ACES Office of International Programs INTERNATIONAL FOOD SECURITY INITIATIVE (IFSI)

RESEARCH BRIEF FOR AFFILIATES

Name	Angela Green		
Department/Group:	Agricultural and Biological Engineering		
Title	Assistant Professor		
Degrees	Degree, discipline	Year	School
	Ph.D. Agricultural Engineering	2008	Iowa State University
	M.S. Biosystems and Agricultural Engineering	2004	University of Kentucky
	B.S. Biosystems and Agricultural Engineering	2002	University of Kentucky
Emphasis	Food Systems ⊠ Production □ Post Farm □ Consumer ⊠ Sustainability □ Social/Economic □ Legal/Policy		Food Security
			⊠Availability of food □Access to food
			\Box Utilization of Food \Box Nutrition
			⊠Stability of availability/access/utilization

Animal welfare has strong implications in the sustainability of our supply of meat, milk, and egg products. The issue of animal housing and husbandry has implications within the context of social, economic, and environmental sustainability, as well as food safety. The considerations of each of these often contradict one another and result in competing priorities for animal management and uncertainty for the impact of these decisions on the supply of animal products.

Countries or regions of collaborations

Brazil, China, Australia

Publication highlights

BC Ramirez, T Liu, AR Green, DW Shike, and LF Rodriguez. 2014. Long-term evaluation of an updated GPS collar design for cattle and effects of GPS receiver position and orientation on GPS performance. Trans ASABE. Under review.

GDN Maia1, BC Ramirez3, AR Green, Y Sun3, LF Rodriguez, DW Shike, and RS Gates. 2014. A Novel Ruminant Emission Measurement System: PART II - Commissioning. Trans ASABE. Under Review.

GDN Maia1, BC Ramirez3, AR Green, LF Rodriguez, JR Segers, DW Shike, and RS Gates. 2014. A Novel Ruminant Emission Measurement System: Part I - Design Evaluation and Description. Trans ASABE. Under Review.

Y Xiong3, AR Green, and RS Gates. 2014. Assessment of Swine Transport Industry Guidelines for Trailer Management During Extreme Hot or Cold Outdoor Temperatures. Special Edition on Pig Transport in Animals. Accepted for publication pending revisions.

Y Xiong3, AR Green, and RS Gates. 2014. Characteristics of Trailer Thermal Environment during Commercial Swine Transport Managed Under US Industry Guidelines. Special Edition on Pig Transport in Animals. Accepted for publication pending revisions.

T Liu, AR Green, LF Rodriguez, BC Ramirez3, DW Shike. 2014. Effects of number of animals monitored on

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representations of cattle group movement characteristics and spatial occupancy. PLOS One. Accepted for publication pending revisions.

KW Koelkebeck, S. dePersio, K Lima4, PC Harrison, C Utterback, P Utterback, RN Dilger, R Gates, A Green, and J.M. Campbell. 2014. Evaluation of feeding spray-dried bovine plasma protein on production performance of laying hens exposed to high ambient temperatures. J. Appl. Poult. Res. In press.

H Webster, D Morin, V Jarrell, C Shipley, L Brown, A Green, R Wallace, P Constable. 2013. Effects of local anesthesia and flunixin meglumine on the acute cortisol response, behavior, and performance of young dairy calves undergoing surgical castration. J. Dairy Sci. 96(10): 6285-6300.

GT Sales2, AR Green, RS Gates. 2013. Commissioning an animal preference chamber for behavioral studies with laying hens exposed to atmospheric ammonia. Comput. Electron. Agric. 95: 48-57.

H Xin, RS Gates, AR Green, FM Mitloehner, PA Moore Jr. and CM Wathes. 2010. Environmental impacts and sustainability of egg production systems. In: Emerging Issues: Social Sustainability of Egg Production Symposium. Poult. Sci. 90(1):263-277.

AR Green, H Xin. 2009. Effects of stocking density and group size on heat and moisture production of laying hens under thermoneutral and heat-challenging conditions. Trans. ASABE. 52(6):2027-2032.

AR Green, H Xin. 2009. Effects of stocking density and group size on thermoregulatory responses of laying hens under heat-challenging conditions. Trans. ASABE. 52(6):2033-2038.

AR Green, I Wesley, DW Trampel, H Xin. 2009. Air quality and bird health status in three types of commercial egg layer houses. J. Appl. Poult. Res. 18(3):605-621.