



Australian Government

Australian Trade and Investment Commission



A Culinary Treasure of the Sea

# AUSTRALIAN ABALONE

**AUSTRALIA**

Cover graphic:  
Eyrewoolf Abalone

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Produced by  for  Australian Government  
Australian Trade and Investment Commission





*Australian Abalone is one of the traditional treasures of the sea*

Photo Source - Ocean Grown Abalone

# INTRODUCING AUSTRALIA’S ABALONE INDUSTRY

*Australian abalone is harvested one day and served up the next in the world’s finest restaurants – it doesn’t get much fresher than that.*

Abalone is one of the traditional treasures of the sea, and is a popular delicacy featured in many celebratory and special occasion banquets. Often used in traditional Chinese cuisine it is extremely versatile and has become very popular in many other cuisines.

*A variety of Australian species are available, caught in the wild, ocean ranched and farmed.*

Australian wild abalone are very selective about the environment in which they live – the sea should be cold with a high salt content, there should be regular water movement and a healthy abundant supply of seaweed. Although abalone grow in many places around the world, the best quality and most succulent abalone grow near the 40 degrees south latitude. This is what makes Australian wild-caught abalone special.

In addition to the premium wild-caught abalone, Australia leads the world in pioneering ocean ranching technology that sees hatchery reared baby abalone moved to specially designed “Abitats” where they feed and grow naturally in the ocean for two to three years before harvest.

Abalone aquaculture rounds out Australia’s abalone supply with carefully managed farms providing quality Blacklip and Greenlip abalone products as well as a specially bred Australian hybrid Tiger Abalone. Most (>90%) of Australian abalone production (wild and farmed) is exported to Japan, Hong Kong, China, Singapore, Taiwan, USA, Canada, and the EU.

Whatever the source, state of the art processing and exporting facilities together with a finely tuned supply chain sells and delivers live, fresh chilled, frozen and value-added Australian abalone products daily to markets across the globe.

Consumers the world over can be confident that all Australia’s abalone products meet the strictest standards for safety, sustainability and quality.



Photo Source - Blue Sky Fisheries



*Australia is the home of the world's largest wild abalone fishery*

## AUSTRALIAN WILD CAUGHT ABALONE

*Australian wild abalone is prized around the world for its sweet and salty taste with a whack of umami.*

Australian wild-caught abalone are highly sought after by consumers who appreciate the finer things in life and are looking for new and exciting food experiences.

Each wild-caught abalone is caught by hand causing no damage to the surrounding environment.

Cold and clean oceanic waters with seaweed in abundance for the wild abalone to feed on, resulting in succulent and tasty abalone meat prized by discerning diners from all corners of the globe.



Photo Source - Tasmanian Abalone Council

### Special qualities of Australian wild-caught abalone



Limited quantities



Versatile formats



Healthy & nutritious



Hand-caught by divers



From clear, cold Australian oceans



Certified safe by Australian government

Photo Source - Australian Wild Abalone, Dean Lisson



There are four species of Australian wild-caught abalone

Blacklip, Greenlip, Brownlip and Roe’s Abalone are wild-caught, by hand, causing no damage to the surrounding environment.



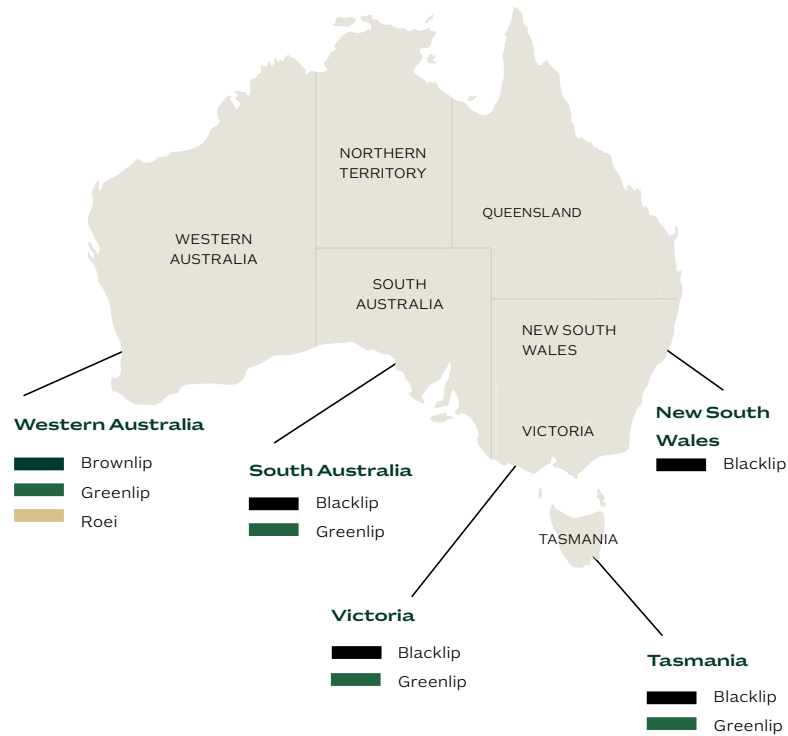
The southern Australian coastline provides the perfect growing environment for wild abalone.

Where do they grow?

