



Australian Government

Department of Education, Employment and Workplace Relations

SFIAQUA212C Work with crocodiles

Release: 1

SFIAQUA212C Work with crocodiles

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit of competency involves working with crocodiles, including the culture for meat, skins and other products, and holding for display purposes. It involves capturing (from the wild or an enclosure), restraining, transporting, releasing, handling and grading. Collection, transport, processing and incubation of eggs and care of hatchlings are covered in other units, as are feeding, health arrangements, culture structures and water quality maintenance. Work is likely to be under routine supervision with intermittent checking and often carried out as part of a team effort. Responsibility for observing and reporting non-standard conditions is expected at this level. It covers the interpreting of instructions and appropriate use of equipment. 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.
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Application of the Unit

Application of the unit	As crocodiles can be dangerous, particular care must be taken when near these animals. Much of this unit is based on the Code of Practice on the Humane Treatment of Captive and Wild Australian Crocodiles and the Australian Standard for Hygienic Production of Crocodile Meat for Human Consumption. Specific permits or licences may need to be issued by state or territory authorities as well as some commonwealth government departments. Where crocodiles are being exported refer to the Australian Quarantine Inspection Service (AQIS) Export Control (Fish) order. Licences may be required for the use of: • firearms • restricted drugs • vehicles. All enterprise or workplace procedures and activities are
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	carried out according to <i>relevant government regulations, licensing and other compliance requirements</i>, including <i>occupational health and safety (OHS) guidelines</i> and <i>ecologically sustainable development (ESD) principles</i>. 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.
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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 working with crocodiles	1.1.Dangers in working with crocodiles are understood and verbally confirmed with supervisor and other handlers. 1.2.Behaviour of crocodiles in the wild and in captivity is understood and verbally confirmed with supervisor and other handlers. 1.3.All activities with crocodiles are undertaken according to industry codes, government requirements and enterprise procedures to reduce stress and injury to the animal, other crocodiles, handlers and the environment. 1.4.Instructions associated with the task are obtained from supervisor, harvest schedule or production schedule.
2. Capture crocodiles from wild or enclosures	2.1.Capture, holding and transport equipment appropriate for the task, location and enclosure is collected, checked and repaired, as required. 2.2.Crocodiles to be captured are confirmed with supervisor. 2.3.Assistance is provided in administering of sedatives to immobilise crocodile, if required. 2.4.Capture is undertaken according to preparations and work instructions.
3. Crocodiles are restrained and transported	3.1.Crocodiles are restrained and prepared for transport to post- harvest facilities or relocation sites. 3.2.Crocodiles are placed in transport container appropriate to the size of crocodile, mode of transport and length of journey. 3.3.Condition of crocodiles is monitored regularly and any abnormal behaviour or conditions reported to supervisor. 3.4.Transport environment is maintained to best suit the crocodile. 3.5.Crocodile is released into holding or culture structure.
4. Crocodiles are housed and maintained	4.1.Holding or culture environment is maintained to best suit crocodiles. 4.2.Crocodiles are fed according to enterprise feeding schedule and procedures. 4.3.Abnormal behaviour or other indications of health

ELEMENT	PERFORMANCE CRITERIA
	problems are observed and reported to supervisor. 4.4. Sick or unhealthy crocodiles are treated, under supervision. 4.5. Dead crocodiles are removed as soon as detected and disposed of.
5. Complete post-task activities	5.1. Clean up of work area, including repairs and storage of equipment, is supervised, and condition report prepared. 5.2. Relevant handling data, observations or information are recorded legibly and accurately, and any out of range or unusual records are checked. 5.3. Compliance and other required reports are prepared and conveyed to senior personnel advising of the effectiveness of the handling, and recommendations made for improvements. 5.4. Feedback on own work performance is sought from 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 and other handlers on work activities
- maintaining and repairing basic harvesting equipment
- operating crocodile capture, housing, handling and feeding equipment
- providing oral reports to supervisor on operation irregularities
- recognising abnormal stock behaviour.

Literacy skills used for:

- interpreting harvest schedules
- recording harvest information.

Numeracy skills used for:

REQUIRED SKILLS AND KNOWLEDGE

- counting stock and containers.

Required knowledge

- behaviour of crocodiles in captivity and in the wild
- equipment and procedures for housing, feeding and handling crocodiles
- food and other requirements for captive crocodiles
- OHS requirements when working with crocodiles.

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

Assessment must confirm the ability to:

- handle crocodiles according to production schedule and supervisor's instructions to ensure stock suffer minimal stress and damage
- share information with supervisor and other handlers
- observe and report abnormal behaviour of crocodiles
- work safely with crocodiles.

Assessment must confirm knowledge of:

- equipment operation consistent with enterprise and manufacturer guidelines
- industry codes of practice.

Context of and specific resources for assessment

Assessment is to be conducted at the workplace. Competency should be demonstrated over a period of time and involve crocodiles of a range of sizes. Where there is a range of methods and options, assessment of competency should cover those commonly used in the region.

