Australian Freshwater Sciences Society Hilary Jolly Medal Citations



2020: Ross Thompson

The Hilary Jolly Medal is awarded in memory of Hilary Jolly and recognises excellence across any of three criteria: research excellence, in particular key publications; education or communication excellence, including the mentoring of early career researchers, that advances and disseminates limnological knowledge in a variety of forums; and management excellence, especially the conservation and management of freshwaters.

Our awardee is recognized worldwide for their contributions to understanding food web ecology and the management of aquatic ecosystems. Over the past two decades, our awardee has published prolifically, with more than 100 papers, a dozen of which have been cited more than 100 times. Our awardee's impact is profound, both academically and in the management of aquatic ecosystems. The awardee has been an outstanding mentor, with many students, staff and colleagues benefitting from their enthusiasm, kindness and wisdom.

The awardee is generous with their time with students and highly sought after as a supervisor. Our awardee enables and supports their staff, encouraging them to achieve to their potential and widely lauding their successes. Our awardee is a valued colleague, willing to contribute ideas, energy and hard work to achieving collaborative goals.

The combination of wide scientific experience, professional collegiality and friendly nature, and a capacity to communicate effectively has ensured that our awardee is often involved in the collaborative management of Australian water resources. Their contributions have enhanced the effectiveness of policy and management actions, especially in rivers of Murray Darling Basin and inland Australia.

Our awardee's influential publications that have challenged aquatic food web science, years of inspired teaching and postgraduate supervision, mentoring of new generations of freshwater ecologists, and sustained involvement in effective river management are the key attributes of an exemplary contribution to Australian freshwater science, and the reason that the 2020 Hilary Jolly Medal is awarded to Professor Ross Thompson.

Congratulations Ross - I invite you to attend next year's AFSS conference to receive your medal and to present the Hilary Jolly address at the conference.

2019: Peter Gell

This year's recipient has a long and distinguished research career in paleolimnological research with 60+ papers in this field and a few more in other ecological endeavours. He pioneered the use of diatoms in salinology to determine past salinities and hence climate change from the analysis of sediment cores. Over the years his use of diatoms has widened to other taxa and to flood plain lakes, estuaries and peat bogs, with similar major conclusions on past conditions in these waterbodies. His papers are usually multi-authored with himself as the leader and published in premier journals. Besides studies on individual sites, he was written many reviews and some of these are global. Citations of his works are extensive (100+ for some, even 25+ for very recent ones).

The academic positions he has held over the years reflect this research excellence and his leading position in palaeolimnology. Since 2014 he has been Professor of Environmental Science at Federation University, Ballarat and before that various prestigious positions including an Adjunct Professor, Acting Pro-vice Chancellor for Research at Ballarat University, and research leaders at different places and times. Such honours confirm his research excellence.

A further measure of his research excellence is the amount of research funds he has attracted. The figure is \$8 mill and still rising.

This year's recipient trained in education and taught high school. This laid a foundation for inspirational education experience and leadership. Perhaps this has reached its zenith in his position at Federation University where he has mentored many outstanding students. He has been prominent in disseminating knowledge by being the editor of four books and a writing contributing chapters to many (12+) more. Also he has run symposia and conferences and attended many, many others disseminating knowledge by paper presentation (and of course ad hoc discussions) Then there are post graduate students educated --- at last count 25 PhDs, 8 Masters and 30+ Honours (though not all in limnology).

Given his works with salinising lakes and flood plain billabongs mostly in degraded environments, it is not surprising his work has lead to practical outcomes and consultations in management. This is illustrated by the many reports he had generated for environmental organisations and by also talks to similar groups, and his CV speaks of volumes with regards to his contributions.

In summary it is his extensive and outstanding research in palaeoecology that is very impressive, not forgetting his contribution to higher education. We therefore invite Professor Peter Gell, to accept the 2019 Hilary Jolly Award and present the Hilary Jolly Memorial Lecture at the society's next annual conference.

2018: Angela Arthington

The 2018 recipient of the Australian Society for Limnology Medal was nominated for her outstanding contribution to Australian freshwater ecosystems, in the fields of research, management and education. The 2018 ASL Medal is awarded to Emeritus Professor Angela Arthington.

