



EXAMPLE HOLE DATA REVIEW



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EXAMPLE HOLE DATA REVIEW

DATA COLLECTED: 18/05/20 - 18/08/20

ROUNDS COLLECTED

1,348

SHOTS COLLECTED (COURSE):

119,832

SHOTS COLLECTED (HOLE):

8,492

Brief

The client has requested a full data-led review of the golf course. This research has sought to underline how the intended strategy of each hole is experienced by each standard of golfer, in all weather conditions. The club committee intends to gradually allocate funds over a period of 10 years using this data as the basis for improvements to the on-course experience of golfers of all standards, reductions in maintenance costs, improvements to environmental efficiency and to ensure the intended strategic vision for each hole is experienced by all players.

Intended Strategy Hole 3

This hole is designed as a reachable par 5 for most players. The green and surrounding bunkers are shaped to encourage play from the left side of the fairway. As such, the ideal line from the tee should be as close to the two fairway bunkers as possible with only a well struck, well placed drive allowing the golfer to hit the green in two shots. For those looking to lay-up, a similar dilemma is also presented; the golfer is encouraged to skirt the 3rd fairway bunker, lay-up short of it (leaving a longer approach) or carry it (bringing the intersecting rough into play).



Bunker 6

Bunker 5

Intersecting Rough

Bunker 4

Bunker 3

Bunker 2

Bunker 1

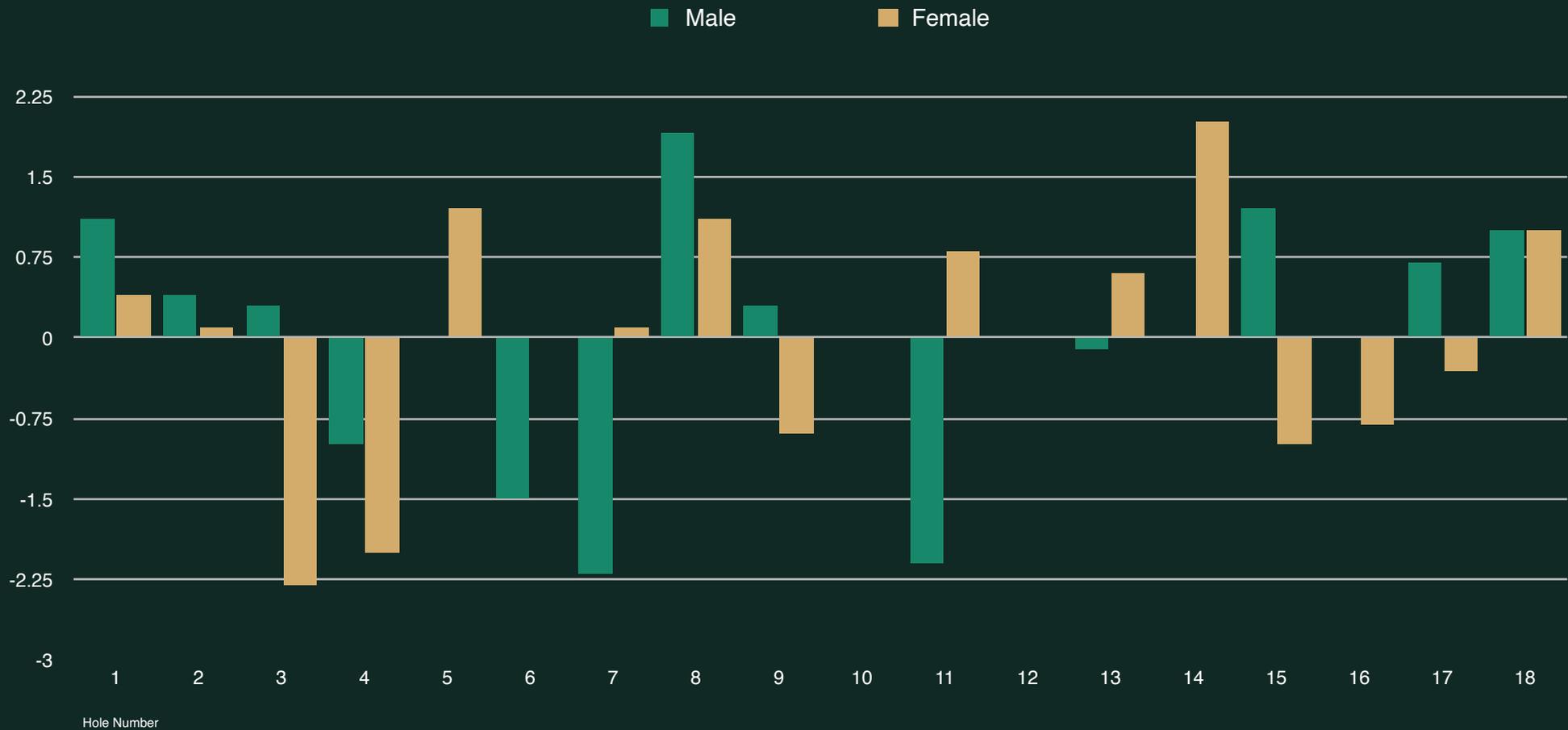
Copse of
Trees

HOLE 3
Par 5

- 503 Yards
- 498 Yards
- 491 Yards
- 478 Yards

Survey Responses- Favourite Holes Survey

The bar chart below shows responses from Survey 1. This survey asked golfers to list their 3 favourite and 3 least favourite holes on the course; a hole was given 3 points for being listed as a players' favourite, 2 for second favourite and 1 for third favourite. The equivalent negative figures were used for holes identified as a players' 3 least favourites. The figures used here are the average number of points allocated per person, per hole. Hole 8 was identified as the favourite for men and hole 14 for women, whilst hole 7 (men) and hole 3 (women) ranked lowest.

