

November 2022 Newsletter

This month newsletter deals solely with the topic of renovations. It has been prepared using a document produced by Bill McCarthy, based on his experiences at Meadowridge Bowling Club, and his time serving on the BSA Greens Committee. It is recommended that Renovation take place from mid-November to the end of December. The recovery period at this time of year is so much shorter.

Annual renovation of bowling greens

1. Why renovate?

During a normal season, deterioration in the quality of the turf is inevitable and if ignored will continue unabated until intensive reconstruction is necessary.

Wear and Tear can be caused by the following:

- Heavy “traffic” on a green around the Mat area.
- Players walking and “scuffing” their feet, especially at the end where their bowls bags and scoreboards are placed.
- The movement and the turning action of the mowers and other maintenance equipment.
- Compaction.
- Consistently mowing too short, thus reducing the leaf area and causing reduction in root capacity. This is more marked on the edges and towards the end of the growing season.
- Scalping by mowing over high areas.
- Diseases- fungi, algae, moss or insects.
- Not moving the rink positions and directions often enough.
- Turning the mower at the same place every cutting.
- Not “picture framing” ones’ mowing.
- Not encouraging players to move the mat up and down the rink.

All these will cause bruising and defoliation of the Turfgrass. Despite the best attentions of the GKP, there will be a need at the end of a season to reinvigorate the turf. Clubs should give their GKP full support in implementing some form of renovation before the beginning of the new season.

2. What is renovation?

Renovation can be described as the rejuvenation of the grass plant and upgrading of the Green. This will involve some or all of the following:

- Reducing the degree of compaction: This can be achieved by hollow-tining, vertidrainage or hand forking, dependent on the extent of the compaction i.e., is the compaction only in the 2m areas or over the entire green?
- Aerating the soil: should the compaction on your green not be too excessive, there is still the need to provide “gaps” for water to percolate more easily, oxygen to get to the roots to allow them to breathe, or release the toxic CO₂ which often gets trapped in the soil.
- Removing the build-up of thatch. Thatch is made up of the undecomposed or partially decomposed organic matter situated above the soil surface. It is estimated that 25% of cuttings are not collected in the bin. If not removed via regular brushing, this will contribute to a thick thatch surface which will have a slowing effect on the bowl. Removal of the thatch can be achieved by the use of a scarifier or a verticutter. Many Clubs have found the pin scarifier to be most effective in removing the thatch.
- Improving the levels: With the green closed for a number of weeks, this allows the GKP to check the levels and take the necessary steps to correct inconsistencies. This will involve taking readings at 2m intervals and entering these readings in the Cubitt programme. The outcome will indicate the extent to which topdressing needs to be applied to restore the levels.
- Re-aligning ditch boards: the closure of the green for renovation will also allow the GKP to lift and re-align the ditch boards.
- Repairing/rebuilding banks: for those of us not fortunate enough to have artificial banks, renovation time is an opportunity for us to repair our banks.

3. Preparing for renovation

- Timing: In the life-cycle of the grass plant the leaves become dormant in late Winter (July/August) and leaf growth ceases. In the meantime, the roots are still active storing up “FOOD” (Carbohydrates) in the stems and larger roots. In early September leaf growth is again initiated while the roots retract and “die back” from mid-September till about end of October. During this period the leaves are active and now dependent for their nutrition on the carbohydrates stored in the stems. It would be inadvisable for a GKP to attempt any aggressive scarifying during the period of “Root Die Back”.
- At least 2 months before renovation, introduce sods on bare areas, use cookie cutters or sod doctors depending on repair areas. Arrange to take Soil Samples for analysis and we would recommend making use of Dr. Gavin Cooper to study the soil sample analysis and prepare a comprehensive fertiliser management report. The report from Gavin is considered to be of great value to GKPs with the selection and choice of fertilisers. The cost of the report is very reasonably priced.

- Arrange to take first set of Levels. After renovation and when the grass has grown and mowed to playing height, arrange another set to be taken. Good levels score good BSA points and Greenkeepers should strive for a target of 24 BSA points out of 30. BSA have accepted the Cubitt Workbook format as their recommended standard and all Clubs in the BSA Districts are encouraged to adhere to this format for Level Grids
- Remove all visible weeds, e.g., Spray Versus on greens and banks
- Check for shadows on greens from trees, hedges etc. and remove or aggressively trim.
- Consider application of 20ml Grammoxone for control of winter grass and pre scarification process. Take all necessary precautions, no post watering for at least 3 days. Based on Cubitt outcome, order the appropriate quantity of bowling green mix for topdressing or dusting. Top Dressing specifications should be based on that of British Standards Institution, or USGA Specifications. Sifted and washed River Sand comes close to fulfilling these specifications, with a particle size about 3mm. Also called a "Bowling Mix", top dressing is a mixture of say 80% River Sand or other suitable soil and 20% screened 4mm compost.
- Dusting is only applying a very small amount of top dressing to cover minor hollows and disturbances.

4. RENOVATION PROGRAMME

- Water the green well (10 mins) the day before the renovation is planned.
- Cut the green low (+/- 2mm)
- Scarify or verticut twice diagonally, until only stubs (stalks) remain. You may remove around 120 wheelbarrows.
- Brush each time at right angles to remove scarification's and then cut.
- When satisfied that thatch is completely removed, spray anti-fungal Potassium Permanganate (2 x 500g).
- Service provider to hollow tine or vertidrain as required. Remove core material for use in gardens or on top of banks
- Spray anti-fungal cocktail (Bounce?)
- Take levels. High points can be scarified further or be watered, hand cored and rolled.
- Locate all zero readings. Check with dumpy that they are all correct then reference all these areas by pegging and arrange to set up rails by rinks using distance pieces. Using rails for levelling is considered to be the most accurate procedure. One can use Laser levelling although this is a slightly more expensive route.
- Introduce topdressing or dusting. Remember not to apply topdressing exceeding 10 mm to hollows otherwise grass will take much longer to grow through.
- Apply 50kg Booster Fertilise 3:1:5 per green, and water well.

- During the passive time, that is after completing all top dressing and when green is kept closed for grass to recover, do not mow until vertical growth gets to a height of about 12 mm. The first cut of new grass can be done at 10mm height and then gradually reduced to heights of 8 mm, 7 mm, 6 mm, 5 mm, and 4 mm over a period of say 8 to 10 days to allow the stolons to start their lateral growth. Please note this is very important for re-establishing the new mat.
- When the new Green is cut at 5mm it should be fast enough to open the green for play.