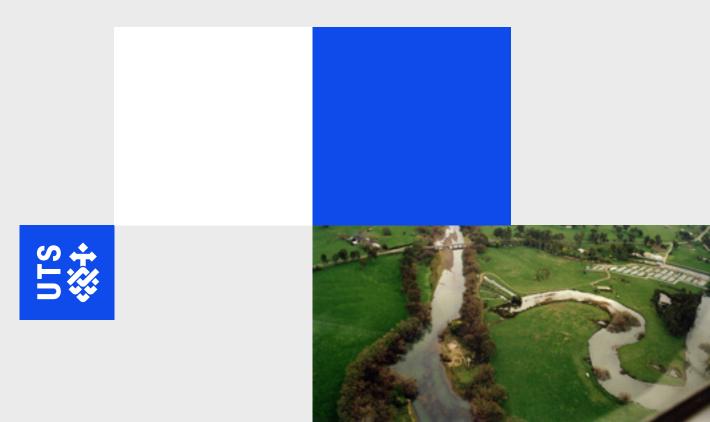
Faculty of Arts and Social Sciences



Factsheet

Victoria's fisheries and aquaculture: economic and social contributions **Trout and salmon aquaculture**





Salmon and trout (salmonid) aquaculture is the oldest sector of the Victorian aquaculture industry. It started in the early 1900s in the Goulburn Valley and has historically been the mainstay of the industry. Salmonid aquaculture continues to be an major sector in Victoria, contributing the most aquaculture product by volume.

Most salmonid farms are located around the Goulburn Valley, some in the Upper Yarra Valley, and one in the Bright district. In these areas, cool mountain water provides the ideal growing habitat for these cold water species.

Brown and Rainbow trout are farmed in concrete and earthen ponds and are sold for consumption or used for stocking in Victorian waterways. Atlantic Salmon are farmed in ponds for caviar production.

Periodically, environmental and biological factors have influenced the growth of the salmonid sector. Fires in 2009 devastated the production of some farms, and long-term drought conditions have limited new water licences being issued. Since then the salmonid producers have rebounded. In some cases, farms have diversified to include recreational-oriented activities, including "fish-outs" where visitors can cook the fish they catch.

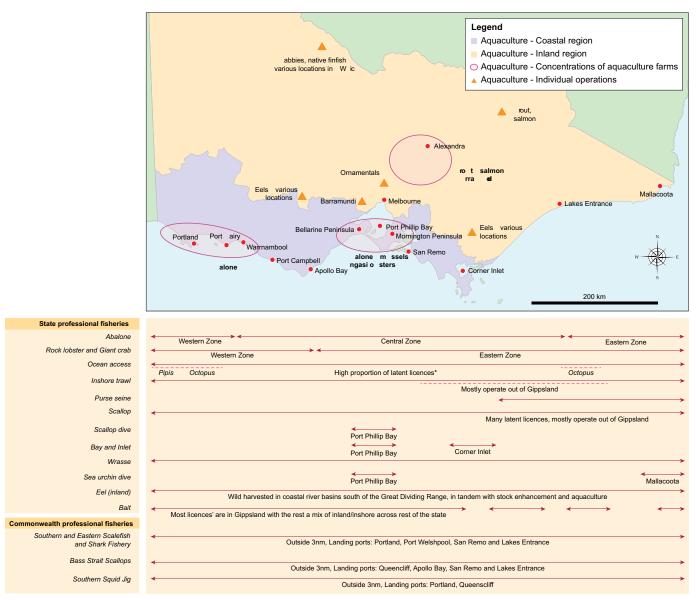
Most trout are produced for domestic consumption, and are sold in supermarkets throughout Australia, and there are local sales in restaurants and pubs.



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

Salmonid 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 salmonid aquaculture contributed:

- 30% of the total value of the Victorian aquaculture production.

Salmonid aquaculture provides diverse employment and business opportunities

- Salmonid 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.
- Salmonid 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.

Salmonid 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.

Regional 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 supply

Salmonid aquaculture provides access to a nutritious and important food source

- Salmonid aquaculture produced 1,282 tonnes of seafood in Victoria in 2016/17.
- The majority of the produce are plate sized rainbow trout sold by seafood retailers in Melbourne, and around Australia.
- Salmon farms produce a high value caviar, which is primarily sold to restaurants as a luxury product.
- 90% of Victorians surveyed believe it's important to produce local seafood and reduce reliance on imports (over 70% of seafood consumed in Australia is imported).

Victorians and regional communities prefer local seafood

- 85% of Victorians surveyed prefer Australian seafood.
- The preference is even stronger in fishing and aquaculture areas, 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'.

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.

Tourism and recreation

Victorian communities believe the aquaculture industry contributes to tourism

- 67% of residents from Victorian regional towns believe the most important contribution the local seafood industry makes to communities is through the interactions and benefits flowing to tourism.

Consuming seafood is part of the 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.
- 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.

Salmonid aquaculture supports recreational fishing

- Fingerlings grown at the Snobs Creek government hatchery are supplemented by farms for stocking of public waterways in Victoria.
 - "One of the fish the government are now stocking, it's called their 'family friendly' fish. So it's about a 200 gram fish, a trout... often [released] on the urban fringe, especially leading into the April school holidays and then the July school holidays... [W]e do quite a lot of those family fish for them... [t]his year I think we'll do about 15 tonnes of fish for the government which are for recreation angling."

(Aquaculture farm operator)

- Supporting healthy populations of trout in Victoria's rivers and lakes, the aquaculture sector contributes to recreational fishing tourism.
 - "[W]e get a massive influx of people coming up to Eildon for the annual Fishing Festival. Last year we had over 1100 people attended it, on the Father's Day weekend... the kids get casting clinics. They get taught how to cast... and they get educated in what's required to actually grow the fish and all that sort of thing."

(non-industry interviewee, Eildon)

- Some trout farms include 'fish out' activities where families travel to the farms to catch and cook trout on site. One of the main markets for this seafood experience is new migrant families.

"We get a lot of social groups come here, sure, they come here and they want to eat fish but they're actually coming here primarily for a social occasion as a family to get together... Thirty years ago, we used to have a lot of Italians and Greeks come up and then it was Asians, in the '90s. Now it's more Muslims, Indians. So, it's always the latest generation of immigrants that still have big social networks and family groups... [its about] catching a fish with their uncle or their grandpa or something."

(non-industry interviewee, Eildon)

Environmental health

The salmonid aquaculture industry acts voluntarily to improve the wider environment

- Salmonid farmers have invested substantially in developing practices to minimise nutrient loading flowing out from trout farms to natural waterways. Currently all farms are compliant with EPA regulations which ensure nutriuents cannot be detected to within 300m of farm outlets. This has led to a high level of community support and support among recreational trout anglers.

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 salmonid aquaculture industry plays an important role in community life

- 79% of residents surveyed agree that local seafood families are active community members.
- Salmonid farms support and donate to local events and charities.

Challenges and Opportunities

Developing salmonid farm tourism experiences

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

With the salmonid aquaculture sector's growth limited by no new water licences issued due to increasingly dry landscapes in Victoria, diversifying operations to include tourism experiences may be an option for some farms. This is particularly the case for smaller farms and those farms without ready access to more water. Including tourism experiences may be a way to maintain production and remain viable without having to compete with large operators supplying large quantities for consumption.

Experiences are about tourists interacting with and experiencing the seafood industry, such as tours offered by seafood producers and "fish out" activities. 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.



