

Title	Describe New Zealand Greenshell mussel (kutai, kuku) farming		
Level	3	Credits	10

Purpose	People credited with this unit standard are able to describe: the Greenshell™ mussel; the structures and methods of Greenshell™ mussel farming in New Zealand; the location and history of Greenshell™ mussel farming in New Zealand; the Greenshell™ mussel farming industry structure and size in New Zealand; the consumer products and the consumer markets for the Greenshell™ mussel; and features of good mussel farming practices and methods for dealing with harvesting vessel discharge.
----------------	---

Classification	Seafood > Aquaculture
-----------------------	-----------------------

Available grade	Achieved
------------------------	----------

Guidance Information

1 Definitions

Greenshell™ mussels refer to the New Zealand Greenshell™ mussel (kutai, kuku). *Company requirements* refer to instructions to staff on policy and procedures which communicated in verbal or written form. These requirements may include but are not limited to – manufacturers' instructions, company safety requirements, throughput, and industry codes of practice and standards. Company requirements must include legislative requirements.

A+ New Zealand Sustainable Aquaculture refers to sustainable management framework which enables the New Zealand aquaculture industry to better engage with communities and continuously improve environmental practices while strengthening global demand for New Zealand seafood available from A+ Aquaculture New Zealand <http://www.aplusaquaculture.nz>.

2 All evidence presented in this unit standard must be in accordance with company requirements.

Outcomes and performance criteria

Outcome 1

Describe the Greenshell™ mussel.

Performance criteria

1.1 State the scientific name for the Greenshell™ mussel.

- 1.2 Describe features of the Greenshell™ mussel that distinguish it from other common mussel species.

Range evidence of a minimum of three features is required.

Outcome 2

Describe the structures and methods of Greenshell™ mussel farming in New Zealand.

Performance criteria

- 2.1 Describe the physical structures of a Greenshell™ mussel farm in terms of design and layout of lines.

- 2.2 Describe the different types of rope and their uses on a Greenshell™ mussel farm.

Range types of rope include but are not limited to – standard rope, culture rope, spat catching rope, lashings.

- 2.3 Describe the location of spat, their origin, and current spat catching or collection techniques and transportation methods.

Range evidence of three locations, three collection or catching techniques, and two spat transportation methods is required.

- 2.4 Describe how spat or seed quality is maintained in terms of temperature, length of time out of water, handling methods, size of spat or seed, and source of spat or seed.

- 2.5 Describe how Greenshell™ mussels are seeded, harvested, and bagged on a mussel farm.

- 2.6 Describe the factors that may impact on the farming of Greenshell™ mussels and the control measures available.

Range includes but is not limited to – over-settlement, storm events, slippage.

Outcome 3

Describe the location and history of Greenshell™ mussel farming in New Zealand.

Performance criteria

- 3.1 Describe the regional areas where Greenshell™ mussel farms are located in New Zealand.

Range two main areas and two others is required.

- 3.2 Describe the farming methods used at the beginning of the Greenshell™ mussel industry in New Zealand.
- 3.3 Describe how methods of farming Greenshell™ mussels have changed to meet current farming practices.
- Range includes but is not limited to – the impact of technologies.
- 3.4 Describe the establishment of the Greenshell™ mussel industry and identify reasons for its success.
- Range evidence of a minimum of three reasons for success is required.

Outcome 4

Describe the Greenshell™ mussel farming industry structure and size in New Zealand.

Performance criteria

- 4.1 Describe organisations in terms of their role in the mussel farming industry.
- Range Aquaculture New Zealand, local Marine Farming Association, local water quality programme, District and Regional Councils, Ministry for Primary Industries.
- 4.2 Describe the tonnage of annual Greenshell™ mussel production and the percentage for export.
- 4.3 Describe the export returns of the annual Greenshell™ mussel production.

Outcome 5

Describe the consumer products and the consumer markets for the Greenshell™ mussel.

Performance criteria

- 5.1 Describe mussel products on the consumer market.
- Range includes a minimum of three products.
- 5.2 Describe consumer markets for the Greenshell™ mussel.
- Range includes a minimum of five consumer markets.

Outcome 6

Describe features of good mussel farming practices and methods for dealing with harvesting vessel discharge.

Performance criteria

6.1 Describe features of good mussel farming practices that minimise adverse effects on the environment in terms of the A+ New Zealand Sustainable Aquaculture management framework.

Range features include but are not limited to – operating equipment, checking of secured anchoring and floats, waste removal, lighting.

6.2 Describe the methods for dealing with harvesting vessel discharge in terms of the A+ New Zealand Sustainable Aquaculture management framework.

Range methods include but are not limited to – disposal of lashings, domestic rubbish, synthetic material, wastewater, noise, fuel and oil spills.

Planned review date	31 December 2028
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 April 1999	31 December 2024
Review	2	25 February 2003	31 December 2024
Review	3	20 March 2009	31 December 2024
Review	4	28 October 2021	31 December 2024
Revision	5	29 June 2023	N/A
Rollover	6	29 February 2024	N/A

Consent and Moderation Requirements (CMR) reference	0123
--	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard.