

LIST OF PUBLICATIONS

(updated October 21, 2008)

**The Appalachian Farming Systems Research Center,
USDA-ARS
(Formerly, the Appalachian Soil and Water Conservation Research
Laboratory)
Beaver, West Virginia**

2008

- Belesky, D. P., D. M. Burner, and J. M. Ruckle. 2008. Does Endophyte Influence Resource Acquisition and Allocation in Defoliated Tall Fescue as a Function of Microsite Conditions? *Environmental and Experimental Botany*, 63(1-3):368-377.
- Boyer, D. G. 2008. Assessment of a Sinkhole Filter for Removing Agricultural Contaminants. *Journal of Soil and Water Conservation*, 63(1):47-52.
- Boyer, D. G. 2008. Fecal Coliform Dispersal by Rain Splash on Slopes. *Agricultural and Forest Meteorology*, 148(8-9):1395-1400.
- Boyer, D. G., E. Kuczynska, and R. Fayer. 2008. Transport, Fate, and Infectivity of *Cryptosporidium parvum* Oocysts Released from Manure and Leached through Macroporous Soil. *Environmental Geology* (in press).
- Burner, D. M. and D. P. Belesky. 2008. Relative Effects of Irrigation and Intense Shade on Productivity of Alley-Cropped Tall Fescue Herbage. *Agroforestry Systems*, 73(2):127-139.
- Burner, D. M., D. J. Carrier, D. P. Belesky, D. H. Pote, A. Ares, and E. C. Clausen. 2008. Yield Components and Nutritive Value of *Robinia pseudoacacia* and *Albizia julibrissin* in Arkansas, USA. *Agroforestry Systems*, 72(1):51-62.
- Clapham, W. and J. Fedders. 2008. Effects of Sowing Date of Triticale on Seasonal Herbage Production in the Central Appalachian Highlands of the United States. *Grass and Forage Science* (in press).
- Clapham, W. M., J. M. Fedders, A. O. Abaye, and E. B. Rayburn. 2008. Forage Pasture Production, Risk Analysis and the Buffering Capacity of Triticale. *Agronomy Journal*, 100(1):128-135.

- Feldhake, C. M., D. P. Belesky, and E. L. Mathias. 2008. Forage Production Under and Adjacent to *Robinia pseudoacacia* in Central Appalachia, West Virginia. In: Jose S. and A. M. Gordon (eds). *Toward Agroforestry Design: An Ecological Approach*. Chapter 4, 55-66, Advances in Agroforestry 4, Springer Science.
- Ferreira, J. and J. Gonzalez. 2008. Analysis of Underivatized Artemisinin and Related Sesquiterpene Lactones by High-Performance Liquid Chromatography with Ultraviolet Detection. *Phytochemical Analysis* (in press).
- Halvorson, J. J. and J. M. Gonzalez. 2008. Tannic Acid Reduces Recovery of Water Soluble Carbon and Nitrogen From Soil and Affects the Composition of Bradford-Reactive Soil Protein. *Soil Biology and Biochemistry*, 40(1):186-197.
- Halvorson, J. and J. Smith. 2008. Carbon and Nitrogen Accumulation and Microbial Activity in Mount St. Helens Pyroclastic Substrates after 25 Years. *Plant and Soil* (in press).
- Jimenez Esquilin, A., K. O'Neill, and J. Carter. 2008. Characterization of Soil Microbial Community Dynamics Related to C and P Cycling Along a Forest to Pasture Gradient. *North American Forest Soils Conference*, Blacksburg, VA. (in press).
- Kinraide, T. B. 2008. Improved Scales for Metal Ion Softness and Toxicity. *Environmental Toxicology and Chemistry* (in press).
- Liu, S., N. Tian, Z. Liu, J. Huang, J. Li, and J. F. S. Ferreira. 2008. Affordable and Sensitive Determination of Artemisinin in *Artemisia annua* L. By Gas Chromatography with Electron-Capture Detection. *Journal of Chromatography A*, 1190(1-2):302-306.
- Neel, J. P. S., C. M. Feldhake, and D. P. Belesky. 2008. Influence of Solar Radiation on the Productivity and Nutritive Value of Hbage of Cool-Season Species of an Understorey Sward in a Mature Conifer Woodland. *Grass and Forage Science*, 63(1):38-47.
- Riedel, B. L., K. R. Russell, W. M. Ford, K. P. O'Neill and H. W. Godwin. 2008. Habitat Relationships of Eastern Red-Backed Salamanders (*Plethodon cinereus*) in Appalachian Agroforestry and Grazing Systems. *Agriculture, Ecosystems and Environment*, 124(3-4):229-236.
- Ritchey, K. D., D. G. Boyer, K. E. Turner, and J. D. Snuffer. 2008. Goat Urine and Limestone Affect Nitrogen and Cation Distributions in an Acidic Grassland. *Soil Science Society of America Journal*, 72(3):626-633.

