



Members in Profile

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I am currently an Honorary Associate Professor in the School of Geosciences at the University of Sydney. Previously I was an Associate Dean of the Faculty of Science, a Deputy Chair of the Academic Board, and Director of Postgraduate Studies for the Faculties of Science, Agriculture and Veterinary Science. During these years I was involved in establishing postgraduate degrees in environmental science, among a number of others. Several years were spent as a councillor of the GSNSW, including periods as Vice President and President, during which time I organised two GSNSW conferences. In 1997 I was awarded a Professional Service Commendation from IAG; in 1998 a Fellowship of GSNSW; in 2005 the Macdonald Holmes Medal; and in 2012 a Fellowship of the Institute of Australian Geographers. Currently I am responsible for two postgraduate coursework units (*Management of Parks* and *Integrated Research Practice*) and supervise four PhD students.



My interest in geography started at an early age, while contemplating a highly coloured wall map of the world above the blackboard in a one-teacher country school and wondering what all these exotic places were like. I probably started teaching geography earlier than most too – in a one-teacher school everyone listened in on everyone else’s class, so in grade 3 I was taking grade 5 for the “capes and bays” geography of New Zealand. Thankfully geography has progressed far from this uninspiring approach which nevertheless failed to dampen my continuing enthusiasm for landscape interpretation and environmental geomorphology.

Geography for me was always focussed on the processes operating in places and landscapes, particularly in relation to weathering and erosion. Research on desert varnish, a thin (<0.3mm) often shiny deposit on stable rock surfaces, led to an interest in the conservation of aboriginal rock engravings in arid parts of Australia (Broken Hill in NSW and the Pilbara in WA). Subsequently I became involved in assessing weathering processes and rates of deterioration of sandstone and marble used in historic buildings and structures in the urban environment of Sydney, and investigating which stone management and conservation activities would be most effective. This weathering research has run in parallel with work on soil erosion, especially post-fire sediment movement. The impact of moderate to high severity wildfires and prescribed burns are

predictable – erosion will increase – but the quantity of sediment moved is unpredictable due to the role of post-fire rainfall intensity and amount, and soil conservation measures. Fires alter vegetation cover and thus rainfall interception, as does logging of forests and human activities including recreation; all these impacts contribute in varying degrees to accelerated sediment movement.

Current research is directed towards the application of geomorphic knowledge to environmental problems, with much of this work being conducted with PhD students: investigations on desertification and sustainability in arid lands, post-fire erosion, logging impacts, and pathway erosion in national parks. The multi-faceted discipline of geography is a natural and leading contributor in progress towards successfully managing environmental problems.