

# THE ULTIMATE GOLFER'S GUIDE

FREE E-BOOK ON LOWERING YOUR SCORES

FAIRWAYS IN REG

SEASON  
38%

AVERAGE 7 IRON DISTANCE

144 YDS

USAGE 28%

STRATEGY TIPS AND DATA  
INSIGHTS ON YOUR GAME

*Shot Scope*

# INTRODUCTION

## CHAPTER 1 - TEE SHOTS

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**The areas discussed in this e-book hope to provide you with a new approach to the fundamentals of golf and golf improvement. Golf is an incredibly difficult sport to play, therefore these tips and insights into the game aim to make golf less stressful and more enjoyable, for every level of golfer.**

The e-book comprises of 4 chapters; Tee Shots, Approaches, Short Game and Putting. Use the information provided in this e-book to help you learn about areas of improvement and hopefully you will think differently next time you are on a golf course.

To make this information more relevant to the individual golfer, we have based the majority of statistics in this e-book on an average 8, 14 and 20 handicap golfer. Regardless of your handicap these are nuggets of information that WILL help you improve your game and lower your scores.

The information and statistics used in this book have been collected from the Shot Scope user database. Shot Scope produces the Shot Scope V2 - a GPS watch with performance tracking capabilities, proven to change the way you approach the game.

[Find out more about Shot Scope V2 here >](#)

Shot Scope V2 users reduce their handicaps by an average of 2.7 shots – improvements made due to learning the ‘ins and outs’ of their game from statistics discussed in this e-book.





## DRIVER VERSUS 3 WOOD

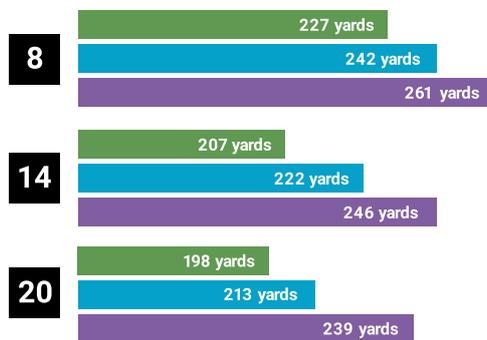
The common myth is that golfers think they hit the ball further than they do. A golfer will normally assume their longest distance is close to their average distance, it is not.

We recommend that all **Shot Scope** users refer to the **P-AVG** (Performance Average) distance, as this removes outliers both long and short to give an accurate club distance for what a golfer would describe as a 'good' shot.

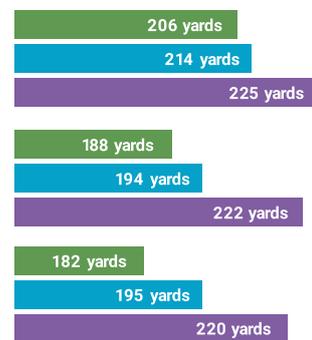
It is noticeable that there is a distance drop off between handicaps with drivers, yet not as much with 3 woods. A theory would be, increased loft from a 3 wood will help most golfers reach their distance potential. What does stand out is the near 30 yards loss in distance across all handicaps when hitting 3 wood instead of driver.

### AVERAGE DISTANCES

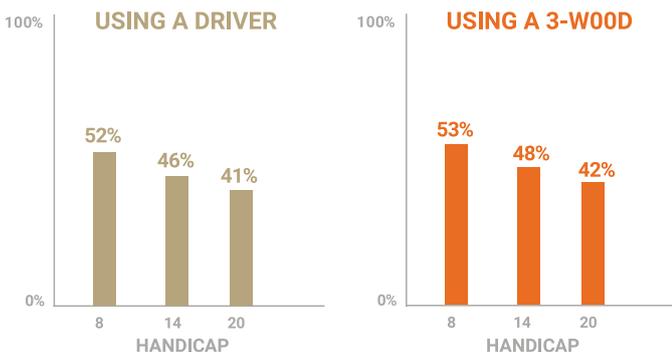
#### DRIVER



#### 3-WOOD



### FAIRWAYS IN REGULATION



Another myth in golf is that the shorter the club you hit, the better chance you have of finding the fairway. **Shot Scope** data supported this belief but not at the level you might expect.

Interestingly though, across all handicaps 3 woods are only a fraction (1-2%) more accurate than drivers off the tee. Based on this information, we recommend that driver should be hit as often as possible, as the sacrifice of nearly 30 yards is not worth the minimal gain in accuracy off the tee. Being closer to the green with your tee shot leaves you a shorter approach shot, which **Shot Scope** shows us, allows for closer approach proximity.



## HOW AN INCREASE OF 30 YARDS WOULD HELP YOU IMPROVE...

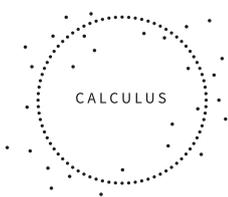
This is an example taking a 14 handicap performance average (versus if they hit their longest drive on each hole) you can see there would be a difference of 24 yards (when they hit the fairway).

Length of hole	Approach distance after P-Avg tee shot	Average proximity to hole	Approach distance after longest tee shot	Average proximity to hole
450	228 YARDS	157 FT	204 YARDS	121 FT
425	203 YARDS	124 FT	179 YARDS	92 FT
400	178 YARDS	98 FT	154 YARDS	74 FT
375	153 YARDS	73 FT	129 YARDS	51 FT
330	108 YARDS	37 FT	84 YARDS	29 FT

Being 24 yards closer to the green increases the number of greens hit (green success or GIR %) and also reduces your average proximity to the hole. This type of gain makes a significant scoring difference.

