



BIOLOGY COLLOQUIUM

Friday, 3 November 2017 | 4pm | DBS Conference Room 1

Hosted by Graduate Students' Society

Plants, traits and models



By Peter Vesk

*Associate Professor, University of
Melbourne, Australia*

There are about 300,000 species of seed plants in the world. We have good ecological knowledge about relatively few of them and rather less about the great majority. The ability to generalise our knowledge is a central feature of science. Moreover, generalisation is crucial to ecological management when we seek to manage species with little direct knowledge. In this talk I will describe the way my colleagues and I have been working through the problem of generalising ecological knowledge and in particular the use of statistical models for species responses involving species traits. I will draw on case studies of species distribution, growth responses after fire, and urbanisation.

Assoc Prof Vesk is a quantitative ecologist bridging the gaps between field ecology of plants, comparative ecology, modelling and decisions. Focus is on gathering, formalising and generalising ecological knowledge, often for ecological management. One theme is multispecies statistical modelling incorporating species traits or particular forms of non-independence among species. Applied emphasis has been on vegetation change and estimating its likelihood and uncertainty to aid ecosystem management decisions. He has 95 published papers, a H-index of 30 and over 3000 citations, and is a CI in the ARC Centre of Excellence in Environmental Decisions.