



# Sandyhills Golf Club

## Advisory Report on the Golf Course Incorporating the STRI Programme

Report Date: 14<sup>th</sup> May 2015

Consultant: Ian Craig

## CONFIDENTIAL

Date of Visit: 27<sup>th</sup> April 2015

Visit Objective: To review the early season condition of the course and take further measurements from the indicator greens.

Present: Mr Jim Caldwell – Head Greenkeeper  
Mr Ian Craig - STRI

Weather: 7°C and overcast.

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## Executive Summary

- A slower start to the growing season in 2015 has been experienced with temperatures through February and March regularly dipping down below zero.
- Drier conditions throughout the winter have resulted in relatively little damage to the course brought on by winter play. The current weather conditions are supporting some reasonable growth to the greens and with temperatures expected to rise over the next few weeks we can expect a continued improvement to grass cover.
- Recovery following the Graden sand injection scarifying operation in March has been good due to a brief warm spell at the beginning of April and grass cover was restored to the greens relatively quickly as a result.
- The greens are still somewhat early season in appearance with growth differentials between the bentgrass and meadow-grass and the meadow-grass beginning to show signs of seed head activity. This being said the playing qualities are generally good for the time of year in response to the dry spring resulting in firm surfaces.
- Testing of firmness and soil moisture content was carried out to the three indicator greens however, ball roll qualities were not measured on this inspection due to the earliness of the visit and the recent renovation works carried out to the greens.
- Approaches and green surrounds have responded well to the recent application of 16:2:10 granular fertiliser. This product has also been applied to fairways which is a very positive step and we would expect to see an improvement in early season grass cover to the surfaces.
- Drainage work and bunker reconstruction carried out over the winter to the 10<sup>th</sup> green complex has been extremely positive and will greatly increase the playing qualities of this hole.
- The 12<sup>th</sup> green has recovered well from the outbreak of take all patch during the summer and fescue overseeding has been successful. There are however still problems with surface levels and a loss of grass cover in the centre of the green is greatly restricting playing qualities and usable areas of this green.

## Key Observations

### Greens

A number of remedial works have been carried out to the greens since our last visit including Graden sand injection scarifying, solid tining and some routine sand topdressing. We would fully expect these works to have a positive influence on the playing qualities of the greens throughout the summer months. 120 tonnes of sand topdressing was applied in 2014 with a target of 150 tonnes/hectare the target for 2015, 70 tonnes have been applied so far with routine topdressing planned throughout the summer which is extremely positive to see. At the time of inspection the greens were beginning to show signs of yellowing indicating that fertiliser is required. An application of 12:0:14 granular fertiliser is planned for the spring however, given the low temperatures we are experiencing response from this product would be very limited and liquid foliar applications would be the best approach until soil temperatures are more suitable.

Despite the low temperatures a brief warm spell at the beginning of April has resulted in excellent recovery from the Graden operation to the greens and grass cover has been restored which is pleasing to see.

The unusually dry conditions throughout the spring months have resulted in excellent firmness readings for the greens however, we would expect to see these deteriorate in response to periods of sustained rainfall.

The aeration and sanding work carried out at the back end of 2014 and early in 2015 have been extremely positive and there was no evidence of the black layer noted on the 2<sup>nd</sup> green at the time of the last visit.

## 12<sup>th</sup> Green



The 12<sup>th</sup> green continues to be an issue in terms of playability. The outbreak of take all patch experienced in 2014 was controlled with a sensible application of Heritage Maxx fungicide and recovery from this damage has been good following overseeding with fescue. There remains to be issues with the joining section between the old and new parts of the green, surface levels remain uneven and a collection point in the middle of the green remained underwater for long periods resulting in a loss of grass cover (as shown in the above photograph) which will require re-turfing. When re-turfing work is carried out attention must also be paid to the surface levels to ensure no repeat of this issue.

