

## JACQUOMO MONK - RESUME

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### ACADEMIC QUALIFICATIONS:

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|-----------|---|
| 2008-2011 | DOCTOR OF PHILOSOPHY ( <i>PhD</i> ) (Conferred 29 <sup>th</sup> March 2012)<br>Deakin University, Warrnambool |
| 2005-2006 | BACHELOR OF ENVIRONMENTAL SCIENCE ( <i>FIRST CLASS HONOURS</i> )<br>Deakin University, Warrnambool            |
| 2004      | BACHELOR OF ENVIRONMENTAL SCIENCE ( <i>MARINE AND FRESHWATER SCIENCE</i> )<br>Deakin University, Warrnambool  |

### OTHER QUALIFICATIONS:

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| 2014 | COXSWAIN GRADE 2 NEAR COASTAL<br>South-west Institute of TAFE, Warrnambool   |
| 2013 | AN INTRODUCTION TO SIMPLE MIXED MODELS TO TEST<br>EVOLUTIONARY AND ECOLOGICAL HYPOTHESES ABOUT WITHIN- AND<br>BETWEEN-INDIVIDUAL PATTERNS (Martijn van de Pol)<br>University of Melbourne, Melbourne |
| 2012 | WORKSHOP ON EXPERIMENTAL DESIGN AND ANALYSIS OF<br>MULTIVARIATE DATA USING PRIMER AND PERMANOVA (Marti Anderson)<br>University of Melbourne, Melbourne   |
| 2011 | MEDIUM RIGID TRUCK LICENCE<br>VicRoads, Warrnambool  |
| 2010 | RECREATIONAL BOAT LICENCE<br>VicRoads, Warrnambool   |
| 2007 | DIVE CONTROL SPECIALIST (Diver Master)<br>Scuba Schools International, Cairns  |
| 2005 | ESRI ONLINE GIS COURSES- ArcGIS 9.1-Spatial Analyst and 3D Analyst<br>Deakin University, Warrnambool   |
| 2000 | MANUAL DRIVERS LICENCE<br>VicRoads, Leongatha  |

### AWARDS:

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| 2012      | TEACHING AWARD (RESTORATION OF AQUATIC ECOSYSTEMS)<br>Deakin University, Warrnambool                |
| 2010      | THREE MINUTE THESIS COMPETITION: WINNER FOR WARRNAMBOOL<br>CAMPUS<br>Deakin University, Warrnambool |
| 2009      | AUSTRALASIAN HYDROGRAPHIC SOCIETY EDUCATION AWARD<br>AHS, Sydney                                    |
| 2009      | AUSTRALIAN MARINE SCIENCE ASSOCIATION TRAVEL AWARD<br>AMSA Victoria                                 |
| 2009      | LOCH AWARD<br>Deakin University   |
| 2008      | MUSEUM VICTORIA 1854 STUDENT SCHOLARSHIPS<br>Museum Victoria  |
| 2008-2012 | DEAKIN UNIVERSITY POSTGRADUATE RESEARCH SCHOLARSHIP<br>Deakin University                            |
| 2006      | SCIENTIFIC AND TECHNICAL ACHIEVEMENT AWARD FOR  |

CONTRIBUTIONS TO BENTHIC HABITAT CHARACTERISATION (TEAM AWARD)

Australian Hydrographic Service

2005 SHERWOOD SCHOLARSHIP

Deakin University, Warrnambool

2005 VICE-CHANCELLOR'S AWARD FOR EXCELLENT CONTRIBUTIONS IN COMMUNICATION, MARKETING AND POSITIONING

Deakin University, Warrnambool

**RELEVANT SCIENTIFIC EMPLOYMENT HISTORY:**

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**2014-Current POST DOCTORAL RESEARCH FELLOW**

IMAS, University of Tasmania, Taroona

I form part of a team investigating the logistical and statistical challenges associated with developing a blueprint for the sustained monitoring of Australia's Commonwealth Marine Reserve Network.

**2014 AQUATIC ECOLOGIST**

Austral Research and Consulting, Kirkstall

Provide statistical and spatial analysis support to NRM-based projects (e.g. Victorian Environmental Flows Monitoring and Assessment Program). Undertake field work using traps, cameras, nets and electrofishing techniques.

