

**Modification history**

| Release   | Comments   |
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| 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  |
|--------------------------|--|
| <b>Application</b>       | <p>This unit of competency describes the skills and knowledge required to monitor the health and condition of high performance 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> |
| <b>Prerequisite Unit</b> | Nil  |
| <b>Unit Sector</b>       | 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<br>1.2 Identify turf grass species and assess common health issues attributed to the species<br>1.3 Identify plant health specialist advisor and determine their scope of support and sampling specifications<br>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<br>2.2 Assess extent of turf grass health problem and record and report according to workplace procedures<br>2.3 Conduct field diagnoses and tests to aid in identifying plant health issue according to workplace procedures<br>2.4 Collect, secure, label and despatch samples for laboratory testing according to workplace procedures and specialist advisor specifications<br>2.5 Repair sample sites, clean tools and equipment and dispose of waste materials according to workplace and environmental procedures<br>2.6 Communicate with specialist advisors to establish diagnoses of plant health problem<br>2.7 Assess diagnoses and compare results with acceptable parameters according to workplace and industry standards<br>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<br>3.2 Identify poor turf health and deviations in turf quality according to expected sporting standards and workplace requirements<br>3.3 Compile examination results and report with recommendations according workplace procedures   |

| <b>Foundation Skills</b>   |  |
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| <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> |  |
| <b>Skill</b>   | <b>Description</b>   |
| Reading  | <ul style="list-style-type: none"> <li>Analyse and consolidates test results and data against defined criteria and requirements</li> </ul>   |
| Writing  | <ul style="list-style-type: none"> <li>Accurately records and documents turf health assessment and recommendations using clear language and correct spelling, grammar and terminology</li> </ul> |
| Oral communication   | <ul style="list-style-type: none"> <li>Use active listening skills</li> <li>Interprets verbal and non-verbal communication</li> </ul>  |
| Numeracy   | <ul style="list-style-type: none"> <li>Performs mathematical calculations to check, interpret and confirm test results of specialist advice and field tests</li> </ul>                           |

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

| <b>Links</b>  |
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| Companion Volumes, including Implementation Guides, are available at VETNet:<br><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> |

| TITLE   | Assessment requirements for AHCTRF304 Monitor turf health |
|---|---|
| <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 on at least one occasion monitored the health of turf and reported recommendations for turf health, including:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• identified turf health specialist advisors and their requirements to support monitoring procedures</li> <li>• identified and selected tools and equipment required to monitor and sample turf health issues</li> <li>• 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"> <li>• pests</li> <li>• diseases</li> <li>• nutritional</li> <li>• environmental causes</li> </ul> </li> <li>• conducted field diagnoses and tests to aid in diagnosing the health issue including: <ul style="list-style-type: none"> <li>• pH</li> <li>• salinity</li> <li>• soil moisture</li> </ul> </li> <li>• collected and despatched samples for laboratory testing and repaired sample sites</li> <li>• assessed diagnosis from field and specialist advisor results and determined acceptable parameters</li> <li>• prepared recommendations according to the sports play standards and workplace procedures</li> <li>• monitored turf grass during growing season according to workplace procedures.</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>• 15 turf grass species or cultivars their common name, genus and species and growth habit, including warm and cool grass species</li> <li>• importance of plant physiology in plant health including: <ul style="list-style-type: none"> <li>• photosynthesis</li> <li>• transpiration</li> <li>• structural components of turf grasses (e.g. creeping grass, non-creeping grass) and relation to turf grass health</li> <li>• basic metabolic and physiological processes for disease resistance in turf grass</li> <li>• nutrients and nutrient uptake</li> </ul> </li> <li>• specialist advisors their purpose and method of engagement to support turf health diagnosis</li> <li>• turf grass species selection for plant health management including: <ul style="list-style-type: none"> <li>• disease tolerance</li> <li>• mowing height</li> <li>• playing requirements</li> <li>• dormancy</li> <li>• salinity</li> <li>• resilience, wear and recovery</li> <li>• water requirements</li> </ul> </li> <li>• turf grass species and common regional health issues including: <ul style="list-style-type: none"> <li>• basic biology, symptoms and controls of pests</li> <li>• basic biology, symptoms and controls of diseases</li> <li>• symptoms and controls of disorders including soil condition, nutrition</li> <li>• environmental disorders (e.g. frost, poor drainage, shade)</li> </ul> </li> <li>• tools, equipment and process for diagnosing turf health and disorders</li> <li>• expectations and quality indicators for turf grass and sports turf standards</li> <li>• rates and recommended treatments to achieve optimum turf grass health objectives including: <ul style="list-style-type: none"> <li>• simple and compound fertilisers used in the turf industry and their analysis, solubility, salt index, rates and cost</li> </ul> </li> </ul> |   |

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| <b>Knowledge Evidence</b>  |  |
| <ul style="list-style-type: none"> <li>• pesticides types and rates of application</li> <li>• external environment impact of treatments through leaching, excessive spraying and overuse</li> <li>• role of trace elements and nutrients required by turf grass plants, and symptoms of toxicities and deficiencies</li> <li>• soil and plant tissue analysis for monitoring and managing turf health including:             <ul style="list-style-type: none"> <li>• main elements of analysis</li> <li>• significance as indicators of nutritional deficiency and toxicity.</li> </ul> </li> </ul>   |  |
| <b>Assessment Conditions</b>   |  |
| <p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions:             <ul style="list-style-type: none"> <li>• a sports turf facility or an environment that accurately represents workplace conditions</li> <li>• a sports play area with warm and cool season turf grass species to monitor for health issues</li> </ul> </li> <li>• resources, equipment and materials:             <ul style="list-style-type: none"> <li>• test equipment and resources for pH, soluble salts and soil moisture analysis</li> <li>• sampling equipment and materials for collecting, storing and despatching soil, plant, pests and disease test samples</li> <li>• examples of pests, diseases and disorders for identification purposes</li> <li>• turf health specialist advisory reports</li> </ul> </li> <li>• specifications:             <ul style="list-style-type: none"> <li>• workplace procedures and instructions related to monitoring turf health</li> </ul> </li> <li>• relationships:             <ul style="list-style-type: none"> <li>• access to a specialist advisor</li> </ul> </li> <li>• timeframe:             <ul style="list-style-type: none"> <li>• a scheduled period of time for monitoring a turf grass area for health issues.</li> </ul> </li> </ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p> |  |
| <b>Links</b>   | <p>Companion Volumes, including Implementation Guides, are available at VETNet:<br/> <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></p> |