Dennis Buckmaster

Ph.D. Michigan State University - 1989

Associate Professor

American Society of Agricultural and Biological Engineers
Fluid Power Society
American Forage and Grassland Council

Research Areas:
Forage and biomass harvest and handling, livestock feeding, horticultural mechanization; agricultural systems management

Classes Taught:

ASM 491 – Computing in Agriculture
ASM 345 – Power Units and Power Trains
ASM 421 – Senior Seminar
ASM 495 – Agricultural Systems Management

Selected Publications (last 5 years):

Buckmaster, D.R. and N.J. Carroll. 2009. Motivating students: factors to consider. NACTA Journal. 53(2):53-55.

Buckmaster, D.R. 2009. Equipment matching for silage harvest. Applied Engineering in Agriculture. 25(1):31-36

Buckmaster. D.R. 2008. Assessing Activity Access of Forage and Biomass. Trans. of the ASABE. 51(6):1879-1884.

Buckmaster, D.R. 2007. An Off-Road Equipment Minor. Applied Engineering in Agriculture 23(5):691-694.

Lawrence, M.J., D.R. Buckmaster, and W.J. Lamont. 2007. A pneumatic dibbling machine for plastic mulch. Applied Engineering in Agriculture 23(4):419-424.

Zimmerman, A.P., R.G. Johnson, T.S. Hoover, J.W. Hilton, P.H. Heinemann, and D.R. Buckmaster. 2006. Comparison of personality types and learning styles of engineering students, agricultural systems management students, and faculty in an agricultural and biological engineering department. Applied Engineering in Agriculture. 49(1):311-317

Buckmaster, D. R. 2006. Problem solving with Excel – CD ROM training video package. American Society of Agricultural and Biological Engineers.

Srivastava, A.K., C.E.Goering, R.P. Rohrbach, and D.R. Buckmaster. 2006. Engineering Principles of Agricultural Machines, 2nd ed. American Society of Agricultural and Biological Engineers.

Thomas, R. S. and D. R. Buckmaster. 2005. Development of a Computer Controlled, Hydraulic, Power Take-Off (PTO) System. Transactions of the American Society of Agricultural Engineers. 48(5):1669-1675.

Buckmaster, D.R. and J.W. Hilton. 2005. Computerized cycle analysis of harvest, transport, and unload systems. Computers and Electronics in Agriculture. 47(1):137-147.

Rotz, C.A., D.R. Buckmaster, and J.W. Comerford. 2005. A beef herd model for simulating feed intake, animal performance, and manure excretion in farm systems. Journal of Animal Science. 83(1):231-242.

Zhang, M., M.L. Sword, D.R. Buckmaster, and G.R. Cauffman. 2003. Design and evaluation of a corn silage making system with shredding and flail cutting. Transactions of ASAE 46(6):1503-1511.

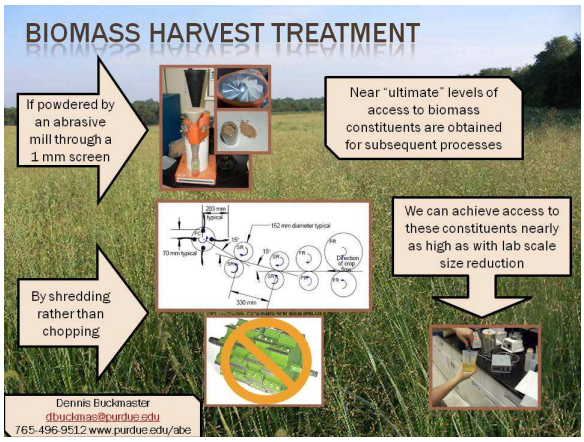
Long, J.P. and D.R. Buckmaster. 2003. Development of an automated system for sampling crop material from a forage harvester. Applied Engineering in Agriculture 19(2):30-37.

Buckmaster, D.R. 2003. Benchmarking tractor costs. Applied Engineering in Agriculture 19(2):168-171.

Kononoff, P.J., A.J. Heinrichs, and D.R. Buckmaster. 2003. Modification of the Penn State forage and TMR particle separator and the effects of moisture content on its measurements. Journal of Dairy Science 86(5):1858-1863.

Thomas, R.S., D.R. Buckmaster. 2003. Relative safety of traditional agricultural tractor power take off (PTO) drivelines compared to fluid power – a review. Journal of Agricultural Safety and Health 9(3):241-250.

Thomas, R.S. and D.R. Buckmaster. 2003. A programmable, multiple supplement cattle feeder for pasture use. Applied Engineering in Agriculture 19(4):511-520.

Rotz, C. A., S. A. Ford, D. R. Buckmaster. 2003. Silages in farming systems. Chapter 11, *In*: Silage, a monograph. American Society of Agronomy. pp. 505-546.

Buckmaster, D. R. 2003. Forage harvesting systems. In: Encyclopedia of Agricultural and Food Engineering. pp. 358-361. Marcel Dekker, Inc.