**2014 SESSIONAL LECTURER**

Deakin University, Warrnambool

Delivery of three undergraduate units; Geographic Information Systems: Uses in aquatic environments, Marine Biodiversity and Aquatic Ecology

**2012-2013 POST DOCTORAL RESEARCH FELLOW**

Deakin University, Warrnambool

Responsible for research and capacity building in the areas of spatial information management, GIS, remote sensing and quantitative statistics to a range of natural resource management projects including the following:

- Warrnambool-Corangamite Land Suitability Decision Framework Project
- Victorian Marine Habitat Mapping Project
- Victorian LiDAR Mapping Project
- Corner Inlet and Nooramunga Marine Habitat Mapping Project

**2011 ANALYSIS OF CURRENT LANDSCAPE OF TREATMENT OF CHILDHOOD PNEUMONIA**

Deakin University, Burwood

Develop a more evidence-based strategy to reduce childhood mortality from pneumonia in sub-Saharan Africa and south Asia. The specific objective of the project is to collate and synthesize available quantitative data assess patterns in the locations of incidences and accessibility to treatment.

**2008-2012 PhD CANDIDATE**

Deakin University, Warrnambool

Investigate variations in demersal fish assemblages as a result of protected areas, seafloor structure and observation method.

**2004-2006 MARINE ECOLOGIST**

Australian Marine Ecology Pty Ltd, Melbourne

Undertake scientific research to support environmental monitoring (e.g. Parks Victoria marine monitoring programs, Abalone virus monitoring) and environmental impact assessments (e.g. Port Phillip Bay Channel Deepening Project).

## KEY SCIENTIFIC SKILLS:

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### Problem solving

- Demonstrated ability to think sequentially, critically and strategically to synthesise information gained through environmental research.
- Ability to analyse issues for underlying causes, assessing options, proposing solutions through environmental monitoring.

### Communication and project management

- Ability to implement projects and effectively disseminate outcomes in verbal and written forms to audiences from a broad demographic.
- Thorough experience in managing timelines and prioritising workloads in order to meet project deliverables.
- Ability to set priorities, plan and organise work in order to reach specified objectives, including that of subordinate staff.
- Demonstrated ability to effectively communicate with community groups from diverse backgrounds
- Experience in liaising and supporting all levels of management, from a range of agencies including, Parks Victoria, DEPI, local government, local CMAs, Universities and other industry partners.
- Experience in preparing grant applications (over \$760k in past 5 years) and managing budgets.

### Technical skills and knowledge

- Expert in spatially-explicit predictive modelling (Presence-only models: MaxEnt, Ecological Niche-Factor Analysis, BIOCLIM, DOMAIN; and, Presence/Absence/Abundance models: GLM, GLMM, GAM, GAMM, Decision Trees, MLC, SVM).
- Experienced in parametric and non-parametric quantitative analysis techniques with statistical programs (R, SPSS and PRIMER & PERMANOVA + add-on).
- Knowledge and experience with GIS and remote sensing software (Manifold, Surfer, ERMapper™, ArcView, DIVA-GIS, ArcMap suite, Mapinfo and ENVI).
- Thorough knowledge of appropriate scientific procedures for collection, identification, statistical analysis and interpretation of data relating to environmental monitoring programs.
- Sound knowledge and experience in experimental design and statistical analysis of environmental monitoring programs.
- Thorough knowledge and experience in deploying and operating scientific surveying equipment in remote locations.
- Demonstrated experience at interpreting policies, regulations and legislation relevant to the management of flora and fauna (e.g. Environment Protection and Biodiversity Conservation Act 1999).
- Experience in strategic planning and policy development for issues relating to rural Australia.
- Knowledge and understanding of environmental sustainability with a particular focus on:
  - Climate change
  - Biodiversity
  - Urban/rural interface
  - Water quality and conservation

## PUBLICATIONS:

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(Google Scholar: Total citations 116; H-index 7 – December 16<sup>th</sup>, 2014)

### Journal Articles (Peer reviewed)

17. Jalali MA, Ierodionou D, **Monk J**, Gorfine H, Rattray A (*in review*). Predictive mapping of abalone fishing grounds using remotely sensed LiDAR and commercial catch data. *Fisheries Research*. IF = 1.84. Ranked 12 of 50 in Fisheries.
16. Mitchell P, **Monk J**, Laurenson L (*pending revisions*) Sensitivity of fine-scale species distribution models to locational uncertainty in occurrence data. *Methods in Ecology and Evolution*. IF = 5.32. Ranked 15 of 140 in Ecology.
15. Jalali MA, Ierodionou D, Gorfine H, **Monk J**, Rattray A (*pending revisions*). Exploring spatiotemporal trends in commercial fishing effort of an abalone fishing