Angela is a leading international expert recognised for her ground-breaking research on environmental flows, fish ecology and fish conservation. She has over 40 years of research practice, more than 280 refereed publications and countless technical reports. Angela has either lead, or been a major contributor, in gaining more than \$9 million in research funding for freshwater science since 1980. Angela's international reputation as one of the founding researchers in environmental flows methodology, her leadership in the management of a broad range of Australian freshwater systems and her sustained role as a supervisor of higher degree students are evidence of her exemplary contributions to Australian limnology.

Angela founded and led the Centre for Catchment and In-Stream Research (CCISR), which has become one of the leading research institutes in Australia, the Australian Rivers Institute. Angela has been a Fellow of the Australian Institute of Biology since 1991.

Angela has a long and distinguished career of influencing the policy related to, and the management of, Australia's freshwater ecosystems. She was a key player in the National River Health Program and a directing force in the Water Resources R&D Corporation (AWRAC), and the Land and Water Resources Research and Development Corporation (LWRRDC). LWRRDC

was a major funding agency for some of the foundation research on many Australian freshwater systems, much of this research is still underpinning management actions in river catchments. Angela has also held significant positions on the numerous advisory groups.

Angela has published widely on a range of topics, including river ecology, environmental flows and flow management, ecology and management of exotic fishes, biodiversity and conservation biology, ecotoxicology and biomonitoring of river health. She has over 280 publications, including 200+ refereed articles. Angela has an h-index of 58 and has over 19 000 citations. Two publications co-authored by Angela have over 2000 citations each and are 'citation classics" – Dudgeon et al. (2006) and Bunn & Arthington (2002). She has an international reputation for pioneering work on ecosystem-level environmental flow methods. She has researched the ecology and impacts of exotic fishes in Australia, with emphasis on escaped aquarium fish. She has also led significant research projects into the distribution, ecology and conservation status of two vulnerable fish species in SE Queensland, contributing to the recovery plans for those species. Angela also undertook substantive research into ecotoxicology and biomonitoring of river health, contributing to the development of new methods of assessing stream health using native and exotic fish.

Angela was a member of the academic staff at Griffith University from 1976 until 2011 and has supervised 35 students at the honours, masters and postgraduate level. Many of her students have gone on to make a significant contribution to freshwater ecology in diverse ways including employment in CSIRO, Local and State Government, as private consultants, in business and in University faculty positions.

As a strong national and international leader in freshwater science for over 40 years, with major impacts on national policy and management agendas with respect to freshwater systems, Emeritus Professor Angela Arthington is a worthy recipient of the 2018 ASL Medal. We therefore invite Angela Arthington to accept this medal and to present the Hilary Jolly award address at our next annual conference in 2019.

2017: Jane Chambers

Citation coming soon

2014: Fran Sheldon

The ASL medal is awarded in memory of Hilary Jolly and recognises excellence across any of three criteria: research excellence, in particular key publications; education or communication excellence, including the mentoring of early career researchers, that advances and disseminates limnological knowledge in a variety of forums; and management excellence, especially the conservation and management of freshwaters. This year's recipient is remarkable for having been nominated against all three criteria. The nomination was supported by a wide range of distinguished scientists, including former students, which reflects the diversity of her research in inland waters. She is also the first recipient of the ASL Early Career Excellence Award to have achieved the ASL medal. I am delighted to present Associate Professor Fran Sheldon to you as this year's recipient of the ASL medal.

Fran began her career at the University of Adelaide, where her Honours and PhD, focussing on the Murray River, were supervised by Keith Walker. She then moved on to a variety of postdoctoral research projects on dryland rivers, including Cooper Creek, for the then CRC for Freshwater Ecology, which entailed a move to Griffith University in Queensland. Fran joined the academic staff of the School of Environment at Griffith, where she remains today.

Fran has made an outstanding and sustained contribution to limnological research, especially to the ecology of dryland rivers and the role of hydrological connectivity and flow variability in arid zone systems. She has more than 65 peer-reviewed publications and book chapters. She is respected worldwide for her influential publications on arid-zone limnology (for example, the now classic paper with Puckridge, Walker & Boulton has been cited >500 times) and she has written high-impact papers on river

ecology and management with a diverse array of national and international co-authors.