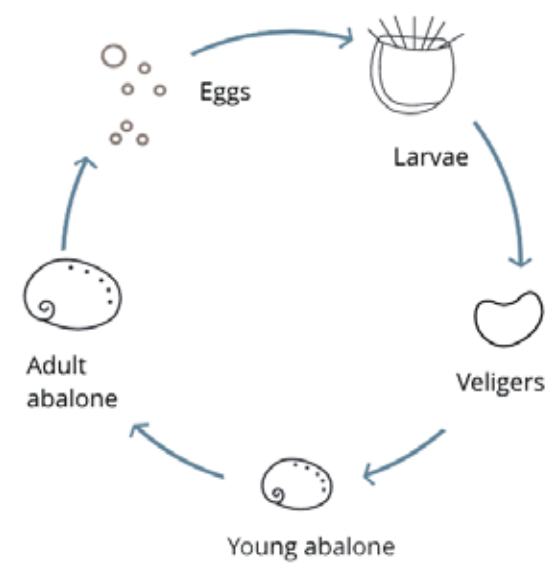
Although abalone grow in many places around the world, the best quality and most succulent abalone grow around the 30 - 40 degrees south latitude.

We have fisheries in Western Australia, South Australia, Victoria, New South Wales and Tasmania.

Here is a map showing our wild fisheries and species caught in southern Australia.



The wild abalone lifecycle



Some Australian wild abalone are more than 200mm+ in length and weigh in at over 1.5kg!

Abalone are herbivores, feeding on algae and small seaweeds which they grind from the rocks. Never travelling far from the place where they first settled, abalones prefer to live where drift weed is conveniently carried along by a gentle current.

Size matters

One of the most distinguishing features of Australian Wild Abalone is its size, abalone shells can grow up to twenty centimetres. The industry complies with legal minimum length requirements set by the government. This is to ensure sustainability of wild fish stocks. These requirements depend on the species and the location they are caught.

When choosing Australian Wild Abalone, customers are getting a larger, more tasty fish – that fresh clean taste that is only found in wild abalone caught by hand from the clean cool waters of the Southern Ocean.

Nutritional Information

High in protein and low in cholesterol and fat, Australian abalone are not only purchased for flavour, but a great choice health-conscious consumers.

This Nutritional Information was provided by Seafood CRC and accepted by Food Standards Australia & New Zealand (FSANZ). All Australian Abalone have similar nutritional profiles.



Photo Source - Bluesky Fisheries

Wild Abalone	Average quantity per serving	% Daily Intake* (per serving)	Average quantity per 100g
Average quantity per 100g			
ENERGY	392kJ	4.5	392kJ
PROTEIN	18.6	37.3	18.6g
FAT, TOTAL	0.58g	0.82	0.58g
saturated	0.20g	0.85	0.20g
trans	0g		0g
polyunsaturated	0.24g		0.24g
omega3	0.094g		0.094g
docosahexaenoic acid	29.30g	97.7	29.30g
eicosapentaenoic acid	0.67g	2.2	0.67g
monounsaturated	0.13g		0.13g
CARBOHYDRATE	3.14g	1.01	3.14g
sugars	0.9g	1.0	0.9g
SODIUM	268mg	11.6	268mg
PHOSPHOROUS	132mg	13.2	132mg
IODINE	0.13mg	84.4	0.13mg
IRON	2.86mg	23.8	2.86mg
VITAMIN E	1.33mg	13.3	1.33mg
MAGNESIUM	48.3mg	15.1	48.3mg
SELENIUM	0.009mg	12.9	0.009mg

\* Percentage daily intakes are based on an average adult diet of 8.700kJ. Your daily intakes may be higher or lower depending on your energy needs.

BLACKLIP ABALONE *Haliotis rubra rubra*

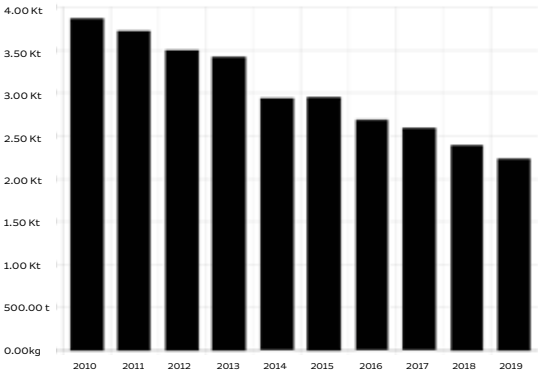


Production Location

Blacklip abalone is harvested in NSW, SA, TAS and VIC.



Supply



Commercial catch of Blacklip Abalone - note confidential catch not shown

Commercial catch (2019)



Supply, production and sustainability data source: Fisheries Research and Development Corporation 2020

GREENLIP ABALONE *Haliotis laevis*

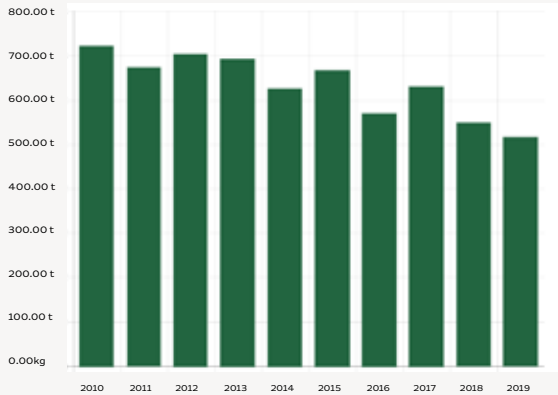


Production Location

Greenlip abalone is harvested from the south coast of Australia.