- zone: a GIS-based hotspot model. *PloS ONE*. IF = 3.53. Ranked 8 of 55 in Multidisciplinary Sciences.
14. Laurenson L, **Monk J**, Christiansen F (*pending revisions*). Popular fiction: culling sharks reduces the number of shark attacks. *Conservation Letters*. IF = 5.03. Ranked 4 of 41 in Biodiversity Conservation.
  13. **Monk J** and Versace VL (*revisions invited*). Why controversial presence-only models are used in predicting species distributions: an insight from the marine literature. *Methods in Ecology and Evolution*. IF = 5.32. Ranked 15 of 140 in Ecology.
  12. Rattray A, Ierodiaconou D, **Monk J** and Laurenson LJB (2014). Quantification of spatial and thematic uncertainty in the application of underwater video for benthic habitat mapping. *Marine Geodesy*, 1-22. IF = 1.11. Ranked 17 of 24 in Remote Sensing. Cites = 1.
  11. Bellgrove A, Quinn GP and **Monk J** (2014) The effects of molluscan and crustacean herbivores on intertidal macroalgal recruitment. *Marine Biology* **161**, 1207-1216. IF = 2.47. Ranked 18 of 100 in Marine and Freshwater Biology. Cites = 0.
  10. **Monk J** (2014) How long should we ignore imperfect detection of species in the marine environment when modeling their distribution? *Fish and Fisheries* **15**, 352-358. IF = 8.76. Ranked 1 of 50 in Fisheries. Cites = 8.
  9. Zavalas R, Ierodiaconou D, Ryan D, Rattray A and **Monk J** (2014) Habitat classification of exposed coast macroalgae communities, using bathymetric LiDAR and video observation data. *Remote Sensing*. **6** 2154-2175 IF = 2.62. Ranked 6 of 27 in Remote sensing. Cites = 0.
  8. Rattray A, Ierodiaconou D, **Monk J**, Versace VL and Laurenson LJB (2013). Detecting patterns of change in benthic biological habitats using an acoustic remote sensing approach. *Marine Ecology Progress Series* **477** 1-13. IF = 2.64. Ranked 15 of 102 in Marine and Freshwater Biology. Cites = 3. **FEATURE ARTICLE**.
  7. Che Hasan R, Ierodiaconou D, and **Monk J** (2012). Evaluation of four supervised learning methods for benthic habitat mapping using backscatter from multibeam sonar. *Remote Sensing* **4**: 3427-3443. IF = 2.62. Ranked 6 of 27 in Remote sensing. Cites = 11.
  6. Laurenson L, French R, Jones P, Ierodiaconou D, Gray S, Versace V, Rattray A, Brown S, and **Monk J** (2012) Aspects of the biology of *Galaxias maculatus* from south-western Victoria, Australia. *Journal of Fish Biology*, **81** 1085-1100. IF = 1.73. Ranked 16 of 50 in Fisheries. Cites = 2.
  5. **Monk J**, Ierodiaconou D, Versace VL, Rattray A, and Harvey ES (2012) Are we predicting the actual or apparent distribution of temperate marine fishes? *PloS ONE* **7**: e34558. IF = 3.53. Ranked 8 of 55 in Multidisciplinary Sciences. Cites = 12.
  4. **Monk J**, Ierodiaconou D, Bellgrove A, Laurenson L and Harvey E. (2011). Remotely sensed hydroacoustics and underwater video for modelling fish habitat suitability. *Continental Shelf Research*, **31**: S17-S27. IF = 2.49. Ranked 21 of 58 in Oceanography. Cites = 18.
  3. Ierodiaconou D, **Monk J**, Rattray A, Laurenson L and Versace VL (2011). Modelling distribution of temperate benthic biological communities using remotely sensed hydroacoustics and underwater video. *Continental Shelf Research*, **31**: S28-S38. IF = 2.49. Ranked 21 of 58 in Oceanography. Cites = 33.
  2. **Monk J**, Ierodiaconou D, Versace VL, Bellgrove A, Harvey E, Rattray A, Laurenson L and Quinn GP (2010). Habitat suitability for marine fishes using presence-only modelling and multibeam sonar. *Marine Ecology Progress Series*. **420**: 157-174. IF = 2.64. Ranked 15 of 102 in Marine and Freshwater Biology. Cites = 20.
  1. **Monk J**, Ierodiaconou D, Bellgrove A and Laurenson L (2008). Using community-based monitoring with GIS to create habitat maps for a marine protected area in Australia.. **88**: (5) 865-872. IF = 1.13. Ranked 61 of 102 in Marine and Freshwater Biology. Cites = 8.

### Conference Proceedings

25. Iervasi D, **Monk J**, Versace, V (2014) *Contrasting baited video with "traditional" survey methods for assessing freshwater fish assemblages*. Australian Society for Fish Biology and Australian Society of Limnology, 30<sup>th</sup> June – 4<sup>th</sup> July, Darwin, Australia.
24. **Monk J** (2014). *Changing global patterns in potential distributions of marine fishes*. GeoHab Conference, 6<sup>th</sup> – 8<sup>th</sup> May, Lorne, Australia.

