

Mr Wayne Hutchinson

SARDI AQUATIC SCIENCES

Areas of expertise

- Design and construction of larval and hatchery systems for research and commercial production of marine finfish.
- Design and construction of recirculated seawater treatment systems for aquaculture.
- Controlled spawning of broodstock and larval rearing of marine finfish.
- Reproductive biology of marine finfish.
- Husbandry, handling and management of marine finfish.

Countries of work experience

Australia, Indonesia and Singapore.

Overview of experience and qualifications

Mr Hutchinson has a Master of Applied Science in Aquaculture (by Research) qualification from the University of Tasmania. Since 1994 he has accumulated a range of research and technical skills specific relevant to development of new species for marine finfish aquaculture. R&D projects managed by Mr Hutchinson have been instrumental in the establishment of the growing marine finfish aquaculture industry sector in South Australia. His research has primarily addressed hatchery related issues ranging from egg supply through to fingerling production of a range of local marine finfish species including snapper, King George whiting, yellowtail kingfish, mulloway and southern bluefin tuna. He has also initiated projects to investigate the use of inland saline groundwater for aquaculture in South Australia. Mr Hutchinson has considerable experience in the design and installation of research and production facilities for marine finfish aquaculture. He has completed construction of controlled environment broodstock holding systems, larval culture and nursery systems and recirculating aquaculture systems. This has involved liaison with engineering disciplines for design, tendering and supervision of construction of infrastructure and installation of tanks and water treatment components within reticulation systems.

Professional appointments

2003 – present: Subprogram Leader, Propagation and Systems, Aquaculture Program, SARDI Aquatic Sciences.

Research and consulting

2008 – present: Conduct and manage Australian Seafood Cooperative Research Centre R&D projects on yellowtail kingfish and southern bluefin tuna in collaboration with industry. Provide technical advice to industry on issues relating to captive spawning of southern bluefin tuna.

Management of a collaborative project to achieve spawning of captive yellowfin tuna in Bali, Indonesia.

2006 – 2008: Management of R&D activities at the Waikerie Inland Saline Aquaculture Centre. Primary species included mulloway and yellowtail kingfish.

2004 – 2006: Planning, design and installation of R&D and demonstration facilities at the Waikerie Inland Saline Aquaculture Centre. Major redevelopment of R&D fish holding facilities at the South Australian Aquatic Science Centre.

2001 – 2004: Consultancy services for design and installation of marine finfish broodstock spawning tanks, larval rearing and nursery culture systems for the Marine Aquaculture Centre, St John's Island, Singapore.

2000 – 2001: Contract production of 400,000 mulloway fingerlings for industry.

1998 – 2000: Design and construction of SARDI R&D hatchery facilities at the South Australian Aquatic Sciences Centre.

1997 – 2001: Spawning and larval rearing studies of King George whiting relevant to aquaculture and fisheries biology.

1993-1996: Development of snapper aquaculture in the Upper Spencer Gulf region of South Australia.

Selected recent publications

Hutchinson, W.G., Barry, D., 2009. Preliminary environmental description of the Stockyard Plain Disposal Basin, Sept 2007 – Sept 2008. South Australian Murray Darling Basin Natural Resource Management Board, Project 39/2007. SARDI Research Report Series No. 346, 22 pp.

Hutchinson, W.G., Flowers, T.J., 2008. Research to foster investor attraction and establishment of commercial Aquaculture Parks aligned to major saline groundwater interception schemes in South Australia. Centre for Natural Resource Management (CNRM), Project 043713. SARDI Research Report Series No. 317, 378 pp.

Hutchinson, W.G., Black, I., Buchanan, J., 2008. Assessment of alternative platforms for southern bluefin tuna research. Part A. Benefit and cost analysis for alternative research platforms. Part B. Sea-based research platform assessment trials. Aquafin CRC Project No. 1A.9, FRDC Project No. 2004/212. SARDI Research Report Series No. 283, 57 pp.

Chen, B.N., Qin, J.G., Kumar, M.S., **Hutchinson, W.G., Clarke, S.M., 2006.** Ontogenetic development of digestive system in yellowtail kingfish *Seriola lalandi* larvae. Aquaculture, 256, 489-501.

Hutchinson, W.G., Vandeppeer, M., 2004. Water quality: effects and management on abalone farms. South Australian Research and Development Institute (Aquatic Sciences). 55 pp.

Flowers, T.J, **Hutchinson, W.G., 2004.** Productive uses for saline groundwater using semi-intensive integrated aquaculture. CNRM Final Report 2002/16. South Australian Research and Development Institute (Aquatic Sciences). 82 pp.

Hutchinson, W.G., Jeffrey, M., O'Sullivan, D., Casement, D., Clarke, S., 2004. Recirculating Aquaculture Systems - Minimum Standards for Design, Construction and Management. Prepared for Inland Aquaculture Association of South Australia Inc. by Rural Solutions SA.

Ham, J., **Hutchinson W.G., 2003.** Spawning and larval rearing research on King George whiting (*Sillaginodes punctata*) relevant to aquaculture and fisheries biology. FRDC Final Report, SARDI Aquatic Sciences Publication No. RD03/0067.

Contact

Wayne Hutchinson,
SARDI Aquaculture Subprogram Leader, Propagation & Systems,
Tel: +61 8 8207 5444, Fax: +61 8 8200 5406
E-mail: wayne.hutchinson@sa.gov.au
www.sardi.sa.gov.au