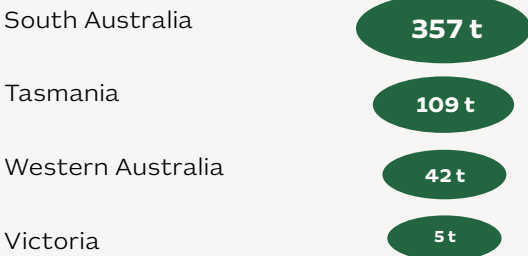


Supply



Commercial catch of Greenlip Abalone - note confidential catch not shown

Commercial catch (2019)



Supply, production and sustainability data source: Fisheries Research and Development Corporation 2020

BROWNLIP ABALONE *Haliotis rubra conicopora*

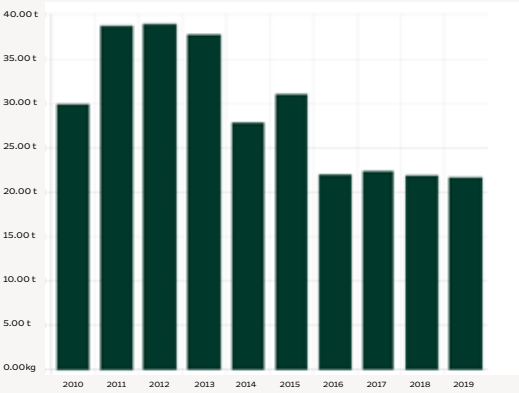


Production Location

Brownlip abalone is found along Australia's south coast.



Supply



Commercial catch of Brownlip Abalone - note confidential catch not shown

Commercial catch (2019)



Supply, production and sustainability data source: Fisheries Research and Development Corporation 2020

ROE'S ABALONE *Haliotis roei*

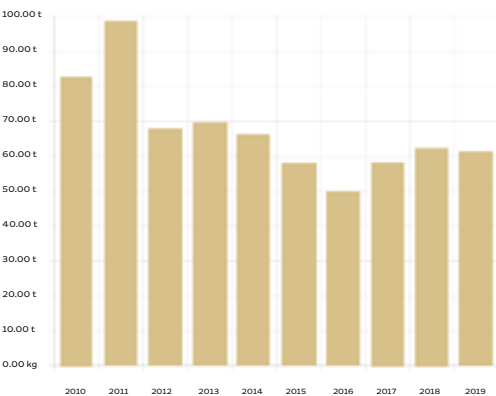


Production Location

Roe's Abalone are distributed from Shark Bay in WA south around western South Australia.

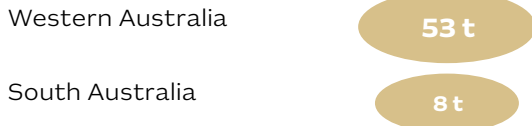


Supply



Commercial catch of Roe's Abalone - note confidential catch not shown

Commercial catch (2019)



Supply, production and sustainability data source: Fisheries Research and Development Corporation 2020



Grown and ‘hand-plucked’ from a natural, safe and sustainable habitat.

Photo Source - Ocean Grown Abalone

# OCEAN RANCHED ABALONE

Ocean ranched abalone live on reefs located on the seabed off the Western Australian coastline, where the two oceans, the Southern and Indian Ocean meet

Hatchery reared juvenile greenlip abalone are placed on custom built reefs in the pristine waters of Flinders Bay.

The leases are situated in areas where wild abalone is in abundance.

Nature (with a little help from the divers) does the rest to provide a premium product.



## Special qualities of Australian ocean ranched abalone



Versatile formats



Hand-selected, light footprint



Healthy & nutritious



From clear, cold Australian oceans



Certified safe by Australian government



There is one species of Australian ocean ranched abalone

Australia’s ocean ranched abalone has received national and international recognition for our greenlip abalone and enhanced, sustainable fishery.



**Greenlip Abalone**  
*Haliotis laevis*

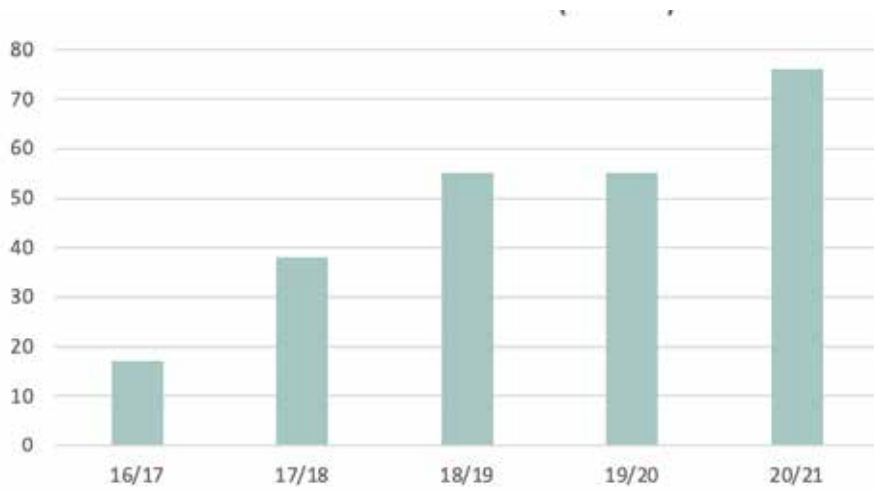
Total Supply Tonnage  
(2020-21)

