- 2. 1994: Judge. 31st Annual NJ State Dairy Princess Pageant. October 15, 1994. Warren Grange Hall #110. Broadway, New Jersey.
- 3. 1994: Announcer. New Jersey State 4-H Invitational Beef Show. September 3, 1994. Flemington Fairgrounds. Flemington, New Jersey.
- 4. 1994-2009: Announcer. August 1994-1995, 1997, 1999, 2001, 2004, 2006-2009. Sussex County Holstein Association Registered Dairy Cattle Show. Sussex County Fairgrounds. Newton, New Jersey.

- 5. 1994: Fitting Judge. 49th Annual Southeast 4-H Dairy Show. August 26, 1994. Kutztown Fairgrounds. Kutztown, Pennsylvania.
- 6. 1993-ongoing: Announcer. August 1993-1996, 1998-2009. State Holstein Association Registered Dairy Cattle Show. New Jersey Holstein Association.