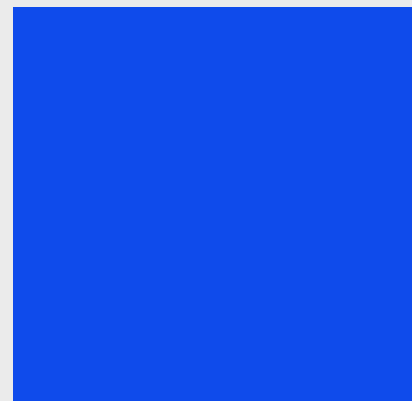
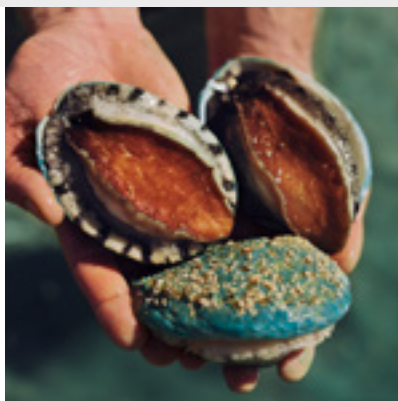




Factsheet

Victoria's fisheries and aquaculture: economic and social contributions **Abalone aquaculture**



Abalone is one of the most important aquaculture sectors of the Victorian industry. Operations are geographically located near the coastal towns of Portland and Port Fairy in the South west, and at Indented Head and Avalon on Port Phillip Bay.

Abalone farms are onshore, they circulate saltwater from the ocean, and utilise feed. Hatcheries are one part of abalone aquaculture integrated into the businesses. In most cases these hatcheries are located in Victoria.

Periodically, environmental and biological factors have influenced the growth of the sector. For example, an outbreak of the Abalone herpes virus affected production in both wild catch and aquaculture sectors in the mid-2000s. However, today farmed abalone is one of the fastest growing sectors in the Victorian seafood industry.

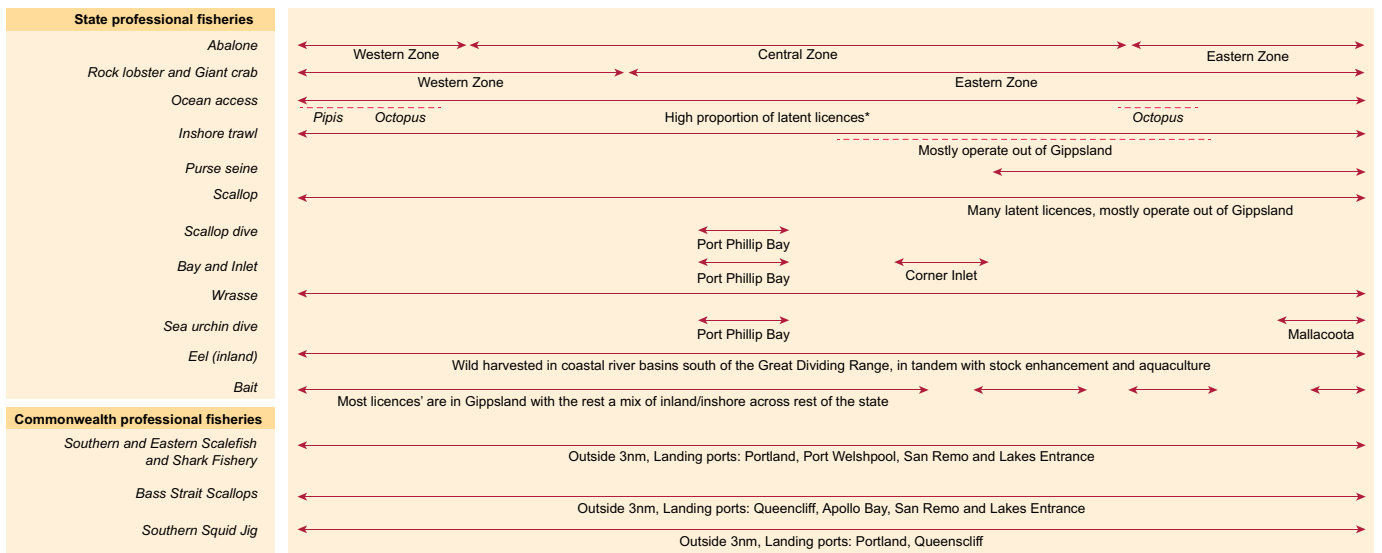
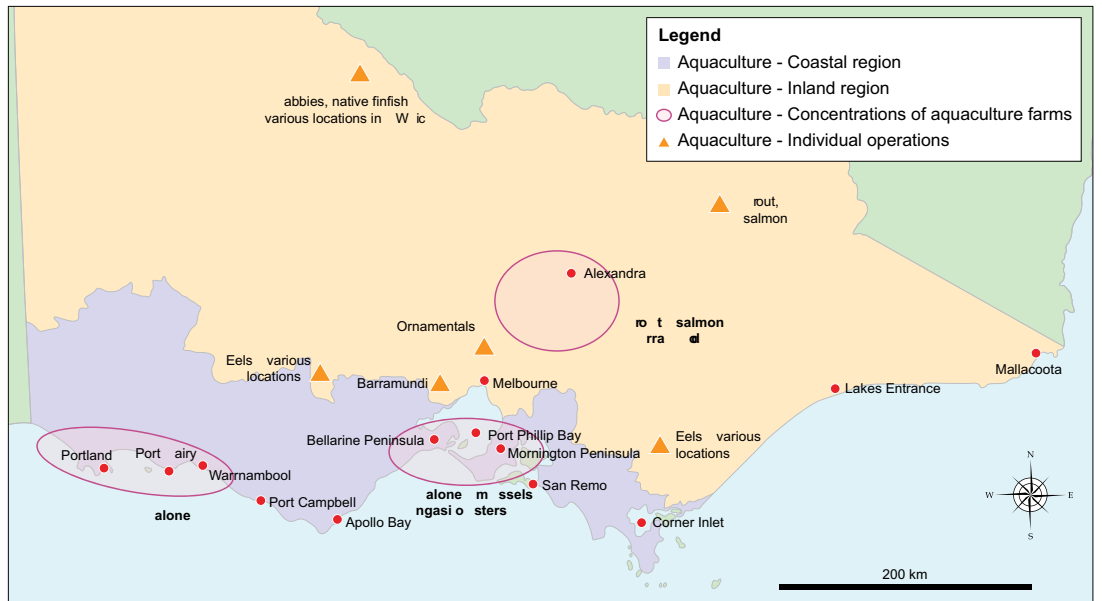
At the present time the majority of the abalone produced is exported to Asian and North American markets, although there is an increasing focus on domestic sales.



