

Aaron M. Yoder, Ph.D.

Instructor and Extension Safety Associate, The Pennsylvania State University
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Education

Ph.D., Purdue University, Department of Agricultural & Biological Engineering, 12/02

Field of Study: Agricultural & Biological Engineering

Specialization: Agricultural Systems Management

Dissertation: *Ergonomic Evaluation of Commercially Available Operator Lifts for Farmers with Disabilities*

M.S., The Pennsylvania State University, Department of Agricultural & Biological Engineering, 5/99

Field of Study: Environmental Pollution Control

Thesis: *Identifying and Classifying Agricultural Injury Cases*

B.S., The Pennsylvania State University, Department of Agricultural & Biological Engineering, 5/97

Field of Study: Agricultural Systems Management

Professional Positions

6/01- Instructor, The Pennsylvania State University, Agricultural & Biological Engineering,
University Park, PA

6/99-8/01 Graduate Research Assistant, Agricultural & Biological Engineering, Purdue University,
West Lafayette, IN

6/97-5/99 Graduate Research Assistant, Agricultural & Biological Engineering, The Pennsylvania State
University, University Park, PA

Current Responsibilities

Teaching (10%), research (30%) and Extension (60%) Teaching activities include courses in agricultural safety & health, machinery management, and physical principles in processing. Research activities include agricultural safety & health education & program development and injury surveillance & tracking. Extension activities include agricultural safety & health education & program development. Additional departmental responsibilities include marketing and coordinating of the Agricultural Systems Management program.

Recent Courses Taught

ASM 326 Hazard Identification and Control in Production Agriculture and Related Businesses

Student Rating of Teaching Effectiveness for Fall 2011: 6.37 (out of 7 with 4 as Average)

ASM 424 Machinery Management

Student Rating of Teaching Effectiveness for Fall 2011:: 6.20 (out of 7 with 4 as Average)

ASM 425 Physical Principles in Processing

Student Rating of Teaching Effectiveness for Fall 2011: 6.38 (out of 7 with 4 as Average)

Other Courses Taught

ASM 101 Mechanization Principles for Production
Agriculture

ASM 210 Turfgrass and Outdoor Power Equipment
Systems Management

ASM 310 Power Transmission in Agriculture

ASM 320 Combustion Engines for Mobile
Equipment

ASM 902A Turfgrass and Outdoor Power Equipment
Systems Management

TAE/CMP 912 Computer Basics

TAE 913 Safety and Health

TAE 914 Power Trains

TAE 915 Turf and Ag Equipment Operation

TAE/CMP 922 Computer Applications

TAE 928 Fluid Power

TAE 929 Electrical Systems

TAE 937 Diagnoses and Repair

TAE 940 Water and Irrigation

TAE 946 Information Technology

TAE 948 Electrohydraulics

Research Support

Aaron M. Yoder (PI) \$60,000	USDA – NIFA Developing a FReSH CoP at eXtension.org	1/1/11-12/31/11
Green Heron Tools \$45,500	USDA SBIR Program – Phase II Farm Tools for Women - Tiller	10/1/10-9/30/12
Aaron M. Yoder (CoPI) \$832,408	NIOSH – Northeast Center for ASH The Social Marketing of Rollover Protection: A Multistate Expansion	8/1/10-7/31/13
Aaron M. Yoder (PI) \$177,389	USDA – NIFA Developing an Online ASH Training and Evaluation for Youth	6/1/10-5/31/13
Green Heron Tools \$22,450	USDA SBIR Program – Phase I Farm Tools for Women - Shovel	5/1/09-12/31/09
Yoder, Aaron M. (PI) \$14,981	USDA-CSREES, NE Center for Risk Mgmt. Ed. Agricultural Safety and Health Risk Management Education	7/1/07-6/30/08
Hilton and Murphy (PIs) \$511,376	USDA-HOSTA Program Establishing a National Safe Tractor and Machinery Operation Program	9/15/01-9/14/06
Hilton and Murphy (PIs) \$38,396	USDA-HOSTA Program Establishing a NSTMOP (National Steering Committee)	9/1/02-8/31/06

