

Holsworth: 30 years of ecology funding



Photo: Blue Planet Marine and CEAL

Dr Bill Holsworth

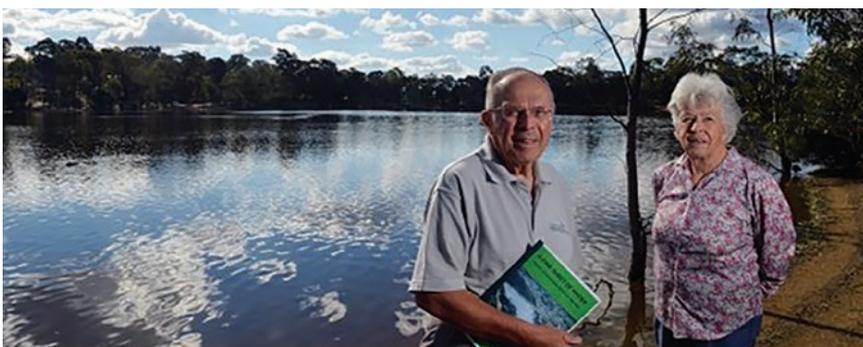
Dr Bill Holsworth is a renowned ecologist, mammal researcher, wildlife biologist and philanthropist.

The man behind more than \$1 million in funds for students each year says it's rare for philanthropists to donate for the environment.

'Very little philanthropy goes into funding ecological research,' says Dr Holsworth. 'There are so many factors influencing the environment, but so little knowledge about what is going on. I'm hoping that in time we will not make so many stupid decisions in terms of managing the environment, wildlife, plants and animals, forests, deserts and so on.'

'The problem of managing ecological resources is very complex – more so than a simple little thing like the economy,' he says. 'There's a need to educate the public and the politicians responsible for some of the mistakes that have been made.'

Past students have moved into a range of careers: into university and school teaching, scientific research, public relations, and advising governments. 'All of these pursuits are valuable, so I couldn't say which is my favourite,' says Dr Holsworth.



Bill and Carol Holsworth. Photo: Bendigo Advertiser

2019 marks the 30th anniversary of the Holsworth Wildlife Research Endowment.

In 1989, Bill and Carol Holsworth established the Holsworth Wildlife Research Endowment to provide grants to universities for postgraduate students in fauna and flora. The Endowment has funded thousands of postgraduate students and their projects. Each year, more than 200 postgraduate students share more than \$1 million in funds to conduct research in ecology, wildlife management, and natural history. Individual grants of up to \$22,500 for three years are available. Formerly managed by Bill himself, the Endowment is now managed by the ESA with support from investment fund managers Equity Trustees, through a partnership formed in 2017.

More information about the
Holsworth Wildlife Research
Endowment is available at
www.ecolsoc.org.au/endorments

Supporting research

Students funded by the Holsworth Wildlife Research Endowment have contributed in many areas. The projects aim to answer some of the most urgent environmental problems facing Australia.

For example, the Endowment is funding Australian National University PhD student, Mr Weliton Menário Costa, to see if the reproduction and survival of eastern grey kangaroos are influenced by personality traits such as how bold, sociable or exploratory they are. 'I am very grateful to Dr Holsworth and the Ecological Society of Australia for their support, as it means I can make more progress in my research,' he says.



Photo: Weliton Menário Costa

The Endowment is also funding research investigating why female Superb Lyrebirds mimic other species, and why some are better at it than others. Ms Victoria Austin, from Western Sydney University, says the Holsworth grant will allow her to purchase equipment – including taxidermic models of predators such as goshawks, goannas and foxes – to investigate the purpose of female lyrebirds' mimicry. 'Lyrebird numbers have been in decline,' says Ms Austin. 'My research will also provide insight into female lyrebird behaviour, how they respond to introduced species such as foxes, and hopefully help with their conservation.'



Photo: Justin Welbergen

Ms Dana Cusano, from the University of Queensland, is using Endowment funds to discover what motivates whales to make social sounds, and if the noise from increased shipping means they can't hear each other. Little is known about the function of whale sounds or the information encoded within them. 'They make a few sounds regularly, such as the 'thwop', but it's almost impossible to pinpoint what one call means as it may be used in multiple contexts,' says Ms Cusano. 'If we can work out how whales use sounds, and how important their calls are, we'll have a better idea about how shipping will affect them.'



Photo: Dana Cusano

Dr Jenny Martin was funded by the Endowment to investigate the social and mating behaviour of Bobuck Possums in north-east Victoria. 'The funds enabled me to buy radio collars back in the days prior to GPS, and nest boxes to do experiments manipulating the availability of sleeping hollows,' she says. Her results showed that the same species can behave in completely different ways. 'We had one possum population that was faithful to their mate, whereas another nearby population had males sleeping around. The lesson was that you can't pigeonhole a species: their behaviour depends on the environment they're in.' She says the funds were fundamental to her research. 'I don't know how I could have done it otherwise. Bill was amazing; he was really interested in my research and even came into the field and got to know the animals.' Jenny says her PhD taught her the importance of communication, and she now teaches others to communicate effectively through the science communication program she established at the University of Melbourne.



Photo: Euan Ritchie

Thanks to the Endowment, Mr Tom Botterill-James from the University of Tasmania is investigating a mystery of evolution – why animals cooperate when cheating helps the fittest survive. 'A key question in evolutionary biology is that if the strongest survive through the selection of the fittest genes, why do animals cooperate?' says Mr Botterill-James. He has experimentally manipulated relationships by catching White's Skink Lizards, one of few lizard species that live as a family of a mum, dad and kids. Next he'll see how behaviour in the lab plays out in nature and see if female promiscuity is a barrier to families, and if monogamy promotes family living. His results may extend to other species and could even help explain the origins of family living.



Photo: Geoff White

The cracking-clay landscapes of the southern Lake Eyre basin in South Australia provide important habitat for small-animal populations, including those of the Striped-faced Dunnart and Fat-tailed Dunnart. 'The consistent microclimate in these cracks means that they are excellent shelter for the dunnarts and other species, providing a buffer against extreme temperatures,' says Dr Helen Waudby, who was funded by the Holsworth Endowment in 2008 and 2010. 'When you're a small mammal, it's very helpful to be able to access shelters with a consistent microclimate because your small size can make it hard to maintain a suitable metabolic rate when faced with large temperature fluctuations,' she says. 'The Holsworth funds enabled me to purchase radio transmitters and trapping equipment to track dunnarts and confirm how often and when they use the cracks.' Helen is now a conservation biologist with the NSW Office of Environment and Heritage, working on projects focussed on threatened species recovery.



Photo: Topa Pettit