This factsheet draws on research conducted by the University of Technology Sydney (UTS), for the Fisheries Research and Development Corporation, to investigate how the Victorian fishing and aquaculture industries contribute to the wellbeing of regional communities, and to Victoria overall.

For more information, see uts.ac/VictoriaFisheriesAquaculture

Victoria's fisheries and aquaculture: economic and social contributions FRDC Project No 2017-092



*Pipis and Octopus are currently managed under Ocean Access licences but with separate management plans, main fishing grounds identified

Economic diversity and resilience

Abalone and the wider aquaculture industry make significant economic contributions to Victoria

In the 2016/17 financial year aquaculture contributed:

- \$100 million of added value
- \$56 million of household income
- 988 full time jobs

In the 2016/17 financial year abalone aquaculture contributed:

- 37% of the total value of the Victorian aquaculture production

Abalone aquaculture provides diverse employment and business opportunities

- Abalone aquaculture supports opportunities from on-the-farm work through to associated businesses, including those providing inputs; in transport, processing and sale; and tourism and hospitality operations.
- Abalone aquaculture provides important flow-on economic activity and employment to Melbourne and other regional towns
- Farms require diverse and often high-level skills, but also provide entry-level jobs.
- The specialised equipment used by farms requires a high level of support from specialised local trades.

Abalone aquaculture farms contribute to regional economic diversity and stability

- They diversify economic opportunity in regional towns, which is critical for resilience.
- They generate jobs in places where there are few alternative industries.
- They provide economic stability by being active through the year, versus seasonal work, e.g. tourism.

Coastal communities recognise the economic importance of the Victorian seafood industry

- 81% of residents surveyed believe the sector supports their local economy and provides jobs.
- 85% believe it helps create economic diversity in their community.
- 76% believe it's important for supporting their community during the tourist off-season.



Food and tourism

Abalone aquaculture provides access to a prestige seafood product

- Victorian farms produced 485 tonnes of abalone in 2016/17.
- Abalone is sold as a prestige, high value product focused on Asian markets both domestically and overseas.
- Specialty restaurants in Melbourne and along the Victorian coast are growing markets for farmed abalone.
- Victorians and tourists buy abalone direct from farms and in restaurants.

Victorians and coastal communities prefer local seafood

- 85% of Victorians surveyed prefer Australian seafood and 24% prefer Victorian seafood.
- The preference is even stronger in fishing and aquaculture towns, where 40% prefer seafood from their town or region.
- 74% of Victorians surveyed feel it is very or extremely important to know where their seafood comes from.
- They prefer local seafood because they believe it's fresher, safer and higher quality, and they want to support the Australian economy and industry.
- Victorian seafood caters for local consumers' preferred species and price points, and their ethnic diversity.
- People go to great effort to buy Victorian seafood, regularly travelling substantial distances to 'stock up'.
- 90% of Victorians believe it is important to produce seafood in Victoria and reduce reliance on imports (over 70% of seafood consumed in Australia is imported).

