

CATHERINE PREECE

Career History and Research Achievements

2014-2016

**Marie Curie Research Fellow – ‘Drought impacts on plant-soil interactions and ecosystem stability’
*Global Ecology Unit, CREAM, Spain.***

Working with: Prof. Josep Peñuelas

EU FP7 funded project aimed at increasing understanding of the mechanisms of plant-soil interactions, the role of root exudates, and the importance of soil communities for ecosystem stability.

2011-2014

Post-doctoral research associate – ‘Origins of agriculture – an ecological perspective on crop domestication’

University of Sheffield, UK

Supervisors: Dr Colin Osborne and Prof Mark Rees

NERC (Natural Environment Research Council, UK) funded project aimed at developing a new ecological model for crop domestication, integrating the roles of environmental change, plant traits and human agency, under the constraints of the archaeological record.

2007-2011 **PhD – ‘The impacts of icing events on sub-arctic heathland vegetation’**

University of Sheffield, UK

Supervisors: Dr Gareth Phoenix and Prof Terry Callaghan

NERC funded project investigating how ice encasement affects the ecology and physiology of dwarf shrubs in sub-arctic heathland: field work conducted at Abisko Scientific Research Station (Sweden).

2005-2006 **Undergraduate placement – ‘Investigating the mechanisms of secondary succession in terrestrial plants’**

Imperial College London, UK

Supervisor: Dr Peter Manning

Twelve month project exploring the roles of nutrients and competition in controlling succession (during third year of four-year BSc course).

Publications

Preece, C, Livarda, A, Wallace, M, Martin, G, Charles, M, Christin, P-A, Jones, G, Rees, M, and Osborne, C.P, (2015) ‘*Were Fertile Crescent crop progenitors higher yielding than other wild species that were never domesticated?*’, **New Phytologist** (in press).

Preece, C and Phoenix, G.K, (2014) ‘*Impact of early and late winter icing events on sub-arctic dwarf shrubs*’, **Plant Biology** **16(1)**: 125-132.

Preece, C and Phoenix, G.K, (2013) ‘*Responses of sub-arctic dwarf shrubs to low oxygen and high carbon dioxide conditions*’, **Environmental and Experimental Botany** **85**: 7-15.

Bokhorst, S, Bjerke, J.W, Tømmervik, H, **Preece, C** and Phoenix, G.K (2012) ‘*Ecosystem response to climatic change: the importance of the cold season*’, **Ambio** **41** (Supplement 3): 246-255.

Preece, C, Callaghan, T.V and Phoenix, G.K, (2012) ‘*Impacts of winter icing events on the growth, phenology and physiology of sub-arctic dwarf shrubs*’, **Physiologia Plantarum** **146(4)**: 460-472.