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Competency Framework Report

NZ Bowls Greenkeeping Association



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OVERVIEW

New Zealand Sports Turf Institute (NZSTI) is developing a bowls competency framework and associated training for the New Zealand Bowls Greenkeeping Association, so they can have sufficiently trained personnel to manage their natural bowling greens.

PROJECT MILESTONES

The project consists of the following milestones:

- 1) Competency framework; content design and production
 - a) Content to be validated by BNZGA Executive
- 2) Online portal for recording competency and tracking achievement
- 3) Design “Train the Trainers” programme
 - a) Content to be validated by BNZGA Executive
- 4) Deliver the pilot “Train the Trainers” programme (12 trainers limit)

MILESTONE REPORT

The following report represents milestone 1A the draft competency framework for review and validation by the BNZGA Executive.

CONTEXT

The competency framework is intended as a list of competencies for a “skilled labourer” performing greenkeeping tasks on a natural bowling green, it is not intended to replace formal sports turf management qualifications such as the New Zealand Certificate in Horticulture (Sports Turf) Level 3, nor produce a greenkeeper.

KEY COMPETENCIES

The competency framework contains the following six (6) key competencies, each of these competencies have their own enabling objectives. To be deemed competent in one of the key competencies an individual must have completed all the enabling objectives under that competency.

- 1.0 Mow and roll a bowling green
- 2.0 Irrigate a bowling green
- 3.0 Fertilise a natural bowling green
- 4.0 Apply agrichemicals to a bowling green control pest, weeds, diseases, disorders.
- 5.0 Repairing areas on a bowling green (small)
- 6.0 Renovate a bowling green

ENABLING OBJECTIVES

The enabling objectives are shown in a number order, but they may not necessarily be delivered in that order by the BNZGA Trainer, for example a mower may need operator maintenance (which presents a training opportunity) but have not yet completed the preceding enabling objectives.

It is also anticipated that not all individuals will necessarily choose to complete all six (6) key competencies, they may for example only choose to complete 1.0 Mow and roll a bowling green.

EXTENSION SUBJECTS

The competency framework is also contains a list of extension subjects, these are subject areas not covered under the proposed training but are considered areas of development on a case-by-case basis.

1.0 MOW AND ROLL A BOWLING GREEN

- 1.1 Check greens mower
- 1.2 Set cutting height of pedestrian reel mower
- 1.3 Operate a pedestrian reel mower
- 1.4 Mow a bowling green
- 1.5 Grooming/raking a green
- 1.6 Clean and store a pedestrian reel mower
- 1.7 Maintain a pedestrian reel mower
- 1.8 Operate a greens roller
- 1.9 Maintain a roller

Extension subjects

- Function and maintenance of petrol engine
- Adjusting a reel or replacing bed knives
- Assess a bowling green for mowing-
- Identification of *Cotula dioica*, summer & winter leaf forms of *C. Maniototo*, Starweed
- Assessing green speed, consistency & smoothness (with a Jack)

2.0 IRRIGATE A BOWLING GREEN

- 2.1 Operate an irrigation system
- 2.2 Check and set/adjust irrigation heads
- 2.3 Record irrigation application

Extension subjects

- Assess bowling green for irrigation- Check green (colour, clipping, plinth, soil sample)
- Checking weather
- Irrigation scheduling. Selective watering -syringing, hand watering: when and how
- Determine irrigation uniformity
- Maintain- replace head, fix leaks, order parts, contact irrigation specialist

3.0 FERTILISE A NATURAL BOWLING GREEN

- 3.1 Check spreaders is in working condition
- 3.2 Set spreader
- 3.3 Operate a pedestrian spreader
- 3.4 Clean and store a pedestrian spreader
- 3.5 Maintain a pedestrian spreader
- 3.6 Record fertiliser application

Extension subjects

- Soil testing and fertiliser programmes
- Common fertilisers product knowledge- analysis, burn, mixing, storage, water rates etc
- Assess bowling green for fertiliser- Colour, growth rate (records), disease, season (autumn fertilisation/renovation)
- Alternative methods of fertilisation - water can, back-pack, hand, ejector.

4.0 APPLY AGRICHEMICALS TO A BOWLING GREEN TO CONTROL PEST, WEEDS, DISEASES, DISORDERS

- 4.1 Check boom sprayer
- 4.2 Set/Prepare for boom spraying
- 4.3 Operate a pedestrian boom sprayer
- 4.4 Clean and store a pedestrian boom sprayer
- 4.5 Maintain a pedestrian boom sprayer
- 4.6 Record agrichemical applications

Extension subjects

- Calibration
- GROWSAFE
- Agrichemical knowledge and rates
- Assess a bowling green for spraying (PWDD)
- Identification of hydrocotyle, Colobanthus, pearlwort, moss, grass & toad rush etc
- Identification of sclerotinia minor, fairy ring, gold bracelet, brown patch etc
- Identification of porina, cotula weevil, sod webworm & earthworms etc
- Identification of disorders

5.0 REPAIRING AREAS ON A BOWLING GREEN (SMALL)

- 5.1 Prepare the areas to be repaired for seed/stolons
- 5.6 Prepare soil
- 5.2 Apply topsoil
- 5.3 Post soiling work
- 5.4 Establish turf cover
- 5.5 Plugging

Extension subjects

- Why do bare areas occur
- Assess the areas to be repaired
- Bulbil harvest/storing bulbils
- Soil selection, sterilisation, timing of getting soil in

6.0 RENOVATE A BOWLING GREEN

- 6.1 Groove a bowling green
- 6.2 Drilling/boring a green Post
- 6.3 Apply topsoil to a bowling green
- 6.4 Incorporate soil into grooves/holes
- 6.5 Screed a bowling green

Extension subjects

- Aeration machines typically contracted- Vertidrain, hydroject, core,
- immediate post renovation management
- Not full green levelling- Wires, Laser controlled levelling
- Sowing a new green
- Resurfacing for example Turfcut, planing.