The post-harvest sector experiences high demand for local seafood

- Food localism among consumers is a growing trend benefiting seafood businesses around the state.
- Retailers and wholesalers say having Victorian produce helps project an image of freshness and quality.
- 62% of post-harvest businesses surveyed say the demand for local seafood is growing
- 80% say demand for Victorian seafood is greater than for imported seafood
- 58% say demand for Victorian seafood is greater than for interstate seafood
- 96% of hospitality businesses surveyed say their customers want to know the origin of their seafood

Consuming seafood is part of the coastal travel experience for international and domestic visitors

- Visitors place increasing importance on local food provenance and food production experiences.
- 81% of Victorians surveyed say eating local seafood is an important part of their holiday experience.
- 94% of tourism businesses surveyed say eating local seafood is an important part of the tourism experience.
- International visitors, particularly from Asia, are the tourists most interested in eating local seafood, which includes cultural delicacies such as abalone and rock lobster, from a clean environment.
- There's considerable unmet demand, with 54% of tourism businesses surveyed reporting that regional tourism suffers from a lack of access to locally produced seafood.



Environmental health

The abalone aquaculture industry acts voluntarily to improve the wider environment

- Installation and sourcing of renewable power to reduce CO2 output per kg of abalone
- Improving pumping efficiencies to reduce CO2 output per kg of abalone.
- Participating in programs to ensure that every part of the abalone is fully utilised so that nothing goes to landfill.
- The abalone industry does not use antibiotics or hormones
- The abalone industry has low chemical use compared to other types of farming, and abalone farms must be compliant with strict EPA regulations regarding water quality.

The aquaculture industry voluntarily collaborates with researchers

- Collecting samples and providing logistics
- Sharing their experience and local knowledge
- Sitting on voluntary advisory groups and research committees

Social fabric

Aquaculture contributes to the sense of identity in regional communities

- 83% of residents surveyed agree fishing and aquaculture is important to cultural heritage and identity.
- Seafood festivals, supported by local industry, foster social connections and reinforce community identity.

The abalone aquaculture industry plays an important role in community life

- 79% of residents surveyed agree that local seafood families are active community members.
- Abalone farms support and donate to local events and charities.
- On the South west coast abalone farms have active partnerships with local Aboriginal organisations.
- Abalone farms have large numbers of work experience students both from high school and university.
- Abalone aquaculture businesses do group tours of their farms to community groups and high schools.
- Abalone farm staff participate in a wide range of local civic and business groups.



Challenges and Opportunities

Improving public understanding of the abalone aquaculture sector and its contributions

The project revealed there's often poor understanding of the abalone aquaculture industry among the Victorian public, both in metropolitan areas and in coastal communities themselves. There's substantial opportunity to improve engagement with the public, in turn helping to address misperceptions, reduce tension and conflict, build support for the sector and strengthen its future.

Key areas of misperception or lack of knowledge include:

- The misperception that farmed abalone production is unsustainable
- The extent of the sector's environmental credentials, which go beyond what's regulated

Specific responses could include:

- Sharing information transparently with communities to demonstrate environmental credentials of farms
- Industry-led engagement activities with Victorian communities to improve awareness of the abalone aquaculture sector through the fostering of cross-sector and cross-industry relationships within communities and regions.
- Enhancing and expanding voluntary environmental activities beyond immediate operations on the farm.

Providing improved access to Victorian farmed abalone

The need – and opportunity – to provide greater access to Victorian produced seafood was raised frequently during the project. Given reduced seafood production in Victoria, variable overseas markets, and the consistency of supply of farmed product, there may be opportunities for abalone farms to place more emphasis on Victorian markets

- Recognising Victorian farmed abalone's unique selling points and the opportunity to build a brand around this.
- Enhancing direct sales from farms.
- Developing financially viable opportunities for new relationships between producers and local businesses that might want to sell their products.
- Strengthening the hospitality sector's ability to work with abalone given it is an expensive product and is perceived to be difficult to prepare.
- Collaborate with well-known local chefs to promote locally produced abalone.
- Improving country of origin labelling in restaurants.

Developing abalone farm tourism experiences

The study found that the links between the Victorian seafood industry and tourism industry are weak. That said, communities, tourism operators and seafood producers all recognise the clear opportunity to improve connections.

This can be done, most obviously, through food supply (as described above) and by capturing the growing international tourist market, especially the Asian tourist market who are particularly interested in abalone for its cultural importance.

Beyond food supply, the key opportunity to improve the contribution of the sector to tourism and regional economies is by developing aquaculture tourism 'experiences'.

Experiences are about tourists interacting with and experiencing the seafood industry. An example of an 'experience' is a tour offered by a seafood industry operator. Seafood festivals are also gaining popularity in Victoria. Aquaculturists may not necessarily have the time or skills to develop and promote tourism opportunities, so it will be necessary to build relationships and partnerships with tour operators, tourism boards and local governments.

