

Oleksandra Hararuk

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Research interests

- Climate change
- Biogeochemical cycles
- Ecosystem modeling
- Data assimilation

Education

2008- Ph.D. in Botany, University of Oklahoma

2008-2012 M.Sc. in Botany, University of Oklahoma

Thesis: Changes in soil mercury pools in response to climate change in conterminous USA

2004-2008 B.S. in Ecology, National University “Kyiv Mohyla Academy”, Kyiv, Ukraine

Thesis: Energy storage in coniferous and deciduous forests in Kyiv region.

Professional Experience

2008- Research Assistant, Global Change Ecology, University of Oklahoma (with Dr. Yiqi Luo)

2009-2011 Teaching Assistant, Ecology and Environmental Quality; Methods in Plant Ecology, University of Oklahoma

Publications

2. Xia J, Luo Y, Wang Y-P, Weng E, Hararuk O. 2012. A semi-analytical solution to accelerate spin-up of coupled carbon and nitrogen land models to steady states. *Geoscientific Model Development Discussion*, 5, 803-836.

1. D. Obrist, D. W. Johnson, S. E. Lindberg, Y. Luo, O. Hararuk, R. Bracho, J. J. Battles, D. B. Dail, R. L. Edmonds, R. K. Monson, S. V. Ollinger, S. G. Pallardy, K. S. Pregitzer, and D. E. Todd. 2011. Mercury Distribution Across 14 U.S. Forests. Part I: Spatial Patterns of Concentrations in Biomass, Litter, and Soils. *Environ. Sci. Technol.*, 45, 3974–3981. DOI: 10.1021/es104384m.

Grants and Awards

- George L. and Cleo Cross Graduate Student Endowed Scholarship. 2010.

Professional service and membership

- Member: Ecological Society of America (ESA)

Presentations

7. O. Hararuk, D. Obrist, Y. Luo. Modeling the sensitivity of soil mercury storage to climate-induced changes in soil carbon pools. 97th Ecological Society of America Annual Meeting. Portland, Oregon, USA, August 5 - 10, 2012

6.O. Hararuk, J. Xia, Y. Luo. Performance of CLM-CASA and CABLE Models in Predicting Soil Carbon: The Need for Data Assimilation. 17th Annual CESM Workshop, The Village, Breckenridge, Colorado, June 18-21, 2012.

5. Xia J, Luo Y, Hararuk O, Wang Y. Traceable components of modeled global carbon cycle. U.S. Department of Energy Experiment-Model Workshop, Bethesda, Maryland. USA. Mar. 19-21, 2012.

4. Niu, S., Li, D., Hararuk, O., Yan, L., Chen, X., Ali, E., Luo, Y. Disturbance and Recovery in Terrestrial Ecosystem Carbon Cycling-a Global Synthesis. EGU General Assembly 2012, held 22-27 April, 2012 in Vienna, Austria., p.7498

3. Hararuk O and Xia J. Applying a semi-analytical solution to accelerate carbon model spin-up to steady state. Norman, Oklahoma, USA. September 30, 2011.

2. Xia J, Luo Y, Wang Y, Weng E, Hararuk O. A semi-analytical solution to accelerate spin-up for carbon and nitrogen coupled ecosystem models. Breckenridge, Colorado, USA. June 22, 2011.

1. Hararuk O., Obrist D., Luo Y. Modeling mercury dynamics in terrestrial ecosystems in response to climate change. 95th Ecological Society of America Annual Meeting. Pittsburgh, Pennsylvania, USA, August 1 - 6, 2010