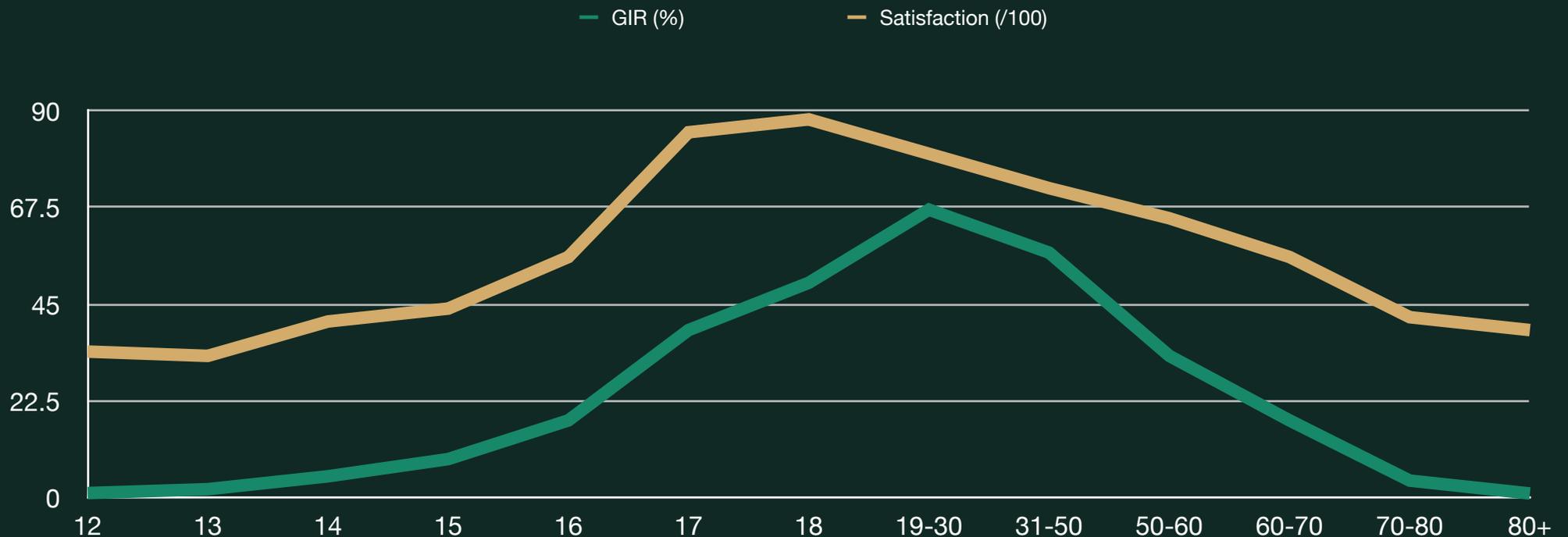


Surveys 1 & 2

Survey 2 probed deeper into opinions on Hole 3, asking players to provide a satisfaction rating out of 100 with explanations for their choices.

Amongst golfers aged 65+, non-elite women and juniors under the age of 15 there was a clear dislike for the hole, generally referencing its length and the lack of interest in playing it. In addition to this, <5 handicap men did express some beliefs that the hole was 'too easy' and/or 'uninteresting'.

The graph below confirms the relationship between the ability for players to reach the green in 3 shots and satisfaction with the current hole.





Courses > Demo > Hole

Details Statistics **Visualisation**



Home



Members



Courses



Course setup Show all setups

Tee Show all tee play

Gender Show all genders

Age From lowest to highest

Handicap From lowest to 8

Ground Show all ground

Weather Show all weathers

Wind speed From lowest to highest

Wind direction From lowest to highest

Reset filters

Shot number All shots

Hide Show all

Show Show all

Map style Satellite view

Shot display 3D mode

Point grouping 0.5 metres

Logout

mapbox

© Mapbox © OpenStreetMap Improve this map © Maxar

<8 handicap players 1st and 2nd shot locations



Courses > Demo > Hole

Details Statistics **Visualisation**



Home



Members



Courses



- Course setup Show all setups ▾
- Tee Show all tee play ▾
- Gender Show female players ▾
- Age From lowest to highest ▾
- Handicap From lowest to highest ▾
- Ground Show all ground ▾
- Weather Show all weathers ▾
- Wind speed From lowest to highest ▾
- Wind direction From lowest to highest ▾
- Reset filters

- Shot number Tertiary shots ▾
- Quaternary shots
- Secondary shots
- Hide Show all ▾
- Show Show all ▾

- Map style Satellite view ▾
- Shot display 3D mode ▾
- Point grouping 1.5 metres ▾

