



Australian Government

AHCARB316 Perform pruning operations

Release: 1

AHCARB316 Perform pruning operations

Modification History

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

Application

This unit of competency describes the skills and knowledge required to perform corrective and remedial pruning operations to trees either from the ground or whilst working at height.

The unit applies to individuals who work in arboriculture under broad direction 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.

The arboriculture industry requires that all pruning operations work is undertaken according to preferred industry practices (as outlined in the Companion Volume).

Legislation, regulations and by-laws relating to the treatment and removal of trees apply in some states and territories.

Pre-requisite Unit

Nil

Unit Sector

Arboriculture (ARB)

Elements and Performance Criteria

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. Prepare for pruning operations	1.1 Receive and confirm instructions with supervisor 1.2 Confirm access to site and location of trees and work zones 1.3 Determine type, extent and limit of pruning work in accordance with specifications, scope of works and client brief 1.4 Undertake a site-specific job safety analysis (JSA) and record and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	implement site-specific control measures 1.5 Communicate with work team using agreed methods according to works undertaken and site and environmental conditions
2. Prepare tools, equipment and work environment	2.1 Select tools and equipment for pruning work 2.2 Consider access and impact of selected pruning tools and equipment on tree 2.3 Carry out pre-operational and safety checks on pruning tools and equipment 2.4 Select, check and use personal protective equipment 2.5 Disinfect pruning equipment during tree work according to hygiene and biosecurity procedures and tree assessment outcomes 2.6 Implement workplace health, safety, site, environmental and traffic control measures according to JSA
3. Determine tree parts to be removed and plan pruning operations	3.1 Investigate tree canopy shape, structure and defects to determine pruning plan 3.2 Assess tree structure for stem co-dominance and branch attachment to determine options for pruning cut procedure 3.3 Identify tree part requiring removal and select pruning procedure and location of cut from identified pruning cut options
4. Perform pruning operations	4.1 Prepare pruning equipment to ensure cuts are clean 4.2 Use pruning tools to make pruning cuts according to industry standards and manufacturer operating instructions 4.3 Make cuts from a secure body position with awareness of extant tree hazards 4.4 Maintain awareness of power line proximity, safe approach distances and clearances 4.5 Select pruning cuts for crown maintenance or crown modification according to scope of works 4.6 Perform pre-cutting techniques to avoid splitting or tearing of the stem and bark 4.7 Perform final cut according to the principles of compartmentalisation of decay in trees (CODIT) and current industry standards 4.8 Ensure bark at edge of all pruning cuts remains firmly attached

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
5. Improve pruning quality	5.1 Review previous pruning cuts to determine tree response to pruning activities 5.2 Assess tree response to previous pruning methods and compare with current work practice 5.3 Seek advice from consulting arborists on quality of current pruning work practice 5.4 Identify substandard current pruning cuts and rectify according to advice
6. Complete pruning operations	6.1 Drop or lower pruned material into designated drop zone 6.2 Clean, maintain and store tools and equipment 6.3 Collect and dispose of pruned material according to environmental procedures 6.4 Maintain pruning records according to workplace procedures

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
Writing	Accurately complete organisational documents, including job safety analysis, using clear language, correct spelling, grammar and industry terminology

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCARB316 Perform pruning operations	AHCARB303 Perform pruning operations	Prerequisite units removed Elements and performance criteria clarified	Equivalent

		Foundation skills added Assessment requirements updated	
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Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCARB316 Perform pruning operations

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has demonstrated pruning operations according to given specifications for at least 4 trees, including:

- 1 tree with a minimum height of at least 10 metres and a minimum 5 metre spread for which the pruning specifications must include:
 - removal of hazardous dead wood or branches from the tree canopy
 - reduction of the extent of the crown
 - selective pruning to remove branches to resolve specific problems
- 1 tree of less than 4 metres in height to be formatively pruned
- 2 mature trees of at least 10 metres in height, for which the predetermined specifications must include at least 3 of the following maintenance or modification activities:
 - reduced the extent of the crown
 - lifted the height of the crown
 - pruned trees for low voltage line clearance on a residential property
 - performed remedial pruning including removal of dead wood
 - removed dead fronds and fruit from palm trees
 - pollarded a tree.

