

# Curriculum Vitae

John (Jack) Schieffer

## CURRENT POSITION

Assistant Professor, Dept. of Agricultural Economics, Univ. of Kentucky. June 17, 2009 to present. DOE: 58.5% research, 41.5% teaching (Target DOE of 60% research, 40% teaching).

## RESEARCH

### *Projects*

#### Extramural

Co-project director (Co-PI). "Grape and Winery Contracting and Supply Chain Management." Project director (PI): Tim Woods. Sponsored by Southern Risk Management Education Center. 2012-2013. Budget: \$44,132.

#### Other

W3133, "Benefits and Costs of Natural Resources Policies Affecting Public and Private Lands." Hatch/Multi-state project. 2013-2017.

Principal investigator, "Nanotechnology Preference Survey." Research Activity Award. Sponsored by UK College of Agriculture. 2012-2013. Budget: \$2,000.

#### Proposals Submitted

Collaborator. "BMP demonstration and outreach project on the economic and ecological functionality and streamside stabilization along the Bayou de Chien riparian corridor." Project Leader: Susie Fenwick, Friends of Bayou de Chien Watershed. Sponsored by Kentucky Energy and Environment Cabinet, Division of Water. 2012-2013. Not awarded.

### *Graduate Student Advising*

MS: Committee member for 6 MS students in 2013-2014.

PhD: Muhammad Ahmadi, Co-Advisor (in-progress); Na Zuo, Co-Advisor (in-progress); GwanSeon Kim, Co-Advisor (in-progress); Ritwik Dutta, Co-Advisor (in-progress); Marie Pelton, Co-Advisor (transferred in 2013). Committee member for 6 other PhD students in 2013-2014.

## TEACHING AND ADVISING

### *Courses Taught*

Term		Course	Title	Students	Evaluations
2014	Fall	AEC 745-001 / ECO 726-001 (Cross-listed)	Natural Resource Economics	4 / 1	Not available*
2014	Fall	AEC 445G- 001	Introduction to Natural Resource and Environmental Economics	29	Pending
2014	Fall	AEC 326-001	Principles of Environmental Law	30	Pending
2014	Fall	AEC 399-003	Experiential Education in Agricultural Economics	1	Not available*
2014	Fall	NRE 399-006	Experiential Education in Natural Resources and Environmental Science	3	Not available*
2013	Fall	AEC 780-001	Natural Resource Economics	3	Not available*
2013	Fall	AEC 780-009	Special Problems in Agricultural Economics	1	Not available*
2013	Fall	AEC 445G- 001	Introduction to Natural Resource and Environmental Economics	31	3.5 / 3.5
2013	Fall	AEC 424-001	Principles of Environmental Law	31	3.6 / 3.7
2013	Fall	NRE 399-006	Experiential Education in Natural Resources and Environmental Science	1	Not available*
2013	Spr	AEC 780-009	Special Problems in Agricultural Economics	1	Not available*
2013	Spr	NRE 395-001	Independent Study in Natural Resources and Environmental Science	1	Not available*
2013	Spr	NRE 399-002	Experiential Education in Natural Resources and Environmental Science	1	Not available*

\* Evaluations are not collected or officially reported for classes with fewer than 5 students, independent study courses, and internship courses.

### *Undergraduate Advisees*

Fall 2014: 20 undergraduate advisees

Spring/Summer 2014: 20 undergraduate advisees

Fall 2013: 25 undergraduate advisees

Spring/Summer 2013: 21 undergraduate advisees

Supervised 1 AEC 399 internship during 2013-2014 review period (Katherine Aydelotte)

Supervised 1 NRE 395 research project during 2013-2014 review period (John Reed)

Supervised 5 NRE 399 internships during 2013-2014 review period (Patrick Hayes, Jamie Keyes, Sean Kovanda, Lee Mudd, Rebecca Petry)

### *Professional Development*

“Faculty Learning Community in Student Engagement Techniques.” Semester-long workshop sponsored by College of Agriculture, Spring 2013.

## **EXTENSION AND OUTREACH**

“Kentucky Grape Contracting.” Webinar presentations in association with Center for Crop Diversification, Nov. 21, 2013.

## **PUBLICATIONS**

A \* denotes graduate student or post-doctoral scholar.

### *Refereed Journal Articles*

Schieffer, Jack and Carl R. Dillon, 2014. “The economic and environmental impacts of precision agriculture and interactions with agro-environmental policy,” *Precision Agriculture*, published online 10/10/2014, DOI 10.1007/s11119-014-9382-5.

Liu, Zheng\*, Angelos Pagoulatos, Wuyang Hu, and Jack Schieffer, 2014. “Valuing the Benefit of Reducing Adverse Effects from Polluting Heating Fuels,” *Social Science Quarterly* 95(3): 868-881.