Logout

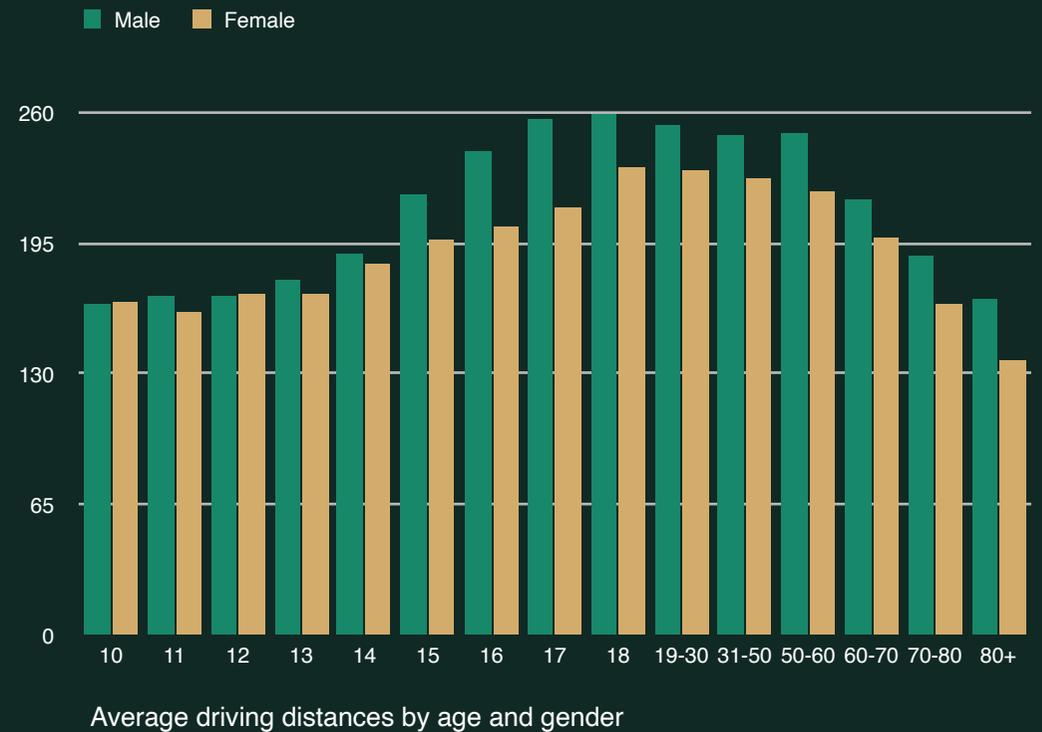
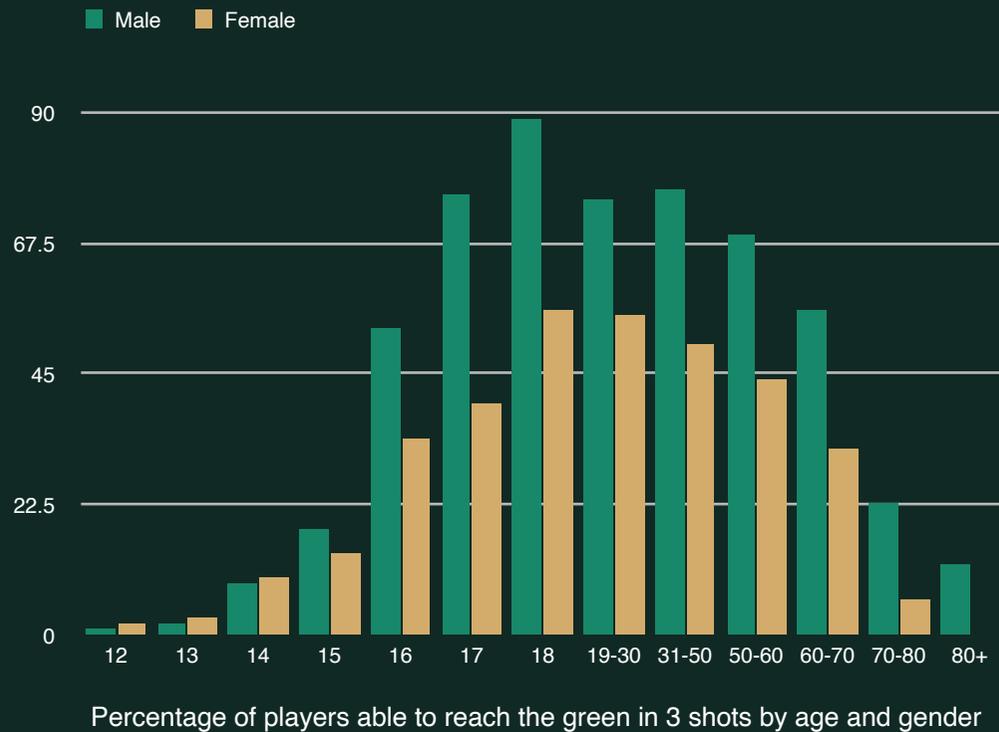


© Mapbox © OpenStreetMap Improve this map © Maxar

1st, 2nd & 3rd shots for golfers aged 65 and above

Teeing Area Analysis

As is common with par fives, there is a significant advantage here for the longer hitters. Even from the back tee, the green is easily reachable in two for longer players but often takes 4 or 5 shots to reach for shorter hitters. There is little opportunity to lengthen the hole, apart from moving the green some 15 yards backwards, but there is ample opportunity to create a new forward tee to allow women, juniors, older golfers and other shorter-hitting players the opportunity to hit the green in regulation. We have compiled relevant driving distance and GIR information below.





Tee shot locations for 19+ handicap golfers



Tee shot locations for 9-18 handicap golfers



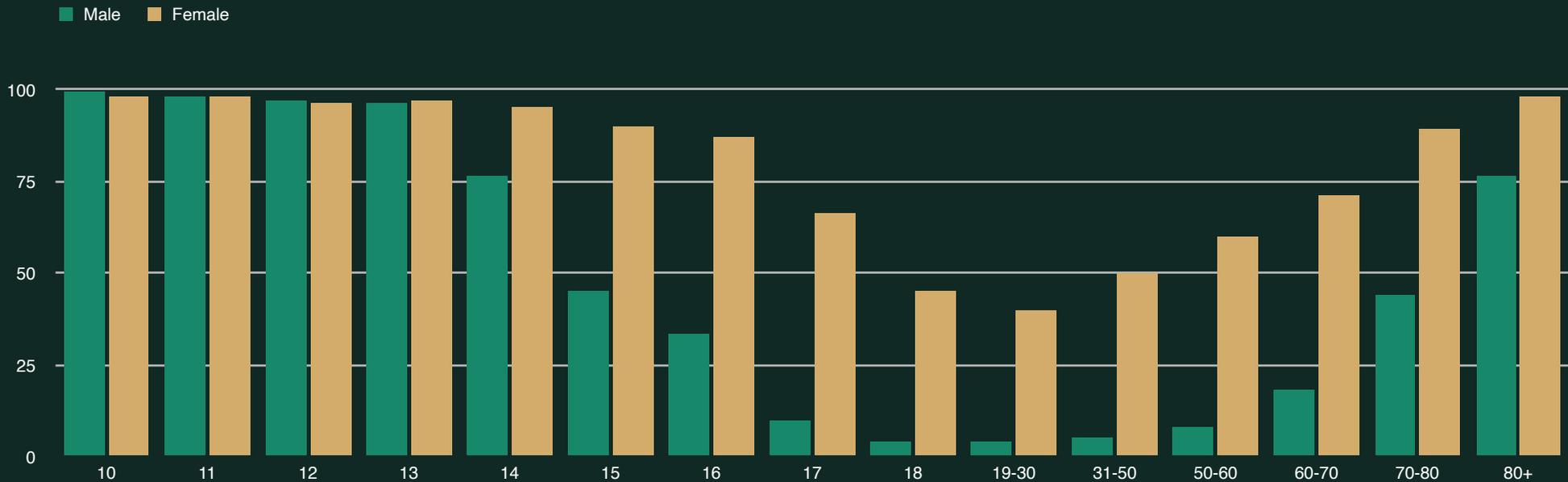
Tee shot locations for <8 handicap golfers

Suggestions for a New Forward Tee

Currently, an estimated 19% of golfers are unable to reach the green in 3 shots. It should be noted that this figure has been calculated by analysing play from the centre of the fairway, excluding players unable to reach the green in regulation by being out of position. Surveys found these golfers to have a low opinion of the hole, citing its length and lack of interest on their 2nd and 3rd shots as the problem.

By creating a new forward tee between 25 and 30 yards closer to the green, the number of golfers unable to reach the green in 3 shots would be expected to drop to approximately 6%. It is proposed that golfers who drive the ball less than 190 yards on average should use this new tee. The graphs below show the percentage of each age and gender category who should use this new tee.