Fran is a gifted teacher and mentor. Her inspiring lectures and innovative practical classes in freshwater ecology has led to awards from Griffith University for Excellence in Teaching for both undergraduate and postgraduates. Over more than two decades, many students and colleagues have been mentored by Fran and guided by her consistent wisdom which is always generously shared. Many of Fran's postgraduates have gone on to make their own significant limnological contributions, working in management and conducting post-doctoral research.

Fran's wide scientific experience, her professional collegiality and her capacity to communicate effectively have ensured that she has made important contributions to the management of rivers, in particular to the assessment of catchment and river condition in dryland rivers and in urban catchments. Her contributions have substantially enhanced the effectiveness of policy and management actions, especially in rivers of south-east Queensland and inland Australia.

I therefore invite Fran to accept this medal and to present the Hilary Jolly award address at our next congress in New Zealand in 2015.

2013: Leon Barmuta

The ASL medal is awarded in memory of Hilary Jolly and recognises excellence across any of three criteria: research excellence, in particular key publications; education or communication excellence, that advances and disseminates limnological knowledge in a variety of forums; and management excellence, especially the conservation and management of freshwaters. This year's recipient is remarkable for having been nominated for his achievements against all three criteria. Personally, I am delighted to announce the recipient of the 2013 ASL medal to you, because many years ago I was his first PhD student. Since then, he has supervised more than 25 PhD students and published more than 60 journal articles and 5 books and book chapters. He has sustained his passion for rigorous, original

freshwater science and communicated it to those of us lucky enough to have been his students. This year's ASL medallist is Dr Leon Barmuta.

The excellence of Leon's research, its remarkable breadth and depth are well recognised. Leon began his career with Honours at the University of Adelaide, and a PhD with Sam Lake at Monash. He then did postdoctoral research at both UC Santa Barbara and Murdoch University, after which, in 1991, he accepted the position of Lecturer in Zoology at the University of Tasmania. Since then, his research has been characterised by its strong basis in ecology, its rigorous experimental design and sophisticated statistical analysis. He has made major contributions to invertebrate biomonitoring in Australia and to concepts of river conservation at an international level. He has also made major contributions to our knowledge of habitat complexity, trophic interactions and to river ecology in general.

Leon has always been committed to high quality teaching and has received several awards, most recently the prestigious National Office for Learning and Teaching Citation for Outstanding Contributions to Student Learning. He has been recognised for his innovative teaching practices that encourage active participation by students in their learning across science, freshwater ecology and research methods. Leon is an effective, successful and admired teacher of undergraduates. He has also guided and mentored his research students towards publication in international journals and they are making an active contribution to freshwater science and management across Australia and internationally.

Leon has had an enormous impact on the conservation, management and restoration of freshwaters in Tasmania and across Australia. He has collaborated with and been funded by a range of industry partners to inform the management of short-range endemic species, climate change and forestry impacts on headwater streams. Leon has also been a long-time and active member of ASL and was President from 1992-1993.

I therefore invite Leon to accept this medal and to present the Hilary Jolly award address at our next congress in Darwin in 2014.

2012: Bruce Chessman

During his career, Dr Bruce Chessman has produced influential research on topics ranging from the dietary preferences of aquatic insects and the ecology of native turtles (His PhD in 1978), to major applied issues such as the assessment of river condition, aquatic biodiversity conservation, environmental flows, and more recently the ecological effects of climate change.

One of the distinguishing aspects of Bruce's career is that his research has been almost entirely conducted in State government natural resource management agencies in Victoria and NSW. He has been almost unique in his ability to combine robust theoretical ecology and applied science to directly influence the conservation and rehabilitation of freshwater ecosystems in Australian and overseas. Bruce has been at the forefront of some of the most important developments in applied freshwater science and has quietly influenced many of these initiatives. In particular, he has developed a number of significant and widely used freshwater assessment tools: pioneering the development of rapid assessment techniques for macroinvertebrates, devising the widely used SIGNAL biotic index, and collaborating on the development of ecological predictive models for environmental watering. This research has led to the publication of over 130 scientific publications cited over 1200 times.