### *Books and Chapters*

Schieffer, Jack, 2015. “Urban Water Management: Responding to Federal Regulation.” In *Water in Kentucky: Shaping Landscapes, People, and Communities*, B.D. Lee, A. Jones, D. Carey, and J. Burch, eds. University Press of Kentucky: Lexington, KY. (Forthcoming, 2015).

Schieffer, Jack, 2013. “The Neoclassical Economics Model: Extensions and Limits” In *Comparative Decision-Making Analysis*, Philip H. Crowley and Thomas Zentall, eds. Oxford University Press: New York, pp. 40-43

Schieffer, Jack, 2013. “Crossovers in Ecological and Economic Models of Decisions” In *Comparative Decision-Making Analysis*, Philip H. Crowley and Thomas Zentall, eds. Oxford University Press: New York, pp. 271-273.

Schieffer, Jack, 2013. “Designing Mechanisms to Overcome Market and Behavioral Failures” In *Comparative Decision-Making Analysis*, Philip H. Crowley and Thomas Zentall, eds. Oxford University Press: New York, pp. 485-488.

### *Other Publications*

Jack Schieffer and Carl R. Dillon, 2013. “Precision Agriculture and Agro-Environmental Policy.” In *Precision Agriculture '13*, John V. Stafford ed., pp. 755-760. (Proceedings of the European Conference on Precision Agriculture. Refereed, with approximately 36% acceptance rate.)

## *Under Review*

Zuo, Na\* and Jack Schieffer. “Crowding Out Effect or Institutions? The Resource Curse Revisited at the U.S. State Level.” *Journal of Agricultural and Resource Economics*. (Revise and resubmit)

Brown, Rachael\*, Carl R. Dillon, and Jack Schieffer. “The Carbon Footprint and Economic Impact of Precision Agriculture Technology on a Corn and Soybean Farm.” *Agricultural Economics*. (Under review)

Michael Vassolos\*, Wuyang Hu, Timothy Woods, Jack Schieffer, and Carl Dillon. “Risk Perception, Risk Preferences and Choice of Marketing Contracts: Evidence from a Choice Experiment with U.S. Mid-South Fresh Vegetable Producers.” *Agribusiness: An International Journal*. (Under review)

Zhang, Yan and Jack Schieffer. “Growth, investment and environment in Chinese cities: Evidence from 2005-2010 panel data.” *Review of Development Economics*. (Under review)

## **MEETINGS, PRESENTATIONS, AND CONSULTATIONS**

(Presenter in bold. A \* denotes graduate student or post-doctoral scholar.)

**Na Zuo\*** and Jack Schieffer, “Are Resources Cursed? An Investigation of Chinese Provinces.” Selected paper, Southern Agricultural Economics Association (SAEA) annual meetings. Dallas, TX, February 2014.

**Guzhen Zhou\***, Wuyang Hu, Jack Schieffer, and Lynn Robbins, “Public Acceptance of and Willingness to Pay for Nanofood: Case of Canola Oil.” Selected paper, Agricultural and Applied Economics Association (AAEA) annual meetings. Washington, DC, August 2013.

**Jack Schieffer** and Carl Dillon, “Precision Agriculture and Agro-Environmental Policy.” Selected paper, European Conference on Precision Agriculture. Lleida, Spain, July 2013.

**Na Zuo\*** and Jack Schieffer, “Crowding-out Effect or Institutions? Revisiting the Resource Curse with an Investigation of U.S. States.” Selected paper, Southern Agricultural Economics Association (SAEA) annual meetings. Orlando, FL, February 2013.

**Michael Vassolos\***, Wuyang Hu, Timothy Woods, Jack Schieffer, and Carl Dillon. “Fresh Vegetable Growers’ Risk Perception, Risk Preference and Choice of Marketing Contracts: A Choice Experiment.” Selected paper, Southern Agricultural Economics Association (SAEA) annual meetings. Orlando, FL, February 2013.

**Andrew McLaughlin\***, Wuyang Hu, Jack Schieffer, and Angelos Pagoulatos. “Understanding Point Source Cost Structure and Willingness to Pay for Reducing Nitrogen and Phosphorus.” Selected paper, Southern Agricultural Economics Association (SAEA) annual meetings. Orlando, FL, February 2013.

## **SERVICE AND RECOGNITION**

### *Editor and Reviewer Service*

Reviewer, AAEA 2014 annual meeting, Resource and Environmental Policy Analysis topic area

Reviewer, AAEA 2013 annual meeting, Resource and Environmental Policy Analysis topic area

### *Committees and Offices Held*

Council on Food, Agriculture, and Resource Economics (C-FARE) “Blue Ribbon” Panel on Climate Change. 2012-present.