23. Zavalas R, Ierodiconou D, **Monk J** (2014). *How distance to reef and distance to soft sediment influence the structure of fish communities*. GeoHab Conference, 6<sup>th</sup> – 8<sup>th</sup> May, Lorne, Australia.
22. French T, **Monk J**, Ierodiconou D, Pope A, Ball D, Howe S, Dekker A, Anstee J, Botha, H (2014). *Classification of benthic marine habitats using LiDAR and WorldView-2 imagery*. GeoHab Conference, 6<sup>th</sup> – 8<sup>th</sup> May, Lorne, Australia.
21. Ali Jalali M, Ierodiconou D, Millar D, **Monk J**, Rattray A (2014). *A multidisciplinary approach to shallow benthic fisheries management integrating bathymetric LiDAR*. GeoHab Conference, 6<sup>th</sup> – 8<sup>th</sup> May, Lorne, Australia.
20. Rattray A, Ierodiconou D, **Monk J**, Che Hasan R, Womersley T (2014). *Wave-driven exposure as a surrogate for benthic habitat distribution*. GeoHab Conference, 6<sup>th</sup> – 8<sup>th</sup> May, Lorne, Australia.
19. Mitchell P, **Monk J**, Laurenson L (2014). *Sensitivity of fine-scale species distribution models to spatial errors in species occurrence data*. GeoHab Workshop, 5<sup>th</sup> May, Lorne, Australia.
18. **Monk J** (2014). *Ignoring important assumptions in species distribution models: how is it likely to influence the predictions?* Geohab Workshop, 5<sup>th</sup> May, Lorne, Australia.
17. Arnould JPY, Dorville N, **Monk J**, Ierodiconou D, Hoskins A, Hindell M, Semmens J, Marshall G, and Abernathy K (2013). *The diet of female Australian fur seals as determined by animal-borne video cameras*. 20<sup>th</sup> Biennial Conference on Marine Mammals. 9-13<sup>th</sup> December, Dunedin, New Zealand.
16. Ierodiconou D, **Monk J**, Wheatley K, Semmens J, Hindell M, Hoskins A, Abernathy K, Marshall G and Arnould J (2012). *Animal-borne remote sensing: Modelling the foraging habitat of the Australian fur seal in Bass Strait, Australia*. 34<sup>th</sup> International Geological Congress. 5<sup>th</sup>-10<sup>th</sup> August, Brisbane, Australia.
15. **Monk J**, Pope A, and Ierodiconou D, Otera K and Mount R (2012). *Predictive mapping of intertidal and shallow subtidal habitats using ALOS imagery and LiDAR bathymetry*. Australian Marine Sciences Association; Marine Extremes and Everything in Between, 1<sup>st</sup>-5<sup>th</sup> June, Hobart, Australia.
14. Zavalas R, Ierodiconou D, Ryan D, Rattray A, and **Monk J** (2012). *Benthic characterisation of temperate marine habitats using bathymetric LiDAR and video observations*. Australian Marine Sciences Association; Marine Extremes and Everything in Between, 1<sup>st</sup>-5<sup>th</sup> June, Hobart, Australia.
13. **Monk J**, Versace V and Ierodiconou D (2012). *Transferability of predictive fish distribution models between two coastal systems*. Australian Marine Sciences Association; Marine Extremes and Everything in Between, 1<sup>st</sup>-5<sup>th</sup> June, Hobart, Australia.
12. **Monk J**, Ierodiconou D, and Versace V (2012). *Transferability of fine-scale habitat suitability models for temperate marine demersal fishes*. GeoHab Conference, 1<sup>st</sup>-4<sup>th</sup> May, Orcas Islands, USA.
11. Versace V, **Monk J**, Salzman S, and Laurenson L (2011). *Geographical Information Systems (GIS) and their role in sustainable planning: a case study from a Local Government Area (LGA) in Australia*. The Australasian Conference on Information Systems. Peer Reviewed, 30<sup>th</sup> November-2<sup>nd</sup> December, Sydney, Australia.
10. Che Hasan R, Ierodiconou D, Rattray A, **Monk J**, and Laurenson L (2011). *Applications of multibeam echosounder data and video observations for biological monitoring on the south east Australian Continental Shelf*. 10<sup>th</sup> International Symposium and Exhibition on Geoinformation. 27<sup>th</sup>-29<sup>th</sup> September, Shah Alam, Malaysia.
9. **Monk J**, Ierodiconou D, Versace V, Rattray A, and Harvey ES (2011). *Testing the influence of survey method for building species distribution models of marine fishes*. Australian Marine Sciences Association: Crossing Boundaries. 3<sup>rd</sup>-7<sup>th</sup> July, Fremantle, Australia.
8. **Monk J**, Ierodiconou D, Versace V, Rattray A Stagnitti F, and Harvey ES (2011). *Comparing towed and baited underwater video techniques for assessing temperate marine fishes*. GeoHab Conference, 3<sup>rd</sup>-5<sup>th</sup> May, Helsinki, Finland.
7. Rattray A, Ierodiconou D, **Monk J**, Laurenson L, and Quinn, G (2011). *Integrating time-series hydroacoustics and video observations for detecting changes in benthic habitats*. GeoHab Conference, 3<sup>rd</sup>-5<sup>th</sup> May, Helsinki, Finland.

