

BARNARD CASTLE GOLF COURSE REPORT SEPTEMBER 2023

11/09/2023



	Page
Contents	2
Introduction	3
Summary	3
Course Report	
• Greens	4
• Tees	4
• Approaches and Fairways	5
• Rough and Semi Roughs	5
• Long Roughs	5
• Bunkers	5
• Irrigation and Waterways	6
• Trees	6
• Pathways	6
• Tee Signage	6
• Greens Surrounds / Mounds	6
Other Issues	
• Machinery	7
• Irrigation	7
Proposed Works through Autumn / Winter 2022	8
3 Year Proposed Course Improvements	8
Budget Update	8
Weather / Rainfall	9
Conclusion	9
Attachments	9

Introduction

This report will look at all areas of the golf course, looking at the existing turf and agronomic quality we have achieved so far this year.

It will look at how the preparation leading up to the main season has gone.

We will take a look at Current Spend V Budget and forecast for the remainder of financial year.

I will report any issues I have regarding where we are as a course going forwards and thoughts for improvement on the course and the department as a whole.

Summary

This report looks at conditions and how the Golf Course was / is throughout all areas with issues, changes we have made throughout and improvements we intend to make.

- Greens
- Tees
- Approaches and Fairways
- Roughs and Semi Roughs
- Long Roughs
- Bunkers
- Irrigation and Waterways
- Trees
- Pathways
- Tee Signage
- Green Surrounds

The SECOND section looks at the other issues that I feel need addressing and mainly cover Machinery and Irrigation which have either broken or what are causing us problems and damage to the course and where do you go in the future.

The report is concluded as to thoughts on progression of the course and where I think we are at as a course from this season's success.



COURSE REPORT

Greens – We are now into Autumn and can assess how the greens react to regular mowing and routine maintenance programs such as irrigation, aeration, feed and chemical applications.

We have discussed previously regarding the build of the greens and structure of the rootzone and the amount of work to complete to improve surfaces throughout all seasons. We have over the last 18 months attempted to improve surface drainage and quality of the rootzone via a mix of deep and varied aeration to improve grass cover and greater air and water spaces to therefore improve drainage and air / gas exchange. However we are still having to close after prolonged rain as although we are aerating and removing thatch down to 4 inches with verti drain going down 8-9 inches but closing up soon afterwards. Ideally we need to be going down 10-12 inches and back filling with sand. Quotation has been received circa 10k for doing this with the drill and fill machine for our worst 12 greens but must be done in spring or autumn.

The sward on each green varies greatly through a mix of bents, fescues, poa annua (dominant 'weed' grass), Dwarf rye and common rye – I would imagine that the bents are original but due to varied management and budgets different grasses have been sown during aeration and along with poa annua (common meadow grass) which would invade when swards are weak the sward is quite 'blotchy' and makes difficult to have a consistent ball roll therefore speed. Our intention was to go back to basics and only sow pure bents to try and outgrow the unwanted species to improve surface and speed. Looking at how the greens have performed over this past year I believe this is slowly working but this is not a quick fix and will take many years to achieve but greens should improve year on year.

We have also continued a more stable balanced fertiliser and chemical program and hopefully the benefits throughout the year and forthcoming years are noticable. Generally I believe we have seen improvement of the last month or so and greens look healthier with green speed slightly increased.

Disease and Pest Activity on Greens

Pests and disease feed on the plant and/ or roots so the most important factor is, is to keep the plant healthy and stress free. This we will do using more bio – stimulants than usual, seaweeds, phosphites, micro nutrients (as mentioned above). This will strengthen the plant internally and helped stressing itself out due to attack. Unfortunately, this will never totally prevent disease as weather will always help aid various attacks but it will reduce the threat.

The greens are averaging a pH reading of 6.7 currently a fall of 0.1 from last year whereas bent grass prefers pH of 6 and below which also would help the reduction of alkaline leading to take all disease and worm casts.

Worm casts are not really causing problems around the course although we obviously do see them on Tees, greens and approaches, especially in the damper months, spring and autumn but to any quantity. Unfortunately with modern law there isn't a lot Greenkeepers can do nowadays to eradicate worms and best deterrent seems to be sand topdressing and well aerated rootzone which we are obviously trying to improve on.

Tees – We said last year that we thought the tees are the weak area on the course as they are pretty much ALL uneven with various grass species and a very poor badly designed irrigation system within them. Aeration has been carried out in Spring and Autumn with top dressing and a planned fertiliser program introduced to improve surfaces and drainage and believe this is bearing dividends. We still have issues with irrigation due to many tees having poor pressure, faulty heads and incorrect nozzle selection. We will look to address many of these issues from October onwards.

Disease and Pest Activity on Tees

There has been no sign of disease on these areas with only pest activity being rabbit and mole damage.

