

Spring Management Checklist

1. FERTILISER

The main fertiliser requirements during spring are:

- Any remaining lime requirements (where identified on your soil test) can be applied in August.
- Magnesium applications (normally magnesium sulphate) particularly on cotula maniototo and starweed.
- Potassium and Iron applications to 'harden' the leaf for the playing season.

Nitrogen

Avoid nitrogen applications unless necessary, as this will encourage slow, soft (susceptible to bruising and disease) growth and poor bowling surfaces for the early part of the season.

Cotula Dioica

- No need to apply nitrogen in the spring if green is well covered.
- Selectively feed weak areas on a regular basis – e.g. DAP at 25-40g/10m² every 7-10 days.

Cotula Maniototo

- Delay any nitrogen applications until cotula maniototo is in its summer leaf.
- Generally cotula maniototo is vigorous enough that it will fill in weak areas quickly once it changes to its summer leaf stage without using nitrogen fertiliser.
- If required, selectively feed the weak areas only.
- Sclerotinia minor disease is encouraged by spring applications of nitrogen.

Starweed

- No point in using nitrogen.

2. EARLY SEASON MOWING

Green speed and draw depends on a combination of the climate, stage of the season and condition of the green. Shaving a green early season is a 'recipe' for cover loss and disappointment for the remainder of the playing season.

- Be patient and maintain a sensible cutting height while the green is soft. The height should be determined by the levelness and softness of your green and not the height that other clubs are cutting at.
- Mow more frequently in 'slow speed' (up to daily on cotula dioica during the spring flush).
- Double cut the green before considering lowering the height.
- Cut the green on the diagonal, especially if lowering the height.
- Know where your slow growth areas are on the green. Mow these areas according to their growth. For example, the thick areas may need to be double cut, whilst you should avoid or ease back on mower handle when mowing thin or slow growth areas.
- Empty the catcher frequently (max 1/3 of catcher when green is soft).
- Use rake or grooming (verti-cutting) unit to reduce growth variations between cotula dispersa, dioica strains, maniototo and starweed. Take care not to overly thin the turf cover during spring:
 - Set grooming reel, rake etc so that they are working within the leaf canopy, rather than entering soil surface.
 - Avoid using grooming tools within 2 – 4m of the ends unless there are thick patches of cotula present.

3. MAINTAINING CONSISTENT SURFACES DURING THE SEASON

The variations in growth between the different cotula species/strains and starweed can be a problem resulting in variable pace and draw. To provide a more consistent playing surface, consider:

- Mow frequently (5 – 7x/week) while there is a good growth.
- Regular use of the rake (or verti-cutting/grooming units).
- Selectively cutting the thicker patches more often, e.g. cut/rake thicker patches then mow the entire green.
- Cut the last 2 – 3m less often than the middle part of the green (especially at greens that have high usage) so the bowling speed is consistent over the entire surface.

There is no 'quick fix' to this situation – selective mowing, raking and frequent mowing is the key.

Test for green's consistency (to assess whether different strains/species on a green are having an effect on bowling consistency).

Assuming good surface levels:

- Start with a short end: play 2 bowls on each hand to the jack and see if the line that the bowls leave on the green (bowls arc) is similar for both hands. Repeat from the other end of the green. If necessary repeat again.
- Repeat the same exercise to both medium and long ends again in both directions.
- If the bowls arc is the same for both hands at each length, then the green is consistent and the patches aren't interfering with the bowl.

4. RINK MOVEMENT

Frequent rink movement during the season is vital, but it is even more important in the early part of the season when greens are often soft to prevent the ends from wearing and to also maintain a consistent surface. Consider:

- Move rinks each time there is play (if possible move rinks twice daily in the early part of the season).
- At the start of each days play, change the playing direction rather than moving rinks sideways.
- Use 7 rinks where possible – it provides more flexibility.
- Avoid concentrating play on 'favourite rinks'. Spread the wear by using 'rink closed' signs on such rinks (e.g. rinks directly outside the clubhouse).
- Encourage members to play variable length ends (push the mat beyond the 2m mark perhaps to 3-4m) early in the season. Not only does this assist help spread any wear, especially if experiencing a wet spring, it also provides a 'summer feel' for the bowler as bowl doesn't need to be 'pushed' as firm.

5. DISEASES

Sclerotinia minor

On both cotula maniototo and starweed greens watch for *Sclerotinia minor* from September onwards (or August for the North Island). Spring soiling, nitrogen fertiliser and lax mowing are common causes of this disease during spring.

If further soiling is required (to fill autumn groove lines) apply a fungicide 2 – 3 days prior to soiling. Next year make sure that the grooves are completely backfilled before winter.

Some common products/fungicides for controlling *Sclerotinia minor* include:

- | | |
|-------------------------------------|---|
| ▪ Iron sulphate at 5 – 7kg/green | ▪ Carbendazim (500gai) at 1L/green |
| ▪ Thiram (800gai) at 1kg/green | ▪ Chlorothalonil (500gai) at 1 – 2L/green |
| ▪ Thiram 40F (400gai) at 2.0L/green | ▪ Thiophanate – methyl (250gai)/ |
| ▪ Mancozeb (750gai) at 1kg/green | chlorothalonil (250gai) at 1 – 2L/green |

Fairy ring

Take plugs from known fairy rings in August and check they are fully re-wetted to at least 75mm. If this is not the case:

- Shallow spike ring to a depth of 25mm (approx) and apply a curative wetting agent. Once profile is wetted up then apply a preventative type wetting agent.

If the fairy ring is fully rewetted and you have 'struggled' to keep the rings alive during past summers, commence a preventative wetting agent programme (typically September/October onwards).

If you wish to try to chemically control the fairy ring, commence treatment when the ring first starts to 'green up'. Ring needs to be completely wetted up prior to treatment and product washed in thoroughly after application.

6. PESTS

Cotula weevil

Given the mild winter in the upper North Island; start looking for the adult weevils from mid/late August onwards. In other parts of New Zealand, watch for Cotula weevil from late September/October onwards. Treat when they become a problem.

Nematodes

If your greens have a history of nematodes, start taking plugs from the green to check the root system from September/October onwards. The root system should be white and healthy during spring. If the root system is very shallow (< 30mm deep), brown in colour and if the leaf is turning orange in yellow, seek professional advice. A control programme for nematodes maybe required.

7. IRRIGATION SYSTEM CHECK

If your club has a pop up irrigation system to water the green(s), spring is a good time to switch it on and check that all the sprinklers are functioning correctly and the arcs are properly adjusted and providing an even water distribution over the green for the coming summer.

Do this test on a dewy morning as this will give a good indication of how even the coverage is. Areas where the dew is still obvious indicate poor distribution. If the green has areas like that after doing the test, contact your local irrigation company to improve the coverage before the summer.

© NZ Sports Turf Institute ■ Email: turf@nzsti.org.nz ■ www.nzsti.org.nz