6. **Monk J** and Ierodiconou D (2010). *Opportunities and challenges of predictive models in the marine environment. Predicting species distributions and communities in the marine realm*. Invited presentation, 8<sup>th</sup>-9<sup>th</sup> May, NIWA Wellington, New Zealand. **INVITED PRESENTATION**
5. **Monk J**, Ierodiconou D, Harvey E, Bellgrove A, Laurenson L, Rattray A and Quinn G (2010). *Spatial prediction of demersal fish habitat suitability for remotely-sensed observation and hydroacoustic datasets*. GeoHab Conference, 4<sup>th</sup>-7<sup>th</sup> May, Wellington, New Zealand.
4. **Monk J**, Ierodiconou D, Bellgrove A, Harvey E and Laurenson L (2009). *Incorporating sonar and video data for predicting fish habitat suitability*. Australian Marine Sciences Association: Marine Connectivity. 5-9<sup>th</sup> July, Adelaide, Australia.
3. Ierodiconou D, Rattray A, **Monk J** and Laurenson L (2009). *Linking seafloor characteristics to biological communities*. Australian Marine Sciences Association: Marine Connectivity. 5-9<sup>th</sup> July, Adelaide, Australia.
2. Rattray A, Ierodiconou D, Laurenson L, Quinn, G and **Monk J** (2009). *Potential sources of error in the application of towed video data for benthic habitat characterisation*. Australian Marine Sciences Association: Marine Connectivity. 5-9<sup>th</sup> July, Adelaide, Australia.
1. **Monk J**, Ierodiconou D, Bellgrove A and Laurenson L (2007). *A starting point: Mapping of the subtidal zones of a Victorian marine sanctuary using an integrated community-based monitoring GIS approach*. In "GIS for coastal zone: a selection of papers from CoastGIS 2006". Woodroffe CD, Bruce EM, Puotinen M and Furness RA (Eds.). Wollongong Papers on Maritime Policy No. 16.

### Thesis

2. **Monk J** (2011). Understanding fish-habitat associations using video observations and sonar imaging. PhD Thesis, Deakin University, Warrnambool.
1. **Monk J** (2006). A starting point: mapping of the subtidal zones of the Merri Marine Sanctuary using an integrated community-based monitoring GIS approach. Honours Thesis, Deakin University, Warrnambool.

### Technical Reports

28. French T, **Monk J**, Ierodiconou D, Pope A, and Ball D (2013) *Yaringa and French Island Marine National Park Habitat Mapping. Report to Parks Victoria*. Deakin University, Warrnambool, Victoria, Australia.
27. Pope A, **Monk J** and Ierodiconou D (2013) *Corner Inlet and Nooramunga Habitat Mapping Project- Part II: High resolution mapping and change detection analysis using 2011 Rapid Eye Satellite Image compared to 2009 ALOS Satellite Image*. Report to Parks Victoria. Deakin University, Warrnambool, Victoria, Australia.
26. Versace V, **Monk J**, Ierodiconou D, Scarborough H, Wallis A, O'Toole K, Budge T and Chesterfield M (2013). *Corangamite Land Suitability Decision Framework Study: Planning Paper*. Report to Warrnambool City Council and Corangamite Shire Council. Deakin University, Warrnambool, Victoria, Australia.
25. Versace V, **Monk J**, Ierodiconou D, Scarborough H, Wallis A, O'Toole K, Budge T and Chesterfield M (2013). *Warrnambool Land Suitability Decision Framework Study: Planning Paper*. Report to Warrnambool City Council and Corangamite Shire Council. Deakin University, Warrnambool, Victoria, Australia.
24. Versace V, **Monk J**, Ierodiconou D, Scarborough H, Wallis A, O'Toole K, Budge T and Chesterfield M (2013). *Warrnambool and Corangamite Land Suitability Decision Framework Study: Technical Report*. Report to Warrnambool City Council and Corangamite Shire Council. Deakin University, Warrnambool, Victoria, Australia.
23. **Monk J** and Pope A (2012). *Corner Inlet and Nooramunga Habitat Mapping Project: Part II- May 2012 Milestone Report*. Report to Parks Victoria. Deakin University, Warrnambool, Victoria, Australia.
22. **Monk J**, Pope A, Ierodiconou D, Otera K, and Mount R (2011). *Corner Inlet and Nooramunga Habitat Mapping Project*. Report to Parks Victoria. Deakin University, Warrnambool, Victoria, Australia.
21. Rattray A, **Monk J** and Ierodiconou D (2009). *Preliminary spatial analysis of rock lobster catch data for the Hopkins Bank*. Report to Fisheries Research Branch- Fisheries Victoria. Deakin University, Warrnambool

