

GRASS CLIPPINGS 9

For a number of years our Greens Standing Committee has been encouraging clubs to replant their greens. Some have followed the prescribed procedures and been very satisfied with the results. Others have “done their own thing” with variable results. This issue of Grass Clippings * will be devoted to the reasons for replanting a bowling green. The procedures involved will be discussed in Grass Clippings 9.

One of the main reasons for re-planting are that there is more than one variety of grass on the same green (called a Heinz Green)

It is for that reason that the caption for this issue will be –

HEINZ – 57 VARIETIES WITH ONLY ONE REMEDY

Multi-strain (or Heinz) green can occur for the following reasons -

1. A green, originally planted with a fine grass, which has now been invaded by a coarser “kweek”.
2. A green originally planted with whatever grass grew in the vicinity in the erroneous belief that the stronger strain would take over and replace the other strains.
3. A green deliberately planted with a new variety leaving the previous grass still on the green.

In Australia the players soon realized that inconsistencies on the Heinz greens did not promote precision bowls and started agitating for single – strain greens. In 1963 the powers that be in Australia decided that after 1968 no State Championships would be played on Heinz greens. It was left to the clubs to decide whether they wanted to host State Championships or not.

The grasses commonly used on our sports fields all have one thing in common – they form a contiguous mat which spreads laterally to cover the whole green. Apart from this characteristic they differ in other respects which makes it impossible to have two or more of them on the same green.

1 Mat Thickness – Our finer grasses have many small leaves and thin stolons. It would be easy for them to cover the whole green with a thin mat. Other coarser varieties might have larger but fewer leaves and thicker stolons. In such instances it would require many leaves and stolons crisscrossing each other before the whole green is covered. Such a mat would be much thicker than the fine-grass mat. As the passage of the bowl over a green depends on the resistance the bowl has encountered it follows that patch of thick mat with maximum resistance

interspersed with patches of a thin mat (with minimum resistance would affect the run of the bowl).

Note- Apart from the way the run of the bowl is affected over the patches of thick and thin mat the Greenkeeper would also have problem controlling the proliferation of the mat where the thickness of the mat varies.

It is physically impossible to instruct the Greens Assistant to “thin out” one portion of the green while leaving the other portions where the mat is already thin. The most a Greenkeeper can do is to “thin out” the whole green with the machine set to cope with the weakest variety. If he set it to cope with the thickest mat the thin portions would be bare.

2 Leaf Rigidity - Some varieties (Bayview, Kweek) have rigid unbending leaves while other varieties (Tifdwarf, Paspalum) have “softer” leaves which do not resist the passage of the bowl. Here again patches of the one variety interspersed with patches of the other variety would make the bowl run slower or faster as the case may be.

3 Rate of Growth – Some varieties grow faster vertically than others. Unless the Greenkeeper mows just before play there will be patches where the bowls slows down more readily than over other parts of the green.

4 Dormancy – Our grasses we use on bowling greens do not all become dormant at the same time. On a Heinz green it could easily happen that one variety has already become dormant

while another variety is still in full growth. Again, the areas still growing would offer more resistance to the run of the bowl than the other dormant patches.

5 Nap– Although all the Cynodon grasses have a tendency for their leaves to “follow the sun” during the sunlight hours it is more pronounced in some varieties than in others. The degree of nap could also depend on the rigidity of the leaf (see 2 above) With two or more grasses on the same green each with its own “nap” the run of the bowl could be influenced.

6 Mowing Height Tolerance - Each grass variety has its own mowing height tolerance. That would be the level at which the grass performs best and has the most pleasing appearance. When there are different grasses on the same green the appearance of the green might suffer because all the grasses do not look or are not performing at their best.

Comment- It is a sobering thought that about 90 % of the greens in the RSA are Heinz greens and that unlike our Australian counterparts our players have accepted the inconsistencies one

associates with a Heinz green.

I must admit that there are some Heinz greens where it would be impossible to determine any difference in the run of the bowl over the different patches of grass. At the same time there are many where one can see large patches of different grasses on the green and it is obvious that the texture of the grass is different over those patches.

The main issue would be whether the clubs will decide on their own to re-plant their Heinz greens or whether Bowls SA should take the lead in the same way as the authorities did in Australia.

The motto adopted by the Greens Standing Committee of Bowls SA is –
“Better greens breed better bowlers”

We will not have better bowlers until we have become more critical of the bowling surfaces provided for our major events. The only remedy for a Heinz green is to replace the grass with a suitable single variety.