There must also be evidence that the individual has:

- communicated with work team during operations using communication method agreed with work team
- determined type, extent and limit of pruning work according to the specifications, scope of works, relevant standards and client brief
- operated safely while undertaking work, including:
 - conducted a job safety analysis for the site before work
 - maintained safe approach distances and clearances to power lines
 - selected and used personal protective equipment

- inspected tree for safe access and work
- conducted tree pruning from a secure and safe position
- selected, prepared and checked and safely used tools and equipment and cleaned and maintained for all pruning operations
- determined crown maintenance and modifications required and identified pruning cut options according to Australian Standards AS 4373 including:
 - stem co-dominance
 - stem bark ridge
 - old cuts
 - dead branches
 - occluded and occluding branches
 - used pre-cuts and undercuts of branches to avoid splitting or tearing and ensured bark remained firmly attached
- performed final cuts that complied with principles of compartmentalisation of decay in trees (CODIT), including:
 - cut to the branch collar without leaving a protruding stub
 - used branch bark ridge to determine angle of cut where visible collar is absent
 - ensured lateral branch to which the final cut is made is the correct diameter for the branch being reduced
 - used stem bark ridge to determine the angle of cut when removing a co-dominant stem
 - positioned the final cut guided by positions and angles of joins between tissue of declining or dead stems and those of healthy stems elsewhere in tree
 - ensured bark at edge of cuts remained firmly attached
- conducted a review of pruning practices for tree response to pruning and advice from arborist and modified pruning methods to improve pruning quality
- dropped or lowered pruned material into designated drop zone and collected and removed pruned material according to workplace and environmental procedures
- maintained pruning records according to workplace procedures.

All pruning operations work is required to be performed according to preferred industry practices (as outlined in the Companion Volume).

Knowledge Evidence

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:

- purpose of pruning trees and the standards expected, including:
 - canopy maintenance and the principles of dead wooding, crown thinning, selective pruning, formative pruning
 - canopy modification and the principles of reduction pruning, crown lifting, pollarding, remedial pruning, line clearance
- work health and safety procedures for pruning operations
- work site procedures for job safety analysis (JSA) for pruning and activities and control measures, including:

- recognition of hazards
- assessing the risks
- identifying controls
- documenting a JSA
- personal protection
- first aid
- rescue procedures
- visual tree assessment, including health, growth habit, structure, stability and growing environment
- pruning equipment; advantages and disadvantages and use, including:
 - secateurs
 - chainsaws
 - pole saws
 - handsaws
 - equipment pre-start checks
- tree and branch anatomy and attachments related to pruning, including:
 - lateral branch collars
 - branch bark ridges
 - stem bark ridges
 - occluded and occluding branches
 - dominant and co-dominant stems
- preferred industry practices (as outlined in the Companion Volume) for pruning operations and Australian Standard AS 4373
- gauging the quality of pruning by assessing tree responses to pruning, including:
 - recognising correct and incorrect pruning cuts
 - rectifying poor pruning cuts
- hygiene and biosecurity procedures to minimise cross-infections from pruning activity
- safe communication during tree pruning work, including the impact of noise, environmental conditions, communications resources, and visibility
- communications strategies used in the arboriculture industry, including:
 - voice
 - hand
 - whistle signals
 - electronic communications
- safety considerations and procedures when working near overhead power lines, including:
 - basics of electrocution
 - power line types and insulation
 - approach distances and safety zones, voltage and arcing
 - authorisations to work near power lines
 - tools, equipment, tree loads, personnel and power line contact

- legal liability
- workplace records for pruning operations
- environmental procedures and site management and clean-up.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - the trees stipulated to be pruned in the performance evidence
- resources, equipment and materials:
 - chainsaws, including a climbing saw
 - pole saw
 - pruning handsaws
 - personal protective equipment
 - first aid and emergency kit
 - traffic management kit
 - signage – work zone
 - trees and tree parts
- specifications:
 - workplace procedures and instructions related to pruning trees
 - legislation, regulations, codes of practice, Australian Standard AS 4373 related to pruning trees
 - preferred industry practices (as outlined in the Companion Volume) for pruning operations
 - documentation for planning, obtaining permits
- relationships:
 - client and work team.

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

- arboriculture vocational competencies at least to the level being assessed
- current arboriculture industry skills directly relevant to the unit of competency being assessed.

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