Early in his career, Bruce decided to actively improve natural resource management by supporting government decisions via his scientific research. Bruce's work has often breached the much discussed barrier between science, policy and management. Bruce has also provided great scientific leadership, support and guidance for many scientific staff in multiple government agencies and universities, as well as supervising a number of postgraduate students in a number of Australian universities. Through his generous leadership and assistance, Bruce has encouraged others to think more critically about their work and underpin their applied science with sound ecological theory. In his quiet and understated manner, he has provided a strong positive influence to many scientists and water resource managers.

Above all, the role model Bruce provides for placing the management of Australia's freshwater ecosystems firmly in the context of strong theoretical ecology is a profoundly important role for which he deserves the recognition of ASL through the award of the 2012 ASL medal.

2011: Barbara Downes

During her research career, Prof. Barbara Downes has produced a sustained body of work examining how dispersal, spatial variation in habitat and resource availability influence species diversity and population numbers. These are challenging research topics of widespread interest to ecologists, and understanding patchiness and dispersal processes is also vital to effective management and rehabilitation of rivers. Barbara's research has focussed largely on stream invertebrates living on rocks, but also includes systems as diverse as parasites living on their animal hosts and sessile marine invertebrates living on reefs. Indeed, one of the hallmarks and strengths of Barbara's research is that her work on freshwater systems draws on the strengths of research in other ecosystems, it is always put into a wider ecological context and is firmly grounded in ecological theory. A second hallmark is a commitment to innovative experimental and survey design.

Barbara has published more than 50 articles and chapters in peer-reviewed journals and books, routinely in top international journals, and this work is highly cited by her peers. Barbara has also served (and still serves) on the editorial boards of several international journals (e.g., *Oecologia, Ecology* and *Ecological Monographs*) and Australian-based journals (*Austral Ecology*), and has made a substantial contribution to ASL as a member of the national executive. Invitations to present at workshops and prestigious conference symposia both nationally and internationally are recognition of Barbara's research quality.

Barbara's expertise in experimental design is exemplified further by her pivotal contribution to the co-authored book entitled "Monitoring Ecological Impacts: Concepts and Practice in Flowing Waters". This book brings together a diverse, very technical, and much misunderstood set of

literature. It also presents solutions to some pressing problems that have been all but ignored, and is likely to become the standard reference by which all freshwater monitoring programmes are judged.

As a member of the academic staff at the University of Melbourne since 1995, Barbara has been extensively involved in teaching and training students in freshwater sciences. At the honours and postgraduate level, she has supervised to completion more than 20 Honours students and 10 PhD students. Her research students have found her to be an inspirational supervisor and have particularly appreciated her patience, understanding and empathy.

Barbara is an excellent teacher, and in her lively lectures and innovative practicals in freshwater ecology, she has undoubtedly had a strong positive influence on undergraduates. She has co-authored an introductory textbook "Freshwater Ecology: A Scientific Introduction" that promotes freshwater ecology as a problem-solving science and encourages students to think critically.

Above all, the role model Barbara provides for placing freshwater science firmly in the context of strong theoretical ecology is a profoundly important role for which she deserves the recognition of ASL through the award of the 2011 ASL medal.

2010: Richard Norris

Richard Norris has made major contributions to advance limnology and the application of freshwater science, in Australia and overseas. These include: devising predictive methods for assessing biodiversity; broadscale methods for national assessment of river condition; and predictive methods for comparing freshwater sites to assess their condition. For many years he has been an important voice advocating the application of freshwater science in natural resource management across eastern Australia.

Richard has authored or co-authored over 70 papers published in refereed journals plus 24 papers in refereed conference papers or special

publications, 10 books and chapters in books, and guest edited five special issues of international or national journals. His papers have been cited over 2000 times; 8 of his papers have over 100 cites.

Richard has taught freshwater ecology and river assessment for nearly 30 years at the University of Canberra, at both undergraduate and graduate levels. He has successfully supervised 25 Honours, 10 Masters and 6 PhD students. Currently he runs the postgraduate training program for eWater CRC's 27 students, and he set up the postgraduate training program for the CRC for Freshwater Ecology during 1993–1999. But his influence extends beyond this. He and his team have developed online courses to train water management personnel in the use of AUSRIVAS and aspects of freshwater management. The AUSRIVAS course is fundamental to being accredited as an operator in the National River Health Program, and without it there would be many fewer active operators.