## Tees

Tees have generally come out of the winter well and are well grassed for the time of year. The reconstructed tee on the 3<sup>rd</sup> hole has settled well and performed adequately throughout the 2014 season. The forward tee on the 3<sup>rd</sup> hole remains an issue with overhanging trees resulting in a severe lack of sunlight coupled with canopy drip following rainfall and grass cover to the surface is extremely poor.

## Fairways

The decision was taken this year to apply a granular fertiliser to the fairways which is an extremely positive move by the Club. The 16:2:10 Award product was applied the week prior to the visit and we would expect to see a response from this product within the next couple of weeks which will greatly accelerate recovery from winter damage and improve turf health and density throughout the season leading to better lies and overall better playing qualities to the fairways.

## Bunkers

Reconstruction work has been carried out to a number of bunkers on the golf course. During the last inspection we focussed on the greenside bunkers on 10 which displayed very uneven depths of sand and poor playing qualities. These bunkers were successfully reconstructed during the winter, sand depths, playing qualities and general aesthetic of these bunkers is now excellent.

## Key Recommendations

### Greens

- A foliar nitrogen application would be recommended for the time being followed by the 12:0:14 Award granular application when soil temperatures are averaging 8 – 9°C throughout the day.
- Regular verticutting and brushing will now help to refine the sward and even out any current discrepancies in growth between bentgrass and annual meadow-grass as well as minimising the effect of seed head production from the annual meadow-grass which has begun to show evidence on the surfaces.
- We would support the current topdressing plan for the season which incorporates 5 tonnes of sand in total to be applied to all 18 greens on a weekly basis, this combined with the 40 tonnes already applied this season should see us easily hit the seasons total of 150 tonnes per hectare per annum which is excellent and will help to dilute any further organic matter build-up throughout the growing season.
- Soil samples will be taken prior to our next visit and further recommendations regarding remedial works such as hollow coring and Graden work will be made based on these results.

### 12<sup>th</sup> Green

- The bare patch in the middle of the green totalling around 5m<sup>2</sup> will require re-turfing. Turf could be harvested from either a putting green or the outer perimeter of the 12<sup>th</sup> green bringing the cutting line in to allow regeneration of this area. Before re-turfing levels must be adjusted to ensure that no low areas are present as this will lead to a collection of water and further damage to the area.
- An increase in topdressing, particularly to the back section of this green would be necessary this combined with regular rolling will help to firm up this surface and even out the playing qualities across the surface allowing the entire green to be used for play thus minimising damage to the front section which is regularly in use at the moment and suffering high levels of wear and tear.

## Tees

- The tees would benefit from raising the current height of cut from 7 – 8mm up to around 10mm as this will help to reduce the stress and aid in recovery at this time of year, especially while growth remains slow due to cooler temperatures.
- The forward tee on hole 3 remains problematic and would benefit from the removal of the overhanging and surrounding trees however this may cause problems with errant shots straying onto the surrounding road and houses. We would support the plan to move the tee to the right hand side of its current location, this work would involve removal of a number of trees on the right hand side of the 3<sup>rd</sup> fairway, however should provide a far more suitable location for the tee.

## Fairways

- The current height of cut to fairways is 10mm however given the recent application of granular fertiliser we would recommend that the height be raised to 12 – 13mm for the time being. As with tees this will help to more quickly establish better grass cover and minimise stress to the surfaces. The height of cut can be reduced back down to 10mm during the summer months however, for the time being it would be best to raise the height.

Signed



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STRI is completely independent and has no alliances to commercial products, services or contractors. This ensures that our design, project management and advisory services provide the best solutions for each individual client.

*The STRI Programme provides golf courses with measurements and data that help to monitor and assess golf course performance. The R&A has recently developed CourseTracker ([www.coursetracker.org](http://www.coursetracker.org)), a free, online business management tool for golf courses, to record, review and analyse golf club performance across many areas of your business, including the golf course. STRI believes The R&A CourseTracker combined with the STRI Programme provides the tools you need to objectively monitor and assess your golf course performance.*

# APPENDIX 1

## PERFORMANCE DATA



## Performance Data

### STRI Programme Measurement Protocols

By taking measurements of the playing qualities we can accurately describe the standards being set and also compare the results against our target performance levels. Essentially, our aim is to produce a set of greens that receive approach shots correctly then provide smooth/true and well-paced surfaces for putting. It is important that the greens are performing consistently on any given day and as well as possible throughout the year.