20. Ierodiasconou D, **Monk J**, Rattray A, Laurenson L and Quinn G (2009). *South west Victoria marine habitat and biodiversity asset identification and applications of seascape data in Victorian coastal waters*. Report to the Department of Sustainability and Environment. Deakin University, Warrnambool
19. Ierodiasconou D, Rattray A, Laurenson L, **Monk J** and Lind P (2007). *Victorian Marine Mapping Project. Report to Natural Heritage Trust*. Report to the Department of Sustainability and Environment. Deakin University, Warrnambool.
18. Pope A, Lind P, Ierodiasconou D, Wallis A, **Monk J** and Rattray A (2007). *Development of a GIS for the southwest coastal marine values audit*. Report to Western Coastal Board. Deakin University, Warrnambool.
17. Pope A, Lind P, Ierodiasconou D, Wallis A, **Monk J** and Rattray A (2007) *South West Coastal and Marine Values GIS: Training and Evaluation Workshop, Feedback & Refinement of GIS*. Deakin University, Warrnambool.
16. **Monk J**, Gilmour P and Crozier J (2006). *Portland Trawler Wharf Marine Survey, September 2006*. Report to Department of Sustainability and Environment. Australian Marine Ecology Report 373, Melbourne. [Report of Restricted Access].
15. Edmunds M, **Monk J** and Stewart K (2006). *Port Phillip Bay Channel Deepening Project Supplementary Environmental Effects Statement – Marine Ecology Specialist Studies. Volume 4: Epibenthic Plants and Animals*. Report to Port of Melbourne Corporation and Maunsell. Australian Marine Ecology Report 355, Melbourne. [Report of Restricted Access].
14. Edmunds M, Crozier J, **Monk J** and Pickett P (2006). *Port Phillip Bay Channel Deepening Project Supplementary Environmental Effects Statement – Marine Ecology Specialist Studies. Volume 3: Microphytobenthos*. Report to Port of Melbourne Corporation and Maunsell. Australian Marine Ecology Report 351, Melbourne. [Report of Restricted Access].
13. Edmunds M, Williams J, Stewart K, Crozier J and **Monk J** (2006). *Port Phillip Bay Channel Deepening Project. Supplementary Environmental Effects Statement – Marine Ecology Specialist Studies. Marine Ecology Existing Conditions Summary Report*. Report to Maunsell. Australian Marine Ecology Report 359, Melbourne. [Report of Restricted Access].
12. Edmunds M, Judd A, Gilmour P, Stewart K, Pickett P, **Monk J** and Crozier J (2006). *Port Phillip Bay Channel Deepening Project. Supplementary Environmental Effects Statement – Marine Ecology Specialist Studies. Volume 8: Seaweed Beds*. Report to Maunsell. Australian Marine Ecology Report 356, Melbourne. [Report of Restricted Access].
11. Edmunds M, Gilmour P, Power B, Shimeta J, Pickett P, Judd A, Baker K, Sams M, Wassnig M, Williams J, Crozier J, Stewart K and **Monk J** (2006). *Port Phillip Bay Channel Deepening Project. Supplementary Environmental Effects Statement – Marine Ecology Specialist Studies. Volume 9: Deep Reef Biota*. Report to Maunsell. Australian Marine Ecology Report, Melbourne. [Report of Restricted Access]. 235 pp
10. **Monk J** and Edmunds M (2005). *Channel Deepening Project Monitoring Program: Marine Ecology Standard Operating Procedures. ME16: Visual Inspections for Marine Pest Species*. Report to Port of Melbourne Corporation. Australian Marine Ecology Report 238, Melbourne. [Report of Restricted Access].
9. Edmunds M, **Monk J** and Williams J (2005). *Channel Deepening Project. Substratum Features of the Great Ship Channel: Baseline Survey*. Report to Port of Melbourne Corporation. Australian Marine Ecology Report 311, Melbourne. [Report of Restricted Access].
8. Edmunds M, **Monk J** and Gilmour P (2005). *Port Phillip Bay Channel Deepening Project. Trial Dredging Risk Assessment: Marine Ecology*. Report to Port of Melbourne Corporation. Australian Marine Ecology Report 309, Melbourne. [Report of Restricted Access].
7. Edmunds M and **Monk J** (2005). *Port Phillip Bay Channel Deepening Project. Southeast DMG Optimisation* Report to Parsons Brinkerhoff and Port of Melbourne Corporation. Australian Marine Ecology Report 308, Melbourne. [Report of Restricted Access].
6. Edmunds M, Gilmour P and **Monk J** (2005). *Port Phillip Bay Channel Deepening Project. Marine Ecology Experimental Designs for Trial Dredging*. Report to Port of

