Nomination for the Griffith Taylor Medal, 2015

Arthur Conacher

Arthur Conacher is an outstanding Australian geographer whose research, teaching, service and leadership has been of enormous influence both nationally and internationally. The following nomination highlights just some of the key features of Professor Conacher’s distinguished career.

Arthur Conacher was born in South Africa and attended the University of Durban. He later received his training in Geography at the University of Auckland where he gained a Bachelor of Arts in 1964 and a Master of Arts (Hons) in 1965. A brief stint as a researcher with the Auckland Regional Planning Authority accompanied these studies, before he took up an academic appointment in Geography at the University of Queensland in 1966. In 1968 Arthur travelled across the country to take up a Lectureship at the then recently established Department of Geography at The University of Western Australia (UWA). He remained at UWA until his retirement in 2004, and remains an active member of the School of Earth and Environment in an Honorary role.

In 1992, Professor Conacher was awarded a higher doctorate, a Doctor of Science, from the University of Western Australia. This was awarded for a thesis entitled *Environmental Studies With Particular Reference to Western Australia*, which was based on a collection of his most influential peer reviewed papers to that date, spanning geomorphology, land degradation, forest management, and environmental policy.

Arthur’s early research was initially focused on the development of a model of soil/slope relationships (the Nine Unit Landsurface Model). Important co-authored publications in 1968 (in *Zeitschrift für Geomorphologie*) and in 1977 (in *Geoderma*) were highly influential internationally in physical geography and other disciplines (e.g. soil science), and are important foundations of both teaching and research. These two papers alone have had nearly 350 citations.

Arguably even more influential work was to follow with Conacher being a major contributor to our understanding of the problem of secondary salinity in dryland agricultural environments. While the pioneering elements of his work on salinity were conducted in Western Australia, the research had a global reach influencing the understanding and management of agriculture in a range of semi-arid environments. The antecedents of this work were undertaken in the wheatbelt of Western Australia in the early 1970s, where he identified secondary salinity as a result of land clearing as one of the State’s looming environmental disasters. This was at a time when few others recognised the scale or the potential of this problem. Indeed, the Department of Agriculture at that time regarded salinity as a minor problem, instead pointing to soil erosion as the major land management issue facing the Western Australia.

An early paper with David Murray in *Australian Geographical Studies* (1973) highlighted the potential causes and impacts of salinity, and this was followed by a large volume of work on the topic over much of the next three decades. One of his major contributions was to establish
that throughflow is a significant mechanism contributing to the problem of secondary salinity, and that managing this requires the manipulation of both shallow and deep aquifers using a combination of engineering and vegetative approaches. The findings of this work have been highly influential not only in physical geography and hydrology, but also in policy and environmental management circles. The work of Arthur and his PhD student Dr Richard George challenged the then accepted orthodoxies of salinity management and provided a major impetus to renewed salinity research and practical responses by CSIRO and the Western Australian Department of Agriculture. Indeed Dr George has been active in this field through his own career and is identified as a leader nationally and internationally on the basis of the mentoring, research training and collaborative research provided Arthur. Moreover, Arthur’s work and leadership in this field contributed to the Western Australia’s Salinity Action Plan and to the Commonwealth’s National Action Plan for Salinity and Water Quality.

Throughout his work on secondary salinity Arthur has been far from ‘arm’s length’. He actively worked with farmers and other land users as they struggled to come to terms with the scale and impact of salinization, and helping to identify practical remedial strategies, such as near surface drainage, vegetation and other controls – responses that are now seen as common place, but at the time were cutting edge. Importantly, Arthur understood and empathised with the challenges facing farmers, not seeing landowners as necessarily the cause of the problem, but rather as part of the solution to land degradation. In many ways, his research, authorship and advocacy in this area was far ahead of its time in linking on-farm profitability with environmental action and managing land degradation, and is the model under which the Landcare, Natural Heritage Trust and more recent stewardship programs have evolved.

As noted above, the influence of this pioneering body of work was far from limited to Western Australia. Indeed, Arthur’s work has been widely cited and influential in helping to understand the salinity problem in eastern Australia, the Middle East, Asia and North America. Moreover, the work crossed disciplinary boundaries, and had an impact in agricultural science, soil science, environmental engineering and ecology.

Arthur’s deep commitment to environmental sustainability led to one of the most challenging periods of his academic career. During the 1970s, his work on conservation led to an interest in the State’s woodchip industry and issues associated with forest management. He became increasingly concerned about the impact of logging in Western Australia’s south-west forests and became an active campaigner to bring to an end the woodchip industry. He was an important member of the South-West Forests Defence Foundation in the mid 1970s, contributing to a number of government inquiries into forest management and ultimately playing a critical role in ensuring the end of old-growth logging in Western Australia.