Richard also directs the extensive activities of the Institute for Applied Ecology at University of Canberra, which include vertebrate pest control, conservation biology, wildlife genetics, environmental chemistry, habitat assessment, and environmental planning and law. He was appointed Director in 2005.

Richard played a central role in the development of Australia's National River Health Program, and manages the website that runs all AUSRIVAS analyses. He led the teams that undertook the 'Assessment of River Condition' component of the National Land and Water Resources Audit (in 2000) and the Snapshot of Murray-Darling Basin River Condition (also in 2000). The Snapshot was prepared to inform discussion on matters affecting river health in the Basin and played an important role in supporting the decision to retrieve water for the environment. Recently, Richard led the baseline assessment of Australian river and wetland health for the National Water Commission (2005–2007). Internationally, Richard has had extensive involvement with Environment Canada in the development of biological assessment for the Great Lakes and the Fraser River basin in British Columbia.

Richard best exemplifies the integration of strong science with an eye on rigorous application and actions that result from that science. For all these reasons we believe he is a worthy recipient of the ASL medal.

2009: Terry Hillman

Terry Hillman has had a long and distinguished career in the field of limnology, spanning over forty years. In that time he has made a substantial contribution to the understanding and management of Australian freshwater ecosystems. He has played an important role in Australian limnology. He has held the roles of the Officer in Charge of the Peter Till Environmental laboratory (1974–1986), Officer in Charge and Deputy-Director of The Murray-Darling Freshwater Research Centre (1986–1993), Director of The Murray-Darling Freshwater Research Centre (1993–2001), Project Leader in CSIRO Land and Water (1993–2000) and Deputy-Director CRC for Freshwater Ecology (1993–2001). His contributions to Australian limnology have already been recognised by conferral of a Doctorate of Science (*Honorus causa*) by LaTrobe University, appointment as Professor Emeritus at La Trobe University and life membership of the Murray-Darling Association.

Over his career he has:

- Produced nearly 90 scientific publication including 5 book chapters;
- Co-supervised 9 PhD, 2 masters and 28 honours students;
- Examined 17 PhD, 6 masters and 37 honours theses;
- Been a member on the National Executive of the Murray Darling Association;
- Been on the Executive of Australian Society for Limnology (President 1987-1988);
- Been a member of the Research Advisory Committee of the Johnstone Centre - Charles Sturt University;
- President of the Regional Advisory Board, La Trobe University;
- Member of La Trobe University Council.

However, his greatest contribution to Australian limnology, has been his ability to transfer ecological knowledge into management outcomes. This

has been achieved through the preparation of consultancy reports and publications, but most importantly through his participation on natural resource management and inter-governmental technical panels – many through Ministerial appointment. Through his efforts Terry has changed the way Natural Resource Managers view the aquatic environment which has led to significant changes in how rivers in the Murray-Darling Basin are run.

2008: Margaret Brock

Margaret Brock is an excellent research scientist, educator and mentor who has significantly advanced limnological knowledge and the management of aquatic ecosystems in Australia. She has consistently demonstrated excellence in research relating to the ecology, conservation and management of aquatic ecosystems through studies of wetland plants and processes at population, community and landscape levels. Her main focus has been on the response of aquatic plants to changes in water regime and increases in salinity, and she is recognised as an authority in this field. Her limnological studies have involved plant population biology, reproductive biology, seed bank dynamics and dispersal ecology. Throughout her career Margaret has worked on a diverse range of aquatic ecosystems including salt lakes, salt marshes and freshwater wetlands and collaborated with aquatic ecologists in France, South Africa and the United States.

Evidence of Margaret's research productivity is demonstrated by the publication of two books, 14 book chapters, 41+ peer-reviewed papers and. 46+ technical papers and reports (listed in more detail in the attached CV). Her proven success in obtaining federal research grants (Land and Water Australia, Environment Australia and ARC) is a tangible indicator of the quality of her research.

