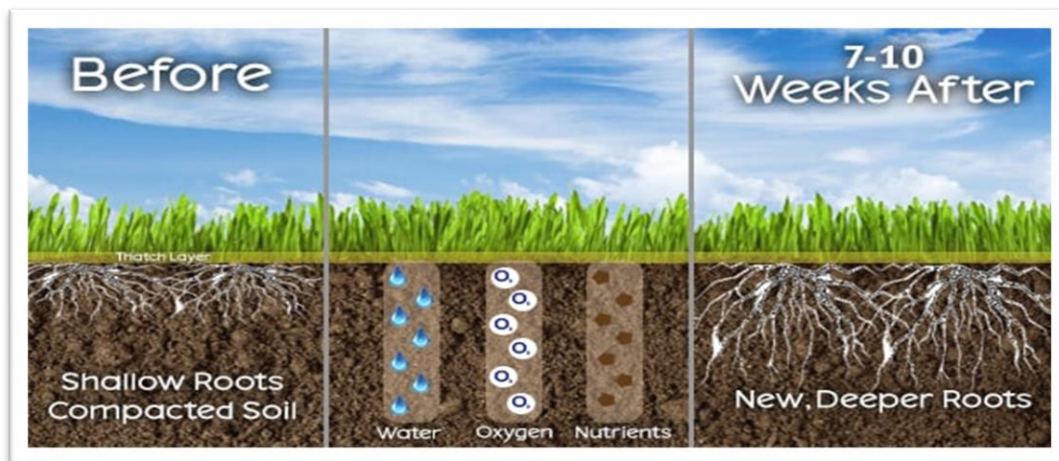


Dear Members

Now the season has started I thought to give you all a brief update on the works the Greenkeeping team have been undertaking over the last couple of months getting the course ready for the season ahead.

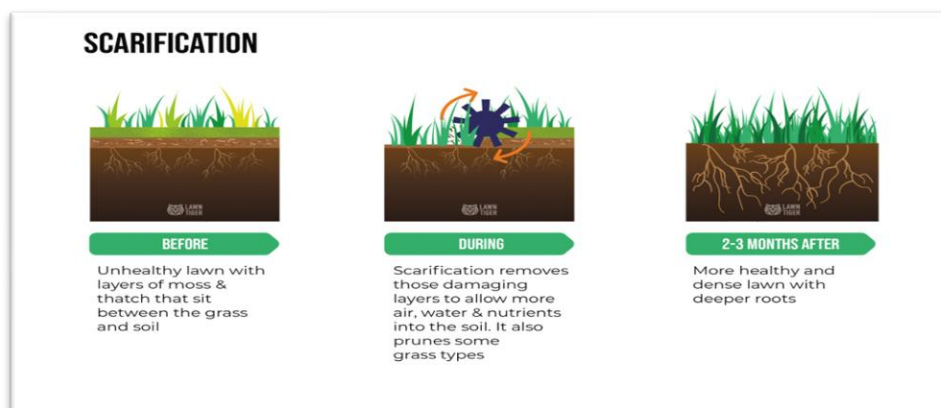
Just before the season started we had a light maintenance week on the putting surfaces. Greens were aerated using our Toro pro core with 200mm solid tines at 50mm centres to a 130mm depth.

Aeration is a key maintenance practice in maintaining high performing putting surfaces.



*(Benefits of Turf Aeration)*

The greens were then scarified in two directions to 20mm depth. Scarification removes unwanted lateral growth and dead plant material whilst opening up the surface for topdressing sand to mesh in to. Slicing the grass helps encourage the turf to grow upright resulting in a truer, faster putting surface. Scarification removes thatch which is a build-up of organic matter comprising of dead grass, leaves, shoots, roots and stolon's. Out of the 11,000 M<sup>2</sup> of putting surfaces on L'Ancrese we removed two full four ton trailers of thatch material out of all putting surfaces.