Approaches and Fairways – Approaches have improved a lot in last 12 months due to doing quite a bit of work on them to increase their size and condition. Again, aeration and feeding has been limited and they have been reduced throughout the years to nearly non-existent by the time I had taken over. In the last few months, we have increased the size, hollow cored, verti cut, top dressed and added fertiliser and wetting agent and believe these will grow from strength to strength with the addition of more of the same. The only negative worth mentioning is the amount of golfers driving on the aprons in Golf Buggies which compact surfaces and deter growth.

The fairways were again very poor in places with a lot of weed and weed grasses throughout but again we have improved both via use of light liquid feeds and herbicides providing improved grass coverage and playing surface. What we do require is to improve surface drainage via light aeration and is mentioned again later in Machinery Expenditure.

Disease and Pest Activity on Approaches and Fairways – **red thread** disease signs have been there in early spring due to lack of nitrogen and feed but never a concern as once growth starts this grows out and recovers quite quickly – I did apply a light liquid feed to strengthen the sward early Summer to kick start this and strengthen sward against weed growth too which we will mimic in late autumn and next spring also. No signs of pest activity other than hare, badger, crow and mole activity.

Roughs and Semi Roughs

The roughs have again been a contentious area by some members but is the amount of time it takes to mow it which is the main reason we have brought several areas in! In the past I was informed it took 3.5 full days to mow and with only 4 staff that is ridiculous amount of time spent on one area. The decision I made to benefit both staffing hours, machine wear and fuel costs was to bring in various areas of long rough that only really come in to play with very errant shots which I believe has benefitted all the concerns above and brought mowing time down to 22 hours instead of 32. The only other issue we have with the mown rough is that if we miss one cut due to wet weather or machinery break down we experience a ridiculous amount of drop back (dead grass) such as we have now which lasts several weeks but if the acquisition of our trailed blower means we can blow off all debris in a few days.

Long Roughs

There are large sections of really long unkept rough which ideally would benefit a once a year cut (October) with flail mowers. The benefit of doing this would be thinned out areas, perfect for golf, long enough for the visual aspect of the course, punishing if you got into it but also easier to find your ball if you go into it. This can be done via contractor or local farmer and we will still keep plenty of areas for wildlife habitats but obviously a cost consideration must come first.

Bunkers

We are slowly changing sand as and when we can and budget permits. The intention is to try and also make a couple of the larger bunkers slightly smaller when clearing too such as left 6th greenside, right 7th greenside and left 8th greenside purely to improve the aesthetics and reduce labour hours raking and weeding as well as reducing sand costs since they have increased 30% from last year.

Irrigation and Waterways

The irrigation system still has a lot of issues which we will try and address October onwards. Nearly all tee heads (circa 160) need maintenance whether it be re-aligning or new nozzles or raising and will take several months to complete but will definitely be worth it. Waterways throughout the course have been looked at and a few conclusions have been drawn up – there are several issues with overhang throughout the waterways where we feel could be an H&S issue so we will look to remove these with the 360 digger and trailer. Last comment I would like to add is that we completed a method study of strimming and tidying ditches which revealed it takes 2 staff 4 days to complete once a month in growing season which is difficult to do during the busy growing months and we are grateful for the support by members this year to do. Bridges are in various states of repair and we will audit at end of playing season when things quieten down. We intend to clear at least 75% of pond weed / reeds from the 3rd pond to aid looking for golf balls and improve water storage after heavy rain.

Trees

Last winter we completed a lot of brashing in various tree copses such as behind 10th / 8th greens which has improved air flow and light as well as improving wildlife habitat for our various furry friends. We may look at a couple more this year such as right of 13th / 14th as well as felling a couple of dead brittle trees which again could be a H&S issue.

Pathways

It is plain to see that we have issues with the hex path system that runs between the 2nd green – 3rd, 8th green – 9th and throughout the course. Clearly the tree roots adjacent to the main stretch have pushed up and distorted the path throughout and no easy solution. There is nothing we can do short term to resolve and long term the only option is to lift up the whole length and dig out base removing all tree roots and adding new path system. This also will eventually have root intrusion but not for several years. I would suggest looking at new path construction material and trial one path when budget permits.

Tee Signage

Back in Spring we moved signage off the tees to points approaching the tee and this was to aid guidance for visitors but also to make it easier for us to maintain tee banks. Ideally, we would like to add the artificial strip around each tee sign similar to that at the first.

Green Surrounds / Mounds

There are several small areas of green surrounds / mounds and sunken areas throughout the course that require levelling to make maintenance easier and less damaging to our machinery such as left of 7th fairway bunker, right of 8th green, left of 16th fairway as examples. These will be carried out as weather permits in the winter months.

Other issues

Machinery

As aforementioned in Fairways we would like to slit aerate all fairways but our existing outfield slitter is worn and causes damage when using due to overworn tines and having no roller. The same can be said for the greens slitter so awaiting quotations for possible replacement discussion.