Resources may include:

- crocodiles, caymans or alligators
- culture or holding structures with water exhibiting a range of quality parameters
- harvest schedule
- harvesting equipment and enterprise procedures
- holding and transporting equipment.

Method of assessment

The following assessment methods are suggested:

- 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.

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

- biodiversity and genetically modified organisms
- biosecurity, translocation and quarantine
- AQIS Export Control (Fish) orders and other import requirements
- business or workplace operations, policies and practices
- correct marketing names and labelling
- ESD principles, environmental hazard identification, risk assessment and control
- fisheries or aquaculture regulations, permits and licences
- health and welfare of aquatic animals
- Indigenous land rights and cultural activities, including fishing by traditional methods
- OHS hazard identification, risk assessment and control.

OHS requirements may include:

- 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 technique,

RANGE STATEMENT	
	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.
ESD principles may include:	• applying animal welfare ethics and procedures • control of effluents, chemical residues, contaminants, wastes and pollution • control of weeds, pests, predators and diseases, and stock health maintenance • improving energy efficiency • increasing use of renewable, recyclable and recoverable resources • maintaining biodiversity by sustainable fisheries or broodstock/seedstock collection • 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 interactions with native and protected flora and fauna, marine or land parks or areas • reducing use of non-renewable resources • undertaking environmental hazard identification, risk assessment and control • undertaking facility quarantine, biosecurity and translocation of livestock and genetic material • using and recycling of water, and maintaining water quality.
PPE may include:	• buoyancy vest or personal floatation device (PFD) • gloves, mitts or gauntlets, and protective hand and arm covering • hard hat or protective head covering • non-slip and waterproof boots (gumboots) or

RANGE STATEMENT	
	- other safety footwear - personal locator beacon or Emergency Position Indicating Radio Beacon (EPIRB) - protective outdoor clothing for tropical conditions - 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).
Crocodiles may include:	- American alligators (<i>Alligator mississippiensis</i>) - estuarine or saltwater crocodile (<i>Crocodylus porosus</i>) - freshwater or Johnstone's crocodile (<i>C. Johnstoni</i>) - other species, including caymans and alligators.
Industry codes may include:	Code of Practice on the Humane Treatment of Captive and Wild Australian Crocodiles.
Harvest schedule may include:	- crocodiles to be harvested - destination of harvested stock - equipment required for harvest operations - quantities and specific quality parameters: - body condition (e.g. fat content and meat yield) - physical appearance - sex or maturation condition - shape or colour - size or weight - type and extent of external damage - time and period over which harvest is to be carried out: - hours/days/weeks - time of day.
Capture, holding and transport equipment may include:	- capture equipment or method (based on length of crocodile): - hand capture (<1.0 m) - hand noose (1.0-1.5 m) - nets (0.5-6.0 m) - ropes (>1.5 m)

RANGE STATEMENT	
	• skin harpoon (2.0-6.0 m) • trap (2.0-6.0 m) • holding and transport containers and associated equipment: • capped PVC pipes • carry boards • cooling water • covers and tarpaulins • ropes and ties • straw • ventilated containers (e.g. prawn crates, wooden boxes and hessian bags) • immobilising agents • transport vehicle: • trailer, vessel, vehicle, helicopter (charter) and airplane (charter).
Location may include:	• farm, including hatcheries and nurseries • wild, natural environment • zoos and public aquaria.
Enclosure may include:	• cages, enclosures, fences and pens • dams, ponds and pools • tanks.
Restrained may include use of:	• immobilising agents (e.g. sedatives) • jaw ties (e.g. rubber bands, tape or cord according to size of crocodile) • leg ties (e.g. rope, cord or tape) • wet sack to cover eyes.
Post-harvest facilities may include:	• holding, depuration or purging • on-farm • off-farm • packing • processing (e.g. cleaning, icing or temperature manipulation) • sorting or grading.
Transport environment may include:	• cover or shade • humidity • protection from mechanical shock or jolting • protection from other crocodiles • protection from sunlight, particularly eyes

RANGE STATEMENT	
	• restraints which do not restrict blood circulation or injury in any other way • stocking density • temperature.
<i>Holding or culture environment</i> may include:	• adequate amounts of calcium, phosphorus (for skeletal growth) and vitamins, if not provided in food • clean, fresh drinking water • cover or shade • high animal protein food (e.g. red meat) • humidity • light • pond of clean (filtered) water for swimming or complete submergence • protection from other crocodiles • protection from physical abuse, such as hitting with sticks and rocks • protection from visual disturbances, noises and predators (hatchlings) • regular grading of hatchlings and small (raising stock) animals • stocking density or size of other crocodiles • substrates that are not unduly abrasive (ideally should be smooth, such as concrete, fibreglass or grass) • temperature.
<i>Abnormal behaviour or other indications of health problems</i> may include:	• death • external appearance (e.g. wounds and fungal lesions) • inactivity • isolation from other crocodiles • loss of appetite • loss of coordination • loss of weight.
<i>Treatment</i> may include:	• dietary • euthanasia (by drug or shooting) • isolation • veterinary.

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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