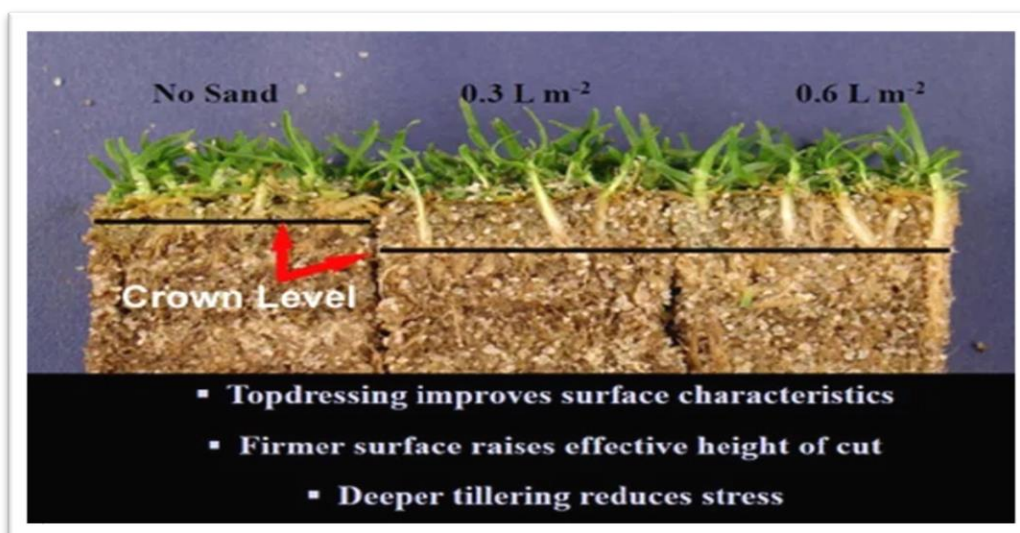


*(Benefits of Scarification)*



*(One of the 4 Ton Trailers filled with Thatch)*

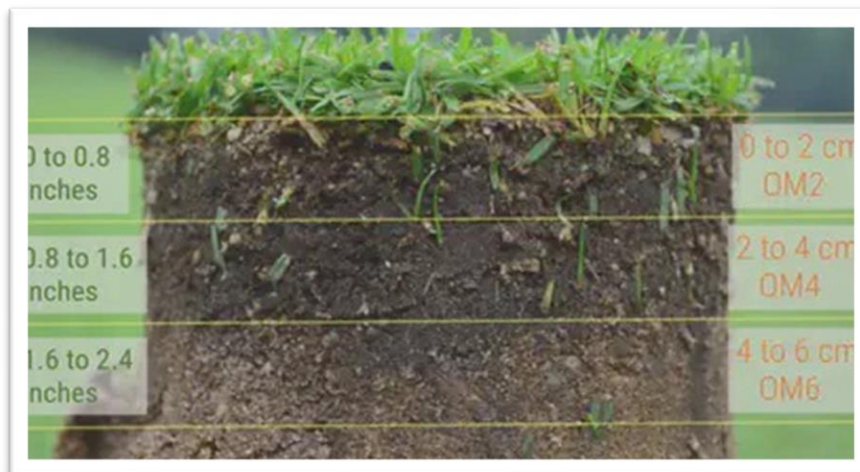
Finally, the greens were top-dressed. Top dressing aids in the dilution of organic matter (Thatch). Topdressing will also restore surface smoothness and firmness creating smooth consistent surfaces.



*(Benefits of Sand Topdressing)*

Golf Course Management recently employed European Turf Grass Laboratories to undertake organic matter sampling at various depths on 10 Greens here at L'Ancrese with the other 10 Greens being sampled next year. This will enable us to start to understand where we are with levels and how much extra work 'if warranted' each green will need. Organic matter content is usually measured by loss on ignition. Oven-dried material is placed in a furnace (e.g. at temperatures of 360°C or 400°C depending on the test method specified) the organic matter content is assumed to be equivalent to the loss of weight. Organic matter content can also be measured chemically using a method of breaking down the organic matter using potassium dichromate.

The method used for the greens at L'Ancrese were core samples measured at differing depths. 0-20mm 20-40mm 40-80mm these were measured on loss of ignition. This is when the core samples are measured before the furnace and then again after with the plant material having been burnt away. Percentages at the differing depths will then be calculated.



