



Australian Government

Department of Education, Employment and Workplace Relations

SFIEMS302B Act to prevent interaction with protected species

Release: 1

SFIEMS302B Act to prevent interaction with protected species

Modification History

Not Applicable

Unit Descriptor

<p>Unit descriptor</p>	<p>This unit of competency involves implementing strategies that prevent or minimise the impact of interaction with protected species resulting from aquaculture, ornamental or holding facilities or commercial fishing operations. In the event of interaction, the unit extends to interventions that aim to restore the wellbeing of the animal. It also relates to intervention for animals that may be injured through means unrelated to these operations.</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

<p>Application of the unit</p>	<p>This unit addresses the knowledge, practices and interventions necessary to prevent or minimise the impact of interaction with protected species. It has application for skippers, leading hands and experienced staff.</p> <p>An individual working at this level will be following the organisation's policies and procedures and acting on the advice of state, territory and federal environment agencies and in response to legislated and regulatory requirements under federal, state and territory fisheries and environment Acts.</p> <p>This unit does not address the requirements of protecting species that are inherently dangerous, such as sharks and crocodiles.</p> <p>Note: Any interventions must comply with legislation, such as the Environment Protection and Biodiversity Conservation Act 1999 and state and territory fisheries and environment Acts, and any subsequent regulations. In some states and territories, it is illegal to kill protected species, even when injured, without the approval of appropriate authorities.</p> <p>A current licence is required for anyone using a firearm. Refer to the relevant state and territory authority for conditions of use.</p> <p>All enterprise or workplace procedures and activities are</p>
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	<p>carried out according to <i>relevant government regulations, licensing and other compliance requirements</i>.</p> <p>Equipment operation, maintenance, repairs and calibrations are undertaken in a safe manner that conforms to manufacturer 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

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>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.</p>
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<p>1. Determine strategies for preventing or minimising the impact of interactions</p>	<p>1.1. Information relevant to threatened, endangered and protected species which may be encountered during the operation is obtained.</p> <p>1.2. Information about strategies that prevent or minimise the impact of interaction with protected species is obtained.</p> <p>1.3. Information about interventions that may restore the wellbeing of an animal during or after interaction is obtained.</p> <p>1.4. Strategies for preventing or minimising the impact of interactions during the operation are selected in consultation with or by management.</p>
<p>2. Implement strategies</p>	<p>2.1. Occupational health and safety (OHS) hazards are identified and risk control procedures are selected using the hierarchy of control model, legislative requirements, and enterprise and workplace procedures.</p> <p>2.2. Resources and equipment required to implement strategies are identified and acquired.</p> <p>2.3. Enterprise procedures for implementing strategies are developed and documented.</p> <p>2.4. Appropriate PPE is provided, used and maintained according to OHS requirements.</p> <p>2.5. Personnel are trained in the implementation of strategies.</p> <p>2.6. Strategies are applied according to agreed procedures.</p>
<p>3. Intervene to restore the wellbeing of an animal</p>	<p>3.1. The species is accurately identified.</p> <p>3.2. Options for intervention are evaluated against criteria for a successful outcome.</p> <p>3.3. The preferred option for intervention is selected based on agreed procedures and the outcomes of the evaluation.</p> <p>3.4. The decision to intervene is taken or referred to management where there is an OHS risk to personnel.</p> <p>3.5. The intervention is carried out according to agreed procedures.</p> <p>3.6. The wellbeing of the animal is monitored before, during and after the intervention.</p>

ELEMENT	PERFORMANCE CRITERIA
4. Monitor and report on interactions	<p>4.1. Interactions, potential interactions and interventions are monitored, recorded, reported to management and referred, as required, to <i>legislative authorities</i>.</p> <p>4.2. <i>Data</i> required by authorities is collected, recorded and relayed, as required.</p> <p>4.3. Recommendations for improvement to strategies and interventions are communicated to management.</p> <p>4.4. Opportunities to take a regional or whole of industry approach to preventing or minimising the impact of interactions are recognised and referred to <i>relevant organisations</i> for consideration.</p> <p>4.5. Publicity associated with an interaction or intervention event is handled.</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
<ul style="list-style-type: none"> • carrying out interventions • communicating both in writing and orally • evaluating information against criteria for a successful outcome • identifying hazards, assessing risks and applying the hierarchy of risk control measures • identifying species • researching information on protected species, including strategies to prevent and minimise the impact of interaction, and interventions to restore the wellbeing of an animal • training personnel in relevant enterprise procedures.
Literacy skills used for:
<ul style="list-style-type: none"> • filling out enterprise records • providing required data • reading and interpreting procedures • researching information.
Required knowledge