Margaret's role as the Program Leader in the Conservation Ecology Program in the CRC for Freshwater Ecology from 2002 to 200 provides evidence of her ability to provide leadership in research. In addition to her ability to lead, she is also a keen collaborator, working productively with Australian and international scientists. Her expertise, knowledge and commitment to

wetland issues has also resulted in a high demand for her services in an advisory role. She has been a valuable member of a number of committees, including the WWF Scientific Advisory Committee, the NSW Threatened Species Scientific Committee and the federal Endangered Species Advisory Committee. She was President of the ASL in 1994–95 and has taken an active role in encouraging her students to attend ASL conferences.

Marg is an approachable and inspiring person, who takes the time to mentor young limnologists. Her influence on limnological learning has occurred through both formal and informal channels. She has played a significant role in the advancement and dissemination of limnological knowledge through her joint authorship (with Andrew Boulton) of the textbook: Australian Freshwater Ecology. This publication is the foremost textbook on aquatic ecology in Australia. It is the recommended text for courses in aquatic ecology at a number of Australian universities. The very readable style, and comprehensive treatment of Australian inland waters, has ensured that Australian students have ready access to detailed information about Australian aquatic ecosystems. Despite its Australian focus it has international recognition, with one reviewer citing "in my opinion (this is) the best book yet written on freshwater ecology".

As an academic who has taught at three universities: Adelaide University; Murdoch University; and the University of New England, Margaret has played an important role in teaching undergraduate students and supervising postgraduate students in Australian limnology for more than 30 years. Her recent postgraduates include: John Porter, Steve Mackay, Samantha Capon, Sandra Grinter, Annabel Douglas-Hill and Janet Smith.

The interpretation of her research for use in natural resource management has been a major focus of Margaret's work. She has promoted the protection, conservation and management of Australia's wetlands and aquatic flora through her membership of national and state organisations such as WWF, Wetland Care Australia, the federal Endangered Species Advisory committee and many others. Margaret is one of the few Australian scientists who has moved from an academic sphere to a more 'hands on' position in natural resource management. Margaret achieved this by concurrently holding positions at the University of New England and the NSW

Department of Natural Resources over the period 1999 to 2006. Margaret's ability to successfully move into an active role with a state agency, while retaining her academic ties exemplifies her enthusiasm to translate theory in practice and to ensure that scientific results are taken up by the wider management community.

Although Margaret retired from full time university and government employment in mid-2006, she maintains an active and ongoing commitment to limnological research and management and holds an honorary research position at the University of Tasmania.

2007: Stuart Bunn

Stuart gained his PhD at the Department of Zoology at the University of Western Australia in 1985. He then accepted a post-doctoral position with Noel Hynes at the University of Waterloo, Canada. He returned to Australia to Griffith University in 1988 where he is now Professor and Director of the Centre for Riverine Landscapes. Stuart Bunn is a longstanding and active contributor to the ASL. He has served as an Executive Committee member for more than 10 years including holding the position of President and Vice-President on two occasions.

He has an outstanding record of publication and grant success and has a respected international profile. Since his PhD, Stuart has published over 80 papers in international journals, 15 book chapters and nearly 50 conference proceedings and general publications. Stuart's publications have a large impact on both the Australian freshwater fraternity and internationally. His papers on patterns of energy fluxes in aquatic systems and the ecosystem health of rivers and streams have been particularly widely-cited in international journals. He has pursued interdisciplinary collaborations between ecologists, geomorphologists, geneticists and microbiologists which have led to new ways in which we view aquatic ecosystems. He has often worked in under researched and challenging physical environments such as arid zones and has been successful in raising the profile of these systems among researchers and managers.

He has also made significant contributions to the management and conservation of Australia's rivers and wetlands. His research on riparian zones, food webs and environmental flows has not only had a major impact on the research community but has been widely applied by managers. He has also worked closely with community groups, government agencies and the media to challenge current management practice and water use policies and to promote more sustainable approaches

As demonstrated by his numerous invited lectures and public talks, he is an excellent communicator of limnological issues and concepts and can do this across a range of audiences including students, other researchers, land and water manager, politicians and the general public. His vision and leadership skills have seen him build a leading river research centre at Griffith University and play a critical role in establishing and managing some of Australia's biggest water-related research and management programs.

