



AIAS Newsletter July 2011

NCCARF Grant (National Climate Change Research Facility)

A partnership of Griffith University, National Parks and Wildlife Service and the Australian Alps Liaison Committee has received one of only seven NCCARF terrestrial ecology grants. The title of the project is: 'Determining high risk vegetation communities and plant species in relation to climate change in the Australian alpine region.' The aim is to use plant functional traits in combination with existing long-term data sets to assess the risk associated with different threats to the flora of the Australian Alps, including directly from climate change (reduced snow cover, warmer summers), and indirectly (increased fires, grazing by feral animals, and summer tourism). The study is based on a number of long-term data sets: (i) plant composition, cover, and climatic variables in snow banks; (ii) the GLORIA (Global Observation Research Initiative in Alpine Environments) data set, also looking at plant composition, cover, and climatic variables (iii) Impacts of grazing and drought –several long term datasets; plus the impacts of feral hares, from a manipulative experiment comparing vegetation in 20 hare exclosures with control sites over 5 years. (iv) Fire data sets from 2003 to 2011 comparing burnt and unburnt alpine and subalpine plant communities; (v) Impacts of summer tourism including hiking, mountain biking, camping and different trail types on alpine vegetation. The whole thing is anchored by a plant functional traits database of alpine, subalpine and weed species which will include data on seven functional traits for each species including information on flowering based on weekly flowering data set accumulated over the past five years.

For more information please contact Catherine Pickering, Griffith University.

ESA Conference – Hobart!

Don't forget that the 2011 Annual Conference of the Ecological Society of Australia will be held in Hobart, Tasmania for the first time in 15 years, from 21 – 25 November 2011.

The theme of the conference is "Ecology in changing landscapes", and there is both an alpine symposium and a recreation ecology symposium. Submission of abstracts will be closing on Friday, 29 July 2011. So get in quick.

More Tasmanian news:

Jamie Kirkpatrick and Kerry Bridle re-measured their Liaweenee exclosure plots this summer and are re-measuring some of the other Central Plateau exclosure plots later in the year. They published a paper last year (Kirkpatrick, J.B., Bridle, K.L. and Dickinson, K.J.M., 2010. Decades-scale vegetation change in burned and unburned alpine coniferous heath. *Australian Journal of Botany* 58, 453-462.) that refuted the generalisation of disturbance-resistance made for all Australian alpine vegetation in an earlier synthetic multi-authored paper.

AALC proposal accepted

The project: "A management oriented survey of required climate change research and monitoring" (submitted by Ken Green) got a Guernsey from the Australian Alps Liaison Committee. This project sought no funding but seemed to strike a chord with the committee. The project is to research management attitudes and perceived directions for long-term monitoring within Australia's alpine regions. In the past the AALC has striven for climate change projects with management directions. This project would look to address this issue by surveying operational managers on what they want to see from climate change research.

Upcoming conference:

Planet Under Pressure 2012 - New Knowledge Towards Solutions 26-29 March 2012 London, Abstract submission is now open for this major international science conference focusing on solutions to the global sustainability challenge. It is organised by the International Geosphere-Biosphere Programme, DIVERSITAS, International Human Dimensions Programme on Global Environmental Change, World Climate Research Programme, and Earth System Science Partnership. The conference will provide a comprehensive update of the pressure planet Earth is now under. It will discuss solutions at all scales to move societies on to a sustainable pathway and will provide scientific leadership towards the 2012 UN Conference on Sustainable Development - Rio+20. This is an open call for participants and for abstracts for presentations and posters to be submitted against the session topics described on the conference website under the following outline: Day 1: State of the planet: the latest knowledge about the pressures on the planet Day 2: Options and opportunities: exchanging knowledge about ways of reducing the pressures on the planet, promoting transformative changes for a sustainable future and adapting to changes in the global system Day 3: Challenges to progress: clarifying what is preventing or slowing humanity from implementing potential solutions Day 4: Ways ahead: a vision for 2050 and beyond, and exploring new partnerships and pathways towards global sustainability. Each day will include relevant aspects of the conference themes: A. Meeting global needs: food, energy, water and other ecosystem services B. Transforming our way of living: development pathways under global environmental change C. Governing across scales: innovative stewardship of the Earth system The closing date for abstract submission is 19 August 2011. For further information on submitting an abstract, conference

themes and sessions, mentoring and funding visit:
www.planetunderpressure2012.net

Recent Publications in 2011

Edwards E.D. and Green K. (2011) Two new species of *Oxycanus* Walker (Lepidoptera: Hepialidae) from Kosciuszko National Park, one with a sub-brachypterous female. *Australian Journal of Entomology* 50, 78-85.

Green K (2011) The transport of nutrients and energy into the Australian Snowy Mountains by migrating Bogong Moths *Agrotis infusa*. *Austral Ecology* 35, 25-34.

Growcock, A.J. and Pickering, C.M. (2011) Impacts of small group short term experimental camping on alpine and subalpine vegetation in the Australian Alps. *Journal of Ecotourism* 10: 86-100.

Pickering, C.M., Mount, A., Wichmann, M.C. and Bullock, J.M. (On-line 2011) Estimating human-mediated dispersal of seeds within an Australian protected area. *Biological Invasions*. DOI 10.1007/s10530-011-0006-y

Pickering, C.M. (2011). Changes in demand for tourism with climate change: A case study of visitation patterns to six ski resorts in Australia. *Journal of Sustainable Tourism*.19: 767-781.

Roberts, C, Kirkpatrick, J.B. and McQuillan, P.B., 2011. Tasmanian lentic wetland lawns are maintained by grazing rather than inundation. *Austral Ecology* 36, 303–309

Venn, SE, Green, K. Pickering CM and Morgan J. (2011) Using plant functional traits to explain community composition across a strong environmental filter in Australian alpine snowpatches *Plant Ecology online*