REQUIRED SKILLS AND KNOWLEDGE

- biological and behavioural characteristics of protected species likely to be found in the local area of operation
- consequences of non-compliance with fisheries and environment legislation
- enterprise procedures relating to the implementation of strategies and interventions
- hazards and risks associated with interaction and interventions with protected species
- hierarchy of risk control measures in ensuring a safe work environment
- legislation under which a species is afforded protection
- regulations pertaining to the responsibility of aquaculture and commercial fishing operations to:
 - intervene to restore the wellbeing of an animal
 - prevent or minimise the impact of interactions with endangered, threatened or protected species.

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
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"> • apply strategies to prevent or minimise the impact of interactions • evaluate and select intervention options to restore the wellbeing of an animal. <p>Assessment must confirm knowledge of:</p> <ul style="list-style-type: none"> • legislation that affords protection to a species • requirement to intervene to restore the wellbeing of an animal, and to prevent or minimise the impact of interactions with endangered, threatened or protected species.
Context of and specific resources for assessment	<p>Assessment is to be conducted at the workplace or in a simulated work environment.</p> <p>Resources may include:</p> <ul style="list-style-type: none"> • appropriate enterprise procedures and workplace personnel • operational environment or simulation that closely resembles an actual workplace • relevant legislation, standards and guidelines.
Method of assessment	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> • work diary • photographs and journal • enterprise records and referrals to fisheries and environment agencies • case studies, simulation or drill.
Guidance information for assessment	<p>This unit may be assessed holistically with other units within a qualification.</p>

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.

<p><i>Relevant government regulations, licensing and other compliance requirements</i> may include:</p>	<ul style="list-style-type: none"> • biodiversity and genetically modified organisms • biosecurity, translocation and quarantine • Australian Quarantine Inspection Service (AQIS) and other import requirements • business or workplace operations, policies and practices • correct marketing names and labelling • ecologically sustainable development (ESD) principles, environmental hazard identification, risk assessment and control • fisheries or aquaculture regulations, permits and licences • food safety, Hazard Analysis Critical Control Point (HACCP), hygiene and temperature control along chain of custody • health and welfare of aquatic animals • Indigenous land rights and cultural activities, including fishing by traditional methods • maritime and occupational diving operations, safety at sea and pollution control • OHS hazard identification, risk assessment and control.
<p><i>PPE</i> may include</p>	<ul style="list-style-type: none"> • buoyancy vest or personal floatation device (PFD) • gloves, mitts or gauntlets, and protective hand and arm covering • 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

RANGE STATEMENT	
	<p>Position Indicating Radio Beacon (EPIRB)</p> <ul style="list-style-type: none"> • protective eyewear, glasses and face mask • protective outdoor clothing for tropical conditions • respirator or face mask • 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).
<i>Information</i> may include:	<ul style="list-style-type: none"> • afforded protection to a species • behavioural characteristics • breeding habits • define circumstances under which an animal may be euthanised • defined reportable incidents • describe of allowable interventions • ecological threats • feeding habits • habitat • legislation, such as the Environment Protection and Biodiversity Conservation Act and state and territory fisheries and environment Acts, and any subsequent regulations • life cycle • mobility and range or migration movements • position in food chain • sources of food • vulnerability to interaction.
<i>Protected species</i> is considered to be:	<ul style="list-style-type: none"> • any vertebrate species that has some level of protection afforded through state, territory, commonwealth or international law, including finfish and sharks, mammals, reptiles, amphibians, marine birds, listed migratory birds and species listed by the Commonwealth government through the Environment Protection and Biodiversity Conservation Act • threatened and endangered species.

