



Australian Government

Department of Education, Employment and Workplace Relations

SFIAQUA216B Harvest cultured or held stock

Release: 1

SFIAQUA216B Harvest cultured or held stock

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	<p>This unit of competency involves harvesting <i>cultured or held stock</i> and transporting it to an on- or off-farm post-harvest facility. The unit covers interpreting instructions, using equipment appropriately and, where required, carrying out some post-harvest operations, such as sorting, grading or removing half pearls from molluscs. The live transport of stock is covered by SFISTOR204A Prepare, pack and dispatch stock for live transport. Maintaining seafood at its correct temperature is covered by SFIFISH209C Maintain the temperature of seafood.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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Application of the Unit

Application of the unit	<p>Licences may be required if operating:</p> <ul style="list-style-type: none"> • load-shifting equipment, including forklifts • vehicles • vessels. <p>All enterprise or workplace procedures and activities are carried out according to <i>relevant government regulations, licensing and other compliance requirements, including occupational health and safety (OHS) guidelines, food safety and hygiene regulations and procedures</i> and <i>ecologically sustainable development (ESD) principles</i>.</p> <p>Equipment operation, maintenance, repairs and calibrations are undertaken in a safe manner that conforms to manufacturer's instructions. Appropriate <i>personal protective equipment (PPE)</i> is selected, checked, used and maintained.</p>
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for <i>harvest</i>	<p>1.1. Requirements of the <i>harvest schedule</i> are noted and confirmed with supervisor.</p> <p>1.2. Required <i>equipment</i> is collected and checked for serviceability.</p> <p>1.3. Sub-standard equipment is repaired or replaced according to manufacturer guidelines.</p> <p>1.4. Equipment is moved to site, positioned in relation to <i>culture or holding structures or systems</i>, and readied for use.</p> <p>1.5. Transport and holding equipment, including <i>post-harvest facilities</i>, are prepared and moved into position.</p>
2. Carry out harvest	<p>2.1. Stock are identified, retrieved and isolated, behaviour anticipated and controlled, and appropriate safety measures taken for <i>dangerous stock</i>.</p> <p>2.2. Behaviour of stock and other animals is observed and non-standard activity reported to the supervisor.</p> <p>2.3. Water and weather conditions are observed and conditions that could adversely impact on the harvest or wellbeing of stock reported to the supervisor.</p> <p>2.4. Automatic or mechanised equipment are operated and maintained according to workplace procedures.</p> <p>2.5. Stock are removed from water and placed in holding containers or transport equipment.</p> <p>2.6. Stock are graded and counted as indicated in the <i>quality parameters</i> of the harvest schedule or supervisor's instructions.</p> <p>2.7. Stock are moved to the next phase of the harvest chain according to supervisor's instructions.</p>
3. Complete post-harvest activities	<p>3.1. Clean up of work area, including repairs and storage of equipment, is supervised and condition report prepared.</p> <p>3.2. Relevant harvest data, observations or information are recorded legibly and accurately, and any out of range or unusual records checked.</p> <p>3.3. Compliance and other required reports are prepared and conveyed to senior personnel advising of the effectiveness of harvest, and recommendations made for improvements.</p> <p>3.4. Feedback on own work performance is sought from</p>

ELEMENT	PERFORMANCE CRITERIA
	supervisor and opportunities to improve identified.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- communicating ideas on possible improvements
- communicating with supervisor on harvest activities and on own performance
- handling stock
- maintaining and repairing basic harvesting equipment
- operating basic harvesting equipment
- providing oral reports to the supervisor on activity irregularities
- recognising normal and abnormal stock behaviour.

Literacy skills used for:

- interpreting harvest schedules
- recording harvest information.

Numeracy skills used for:

- counting stock and containers.

