

Modification history

Release	Comments
Release 2	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0.
Release 1	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0.

AHCTRF304	Monitor turf health
Application	<p>This unit of competency describes the skills and knowledge required to monitor the health and condition of sports turf playing surfaces.</p> <p>The unit applies to individuals who work 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.</p> <p>No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Turf (TRF)

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 monitoring activities	1.1 Establish the scope, regularity and time constraints for monitoring and reporting turf health according to workplace requirements 1.2 Identify turf grass species and assess common health issues attributed to the species 1.3 Identify plant health specialist advisor and determine their scope of support and sampling specifications 1.4 Identify and select tools and equipment required to monitor and sample turf plant health according to specialist advice
2. Assess the health of turf grass area	2.1 Inspect and record signs and symptoms of abnormal turf grass health according to workplace procedures 2.2 Assess extent of turf grass health problem and record and report according to workplace procedures 2.3 Conduct field diagnoses and tests to aid in identifying plant health issue according to workplace procedures 2.4 Collect, secure, label and despatch samples for laboratory testing according to workplace procedures and specialist advisor specifications 2.5 Repair sample sites, clean tools and equipment and dispose of waste materials according to workplace and environmental procedures 2.6 Communicate with specialist advisors to establish diagnoses of plant health problem 2.7 Assess diagnoses and compare results with acceptable parameters according to workplace and industry standards 2.8 Prepare recommendations to address identified plant health problems according to workplace procedures
3. Monitor and report turf health and condition	3.1 Examine turf for poor health and substandard quality indicators in a scheduled manner according to workplace procedures 3.2 Identify poor turf health and deviations in turf quality according to expected sporting standards and workplace requirements 3.3 Compile examination results and report with recommendations according workplace procedures

Foundation Skills	
<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
Reading	<ul style="list-style-type: none"> Analyse and consolidate test results and data against defined criteria and requirements
Writing	<ul style="list-style-type: none"> Accurately record and document turf health assessment and recommendations using clear language and correct spelling, grammar and industry terminology
Oral communication	<ul style="list-style-type: none"> Use active listening skills Interprets verbal and non-verbal communication
Numeracy	<ul style="list-style-type: none"> Performs mathematical calculations to check, interpret and confirm test results

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
AHCTRF304 Monitor turf health	AHCTRF304 Monitor turf health	Minor changes to Elements and Performance Criteria for clarity Updated Performance Evidence and Knowledge Evidence	Equivalent unit

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

TITLE	Assessment requirements for AHCTRF304 Monitor turf health
Performance Evidence	
<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 on at least one occasion monitored the health of turf and reported recommendations for turf health, including:</p> <ul style="list-style-type: none"> established the scope and scheduling for monitoring turf health for both a warm and a cool season turf grass species and their common health issues identified turf health specialist advisors and their requirements to support monitoring procedures identified and selected tools and equipment required to monitor and sample turf health issues inspected and assessed turf grass for signs of common turf health problems and assessed the extent of the problem including: <ul style="list-style-type: none"> pests diseases nutritional environmental causes conducted field tests to aid in diagnosing turf grass health issues including: <ul style="list-style-type: none"> pH electrical conductivity (EC) drainage and infiltration rate soil temperature collected and despatched samples for laboratory testing and repaired sample sites assessed diagnosis from field and specialist advisor results and determined acceptable parameters prepared recommendations according to the sports play standards and workplace procedures monitored turf grass during growing season according to workplace procedures. 	
Knowledge Evidence	
<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"> 15 turf grass species or cultivars their common name, genus and species and growth habit, including warm and cool grass species importance of plant physiology in plant health including: <ul style="list-style-type: none"> photosynthesis transpiration structural components of turf grasses (e.g. creeping grass, non-creeping grass) and relation to turf grass health basic metabolic and physiological processes for disease resistance in turf grass nutrients, nutrient uptake and role in plant growth basic physiology processes for insect and disease resistant turf basic endophyte infection of turf alleopathy in turf grass species specialist advisors their purpose and method of engagement to support turf health diagnosis turf grass species selection for plant health management including: <ul style="list-style-type: none"> disease tolerance mowing height playing requirements dormancy salinity resilience, wear and recovery water requirements turf grass species and common regional health issues including: <ul style="list-style-type: none"> basic biology, symptoms and controls of pests basic biology, symptoms and controls of diseases symptoms and controls of disorders including soil condition, nutrition environmental disorders (e.g. frost, poor drainage, shade) 	

Knowledge Evidence

- tools, equipment and process for diagnosing turf health and disorders
- expectations and quality indicators for turf grass and sports turf standards
- rates and recommended treatments to achieve optimum turf grass health objectives including:
 - simple and compound fertilisers used in the turf industry and their effect on turf health
 - fertiliser types and nutrient release rates
 - common pesticides types and methods of application
 - external environment impact of treatments through leaching, excessive spraying, off target damage and overuse
 - interpretation of labels and safety data sheets for treatments
 - use of growth regulators and concept of "growing degree days"
 - calculating actual nutrient requirement for turf growth
- role of trace elements and nutrients required by turf grass plants, and symptoms of toxicities and deficiencies
- soil and plant tissue analysis for monitoring and managing turf health including:
 - main elements of analysis
 - significance as indicators of nutritional deficiency and toxicity.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a sports turf facility or an environment that accurately represents workplace conditions
 - a sports play area with warm and cool season turf grass species to monitor for health issues
- resources, equipment and materials:
 - test equipment and resources for pH, soluble salts and soil moisture analysis
 - sampling equipment and materials for collecting, storing and despatching soil, plant, pests and disease test samples
 - examples of pests, diseases and disorders for identification purposes
 - turf health specialist advisory reports
- specifications:
 - workplace procedures and instructions related to monitoring turf health
- relationships:
- access to a specialist advisor timeframe:
 - a scheduled period of time for monitoring a turf grass area for health issues.

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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<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>