

# BOWLS SOUTH AFRICA

## GREENS STANDING COMMITTEE

### GRASS CLIPPINGS – 2

July 2005

We hope that all the clubs received the first edition of "Grass Clippings". We also hope that the Executives of the Districts and Sub-Districts had the opportunity to study "G.C.-1" before it was sent on to the clubs because much of it is for their consumption and is about incentives. In our first edition of "Grass Clippings" we concentrated on the Green Keeper (GKP) – his position in the hierarchy of the club and his status vis-a-vis the other disciplines. We also reiterated our commitment to raise the standard of green keeping in the RSA.

#### **How good are our Greens to-day?**

To answer this we have to go back 50 – 60 years ago when the introduction of vertical mowing also heralded the advent of a new era in greens management as the term "leaf area" was added to the GKP's vocabulary.

*Note – Leaf Area* The grass plant produces its own "food"(Carbo-hydrate). This "food" is produced by a process called photosynthesis. Photosynthesis only occurs in leaves which are exposed to sunlight –the number of leaves exposed to sunlight we refer to as "leaf area". It follows that any reduction in the leaf area would also reduce the amount of food being produced by the grass plant.

The following is the opening paragraph of an article "Hail the Green keeper" which appeared in the S A Bowling Magazine in 1944 -

"Greens are more perfect to-day in South Africa than they have ever been. There may be exceptions. There are always exceptions, but they only prove the rule. The greens are better because the players demand good surfaces, and what the rank and file demand, the officials try to provide".

Now 60 years later we must ask ourselves - Assuming the writer was justified in making those claims at that time, what has happened since then?" The one thing we do know is that the players of to-day are as vociferous and demanding as the players in 1944. In fact ours are more demanding. They are asking for speeds which could be beyond the capabilities of the green or the GKP.

In 1944 the GKP's management of the grass was limited to the Primary Cultural Practices – Watering, Fertilizing and Mowing. They only used the horizontal mower- there was no "thinning out "(Vertical mowing) equipment

Most of the clubs had planted whatever indigenous grass they could find in the vicinity of the green.

The grasses they had available belonged to the genus Cynodon (often called Bermuda) of which a finer specie C.Transvaalensis (unique to South Africa) and the other more common C. Dactylon ( or Kweek ).

All these varieties were well adapted to close mowing and easily formed an even contiguous mat which covered the whole green – so essential for the production of quality sports turf

A feature of these varieties was that more than 70% of their leaves grew horizontally in the mat and only the balance grew vertically. So that even with the mower set at less than 3.00 mm only the vertical growth was being removed by the mower and the leaves lying in the mat exposed to the sun were untouched.

With all this "leaf area" in the mat the production of "food" through photosynthesis was more than sufficient for the grass plant's requirements and for storage. The only problem being that there was nothing to restrict the proliferation of the mat - the mat got thicker and the green slower as the season progressed

Virtually all the greens planted with one of the above varieties were completely covered with healthy grass and would have graded as "C" s in spite of the loss of speed. If the GKP was more enterprising and particular about his equipment, the levels, run off, banks and ditches he could get a "B"

The exception to all this was along the East Coast where quite a number of clubs had originally planted a coarser variety of kweek which did not form a mat too easily...

**Apart from those parts where the unsuitable Kweek had been planted green keeping was simple and uncomplicated.** I do not think those GKP had ever heard the term “leaf area “ because it was never an issue those days.

If we had been able to apply our grading criteria to the 1944 greens we would find that they had a better average score than the 2005 greens. The marks they lost on speed and the draw d draw would have been amply offset by the good marks they scored on the health of the green (Section 2 of the grading sheet) They would all have graded as “C”s

Of, course a number of our greens to-day are better than anything they had in 1944 but we also now have many more “D” and “E” grades than they had in 1944.

The advent of the “groomer” and thinning out equipment was the watershed for sports turf management in the RSA. Just applying the primary Cultural Practices was no longer enough – a new term “Leaf Area” now dominated the GKP’s thinking every time thinned out the green.

The fact that the GKP could now control the thickness of the mat and speed up the green – much to the delight of the players – opened up a “can of worms” for the unsuspecting GKP.

With each reduction in leaf area the cultural intensity required to cope with it increased dramatically. **A very well known authority on turf grass management in Australia once said that to reduce leaf area by 15- 20 % required three times the expertise**

A number of our experienced GKP’s quickly included vertical mowing in their greens management but recognizing the relationship between “leaf area” and photosynthesis they never reduced the leaf area to a level where the health of the grass was threatened. These chaps were producing “B”s and “A”s

There was also a large middle group who went a bit further and reduced the “leaf area” to a critical level where the grass plant was only producing enough “food” to keep the plant alive without being able to build up any reserves or deal with “wear and tear”. The plant was under stress and in the same way as man would re-act to stress by becoming more susceptible to colds and worse infections so did the grass plant lose it’s resistance to Fungi, algae and bacteria. Even foreign grasses and weeds could now invade the green,

Then there was the third group of GKP’s who, just did not have the expertise or access to it to understand “leaf area” it was like asking an oldish man with an ordinary drivers license to drive an articulated truck through Johannesburg at peak hour Spurred on by the speed merchants in the club, they thinned out the mat with a gay abandon and quickly reached the stage where there was not sufficient leaf area to sustain growth. Many weak and bare areas developed on the green - their greens now graded as “D”s and “E”s.