NRES Steering Committee, College of Agriculture, 2009-Present. Also served as organizer for the program’s experiential learning (i.e., internship) component.

Undergraduate Program Committee, Dept. of Agricultural Economics, 2009-2012

Graduate Program and Research Committee, Dept. of Agricultural Economics, 2012-Present

Climate Change Working Group, Tracy Farmer Institute, University of Kentucky, 2011-Present

### *Other*

Served as internal member of committee for the 2014 program review of the NRES program.

## **Narrative Statement**

My position calls for research and teaching in environmental and natural resource economics, with an explicit commitment to serve the college's Natural Resource and Environmental Science (NRES) program, as well as my home department: Agricultural Economics. My appointment entails a relatively heavy teaching load (40% DOE), corresponding to 3 courses/year.

### **RESEARCH**

My overarching research goal is to develop a program within the broad area of natural resource and environmental economics that will facilitate my professional success, fulfill the needs of the department and its graduate program, and contribute to the knowledge and welfare of stakeholders in Kentucky and beyond. My appointment calls for emphasis on issues at the intersection of agriculture and the environment, especially those important in Kentucky.

A main area of emphasis is economics and policy regarding water resources, and related impacts both on and by agriculture. I have investigated the effects from agriculture on quality of water resources and vice versa, the legal and regulatory framework surrounding water policy, and the use of policy instruments (especially tradable credits) to control non-point source pollution. The projected results from this work will inform water resource policy makers regarding the feasibility of and potential cost reductions from incentive-based environmental programs. They should also prove informative to Kentucky land owners as potential new sources of revenue.

A secondary area of emphasis is contracts and related mechanisms for coordinating economic behavior. This line of inquiry builds on research that I began as a Ph.D. student and also benefits from my prior training in law. I investigate the use of contracts and similar mechanisms for coordinating economic activity, as well as applications to specific crops including wine grapes and tomatoes. Although this work is not directly tied to environmental issues, I believe that it complements the work of others in the department and thus benefits the overall research and extension program.

I am also continuing work in other resource topics, including greenhouse gases and the risk of climate change, the production of biofuels as a renewable energy source, and land-use regulatory policy. I am developing collaborations both within the university and outside, related to these topics, with the intent of securing extramural funding for research, extension, and education.

### **TEACHING**

With regard to teaching, one of my primary goals is to improve the NRES and AEC undergraduate curricula. As a member of the NRES Steering Committee, I have worked on various program revisions. I have also taken on responsibility for the program's experiential learning requirement, following Dr. Infanger's retirement. Similarly, during my time on the departmental Undergraduate Committee, I helped with our department's on-going assessment and curriculum improvement efforts.

I teach two undergraduate courses—AEC 326 (Environmental Law) and AEC 445G (Intro to Resource and Environmental Economics)—which are required by NRCM/NRES students and also popular with AEC students and other in the college. In addition to helping students master the substantive knowledge in these topics, I help them develop skills in written and spoken communication, critical thinking, analytical problem-solving, and independent information-gathering. The course designs emphasize activities such as short analytical papers, case studies, multi-step problem-solving assignments, and in-class participation.

A second broad objective is to contribute to graduate training, both within the department and more broadly across the college and university. To strengthen the natural resources component of the AEC graduate curriculum, I have designed a new course, AEC 745 (Environmental and Natural Resource Economics, cross-listed as ECO 726). Intended for Ph.D. students, the course features immersion in the current literature, rigorous analysis of models, and student-initiated research. I have also been active in advising AEC graduate students, as well as working on the departmental Graduate Program Committee, contributing to student recruitment and selection and curriculum improvement.

## **SERVICE**

One aspect of service is that to the department, college, and university. In the College of Agriculture, I serve on the NRES Steering Committee (see Teaching narrative). Within the Agricultural Economics Dept., I am serving on the Graduate Program Committee. I have also recently served on the committee for the 2014 External Review of the NRES program.

At the university level, I have been involved in an initiative to establish an interdisciplinary program for graduate students in comparative decision-making, developing a certificate program for study across decision sciences (economics, psychology, neuroscience, computer science, etc.). I have also been involved in an effort to develop an interdisciplinary graduate program in environmental science and policy.

A second aspect is service to the profession. I am currently serving on a “blue ribbon” panel for the Council of Food, Agricultural, and Resource Economics (C-FARE), providing as a link between policy-makers and economists on the topic of climate change. I have been an active member in several professional organizations: the Agricultural and Applied Economics Association (AAEA), the American Economic Association (AEA), the Association of Environmental and Resource Economists (AERE), and the Southern Agricultural Economics Association (SAEA). I have presented research and served as moderator at numerous conferences. I have also served as reviewer for journal submissions and conference papers.