**76t**

Supply

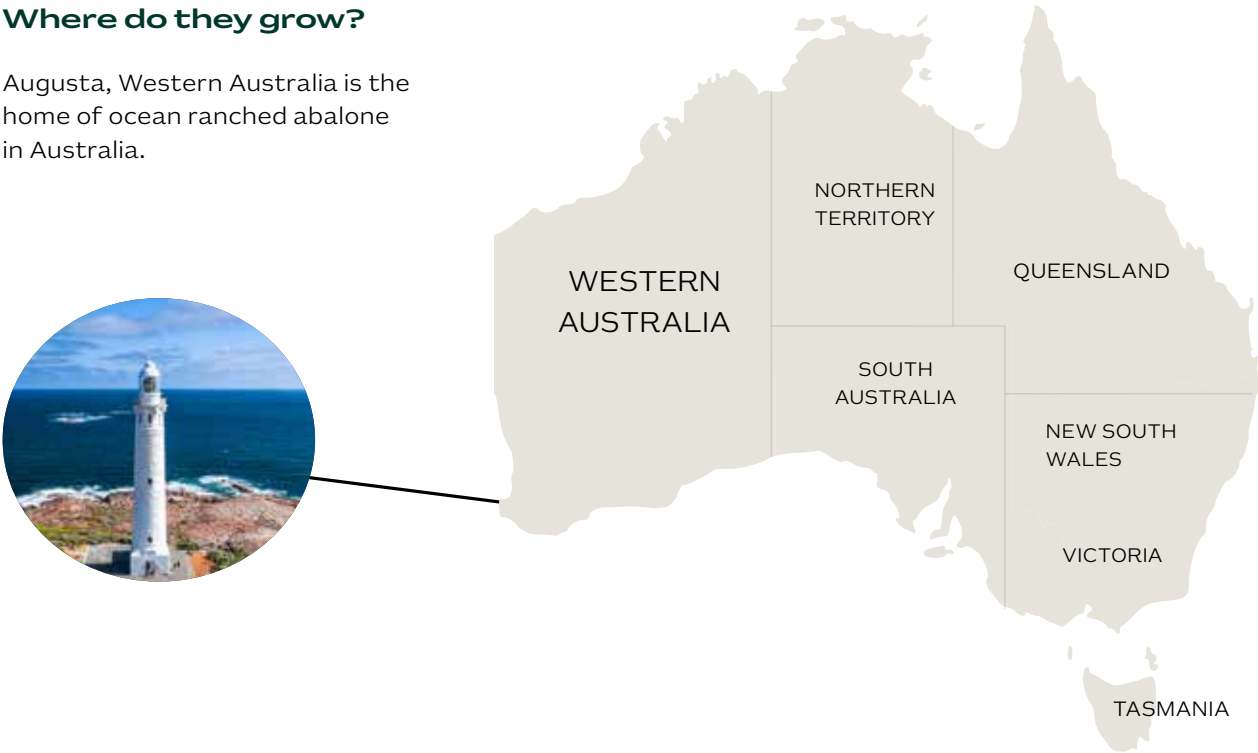
There is a very light footprint using the Australian sea ranching technique.

Of the 413-hectare lease, only 5 hectares are used for our reefs and now produce 76 tonnes of abalone p/a.



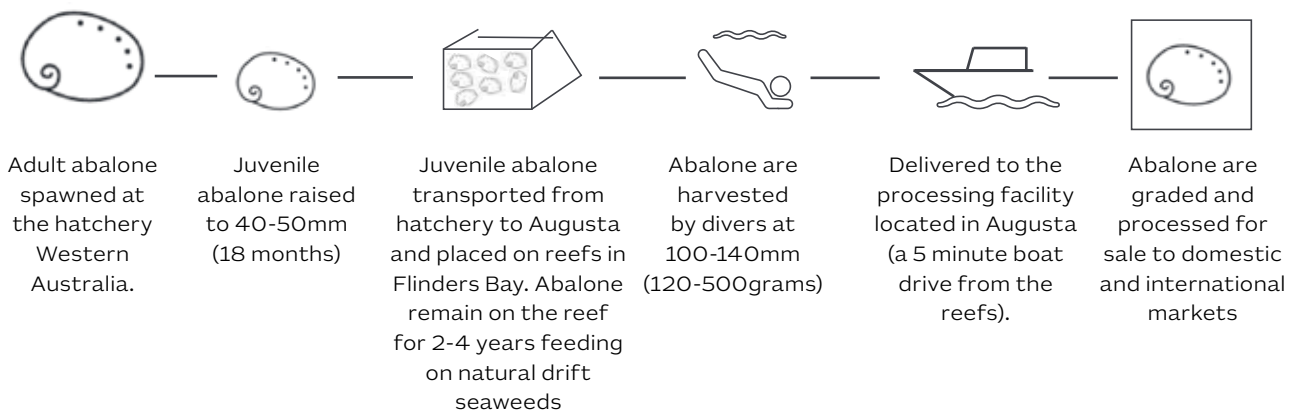
Where do they grow?

Augusta, Western Australia is the home of ocean ranched abalone in Australia.



The ranching process

Using highly researched sea ranching technology a new habitat for the abalone has been created, in a location where wild abalone naturally occur. Juvenile greenlips are placed in the ocean on custom built reefs called ABITATS and left to nature, growing for up to three years until they reach a good size for market.



