Australian Government

AHCARB601 Examine and assess trees

Release: 2

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Modification History

RELEASE	COMMENTS
Release 2	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 2.0.
Release 1	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to examine and assess tree health, age, taxonomy, risk, amenity value and significance and compile a tree assessment report.

This unit applies to individuals with broad theoretical and technical knowledge of a specific area or a broad field of work and learning and cognitive, technical and communication skills to demonstrate autonomy, judgement and defined responsibility in undertaking complex work within broad parameters to provide specialist advice and functions.

The role involves the self-directed application of knowledge with substantial depth in areas such as tree identification, pathology and diagnostics, tree assessment and valuation techniques, tree risk assessment and reporting methods.

Licensing, legislative, regulatory, or certification requirements apply to this unit in some states & territories at the time of publication, and may differ according to jurisdiction. Specific determination should be sought through the relevant State or Territory. Works involving this unit of competency may be subject to local tree protection and preservation laws, and the relevant content of applicable Australian Standards.

Pre-requisite Unit

AHCARB403 Perform a ground-based tree defect evaluation*

*AHCARB302 Inspect trees for access and work***

AHCARB313 Identify trees

Unit Sector

Arboriculture (ARB)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Determine tree survey program requirements	1.1 Identify scope of survey in accordance with client needs 1.2 Determine client's risk threshold 1.3 Determine and document procedures for data capture 1.4 Identify, source and record all current data research relevant to survey requirements 1.5 Check equipment for assessing trees and prepare for use 1.6 Select, check and use personal protective equipment
2. Determine the tree dimensions and structure	2.1 Plot tree location on a device, drawing or plan of the site 2.2 Determine and record tree dimensions and structure 2.3 Measure tree height, spread and diameter-at-breast height (DBH) 2.4 Examine and record form of tree 2.5 Assess tree for asymmetry of canopy 2.6 Assess if tree has a lean and calculate the lean 2.7 Assess how form of crown relates to or is responsive to surrounding trees and structures 2.8 Determine the potential impact of wind loading of the tree
3. Record tree taxonomic features	3.1 Inspect tree and record fruit type and characteristics 3.2 Describe leaf morphology for shape, colour and size 3.3 Examine and record buds, branchlets, branches and bark 3.4 Inspect for and describe trichomes on lamina, petiole and branchlets 3.5 Describe and record floral characteristics of structure of inflorescence, location of the flower, flower colour, details of the flower parts present, absent or modified
4. Assess tree health issues	4.1 Examine and record the canopy density and distribution 4.2 Assess recorded leaf colour and size against a healthy specimen 4.3 Assess for the presence of epicormic shoots 4.4 Assess for dead tips or excessive numbers of dead branches 4.5 Examine roots, root crown, stem, branches and canopy for signs of biotic and abiotic disease 4.6 Evaluate and describe symptoms presenting on tree 4.7 Determine how presence of disease might be affecting tree 4.8 Recognise and record wounds to the tree 4.9 Consider size, location and cause of wounds

Element	Performance criteria
5. Assess age of trees and tree parts	5.1 Determine if species is uninodal or multinodal 5.2 Record the dimensions of the tree 5.3 Examine tree for evidence of growth increments including bud scars, sympodial growth and flush marks 5.4 Estimate average annual increase in diameter of sample of xylem stained as required 5.5 Research historic images of tree or trees of same species in similar environments 5.6 Provide a reasoned estimate of age of tree, tree part or wound
6. Assess trees for significance	6.1 Assess tree for indicators of habitat use 6.2 Assess tree for ecological significance 6.3 Assess tree for cultural significance 6.4 Assess tree for historical significance
7. Assess amenity value of trees	7.1 Evaluate amenity tree valuation methods 7.2 Consider strengths and weaknesses of each method 7.3 Determine amenity tree valuation method to be used 7.4 Collect and collate appropriate unit values and data 7.5 Calculate and record the amenity value of individual trees
8. Inspect and assess trees	8.1 Assess trees to determine their structure and stability 8.2 Give consideration to the tree's age, health, condition, habitat, wind loading, distribution of foliage, wound size and the potential impacts of proposed recommendations 8.3 Use testing equipment, where required, to detect decay, disease and scope of tree problems 8.4 Evaluate visual indications and causes of disease and record results
9. Carry out risk assessment	9.1 Use visual tree assessment (VTA) to identify hazards associated with the tree 9.2 Use basic diagnostic tools to confirm the presence and extent of hazards 9.3 Determine level of risk 9.4 Give consideration to qualification and quantification of tree risk 9.5 Compare the risk level against commonly published levels of risk from non-arboricultural activities and items 9.6 Determine controls required to mitigate risks in accordance with the client's pre-determined threshold 9.7 Document risk controls and recommendations for monitoring and review of risks
10. Compile a tree	10.1 Document diagnosis of tree problems with reference to the

Element	Performance criteria
assessment report	anatomy, physiology and pathology of the tree 10.2 Provide and record specific recommendations for remedial action for tree problems 10.3 Produce a tree assessment report that identifies hazardous trees, recommends appropriate remedial action, and determines appropriate risk controls 10.4 Prepare an expert witness statement if required 10.5 Deliver tree assessment report to client

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCARB601 Examine and assess trees Release 2	AHCARB601 Examine and assess trees Release 1	Minor typographical errors corrected.	Equivalent unit

Links

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