#### Soil Moisture Content

The soil moisture content is measured using a Theta Probe Moisture Meter. Nine points are sampled on each green (3 x 3 grid pattern) and the average calculated. The Theta Probe measures volumetric water content (VWC) through the upper 60mm of the soil profile.

The moisture content of the soil profile has a significant impact on the playing qualities of the greens and also the health of the turf. When the soil moisture content is too high, the surfaces can become soft and the turf health can also suffer. When the soil moisture content is too low the consistency and uniformity of the turf can become compromised.

#### Surface Firmness/Hardness

The firmness of the greens is measured using the Clegg Impact Hammer. A 9-point sampling grid was employed to allow us to calculate an average hardness reading for each green and also determine the level of consistency within the 9 readings.

Performance Measurement Results							
Green No.	Speed (distance)	Smoothness (mm/m)	Trueness (mm/m)	Firmness Mean (gravities)	Firmness SEM (±)	Moisture Content (%)	Moisture Content SEM (±)
1				126	2.9	22.7	1.7
2				104	2.3	36.5	1.0
10				113	3.3	33.0	0.6

Figure 1

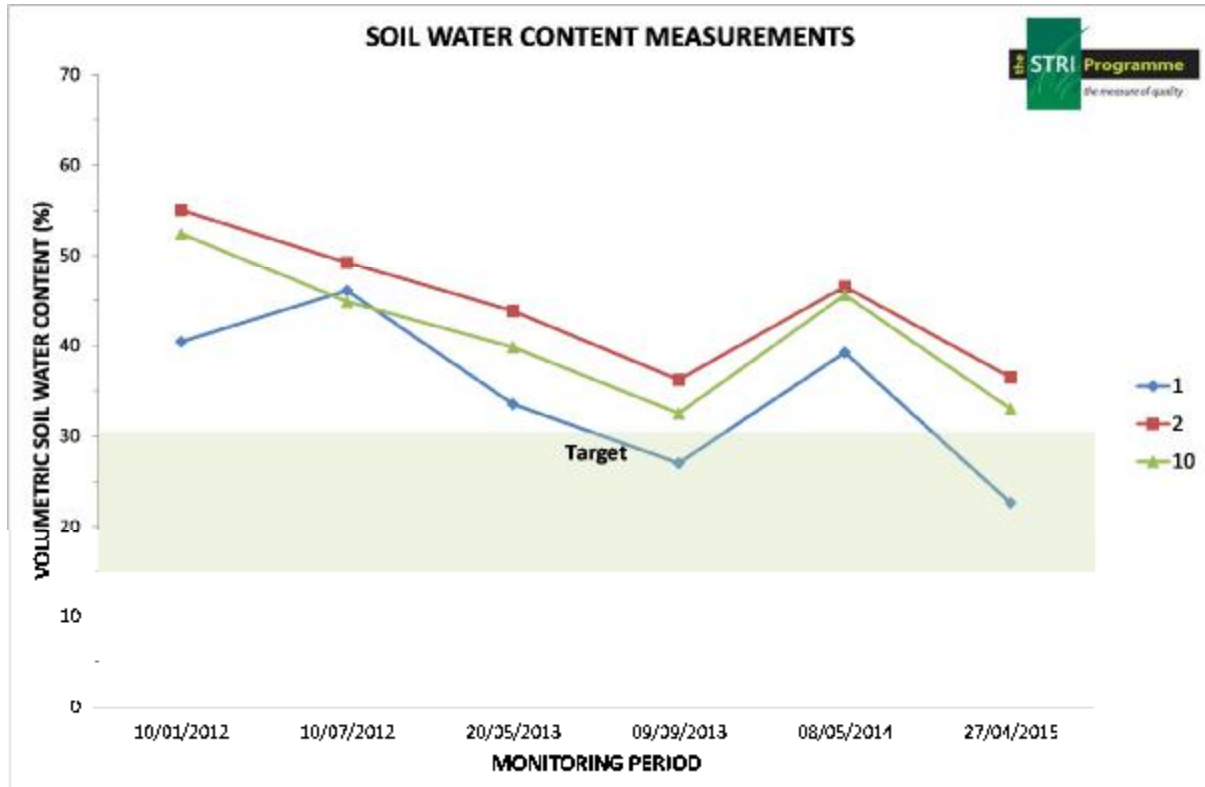


Figure 2

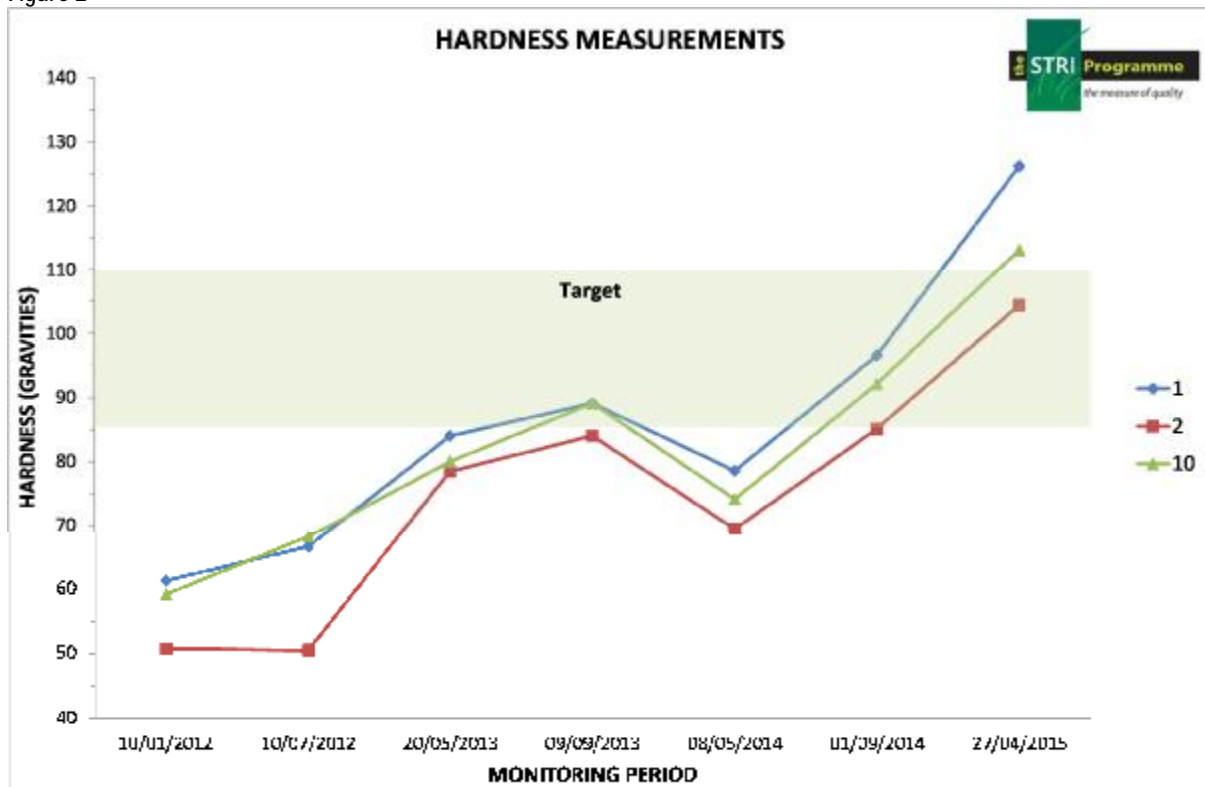


Figure 3