Nutritional Information

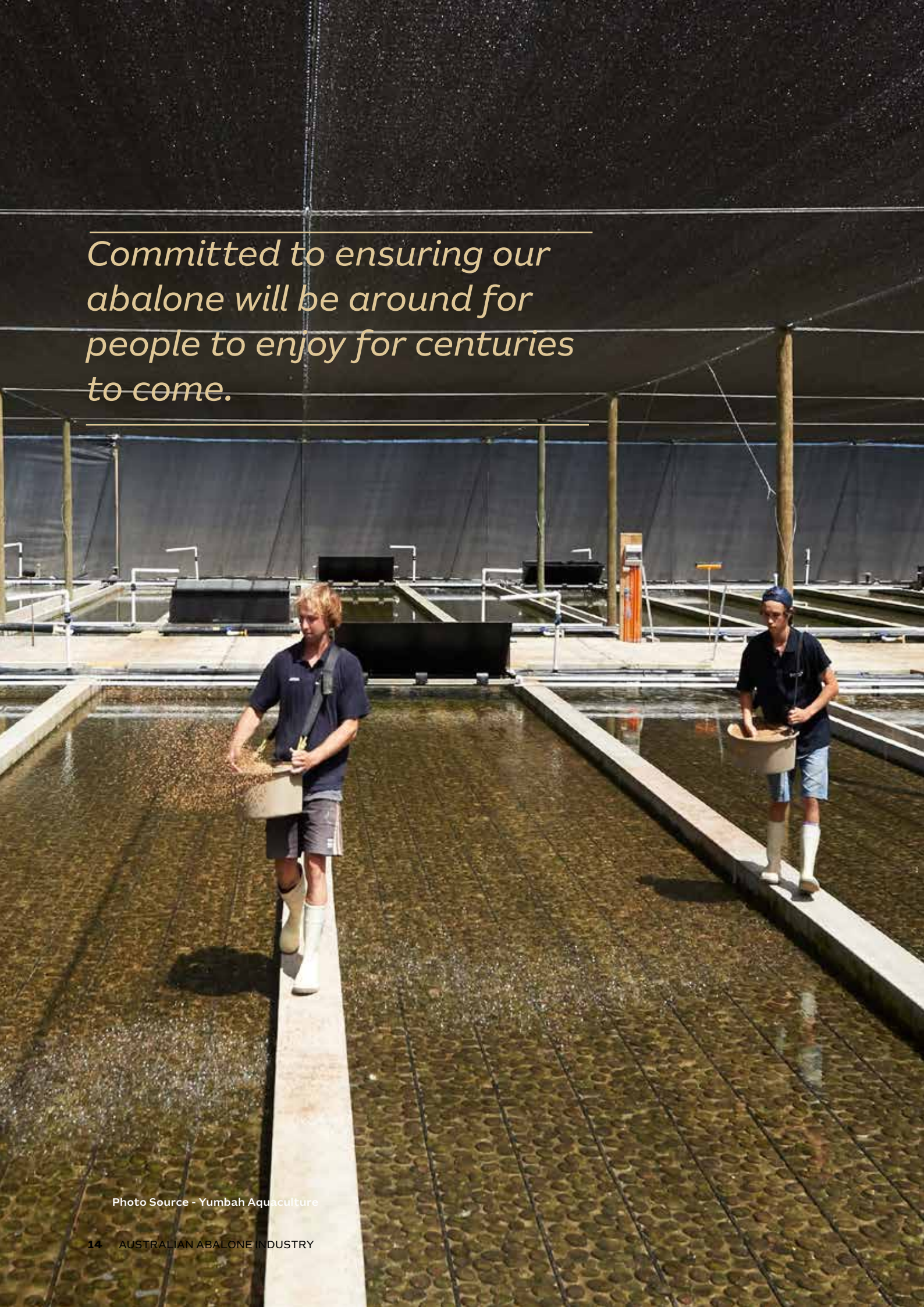
Abalone are high in Omega 3, a good source of iron and a good source of Phosphorous.

Nutritional panel source: Ocean Grown Abaloen (OGA Ltd)



Ocean Ranched Abalone	Average quantity per serving	Average quantity per 100g
Average quantity per 100g		
SUGARS	0.5g	1.0g
PROTEIN	9g	18g
SODIUM	167mg	337mg
CARBOHYDRATES	3.2g	6.3g
ENERGY	225kg	447kg
CHOLESTEROL	48mg	96mg
FAT	0.5g	1.0g
Fatty acid profile		
SATURATED FAT	.2g	1.0g
TRANS FAT	0.05g	0.1g
MONO-UNSATURATED FAT	0.15g	0.3g
POLY-UNSATURATE FAT	0.1g	0.2g





*Committed to ensuring our abalone will be around for people to enjoy for centuries to come.*

# FARMED ABALONE (AQUACULTURE)

*Sustainable farms and state of the art technology produce a unique premium product - plump and consistent in size, colour and texture.*

Abalone farming in Australia has a reputation as reputation for exceptional and consistent quality product.

Australia’s good reputation in global markets is based on sustainable farming practices: social licence to farm, animal welfare and clean water. Farmed abalone is premium quality, safe and versatile.



Photo Source - Yumbah Aquaculture

## Special qualities of farmed Australian abalone



Sustainable farming practices



Certified safe by the Australian Government



Award winning aquaculture products



Healthy & nutritious



Versatile formats

Photo Source - Yumbah Aquaculture



There are two species of Australian farmed abalone

Premium quality is central to our industry. Market demand for our product is strong with prices reflecting the premium quality of our products in international markets, being ranked 1st or 2nd on a per kg basis. About 25% of production is sold domestically with 75% exported to markets internationally



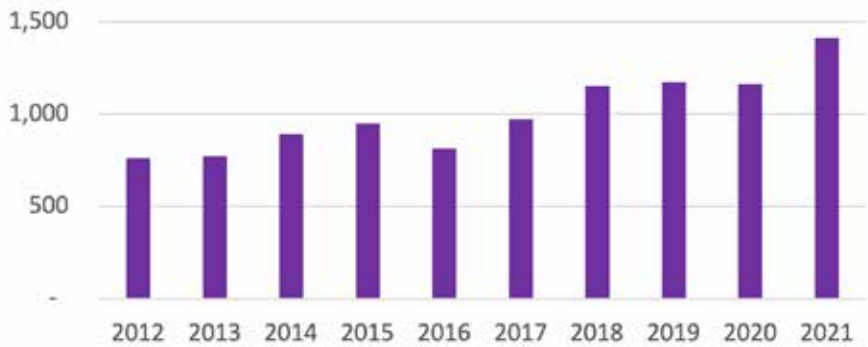
**Tiger Abalone**  
*Haliotis laevisgata x Haliotis Rubra*