As discussed last year we would require a second pedestrian hand mower to mow greens as last year we had two mowers which had to be returned after loan and we purchased one but can only do 10 greens per day so can only mow twice per week and would be an issue if ever broke down. Awaiting quotation for possible discussion.

Our existing 2 ton trailer has a rotten base and low frame which causes damage when riding over rigs and furrows. Awaiting quotation for possible discussion.

Ideally we should sit and agree a 5-10 year machinery replacement plan to understand what equipment are going to need to be replaced within this period and understand the expenditure required.

Irrigation System.

This year we have had 4 bursts / leaks and one breakdown throughout the course, now repaired but I would just like to add what was said last year in my report.

On discussing the system with Mike he has explained the system has not run properly for many years as cannot cope with the amount required to do greens and tee complexes every evening when required and several of the tees sprinklers do not work or have wrong nozzles. To compound this I cannot understand why we have sprinklers in the middle of tees as this prevents aeration and reduces tee positions. I have the head irrigation tech from Rigby Taylor coming in June to audit the system and report on issues and options for repair / replacement / solutions so will feed this back on delivery.

We also seem to have an issue with the main river pump with blocking up with debris which we will look at and also the pump working at full power when on – in my experience we should have a sensor on this pump to reduce power flow until required – will discuss with irrigation tech.

As previously mentioned I do not want to level any tee complexes without renewing any irrigation issues on that tee at the same time.

The last expense within the system which we really need to replace is the now extinct Heron controller system which controls the pump and whole system. This is so outdated and can only be operated whilst standing in front of it so unaware if working or providing any details on the old analogue viewing window – ideally we don't need the best but we do need a mobile app connected controller where anyone with access can switch on or off from home but also see if there are any faults, issues or information at anytime etc.

Proposed Works through Autumn / Winter 2023

- Continued aeration of all playing surfaces and Topdress with Mansfield MM35
- Development of turf nursery near practice range
- Excavate, re-drain and re-sand at least 6 bunkers before May 2024
- Reduce size and reshape of 3 greenside bunkers – 6,7 and 8
- Prune up and brash standard trees around the course for better visual impact for the future
- Drainage works on 17th Fairway
- Levelling of various green surround and fairway mounds.
- Look at replacing damaged bridges.
- In House Machinery Servicing (not grinding)
- Improve 13th tee area
- Clear 75% of 3rd pond weed
- Excavate first 16th ditch into small pond as per greenside ditch to alleviate wet area.
- Raise and repair at least 50% of irrigation heads on tees and greens

Proposed 3 year Plan.

- Audit / level various existing tees, adding irrigation and possible artificial turf teeing area
- Improved vertical drainage on greens by use of drill and fill machine.
- Replace all detrimental machinery and replace with NEW suitable machinery
- Improve playing surfaces on all areas – greens, tees, approaches and fairways.
- Level minimum of 2 tees per year
- Excavate, re-drain and resand all bunkers
- Replace existing path systems with new improved product.
- Improve practice facility throughout
- Replace at least one bridge per hole to allow safer movement of machinery and golfers.
- Improve standards within the maintenance shed and associated areas.

Budget Update. (Full report included within attachments)

	Budget	Spent / Forecast	Remaining
April - August	£37,000	£34,000	£3,000
September – March	£36,400	£38,000	-£1,600
TOTAL	£73,400	£72,000	£1,400

Our main issue this year re costs has been the several increases in fuel, dressings and fertilisers / chemicals due to COVID knock on and the events in Ukraine. Fuel prices have had the knock on affect as mining machinery, manufacture, mills, delivery vehicles as well as the costs on our fuel we use. This along with most minerals used by the major fertilizer companies come from Ukraine and Russia which are obviously unavailable at the moment hiking the prices up.

Weather / Rainfall 1st April – August 30th

Unfortunately, we have had a total of 11 days closed since 1st April all due to heavy rain and waterlogged surfaces especially on greens 1,2,4,5,10,13,14,16 and 18 with the 17th fairway holding water for several days after. As many courses in the area experienced these conditions are flash floods and not our seasonal norms.

In total we have had the sum of 368mm or 15 inches of rainfall with record months of April and July. Full records attached.

Conclusion

Overall so far this year we believe the course has developed further and the playing surfaces improved each month. Now that we have a settled nutrient program and detailed aeration plan I / we believe this will continue and together with a settled staff now we can progress and maintain standards that are expected by Barnard Castle Golf Club. Unfortunately due to the various grass species and varied rootzones throughout the course this cannot be rectified quickly but with time and correct practices we will see steady improvement in sward and health.

Obviously I have highlighted several areas which do need addressing and some are inexpensive and some expensive but each area will improve with spending and without finance will only deteriorate.

As greenkeepers, we pride ourselves with good playing surfaces and presentation and I feel we can achieve this consistently over the season. This bodes well for the future and with continued development of the staff and equipment can only get better and we can establish ourselves as a major player in the region and golf market.

Attachments

- Budget spends 2023
- Images for winter projects
- Weather / Rainfall April - August

