

Title	Demonstrate knowledge of turf species response to mowing and mowing equipment, and mow sports turf areas		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to: demonstrate knowledge of the tolerance and responses of turf species to mowing; evaluate turf mowing equipment and its use for specific situations and describe alternatives to mechanical mowing; and select mowing equipment and mow sports turf areas.
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Classification	Sports Turf > Sports Turf Management
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Available grade	Achieved
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Guidance Information

- 1 Legislation relevant to this unit standard includes but is not limited to:
 - Health and Safety at Work Act 2015; and any subsequent amendments.
- 2 Definition
Workplace procedures – the procedures and standards set down by the client or employing organisation for mowing sports turf areas. Workplace procedures should reflect equipment manufacturer’s requirements, and current legislation.
- 3 For the purposes of assessment:
 - evidence must be presented in accordance with workplace procedures.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the tolerance and responses of turf species to mowing.

Performance criteria

- 1.1 Describe the tolerance of turf species to mowing in terms of the range of acceptable cutting heights.

Range	must include at least three cool season turf species and two warm season turf species from – browntop, creeping bentgrass, Chewings fescue, red fescue, hard fescue, tall fescue, Kentucky bluegrass, <i>Leptinella sp</i> , <i>Poa annua</i> , perennial ryegrass, <i>Cynodon sp</i> , Kikuyu, buffalo grass, carpet grass.
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- 1.2 Distinguish bench setting and effective cutting height in terms of their characteristics.
- 1.3 Describe the physiological responses of turf plants in terms of mowing frequency and cutting height.
- Range at least five of – shoot density, growth response, seedhead formation, succulence, shoot to root ratio, leaf texture, carbohydrate production.
- 1.4 Describe inappropriate mowing practices in terms of the consequences.
- Range inappropriate mowing practices include but are not limited to – scalping, inappropriate mowing frequency, inappropriate mowing height; evidence is required for at least five; consequences – thatch formation, weed invasion, disease susceptibility, wear tolerance, leaf shredding, grain and/or nap.

Outcome 2

Evaluate turf mowing equipment and its use for specific situations and describe alternatives to mechanical mowing.

Performance criteria

- 2.1 Compare mowing equipment in terms of cutting height, turf species, turf use, and cost-effectiveness.
- Range reel, rotary, flail.
- 2.2 Evaluate mowing equipment and use in terms of factors affecting mowing quality.
- Range at least five of – number of reels and blades, reel clip rate, forward speed, height of cut, corrugation, leaf shredding, grooming, mowing patterns, clippings removal.
- 2.3 Evaluate mowing frequency in terms of its relationship with shoot growth rate, environmental conditions, height of cut, and turf use.
- 2.4 Describe the features and suitability of alternatives to mechanical mowing.
- Range plant growth regulators, slow growing species.

Outcome 3

Select mowing equipment, and mow sports turf areas.

Performance criteria

- 3.1 Select mowing equipment suitable for the site.
Range cutting height, turf species, turf use, cost-effectiveness.
- 3.2 Carry out pre-operational checks of mowing equipment and machinery.
- 3.3 Mow sports turf areas at a frequency suitable for the site, turf use, and environmental conditions.
- 3.4 Operate mowing equipment and machinery in a safe and controlled manner and monitor for performance and efficiency.
- 3.5 Recognise and minimise risk to self, other people, and the environment when mowing.
- 3.6 Clean and maintain mowing equipment after use.

Replacement information	This unit standard replaced unit standard 1161.
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Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 January 2018	31 December 2023
Review	2	24 June 2021	N/A

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>.

Comments on this unit standard

Please contact Primary Industry Training Organisation standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.