

Ivor Beatty Award 2020

The Ivor Beatty Award is presented annually to the best paper published in *Pacific Conservation Biology* during a calendar year. The award honours the contributions of the late Ivor Beatty, AM, to conservation in the Pacific region. Ivor's family business Surrey Beatty and Sons published numerous books on natural history and conservation between 1981 and early this century, many of which have had a significant scientific impact. He founded *Pacific Conservation Biology* in 1992. Surrey Beatty and Sons continued the journal until the end of 2014, with the family maintaining Ivor's legacy and vision after his passing in 2012. However, recognising the difficulty of meeting the increasing services expected by authors in recent times, they transferred the journal to CSIRO Publishing from 2015. The Ivor Beatty Award recognises and celebrates this legacy.

The 2020 Ivor Beatty Award is presented to:

Lintermans Mark, Geyle Hayley M., Beatty Stephen, Brown Culum, Ebner Brendan C., Freeman Rob, Hammer Michael P., Humphreys William F., Kennard Mark J., Kern Pippa, Martin Keith, Morgan David L., Raadik Tarmo A., Unmack Peter J., Wager Rob, Woinarski John C. Z., Garnett Stephen T. (2020). Big trouble for little fish: identifying Australian freshwater fishes in imminent risk of extinction. *Pacific Conservation Biology* **26**, 365–377. <https://doi.org/10.1071/PC19053>

This research was an initiative of the Threatened Species Recovery Hub of the Australian Government's National Environmental Science Program. The Hub is a collaboration of

10 leading Australian universities and the Australian Wildlife Conservancy to undertake research to support the recovery of Australia's threatened species. The paper was a collaboration between the Hub and the Australian Society for Fish Biology Threatened Fishes Committee (ASFB TFC) (Fig. 1). Since 1987 the ASFB TFC has curated the most comprehensive listing of Australian threatened freshwater fish. This research capitalised on a series of five annual ASFB TFC workshops (2014–18) that reviewed all Australian freshwater fish to assess the need for formal conservation assessments, which also resulted in IUCN Red List assessments for >240 Australian freshwater fish taxa. This research contributes to improving early warning systems for extinction risks and is part of a broader project looking at the plight of a range of vertebrates and invertebrates across Australia. It aims to identify the taxa in most urgent need of conservation intervention so that appropriate management actions can be implemented in an attempt to secure their future. It is striking to note that of the 22 freshwater fish identified to be at risk of extinction in the next 20 years, 19 were not listed under the National *Environment Protection and Biodiversity Conservation Act* (EPBC Act). Since publication, one of the 19 has been EPBC-listed, and another 15 are currently under assessment.

Associate Professor Mark Lintermans is a Principal Research Fellow at the Centre for Applied Water Science, University of Canberra. Mark is freshwater ecologist with >38 years' experience in the research, management and conservation of



Fig. 1. Fish experts enjoying a lighter moment at the workshop to predict extinction risk of the most imperilled Australian freshwater fish.

Australia's freshwater fish. He was Chair or Co-Chair of ASFB TFC from 2009 to 2018 and coordinated the IUCN Red List assessment of all Australian freshwater fish in 2019. Mark is a passionate advocate for threatened freshwater species and dreams of the day when the EPBC lists accurately reflect the conservation crisis facing Australia's waterways.

Hayley Geyle is currently completing her PhD at Charles Darwin University. Previously, she worked as a Research Assistant for the Threatened Species Recovery Hub of the National Environmental Science Program, primarily on projects focused on identifying the vertebrates and butterflies at greatest risk of extinction. Her research interests include threatened species conservation and monitoring and management of introduced species.

Stephen Beatty is Deputy Director of the Centre for Sustainable Aquatic Ecosystems (Harry Butler Institute) at Murdoch University. His research focuses on understanding anthropogenic threats to inland aquatic ecosystems.

Professor Culum Brown is head of thefishlab.com at Macquarie University and is an expert in fish behaviour.

Dr Brendan Ebner inhabits the Australian Wet Tropics and is a researcher at TropWATER, James Cook University. He seeks to understand the behaviour and ecology of rare and threatened aquatic species, functioning in the modern scientific era as a 'little data' specialist.

