



Lachlan Farrington

School of Earth and Environmental Sciences

University of Adelaide

Australia 5005

Lachlan.Farrington@adelaide.edu.au

Are some life-history strategies more vulnerable to the genetic consequences of habitat fragmentation? A case study using South Australian *Caladenia* species?

The Mount Lofty Ranges, adjacent to the South Australian capital city of Adelaide, constitute a region which was among the first of Australian landscapes to be heavily fragmented through land clearing. The area was historically home to a number of endemic orchid species which are now either extinct or under threat. The contemporary distribution of these species, particularly of the genus *Caladenia*, is interesting with respect to a diversity of traits in habitat requirements and pollination specificity. Determining how these variables govern species health and persistence is an important ingredient for the overall management and future conservation of orchid species. This talk will provide an overview of a genetic study which is comparing microsatellite allelic diversity and structure between species expressing the following range of habitat and pollination specificities: widespread distribution and pollinator specificity; restricted distribution and pollinator specificity; widespread distribution and pollinator generality and restricted distribution and pollinator generality. The results of this study will be presented with an emphasis on how this information can be incorporated into management and conservation strategies.