

## Curriculum Vitae

### Kate S. He

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#### Education (Institutions and Earned degrees)

University of Western Ontario	Statistical Ecology	Ph.D.
Northeast Forestry University	Plant Ecology	M.Sc.
Northeast Forestry University	Botany	B.Sc.

#### Major Research and Professional Interests:

Plant ecology; ecological modeling; invasion biology; biodiversity analysis; landscape ecology; climate change and vegetation dynamics; environmental and conservation biology.

#### Recent Publications in Refereed International Journals

1. **He, K.** and Zhang, J. 2009. Testing the correlation between species diversity and productivity among global Ecoregions, Biomes, and Biogeographical Realms. *Ecological Informatics*, 4(2):93-98.
2. **He, K.** Zhang J., R. Zhang. 2009. Linking variability in species composition and MODIS NDVI based on beta diversity measurements. *Acta Oecologica* 35(1): 14-21.
3. Harris, C., Jiang, H., Liu, D., Brian, Z., **He, K.** 2009. Testing the roles of species native origin and family membership in intentional plant introductions using nursery data across the state of Kentucky. *Torrey Botanical Society Journal* 136: 122-127.
4. Shi, F., Yuan, Z., **He, K.**, Li, J., Gou, S. 2009. Reproductive biology of an alien invasive species smooth cordgrass (*Spartina alterniflora*, Poaceae). *Polish Journal of Ecology*, 57(2): 283-289.
5. Rocchini, D., **He, K.**, Zhang, J. 2009. Is spectral distance a proxy of beta diversity at different taxonomic ranks? A test using quantile regression. *Ecological Informatics*, 4(4): 254-259.
6. Orloci, L. and **He, K.** 2009. On governance in the long-term vegetation process: How to discover the rules? *Frontiers of Biology in China*. In Press. DIO 10.1007/s11515-009-0057-y (Online). **Invited Paper**.
7. Guo, Q., Ma, K., Yang, L., Cai, Q., **He, K.** 2009. A comparative study of the impact of species composition on a freshwater phytoplankton community using two contrasting biotic indices. *Ecological Indicators*. In Press, DOI:10.1016/j.ecolind.2009.06.002 (Online).

8. Guo, Q., Ma, K., Yang, L., **He, K.** 2009. Testing a dynamic complex hypothesis in the analysis of land use impact on lake water quality. *Water Resource Management*. In Press, DOI 10.1007/s11269-009-9498-y (Online).
9. Rocchini, D., **He, K.**, Oldeland, J., Wesuls, D. 2009. Beta diversity versus spectral variation at different spatial scales: a test in African Highland Savannas. *Journal of Environmental Monitoring* (Under Review).

### **Recent Presentations in International, National, Regional Conferences/Symposiums and Invited Talks**

1. **He, K.** 2009. On the relationship between species diversity and productivity. **Invited Talk** at the State Key Laboratory of Urban & Regional Ecology, Research Centre for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, China. June 16-17.
2. Viniard, J., Zhang, R., **He, K.** 2009. A comparison of classification schemes for detecting an invasive plant species using QuickBird image. 2<sup>nd</sup> International Conference on Earth Observation for Global Changes, Chengdu, China, May 25-29.
3. Liu, D., Jiang, H., Zhang, R., **He, K.** 2009. Spatial modeling of an invasive plant, *Lonicera japonica*, based on Species occurrence data from two watersheds in western Kentucky and Tennessee. Odum Conference - Understanding and managing biological invasions as dynamic processes: Integrating information across space and time. Rensselaerville, New York, April 30-May 1.
4. Jiang, H., Zimmerer, E., **He, K.** 2009. Genetic diversity and invasiveness of alligator weed (*Alternanthera philoxeroides*). Odum Conference - Understanding and managing biological invasions as dynamic processes: Integrating information across space and time. Rensselaerville, New York, April 30-May 1.
5. Liu, D., Jiang, H., Zhang, R., **He, K.** 2009. Modeling the spatial distribution of an invasive plant, *Lonicera Japonica*, based on species occurrence data from two watersheds. WSI Research Symposium, Murray, KY, April 22.
6. Jiang, H., Zimmerer, E., **He, K.** 2009. Using molecular markers to study the patterns of genotypic diversity of an invasive plant, Alligator Weed (*Alternanthera philoxeroides*) in Southeastern U.S. 2009 WSI Research Symposium, Murray, KY, April 22.
7. Liu, D., Jiang, H., Zhang, R., **He, K.** 2009. Predicting the spatial distribution of an invasive plant, *Lonicera Japonica*, from two watersheds in western Kentucky and Tennessee. 13<sup>th</sup> Symposium on the Natural History of Lower Tennessee and Cumberland River Valleys, Land between the Lakes, TN. April 1-2.
8. Jiang, H., Zimmerer, E., **He, K.** 2009. Genetic diversity and invasiveness of alligator weed (*Alternanthera philoxeroides*). 13<sup>th</sup> Symposium on the Natural History of Lower Tennessee and Cumberland River Valleys, Land between the Lakes, TN. April 1-2.

9. Jiang, H., Liu, D., Buford, G., Kos, J., **He, K.** 2008. Using molecular markers to study the patterns of genotypic diversity of an invasive plant, Alligator Weed (*Alternanthera philoxeroides*). 94<sup>th</sup> Kentucky Academy of Science Annual Meeting, Lexington, Kentucky. October 31.
10. **He, K.** 2008. Testing the roles of species native origin and family membership in intentional plant introductions using nursery data across the state of Kentucky. Kentucky Invasive Species Conference: Plants, Pathogens, Insects, and Animals, Lexington, Kentucky, December 15-16.
11. **He, K.** and Zhang, J. 2008. Testing the correlation between species diversity and productivity among global Ecoregions, Biomes, and Biogeographical Realms. The 6<sup>th</sup> International Conference of Ecological Informatics, Cancun, Mexico, December 2-6.
12. Brain, Z., Harris, C., Harris, K., **He, K.** 2008. Morphological plasticity: a comparative study of leaf traits between exotic honeysuckle (*Lonicera japonica*) and its native congener (*Lonicera sempervirens*). 93<sup>rd</sup> ESA Annual Meeting, Milwaukee, Wisconsin, August 3 – 8.
13. Harris, C., Harris, K., Brian, Z., **He, K.** 2008. Invasion study: testing the roles of taxonomic affinity and species origin in intentional plant introductions using nursery data in Kentucky. 93<sup>rd</sup> ESA Annual Meeting, Milwaukee, Wisconsin, August 3 – 8.
14. Buford, G., J. Kos, M., McCarthy, **K. He.** 2008. The effects of genetic diversity of Alligator Weed (*Alternanthera philoxeroides*) on its invasion capability. The Confluence of Biology and Mathematics in the Commonwealth, Murray, KY, May 16-17.
15. Zhang, R. and **He, K.** 2008. Detecting and analyzing the spatial distribution of an invasive plant, *Lonicera japonica*, using remote sensing and GIS, at The Fourth Kentucky Innovation and Enterprise Conference. Lexington, KY, April 16-17.