Professional Memberships, Honors and Other Experiences

American Society of Agricultural and Biological Engineers (ASABE), Member (2000 to present)

Chair: ESH-02 (2010 to present)

Committee Member: PM-52, ESH-01

American Youth Soccer Association, Coach (2008 to present)

ASAE Blue Ribbon for Educational Website (www.farmsafety.org) (2001)

ASAE Blue Ribbon for Model or Instructional Display (Hazards of Flowing Grain) (2004)

Gamma Sigma Delta, College of Ag Honor Society, Penn State Chapter (1998 to present)

Graduate Assistantship, Purdue University (1999 to 2001)

Graduate Assistantship, The Pennsylvania State University (1996 to 1999)

Magoon Award for teaching assistants, Purdue University College of Engineering (2000)

NCERA 197 – USDA Multistate committee on extension activities (2009 to present)

Chair (2010 to present)

Penn State ASM Program Co-Coordinator (2006 to present)

Penn State ABE Departmental Committees (2006 to present)

Undergraduate Education

Recruitment and Placement

Penn State College of Agricultural Sciences Committees (2006 to present)

Program Coordinators

Recruitment and Placement

United Way (2011)

Penn State ASM Club Advisor (2003 to 2005)

Penn State ASM Club Member (1995 to 1997)

Web Page Committee Chair (1997)

Undergraduate Research Grant, The Pennsylvania State University (1996)

Refereed Publications

- Jenkins, P. L., J. A. Sorensen, A. Yoder, M. Myers, D. Murphy, G. Cook, F. Wright, B. Bayes, J. J. May. 2012. Prominent Barriers and Key Motivators to Installing ROPS: An Analysis of Survey Responses from Pennsylvania and Vermont. *Journal of Agricultural Safety and Health*. 18(2): 103-112.
- Yoder, A.M., D.J. Murphy. 2012. Using Social Marketing to Address Barriers and Motivators to Agricultural Safety and Health Best Practices. *Journal of Agromedicine*. 17(2): 240-246.
- Garvey, P., A.M. Yoder, J.W. Hilton and D.J. Murphy. 2008. National Safe Tractor and Machinery Operation Program: Development and Content Evaluation. *Journal of Agricultural Safety and Health*. 14(3): 333-349.
- Kingman, D.M., A.M. Yoder, N.S. Hodge, R. Ortega and W.E. Field. 2005. Utilizing Expert Panels in Agricultural Safety and Health Research. *Journal of Agricultural Safety and Health*. 10(1): 61-74.
- Yoder, A.M. and D.J. Murphy. 2000. Evaluation of the Farm and Agricultural Injury Classification Code and Follow-up Questionnaire. *Journal of Agricultural Safety and Health*. 6(1): 71-80.
- Murphy, D.J. and A.M. Yoder. 1998. Census of Fatal Occupational Injury in the Agricultural, Forestry, and Fishing Industry. *Journal of Agricultural Safety and Health*. Special Issue No. 1: 55-66.

