

## VICTORIA LOUISE SLOAN

Postdoctoral Research Associate  
Oak Ridge National Laboratory, Environmental Sciences Division

Email: [sloanvl@ornl.gov](mailto:sloanvl@ornl.gov)

Phone: 865-576-9365

## EDUCATION

- 2006 - 2011    **Ph.D. University of Sheffield, UK**  
Department of Animal and Plant Sciences  
Funding: NERC 'Blue Skies' studentship, within 'ABACUS' consortium ([www.abacus-ipy.org](http://www.abacus-ipy.org))  
Supervisor: Dr Gareth Phoenix  
Title: Plant roots in arctic ecosystems: stocks and dynamics, and their coupling to above-ground parameters
- 2001 - 2002    **M.Sc. (with distinction), University of Newcastle, UK**  
Environmental Resource Assessment  
Supervisor: Dr Roger Smith  
Dissertation title: Vegetation and hydrological monitoring of the Border Mires following management interventions designed to restore blanket bog communities
- 1998 - 2001    **B.Sc. (First Class Honours), University of Durham, UK**  
Ecology and Earth Science (within Natural Sciences programme)  
Awarded Natural Sciences prize for Geology

## EMPLOYMENT

- 2012            **Postdoctoral Research Associate, Oak Ridge National Laboratory**  
Project: NGEE-Arctic <http://ngee-arctic.ornl.gov/>  
Vegetation dynamics group, PI Rich Norby.
- 2011            **Visiting Academic Fellow, University of Bristol**  
Teaching plant identification and habitat mapping on the 'Environmental Systems' module within the Water and Environmental Management MSc program; assisting with redesign of ecological modules for 2012 course.
- 2011            **Researcher, University of Sheffield**  
Fixed-term contract (March-October), Department of Animal and Plant Sciences.  
Project: UKREATE (DERFRA), investigating recovery of limestone and acidic grassland plant communities following long-term N deposition and P fertilisation.
- 2002 - 2006    **Ecologist/Senior Ecologist, White Young Green Environmental**  
  
Role included: Species and habitat surveys, preparation of Environmental Impact Statements, production of professional reports and materials for public enquiries, and management of GIS and cartography for the ecology team.

## GRANTS

- 2009            ANS Scholarship (travel and accommodation grant to undertake additional fieldwork on long-term experimental plots) *Abisko Scientific Research Station* (£700)
- 2009            LAPBIAT travel grant (to undertake additional experiments based at Kevo Subarctic Research Station) *Lapland Atmosphere-Biosphere Facility* (£1500)

## PUBLICATIONS

**Sloan, V.L.**, Fletcher, B.J., Press, M.C., Williams, M. & Phoenix, G.K. Leaf area index predicts carbon stocks and turnover above and below-ground across arctic ecosystems. (submitted, *Science*)

Street, L.E., Subke, J.-A., Sloan, V.L., Ductroy, H., Phoenix, G.K., Williams, M. The fate of assimilated carbon in Arctic vegetation: the importance of non-vascular plants. (in review, *New Phytologist*).

Hartley, I.P., Garnett, M.H., Sommerkorn, M., Hopkins, D.W., Fletcher, B.J., **Sloan, V.L.**, Phoenix, G.K., Wookey, P.A. (2012) A potential loss of carbon associated with greater plant growth in the European Arctic. *Nature Climate Change*. doi:10.1038/nclimate1575

Street, L.E., Stoy, P.C., Sommerkorn, M., Hill, T.C., Fletcher, B.J., **Sloan, V.L.** & Williams, M. (2012) Seasonal bryophyte productivity in the sub-arctic: a comparison with vascular plants. *Functional Ecology*, 26, 365-378

Iversen, C., Allen, M.F., Childs, J., Eissenstat, D.M., Lilleskov, M.T., Murphy, M.T., Sarjala, T.M., **Sloan, V.L.** & Sullivan, P.F. (2011) Advancing the use of minirhizotrons in wetlands. *Plant and Soil*, 353, 23-39

## PRESENTATIONS

**Sloan VL**, Fletcher, BJ & Phoenix, GK. 2012 Getting to the root of the problem: below-ground plant C stocks and dynamics in arctic ecosystems. University of Fairbanks, Alaska. *Invited talk*.

**Sloan VL**. 2012 Coupling of C stocks and dynamics to LAI across contrasting sub-Arctic plant communities. DOE supported workshop: Scaling root processes: Global Impacts, Washington. *Oral presentation*.

**Sloan VL**. 2010 Fine root dynamics across northern high-C ecosystems using minirhizotrons. Workshop: Advancing minirhizotron use to examine ephemeral root dynamics in peatland high carbon ecosystems. Oak Ridge National Laboratory, Tennessee, USA. *Invited talk*.

**Sloan VL**, Fletcher, BJ & Phoenix, GK. 2010 Fine root and leaf turnover in arctic ecosystems: an opportunity to predict below-ground dynamics from above-ground measurements? British Ecological Society Annual Meeting, University of Leeds, UK. *Oral presentation*.

**Sloan VL**. 2009 Roots and shoots in arctic tundra plant communities. UK Polar Network Day for Early Career Researchers, Southampton, UK. *Poster presentation*.

**Sloan VL**, Fletcher, BJ & Phoenix, GK. 2009 Contrasting phenology of shoots and roots in arctic tundra plant communities. 7th International Society of Root Research (ISRR) Symposium, BOKU, Vienna, Austria. *Oral presentation*.

**Sloan, VL** & Phoenix, GK. 2007 Understanding the role of plant roots in arctic carbon cycling. 'CLASSIC' Spring School, Abisko. *Poster presentation*.

## PUBLIC OUTREACH ACTIVITIES

Presentation on arctic plants for Bristol U3A (an educational group for the over 65s)

Designing and producing an information stand to educate members of the public about amphibian and reptile conservation

Writing a grant application to the Open Air Laboratory to further biological recording in my local area; providing a press release and material for a newspaper article, and giving an interview for BBC radio following the award of the grant.