- Melbourne Corporation. Australian Marine Ecology Report 199, Melbourne. [Report of Restricted Access].
5. Gilmour P, Edmunds M, Lindsay M and **Monk J** (2005) *Victorian Subtidal Reef Monitoring Program: The Reef Biota at Phillip Island*. Parks Victoria Technical Series. Parks Victoria, Melbourne.
  4. Edmunds M, Gilmour P, Williams J and **Monk J** (2005). *Port Phillip Bay Channel Deepening Project. Marine Ecology Baseline Monitoring: Progress Report, March 2005*. Report to Port of Melbourne Corporation. Australian Marine Ecology Report 200, Melbourne. [Report of Restricted Access].
  3. Edmunds M, Gilmour P, Lindsay M, Williams J, Bryant C, Robinson E and **Monk J** (2005). *Port Phillip Bay Channel Deepening Project. Marine Ecology Baseline Monitoring: Progress Report, April 2005*. Report to Port of Melbourne Corporation. Australian Marine Ecology Report 304, Melbourne. [Report of Restricted Access].
  2. Edmunds M, Gilmour P, Lindsay M, Williams J, Bryant C, Robinson E and **Monk J** (2005). *Port Phillip Bay Channel Deepening Project. Marine Ecology Baseline Monitoring: Progress Report, May 2005*. Report to Port of Melbourne Corporation. Australian Marine Ecology Report 309, Melbourne. [Report of Restricted Access].
  1. Edmunds M, Gilmour P, Lindsay M, Williams J, Bryant C, Robinson E and **Monk J** (2005). *Port Phillip Bay Channel Deepening Project. Marine Ecology Baseline Monitoring: Progress Report, June 2005*. Report to Port of Melbourne Corporation. Australian Marine Ecology Report 312, Melbourne. [Report of Restricted Access].

### Popular magazine articles

1. **Monk J**, Ierodiconou D and Bellgrove A (2008). *Trained community volunteers can collect useful data*. JMBA Global Marine Environment Magazine.

### SUPERVISION AND TEACHING:

#### SUPERVISION:

##### PhD

2011-Current Richard Zavalas “Investigating reef fish-habitat relationships using active remote sensing and video observation data” (Supervision: Ierodiconou D, Pope A, and **Monk J**)

##### Honours

2014 Peter Mitchell (1st Class Honours) “Sensitivity of fine-scale species distribution models to spatial errors in species occurrence data” (Supervision: Laurenson, L and **Monk J**)

2012 Tom French (1st Class Honours) “Mapping of Benthic Marine Habitats using LiDAR and WorldView-2 Imagery” (Supervision: Ierodiconou D, Pope A and **Monk J**)

2011 Sam Mill (1st Class Honours) “Detection of spatial structuring in demersal fish size-classes using multibeam sonar and baited stereo-video” (Supervision: Ierodiconou D and **Monk J**)

2011 Paddy Hernon (1st Class Honours) Habitat heterogeneity and demersal fish assemblages in a temperate marine environment” (Supervision: Ierodiconou D and **Monk J**)

2010 Richard Zavalas (1st Class Honours) “Benthic characterisation of temperate marine habitats using bathymetric LiDAR and video observations” (Supervision: Ierodiconou D, Matthews T, Quinn G and **Monk J**)

#### TEACHING:

2014 SLE 337 Marine Biodiversity (Demonstrator)  
3<sup>rd</sup> year undergraduate

2014 SLE 244 Aquatic Ecology (Demonstrator)  
2<sup>nd</sup> year undergraduate

2013-2014 SLE 304 Geographic Information Systems: Uses in aquatic environments (Lecturer)  
SETU 4.75  
3<sup>rd</sup> year undergraduate

2013 SLE 104 Blue Planet: Water and Life (Lecturer) SETU 4.00  
1<sup>st</sup> year undergraduate

2012 SLE 347 Restoration of aquatic ecosystems (Lecturer) SETU 4.65



3<sup>rd</sup> year undergraduate

2012 Mapping marine habitats (Demonstrator)  
Workshop for Department of Sustainability and the Environment and Department of Primary Industries.

