

Bongghi Hong **Curriculum Vitae**

Contact Information

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Education

Ph.D., Field of Environmental Toxicology, Cornell University, Ithaca, NY, USA, 2004
M.S., Department of Forest Resources, Seoul National University, Seoul, Korea, 1999
B.S., Department of Forest Resources, Seoul National University, Seoul, Korea, 1997

Professional Experience

2010-2012 Research Associate, Department of Ecology and Evolutionary Biology,
Cornell University, Ithaca, NY
2007-2010 Postdoctoral Associate, Department of Ecology and Evolutionary Biology,
Cornell University, Ithaca, NY
2007-2009 Research Scientist, Department of Environmental and Forest Biology,
SUNY College of Environmental Science and Forestry, Syracuse, NY
2004-2007 Postdoctoral Associate, Department of Environmental and Forest Biology,
SUNY College of Environmental Science and Forestry, Syracuse, NY

Publications

Swaney DP, Hong B, Ti C, Howarth RW, Humborg C, Yan X (*under review*) Watershed nitrogen accounting on three continents: implications for coastal waters. *Current Opinion in Environmental Sustainability*.

Sun N, Hong B, Hall MH (*under review*) Estimation of the U.S. EPA SWMM 5.0 model parameters within a Bayesian Generalized Likelihood Uncertainty Estimation (GLUE) framework for a high resolution urban watershed. *Journal of Hydrology*.

Swaney DP, Santoro RL, Howarth RW, Hong B, Donaghy KP (*in press*) Historical changes in the food and water supply systems of the New York City Metropolitan Area. *Regional Environmental Change*. DOI: 10.1007/s10113-011-0266-1.

Hong B, Limburg KE, Hall MH, Mountrakis G, Groffman PM, Hyde K, Luo L, Kelly VR, Myers SJ (*in press*) An integrated monitoring/modeling framework for assessing human-nature interactions in urbanizing watersheds: Wappinger and Onondaga Creek watersheds, New York, USA. *Environmental Modelling & Software*. DOI: 10.1016/j.envsoft.2011.08.00.

Howarth RW, Swaney DP, Billen G, Garnier J, Hong B, Humborg C, Johnes P, Mörth C-M, Marino R (2012) Nitrogen fluxes from the landscape are controlled by net anthropogenic nitrogen inputs and by climate. *Frontiers in Ecology and the Environment* 10 (1): 37-43.

Hong B, Swaney DP, Mörth C-M, Smedberg E, Eriksson Hägg H, Humborg C, Howarth RW, Bouraoui F (2012) Evaluating regional variation of net anthropogenic nitrogen and

- phosphorus inputs (NANI/NAPI), major drivers, nutrient retention pattern and management implications in the multinational areas of Baltic Sea basin. *Ecological Modelling* 227: 117-135.
- Hong B, Swaney DP, Howarth RW (2011) A toolbox for calculating net anthropogenic nitrogen inputs (NANI). *Environmental Modelling & Software* 26: 623-633.
- Hong B, Limburg KE, Erickson JD, Gowdy JM, Nowosielski AA, Polimeni JM, Stainbrook KM (2009) Connecting the ecological-economic dots in human-dominated watersheds: models to link socio-economic activities on the landscape to stream ecosystem health. *Landscape and Urban Planning* 91: 78-87.
- Limburg KE, Walther Y, Hong B, Olson C, Storå J (2008) Prehistoric versus modern Baltic Sea cod fisheries: selectivity across the millennia. *Proceedings of the Royal Society Section B* 275: 2659-2665.
- Hong B, Limburg KE, Hall MH, Erickson JD (2007) Scenario analysis of economy-ecology interactions in the Hudson River Basin. In: Erickson JD, Messner F, Ring I (editors) *Ecological Economics of Sustainable Watershed Management, Volume 7 (Advances in the Economics of Environmental Resources)*, Chapter 5, pp 97-111. Amsterdam, The Netherlands: Elsevier.
- Hong B, Weinstein DA, Swaney DP (2006) Assessment of ozone effects on nitrate export from Hubbard Brook Watershed 6. *Environmental Pollution* 141 (1): 8-21.
- Hong B, Swaney DP, Weinstein DA (2006) Simulating spatial nitrogen dynamics in a forested reference watershed, Hubbard Brook Watershed 6, New Hampshire, USA. *Landscape Ecology* 21 (2): 195-211.
- Hong B, Strawderman RL, Swaney DP, Weinstein DA (2005) Bayesian estimation of input parameters of a nitrogen cycle model applied to a forested reference watershed, Hubbard Brook Watershed Six. *Water Resources Research* 41: W03007. DOI: 10.1029/2004WR003551.
- Hong B, Swaney DP, Woodbury PB, Weinstein DA (2005) Long-term nitrate export pattern from Hubbard Brook Watershed 6 driven by climatic variation. *Water, Air, and Soil Pollution* 160 (1-4): 293-326.
- Lee KJ, Hong B (2005) Identification of initiation period and subsequent development of floral primordia in Black Locust (*Robinia pseudoacacia* L.). *Journal of Korean Forestry Society* 94 (2): 67-72.
- Hong B, Lee KJ (2001) Interaction of ozone with simultaneous water deficit and water deficit preconditioning in one-year-old *Pinus densiflora* seedlings. *Journal of Forest Research* 6 (4): 273-279.

