

CURRICULUM VITAE

Sylvia L. R. Wood, PhD.

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CURRENT PROJECTS

Mapping Ecosystem Services to Human wellbeing (MESH) for the SDGs

A lead coordinator on a collaborative Bioversity International - The Nature Conservancy (TNC) project for a Science for Nature And People the project aimed to develop indicators and a modelling framework to quantify and map the links between ecosystem service supply and national SDG targets, providing a basis for making comparisons of progress towards multiple SDG targets.

<http://www.naturalcapitalproject.org/MESH.htmlcy>

Review of Trade-off Analysis tools for Sustainable Agricultural Intensification

Lead co-author of a review of modelling tools and approaches for trade-off analysis for agricultural intensification across scales and disciplines to identify gaps, weaknesses and ways forward for both scientists and practitioners.

White Paper on Integrated Landscape Management Approaches for the SDGs

Member of a taskforce team led by EcoAgricultural Partners encouraging policy makers to consider and adopt integrated landscape management approaches in their efforts to implement the SDGs. The output of this working group will be a White Paper presented in Paris at COP 21.

ACADEMIC EXPERIENCE

Postdoctoral Research Fellow in Agroecology - Bioversity International, CGIAR (2014-2016)

- *Bridging Agriculture and Conservation / Making Ecosystem Services Count in the SDGs*
- Dr. Fabrice DeClerck / Dr. Shahid Naeem / Dr. Cheryl Palm (co-hosted at Columbia University)

Doctoral Degree in Geography – AgroForestry (PhD) - Dept. Geography, McGill University (2014)

- Thesis: *"The impacts of peasant agroforestry systems on landscape-level forest dynamics and livelihoods in the Peruvian Amazon"*

Masters in Forest Ecology (MSc) - Dept. of Forest Sciences, University of British Columbia (2007)

- Thesis: *"Tadpole-Sediment Interaction of the Western Toad in a Temperate-Lentic System"*

Bachelors in Biology (BSch) - Dept. of Biology, Queen's University (2005)

- Thesis: *"Inter- and intra-clutch patterns of resource allocation in Barn Swallows: evidence of reproductive costs and the "Brood Survival" strategy"*
- Minor in International Development studies

RELATED WORK EXPERIENCE

Environment and Natural Resource Management Advisor - Aga Khan Foundation Tajikistan - *Khorog, Tajikistan (2008-2009)*

- Advisor on sustainable land management & adaptation for climate change
- Coordinated field team and GIS mapping of water and forests resources for community management
- Organized international workshop on NRM Resiliency approaches with government and NGOs

Environmental and Natural Resource Management Program Assistant - Aga Khan Foundation Tajikistan – *Dushanbe, Tajikistan (2007-2008)*

- Revision of internal Environmental Impact Assessment process and training of local staff on EIA
- Case study design and implementation for project outcome evaluation and monitoring

Community Development Assistant: Agriculture & Technology - Queen's Project on International Development /HECOP - *Sucre, Bolivia (Summer 2003)*

- Assessment of rice production and appropriate technology transfer in collaboration with Bolivian NGO
- Worked independently in remote communities in Spanish to identify appropriate technology

MAJOR AWARDS

NSERC CGS-Alexander Graham Bells Graduate Scholarship – PHD (2009-2011, \$35,000/an)

NSERC PGS- Post Graduate Studies Award – MSc (2005-2007, \$17,000/an)

McGill University Alexandra Irwin Cowie Fellowship in Environment (2013, \$1300)

Warren Fellowship in GIS and Development (2010, 2011, \$5000)

McGill University Lorne Trottier Fellowship (2009, \$5000)

Global Environmental and Climate Change Center (2011, \$3000)

PEER-REVIEWED PUBLICATIONS

Wood, SLR and JM Rhemtulla. *In Prep*. Cultivation, not fallow duration, is the long-term predictor of soil and vegetation dynamics in shifting cultivation systems of the Peruvian Amazon.

