

Title	Demonstrate understanding of nutrients and fertilisers for turf		
Level	3	Credits	5

Purpose	<p>This unit standard is for people working in a sports turf context.</p> <p>People credited with this unit standard are able to: demonstrate understanding of the nutrient requirements of turf, and the properties and characteristics of turf fertilisers.</p>
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Classification	Sports Turf > Sports Turf Management
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Available grade	Achieved
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Guidance Information

Definition

In the context of this unit standard, *understanding* means that there should be evidence of a learner's thorough comprehension of a topic. A learner with a good understanding of a topic should have applied, or should be able to apply what they have learnt to a workplace situation and will be able to alter their practices to the different contexts they are applying their learning to. Assessors should be confident that the learner's understanding is embedded in their practices and behaviour.

Outcomes and performance criteria

Outcome 1

Demonstrate understanding of the nutrient requirements of turf.

Performance criteria

- 1.1 Describe turf growth in terms of the role of and requirements for major and minor nutrients.
- 1.2 Describe turf systems in terms of the mechanisms of nutrient loss.
 - Range at least five mechanisms of nutrient loss.
- 1.3 Describe turf systems in terms of the mechanisms of nutrient availability.
 - Range at least five mechanisms of nutrient availability.

1.4 Describe turf in terms of the effect of environmental and management factors on annual nutrient requirements.

Range clippings removal, wear and traffic, playing quality, growth pattern, drainage, growing media, length of playing season, climate.

1.5 Describe turf growth and development in terms of the effects of major nutrients.

Range at least five of – root/shoot ratio, colour, disease susceptibility, plant hardiness, recovery from wear, botanical composition, establishment and density.

Outcome 2

Demonstrate understanding of the properties and characteristics of turf fertilisers.

Range at least five of – soluble, slow release, organic, inorganic, salt index, particle size, acidity, granule, liquid, foliar, solid, straight, mixture, compound.

Performance criteria

2.1 Describe turf fertilisers in terms of their solubility and formulation.

2.2 Describe turf fertilisers in terms of the percentages of major nutrients they contain.

2.3 Compare turf fertilisers in terms of their advantages and disadvantages.

Range comparisons may include but are not limited to – rate of release, size of granule, ease of application, storage and handling, characteristics, effects on soil and plant, price, and availability; evidence is required for at least five.

Replacement information	<p>This unit standard was replaced by unit standard 32747.</p> <p>This unit standard and unit standard 25112 replaced unit standard 1162.</p>
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This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	17 October 2008	31 December 2019
Review	2	25 January 2018	31 December 2023
Review	3	24 June 2021	31 December 2023

Consent and Moderation Requirements (CMR) reference	0052
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

This unit standard is expiring