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- Takeda, F., K. Demchak, M. R. Warmund, D. T. Handley, R. Grube, and C. Feldhake. 2008. Rowcovers Improve Winter Survival and Production of Western Trailing 'Siskiyou' Blackberry in the Eastern United States. *HortTechnology*, 18(4):575-582.
- Turner, K. E., D. P. Belesky, and K. A. Cassida. 2008. Finishing Lambs and Kids on Pasture in Appalachia. In: Allison, M. W. (Ed.). *Proceedings of the 62nd Southern Pasture and Forage Crop Improvement Conference*, May 12-14, Knoxville, TN. CDROM, pp. 19-23.
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- Wu, C., S. K. Duckett, J. P. S. Neel, J. P. Fontenot, and W. M. Clapham. 2008. Influence of Finishing Systems on Hydrophilic and Lipophilic Oxygen Radical Absorbance Capacity (ORAC) in Beef. *Meat Science*, 80(3):662-667.
- Zobel, R. 2008. Hardware and Software Efficacy in Assessment of Fine Root Diameter Distributions. *Computers and Electronics in Agriculture*, 60(2):178-189.

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- Amacher, M., K. O'Neill, and C. Perry. 2006. Soil Vital Signs: a New Index for Assessing Forest Soil Health. USDA Forest Service, Rocky Mountain Research Station, Fort Collins, CO. *Research Paper*, RMRS-RP-65WWW, 12pp.
- Belesky, D. P., W. B. Bryan, W. M. Murphy, and E. B. Rayburn. 2007. Cool-Season Grass and Legume Pastures. In: Rayburn, E. B. (ed). *Forage Utilization for Pasture-Based Livestock Production*. Natural Resource, Agriculture, and Engineering Service, NRAES-173, Ithaca, NY, Chapter 3, 43-55.
- Belesky, D. P., D. W. Koch, and J. Walker. 2007. Forbs and Browse Species. In: Barnes, R. F., C. J. Nelson, K. J. Moore, and M. Collins (eds). *Forages: The Science of Grassland Agriculture*. Chapter 17, Volume II, 6th Edition, Blackwell Publishing Professional, Ames, IA.
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- Boyer, D. G., D. P. Belesky, and K. E. Turner. 2007. Sustainable Turkey Litter Amendments for Mixed Swards Grazed by Sheep in Appalachia: Nitrate Leaching. *Journal of Sustainable Agriculture*, 29(4):75-86.
- Boyer, D. G. and J. P. S. Neel. 2007. Characterizations of Dissolved Organic Matter in Silvopasture, Pasture, and Forest Leachates. In: Olivier, A. and S. Campeau (eds). *When Trees and Crops Get Together. Proceedings of the 10th North American Agroforestry Conference*, Québec City, Canada, June 10-13, pp 263-269.
- Brauer, D., K. Turner, and D. Belesky. 2007. Effects of Source and Amount of Phosphorus on Sorption Kinetics in the Topsoil of a Highly Weathered Soil. *Communications in Soil Science and Plant Analysis*, 38(7&8):885-893.
- Cassida, K. 2007. Alternative Pastures for Small Ruminants. In: Morales, M. R. and J. G. Foster (eds). *Proceedings of the Fifth Appalachian Opportunities Symposium*, March 10, 2007, Beckley, WV, pp. 11-17.
- Cassida, K. A., J. P. S. Neel, and D. P. Belesky. 2007. Stockpiled Prairie Grass for Fall-Grazing Lambs. In: Alison, M. W. Jr. (Ed.). *American Forage and Grassland Council Conference Proceedings*, 16:66-69.