2009-2013 GIS lab coordinator

# **GRANTS, CONSULTANCIES AND AWARDS:**

**Total last 6 years = AU\$761,433**

Year	Description	Funding Body	Amount
2014	Sharpe A, Iervasi D, Hale, J, Iervasi K, Versace VL and <b>Monk J</b> . Fish monitoring in the Loddon and Campaspe Rivers: VEFMAP adult fish monitoring 2014	North-Central Catchment Management Authority	<b>\$85,500</b>
2014	Iervasi D, Iervasi K, Versace VL and <b>Monk J</b> . Fish monitoring in the Glenelg River: VEFMAP adult fish monitoring 2013-2014	Glenelg-Hopkins Catchment Management Authority	<b>\$73,242</b>
2013	Norman M, <b>Monk J</b> . Under the lens: generating species checklists for Discovery Bay and Twelve Apostles Marine National Parks	Parks Victoria	<b>\$10,000</b>
2013	<b>Monk J</b> . Faculty support for national and international research collaboration	Deakin University	<b>\$1,000</b>
2013-2015	Ierodiconou D, <b>Monk J</b> , Rattray A, Schimel A, Blake S. Hydroacoustic mapping of Wilson's Promontory Marine National Park	Parks Victoria	<b>\$297,140</b>
2012-2014	Ierodiconou D, <b>Monk J</b> , Harvey E. Understanding links between seafloor physical characteristics and biological communities: Integrating LiDAR, multibeam sonar and observation techniques for full coverage assessment of Marine National Parks	Parks Victoria	<b>\$59,000</b>
2012	Pope A, <b>Monk J</b> . Corner Inlet Ramsar Site Habitat Mapping Project – PART 2: Short term habitat change detection analysis using 2011 Rapid Eye Satellite Image compared to 2009 ALOS Satellite Image.	Parks Victoria	<b>\$16,000</b>
2012	Ierodiconou D, <b>Monk J</b> , Pope A. Mapping of marine habitats in Yaringa and French Island Marine National Parks	Parks Victoria	<b>\$75,283</b>
2011-2012	Versace V, Gibson M, <b>Monk J</b> , Rodrigo T. An investigation into the life cycle of the Sicilian sea lavender ( <i>Limonium hyblaum</i> ) on the salt marsh communities of south west Victoria	Glenelg-Hopkins Catchment Management Authority	<b>\$1,600</b>
2011	Whyte P, Younie S, Bulfone L, Carter B, Bennett C, Murphy B, <b>Monk J</b> , Beaton M. Analysis of Current Landscape of Treatment of Childhood Pneumonia	Gates Foundation	<b>\$74,468</b>
2010-2011	Pope A, <b>Monk J</b> , Ierodiconou D, Mount R. Shallow water habitat mapping of designated marine areas, Corner Inlet and Nooramunga Marine & Coastal Parks	Parks Victoria	<b>\$64,700</b>
2009	<b>Monk J</b> , Ierodiconou D. Understanding demersal fish-habitat associations using video observations and sonar imaging	Australasian Hydrographic Society	<b>\$2,500</b>
2009	<b>Monk J</b> , Ierodiconou D, Bellgrove A, Harvey E. Understanding demersal fish-habitat associations using video observations and sonar imaging.	Deakin University	<b>\$1,000</b>

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**SERVICE AND IMPACT:**

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- Manuscript reviewer for *Global Environmental Change*, *Journal of Applied Ecology*, *Marine Ecology Progress Series*, *Ecological Modelling*, *Marine and Freshwater Research*, *Marine Biology*, *Methods in Ecology and Evolution*, *PlosONE*, *Ocean and Coastal Management*, *Journal of Experimental Marine Biology and Ecology*, *Journal of Biogeography*
- Member of the *Australian Marine Science Association* and *GeoHab*
- Numerous presentations and appearances to the general public (e.g. Foster Gallery 2011), radio (Radio Marinara), TV (e.g. Local and State News, Catalyst) and school groups (e.g. Brauer College 2009 – 2011)
- Conference organisation committee member for Centre for Integrative Ecology Higher Degree by Research Conference 2012, School of Life and Environmental Sciences Higher Degree by Research Conference 2011 and GeoHab 2014

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**REFEREES:**

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*Prof Euan Harvey*

**Position:** Professor in Marine Science

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