In addition to his personal achievements, Stuart is a dynamic and enthusiastic researcher, who has inspired and mentored numerous postgraduate students and younger colleagues at his own institution and elsewhere.

For all of these reasons Stuart Bunn is a worthy recipient of the ASL Medal.

2006: Jenny Davis

Jenny Davis is best known for her research into the ecology of wetlands, especially those of south-western Australia and the impact of human activities (e.g., urbanisation, salinisation) on these ecosystems. She has published 27 refereed journal articles in the area of wetland research. However, she has other limnological strings to her bow. In particular one of her early and continuing interests is flow dynamics of rivers. Flow dynamics are a defining process in rivers and understanding them is crucial to understanding lotic ecology. Jenny has probably contributed more to the study of near-bed flows than any other Australian limnologist. Together with Leon Barmuta, she published one of the key papers in the field that has continued to be cited since its publication.

More recently she has begun investigating the impacts of secondary salinisation on wetlands. Jenny has been able to integrate her knowledge of wetland ecology and catchment processes to apply to the complex issue of the effects of saline drainage on waterways, a comparatively novel field compared to dryland salinity issues.

Jenny is also committed to improvements in the management of freshwater habitats in general. She engages willingly with environmental managers through industry-linked research grants, consultancies and service on government committees. In particular, she has contributed to initiatives that have made a difference to the conservation and management of Australian freshwaters. Examples include her role as Chair of the Ribbons of Blue Steering Committee, and a member of the National River Health Program Technical Advisory Committee and of the WA Conservation Commission.

In education and communication, Jenny has the capacity to pitch her messages with equal clarity to a wide audience from community members to established academics. In the academic arena, she has supervised 76 postgraduate research projects to successful completion. Her value as a female role model in science is reflected in the fact that 50 of these were women. Jenny encourages students to excel through her own contagious enthusiasm and drive. This was recognized in 2004 when she won the Vice Chancellor's Award for excellence in postgraduate supervision at Murdoch University.

Jenny actively seeks opportunities to educate the wider community and has found novel ways of doing so. She often says "a picture is worth a thousand words" which was demonstrated in 2005 when her prize-winning photograph of a secondary salinised salt lake captured the imaginations not only of local but international audiences. This photo won the Ecosystems and Communities section of the second British Ecological Society photographic competition.

It should be no surprise therefore that the medal committee was unanimous in awarding the ASL medal to Jenny Davis for her distinguished and continuing contributions to limnology. Warm congratulations!

2005: Andrew Boulton

For this year it gives me great pleasure to announce that the winner of this year's medal is Professor Andrew Boulton from the University of New England.

Andrew's research excellence lies in the field of temporary stream and hyporheic zone ecology. He is internationally recognised for his expertise on hyporheic fauna and biogeochemistry, on the ecology of temporary streams and their biota, cycling of organic matter in streams and linking these attributes to ecological processes for effective river restoration. His achievements are expressed in the publication of 2 books and 95 peerreviewed publications, in over 100 conference presentations- many of which he was invited to present at or be a plenary speaker at. He has worked and lectured in Universities in Australia (Adelaide, Monash, UNE), and in the USA, France and New Zealand. He is on the editorial board of 4 international journals and is a referee for over 35 international journals. He has inspired young researchers in many ways, through supervision of 2 ARC postdoctoral fellows, 8 PhD, 9 Masters and 53 honours students – and he is currently the supervisor of 9 PhD students. He also has had a strong impact through his teaching of undergraduate students – he was awarded a UNE's VC teaching award as well as UNE's VC research award, but he has also had impact on the broader community, through conducting numerous public workshops and school visits to communicate the role of science and aquatic ecology in our society.

In short, Congratulations Andrew, A medal well deserved!