We would expect their enjoyment of the hole to increase as their ability to get closer to the green in 3 shots is increased, also bringing features such as bunker 3 into their line of play, thus adding further interest and strategy.



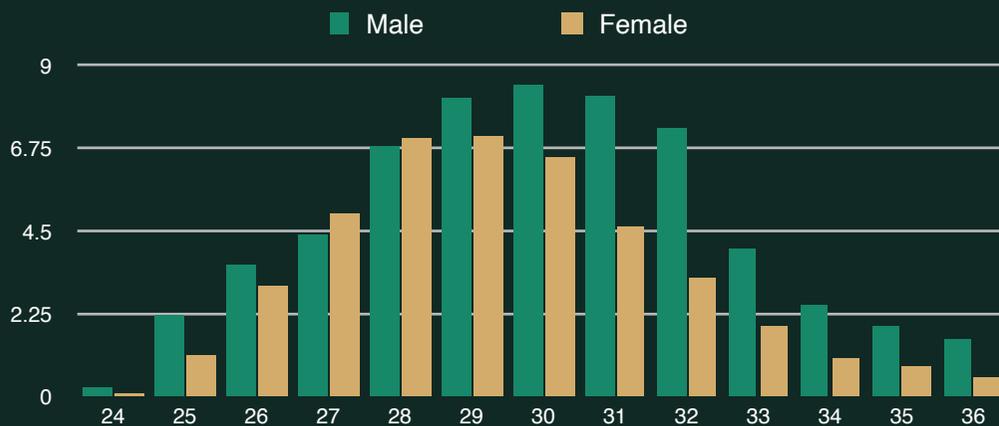
Percentage of golfers who should be using the new teeing area by age and gender

Bunker 1

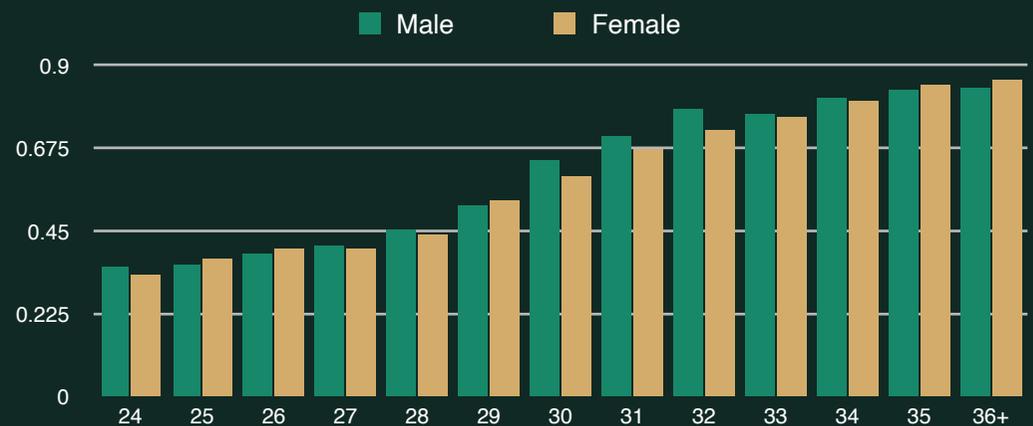
Bunker 1 is in play for exclusively 24+ handicap players and attracts 5.8% of these golfers. It should also be noted that the average strokes gained from visiting the bunker is low at just -0.6 shots, so the hazard is sufficiently shallow for golfers of this category. Survey results show that the hazard is a welcome challenge to the majority of higher handicap players, considered a reasonable punishment for a wayward shot. There are various options which should be considered by the committee and architect:

- A) leave the bunker as it is currently- the fact it is in play for higher handicap players but attracts relatively few shots adds strategy for higher handicap golfers without being particularly punishing*;
- B) mow the fairway toward the bunker edge, encouraging an increased number of shots hit into the hazard, thus increasing its strategic impact;
- C) remove the bunker, thus saving money on maintenance whilst reducing the difficulty of the hole for players with handicaps 24 and above. Given the survey results amongst the relevant players (complaining about the lack of interest on shots 2 and 3, but satisfaction with the tee shot) we would not advise removing the bunker without providing an alternative challenge for the tee shot on this hole.

*It should be noted that whilst currently in play for higher handicap players, if the club were to build a new forward tee as proposed in this report, the effectiveness of the bunker would be further reduced. As such, we would only recommend keeping the bunker if a new tee is not built, or until the new tee is opened. As is discussed in the summary, the use of a new tee would allow the strategy of the tee shot to change from having to negotiate past bunker 1, to hitting alongside bunker 2. The satisfactory balance of strategy and challenge for this standard of golfer would be maintained whilst the first bunker could be filled in.



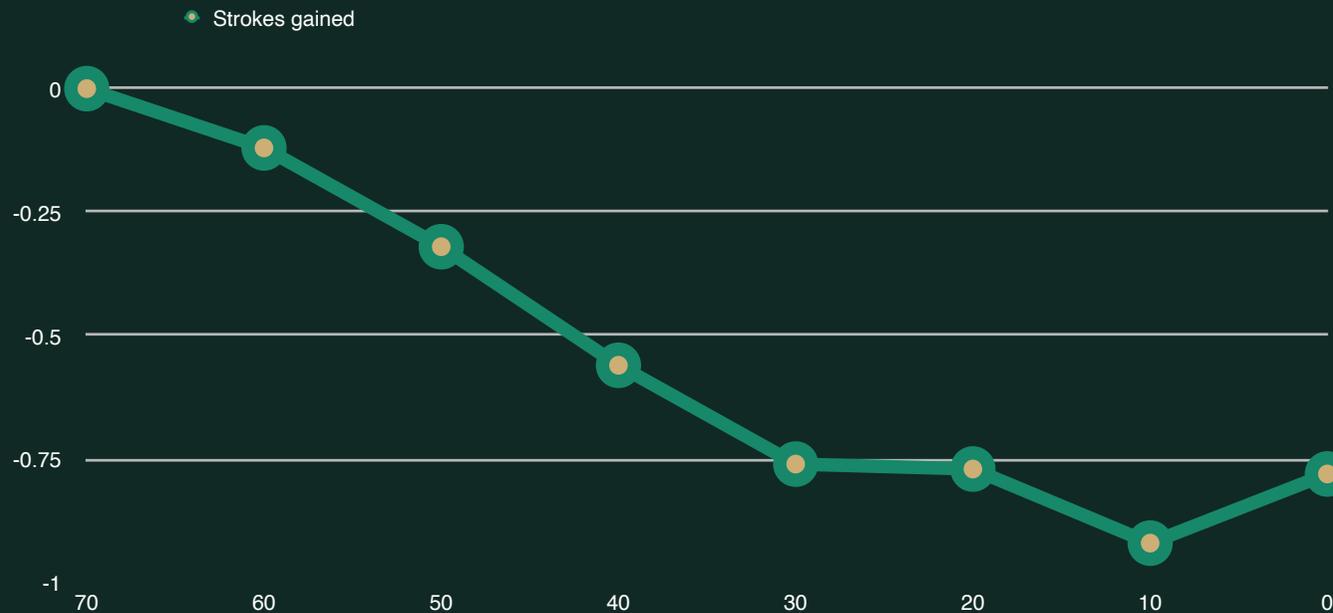
Percentage of players from each handicap category visiting bunker 1, divided by gender