**Greenlip Abalone**  
*Haliotis laevisgata*

Total Supply Tonnage (2020-21) **1,100t**

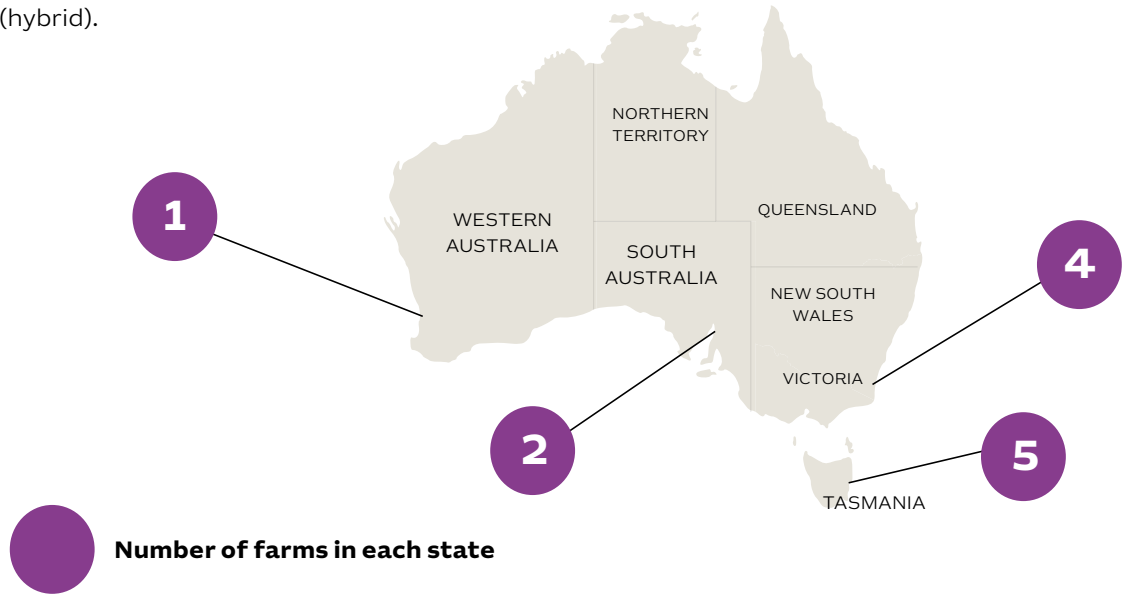
Supply

With farms operating from 12 sites across four southern states collectively, Australian abalone farmers contribute about 1,100 tonnes to a global farmed abalone supply of 132,000 tonnes (FAO 2017).



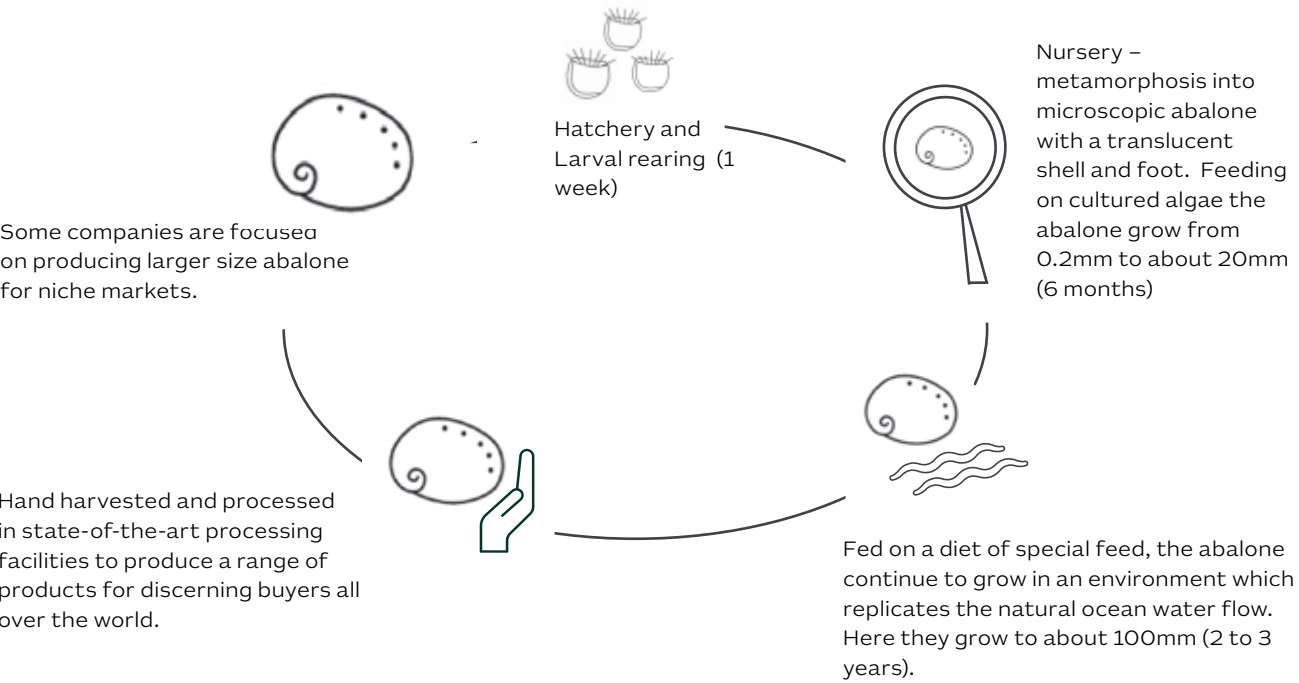
Where do they grow?

Most production in Western and South Australia is Greenlip. Victoria is mainly producing is Tiger (hybrid).