2004: Patrick De Deckker

The ASL Medal Committee is pleased to announce that the ASL 2004 Medal has been awarded to Professor Patrick De Deckker for the following reasons:

A world-wide promotion of Australian limnology with an emphasis on paleoecology, salt lake ecology, and non-marine ostracods (Crustacea). Patrick has worked and/or lectured in many places overseas (e.g., China,

France, Brazil, Belgium, Holland, Japan), has been or is currently on the editorial boards of five international journals, and is a member of eight professional societies. He has made some memorable contributions to Australian limnology through, for example, co-editing 'Limnology in Australia' (1986) with the late Prof. Bill Williams, a text of thought-provoking chapters that continue to be cited today, and as a co-editor of a Special Issue of *Hydrobiologia* due in 2005 to honour Bill Williams' contributions to limnology. He is internationally respected for his expertise in non-marine ostracod taxonomy, ecology and paleoecology, carbonate geochemistry, and the stratigraphy, sedimentology, hydrology and paleoecology of inland waters.

An impressive contribution to limnological scientific research, evidenced by a strong research publication record (including over 120 refereed publications and 7 books) that focus on the topics described above but also extend into the Quaternary marine record of the Australian region and continental environments based on lake deposits. He has conducted research and taught at Monash and ANU (where he is now Professor) and his research excellence has received several honours including the Verco Medal (1992) and a D.Sc. (University of Adelaide) in 2002.

Excellence in education and communication illustrated by his 25 years in tertiary education and supervision of 6 ARC postdoctoral fellows, 11 PhD students, and current supervision of 8 PhD students. Patrick's manner is friendly but direct, his advice is widely sought, and his discussions and talks are characterised by a dry sense of humour and piercing intelligence. One of his letters of nomination attested to his enthusiasm and stamina in the field as an inspiration to students.

Prof. Patrick De Deckker shows strength and depth in all three categories that epitomise winners of the ASL Medal.

2003: Max Finlayson

By unanimous agreement, the ASL Medal Committee awards the 2003 Medal to Dr Max Finlayson for the following reasons:

A world-wide promotion of Australian limnology and wetland management through his involvement and advisory role in international wetland affairs an involvement that led to his Recognition of Excellence

Award in the 2002 round of Ramsar Awards. Dr Finlayson has led the Ramsar Convention's Scientific and Technical Review Panel since its inception in 1992, and has visited most parts of the globe to promote wise management based on rigorous research on the world's wetlands. He is internationally respected and tireless in his efforts to guide conservation policies at a time when wetlands are disappearing or being rapidly degraded.

An impressive contribution to limnological scientific research, evidenced by a strong research publication record (177 publications - many of them in refereed journals) that spans a wide range of topics, particularly wetland plants and weeds. His research work on tropical limnology in Australia (a neglected field compared to work on the southern areas) has brought the challenges of tropical limnology into the spotlight and provided a firm basis for the excellent ongoing work of several agencies in the 'Top End'. His development of wetland inventory, assessment protocols is of particular value as it promotes sustainable use of wetlands through broadening the knowledge base of wetlands.

Excellence in education and communication derived from his broad knowledge, affable and articulate manner, and steadfast dedication to protection and informed management of the world's wetlands. Each member of the ASL Medal Committee has been privy to his wit and wisdom, and while President of ASL, he created many new initiatives and inspired healthy debate over ASL's role as a society. He continues to be very active in ASL, particularly through his garnering communication and collaboration between ASL and other wetland societies – the annual Wetland Forum meetings are good examples of this.

While many previous winners of the ASL Medal have shown exceptional qualities in one or two of the key criteria of research excellence, education and/or communication excellence, and management excellence, Dr Finlayson excels in all three categories.

Max Finlayson was presented with the medal during the opening ceremony of the congress. Following the reading of his nomination at the AGM, Max suggested that the ASL executive consider awarding medals to past

winners of the Hilary Jolly Award (forerunner of the ASL medal). The ASL executive will examine the possibility of doing this.

2002: Brian Timms

2001: Richard Marchant

1999: Russell Shiel

1995: David Mitchell

1993: Keith Walker

1992: Jorg Imberger

1991: Arthur McComb

1989: Ian Campbell

1988: Peter Cullen

1985: George Ganf

1984: Noel Hynes

1982: Barry Hart

1981: John Kirk

1980: Sam Lake

1979: Peter Tyler

1978: John Lake

1977: Bill Williams

1975: Ian Bayly

1974: Alan Weatherley