Non-refereed Technical Publications

- Hanson, I.C., A. M. Yoder and D. J. Murphy. 2011. Video Clips: Safe Tractor & Machinery Operation for Hispanic Youth. 38 Video Clips, 27 minutes. Agricultural Safety & Health Program, Department of Agricultural & Biological Engineering, The Pennsylvania State University, University Park, PA.
- Yoder, A.M.; Deboy, G.R.; Field, W.E. 2011. An Historical Perspective of Operator Lifts Used on Self Propelled Agricultural Equipment. Commission Internationale de l'Organisation Scientifique du Travail en Agriculture. Vienna, Austria
- Yoder, A.M. et al. 2010. "Designing Tools and Agricultural Equipment for Women," ASABE paper no. 1009715. St. Joseph, MI.
- Yoder A.M. 2006. Antes de conducir su tractor, considere la seguridad y seguir vivo. *Hoard's Dairyman* (en espanol) June 2006. Fort Atkinson, WI
- Yoder A.M. 2006. Before you drive, consider safety and stay alive. *Hoards Dairyman*. March 25, 2006. Fort Atkinson, WI
- Yoder A.M., D.J. Murphy, J.W. Hilton. 2005. Instructor Notebook: National Safe Tractor and Machinery Operation Program. Department of Agricultural and Biological Engineering. The Pennsylvania State University, University Park, PA. 79 pp.
- Harshman W.C., A.M. Yoder, D.J. Murphy, J.W. Hilton. 2004. Student Task Sheets: National Safe Tractor and Machinery Operation Program. Department of Agricultural and Biological Engineering. The Pennsylvania State University, University Park, PA. 250 pp.
- Yoder A.M., D.J. Murphy, J.W. Hilton. 2003. Hazards of flowing grain. Department of Agricultural and Biological Engineering Fact Sheet E 42. The Pennsylvania State University, University Park, PA. 4 pp.
- Yoder A.M., D.J. Murphy, J.W. Hilton. 2003. Instructor Notebook: Hazards of Flowing Grain Demonstration. Department of Agricultural and Biological Engineering. The Pennsylvania State University, University Park, PA. 115 pp.
- Jepsen D., T. Bean, D. Murphy, J. Hilton, A. Yoder, S. Steel. 2003. The first step in evaluating the national tractor certification program? Ask the people! Paper No. 03-6. National Institute for Farm Safety, Inc., Madison, WI.
- Field, W.E., S.A. Freeman, D.M. Kingman, E.J. Sheldon, E.J. Sheldon, J.M Shutske, S.D. Whitman, T.L Wilkinson and A.M. Yoder. 2003 Agricultural Systems Management 350, Safety in Agriculture, Class Lesson Plans. Purdue University Agricultural Safety and Health Program. West Lafayette, IN
- Yoder, A.M. and W.E. Field. 2001. 2000 Indiana Farm Fatality Summary. Purdue University Agricultural Safety and Health Program. West Lafayette, IN
- Yoder, A.M. and W.E. Field. 2000. "Ergonomic Evaluation of Operator Lifts for Farmers with Disabilities" ASAE paper no. 007003. St. Joseph, MI
- Yoder, A.M. and W.E. Field. 2000. 1999 Indiana Farm Fatality Summary. Purdue University Agricultural Safety and Health Program. West Lafayette, IN
- Yoder, A.M., N.E. Stoller and W.E. Field, 2000. Plowshares #8: New Concepts in Lift Attachments for Tractors and Combines. Breaking New Ground Resource Center, Purdue University, West Lafayette, IN

Yoder, A.M. and W.E. Field. 1999. 1998 Indiana Farm Fatality Summary. Purdue University Agricultural Safety and Health Program. West Lafayette, IN