The farming process

The Australian farmed abalone sector operates in a complex multi-jurisdictional regulatory environment. Each farm operation is subject to regulation from federal, state and local councils, including for aquaculture site licensing, biosecurity and stock movement, wastewater, food safety, food labelling, and work health and safety.



Nutritional Information

This Nutritional Information was provided by Seafood CRC and accepted by Food Standards Australia & New Zealand (FSANZ). All Australian Abalone have similar nutritional profiles.

Farmed Abalone	Average quantity per serving	% Daily Intake* (per serving)	Average quantity per 100g
Average quantity per 100g			
ENERGY	384kJ	4.4	384kJ
PROTEIN	16.65	33.3	16.65g
FAT, TOTAL	0.763g	1.1	0.763g
saturated	0.244g	1.0	0.244g
trans	0.007g		0.007g
polyunsaturated	0.298g		0.298g
omega3	0.148g		0.148g
docosahexaenoic acid	52.8g	176	52.8g
eicosapentaenoic acid	15.3g	50.8	15.3g
monounsaturated	0.165g		0.165g
CARBOHYDRATE	4.25g	1.0	4.25g
sugars	0.9g	1.0	0.9g
SODIUM	591mg	25.7	591mg
PHOSPHOROUS	153mg	15.4	153mg
IODINE	0.126mg	84.2	0.126mg
MAGNESIUM	66.8mg	20.9	66.8mg
SELENIUM	0.021mg	30.6	0.021mg

\* Percentage daily intakes are based on an average adult diet of 8.700kJ. Your daily intakes may be higher or lower depending on your energy needs.



# A PREMIUM PRODUCT

## Product formats

 **Live abalone**

After hand harvesting by expert licensed divers or from the farm, the live abalone are transported to state-of-the-art processing factories inside refrigerated vehicles.

The abalone are then placed into crates and are lowered into temperature and salinity controlled holding tanks containing pure filtered seawater.

These holding facilities can store live product for several weeks supply if the weather turns bad for an extended period. All abalone are held for several days to ensure the fish are purged and the quality is stabilised prior to shipping.


The live abalone are then hand selected at time of pack-out by highly trained staff to ensure only strong unmarked fish are packed.

Typically, the Abalone are packed into 10kg or 12kg sealed polystyrene foam boxes ready for export. The Abalone in each box are traditionally placed on core flute boarding which they appear to like, sealed with oxygen in heavy gagged bags with an ice pack inserted to keep the fish at low temperature during transport.

Proximity of the processing premises to major international airports enables the product to be delivered promptly with minimal time out of the water allowing a fresher product to the end user. Greenlip, blacklip, brownlip, roei and tiger abalone are all available as live product.



Photo source - Australian Wild Abalone Program

 **Dried abalone**

State-of-the-art drying facilities utilize a drying process based on ancient and traditional methods. The abalone is carefully hand-selected to ensure the size, colour and quality is premium, and there are no marks or bruises on the meat, before the drying process begins.

Australia produces the highest quality dried abalone meat, packed in gift boxes as well in bulk or in smaller bags inside a bulk box. Blacklip and greenlip abalone are available in dried form.


 **Chilled abalone**

Abalone are shucked and cleaned and the meat is carefully chilled to slowly bring the temperature down – the abalone are held in a chilled brine until such time as they are placed in vacuum pouches or modified atmosphere packaging (MAP) – there are various packaging options that provide varying degrees of shelf life and the product must be stored at between -1 and -5 degrees celsius.


This product is usually available in 10 to 15kg polystyrene cartons. Greenlip, blacklip, brownlip and roei abalone are all available as chilled meat.

 **Retort pouched**

Fresh abalone are “shucked” and then “rumbled” to remove the frill pigment. They are blanched before being rinsed and are then transferred to ice slurry for rapid chilling. The product is hand-checked for cleanliness and damage before being graded to size. They are then vacuum-sealed into a clear bag with 1 or 2 abalone per bag and with a net weight between about 95 grams and 600 grams (any size is available, to order) before being cooked in a retort. After cooking the product is boxed and labelled ready for dispatch.

 **Canned abalone**

Canned abalone can be purchased from Chinese and other stores that sell imported Asian goods. It has a firm texture and does not need to be cooked. Drain the flesh, cut it up and add to a soup, casserole or stir-fry.

 **Frozen**

Vacuum-packed IQF abalone meat is available with one or more pieces per vacuum packed bag. Each bag is vacuum-sealed and a label showing the trade description, weight, packing date, best-before date and consumer information for thawing of frozen abalone meat is on the back of the label. These vacuum-packed bags are then packed in a polystyrene box up to 10-12 kg per box. Blacklip, brownlip, greenlip and roei abalone are all available as vacuum-packed meat.

Frozen on Shell (FOS) abalone – live abalone are gently cleaned and then individually quick frozen in their shell or removed from the shell, cleans and then quick-frozen. When an order is to be filled the individual abalone are placed into a lined cardboard carton or Polystyrene box and sealed ready for export. Typically, the cartons are 10kg – 15kg net with the abalone sorted into various sizes according to customer requirements. greenlip, blacklip, brownlip and roei abalone are all available in IQF form.



Photo source - Australian Wild Abalone Program



# COOKING WITH AUSTRALIAN ABALONE

The flavour is naturally buttery and salty, thanks to the salt water in which it lives. There’s a crispy and chewiness to it which makes it unique and delicious.

## Flavour

The flavour of Blacklip abalone can range from mild to strong – it has an intense meaty flavour with a subtle sweetness and a savoury umami of miso soup.

Greenlip Abalone has an intense full flavour which is round along with a lingering sweetness and mild umami character of a quality chicken consume.

