

Curriculum Vitae

Name: Dr William David Robbins

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Education

2007: PhD. School of Marine Biology, James Cook University
Dissertation examined the abundance, demography and ecology of tropical sharks on Indo-Pacific coral reefs

1994: B.Sc (Hons) (Marine Biology, Biochemistry), James Cook University

Non-Confidential Professional Experience

2011 - present

Founder and Research Scientist, Wildlife Marine

Wildlife Marine is a research/consultancy I founded in late 2011. Here I undertake scientific research and consultancy contracts to international peer-review standards. Research findings are published widely, while consultancy contracts are undertaken in strict confidence. In both cases my responsibilities have included project strategy, design, budgeting, staff and stakeholder liaisons, analysis and output distribution. Examples of non-confidential projects include:

- Reviewing and advising State Governments on marine management policies
- International fisheries workshops for Arabian and Indian fisheries managers
- Advising overseas governments on means to detect and reduce shark risk
- Risk assessments of *threatened* and *endangered* marine-associated species
- Assessing novel technologies to aid fisheries and environmental monitoring
- Underwater surveys of marine fauna to assess fisheries management outcomes
- Tagging, tracking and population monitoring of flatback turtles
- Age and growth analysis of commercially-harvested fish populations
- Telemetry and satellite tracking, and underwater video capture of apex predators
- Determining predation rates and trophic interactions of marine apex predators

2007 - 2011

Research Scientist, New South Wales Department of Primary Industries (Cronulla Fisheries Research Centre of Excellence)

While at NSW DPI I ran multiple research programs involving technical staff and university intern supervision, and stakeholder discussions. I was also a member of the Wild Fisheries OH&S advisory working group. Selected projects include:

- Upgrading and managing the State Government's premier fish ageing facility
- Determining the efficacy and outcomes of State-funded beach safety programs
- Annual review of fish stock status for commercial and recreational target species
- Developing workshops and training programs to teach fish ageing practicalities
- Advising Departmental managers on commercial harvest strategies
- Co-managing the State Government's Inshore Telemetry Movement Program
- Legislation-changing investigations into the interactions of *Critically Endangered* marine stocks with recreational fishing gears
- Investigating shark attacks across New South Wales

2000 - 2006

Underwater Marine Surveys Coordinator, James Cook University

I led or co-ran multiple consultancy contracts for Government and private agencies, including the Great Barrier Reef Marine Park Authority, the Department of Environment and Heritage and National Geographic. Tasks included:

- Surveys of benthic habitats and rapid assessments of coral and algae coverage
- Deployment and retrieval of *in situ* environmental monitoring gear
- Mapping and establishing navigational corridors for safe passage between reefs
- Visual census of herbivores and predators on tropical and temperate reef systems
- In-water marine biopsy collections for fish and shark genetic stock analysis
- Assisting light level monitoring and use of underwater spectroradiometric sensors
- Ensuring projects remained within budget and timeline. Report analysis and writing

Environmental Monitor, James Cook University

I assisted in the environmental monitoring of multiple Queensland ports to identify introduced marine pests. Tasks performed included:

- Contribution into project development to ensure appropriate sampling design
- Negotiations with external stakeholders to ensure users safety and access
- Field preparation, budgeting, design and testing of sampling equipment
- Deployment and retrieval of *in situ* environmental monitoring gear
- Field collection of biological samples (diving, sledge, benthic grab and terrestrial)
- *In situ* preservation of biota and subsequent laboratory analysis
- Analysis and writing of internal and client reports

Research Scientist (PhD), James Cook University

My doctoral studies investigated the abundance, demography and genetics of Indo-Pacific reef sharks. My project saw me conduct research in diverse locations, including the Seychelles, Papua New Guinea, French Polynesia, Oman, Great Barrier Reef and Coral Sea, and included the following components:

- Design and implementation of fisheries-independent sampling methodologies
- Leading remote area field operations in Australian and overseas
- Visual and remote video census of sharks and fishes across multiple reef habitats
- Field collection of fish and shark samples for laboratory analysis
- Capture, tag and release of fish and sharks from beaches and small vessels
- Processing of sharks and fishes for age, diet and demography analysis
- Design and development of a biopsy probe for wild tissues collections
- Analysis of shark genetic population structure across the Indo-Pacific

Fish Ageing Laboratory Manager, James Cook University

As manager of the Marine Biology Department's primary fish ageing facility I led research into fish ageing methodologies, and undertook the following tasks:

- Designing and writing computer macros to automate data entry and analysis
- Training of staff and students in laboratory protocols
- Procurement and allocation of laboratory resources
- Conflict resolution between laboratory users
- Being lead analyst for international fish demography collaborations
- Determination of temperate and tropical fish age interpretation
- Wild and captive validation of predatory and herbivorous fish species

Professional Skills

- Over 21 years field experience, including planning, logistics and implementation
- Over 10 years' experience managing laboratories and staff
- Demonstrated skills in project direction, budgeting and time management
- Highly proficient with data manipulation and analysis (including macro writing)
- Over seven years underwater surveying marine vertebrates and benthic habitats
- Computer software proficient (MS Office, Sigmaplot, Endnote, SPSS)
- Adjunct researcher with Curtin University and University of Technology Sydney

Professional Certificates

- AS 2815.1 Australian ADAS commercial diver certificate (>1100 logged dives)
- Queensland recreational vessel license (>500 days logged at sea)
- Marine radio operator's Certificate of Proficiency (MF, HF & VHF)
- Open driving license (with 4WD certification)
- Queensland Justice of the Peace (Qualified)
- Workpro *Workplace Health & Safety* and *Equality in the Workplace* modules

Selected Publications

Non-confidential reports & papers

- **Robbins WD**, Huveneers C, Parra GJ, Möller LM, Gillanders BM. *In review*. Anthropogenic threat assessment of marine-associated fauna in Spencer Gulf, South Australia. *Marine Policy*
- Taylor BM, Brandl SJ, Kapur M, **Robbins WD**, Johnson G, Huveneers C, Choat JH. *In review*. Patterns and processes of reef fish life-history variation across the northern Great Barrier Reef. *Ecology*
- **Robbins WD**. 2015. *Monitoring and tagging of flatback turtles at Cemetery Beach, Port Hedland 2014/15*. Report to Care for Hedland Env. Assoc. Inc. 35 pp
- Gray CA, Barnes LM, Ochwada-Doyle FA, Van der Meulen DE, Kendall BW, and **Robbins WD**. 2014. Age, growth and demographic characteristics of *Sillago flindersi* exploited in a multi-species trawl fishery. *Fisheries Science* 80:915-924
- **Robbins WD**, Peddemors VM, Kennelly SK and Ives, MC. 2014. An experimental evaluation of shark detection rates by aerial observers. *PLoS One* 9(2): e83456
- Stewart J, **Robbins WD**, Rowling K, Hegarty A and Gould A. 2013. A multifaceted approach to modelling growth of the Australian bonito, *Sarda australis* (Family Scombridae), with some observations on its reproductive biology. *Marine and Freshwater Research* 64: 671-678
- **Robbins WD**. 2012. *Science-based management for sustainable fisheries*. International Management Workshop, 2012. Wildlife Marine, Perth. 76 pp
- Choat JH, van Herwerden L, **Robbins WD**, Hobbs JP and Ayling AM. 2006. *A report on the ecological surveys undertaken at Middleton and Elizabeth reefs, February 2006*. Report to DEH. James Cook University, Townsville. 65pp

Further information

Complete publication list and further information available upon request