(Sample Picture of Core Organic Matter Depths) (Web Sourced)

## Royal Guernsey & L'Ancrese Golf Club Greens Organic Matter Content – LOI Test Results

### 1. Introduction

Also known as thatch, matt and fibre, the management of organic matter in the soil profile is essential. Where organic matter increases above tolerable levels we will start to experience:

- Increasingly softer greens, especially in wet periods
- Slower green speeds
- Increased reactive maintenance costs
- Increasing chances of pest and disease outbreaks
- More dry patch turf damage, affecting turf quality and appearance
- Increasing poa annua content

### 2. Loss on Ignition Testing

ETL measures organic matter content at 20mm depths in the soil profile, by Loss on Ignition, using ASTM method: F1647-11a – Method A (Reapproved 2018) "Organic Matter Content of Athletic Field Rootzone Mixes". Through this process, a detailed understanding of desirable organic matter levels and the effectiveness of renovations has been developed.

### 3. Organic Matter Target Ranges

Target ranges for greens are variable and depend on the type and nature of turf present within your green and the playing quality you wish to achieve. The following tables provides outline guidelines for setting target ranges and interpreting results.

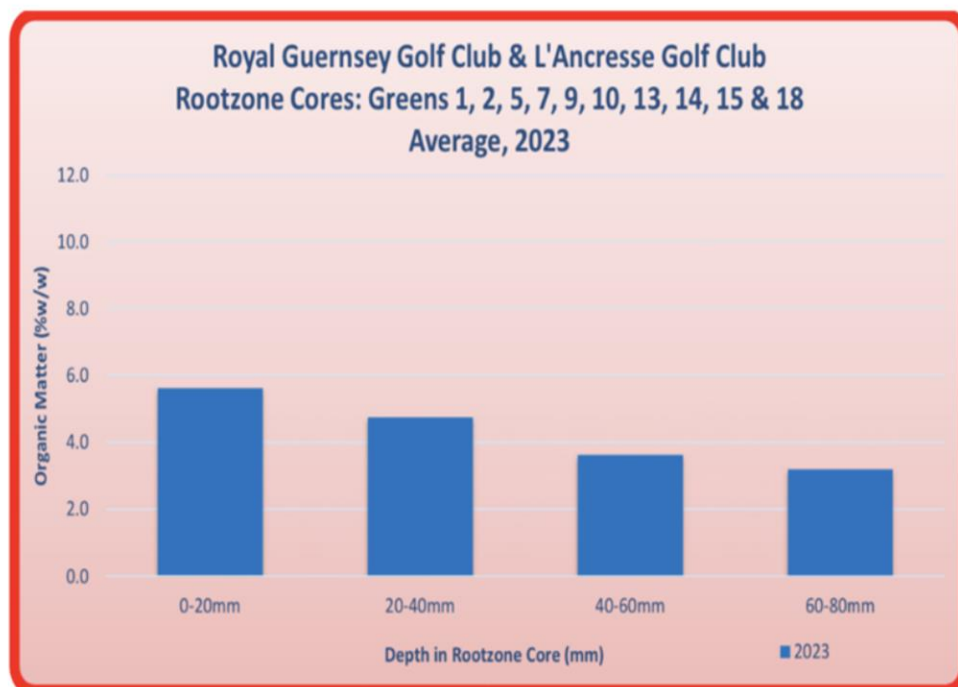
#### 3.1 Organic Matter Guidelines for Championship and Poa Annua Guidelines

Depth	Category 4	Category 3	Category 2	Category 1
0 - 20mm	1.0 – 3.0%	3.1 - 5.0%	5.1 - 8.5%	> 8.6%
20 - 40mm	0.5 - 2.5%	2.6 – 4.0%	4.1 – 6.0%	> 6.1%
40 - 80mm	0.5 – 2.0%	2.1 - 3.5%	3.6 – 5.0%	> 5.1%

