



The Oyster Consortium

Company Members of the Australian Seafood Cooperative Research Centre

What is the Oyster Consortium?

The Oyster Consortium's job is to manage the Australian Oyster Industry's Research and Development (R&D). This group includes Sydney Rock, Pacific and Angasi production and includes representatives of the supply chain with direct and indirect participation of industry research groups, hatcheries, processors and Oyster marketing groups.

The Oyster Consortium and the Australian Seafood CRC

The Oyster Consortium currently has a number of R&D priorities - all aimed at lifting on-farm profitability - including:

- **breeding** strategies to continue lifting quality of Oysters,
- **benchmarking** industry operation to pinpoint areas where the industry could maximise its returns,
- defining **market** expectations and developing new markets both domestically and internationally,
- improving **supply chain** performance through rapid diagnostic tools, improving post-harvest shelf-life and handling
- **education and training**
- Oyster **health** and links with the environment

The skills within the Australian Seafood CRC add value to the Consortium. The team work with members of the Oyster Consortium and collaborating Australian research agencies to deliver projects that enhance the quality and marketability of product through improved supply, farming methodologies, understanding and improving the supply chain, post harvest handling and the development of value added products.

Members of the Oyster Consortium

Australian Seafood Industries Pty Ltd (ASI). ASI promotes the use of selectively bred (thoroughbred) Oysters throughout Australia. As an industry owned organisation, ASI leads the world in commercialising selective breeding of Pacific Oysters.

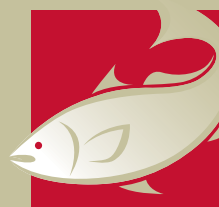
New South Wales Aquaculture Research Advisory Committee (ARAC). ARAC is a statutory body comprising of an independent chair and representatives of the Oyster and non-Oyster aquaculture industries. ARAC provides advice to the NSW Minister for Primary Industries on the direction and priority of research for the NSW aquaculture industry and on the research levies contributed by producers.

Select Oyster Company Pty Ltd (SOCo). SOCo is an industry-owned company whose aim is to improve the profitability of Oyster production in New South Wales through the commercialisation of the genetically improved Sydney Rock Oyster stock developed by the New South Wales Department of Primary Industries.

Shellfish Culture Ltd. Shellfish Culture is the largest shellfish hatchery in Australia with production facilities in Tasmania and South Australia. Shellfish Culture operates selective breeding programs for Pacific Oysters and Blue Mussels and specialises in triploid technology.

South Australian Oyster Research Council (SAORC). SAORC was established in 1999 to promote, encourage and co-ordinate research and development for the benefit of the South Australian Oyster industry.

Tasmanian Oyster Research Council Ltd (TORC). TORC was established 16 years ago by the Tasmanian Pacific Oyster industry to collect funds from Oyster growers and apply them to research and development for the benefit of the industry.



AUSTRALIAN
SEAFOOD
COOPERATIVE
RESEARCH CENTRE

Oyster Consortium = Whole Industry Impact

The Australian Seafood CRC is seen as vital for the sustainability and further development of oyster aquaculture. This can be fully demonstrated in the following case study:

Case Study: Marine Culture

Marine Culture is one of the largest oyster operations in Australia that has diversified its production base in several locations in South Australia and Tasmania and it is currently in the process of expanding into New South Wales.

The company currently produces 1 million dozen Oysters a year but has the potential to double production. However, farming a product wholly reliant on the food that is available in the water without any additions, the need to maintain the highest standards to safeguard against translocation contamination, the exposure of farming sites to adverse weather conditions and susceptibility of oysters to heat and fresh water stress are significant challenges to Marine Culture and other Oyster farms. These challenges are also heightened by land-sourced contaminations, too much or too little run off and extraneous influences beyond the control of the farmer.

The combination of these challenges with domestic market expectations, shelf-life and food handling standards requiring new and exacting product handling techniques, Marine Culture and the rest of the Australian Oyster industry need to pursue advances and solutions in these areas.

The difficulty is it is beyond the resources of even the largest of Oyster farms to do so. Marine Culture, for example, has been an active supporter of industry based groups and research bodies but the amount of work required, the cost of co-operative research and the need to look outwards for world's best practice opportunities is making the task increasingly hard.

Enter the Australian Seafood CRC.....

The Australian Seafood CRC does not only provide a means for collaborating with world leading research institutes but it is also the vehicle to bring industry together for the establishment of national research priorities and standards, the first in the Australian Oyster industry.

Examples of projects being proposed by the Oyster Consortium and the Australian Seafood CRC that would benefit an Oyster farm such as Marine Culture include:



- * Oyster breeding and management. Development of sustainable selective breeding programs for both Pacifics and Sydney Rock Oysters, continuing the development of triploid (non-spawning) oysters, cryopreservation and novel methods such as marker assisted selection and the use of microarrays to bring product with greater consistency and reliability and supply when farms would otherwise be "spawned out".
- * Understanding the supply chain to maximise Oyster sales in Australia and develop lucrative export markets.
- * Characterisation of factors affecting harvest quality of Oysters and optimisation of conditioning practices and systems. The aim is to understand the impacts of factors and measures available to mitigate against adverse circumstances that result in loss of saleable Oysters.
- * Extending shelf-life to preserve quality and nutritional value which has enormous benefit for marketing a perishable product domestically and overseas.
- * Developing rapid diagnostics (lab-on-a-chip) for detecting biological hazard contamination. This would result in the ability to test and verify safety of Oysters enabling reliable and quick verification of product integrity.

For More Information

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Oyster Fast Facts.....

The Australian Oyster industry is valued at over 75 million dollars.

New South Wales produces the largest number of Oysters per annum with a whopping 4,727 tonnes produced annually worth \$35,788,000 per annum at the farm gate.

The South Australian Oyster industry has 346 licence holders, New South Wales 378, Tasmania 116, Queensland 125 and Western Australia 1.

The Australian Oyster industry produces 1,300 jobs from Oyster production alone, with an estimated further 3,000 jobs provided in related services such as transport, processing and distributing.