

## AQUACULTURE IN VICTORIA, AUSTRALIA

### Background

Dating back thousands of years at the Budj Bim National Heritage Landscape at Lake Condah in Victoria's south-west shows evidence of a large, settled Aboriginal community (Gunditjmara) systematically farming eels for food and trade in what is considered to be Australia's and possibly the World's earliest and largest aquaculture ventures.



This complex enterprise took place in a landscape carved by natural forces and full of meaning to the Aboriginals who lived there. They built stone dams to hold the water in these areas, creating ponds and wetlands in which they grew Southern Shortfin Eels and other fish. They also created channels linking these wetlands. These channels contained weirs with large woven baskets made to harvest mature Eels.

The trees close by were hollowed out and used as smoking 'ovens' to cook the Eels and the modified and engineered wetlands and Eels traps provided an economic basis for the development of a settled society with villages.

With European settlement in the area in 1830s came conflict. As this conflict came to an end in the 1860s, many Aboriginal people were displaced. The lands were returned to Gunditjmara in 1987.

### Today's Landscape

Aquaculture is managed under the *Fisheries Act (Victoria) 1995*. The Act provides for the management, development and promotion of an ecologically sustainable and viable aquaculture industry. Over the years there have been major efforts by the Government in Rainbow Trout, Murray Cod and Mussels in various projects. Victoria's aquaculture industry increased its production value (farm gate) by 60% between the 1997/98 and 2005/06 financial years from \$13.7 million to \$21.9 million or approximately 6% per annum.

The Victorian Aquaculture Strategy was developed by the Aquaculture Advisory Group (AAG) – see <http://new.dpi.vic.gov.au/fisheries/about-fisheries/strategy-and-policy/aquaculture-strategy-and-action-plan/victorian-aquaculture-strategy-the-action-plan>. The vision of the strategy is to “grow the value of the Victorian aquaculture industry from \$22 million to \$60 million by 2015 in a sustainable manner”. The gross value of Victorian aquaculture production was \$21.9 million in 2005/06, or approximately 22% of Victorian fisheries production (\$97.9 million) and approximately 3% of Australian aquaculture production.

Victorian aquaculture is undertaken in a variety of offshore, coastal and inland facilities and includes the production of Rainbow Trout, Atlantic Salmon (including hand milked caviar), Abalone, Blue Mussel, Aquarium Finfish, Eel, Murray Cod, Barramundi, Silver Perch, Golden Perch and Yabby.

The aquaculture industry in Victoria is confronted with a number of challenges which are affecting its competitiveness. The mussel sector did not have a reliable supply of wild spat for seed-stock, the abalone sector is recovering from the impact of a virus outbreak, and the trout and eel sectors have major production problems associated with the drought. There is an urgent need to attract investment in the industry to achieve economies of scale.

Future challenges include adapting to climate change and associated water shortages and biosecurity risks; increasing competition in local and global markets; declining terms of trade; and meeting consumer demands (including the sustainability of production systems and integrity of seafood products). Key challenges will need to be addressed for the Victorian aquaculture industry to capitalise on the opportunities associated with the increasing global demand for seafood, and for it to be part of the significant global aquaculture industry valued at more than \$70 billion p.a.

The [Victorian Aquaculture Strategy](#) (2008) provides a blueprint for future aquaculture industry development, and AFI compliments the associated actions. In particular it addresses the priority areas of increasing productivity and sustainability of production systems, attracting new investment in the industry, improving marketing performances in both the domestic and export markets, and developing differentiated products.

Recently a collaborative hatchery project between the Department and a mussel industry group has been working towards securing the future of the industry. Benefits and achievements include:

- A doubling of hatchery output to almost 6000 spat ropes per season
- A competitive advantage through the production of spat outside its usual seasonal availability
- Potentially, an additional 1,700 tonnes of mussels produced per year
- At least 20% of hatchery production will be made available to industry members not directly involved in the hatchery
- Increased employment opportunities for regional Victoria
- Technology transfer to industry will facilitate potential development of a larger, commercial-scale hatchery.



From the original Victorian Aquaculture Strategy Plan the Project Status is

- Ten projects are complete
- Eleven projects are in progress
- Three projects are yet to commence