#### 3.2 Organic Matter Guidelines for Amateur / Members Clubs / Bent-Fescue Guidelines

Depth	Category 4	Category 3	Category 2	Category 1
0 - 20mm	1.0 – 4.0%	4.1 - 6.5%	6.6 – 10.0%	> 10.1%
20 - 40mm	0.5 - 2.9%	3.0 – 5.0%	5.1 – 8.0%	> 8.1%
40 - 80mm	0.5 – 2.0%	2.1 - 3.5%	3.6 – 5.0%	> 5.1%

#### 4. Organic Matter Content Results



##### From Survey

##### Age of Greens:

+20 years

##### Green Type:

Soil Based Push-Up: Greens 7, 10 & 18

Deep Sand Profile / Links: Greens 1, 2, 5, 9, 13, 14 & 15

##### Seed Type:

*Poa Annua* Dominant: Greens 7 & 10

Fine Fescue / Bentgrass *Poa* Mix: Greens 1, 2, 5, 9, 13, 14, 15 & 18

##### Staffing & Budget:

7-10 Staff and £61,000 - £85,000

##### Renovations:

Combination of Hollow/Solid Tining and Light Scarification: 0-2 Years

Combination of Hollow/Solid Tining and Light Scarification: 2-5 Years

##### Sand Volumes:

91-120 Tonnes p/ha: 0-2 Years

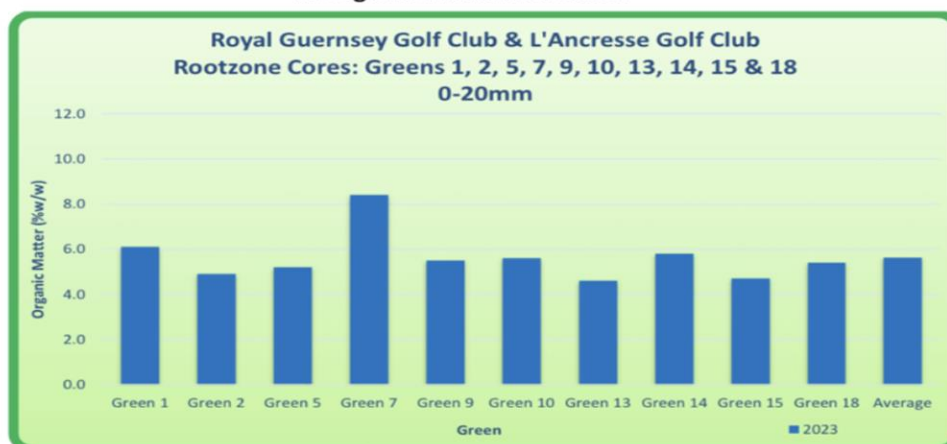
71-90 Tonnes p/ha: 2-5 Years



**Comments****Green 1 (0-20mm: Cat 3, 20-40mm: Cat 2 and 40-80mm: Cat 2)****Green 2 (0-20mm: Cat 3, 20-40mm: Cat 3 and 40-80mm: Cat 2)****Green 5 (0-20mm: Cat 3, 20-40mm: Cat 3 and 40-80mm: Cat 3)****Green 7 (0-20mm: Cat 2, 20-40mm: Cat 2 and 40-80mm: Cat 3)****Green 9 (0-20mm: Cat 3, 20-40mm: Cat 2 and 40-80mm: Cat 2)****Green 10 (0-20mm: Cat 2, 20-40mm: Cat 2 and 40-80mm: Cat 3)****Green 13 (0-20mm: Cat 3, 20-40mm: Cat 3 and 40-80mm: Cat 3)****Green 14 (0-20mm: Cat 3, 20-40mm: Cat 3 and 40-80mm: Cat 3)****Green 15 (0-20mm: Cat 3, 20-40mm: Cat 3 and 40-80mm: Cat 3)****Green 18 (0-20mm: Cat 3, 20-40mm: Cat 2 and 40-80mm: Cat 3)**

