Jason P. de Koff

Phone: 615.963.4929

jdekoff@tnstate.edu

Department of Agricultural Sciences Tennessee State University

EDUCATION

Ph.D. in Agronomy, Purdue University, 2008

Concentration: Environmental soil chemistry and waste management

Dissertation: Sustainable waste management: the beneficial reuse of industrial,

municipal, and agricultural waste products as soil amendments

Research Advisor: Dr. Brad Lee

M.S. in Soil and Water Sciences, University of California, Riverside, 2004

Concentration: Landscape processes and soil chemistry

Thesis: Pre- and post-fire erosion of soil nutrients within a chaparral watershed

Research Advisor: Dr. Robert Graham

B.S. in Chemistry, Ithaca College, 2000

Minor in Environmental Studies

Undergraduate research project: Polystyrene photochemistry

PROFESSIONAL EXPERIENCE

<u>Assistant Professor</u> Tennessee State University, Nashville, TN

6/10-Present 75% Extension/25% Research

Educate stakeholders on agricultural issues related to biofuel crops. Conduct applied research on effects of different management practices on biofuel crop production.

<u>Postdoctoral Associate</u> USDA-ARS, Fayetteville, AR

7/08 - 5/10 -Research projects focused on reuse of biosolids and water

treatment residuals for agricultural-based land application and effects of organic amendments on environmental

factors

Instructor Northwest Arkansas Community College, Fayetteville, AR

1/10 - 5/10 -lecture for Introduction to Soil Science Course

-organize and develop lectures, laboratory experiments, and

coursework

-assist students, grade exams and assignments

Research Assistant Purdue University, West Lafayette, IN

8/04 – 6/08 -Dissertation dealt with (1) recycling waste foundry sand

through incorporation into soil amendments and (2)

analysis of compost maturity indices

Research Assistant University of California, Riverside, CA

7/01 – 3/04 -Conducted analyses of contaminated Salton Sea sediment

to identify geochemistry of iron

-Conducted analyses of hillslope erosional sediment for

loss of nutrients after prescribed fire

<u>Teaching Assistant</u> University of California, Riverside, CA

9/02 – 12/02 - Taught undergraduate introductory soil science laboratory

-Organized and developed new coursework, assisted

students with questions, explained procedures, and graded

lab reports

<u>Lab Technician</u> Cornell University, Ithaca, NY

5/00 – 6/01 -Purified plasmids, prepared samples for PCR reaction and

sequencing, synthesized oligonucleotides with QA/QC

using UV-Vis and mass spectrometry

PROFESSIONAL MEMBERSHIPS

Soil Science Society of America (SSSA), 2003 – Present

HONORS AND AWARDS

Purdue University Agronomy Extension Assistantship, 2007 Gamma Sigma Delta Agricultural Honor Society, Purdue University, 2006 George D. Scarseth Scholarship, 2005 Dean's Graduate Fellowship at University of California, Riverside, 2001 Presidential Merit Scholarship, 1996 National Honors Society, 1996

RESEARCH PUBLICATIONS AND PRESENTATIONS

Research/Refereed Publications:

de Koff, J.P., P.A. Moore, Jr., D.H. Pote, S.J. Formica, M. Van Epps, and P.B. DeLaune.

2010. Effects of pasture renovation on hydrology, nutrient runoff, and forage yield. (In review).

- de Koff, J.P., P.A. Moore, Jr., R.D. Williams, R. Young, and P.J.A. Kleinman. 2010. Utilizing water treatment residuals to reduce phosphorus runoff from biosolids. (In preparation).
- de Koff, J.P., B.D. Lee, S.A. Quideau, and S.-W. Oh. 2010. Assessment of potential compost maturity indices for a high salt/high pH compost. (In preparation).
- de Koff, J.P., B.D. Lee, R.S. Dungan, and J.B. Santini. 2010. Effect of compost-, sand-, or gypsum-amended waste foundry green sands on turfgrass yield and nutrient content. J. Environ. Qual. 39:375-383.
- de Koff, J.P., B.D. Lee, and R.S. Dungan. 2008. Amelioration of physical strength in waste foundry green sands for reuse as a soil amendment. J. Environ. Qual. 37:2332-2338.
- de Koff, J., M.A. Anderson, and C. Amrhein. 2008. Geochemistry of iron in the Salton Sea, California. Hydrobiologia 604:111-121.
- Dungan, R.S., B.D. Lee, P. Shouse, and J.P. de Koff. 2007. Saturated hydraulic conductivity of soils blended with waste foundry sands. Soil Science 172(10):751-758.
- de Koff, J.P., R.C. Graham, K.R. Hubbert, and P.M. Wohlgemuth. 2006. Pre- and postfire erosion of soil nutrients within a chaparral watershed. Soil Science 171(12):915-928.

OUTREACH PUBLICATIONS AND PRESENTATIONS

Numbered Extension Bulletins (refereed)

- de Koff, J.P., P.A. Moore, Jr., R.D. Williams. 2010. Treating biosolids with water treatment residuals (WTRs) for surface-applications in agriculture. (In preparation).
- de Koff, J.P., B.D. Lee, and M.V. Mickelbart. 2008. Household composting: composting with worms. Purdue University Cooperative Extension Service. HENV-104-W.
- de Koff, J.P., B.D. Lee, and A.P. Schwab. 2007. Avoiding arsenic exposure from treated lumber around the home. Purdue University Cooperative Extension Service. HENV-100-W.
- de Koff, J.P., B.D. Lee, and A.P. Schwab. 2007. Protecting your family from lead in the home. Purdue University Cooperative Extension Service. HENV-101-W.

- de Koff, J.P., B.D. Lee, and P.L. Ziemer. 2007. Radon: how to assess the risks and protect your home. Purdue University Cooperative Extension Service. HENV-102-W.
- de Koff, J.P., B.D. Lee, and M.V. Mickelbart. 2007. Household composting: methods and uses for compost. Purdue University Cooperative Extension Service. HENV-103-W.

Outreach Presentations

- de Koff, J.P. Composting: a natural method for creating natural habitat. Habitat Stewards Training Workshop, Indiana Wildlife Federation, Fishers, IN. March 2008.
- de Koff, J.P., B.D. Lee, and R.S. Dungan. Amendment of high strength properties of waste foundry sands with gypsum. Indiana Cast Metals Association, Indianapolis, IN. November 2006.
- de Koff, J.P., and B.D. Lee. Beneficial reuse of foundry sands. Indiana Cast Metals Association Board Meeting, Indianapolis, IN. May 2005.