- Cassida, K. A., K. E. Turner, and J. G. Foster. 2007. Polyphenol Oxidase Activity in Annual Forage Clovers. In: Alison, M. W. Jr. (Ed.). *American Forage and Grassland Council Conference Proceedings*, 16:82-84.
- Clapham, W. M., J. M. Fedders, W. S. Swecker, Jr., G. Scaglia, and J. P. Fontenot. 2007. Heart Rate Variation: Does It Indicate Stress in Calves at Weaning? In: Alison, M. W. Jr. (Ed.). *American Forage and Grassland Council Conference Proceedings*, 16:39-42.
- Duckett, S. K., J. P. S. Neel, R. N. Sonon, Jr., J. P. Fontenot, W. M. Clapham, and G. Scaglia. 2007. Effects of Winter Stocker Growth Rate and Finishing System on: II. Ninth-Tenth-Eleventh Rib Composition, Muscle Color, and Palatability. *Journal of Animal Science*, 85(10):2691-2698.
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- Ferreira, J. 2007. Nutrient Deficiency in the Production of Artemisinin, Dihydroartemisinic Acid, and Artemisinic Acid in *Artemisia annua* L. *Journal of Agricultural and Food Chemistry*, 55(5):1686-1694.
- Kinraide, T. B. and U. Yermiyahu. 2007. A Scale of Metal Ion Binding Strengths Correlating with Ionic Charge, Pauling Electronegativity, Toxicity, and Other Physiological Effects. *Journal of Inorganic Biochemistry*, 101(9):1201-1213.
- Millar, K. D. L., B. J. Crandall-Stotler, J. F. S. Ferreira, and K. V. Wood. 2007. Antimicrobial Properties of Three Liverworts in Exenic Culture: *Blasia pusilla*, *Pallavicinia lyellii* and *Radula obconica*. *Cryptogamie Bryologie*, 28(3):197-210.
- Morales, M. R. and J. G. Foster. 2007. Purslane: A Potential Forage for Small Ruminants. In: Morales, M. R. and J. G. Foster (eds). *Proceedings of the Fifth Appalachian Opportunities Symposium*, March 10, 2007, Beckley, WV, pp. 25-30.
- Neel, J. P. 2007. Silvopasture. In: Morales, M. R. and J. G. Foster (eds). *Proceedings of the Fifth Appalachian Opportunities Symposium*, March 10, 2007, Beckley, WV, pp. 41-44.
- Neel, J. P., S. K. Duckett, R. N. Sonon, W. M. Clapham. 2007. Consumer Acceptance and Carcass Quality. In: *Proceedings of 1st National Grass-Fed Beef Conference*, February 28-March 2, Penn State University, Grantville, PA. CDROM.

- Neel, J. P. S. , J. P. Fontenot, W. M. Clapham, S. K. Duckett, E. E. D. Felton, G. Scaglia, and W. B. Bryan. 2007. Effects of Winter Stocker Growth Rate and Finishing System on: !. Animal Performance and Carcass Characteristics. *Journal of Animal Science*, 85(8):2012-2018.
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- Peterson, P. R., E. B. Rayburn, J. B. Cropper, and D. P. Belesky. 2007. Perennial Warm-Season Grasses. In: Rayburn, E. B. (ed). *Forage Utilization for Pasture-Based Livestock Production*. Natural Resource, Agriculture, and Engineering Service, NRAES-173, Ithaca, NY, Chapter 4, 56-76.
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- Turner, K. E., D. P. Belesky, and Y. J. Pritchard. 2007. Small Ruminant Performance and Carcass Parameters When Finished on Pasture With and Without Whole Cottonseed Supplementation. In: Alison, M. W. Jr. (Ed.). *American Forage and Grassland Council Conference Proceedings*, 16:19-22.
- Unruh-Snyder, L. J., J. M. Luginuhl, J. P. Mueller, A. Conrad, and K. E. Turner. 2007. Intake, Digestibility, and Nitrogen Utilization of *Robinia pseudoacacia* Foliage Fed to Growing Goat Wethers. *Small Ruminant Research*, 71(1-3):179-193.
- Wildeus, S., J. M. Luginbuhl, K. E. Turner, Y. L. Nutall, and J. R. Collins. 2007. Growth and Carcass Characteristics in Goat Kids Fed Grass and Alfalfa Hay-Based Diets with Limited Concentrate Supplementation. *Sheep and Goat Research Journal*, 22:15-19.
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Zobel, R., V. C. Baligar, and T. Kinraide. 2007. Fine Root Diameters Can Change in Response to Changes in Nutrient Concentrations. *Plant and Soil*, 297(1-2):243-254.

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- Belesky, D. 2006. Regrowth Interval Influences Productivity, Botanical Composition, and Nutritive Value of Old World Bluestem and Perennial Ryegrass. *Agronomy Journal*, 98(2):270-279.
- Belesky, D. P., N. J. Chatterton, and J. P. S. Neel. 2006. *Dactylis glomerata* Growing Along a Light Gradient in the Central Appalachian Region of the Eastern USA: III. Nonstructural Carbohydrates and Nutritive Value. *Agroforestry Systems*, 67(1):51-61.
- Belesky, D. P., J. S. Neel, and J. Ruckle. 2006. Prairiegrass-Brassica Hybrid Swards for Autumn Dry Matter Production in the Appalachian Highlands. *Agronomy Journal*, 98(5):1227-1235.
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- Feldhake, C.M., Belesky, D.P., Neel, J.P. 2006. Photosynthetically Active Radiation Relationship to Forage Yield in Central Appalachian Silvopastures . In: *Proceedings of the 60th Southern Pasture and Forage Crop Improvement Conference*, April 12-13, Auburn, AL, 20-25, Cd-Rom.
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- Belesky, D. P. 2005. Growth of *Dactylis glomerata* Along a Light Gradient in the Central Appalachian Region of the Eastern USA: I. Dry Matter Production and Partitioning. *Agroforestry Systems*, 65(2):81-90.
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