

David J Lennon

Australian Reef Ball Contractor & Environmental Consultant

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Date of Birth: 16 November 1965

Citizenship: Australian

✍ Published articles in scientific/trade journals, newspapers and magazines

✍ Promotion of projects on radio and TV

Qualifications:

Master of Science

Environmental Management
Griffith University, Australia 1994

Bachelor of Science

Oceanographic Technology, Florida Institute of Technology,
USA, 1989

Previous Qualifications:

- ✍ Commercial Diver (air and mixed gas)
- ✍ PADI Scuba Instructor
- ✍ Nitrox Instructor, Gas Blender, Service Technician
- ✍ Response & Rehabilitation of Oil Affected Wildlife
- ✍ Diesel Technician

Services:

- ✍ Full assistance with artificial reef projects from concept through to completion and monitoring
- ✍ Reef Ball reefs for impact mitigation or restoration/remediation, breakwaters, fisheries enhancement, snorkelling or diving. Artificial reef design, site selection, construction of Reef Balls, deployment and monitoring
- ✍ Enhancement of coastal developments using innovative Reef Ball configurations and webcam technology
- ✍ Project Management (Incl. International and projects involving diverse teams)
- ✍ Environmental impact assessments, Environmental monitoring, Environmental Management Plans

Key Skills and Experience

- ✍ Reef Ball contractor since 1997, and over 15 years experience in Australia, Saudi Arabia, UAE, Indonesia, Malaysia, US and Cyprus
- ✍ Coastal ecosystems including monitoring, mapping, and enhancement by the creation of responsibly designed artificial reefs to improve development value and/or remediate construction impacts
- ✍ Major consultancies, research institutes, local government departments, universities, industry, and community groups
- ✍ Government approvals and grants
- ✍ Projects and studies with small community groups to projects worth over A\$1 billion

Examples of Artificial Reef Projects:

Marine Habitat Enhancement Program - (Abu Dhabi, UAE) – enhancement of fisheries and corals around a private island using Reef Balls ranging in size from 15 kg to 3000kg. Tasks incl setting up construction site, training of local staff, site assessment, reef design, coral transplants and deployment of 350 Reef Balls.

Erosion Control using Reef Balls - (Turtle Islands Sabah) – survey of five islands and recommendations of how Reef Ball breakwaters could be used to reduce erosion and maximise environmental enhancement. Construction commenced March 2007.

Reef Ball Breakwater – (Antigua) – participation as Reef Ball contractor in the largest Reef Ball breakwater for beach protection built to date using over 1500 Reef Balls weighing up to 5 tonnes each. Included the transplantation on to the Reef Balls of over 17 tonnes of rescued corals from pending dredge sites. (www.reefbeach.com)

Marine Habitat Enhancement – Peel Region (Peel-Harvey Catchment Council Inc, Western Australia) - feasibility study and recommendations for marine habitat enhancement of canal estates and natural waterways, including a financial plan and implementation program.

Peel Region Fish Stocking & Management Association (Western Australia) – set-up of construction site and training of volunteers on construction of Reef Balls and their deployment under docks and within canals.

New South Wales Fisheries (Sydney Australia) – set-up of construction site and training on construction of Reef Balls to be used to enhance Lake Macquarie.

Fishery Enhancement Program – (North Sulawesi, PT Newmont Minahasa Raya) - Community project funded by a US gold mine to improve fisheries and mitigate damage to coral from dynamiting. Included site assessment, set-up of construction site, training on construction of 'Reef Ball' concrete reef modules, deployment methodology and reef configurations. Now the largest non-government Reef Ball reef in the world with over 3200 modules deployed. www.artificialreefs.org/photogallery/ptnewmount/ptnewmont.

HMAS Brisbane - Site Assessment & Recommendations (Queensland Dept. of Premier and Cabinet, Australia) – towed video survey assessment of benthic habitats and analysis of wave climate at proposed locations for sinking of the HMAS Brisbane navy destroyer to create a diving reef off the Sunshine Coast. Project Manager.

HMAS Brisbane - Investigation of Permit Requirements and Required Works – (State Development Sunshine Coast, & Sunshine Coast Artificial Reef Group Australia) – review and recommendations on permits required for sinking of the ex-navy ship as a diving attraction off the Sunshine Coast–

Coastal Protection using Artificial Reefs (Caloundra City Council, Australia) – impact assessment and reef design options and costings for improving swimming conditions along a dangerous coast. Included environmental impacts, community consultation, wave climate assessment, and diving reef options. Project Manager.