Strokes gained impact by handicap category and gender

Copse of Trees in the Right Rough

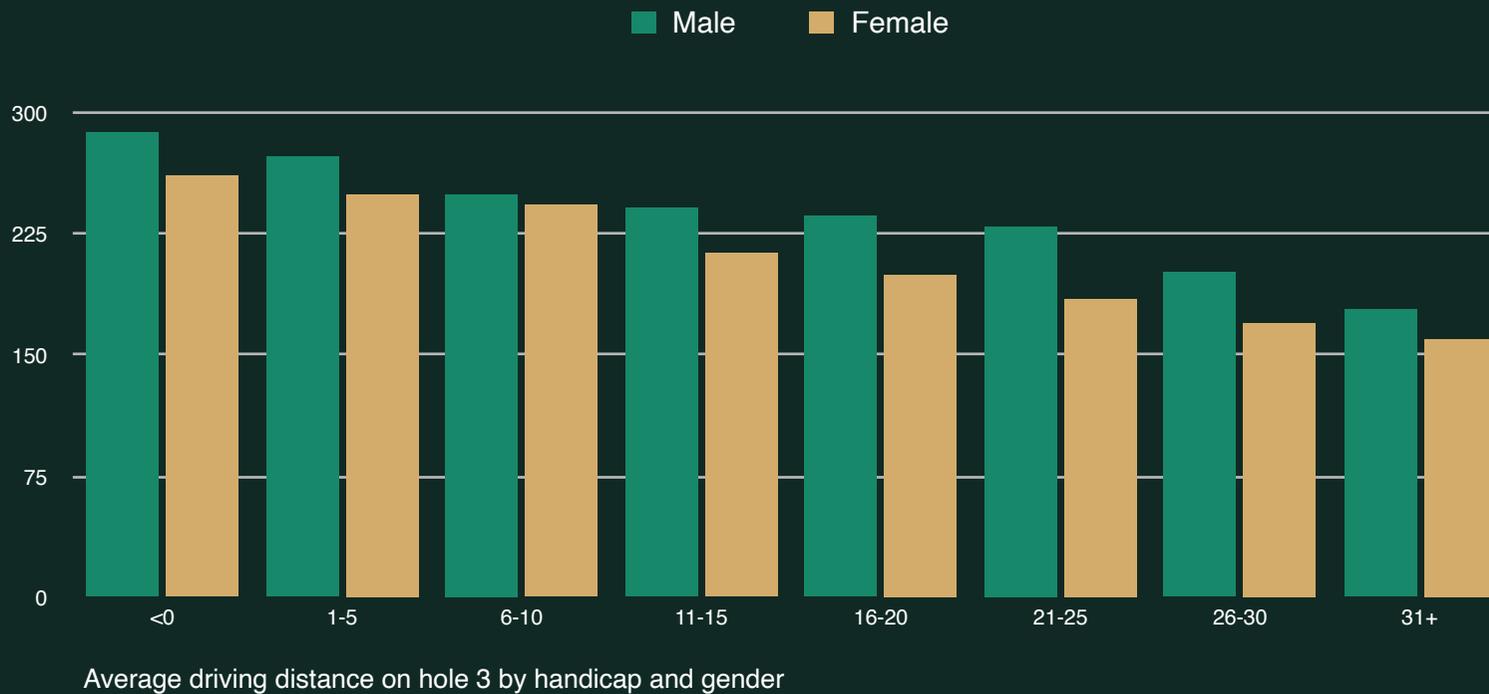
The following information details the impact of the trees highlighted on the hole review summary. In short, they block play from the right rough for predominantly 18+ handicap players as better golfers can drive beyond the trees, into a wider and more forgiving area. From in or behind these trees, the average shot travels only 89 yards, leaving the golfer a long, or even impossible, shot to the green for their third. It is suggested that, in an attempt to improve the playability of the hole, add value to strategy and support recovery play, these trees be removed. The removal of these trees would be extremely low cost but would transform the hole for higher handicap golfers. The rough on the right side will still act as punishment for a wayward drive but allows for well executed recovery shots to get the golfer back into a favourable position for their third shot. The consulting architect and greenkeeping team have also identified these trees as having a negative impact on the grass health in the surrounding area, adding another reason for their removal.



Strokes gained statistics by distance from the trees (in line of play)

Bunker 2

The original intention of bunker 2 was to challenge single figure golfers and elite players, however it currently attracts play from predominantly 9-18 handicap golfers. This is not entirely problematic, as it provides strategic interest for these golfers but, in turn, longer hitting, lower handicap players have little to worry about from the tee. As a result, it is proposed that bunker 2 is not moved, though the fairway should be mown closer to the bunker edge to increase its strategic purpose. In addition to this small change, the club should look to introduce a new bunker further down the left side of the fairway, designed to challenge longer hitters, mostly with handicaps below 8. Given current driving averages, it is proposed that the new bunker be placed 273 yards from the medal tees. The data leading to this suggestion has been included below.