Presentations

- Hong B, Swaney DP, Howarth RW, Humborg C (2011) Net Anthropogenic Nitrogen and Phosphorus Inputs (NANI/NAPI) and riverine nutrient fluxes in the watersheds of the US and Europe. Oral Presentation (*invited*). AGU 2011, 5-9 December 2011, San Francisco, CA, USA.
- Hong B, Swaney DP, Howarth RW, Humborg C (2011) Improved tools for calculating NANI (Net Anthropogenic Nitrogen Input) in the watersheds of US and Europe. Oral Presentation. CERF 2011, 6-10 November 2011, Daytona Beach, FL, USA.
- Hong B, Swaney DP, Howarth RW, Humborg C (2011) Tools for calculating NANI (Net Anthropogenic Nitrogen Input) in the watersheds of US and Europe. Oral Presentation.

- LOICZ OSC 2011, 12-15 September 2011, Yantai, China.
- Hong B, Swaney DP, Howarth RW (2010) A toolbox for calculating Net Anthropogenic Nitrogen Inputs (NANI). Oral Presentation. N2010, 3-7 December 2010, New Dehli, India.
- Hong B, Swaney DP, Howarth RW (2010) A toolbox for calculating Net Anthropogenic Nitrogen Inputs (NANI). Oral Presentation. Chesapeake Modeling Symposium 2010, 10-11 May 2010, Annapolis, MD, USA.
- Hong B, Swaney DP, Howarth RW (2009) A toolbox for calculating Net Anthropogenic Nitrogen Inputs (NANI). Oral Presentation. CERF 2009, 1-5 November 2009, Portland, OR, USA.
- Hyde K, Hall MH, Hong B, Luo L, Mountrakis G, Groffman PM, Myers SJ, Limburg KE (2008) Transdisciplinary approaches to understand and manage spreading impervious surface areas, part I: assessing the causes of sprawl. Poster Presentation. SyracuseCoE Symposium 2008, 29-30 September 2008, Syracuse, NY, USA.
- Hong B, Hyde K, Hall MH, Groffman PM, Kelly VR, Luo L, Mountrakis G, Limburg KE (2008) Transdisciplinary approaches to understand and manage spreading impervious surface areas, part II: modeling the impacts on streamflow and water quality. Poster Presentation. SyracuseCoE Symposium 2008, 29-30 September 2008, Syracuse, NY, USA.
- Hong B, Swaney DP, Howarth RW (2008) Estimating nitrogen fluxes from 16 northeastern US watersheds with the Regional Nutrient Management model (ReNuMa). Poster Presentation. Chesapeake Modeling Symposium 2008, 12-14 May 2008, Annapolis, MD, USA.
- Hong B, Swaney DP, Howarth RW, Dennis RL (2007) Improving ReNuMa (Regional Nutrient Management) model: new estimates of nitrogen loads in 16 northeastern US watersheds. Oral Presentation. ERF 2007, 4-8 November 2007, Providence, RI, USA.
- Hong B, Limburg KE, Erickson JD, Gowdy JM (2007) An interdisciplinary modeling framework assessing how human socio-economic activities on the landscape affect stream ecosystem condition. Oral Presentation. USSEE 2007, 23-27 June 2007, New York City, NY, USA.
- Hong B, Limburg KE, Erickson JD, Gowdy JM, Nowosielski AA, Polimeni JM, Stainbrook KM (2005) Connecting the dots: how economic activities on the landscape affect stream ecosystem health. Oral Presentation. ESA 2005, 7-12 August 2005, Montréal, Canada.
- Hong B, Swaney DP, Woodbury PB, Weinstein DA (2003) Long-term nitrate export from Hubbard Brook Watershed 6 driven by climatic variation. Oral Presentation. ESA 2003, 3-8 August 2003, Savannah, GA, USA.
- Hong B, Swaney DP, Woodbury PB, Weinstein DA (2003) Long-term nitrate export pattern from Hubbard Brook Watershed 6 driven by climatic variation. Oral Presentation. Annual Hubbard Brook Cooperators Meeting 2003, 8-10 July 2003, West Thornton, NH, USA.

Collaborators

Erickson JD (University of Vermont), Eriksson Hägg H (Baltic Nest Institute), Gowdy JM (Rensselaer Polytechnic Institute), Hall MH (SUNY-ESF), Howarth RW (Cornell University), Humborg C (Baltic Nest Institute), Lee KJ (Seoul National University), Limburg KE (SUNY-ESF), Marino R (Cornell University), Mörth C-M (Baltic Nest Institute), Mountrakis G (SUNY-ESF), Santoro RL (Cornell University), Smedberg E (Baltic Nest Institute), Strawderman RL (Cornell University), Swaney DP (Cornell University), Weinstein DA (Cornell University), Woodbury PB (Cornell University)