- Royal Guernsey Golf Club a 18-hole links course located on coast of Guernsey in the Channel Islands.
- The average rainfall for this area is approx. 560m/annum, classified as Low.  
All 10 greens tested are +20 years old, Soil Based Push (Greens 7, 10 & 18) or Deep Sand Profile / Links constructions (Greens 1, 2, 5, 9, 13, 14, 15 & 18. Greens 7 & 10 are *Poa Annua* dominant, the other 7 greens are and are Fine Fescue / Bentgrass *Poa* Mix.
- The results have been compared to Table 3.2, Organic Matter Guidelines for Amateur / Member Clubs / Bent-Fescue Guidelines on Page 1.
- ETL have no historical data to add to this report.
- The decreasing trend in Organic Matter (OM) with increasing depth is very typical in golf greens.
- OM at 0-20mm is generally at acceptable levels in most of the greens. Greens 7 & 10 are on a different classification due to their different seed type and falls into Category 2 which above national norms but not out-with the ranges usually observed. Normally greens at this level will start to soften and hold moisture through wet winter periods but perhaps due to the level of precipitation in this region, it is less critical. Nevertheless, reduction in OM at 0-20mm should be an ongoing objective for the club, particularly in Green 7 which may require some accelerated treatments if results are combined with onsite observations.
- To a lesser extent, and on some greens more than others, the OM content at 20-40mm should also be targeted for reduction. This may require a combination of treatments however the priority is still the upper 0-20mm. OM at this depth is likely to be historical and due to the build-up from top-dressing applications in recent years. Current levels of OM in the 20-40mm increments are commonly seen.
- OM in the 40-60mm increment is a little higher than ideal, but mostly not out-with the norms usually observed by the lab. OM reduction at this depth can be a little more complex, but bypass treatments could be considered if this layer is causing issues.
- Depths of 60-80mm should be left to degrade naturally. And need no specific work – generally at acceptable levels.
- Green 7 may require a little more intensive program (in the top 0-20mm) than the other greens tested in the 0-20mm. Otherwise, one management program should suffice.

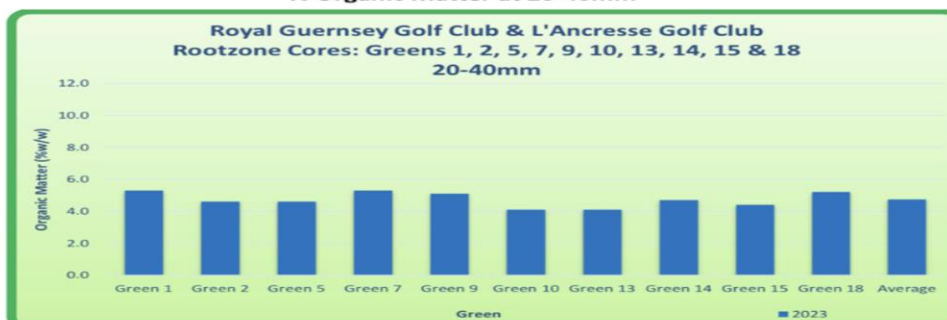
## % Organic Matter at 0-20mm



## Comments

- In March 2023, the OM content in the 10 greens tested ranges from 4.6-8.4% with an average of 5.6%, so is a little variability throughout the course.
- Green 13 has the lowest at 5.6%, Green 7 has the highest OM at 8.4%.
- Greens 1, 2, 5, 9, 13, 14, 15 & 18 are classified as Category 3, and are at functional levels. Greens 7 & 10 (both *Poa Annua* dominant greens, and on a different table/comparison) are classified as Category 2; higher than ideal but not outside the UK norms.
- It is recommended where at all feasible, the club continue with their practices and aim to further reduce organic matter to 5-6% gradually at 0-20mm, in all greens (but Green 13 to a lesser extent). This should be a key priority for the club. It may be Green 7 requires some individual treatment to reduce this down at an accelerated rate.
- *Poa annua* thatch is more moisture retentive as such a reduction in OM at this depth will help prevent soft wet greens through wetter, winter months. Given the location and lower levels of rainfall experienced than other areas of the UK, it may not be so.
- ETL data suggest sand topdressing volumes of 120-150t/ha/year result in effective reductions, this will require significant renovation practices to achieve this volume. Two renovations will be required to achieve this volume of sand per annum in general.

