

**Modification history**

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 5.0.

AHCNAR3XX	Implement assisted regeneration works
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to assist the regeneration of a degraded terrestrial or aquatic ecosystems harnessing potential from on-site components or colonisation from nearby areas, through germination triggers, amelioration, reshaping of substrates for colonization, installation of habitat elements and managing competition from undesirable species.</p> <p>The unit applies to individuals who work under broad supervision and take responsibility for their own work. They use discretion and judgement in the selection, allocation and use of available resources and for solving problems.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Natural Area Restoration (NAR) Or Ecological Restoration (ECR)

Commented [RB1]: This new sector has been suggested to replace Natural Area Restoration

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. Interpret work requirements for site	1.1 Conduct site inspection to identify intact ecological features 1.2 Record the ecosystems and communities present on site 1.3 Identify boundaries of the assisted regeneration zones for site 1.4 Identify factors preventing natural recovery of biota across site 1.5 Identify assisted primary and secondary regeneration treatments to trigger recovery of species for ecosystem 1.6 Identify timing of primary and secondary treatments
2. Prepare for assisted regeneration works	2.1 Identify hazards, assess risks and implement controls according to workplace health, safety and environmental procedures 2.2 Identify biosecurity and environmental risks 2.3 Identify and obtain permits required for specific treatments 2.4 Select check and prepare tools and materials according to project brief and biosecurity requirements 2.5 Determine and organise labour requirements 2.6 Prepare a schedule of works
3. Undertake initial assisted regeneration works	3.1 Apply biosecurity and environmentally sustainable work practices 3.2 Carry out initial assisted regeneration treatments according to project brief 3.3 Select check and use personal protective equipment according to workplace health and safety procedures 3.4 Apply techniques for securing, protecting or supporting the recovering species 3.5 Identify and report potential threats to assisted regeneration works and regenerating species
4. Undertake follow up assisted regeneration works	5.1 Monitor responses of desirable and undesirable biota 5.2 Undertake remedial assisted regeneration works to secure the recovery of desirable biota 5.3 Clean, maintain and store tools and equipment

Commented [RB2]: Is this a level 3 activity?

Commented [RB3]: This seems out of place. Is this part of planning?

AHCNAR3XX Implement assisted regeneration works

<b>Foundation Skills</b>	
<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
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Commented [RB4]: RB to complete after confirmation of Performance Criteria

<b>Unit Mapping Information</b>			
Code and title current version	Code and title previous version	Comments	Equivalence status
AHCNAR3XX Implement assisted regeneration works	New	New	No equivalent unit

<b>Links</b>	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72</a>
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<b>TITLE</b>	<b>Assessment requirements for AHCNAR3XX Implement assisted regeneration works</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has performed ecological restoration works for <b>at least two different ecological environments</b>.</p> <p>There must also be evidence that the individual has:</p> <ul style="list-style-type: none"> <li>• identified intact ecosystem features of site, including: <ul style="list-style-type: none"> <li>• remaining native organisms</li> <li>• intact substrates</li> <li>• habitat</li> </ul> </li> <li>• identified boundaries of natural regeneration, assisted regeneration and reconstruction zones on site</li> <li>• identified assisted regeneration treatments that are appropriate to individual species typical of the ecosystem and type and intensity of the treatment matched to the degradation level of the site <b>which must include all locally applicable treatments for the following:</b> <ul style="list-style-type: none"> <li>• substrate physical treatments including surface contouring and debris laying</li> <li>• substrate chemical treatments including removal of contaminants, pH correction, saline flushing, nutrient stripping</li> <li>• hydrological treatments including water chemistry and elevating or decreasing water availability</li> <li>• habitat reinstatement including rocks, shell, artificial hollows or crevices, debris piles and dispersal perches</li> <li>• applied disturbances including soil disturbance, clearing fire or smoke treatments</li> <li>• removal of competition including any undesirable species</li> </ul> </li> <li>• recognised and minimised threats to regeneration at the restoration site</li> <li>• conducted a site hazard identification and risk control assessment</li> <li>• used, cleaned, maintained and stored machinery and equipment according to manufacturer instructions and enterprise standards</li> <li>• complied with work health and safety, biosecurity and environmental sustainable work practices.</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>• identification of locally native and non-native plants and animals</li> <li>• naming of ecosystems and habitats already present on site</li> <li>• consideration of the effects of climate change on the prior ecosystem and implications for restoration</li> <li>• post-disturbance recovery mechanisms of specific relevant organisms and triggers for their recovery</li> <li>• habitat requirements of locally native biota</li> <li>• principles and methods relating to the prevention and control of pest or undesirable biota</li> <li>• assisted regeneration techniques for a range of native and non-native biota in damaged ecosystems including: <ul style="list-style-type: none"> <li>• substrate physical treatments including surface contouring and debris laying</li> <li>• substrate chemical treatments including removal of contaminants, pH correction, saline flushing, nutrient stripping</li> <li>• hydrological treatments including elevating or decreasing water availability</li> <li>• habitat reinstatement including rocks, shell, artificial hollows or crevices, debris piles and dispersal perches</li> <li>• applied disturbances including soil disturbance, clearing fire or smoke treatments</li> <li>• removal of competition including any undesirable species</li> </ul> </li> <li>• factors affecting the timing, method of primary and secondary assisted regeneration treatments and the consequences of insufficient secondary treatments</li> <li>• safety requirements when handling and using hazardous goods.</li> </ul>	
<b>Assessment Conditions</b>	
Assessment of skills must take place under the following conditions:	

### Assessment Conditions

- physical conditions:
  - skills must be demonstrated in the field as specified in the performance criteria
- resources, equipment and materials:
  - tools and equipment required for ecological restoration works
  - materials required for treatments
  - security guards, pegs and
- specifications:
  - use of specific workplace procedures and processes
  - access to specific safety data sheets for chemical treatments
  - use of workplace instructions and project brief
- relationships:
  - work team
  - supervisor

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

### Links

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