University of Auckland Standard

ACADEMIC CV

THE UNIVERSITY OF AUCKLAND
NEW ZEALAND

NAME: Jenni Anne Stanley

CURRENT POSITION: Post Doctorial Research Fellow

DEPARTMENT: Institute of Marine Science

FACULTY: Science

UNIVERSITY: University of Auckland

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DOB: 17/08/1984

EDUCATIONAL QUALIFICATIONS: [Tertiary only]

2011 (September) University of Auckland, PhD, Marine Science

Thesis title: Ambient underwater sound: Measuring the importance of spatial variability and its effect on late-stage carb larvae.

2008 University of Auckland, Postgraduate Diploma in Science, Specialisation in Marine Science

2007 University of Auckland, Bachelor of Science, Biological Science

PREVIOUS APPOINTMENTS:

- 2011 University of Auckland/National Institute of Water and Atmospheric Research, Contracted Research Fellow
- 2011 University of Auckland Leigh Marine Laboratory, Research Technician
- 2010 Massey University/Ministry of Fisheries, Casual Field Technician
- 2008-2009 National Institute of Water and Atmospheric Research, Contracted Laboratory Technician

SIGNIFICANT DISTINCTIONS / AWARDS:

- 2011 University of Auckland, FRDF Research Fellowship
- 2010 Stanley Wishart Low Memorial Scholarship in Marine Science
- 2009 New Zealand Marine Sciences Society Research Award

RESEARCH GRANTS / FUNDING:

- 2013 Co-investigator with Jeffs on Spat Retention Approaches (Funding from Seafood Innovation LTD & Sanford Ltd) \$94,810
- 2011 Co-investigator with Jeffs on nuisance barnacles on North Island Greenshell mussel farms (Funding from North Island Mussel Processors Ltd) \$20,000
- 2011 Associate Investigator on returning crayfish to the reefs of the Hauraki Gulf \$150,000

- 2011 Researcher on gut microflora of NZ Abalone and Snapper, University of Canterbury & Industrial Research Limited \$15,000
- 2010 Associate Investigator on vessel noise induced biofouling from National Institute of Water and Atmospheric Research (NIWA) Seed Fund \$10,000

RESEARCH EXPERIENCE:

- 2012 2013 Returning crayfish to the reefs of the Hauraki Gulf Habitat change and its effects of recruitment.
- 2012 Acoustics in hard bottomed sponge habitats and effects of sponge dieback, Florida Keys, USA, in collaboration with Professor Mark Butler (Old Dominion University) culminating in a NSF Grant proposal for submission in the USA.
- 2011 Current Vessel noise and its effects on settlement of biofouling organisms, in collaboration with Serena Wilkens (NIWA).
- 2011 Nuisance barnacles on North Island Greenshell mussel farms, North Island Mussel Processors Ltd.
- 2011 Gut microfloria in NZ abalone and snapper, University of Canterbury & Industrial Research Limited.
- 2008 2011 Ambient underwater sound and its effects on tropical and temperate late-stage larvae, north-eastern New Zealand and GBR Australia (PhD Research).

INVITED SPEAKER:

- 2012 Invited speaker to session on larval & settlement behaviour of coral reef organisms at the 12th International Coral Reef Symposium, Cairns, Australia. Location, location, location Finding a suitable home in amongst the noise.
- 2010 Plenary speaker at New Zealand Marine Sciences Society, Wellington, New Zealand. Settlement response to differences in ambient underwater sound in temperate waters.

PROFESSIONAL SOCIETIES / SERVICE / OTHER ACTIVITIES:

Member of the New Zealand Marine Science Society Member of the Australian Marine Sciences Society

TEACHING:

- 2013 Lecturing Mar302: Selected Topics in Marine Science, Fluid Dynamics, coordinator for associated practical field course
- 2012 Course coordinator for Mar702: Field Techniques in Marine Science (due to Radford's absence)
- 2008 2013 Teaching Mar702, Field Techniques in Marine Science
- 2006 2009 Tutor/Demonstrator assorted under-graduate and post-graduate biology papers; 101, 104, 333, 396, 727

CURRENT STUDENT SUPERVISION (* Co-supervisor):

- PhD Jan Hesse*, Recruitment of spiny rock lobsters
- PhD Davide Zazzaro*, Biology and control of nuisance barnacles in mussel farms
- PhD Rebecca Smith*, Mussel seed biology and capture in the Hauraki Gulf

COMMITTEE MEMBER

PhD – John Butler, Characterisation of soundscapes in shallow water habitats of the Florida Keys, Florida (USA) and their influence on the settlement of larval fish and invertebrates. Old Dominion University, Norfolk VA, USA.