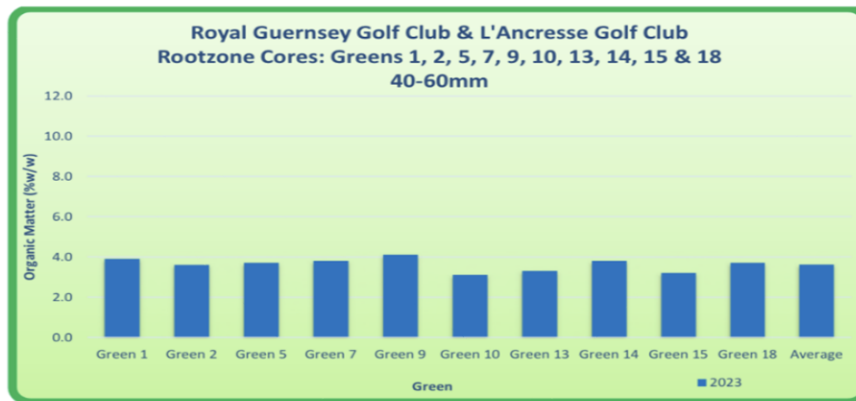
## % Organic Matter at 20-40mm



## Comments

- The OM content of the 20-40mm depth in the 10 greens tested ranges from 4.1-5.3% - this increment is less variable than the layer above.
- Greens 10 & 13 have the lowest at 4.1%, Greens 1 & 7 have the highest OM at 5.3%.
- Greens 2, 5, 13, 14 & 15 are classified as Category 3; generally at good, functional levels. Greens 1, 7, 9, 10 & 18 are a little higher and classified as Category 2, higher than ideal but not outside the UK norms.
- OM in the 20-40mm increment is not uncommon – as the topdressing applications are applied, OM becomes buried in the lower levels.
- Greens 1, 7, 9, 10 & 18 are slightly higher than desirable and should be targeted for reduction. The remaining greens would still benefit from OM management in the form of routine maintenance to prevent any future increases.
- The club should continue to target this depth on the greens at renovations using solid or hollow-tining. Data suggest solid-tining allows for improved backfilling of sand at renovations.
- Once moved away from the surface (0-20mm) OM will start to degrade naturally to some level. Often creation of columns through such layers are also effective.

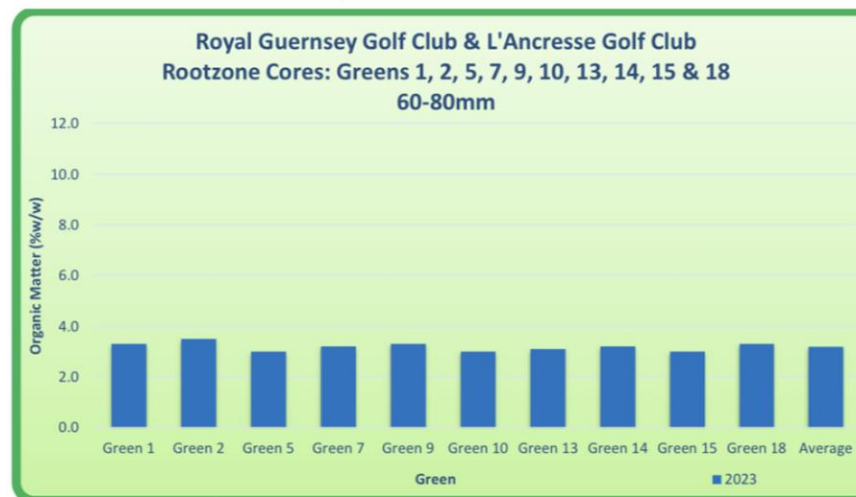
### % Organic Matter at 40-60mm



#### Comments

- At 40-60mm depth, the OM content in the 10 greens tested ranges from 3.1-4.1%.
- Green 10 has the lowest at 3.1%, Green 9 has the highest OM at 4.1%.
- Greens 1, 2, 5, 7, 9, 14 & 18 are classified as Category 2; higher than ideal but not out-with the norms usually seen by ETL. Greens 10, 13 & 15 are lower and classified as Category 3, generally functional levels.
- Greens 1, 2, 5, 7, 9, 14 & 18 should continue to be targeted for maintenance work at 40-60mm, but degradation rates may be slow. Their OM levels are higher than desirable however successfully targeting this depth with physical reduction is challenging. Its derogatory effect should be considered, it may be worth allowing this to degrade and focusing on upper layers.
- If the layers are causing notable issues (from onsite observations), bypass treatment like Dryject or drill and fill could be considered as options. Also consider persistent deeper aeration to a lesser extent.