Wood, SLR and JM Rhemtulla. 2016. Intensification of tropical fallow-based agriculture: Trading-off ecosystem services for economic gain in shifting cultivation landscapes? *Agriculture, Ecosystem and Environment*. Volume 215, 1 January 2016, Pages 47–56

<http://www.sciencedirect.com/science/article/pii/S0167880915300712>

Wood, S.L.R. and F. DeClerck. 2015. Ecosystem Services and human well-being in the Sustainable Development Goals. *Frontiers in Ecology and the Environment* 13: 123. <http://dx.doi.org/10.1890/1540-9295-13.3.123>

Hodgkin, T., Hunter, D. **Wood, SLR**, and N Demers. 2015 Chapter 5: Agricultural biodiversity and food security. *In* "Connecting Global Priorities: Biodiversity and Human Health, A State of Knowledge Review. World Health Organisation/Secretariat of the UN Convention on Biological Diversity.

<https://www.cbd.int/health/SOK-biodiversity-en.pdf>

Marczak, L.B., Sakamaki, T., Turvey, S., Deguise, I., **Wood, SLR** and J S. Richardson. 2010. Are forested stream buffers an effective conservation strategy for terrestrial fauna? An assessment using

meta-analysis. *Ecological Applications* 20, 126-134 <http://www.esajournals.org/doi/abs/10.1890/08-2064.1>

Wood, S.L.R and J.S. Richardson. 2010. Evidence for ecosystem engineering in tadpole of the western toad. *Aquatic Sciences*, 72: 499- 508. <http://link.springer.com/article/10.1007/s00027-010-0151-x>

Wood, S.L.R and J.S. Richardson. 2009. Impact of sediment and nutrient inputs on growth and survival of tadpoles of the Western Toad. *Freshwater Biology*, 54: 1120–1134. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2427.2008.02139.x/full>

De Boeck, G., Hattink, J., Franklin, N.M., Bucking, C.P., **Wood, S.L.R**, Walsh, P.J. and C.M. Wood. 2007. Copper toxicity in the spiny dogfish (*Squalus acanthias*): Urea loss contributes to the osmoregulatory disturbance. *Aquatic Toxicology* 84(2), 133-141. <http://www.sciencedirect.com/science/article/pii/S0166445X07002160>

Wood, C.M., Sloman, K.A., Kajimura, M., Johannsson, O.E., Walsh, P.J., Scott, G., **Wood, S.L.R**, Almeida -Val, V.M.F., and Val, A.F. (2006). Behavioural, respiratory, ionoregulatory and metabolic adaptations to low environmental O₂ and the influence of body size in the hypoxia –tolerant Amazonian oscar (*Astronotus ocellatus*). pp. 179-200 In: Environmental Protection Agency Research Report Series. US EPA, Washington, D.C. EPA/600/R-07-010 (Eds. Brauner, C.J., Surajdric, K., Nilsson, G., and Randall, D.J.).

Sloman, K.A., Wood, C.M., Scott, G.R., **Wood, S.L.R**, Kajimura, M., Almeida-Val, V.M.F. and Val, A.L. 2005. The effect of size on the physiological and behavioural responses of Oscar, *Astronotus ocellatus*, to hypoxia. *Journal of Experimental Biology* 209: 1197-1205. <http://jeb.biologists.org/content/209/7/1197.short>

Grosell, M., Laliberte, C.N., Wood, S.L.R, Jensen, F.B. and C.M. Wood. 2001. Intestinal HCO₃⁻ secretion in marine teleost fish: evidence for an apical rather than basolateral Cl⁻/ HCO₃⁻ exchanger. *Journal of Fish Physiology and Biochemistry* 24: 81-95 (relevant work experience) <http://link.springer.com/article/10.1023/A:1011994129743>

SELECT PRESENTATIONS

Oral Presentation - Ecological Society of America, Baltimore, USA - August 11-14 (2015)
"Ecosystem Services in Large Agricultural Landscapes"

Oral Presentation - International Association for Landscape Ecology - July 5-10 (2015)
"To Plant or Not to Plant: Tradeoffs in Ecosystem Services of fruit orchards and fallows in shifting cultivation"

Oral Presentation - Ecosystem Service Partnership, San Jose, Costa Rica - Sept 7-13 (2014)
"Ecosystem Services in the SDGs - Where are we?"

Oral Presentation - Landscape Ecology and IUFRO, Concepcion, Chile - Nov 4-9th (2012)
"Land Wealth and Biodiversity: Maintaining forest structure and diversity in dynamic landscapes of the Peruvian Amazon"