By the 1980s and 1990s, Arthur’s various interests began to cohere increasingly under the broad banner of ‘land degradation’. This passion and commitment contributed to a large volume of publications on issues such as catchment management, agricultural land use, environmental policy and planning, and sustainability. This period includes two highly influential volumes co-written with his wife Jeanette: Rural Land Degradation in Australia (1995) and Environmental Planning and Management in Australia (2000) for Oxford University Press. Both have been widely used as textbooks in Geography (and other) courses across Australia, and have also achieved broader community and policy impact.
His interests in land degradation again saw him active outside of the academy. He was a Member and subsequently Chair of the Helena River Catchment Group between 1997 and 2000, a Ministerial appointment to the Darling Range Regional Park Community Advisory Committee, and has worked closely with a wide range of community groups and government agencies on issues related to land degradation, catchment management and environmental planning.

It is important to stress that Arthur’s deep commitment to a practical, hands-on and local approach to environmental research and management was matched with his international influence. His work crossing geomorphology, land degradation, and environmental planning and management has helped shape international research agendas in these fields. His work is particularly highly cited by researchers working on a range of Mediterranean and semi-arid environments. He has also held visiting appointments at Reading University, Trent University and Guelph University, and has undertaken research in Europe, Africa, North America, China, Central America and New Zealand. He was also active in the establishment of the IGU’s Commission on Land Degradation and Desertification (COMLAND), and was Secretary of that organisation for nearly a decade. In 2006, a special issue of *Zeitschrift für Geomorphologie* was published to recognize Professor Conacher’s contributions to studies of land degradation and desertification. He was awarded for his contribution to COMLAND in 2006, and again in 2013. Collectively, across all of his areas of research interest, Professor Conacher has produced more than 250 scholarly publications.

Of course, research is not Professor Conacher’s only contribution to the discipline. For nearly 40 years he remained active in undergraduate teaching, presenting courses and conducting field and laboratory work in, among other things, land degradation, geomorphology and environmental planning and management. One of Arthur’s greatest achievements is his education of thousands of students of geography over four decades and the contribution that many of these individuals are now making to society.

He also supervised a large number of Honours students, and around 25 postgraduate (Masters and PhD) research students. His careful mentoring, enthusiastic visits to field sites, challenging questioning and meticulous attention to detail have been enduring features of his supervision. Among these graduates are leading scholars at Australian and other universities, as well as highly influential public servants and industry leaders. He has also been an invaluable mentor to many early career (and some not so early career) academic staff.

Professor Conacher has been an important leader in Australian geography. He was Head of the Geography Department at UWA on three occasions (1977-79; 1988-98 and 2001-2002). He was elected Alternate Dean from 1990-1992 and Dean of the Faculty of Science in 1993, and was involved in numerous Faculty and University Committees over the years. In 1991 he led the development of the University’s new Environmental Science programs. He was also highly active in the development of the high school Geography curriculum in Western Australia during the 1970s and 1980s.

More broadly, he has been an important figure within the Institute of Australian Geographers. He first joined the Institute in 1966 and, to our knowledge, has been a continuous member ever since. From 1983-1988 he served on the IAG Council, and, from 1993-1995, represented the IAG on the Australian Geosciences Council. He was the organiser and conference
secretary for the 1986 Perth IAG Conference, the first to be held in Western Australia. He was awarded Fellowship of the IAG in 1998. Arthur has also been an outstanding contributor to the Institute’s journal, with papers appearing over a span of 40 years. His first paper in *Australian Geographical Studies* was ‘Open systems and dynamic equilibrium in geomorphology’ published in 1969 and his most recent ‘Land degradation and rehabilitation in ecologically fragile areas’ was published in *Geographical Research* in 2009. Between 2000 and 2009 he was co-editor of *Geographical Research* with Roy Jones and George Curry with specific responsibility for physical and environmental geography. This team also saw the journal increase from 3 to 4 volumes per year, successfully regain ISI status and change its name from *Australian Geographical Studies* to *Geographical Research*.

Arthur Conacher’s longstanding and distinguished contribution to Australian and world geography and environmental management would make him a most worthy recipient of the Griffith Taylor Medal.

We attach the most recently available Curriculum Vitae as further support for this nomination.

**Proposors**

Professor Matthew Tonts  
The University of WA

Dr Natasha Pauli  
The University of Western Australia

**Seconded**

Associate Professor Ian Rutherfurd  
University of Melbourne

Professor Jamie Kirkpatrick  
University of Tasmania

Dr Megan Farrelly  
Monash University

Dr Nik Callow  
The University of Western Australia

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