Required knowledge

- behaviour of stock as it relates to harvest
- effects of water and weather conditions on stock and the OHS of employees
- effects on environment of wastes and effluent from harvesting activities
- operation and maintenance of automatic or mechanised harvest equipment
- work procedures for handling stock.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment evidence required to demonstrate competence in this unit	<p>Assessment must confirm the ability to:</p> <ul style="list-style-type: none"> harvest stock according to harvest schedule, supervisor's instructions and with minimal risk of stock stress or damage. <p>Assessment must confirm knowledge of:</p> <ul style="list-style-type: none"> grading procedures stock behaviour in relation to harvest activities work procedures for harvest equipment operations.
Context of and specific resources for assessment	<p>Assessment is to be conducted at the workplace while harvest is under way or in a simulated work environment.</p> <p>Resources may include:</p> <ul style="list-style-type: none"> culture or holding structures with/in water containing stock that exhibits a range of quality parameters harvest schedules harvesting equipment, work procedures and manufacturer guidelines holding and transporting equipment post-harvest processing facilities.
Method of assessment	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> practical demonstration written or oral short-answer testing.
Guidance information for assessment	This unit may be assessed holistically with other units within a qualification.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cultured or held stock may include:

- adults, broodstock (ready to breed), seedstock or stockers, eggs and sperm, fertilised eggs, larvae, post-larvae, seed, spat, hatchlings, yearlings, juveniles, fry, fingerlings, yearlings, smolt, sporophytes, seedlings and tissue cultures
- finfish, crustaceans, molluscs, aquatic reptiles, amphibians, polychaete and oligochaete worms, plankton, micro-algae, seaweed, aquatic plants, live rock, sponges and other aquatic invertebrates
- for human consumption (seafood), stockers for other farms, stockers for conservation or recreational fishing, display or companion animals (ornamentals), and other products, including pearls, skins, shells, eggs, chemicals and pigments
- wild caught, hatchery or nursery reared.

Relevant government regulations, licensing and other compliance requirements may include:

- biodiversity and genetically modified organisms
- biosecurity, translocation and quarantine
- business or workplace operations, policies and practices
- correct marketing names and labelling
- environmental hazard identification, risk assessment and control
- food safety/Hazard Analysis Critical Control Points (HACCP), hygiene and temperature control along chain of custody, and Australian Quarantine Inspection Service (AQIS) Export Control (Fish) orders
- health and welfare of aquatic animals
- maritime operations, safety at sea and pollution control
- OHS hazard identification, risk assessment and control.

RANGE STATEMENT	
<i>OHS guidelines</i> may include:	<ul style="list-style-type: none"> • appropriate workplace provision of first aid kits and fire extinguishers • codes of practice, regulations and/or guidance notes which may apply in a jurisdiction or industry sector • enterprise-specific OHS procedures, policies or standards • hazard and risk assessment of workplace, maintenance activities and control measures • induction or training of staff, contractors and visitors in relevant OHS procedures and/or requirements to allow them to carry out their duties in a safe manner • OHS training register • safe lifting, carrying and handling techniques, including manual handling, and the handling and storage of hazardous substances • safe systems and procedures for outdoor work, including protection from solar radiation, fall protection, confined space entry and the protection of people in the workplace • systems and procedures for the safe maintenance of property, machinery and equipment, including hydraulics and exposed moving parts • the appropriate use, maintenance and storage of PPE.
<i>Food safety and hygiene regulations and procedures</i> may include:	<ul style="list-style-type: none"> • Australian Shellfish Sanitation program • equipment design, use, cleaning and maintenance • exporting requirements, including AQIS Export Control (Fish) orders • HACCP, food safety program, and other risk minimisation and quality assurance systems • location, construction and servicing of seafood premises • people, product and place hygiene and sanitation requirements • Primary Products Standard and the Australian Seafood Standard (voluntary) • product labelling, tracing and recall • receipt, storage and transportation of food, including seafood and aquatic products