RESEARCH SPECIALTIES / CAREER:

Summary Statement:

My main research has focused on how temperate and tropical marine crustacean larvae respond to and utilise ambient underwater sound during settlement and recruitment, with which I employ a multi-disciplinary approach consisting of underwater acoustics, sensory ecology, physiology, animal behaviour, and larval biology.

RESEARCH PUBLICATIONS:

- **Stanley, J. A.,** Radford, C. A., Jeffs, A. G. 2012. Location, location, location finding a suitable home in amongst the noise. *Proceedings of the Royal Society B-Biological Sciences*. doi: 10.1098/rspb.2012.0697. *Included cover image.
- **Stanley, J.A.**, Radford, C.A., Jeffs, A.G. 2012. Effects of underwater noise on larval settlement. *Advances in Experimental Medicine and Biology* 730: 371-374.
- Wilkens, S., **Stanley, J.**, Jeffs, A. 2012. Induction of settlement in mussel (*Perna canaliculus*). *Biofouling*. 28: 65-72.
- Radford, C., **Stanley, J.,** Simpson, S., Jeffs, A. 2011. Juvenile coral reef fish use sound to locate habitats. *Coral Reefs.* 10.1007/s00338-010-0710-6.
- **Stanley, J. A.,** Radford, C. A., Jeffs, A.G. 2011. Behavioural response thresholds in New Zealand crab megalopae to ambient underwater sound. *PLoS ONE 6:* e28572.
- **Stanley, J. A.,** Radford, C., Jeffs, A. 2010. *Induction of settlement in crab megalopae by ambient underwater reef sound. Behavioral Ecology*, 21: 112 120.
- Radford, C., **Stanley, J. A,** Chris, T., Montgomery, J., Jeffs, A. 2010. Localised coastal habitats have distinct underwater sound signatures. *Marine Ecology Progress Series*, 401: 21 29.

RESEARCH PUBLICATIONS SUBMITTED:

- **Stanley, J. A.**, Hesse, J., Jeffs, A. G. Inducers of settlement and moulting in post-larval spiny lobster, *Jasus edwardsii*. Behavioural Ecology.
- **Stanley, J. A.,** Cox, S. Jeffs, A. G. Fouling in your own nest: effects of ship noise on boifouling. Nature Communications.
- Radford, C. A., **Stanley, J. A.**, Jeffs, A. G. Submitted. Adjacent coral reef habitats produce different underwater sound signatures. MEPS.
- **Stanley, J. A.,** Wilkens, S. L., Jeffs, A. G. In Production. Vessel noise on promotes hull-fouling. In R. Fay & A. N. Popper (Eds.) *The effects of noise on aquatic life II.* New York: Springer Science + Business Media.

BOOK CHAPTERS:

Jeffs, A. G., **Stanley, J. A**., Radford, C. A. 2012. Ecological effects of acoustic pollution in the marine environment. In: Pollutants in the aquatic environment. Eds Nzai, E.M., Allodai, S. Research Signpost, India.

Stanley, J. A., Radford, C.A., Jeffs, A. (2011). The effects of noise on larval settlement. In R. Fay, & A.N. Popper (Eds.) *The effects of noise on aquatic life* (pp. 371-374). New York: Springer Science + Business Media.

PATENTS:

Stanley, J. A., Jeffs, A. G., Wilkens, S. L. 2012. Method and systems for reducing biofouling. Paitent number: 599685.

COMMISSIONED REPORTS:

Jeffs, A., **Stanley, J. A**. 2010. The occurrence of barnacles on Coromandel mussel farms: A preliminary report for Sealord Shellfish Ltd. 7pp.

Stanley, J. A., Trottier, O., Jeffs, A. 2011. Literature review on the fouling barnacle Balanus trigonus. A report for North Island Mussel Processors Ltd. 45pp.

Stanley, J. A., Jeffs, A. 2012. The occurrence of the barnacle Balanus trigonus on mussel farms in the Hauraki Gulf. A report for North Island Mussel Processors Ltd. 42pp.

SCIENCE COMMUNICATION:

- 2013 Moana My Ocean Exhibition, Auckland Memorial War Museum Assisted with scientific content
- **2013** Wānanga Nga Pūoro o te Moana, Matariki Festival, Auckland Memorial War Museum and Auckland Zoo Member of expert panel.
- **2012** Outside JEB article about our publication **Stanley, J. A.**, Radford, C. A., Jeffs, A. G. 2012. Location, location finding a suitable home in amongst the noise. doi:10.1242/jeb.064360
- 2012 ABC Science http://www.abc.net.au/science/articles/2012/06/06/3518774.htm
- 2010 Science Learning Hub, Secondary School Website for Understanding Science 'The Noisy Reef'
- 2010 Golden Graduates Function 'Sounds in the Sea'
- 2009 Radio New Zealand's Science Programme 'Our Changing World'