### % Organic Matter at 60-80mm



#### Comments

- The OM content of the 60-80mm depth in the 10 greens tested ranges from 3.0-3.5%.
- Greens 5, 10 & 15 have the lowest at 3.0%, Green 2 has the highest OM at 3.5%.
- All 10 greens fall into Category 3, which is good.
- This should be allowed to degrade and monitored accordingly.



From these test results we have been able to determine exactly which greens will need further work. Over the next couple of years we will continue to core aerate our putting surfaces to reduce all organic matter to category four :- 0% - 3%. This will be combined with scarification, regular solid tine aeration and increasing our top dressing regime to 125 – 150 tons per hectare annually. Green 7 warrants increased work to reduce current levels even further, which will be implemented this year. Once we manage to reach our target ranges core aeration and other high disturbance practices will be reduced.

Obviously there will be challenges on timings of our works due to the overloaded golf calendar we face. Unfortunately there will be disturbance to golf at times but to enable our putting surfaces to continue improving both agronomically and botanically we must carry out these practices.

The old saying of you cannot make an omelette without cracking an egg really is relevant in this situation.

### **Bunkers**

Last month we started work on all our bunkers. All bunkers were edged, trimmed, weeded with faces being brushed and blown to tidy their appearance. Sand levels were topped up to 100mm depth across all course bunkering.



*(Bunker Levels Replenished to 100mm)*

After greens, bunkers are the second highest maintained playing surface of man hours at L'Ancrese with a typical week consisting of thirty man hours used. Bunkers are typically one of the most complained about surfaces within golf course maintenance. The job of keeping bunker sand at a consistent depth and playability are near on impossible.



The current **U.S.G.A / R&A** guidelines for bunkers with a liner are 100-150mm of sand. Keeping bunkers at this level is somewhat difficult. We lose the majority of sand from high winds and sand splash from the amount of play each bunker receives. G.C.M used in total 20 tons of sand to ensure all our bunker sand were replenished to 100mm. Extra sand is on order and should be with us by early next month. There remains an incredible cost to bunkers with the cost of shipping and the sand itself is increasing rapidly. My expectation, by the end of the year we will be close to 50 tons of sand needed to maintain adequate sand levels for this year alone which is a large proportion of the maintenance budget.



*(U.S.G.A Bunker Consistency)*



*(How to Rake Bunkers)*

A polite reminder to all :- Please rake bunkers with the tooth side of the rake in the middle of the playing area, ensuring a forward pushing action. Raking backwards will move sand to the back of the bunker that will inevitably encourage downhill lies i.e. turning your Sand Wedge in to a 7 iron.

The edges are to be raked with the back of the rake creating a smooth, firm transition for the golf ball in to the middle of the playing area.

**Rough**

This year I am very pleased to say that we have finally had a spring. Since starting with G.C.M this is the first spring in my 2 previous that we have encountered above average rainfall. The mild temperatures have helped the turf grow well and recover many areas damaged from last years drought.

The recent bank holidays, staff shortages and machinery breakdowns have left us struggling to keep up with the increased grass growth we are experiencing at present. I am hoping over the coming weeks we will be able to catch up once parts arrive and we have full working weeks, enabling us to get mowing.

Currently semi-rough consists of two widths (5 Yards) of a ride-on cylinder semi rough mower, following the contour edge of the fairway and will be maintained in a similar way to that of fairways. The height of cut here is 35 mm. Generally mowing takes place weekly throughout the playing season.