Approach Area

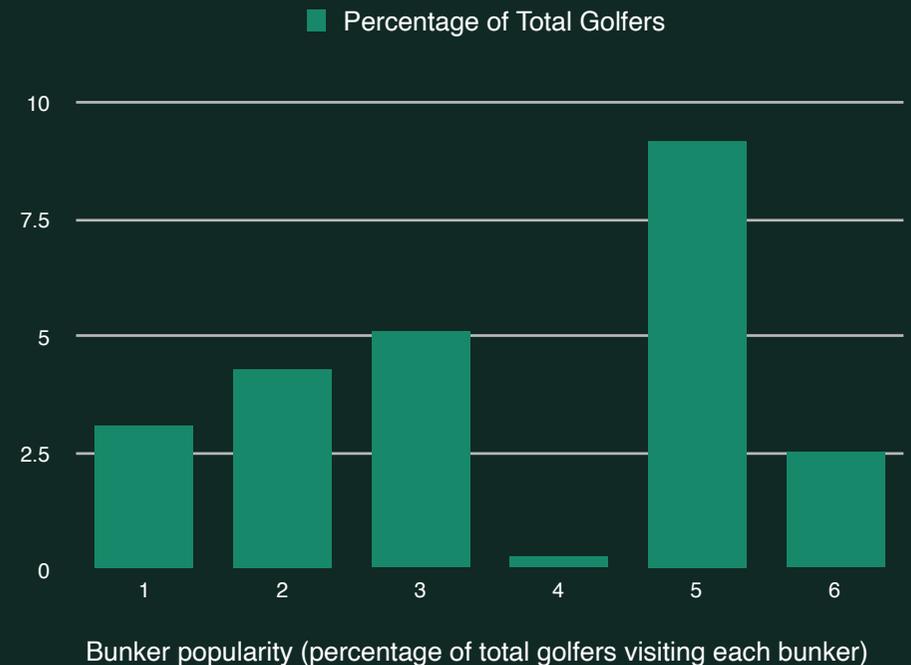
Changes to the area leading up to the green should be carefully considered by the club. Each specific area has been broken down with relevant graphics below.

Currently, the lay-up bunker (bunker 3) is being devalued by long grass preventing balls running into the hazard, and the lack of strategic value in being on the left side of the fairway, or hitting away from the intersecting rough beyond the bunker. The committee may consider re-shaping this bunker slightly to cut into the fairway at more of an angle (as discussed by the consulting architect), but there is no evidence to suggest the positioning of the bunker itself is poor. We would expect to see an increase in play from bunker 3, particularly amongst 9-24 handicap players, if the other factors discussed in this section were fulfilled.

One of the major factors devaluing the 3rd bunker is the lack of punishment for shots hit into the intersecting strip of rough. There are various options here which shall be discussed in more depth by the committee, staff and consultants. In short, it is proposed that the area be converted into a more daunting feature to force the player laying up to think carefully about whether to leave their ball short of the break in the fairway, or to attempt to carry beyond it. This may be achieved by growth of the rough, expansion of the gap between the fairways, digging of a ditch or depression, creation of an additional bunker or through any other method deemed in keeping with the architecture of the golf course, as decided by the club and architect.

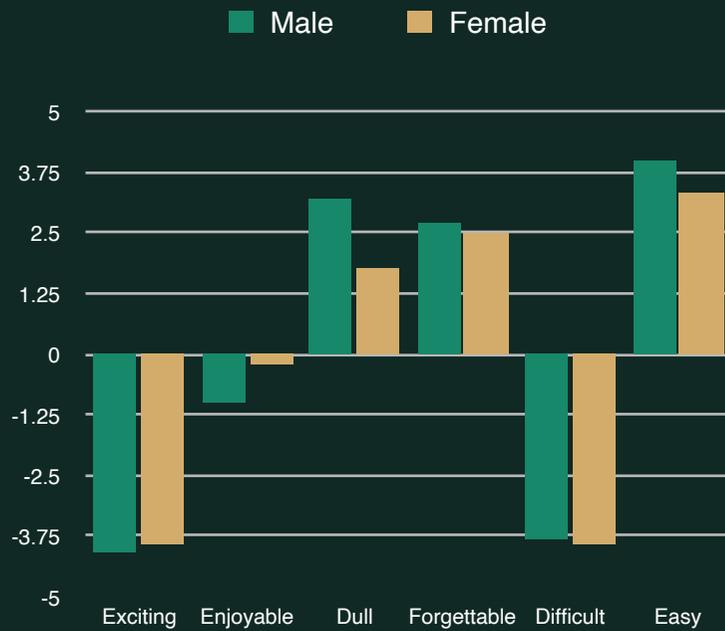
It should be noted that, even in its current form, the intersecting rough would present a marginally higher challenge if the club commits to the reshaping of the green and surrounds, which is presented later in the report.

The 4th bunker currently offers little strategic value to the hole and catches predominantly higher handicap players. Furthermore, should the green and surrounds be reshaped, approaching from the right rough will present a sufficient challenge for players and therefore the committee may consider removal of this bunker, which would save approximately £800pa. Survey results specifically referencing bunker 4 show little attachment of the membership to the bunker, with only 4% of respondents believing the bunker “is an integral part of the hole”, compared with 48% agreeing that “it plays little or no strategic role”.

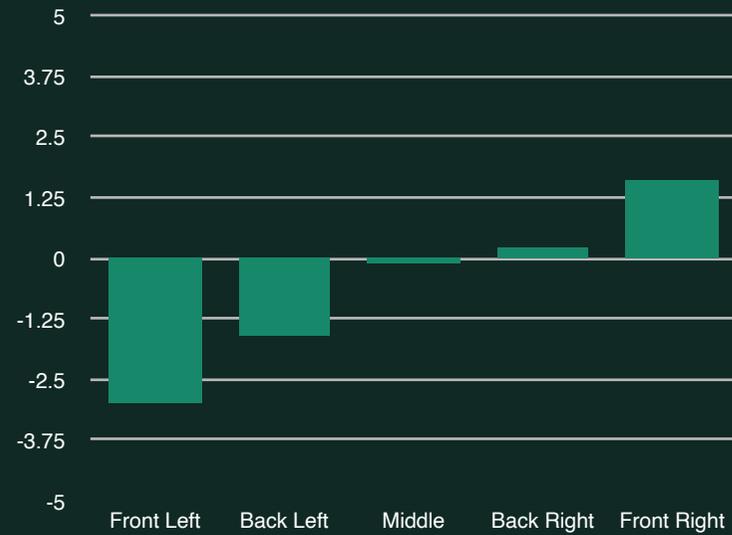


Green Complex Survey Results

The 3rd green complex ranked poorly with golfers for interest and variety which aligns with the analysis of player performance, showing a lack of variety across different pin positions in terms of strategy and scoring for both putting and short game shots. Survey results are explored in the graphics below.