Invited Presentations

- Yoder, A.M. 2011. "Development of the Farm and Ranch eXtension in Safety and Health (FReSH) Community of Practice (CoP)" National Institute for Farm Safety International Meeting. Boise, ID.
- Yoder, A.M. 2010. "Designing Tools and Agricultural Equipment for Women," ASABE Annual International Meeting in Pittsburgh, PA.
- Yoder A.M. 2009. "Biofuels and Outdoor Power Equipment", "Electrical Systems Troubleshooting" and "Hydraulic Systems Troubleshooting". Western Pennsylvania Turfgrass Conference. Pennsylvania Turfgrass Council. Harrisburg, PA.
- Yoder A.M. and D.H. Schaufler. 2009. "Biofuels and Outdoor Power Equipment", "Electrical Systems Troubleshooting" and "Hydraulic Systems Troubleshooting". Eastern Pennsylvania Turfgrass Conference. Pennsylvania Turfgrass Council. Harrisburg, PA.
- Yoder, A.M. 2008 Prepared posters: "Development of a Multistate Research and Extension Plan for Agricultural Safety and Health – NCERA 197", "Current Research, Outreach and Standards in Agricultural Safety and Health related to Agricultural Equipment on Public Roads" and "Key Issues and Actions to be Addressed Related to Agricultural Equipment on Public Roads – Recommendations from NCERA 197". National Institute for Farm Safety, Inc., Madison, WI.
- Yoder, A.M. 2008. "Machinery Management" PA Christmas Tree Grower's Association Winter Conference. Harrisburg, PA.
- Yoder, A.M. and W.E. Field. 2006. "A Proposed SAE Standard for Access Systems on Off-Road Machines for Workers with Disabilities," ASAE Annual International Meeting in Portland, OR.
- Yoder A.M. 2006. "National Safe Tractor and Machinery Operation Program (NSTMOP) for Youth in Agriculture" – National Institute for Farm Safety, Inc., Madison, WI.
- Yoder A.M. 2006. "A Review of Electrical Principles". Western Pennsylvania Turfgrass Conference. Pennsylvania Turfgrass Council. Harrisburg, PA.
- Yoder A.M. 2006. "Decision Making for Reels". Northeastern Pennsylvania Turfgrass Conference. Pennsylvania Turfgrass Council. Harrisburg, PA.
- Yoder A.M. 2005. Ergonomic Evaluation of Commercially Available Operator Lifts for Farmers with Disabilities – National AgrAbility Project, Madison, WI.
- Yoder A.M., Murphy D., Hilton J., Bean T., Jepson D., Steel S. 2005. Project Update: Hazardous occupations safety training in agriculture (HOSTA) – National Safe Tractor and Machinery Operation Program (NSTMOP). National Institute for Farm Safety, Inc., Madison, WI.
- Yoder A.M. 2005. "Hybrid Technology and Fuel Cells", "Is Safety Common Cents" and "Reel Decisions". Western Pennsylvania Turfgrass Conference. Pennsylvania Turfgrass Council. Harrisburg, PA.
- Yoder A.M. 2005. "Turfgrass Equipment Preventive Maintenance". PASBO Winter Meeting. Harrisburg, PA.
- Yoder A.M., Murphy D., Hilton J., Bean T., Jepson D., Steel S. 2004. Project Update: Hazardous occupations safety training in agriculture (HOSTA) – National Safe Tractor and Machinery Operation Program (NSTMOP). National Institute for Farm Safety, Inc., Madison, WI.
- Yoder A.M. 2004. "Small Engine Electrical Systems" and "Small Engine Operation and Maintenance". PLNA Winter Meeting. Harrisburg, PA.
- Yoder A.M., Murphy D., Hilton J., Bean T., Jepson D., Steel S. 2003. Hazardous occupations safety training in agriculture (HOSTA) – National Safe Tractor and Machinery Operation Program (NSTMOP). National Institute for Farm Safety, Inc., Madison, WI.
- Yoder, A.M. 2004, 2003, 2002, 2001. Safety and health training for the Pennsylvania State University's agricultural employees.
- Yoder A.M., Murphy D., Hilton J. 2002. Hazardous occupations safety training in agriculture (HOSTA). National Institute for Farm Safety, Inc., Madison, WI.
- Field, W. E., A. M. Yoder and D. M. Kingman. 2001. "Influences of Disabling Conditions on the Nature and Frequency of Farm/Ranch-Related Injuries," presented at Using Past and Present to Map Future Actions Agricultural Safety and Health Conference in Baltimore, MD.

- Yoder, A. M. and W. E. Field. 2000. "Ergonomic Evaluation of Operator Lifts for Farmers with Disabilities," ASAE Annual International Meeting in Milwaukee WI.
- Yoder, A. M. and W. E. Field. 2000. "1999 Indiana Farm Fatality Summary," presented at the Indiana Rural Safety and Health Council's May 2000 meeting.
- Murphy, D. J. and A. M. Yoder. 1998. "Classification of Agricultural Injuries," presented at the Fourth International Symposium of the Centre for Agricultural Medicine at the University of Saskatchewan, Canada.
- Murphy, D. J. and A. M. Yoder. 1997. "Census of Fatal Occupational Injury in Agriculture," Agricultural Health and Safety Conference of the National Institute for Occupational Safety and Health.