



Australian Government

SFIAQU308 Support hatchery operations

Release: 2

SFIAQU308 Support hatchery operations

Modification History

Release	Comments
Release 2	This version released with SFI Seafood Industry Training Package Version 2.0.
Release 1	This version released with SFI Seafood Industry Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to support hatchery operations, including monitoring the collection and care of broodstock, breeding and raising progeny, and preparing stock for distribution.

The unit applies to individuals who have responsibility for conditioning and spawning operations in an aquaculture hatchery, working under broad direction and having limited responsibility for the work of others.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety, biosecurity and environmental regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Aquaculture (AQU)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for hatchery	1.1 Interpret and confirm hatchery requirements with supervisor

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
production	1.2 Confirm labour and equipment requirements with supervisor 1.3 Identify risk factors that could affect the quality of the end cultured or held stock progeny, and plan to minimise risk 1.4 Communicate with team members on hatchery production operations
2. Collect and care for broodstock	2.1 Provide clean, functional conditions for all stock according to workplace procedures and hygiene requirements 2.2 Ensure selected broodstock are maintained in their selected structure or system with minimal stress 2.3 Condition broodstock to induce maturation or breeding and spawning behaviour 2.4 Ensure identified broodstock to be spawned are maintained in an optimal condition prior to spawning 2.5 Monitor and maintain water quality requirements of broodstock according to workplace procedures
3. Breed and raise progeny	3.1 Monitor signs of imminent spawning and control environment to ensure successful spawning 3.2 Collect spawn according to workplace procedures 3.3 Assess the quality of eggs and sperm and undertake fertilisation of the eggs, if appropriate 3.4 Apply post-spawning broodstock husbandry techniques as required 3.5 Hatch fertilised eggs and care for progeny according to workplace procedures 3.6 Monitor water quality, stock behaviour and environmental parameters and identify and document changing conditions
4. Harvest and distribute progeny	4.1 Select progeny through quality assessment with supervisor, and harvest progeny 4.2 Grade, sort and transport progeny to new on-farm culture or holding structures 4.3 Note, harvest and pack order requirements for external transport
5. Complete breeding activities	5.1 Check cleaning of work area and disposal of waste materials are completed according to workplace procedures and environmental requirements 5.2 Check condition and storage of tools and equipment, and forward

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	repair requirements to supervisor 5.3 Record relevant data and observations and report any abnormal records to supervisor

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret order requirements
Writing	- Complete workplace records legibly and accurately using correct technical terminology - Prepare labels for shipment of containers
Numeracy	- Estimate time and resources needed for hatchery production activities - Count and estimate quantities of stock, feed and containers - Use length, size, weight and other relevant criteria to sort and grade stock - Reconcile stock quantities against order requirements
Oral communication	Explain basic hatchery operations and schedule using language appropriate for audience
Interact with others	Collaborate, cooperate and assist others with hatchery job requirements
Get the work done	Use key functions and features of workplace systems to record data and observations and to operate automated hatchery equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

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SFIAQU308 Support hatchery operations Release 2	SFIAQU308 Support hatchery operations Release 1	Minor update to performance criteria and performance evidence for clarity regarding changing environmental conditions	Equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273>

Assessment Requirements for SFIAQU308 Support hatchery operations

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has, on at least one occasion, monitored hatchery operations in the collection and care of broodstock, breeding and raising of progeny and preparation of stock for distribution, including:

- confirming hatchery requirements with supervisor and team members
- applying risk assessment processes and putting controls in place to mitigate risk and minimise impact
- applying safe and efficient handling of animals throughout their lifecycle
- monitoring and recording water quality and environmental parameters during all growing cycles
- applying workplace quality standards when harvesting progeny for distribution
- maintaining a hygienic and functional work area during and after hatchery operations
- maintaining accurate records on hatchery operations
- identifying changing environmental conditions.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- procedures and schedule for hatchery operations
- cleaning and disinfection requirements for hatchery operations
- clinical signs of ovulation and/or imminent spawning
- feed and other requirements of breeding stock and progeny
- environmental factors or cues for reproductive behaviour
- preparation of broodstock and/or progeny for distribution or transport

- safe work practices relating to hatchery operations
- relevant legislation, including biosecurity control measures relevant to hatchery operations.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in an aquaculture hatchery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - broodstock or seedstock
 - equipment for caring for and raising progeny
 - monitoring equipment
- specifications:
 - hatchery production schedule and workplace procedures for hatchery operations, including advice on health and safety, hygiene and environmental requirements
- relationships:
 - evidence of interactions with supervisor and team members.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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