“To what extent do you strongly agree (+5) or strongly disagree (-5) with the following terms in relation to the green on hole 3?”



Player opinions on hole locations from highly engaging (+5) to uninteresting (-5)

Green Complex Survey Results



“To what extent do you strongly agree (+5) or strongly disagree (-5) with the following terms in relation to chipping around the green on hole 3?”



“To what extent do you strongly agree (+5) or strongly disagree (-5) with the following terms in relation putting on green on hole 3?”

Green Complex

Currently, the primary reason for the lack of strategic value to this hole is a result of the structure of the green and its surrounds. Strokes gained statistics show a mere 0.1 shot advantage when approaching the hole from the left of the fairway to the right, diminishing the necessity for golfers to take on the fairway bunkers from the tee or when laying up. In short, the club and consulting architect might consider the renovation or relocation of the green complex to ensure shots from the left side of the hole receive a noticeable advantage. This may be done by deepening the front bunker, thus creating a more significant deterrent to play from the right as well as an added consideration for those hoping to reach the green in two shots, and reshaping the green contours to encourage play from the left and necessitate more exacting shots from the right. Naturally, consideration of angles will also increase as the average approach shot becomes longer - there is sufficient space to relocate the green backwards and to the right, increasing the angle of the green and the length of approach shots, and reducing the number of shots hit onto or toward the 4th tee. Given the continued advancement of average shot distances and growing concerns for safety on the 4th tee, the relocation of the green offers the best solution to the issues of the hole. However, should funding prevent this, a reshaping of the front bunker and putting surface would certainly be sufficient for re-introducing the intended strategy of the hole.

Plans for both options shall be discussed with the consulting architect; detailed plans for each option, including costings and construction considerations, will be drawn up and submitted to the committee in due course.

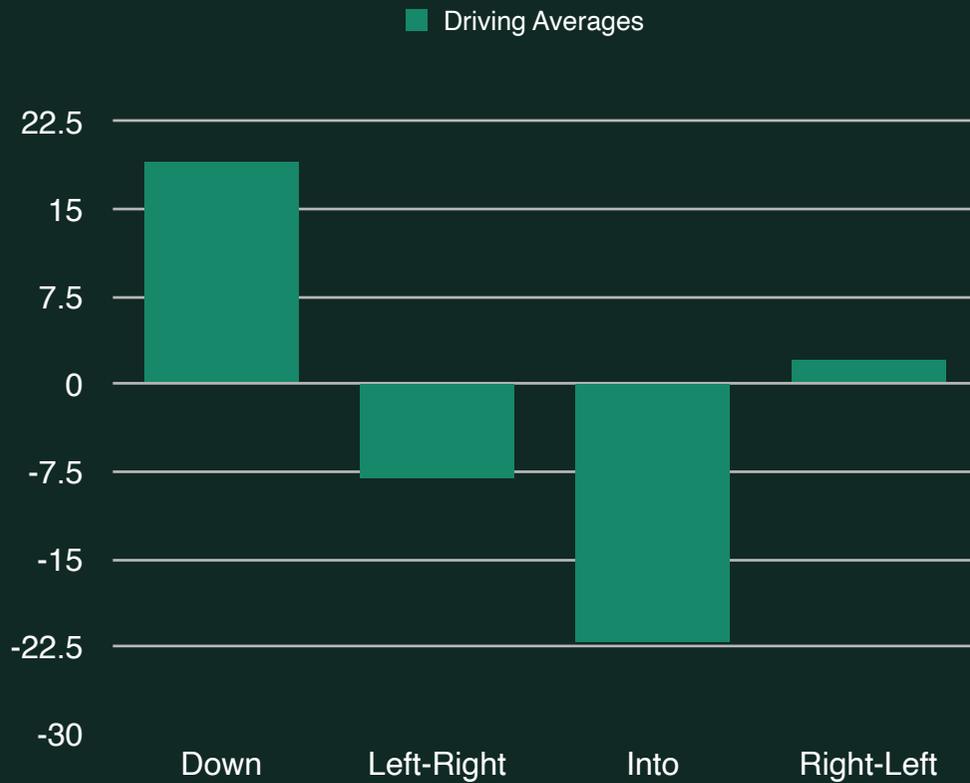
Safety Report

The primary safety concern for hole 3 is stray approach shots heading toward the 4th tee. Out of 1,348 recorded rounds, 12 shots were registered on or beyond (from the line of play) the 4th tee boxes (shown in yellow), with a further 21 within 10 yards of the tee box (shown in blue). In its current form, bunker 5 plays an important role in stopping balls bouncing onto the 4th tees, catching 34 shots (shown in green) from the sample group (2.5%). Further survey results also show 55% of golfers will wait for the 4th tee to clear before hitting, with 12% agreeing that it is 'dangerous'. Furthermore, 71% of members identified the 3rd hole as being problematic with regard to pace of play; we would expect players waiting for the 4th tee to clear to play a role in the frequency of bottlenecks on this hole.