OTHER REASONS FOR RE-PLANTING

1 Levels

It is surprising how few Clubs Greenkeepers know whether their greens are level or not and yet variations in the levels can have such an enormous impact on the reliability of the draw - especially on a fast green.

It has always surprised me how easily our players accept inconsistencies in the draw and weight without complaint (unless they have lost the game). In previous years some of the Municipalities levelled the greens every year with renovation.

Now that this service has been discontinued many clubs have not attempted to level their greens again.

Each club should have a level profile of their greens This should be done by a competent person and plotted at intervals of not more than 2.5 m

For International matches a variation of up to 2.5 mm over 2.50 m is acceptable. In the RSA we allow variations of up to 3.00 mm over 2.50 m for our Championships...

A green can be levelled by Rails or Wires stretched across the green or using a large Jackson Scarifier (Used mainly in the Border area) to remove the high spots. If the variation in the levels is not more than 10 mm then the green can be levelled within one season.

It is widely accepted that it is easier to level a green devoid of grass than to level it when there is grass cover.

A variation of 40 mm over the whole green with a gradual slope is acceptable as long as there are not acute variations over a short distance.

What the club must ask itself "Can we level this green within one year or not: If the answer is "no" then the club must seriously consider - removing the old grass – levelling the green and then re-planting. It is the quicker alternative.

2 Wrong Grass

It may happen that a club originally planted a certain grass only to find after some time that the grass is not performing satisfactorily. If another acceptable grass is available and suited to the local conditions then the Club might decide to re-plant the green.

One must accept the fact that we have not, yet, discovered a grass which meets all the criteria for a Bowling Green grass. In other parts of the world there is a continuous search for new strains or new hybrids which can be developed. It is only recently that a nursery in the RSA has actively joined the search for new strains with a fair amount of success.

3 Wrong Soil

We are well aware of the fact that many of our greens were originally planted by levelling a piece of ground and planting whatever grew in the vicinity. It might take the club a few years to realize that the soil is unsuitable and incapable of supporting the vigorous growth required for a bowling green. The commonest problem would be bad drainage because the soil is too clayey. Attempts by the Greenkeeper to introduce new sandy soil while there is still grass on the green has not been too successful and the club might have to resort to a much more drastic solution – that of removing all the grass and tilling in sufficient suitable sandy soil to reduce the clay content and improve the drainage with a rotovator.

4 Changed Circumstances

It might happen that conditions have changed since the original grass was planted on a green. These will probably be due to changes in the environment. The commonest example would be where the club originally relied on Municipal water for the greens. Due to frequent

restrictions on water use and uncertainty as to how long the Municipal water would still, be available the club started using borehole water which might have a high salinity. The original grass might not be able to tolerate such a high salinity and the club might have to resort to planting a saline-tolerant grass like Paspalum.

On rare occasions it might happen that the Municipal supply has changed. In the same way as a club using borehole water should regularly have the water tested for salinity or other impurities so should the club have the Municipal water tested if they have embarked on a new water scheme

5 Infections

It can happen that a club has been invaded by organisms for which there is no cure and the only remedy might be to fumigate the whole green and re-plant

6 Other Considerations

Thatch Formation

However particular the Greenkeeper might be about removing last year's growth there will still always be a build-up of some thatch in the upper layers of the soil. This will thicken up the mat and affect the speed of the green. It is advisable to remove that thatch every 6-7 years by removing the upper layer (about 20mm) of the green with a sod-cutter

When contemplating whether a green should be re-planted or not the presence of this thatch could influence the club in favour of re-planting.

Compaction

Compaction is a constant threat on any bowling green especially if the clay content is in excess of 10 %. One cannot "un-compact" a green which is already compacted. If the club is considering re-planting the green then an additional argument in favour of replanting would be that it gives the Greenkeeper an opportunity to till over and loosen the soil.

Green keeper Expertise

There is no doubt that managing a green with one or more of the above deficiencies require a much higher level of expertise than managing a green which has been laid down correctly and planted with a single variety of suitable grass. It is difficult enough for our Greenkeepers to keep up with modern trends without loading them with additional burdens.

Conclusion

It is obvious from the above that there are a number of reasons why a green should be replanted. Usually there is more than one on the same green which make it easier for the Club Committee to come to a decision.

While there is no doubt that it is a major operation it does not have to be expensive if the members are prepared to throw in their weight behind the Greenkeeper.