Dr Melanie Massaro

Melanie Massaro has been studying birds as a researcher for over 19 years in some of the most remote places on the planet, such as Newfoundland, Venezuela's montane cloud forests, Tasmania, Antarctica and Australia's and New Zealand's sub-Antarctica islands. She recently took up a new position as Lecturer in Ecology and Ornithology at Charles Sturt University in Albury-Wodonga. She is the author of one book chapter and 27 papers, published in a variety of journals, including *Biological Conservation, Animal Conservation, Biological Invasions and Plos One.* From 2007-2011, she led the research on black robins on the Chatham Islands.

Positions held:

Lecturer in Ecology and Ornithology at the School of Environmental Sciences, Charles Sturt University, Australia (since Feb 2013)
Researcher and Fixed-term Lecturer at the School of Biological Sciences and Gateway Antarctica, an interdisciplinary department for Antarctic Science, at the University of Canterbury, New Zealand (2011-2012)
New Zealand Science & Technology Postdoctoral Fellow at the School of Biological Sciences, University of Canterbury (2007-2010)
Fixed-term Lecturer at the School of Biological Sciences, University of Canterbury, coordinating and teaching undergraduate courses in animal behaviour, ecology and conservation biology (2006)
Postdoctoral Research Fellow at the University of Canterbury (2004-2005)

Education:

2004—PhD (Ecology) University of Otago, New Zealand
2000—MSc (Ecology) Memorial University of Newfoundland, Canada
1996—BSc (Biology) Ernst-Moritz-Arndt University, Greifswald, Germany

Prof. James V. Briskie

James Briskie's research encompasses Conservation Biology, Behavioural Ecology, and Evolutionary Biology. For the past 30 years, he has used both field studies (e.g. nest monitoring, geolocator tracking) and lab studies (e.g. DNA analyses, gas chromatography, sperm motility analyses) to understand the evolution of animal behaviour as well as testing new methods for the conservation of endangered animals. He has a long-standing interest and research programme on the effects of population bottlenecks in birds and the effects of inbreeding on reproductive biology and behaviour.

Positions held:

Professor, School of Biological Sciences, University of Canterbury, Christchurch, New Zealand (promoted 2013).
Associate Professor, School of Biological Sciences, University of Canterbury, Christchurch, New Zealand (2007-2012).
Senior Lecturer, School of Biological Sciences, University of Canterbury, Christchurch, New Zealand (1997-2007).
Departmental Lecturer in Ornithology, University of Oxford, Oxford, UK (1995-1997).
Postdoctoral Research Fellow, University of Montana, USA (1995).

Instructor in Biostatistics, Queen's University, Canada (1993-1994).
Postdoctoral Research Fellow, University of Sheffield, UK (1991-1992).

Education:
1990—PhD (Biology) Queen's University, Kingston, Ontario, Canada.
1985—MSc (Zoology) University of Manitoba, Winnipeg, Manitoba, Canada.
1983—BSc Honours (Zoology) University of Manitoba, Winnipeg, Manitoba, Canada.

List of relevant scientific publications by Drs Massaro and Briskie

Massaro, M., M. Stanbury and J.V. Briskie. 2013a. Nesting habitat choice of endangered black robins increases vulnerability to predation by an invasive bird. *Animal Conservation* **16**: 404-411. DOI: 10.1111/acv.12007

Black robins build cup-like nests either within tree cavities ('cavity' nests) or in the sub-canopy vegetation ('open' nests). We show that robins that nest in cavities are more prone to predation by invasive European starlings than robins that have open nests. Nest height also influenced predation, with predation risk increasing from 4.88% for nests below 1 m to 31.89% for nests above 3 m. Overall, predation on black robin nests decreased chick production in the population by 15.6% annually.

Massaro, M., R. Sainudiin, D. Merton, J.V. Briskie, A.M. Poole and M.L. Hale. 2013b. Human-assisted spread of a maladaptive behavior in an endangered bird. *Plos one* **8**: e79066. DOI: 10.1371/journal.pone.0079066

In this paper, we show that an odd behavioural trait (laying eggs on the rim of the nest) has a genetic basis, and that conservation measures in the 1980s unintentionally relaxed selection against this trait allowing its rapid increase due to strong genetic drift and high levels of inbreeding in an extremely small population. This publication received wide-spread media attention with articles appearing on websites of the National Geographic (http://phenomena.nationalgeographic.com/2014/01/02/in-saving-a-species-you-might-accidentally-doom-it/), LiveScience (http://www.livescience.com/42537-black-robins-rim-eggs.html), and many others. Further New Scientist wrote also an article about this paper, which will be published in March 2014.

Starling-Windhof, A., **M. Massaro** and J.V. Briskie. 2011. Differential effects of exotic predator control on nest success of native and introduced birds in New Zealand. *Biological Invasions* 13: 1021-1028. http://link.springer.com/article/10.1007/s10530-010-9886-5#

Massaro, M., A. Starling-Windhof, J.V. Briskie and T.E. Martin. 2008. Introduced mammalian predators induce behavioural changes in parental care in an endemic New Zealand bird. *Plos one* **3**: e2331. DOI: 10.1371/journal.pone.0002331

Heber, S., A. Varsani, S. Kuhn, A. Girg, B. Kempenaers, and **J.V. Briskie.** 2012. The genetic rescue of two bottlenecked South Island robin populations using translocations of inbred donors. *Proceedings of the Royal Society of London*, Series B 20122228. http://dx.doi.org/10.1098/rspb.2012.2228

Heber, S., and **J.V. Briskie.** 2010. Population bottlenecks and increased hatching failure in endangered birds. *Conservation Biology* **24**:1674-1678.