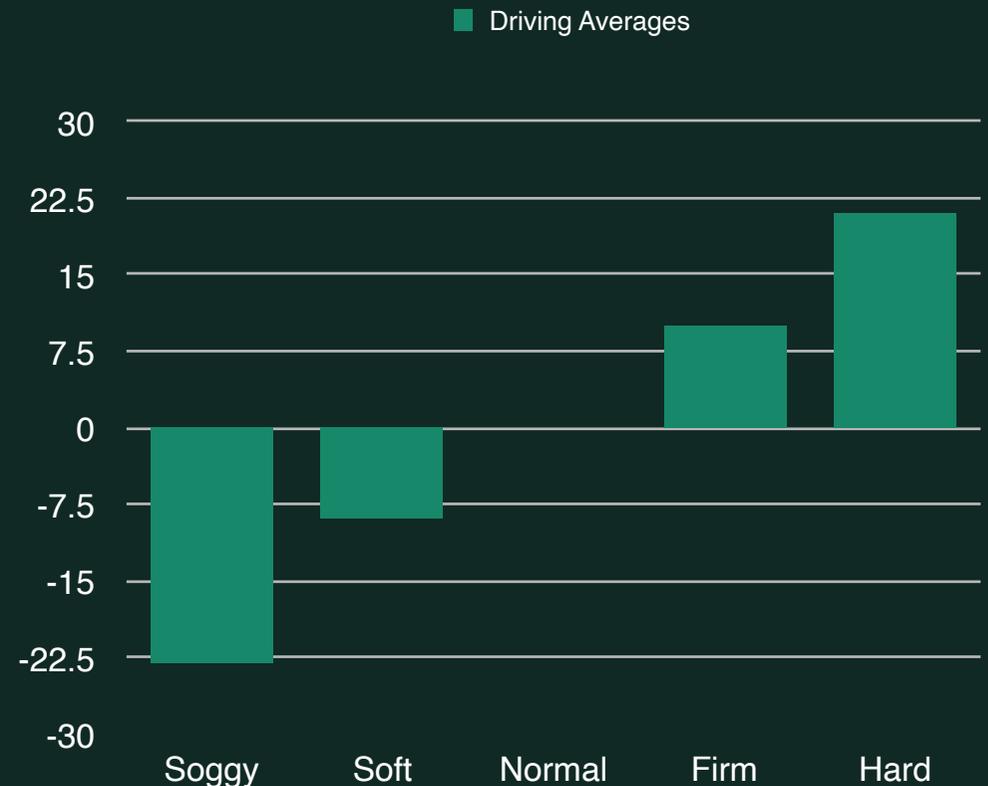


Impact on Weather and Ground Conditions on Player Performance and Strategy

Changes in ground conditions and wind direction have a direct impact on the way golfers play the hole, and their subsequent exposure to its architectural intent. The impact of ground and wind conditions have been outlined below so that hole set-up decisions can be made with forecast weather taken into account.



Driving average variation (yards) in various wind conditions



Driving average variation (yards) in various ground conditions



Driving dispersion for soggy ground conditions



Driving dispersion for soft ground conditions



Driving dispersion for normal ground conditions



Driving dispersion for firm ground conditions



Driving dispersion for hard ground conditions



Report Findings Summary

The report found that the intended hole strategy was being devalued in a number of ways. Firstly, sub-8 handicap golfers generally hit comfortably beyond the second fairway bunker, and strokes gained statistics showed little evidence for the necessity to be positioned on the left side of the fairway. Higher handicap players visited the left fairway bunkers more frequently, but due to rough growth around the bunkers and a lack of value to hitting the left side of the fairway, they still saw less play than intended.

In addition to this, 18+ handicap golfers were generally hitting into the most treacherous section of fairway (between the first bunker and the trees to the right). They are also seldom able to hit the green in two shots, sometimes having to lay up 150-200 yards from the green due to 2nd shots being played from behind the trees to the right of the fairway.

Bunker 3 also saw very little play, again resulting from rough growth, a lack of value in laying up to on the left side and a lack of punishment for shots hit into the intersecting rough beyond the bunker. Most players tend to hit past this bunker, hitting into the rough between the fairways. Strokes gained calculations once again show little difference between approaches from the left or right, or even from the fairway or rough.

Bunker 4 sees very little play and offers no visible strategic merit, also scoring poorly on player opinion surveys.

The left greenside bunker, built to prevent shots going onto the 4th tee, does see play and clearly works well as a safety precaution. The right greenside bunker sees the most play of all the bunkers but offers a relatively straightforward escape. Around the green, there is little difference in strokes gained chipping from any angle to a central pin location, suggesting a fairly equal challenge from any area around the green. The green and surrounds ranked poor for 'interest', particularly amongst <10 handicap players.



Report Findings Summary

A front-right pin location leads to the highest average score, and also presents the most difficult up and down (from the front right bunker). Furthermore, this adds the most value to the intended strategy of the hole, though the strokes gained percentages for approach shots from the left side are still only fractionally higher than the right.

The green itself provides little variance for average putts across each pin location, but the back-right pin location sees the longest average putts. The hole ranks 4th furthest for average proximity to the hole, but 14th hardest for calculated putting difficulty.

Various developmental options were presented to the committee; they have been discussed in this report and summarised on the following page with reference to priority and price. These have been formed in consultation with the architect. Further information can be provided upon request.

All data will be stored within our system for the foreseeable future and can be accessed and re-analysed at a later date.

Remove bunker 4 as it has little strategic value and expand strip of rough to encourage more thought for players laying up.
OR: Move and/or widen bunker to extend across the fairway, adding strategy to the lay-up shot.
In any case, enhance the strategy of the lay-up by addressing the break in the fairway (several options are available)

Priority: medium-high

Cost (a): low, with annual savings or approximately £1000

Cost (b): medium (could be done in-house, or through a contractor)

Widen the fairway up to the bunker edge, increasing its strategic value by allowing more shots to roll into the bunker and by encouraging players to flirt with it more closely when looking to lay up in the left side of the fairway.

Priority: medium-high Cost: low

Build a new bunker at 273 yards from the black tee to challenge elite and single figure handicap players. Ensure the fairway is mowed close to the bunker edge to allow balls to roll into the hazard.

Priority: high Cost: mid-low (in-house)

For all fairway bunkers: widen the fairway to encourage shots to roll into each bunker. This will add value to the hazards and increase their strategic impact.

Priority: medium-high Cost: low

Consider adding a more forward tee as higher handicap players, women and children are often unable to hit the green in 3 shots & dislike the length of the hole.

Priority: mid-high

Cost: mid-high

Move the green and front-right bunker back approximately 15 yards, and to the right. This would lengthen the hole, add value to approach play from the left side of the fairway and improve the safety margins for shots landing on the 4th tee. Ensure the green is shaped more severely than in its current form. Consider deepening the bunker to increase the severity of punishment for those coming up short of the green.

OR: If funds do not permit these changes, the deepening of the current bunker should be considered, and the front half of the green re-shaped if possible.

Priority (a): medium-high;

(b): high

Cost. (a): high;

(b): medium-high

Remove copse of trees as they currently punish exclusively high handicap golfers and impact grass growth in the surrounding area. This would allow 18+ handicap players the opportunity to reach the green in 3 shots from the right rough with a well executed recovery shot.

Priority: medium

Cost: negligible

Review bunker 1 if building a new forward tee- it currently attracts exclusively 24+ handicap players, and costs approximately £800pa in maintenance. The bunker plays an important strategic role for shorter players from the current tee, but its role would be diminished if the new forward tee were added. In that instance, bunker 1 could be removed.

Priority: medium

Cost: low, with annual savings of approx £800



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