Modification history

|  |  |
| --- | --- |
| Release | Comments |
| Release 1 | This version released with SFI Seafood Industry Training Package Version 3.0. |

| SFICRO3X1 | Support crocodile hatchery operations |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to support crocodile hatchery operations, including monitoring the collection and care of hatchlings.  The unit applies to individuals who have responsibility for a crocodile 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. |
| Use Prerequisite Unit | Nil |
| Unit Sector | Crocodiles |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare for crocodile hatchery production | 1.1 Identify crocodile hatchery program aims  1.2 Confirm hatchery labour and equipment requirements with relevant personnel  1.3 Identify risk factors that could affect hatchery operations, and plan to minimise risk |
| 2. Process crocodile eggs | 2.1 Examine crocodile eggs to detect and remove dead specimens to prevent contaminants into the incubator  2.2 Wash surface contaminants off eggs using clean water (24-34 degrees Celsius)  2.3 Place eggs in incubator maintaining appropriate environmental factors to maximise survival rates  2.4 Monitor egg hatching and re-position eggs that are due to hatch so that waste released at hatching does not fall onto incubating eggs below them |
| 3. Support crocodile egg hatching | 3.1 When the first crocodile eggs of a clutch hatch, check the hatchlings to determine whether the residual yolk has been withdrawn completely into the abdominal cavity to determine if incubation conditions have been identical for all eggs  3.2 When the incubation conditions are found to be identical for all eggs, open the remaining crocodile eggs by hand in accordance with hatchling handling procedures |
| 4. Care for hatchlings | 4.1 Wash hatchlings with warm water (28-32 degrees Celsius) and transfer to appropriate pens that facilitate easy movement between land and water and reduce the need for unnecessary handling of the hatchlings  4.2 Euthanise obviously weak or deformed hatchlings by intravenous injection into the cephalic sinus or into the body cavity (intraperitoneal) using suitable euthanising drugs as approved by supervisor  4.3 Monitor and maintain water quality and temperature and heated areas on land allowing crocodile hatchlings to rapidly heat to 30-32 degrees Celsius  4.4 Feed hatchlings five to seven times per week in their first few months of life  4.5 Monitor and document hatchlings behaviour and environmental parameters |
| 5. Conduct crocodile hatchling and stock maintenance activity | 5.1 Check cleaning of work area and disposal of waste materials is completed according to workplace procedures, biosecurity and environmental requirements  5.2 Check condition and storage of tools and equipment, and forward repair requirements to supervisor  6.3 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 |
| Oral communication | * Communicate in a culturally sensitive manner |
| Reading | * Interpret technical information relating to crocodile hatchlings |
| Writing | * Complete workplace records legibly and accurately using correct technical terminology |
| Numeracy | * Estimate time and resources needed for hatchery production activities * Estimate quantities of feed and containers |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| SFICRO3X1 Support crocodile hatchery operations | N/A |  | New unit |

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

| TITLE | Assessment requirements for SFICRO3X1 Support crocodile hatchery operations |
| --- | --- |
| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements, performance criteria and foundation skills in this unit.  There must be evidence that the individual has on at least two occasions:   * carried out crocodile egg incubation care * monitored hatchery operations   on at least one occasion, monitored hatchery operations in the collection are care of crocodile eggs and crocodile hatchlings  In doing the above, evidence must also include:   * applying risk assessment processes and putting controls in place to mitigate hatchling survival risks * observing crocodile hatchling biosecurity and regulatory guidelines * treating crocodiles and crocodile hatchlings humanely * maintaining a hygienic and functional work area during and after hatchery operations * locating and applying required procedures * maintaining accurate records on hatchery operations. | |

| Knowledge Evidence |
| --- |
| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements, performance criteria and foundation skills of this unit. This includes knowledge of:   * key facts about crocodile hatchlings physiology and developmental process:   egg incubation process and the temperature which determines the gender  growth rates  behavioural patterns   * crocodile egg monitoring, including:   maintaining precisely controlled environmental conditions  inspecting eggs regularly, throughout the incubation period and removing dead specimens   * hatchling care, including:   housing hatchlings in pens with adequate shade for all individuals  maintaining water temperatures in the range of 30-32 degrees Celsius and/or heated areas on the land allowing crocodiles to rapidly heat to 30-32 degrees Celsius  protecting hatchlings from wind likely to cause prolonged cooling, undue visual disturbance, changing noise levels, predators  avoiding unnecessary handling  making provision for sufficient water areas for all crocodiles to be submerged  ensuring that there is not more than 10 to 15 individual crocodiles per square metre of water and land in their first year of life  feeding hatchlings at five to seven times per week in their first few months of life and providing the size of food that is reflective of the size of individual hatchlings  scheduling for hatchery operations adequately   * cleaning and disinfection requirements for hatchery operations * feed and other requirements of hatchlings * safe and humane crocodile handling techniques and procedures * the principles of crocodile welfare and ethics as set out in relevant codes of practice * the importance of crocodile skin quality and what this means in the handling of hatchlings * zoonotic diseases that can affect hatchlings * workplace health and safety (WHS) practices related to crocodile hatchery operations * relevant legislation, including biosecurity hatchery control measures. |

| Assessment Conditions |
| --- |
| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a crocodile hatchery or an environment that accurately represents workplace conditions * resources, equipment and materials: * crocodile hatchlings * monitoring equipment * access to crocodile hatchery production schedule and workplace procedures for hatchery operations, including advice on health and safety, hygiene and environmental requirements   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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