

**Modification history**

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

<b>SFIAQU314</b>	<b>Support hatchery operations</b>
<b>Application</b>	<p>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 of progeny and preparing stock for distribution.</p> <p>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</p> <p>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.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Aquaculture (AQU)

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 production	1.1 Interpret and confirm hatchery production schedule with supervisor 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 Brief team members on hatchery production operations
2. Collect and care for broodstock	2.1 Provide clean, functional conditions for broodstock according to workplace procedures and hygiene requirements 2.2 Introduce selected broodstock into broodstock structure or system with minimal stress 2.3 Condition broodstock to induce maturation or breeding and spawning behaviour 2.4 Identify broodstock to be spawned and move to spawning tanks to undergo spawning induction treatment 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, wash and count 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 and document water quality, stock behaviour and environmental parameters
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

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
5. Complete breeding activities	5.1 Check cleaning of work area and disposal of waste materials is completed according to workplace procedures and environmental requirements 5.2 Check condition and storage of tools and equipment and forward repair requirements to supervisor 5.3 Record relevant data and observations and report any abnormal records to supervisor 5.4 Provide feedback on work performance to team members

Foundation Skills	
<i>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.</i>	
Skill	Description
Reading	<ul style="list-style-type: none"> <li>Interpret order requirements</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Complete workplace records legibly and accurately using correct technical terminology</li> <li>Prepare labels for shipment of containers</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Estimate time and resources needed for hatchery production activities</li> <li>Count and estimate quantities of stock, feed and containers</li> <li>Use length, size, weight and other relevant criteria to sort and grade stock</li> <li>Reconcile stock quantities against order requirements</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Explain basic hatchery operations and schedule using language appropriate for audience</li> </ul>
Interact with others	<ul style="list-style-type: none"> <li>Understand what to communicate, with whom and how, in routine work situations</li> <li>Collaborate, cooperate and assist others with hatchery job requirements</li> </ul>
Get the work done	<ul style="list-style-type: none"> <li>Use key functions and features workplace systems to record data and observations and to operate automated hatchery equipment</li> </ul>

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
SFIAQU314 Support hatchery operations	SFIAQUA314A Support hatchery operations	Updated to meet Standards for Training Packages. Minor changes to elements and performance criteria for clarity.	Equivalent unit

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

<b>TITLE</b>	<b>Assessment requirements for SFIAQU314 Support hatchery operations</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all the elements and performance criteria of this unit. There must be evidence that the individual has supported hatchery operations on at least one occasion including:</p> <ul style="list-style-type: none"> <li>• communicating with supervisor on production schedule, labour and equipment requirements</li> <li>• identifying risk factors</li> <li>• communicating to team members on hatchery operations</li> <li>• handling and caring for broodstock, larvae and juveniles efficiently and safely</li> <li>• breeding, raising and monitoring progeny</li> <li>• harvesting progeny for distribution</li> <li>• finalising breeding activities</li> <li>• monitoring health and safety, hygiene and environmental requirements</li> <li>• recording and reporting hatchery operations data.</li> </ul>	
<b>Knowledge Evidence</b>	
<p>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:</p> <ul style="list-style-type: none"> <li>• procedures and schedule for hatchery operations</li> <li>• cleaning and disinfection requirements for hatchery operations</li> <li>• clinical signs of ovulation and/or imminent spawning</li> <li>• feed and other requirements of breeding stock and progeny</li> <li>• environmental factors or cues for reproductive behaviour</li> <li>• preparation of broodstock and/or progeny for distribution or transport</li> <li>• safe work practices relating to hatchery operations</li> <li>• relevant legislation relevant to hatchery operations.</li> </ul>	
<b>Assessment Conditions</b>	
<p>Assessment of this unit of competency must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions: <ul style="list-style-type: none"> <li>• skills must be demonstrated in an aquaculture hatchery or an environment that accurately represents workplace conditions</li> </ul> </li> <li>• resources, equipment and materials: <ul style="list-style-type: none"> <li>• broodstock or seedstock</li> <li>• equipment for caring for and raising progeny</li> <li>• monitoring equipment</li> </ul> </li> <li>• specifications: <ul style="list-style-type: none"> <li>• hatchery production schedule and workplace procedures for hatchery operations that includes advice on health and safety, hygiene and environmental requirements</li> </ul> </li> <li>• relationships <ul style="list-style-type: none"> <li>• interactions with supervisor and team members.</li> </ul> </li> </ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
<b>Links</b>	<p>Companion Volumes, including Implementation Guides, are available at VETNet:  <a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273</a></p>