Unfortunately there was no structure in place to educate (or train) these GKPs in greens management

With the Executive of SA Bowls moving headquarters every three years no lasting policy on greens could be formulated. Their only “contact” with greens was when they received the reports from the old SA Greenkeepers Board who had been called upon to grade and allocate greens for the various SA Tournaments

Apart from the efforts by the Southern Transvaal Greenkeepers Assoc. to educate GKP’s none of the other Districts showed much interest in greens management.

There really was nobody available to identify “trends”.

In 1990 in an attempt to curb the speed merchants the SA Bowls Green keepers Association convinced the SA Bowls Exec. (Basil Knight’s group) to accept 14 secs over 32 metres as the ideal summer speed for SA greens with penalties prescribed for speeds in excess of that figure. The statistics derived from our inspections of the greens offered for the SA Tournaments between 1988 and 1995 showed that about 30 % of the greens on offer were “A”s and “B”s with another 35 % grading out as “C”s the remaining 35 % were D” or “E” grades These stats were only derived from greens we inspected for SA Tournaments. One can presume that the national average could have been worse.

Flawed Greens In our inspections we realized that only 5 % of our greens have been laid down according to the standard specifications. The balance are all flawed e.g. Wrong soil, wrong grass, mixture of grasses, gross discrepancies in the levels or a mixture of the above.

While it is possible for a relatively inexperienced GKP to manage a green which has been perfectly laid down the level of expertise required to handle a flawed green increases with the amount of flaws in the green. Most of these flaws were there when the GKP took over the green

They are not of his making but he has inherited them. So often neither he, or his club members realize, that a basic flaw in the green prevent him from achieving the desired results.

Since 1995 the position has changed again and there has been a further polarization with the old "club" greens ("C" grades) which were always the back-bone of our greens now drifting towards "D"s and "E"s. I attribute this to the shortage of GKP's which, in turn, I attribute to a new phenomenon in our society – a decrease in "**social consciousness**"

Whereas previously some club members offered their services freely they now spend their time looking over their shoulder to see what the other members are doing. One has only to look at the notice board before the AGM to see the paucity of nominations for positions on the Club Committee – the lack of volunteers when it comes to catering the "I did not join this club to work in the kitchen" attitude- and – lastly the absolute rejection when members are asked to make themselves available for the what is the loneliest position in the club – that of green keeper..

Some years ago in an overseas survey on "Communication within Clubs" the following question was put to the GKP's "When last did your club President walk around the greens with you to discuss the greens - 94 % answered "never" – that says it all – Would you make yourself available for a position where you have to "suffer the slings and arrows of outraged members" (sorry Shakespeare) and not be able to turn to your President for support?

In an attempt to fill the post of GKP's some clubs in the cities are forced to group together to obtain the services of a greens advisor. Is this the way we are going? We must face the fact that for the foreseeable future our bowling clubs will not have the funds to offer a young person green keeping as a profession.

#### **What can we deduce from the above and how are we going to reach our objective?**

- 1 On average the 2005 greens do not score as well as the 1950 greens
- 2 Although we have more top greens than they had our average is brought down by the large number of "D"s and "E"s we have to-day.
- 3 If we are going to improve our average our primary target must be the "D"s and "E"s.

It must be remembered that the basic green is a "C". We do not start at an "E" grade and gradually work up to a "B" or "A" we start at the "C" level and, depending on the skill of the GKP the green will either improve to a "B" or even an "A" or deteriorate to a "D" or "E". To improve his grading a GKP must be able to control the proliferation of the mat to a level where he will get the optimum speed **for that green** without impairing the "food supply" of the grass.

While there are many factors which could contribute to the deterioration of a green, in the final analysis, it is the failure of the GKP to appreciate the fact that by reducing the leaf area indiscriminately he is interfering with the regular supply of "food" to the grass plant. His failure to recognize the signs of stress and to act thereon will eventually lead to a further reduction in the "food supply" with the inevitable dormancy followed by the death of the plant.

If we are to "rescue" these "D"s and "E"s we must motivate those clubs to start afresh at the "C" level.

This would involve a fair amount of sacrifice from the members - the green will be out of commission while the grass is re-covering the green (this might even involve re-planting the green). Once this has been achieved the GKP must confine himself to horizontal mowing and the players must accept a slower speed **until the GKP has acquired the necessary knowledge to reduce the leaf area slowly with a pause at every stage whilst he assesses the affect it has on the "food supply" of the grass plant**

**At the same time there must be a commitment from the District not to award any District tournaments to clubs with any greens below the level of a "C" grading.**

#### Conclusion

I believe that if we can get an 80% response from the clubs we will have achieved our initial goal. In "Grass Clippings 3" we will be discussing the dynamics of speed and hopefully convince the readers that it is not only a question of mowing (Horizontal or Vertical)

Authors Note Having been a GKP since 1949 I lived through these stirring times and luckily escaped the blandishments of the "speed merchants". It was only much later in the 1990's when I was inspecting 350 greens per year that I became aware of the extent of the problem.

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