RANGE STATEMENT	
	<ul style="list-style-type: none"> requirements set out in Australian and New Zealand Food Authority (ANZFA) Food Standards Code and state and territory food regulations temperature and contamination control along chain of custody.
ESD principles may include:	<ul style="list-style-type: none"> applying animal welfare ethics and procedures control of effluents, chemical residues, contaminants, wastes and pollution improving energy efficiency increasing use of renewable, recyclable and recoverable resources minimising noise, dust, light or odour emissions preventing live cultured or held organisms from escaping into environment reducing emissions of greenhouse gases reducing energy use reducing use of non-renewable resources undertaking environmental hazard identification, risk assessment and control.
PPE may include:	<ul style="list-style-type: none"> gloves, mitts or gauntlets, and protective hand and arm covering buoyancy vest or personal floatation device (PFD) hard hat or protective head covering hearing protection (e.g. ear plugs and ear muffs) non-slip and waterproof boots (gumboots) or other safety footwear personal locator beacon or Emergency Position Indicating Radio Beacon (EPIRB) protective outdoor clothing for tropical conditions safety harness sun protection (e.g. sun hat, sunscreen and sunglasses) uniforms, overalls or protective clothing (e.g. mesh and waterproof aprons) waterproof clothing (e.g. wet weather gear and waders).

RANGE STATEMENT	
<i>Harvest</i> may include:	<ul style="list-style-type: none"> • drain harvests (stock may be picked up from the pond/tank or collected from the effluent) • fish pumps • full or partial • netting or lining (e.g. handlines or rods) • sieves or bags • trap harvesting.
<i>Harvest schedule</i> may include:	<ul style="list-style-type: none"> • cultured stock to be harvested • destination of harvested stock • equipment required for harvest operations • period over which harvest is to be carried out • quantities and specific quality parameters of stock • time at which harvest is to be carried out • work team members to be involved.
<i>Equipment</i> may include:	<ul style="list-style-type: none"> • bait and attractants • harvesting equipment: <ul style="list-style-type: none"> • dilly nets, drop nets, scoop nets, trawl/prawn nets, cast nets, crowd nets, gill nets, traps (e.g. bait and opera house traps) and wing nets • fish pumps or brails • flow traps • handlines and fishing lines • substrate and hides • holding and transport equipment: <ul style="list-style-type: none"> • bags • baskets • bins • buckets • tanks • trays • troughs.
<i>Culture or holding structures or systems</i> may include:	<ul style="list-style-type: none"> • blowers, aerators, paddlewheels and aspirators • greenhouses, hothouses and igloos • pest, predator and disease control structures • water supply and disposal or effluent systems, including pumps, pipes, canals, channels, settlement ponds and storage dams • cages, pontoons, enclosures and pens,

RANGE STATEMENT	
	<p>including associated moorings, anchors, floats and markers</p> <ul style="list-style-type: none"> • dams, ponds and pools • display tanks, aquaria and aquascapes • grow out facilities, hatcheries and nurseries • harvesting swimways, canals or channels • live holding tanks, bins, cages and pens • longlines, posts, racks and rails, rafts, fences, socks, trays, sticks, baskets, modules, barrels, bags and panels • open, flow-through, closed and semi-closed systems • purging or depurating systems • tanks, raceways and recirculating systems.
<i>Post-harvest facilities</i> may include:	<ul style="list-style-type: none"> • cooking • holding, depurating or purging • packing • processing, including shucking molluscs, gill-gutting and bleeding, scaling or cleaning and icing or temperature manipulation • sedation, including ice, carbon dioxide or anaesthetics • slaughtering • sorting or grading.
<i>Dangerous stock</i> may include:	<ul style="list-style-type: none"> • crocodiles • poisonous molluscs • stock with spikes, spines and teeth.
<i>Quality parameters</i> may include:	<ul style="list-style-type: none"> • body condition, including fat content and meat yield • physical appearance • sex and maturation condition • shape and colour • size or weight • type and extent of external damage.

Unit Sector(s)

Unit sector	Aquaculture operations
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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