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and

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B.Sc. Marine Biology and Zoology 1988 (James Cook University, Townsville, Australia)

B.Sc. (Hons) Zoology 1990 (University of Tasmania, Hobart, Australia) 'Characteristics of Weddell seal, *Leptonychotes weddellii* (Lesson 1826), underwater vocalisations during the 1989/90 breeding season at Davis Station, Antarctica.'

Ph.D. thesis title: The foraging ecology of blue whales in the Bonney Upwelling, southern Australia

Supervisors: Dr Alecia Bellgrove and Dr Debbie Thiele

Research Summary: The Bonney Upwelling region, south-east Australia, is one of very few known feeding grounds worldwide for the endangered blue whale (*Balaenoptera musculus*). The whales' prey, *Nyctiphanes australis*, is also one of the few species of krill that regularly swarms at the surface, allowing unique opportunities to observe blue whale feeding behaviour in detail. This study will collect data on blue whale foraging behaviour and diet and relate these to their prey and foraging habitat. This information will form the basis of a conservation and management-oriented framework that defines habitat critical to maintain blue whales in this region. The development of this region as an offshore gas province of national significance and other human activities creates an immediate need to understand blue whale behaviour and ecology.

Research Interests: predator/prey interactions, diving behaviour, habitat conservation

Bio: Margie brings to this blue whale research 20 years of marine mammal research and management experience. She completed her Bachelor of Science in Marine Biology at James Cook University, Northern Queensland in 1988, and her Honours Degree at the University of Tasmania in 1990. Her marine

mammal research capacity extends to southern elephant seals at Macquarie Island; Weddell seals and crabeater seals in Antarctica; orcas at Macquarie Island, in other Australian waters and in Alaska; humpback whales on Australia's east coast, southern right whales at the Head of the Bight, SA, and dugongs in Moreton Bay QLD. Research of these species covered a range of disciplines including acoustics, dive behaviour, foraging ecology, population biology, and impacts from tourism and seismic activities. She has presented papers at national and international conferences, and has published a number of papers in peer-reviewed journals relating to cetacean ecology and management. She was part of a team of researchers that won a University of Tasmania Faculty of Science, Engineering and Technology award for excellence in research. Margie can also provide a solid background in planning and management, as from 1999 to 2002 she was the Strategic Coastal Planning Officer for the Great Ocean Road region of Victoria. Since 2000, Margie has been involved with the blue whale research in the Bonney Upwelling. Her PhD thesis now focuses on the feeding ecology of blue whales, and the definition of critical feeding habitat.

Publications:

Refereed publications (scientific journals and books)

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Anderson, R.C., Baker, A.N., Best, P.B., Borsa, P., Brownell Jr, R.L., Childerhouse, S., Findlay, K.P., Gerrodette, T., Ilangakoon, A.D., Joergensen, M., Kahn, B., Ljungblad, D.K., Maughan, B., McCauley, R.D., McKay, S., Norris, T.F., Oman Whale and Dolphin Research Group, Rankin, S., Samaran, F., Thiele, D., Van Waerebeek, K. and Warneke, R.M. 2007. Past and present distribution, densities and movements of blue whales *Balaenoptera musculus* in the Southern Hemisphere and northern Indian Ocean. *Mammal Review* 37:116-175.

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