Rob Freeman is a Fisheries Management Biologist with the Inland Fisheries Service, Tasmania. Over a 25-year period he has been involved with and managed the conservation of freshwater fish within Tasmania, specifically including several rare and endangered galaxiid species. He has also undertaken several programs involving the management and eradication of invasive freshwater fish.

Dr Michael Hammer is a fish curator at the Museum and Art Gallery of the Northern Territory. His work focuses on biodiversity assessment and discovery, fish ecology and conservation, citizen science and two-way learning, providing key advice to management, promoting awareness of threatened species, and specific recovery action. This work is achieved through a collaborative base with wide partner research agencies, landholders, traditional owners, rangers, and government and community stakeholders.

Professor Bill (William) Humphreys progressed from marine ecology through terrestrial biology to settle on subterranean biology. He focused initially on troglotauna (terrestrial) before moving to stygofauna (aquatic) in Western Australia, Christmas Island and the arid centre of Australia. He discovered a Tethyan anchialine fauna on North West Cape (Cape Range) linking the Atlantic cave fauna with that of the Indian Ocean.

Mark Kennard is a Professor at the Australian Rivers Institute at Griffith University. Mark is most interested in the ecology and conservation of freshwater ecosystems and the wonderful creatures that live in them.

Dr Pippa Kern completed her undergraduate degree (BSc/AVB Hons) at Sydney University and her PhD at The University of Queensland, Australia. Her early career research focused on improving fish passage through stream modifications (culverts) for small-bodied fish in South-East Queensland, Australia. Pippa now works in the non-for-profit wildlife conservation

sector and focused the last few years on the conservation of artesian spring fish, and the recovery program for the Red-finned Blue-eye, one of the focus species of this publication.

Keith Martin is a retired environmental scientist who has lived and worked in tropical Australia for over 40 years, firstly in the Northern Territory then in Cairns, North Queensland since 1995. Keith and his biologist partner Susan are particularly active in research projects on rainbowfish conservation and evolution in the Wet Tropics.

David Morgan is an Associate Professor at the Centre for Sustainable Aquatic Ecosystems (Harry Butler Institute) Murdoch University. His research focuses on threatened fishes with a particular expertise in sawfish ecology. He instigated and leads the Team Sawfish project in northern Western Australia that has been running for the past 20 years that builds relationships with Traditional Owners to understand the ecology and improve the conservation plight of sawfishes and other iconic fishes.

Peter Unmack is a fish conservation biologist who is deeply concerned by the lack of any real conservation actions by various government agencies for most fishes (and other biota) in Australia. Peter has spent 35 years chasing fish around Australia, keeping fish in aquaria, conducting research and doing hands on conservation actions.

Dr Tarmo Raadik is an aquatic taxonomist and conservation biologist focusing on discovering and describing Australian cryptic species of freshwater fish, crayfish and mussels to improve biodiversity knowledge and, therefore, the effectiveness of management. His research also focuses on aquatic fauna biodiversity management, from drier lowland agricultural area to alpine regions, addressing threats to aquatic systems such as fire, drought, instream sedimentation, fish movement barriers and aquatic predators.

Rob Wager is a self-funded fisheries biologist with an interest in conservation of aquatic animals in a rapidly deteriorating and modified natural world. He is elucidating captive breeding strategies and crafting habitat solutions for selected species. Rob fears real-world conservation actions undertaken by various governments are declining despite enactment of more intricate legislations.

Professor John Woinarski is a conservation biologist with long experience in research, management and policy, especially relating to threatened species.

Professor Stephen Garnett is a conservation biologist working on threatened species who led a project looking at extinction risk across all vertebrate fauna in Australia, with the aim of minimising risk in the future.

The Ivor Beatty Award is judged by the Editor-in-Chief Dr Mike Calver, and the Managing Editors Dr Alan Lymbery and Dr Mike van Keulen. On awarding the paper by Lintermans *et al.*, Editor-in-Chief Mike Calver commented 'the paper illustrates the importance of collaborations between researchers with diverse experience and skills to assess risks to biodiversity and propose solutions'. In recognition of the award, the authors will receive a \$500 book voucher from the publisher, a certificate and will each receive a subscription to *Pacific Conservation Biology*. The staff at CSIRO Publishing and the editorial board join the Managing Editors and the Editor-in-Chief in congratulating the authors on their achievement.