## Handling and Storage

Canned abalone should be drained and rinsed prior to use. Frozen abalone should be thawed slowly in a cool room overnight in an airtight container. Fresh Abalone should be always refrigerated at <5°C.

## Texture and taste

The texture of abalone varies dramatically depending on its preparation form. In its raw form, it has a crisp bite with a subtle mouthfeel. Wok fried in thin strips cut against the grain, it is soft and giving. The long braised or canned abalone has the texture of a cooked cheese such as taleggio with a supple, yet firm texture and genuine bite.

Moisture: Low



Oiliness: Low to medium



Photo source Australian Wild Abalone Program



Photo source Australian Wild Abalone Program

Australian abalone is always a luxurious dish and is one of the most sought-after seafood delicacies in the world.



Photo source Australian Wild Abalone Program

## Cooking

The firm flesh of abalone is highly prized in Asian circles and is central to some of the best Oriental seafood recipes.

Abalone meat can be stir-fried, pan-fried, poached, steamed, or stewed. However, it is considered by some to be best when eaten raw, in thin strips with wasabi and soy sauce.

Another option is lightly braised abalone. With its absorbent texture that draws other flavours beautifully, braised abalone is traditionally prepared in the Cantonese cooking style using garlic, ginger, and oyster sauce.

If deep frying, the fritter is superb topped with a herb mayonnaise or minced into patties and coated with crumbs of garlic and onion. Citrus-marinated abalone combines well with shallots and parsley when pan-fried in oil or butter.

Abalone also makes a wonderful addition to salads. The best way to avoid loss of flavour and to tenderise the meat is to use the slow stewing style of cooking. Alternatively, fry it quickly on a high heat, or serve raw.

## Cooking styles

Abalone can be braised, poached, stir fried, served sashimi, grilled, roasted – in all preparations, extreme care must be taken to ensure it doesn’t lose its subtle flavour nor become tough.



Braised



Poached



Sashimi



Stir-fried



Grilled



Roasted



# CLEAN AND GREEN CREDENTIALS

Australia has a well-deserved reputation for producing the world’s best abalone – meeting the highest safety, sustainability and quality standards in the world.

## Environment Credentials



All Australia’s wild-caught abalone fisheries are approved as a wildlife trade operation under subsection 303FN (2) of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

### EPBC Act

Australian wild-caught abalone products are all sourced from fisheries that are approved for export under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). This requires the Australian Government to assess the environmental performance of fisheries and promote ecologically sustainable fisheries management.

To meet these requirements an independent assessment is required. Each fishery is unique, and assessment is based on the merits of the combination of management measures in place.

The assessments are conducted against the Guidelines for the Ecologically Sustainable Management of Fisheries which outline principles and objectives to ensure a strategic and transparent evaluation of the ecological sustainability of fishery management arrangements and to ensure that, over time, Australia’s fisheries are managed in an ecologically sustainable way.



The Western Australia Abalone Fishery was the first commercial wild-caught abalone fishery globally to attain Marine Stewardship Council (MSC) certification. MSC certification confirms the stock assessment, ecosystem impact and governance credentials of the fishery.



Photo source - Ocean Grown Abalone

## Food Safety and Quality



FSANZ develops standards that regulate the ingredients, processing aids, colourings, additives, vitamins and minerals. FSANZ develops and oversees Australia’s primary production and processing standards. All abalone producers and processors must by law comply with these standards.



Exports are regulated by the Australian Government. All abalone exporters must comply with the Australian domestic food standards set by FSANZ and must meet any importing country requirements for the products that they are exporting. This is generally achieved by preparing a documented Food Safety Program (including a HACCP plan). The Food Safety Program is reviewed and approved by the competent authority, Biosecurity Australia. Exporters are audited regularly and need to demonstrate compliance with their program.



SafeFish provides technical advice to support Australia’s seafood trade and market access negotiations and helps to respond to any food safety incident that may impact on that trade. SafeFish. SafeFish also provides input to the Codex Alimentarius Commission and works to develop harmonised international food standards, guidelines and codes of practice to protect the health of consumers and ensure fair practices in the food trade.

<https://seafoodtradeadvisory.com/seafood-safety-safefish/>



## Australian Wild Abalone® certification

Australia’s top wild caught Abalone exporters have developed the Australian Wild Abalone® Program as a way of ensuring that customers and consumers can be confident that they are purchasing product that is certified safe and sustainable by the Australian Government and protected from counterfeit product through innovative product tamper evident packaging.

Australian Wild Abalone® is hand-harvested directly from the ocean which is why it retains its original wild taste.

All Australian wild-caught abalone is harvested from State managed fisheries. Each fishery has a fishery management plan that includes a range of measures designed to maintain the biomass at a sustainable level. Compliance with the fisheries management plan is monitored with documentation required at all points in the chain to ensure that only legally fished product is processed and offered for sale



Photo source Australian Wild Abalone Program



# CONTACT US

**Abalone Council Australia Ltd**  
<https://www.abalonecouncil.com.au/>

**Australian Wild Abalone**  
<https://www.australianwildabalone.com>

**Abalone Industry Association of Western Australia**  
<https://www.abalonewa.com.au/>

**Tasmanian Abalone Council**  
<https://www.tasabalone.com.au/>

**Abalone Council Victoria**  
<https://abalonecouncilvictoria.com.au/>

**Abalone Industry Association of South Australia**

**Abalone Association NSW**

**Australian Abalone Growers Association**

**Australasian Abalone Association**

**Seafood Industry Australia**  
<https://www.greataustralianseafood.com.au/>

**Enquiries visit:** [www.austrade.gov.au/contact/importing-from-australia-enquiries](http://www.austrade.gov.au/contact/importing-from-australia-enquiries)



Photo source Australian Wild  
Abalone Program