RANGE STATEMENT	
<i>Operation</i> refers to:	<ul style="list-style-type: none"> • aquaculture either on land or in water • commercial fishing • ornamental, display or live holding operations.
Information may be <i>obtained</i> from:	<ul style="list-style-type: none"> • AquaFin Cooperative Research Centre (CRC) and Australian Seafood CRC • Catchment Management Boards • fisheries compliance agencies • Fisheries Research and Development Corporation • Marine Stewardship Council • Oceanwatch, Landcare and related organisations • Seafood Services Australia • specialists, such as fauna ecologists and marine ecologists • state and territory seafood industry councils • state, territory and federal environment and wildlife agencies.
<i>Strategies</i> may include:	<ul style="list-style-type: none"> • alternative barrier techniques or materials • alternative fishing gear technology • alternative fishing techniques • avoiding known habitats • considering the characteristics of the identified species (e.g. breeding period, life cycle, feeding habits and habitat) when scheduling fishing or aquaculture operations • using by-catch reduction devices.
<i>Interventions</i> may include:	<ul style="list-style-type: none"> • assisting animals that may have been injured through means unrelated to professional fishing • euthanasia where an animal is not recovering as expected • first aid, including resuscitation • release from device or entanglement • relocation of animal • removal of material, such as fish hook, netting or plastic, which may entangle species • rescue and rehabilitation. <p>Note: Any interventions must comply with legislation, such as the Environment Protection</p>

RANGE STATEMENT	
	and Biodiversity Conservation Act and state and territory fisheries and environment Acts, and any subsequent regulations. In some states and territories it is illegal to kill threatened, endangered and protected species, even when injured, without the approval of appropriate authorities.
<i>OHS hazards</i> relating to personnel may include:	<ul style="list-style-type: none"> • entanglement with nets or other fishing gear • manual handling of large, moving animals • other potentially dangerous animals in local area • vessels or vehicles moving through the area • uncontrolled movement and defensive action of trapped or restrained animals • use of firearms • vessel propeller and any other appendages or attachment • water, including depth, temperature, current, tide and wave actions.
<i>Resources and equipment</i> may include:	<ul style="list-style-type: none"> • first aid materials • fishing technology gear, including by-catch reduction devices • gear for retrieving and removing an animal, such as rods, snips, nets and baskets • means for euthanising or sedating an animal. <p>Note: Use of immobilising or anaesthetic agents is controlled under state and territory legislation. Refer to relevant authorities for registration requirements.</p>
<i>Enterprise procedures</i> may address:	<ul style="list-style-type: none"> • decision-making process for determining appropriate intervention for a range of interaction events anticipated in the location of the operation • fishing techniques that minimise interactions • handling negative and positive media publicity associated with an interaction or intervention event • humane euthanising of injured animals and disposal of carcasses • process of continuous improvement for strategies, interventions and enterprise

RANGE STATEMENT	
	<p>procedures</p> <ul style="list-style-type: none"> • recording, reporting and referring information about interactions and interventions.
<i>Agreed procedures</i> may include:	<ul style="list-style-type: none"> • by-laws and statutory rules • company procedures • federal, state and territory Acts • publications and guides on interaction with protected species, for example, Queensland Department of Primary Industries and Fisheries 'A guide for commercial fishers - Looking after Protected Species in Queensland'.
<i>Criteria for a successful outcome</i> may include:	<ul style="list-style-type: none"> • compliance with catchment and/or whole of industry codes of conduct or limitations, and state and territory fisheries and environment Acts • potential for success in restoring the animal's wellbeing • safety and security of crew • security and safety of equipment • security and wellbeing of aquacultured stock.
<i>Legislative authorities</i> may include:	<ul style="list-style-type: none"> • state and territory fisheries and environment agencies.
<i>Data</i> may include:	<ul style="list-style-type: none"> • numbers in the range statement • sex • size.
<i>Relevant organisations</i> may include:	<ul style="list-style-type: none"> • industry associations and state government agencies • legislative authorities under the Environment Protection and Biodiversity Conservation Act • management committees responsible for industry-based management plans, such as environmental management systems.

Unit Sector(s)

Unit sector	Environment and sustainability
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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