From an environmental perspective the rough grass lands at L'Ancrese are one of the club's biggest assets. Many areas contain a vast array of grass and wildflower species. Management practises are tailored to preserve and enhance these within the context of the game of golf. Appropriate management of the rough is also crucial to frame holes and define the playing area. The way the rough looks plays a vital role in the overall feel of the golf course and the importance of rough grasslands cannot be overstated. Certain, small defined areas are mown routinely in the growing season these are determined at the beginning of each season. The Ecological Management Plan from the consultancy firm Olejnik Ecology will contain details of planned works to the rough grasslands and around the course (Found on your relevant clubs website).

To help thin our flowering rough and decrease the density we must look at purchasing a cut, collect and scarify mower. By removing the plant material you are taking away the nutrient holding capability of the soil. This will reduce the severity of the rough over time and create the desired thin wispy rough that is playable, frames holes and keeps habitats for local wildlife.

In the meantime where appropriate we will mow an added 5 yards of rough at 100mm height following the semi rough contour, giving a total of 10 yards of managed rough from the fairway. Unfortunately by doing this we will increase the nutrient returning to the soil which the plant will then uptake causing the managed area to become denser over time.

Once the rains cease and summer arrives the thick rough will burn away and the severity of the flowering rough will subside. We are going through the Spring flush with thick rough being the topic of conversation at most clubs this year.





*(Cut and Collect Scarify Mower Royal Porthcawl Golf Club)*



*(Cut and Collect, Scarify Mower North Berwick Golf Club)*



### Irrigation

I'm sure many of you would have noticed there are a quite a few holes around the course at present. We have been plagued with numerous leaks. Wayne has been busy fixing as many as possible and recently encountered five leaks in five days, he has had his work cut out in trying to keep us up and running and has put in numerous out of hours work to help keep us moving. Which I am grateful for.

I am hoping the irrigation holds until the instillation of our new system commences at the end of September. Although we have not needed to use the irrigation system this year it will not be long until we have to and we must ensure everything is primed and ready.

I will be updating after the Island Games further on the new irrigation installation project commencing at the end of September.



*(Irrigation Leak 2<sup>nd</sup> Hole)*

### **New Staff**

Recently Golf Course Management employed two new staff members. Johan Greenberg and Mark Hill. I would like to welcome them both to the team. Johan and Mark are keen golfers and are looking forward to now working in the golf course maintenance industry.

Golf Course Management will also be employing an Apprentice Greenkeeper at the end of July.

G.C.M are encouraging all staff to undertake their work place diplomas in Sports Turf. The overall aim is to have all staff qualified to a minimum of Level 2 in Amenity Horticulture specialising in Sports Turf Management.



*Johan Greenberg & Mark Hill*

### **Island Games 2023**

With the Island Games fast approaching and a full calendar of golf pencilled in right up to the start of the games. I am hoping there may be some volunteers to help the green-staff in the afternoons.

Duties would include divot filling, watering, bunker maintenance etc. If anyone could assist that week it would be of great help to us and please let me know at [oliverpennington@hotmail.co.uk](mailto:oliverpennington@hotmail.co.uk)

### **GCM Volunteer Programme**

The Green-staff are always appreciative of the efforts of members who rake the bunkers, replace divots and their pitch marks, often not just their own but those of others too.

Tending to the bunkers, greens, divots and rabbit holes also eats into the time of green-staff who during the busy periods, often have more labour intensive duties to attend to. This time of year with staff holidays, a packed competition schedule and grass that will not stop growing given the wetter Spring we have encountered this year.

Golf Course Management wishes to roll out a program to see if any members have some spare time to assist the green-staff with some of the more menial and lighter duties of golf course maintenance, such as divot and rabbit hole filling for example.

Our insurers are happy with this scheme but a very brief form which is attached, will have to be completed and handed in for consideration of the GCM Board prior to any volunteer commencing some duties.

Training and advice will be given where needed too. Please speak to me (Ollie) or to one of the team if you wish to have further information or e-mail Jason Savident (Board Director) [jsav7566@gmail.com](mailto:jsav7566@gmail.com) to express an interest.

Hopefully this gives you all a bit of an understanding on where we are with the course this Spring. I will update further after the Island Games in July. In the meantime I hope you all have an enjoyable golfing season and please do try and stay out of the rough until June.

Kind Regards

Ollie