Southern Cross Underwater Trail - (Mooloolaba, Qld) – unique concept design, site assessment, permit approval and provision of concrete Reef Ball modules for an underwater trail off Mooloolaba. Supported by Underwater World and Bodysop.

Underwater Research Group of Qld (Brisbane, Qld) – Project & Environment Officer. Fishcare grant to assess the effectiveness of concrete pipes deployed on Australia's largest artificial reef (Curtin Reef). Produced the first economic study on the Curtin Artificial Reef, 'The Value of the Curtin Artificial Reef to the Sport Diving Industry – Survey of Brisbane Dive Centres', 1994. Conducted site assessments and made recommendations for proposed new artificial reef sites.

Wave Break Island dive trail (Gold Coast, Australia) – proposal to enhance popular scuba training site and procurement of approval from Gold Coast City Council.

Octopus Gardens (CYDIVE Pty Ltd, CYPRUS) - design and establishment of the world's first 'Octopus Gardens'. Extremely successful habitats specifically designed to attract octopus to entertain and help educate sport divers about marine life. Project included a complete package of design, construction, fauna/flora surveys, monitoring methodology and media releases.

Construction of artificial reefs (Saudi Arabia) – general diving reefs in a sandy bay within the Arabian Gulf using materials of opportunity. Included the preparation of a guide for the local diving clubs on how to design and construct an artificial reef.

Employment:

March 2006 - present

**David J Lennon & Assoc - consulting,
business development and project
management, UAE, Malaysia, Australia**

December 2003 - March 2006

**Research & Business Development
Project Manager
Gale Pacific, Melbourne**

March 2003 - December 2003

**Principal & Reef Ball Contractor
David J Lennon & Associates**

September 2002 - February 2003

**Project Manager for United Nations coral reef
investigation to assess the impacts of the
1991 Gulf War Oil Spill
Saudi Company for Environmental Works
(SEW) (Saudi Arabia)**

November 2001 - August 2002

**Senior Environmental Consultant
Halliburton KBR (Brisbane)**

April 2001 - November 2002

Private Environmental Consultant (Brisbane)

January 1998 - March 2001

**Environmental Consultant
Sinclair Knight Merz (Brisbane)**

1995 - December 1997

**Principal
Green Marine International (Brisbane):
Innovative environmental products, programs
and events.**

1995

Private Environmental Consultant (Cyprus)

1990 - 1993

**Research Scientist & Field Coordinator
KFUPM Research Institute (Saudi Arabia)**

1989 - 1990

**Oceanographic Technician
Continental Shelf Associates (USA)**

Sample Publications and Presentations:

Publications

Lennon, D.J. (Sum 96/97). 'Artificial Reefs Don't Have to be Big! Waves, Newsletter of the Marine & Coastal Community Network, Vol. 3, No. 4

Lennon, D.J. (1996). 'Moving In? Octopus Gardens Downunder'. Scuba Diver, Mar/Apr

Lennon, D.J. (1995). 'How Wetlands Remove Contaminants'. Underwater Geographic, Jul/Aug

Lennon, D.J. (1994). 'How Wetlands Remove Contaminants'. Bulletin of the Australian Littoral Society, Vol. 17, No. 1

McCain, J.C., Qurban, M., Lennon, D.J., and Chesterton, N.J. (1993) 'Remediation of salt marshes after the 1991 Gulf Oil Spill'. Arabian Journ. Sci. and Engin., Vol. 18, No. 2, pp 257-267

Lennon, D.J. (1992). 'If you can't get to the Reef...bring the Reef to you'. A guide to the construction of Artificial Reefs. Dhahran: David Lennon.

Presentations

Numerous successful presentations to government and local councils (including community consultations) regarding the establishment of artificial reefs or enhancement programs.

Lennon, D.J. (1997) Artificial Reefs - present and future. Presentation to the Wildlife Preservation Society

Lennon, D.J. (1996) Artificial Reefs. Presentation to Fish and Fisheries Discussion Group, University of Queensland

Lennon, D.J. (1994) The Value of the Curtin Artificial Reef to the Sport Diving Industry. Results of survey. Presented at the 40th anniversary function of the Underwater Research Group of Queensland.

Personal Interests:

Exploring and promoting how we can incorporate 'design for ecology' in coastal engineering and the construction of coastal structures.

Marital Status:

Married with one child

References available upon request



Octopus Gardens - Cyprus



Canal Enhancement - Mandurah Western Australia