This theory can be applied to 3 wood versus driver distances off the tee – driver goes further and of course leaves a shorter approach, resulting in a closer 2nd shot. Whereas hitting 3 wood off the tee would leave a longer shot in, and an approach ending up further away from the pin than if driver had been hit.

**TOP TIP: WE RECOMMEND HITTING YOUR DRIVER AS OFTEN AS POSSIBLE ALTHOUGH CHECK YOUR INDIVIDUAL PERFORMANCE DIFFERENCES BETWEEN DRIVER AND 3 WOOD.**



Our partners at **CALCULUS** have created a playlist of videos outlining how you can achieve this. [Watch the videos here.](#)



# THE COST OF INACCURACY OFF THE TEE

Shot Scope data shows us just exactly how many shots hitting in to the trees, rough and bunker will cost an average golfer.

The worst place for a typical amateur golfer to hit their tee shot is into a fairway bunker. Hitting here will cost an average of 1.4 shots per round. If a golfer was able to reduce the number of fairway bunkers they went in, they would give themselves the chance to begin scoring lower and finally get their handicap cut.

Interestingly, light rough or semi rough will only cost on average the same as hitting a shorter club off the tee. This tells us that a golfer should be pulling out driver more often and if they hit the fairway great, if they are in the semi rough, they are no worse off than if they were to hit a 3 wood down the fairway for position.

To conclude, we suggest from looking at the average distances off the tee by handicap category, you will probably realise that not everyone will hit it as far as they claim they do. Overall, for an average golfer on an average golf hole, there is no statistical benefit to hitting 3 wood instead of driver off the tee. There is only a minimal gain in accuracy, and the distance sacrifice will cost the golfer 0.3 shots per hole. Arguably, a bad shot which is uncontrollable, can end up in the trees but a good shot that it only a little inaccurate can end up in bunkers. Ultimately, you do not need to hit a good shot to avoid all hazards, good shots can end up in bad places as well, but this is what we need to try and avoid.

## DRIVER ACCURACY

Understanding where a you lose shots is key to improving your scores. And for the handicap golfer fairway bunkers can ruin scores, and should be avoided at all costs!





# ANALYSING DRIVING LEFT, RIGHT OR TWO WAY MISS

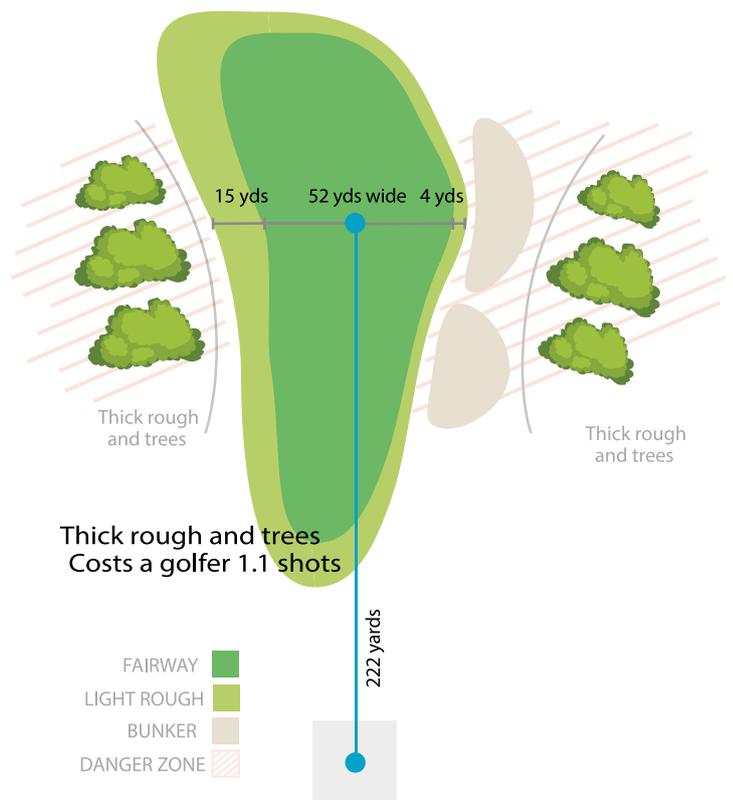
One of the biggest findings here is what **Shot Scope** term an 'overvaluation' of hitting the fairway.

For example, on a hole with sand or water down the right, aiming towards light rough up the left side would typically yield a lower score than aiming up the middle.

To demonstrate **Shot Scope's** findings on this, we have mocked up a realistic hole with bunkering down one side. Understanding the danger allows you to understand the correct line you should hit your tee shot on. This example has been pulled together using an average of golfers between 8 and 20 handicaps.

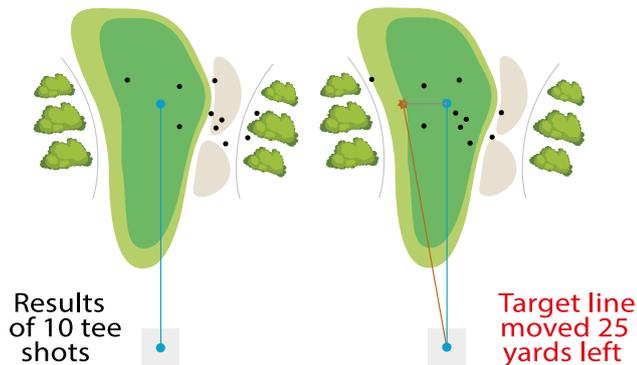
As we will show in all three examples, the handicap golfer can make significant scoring gains by just altering their target line to suit their tee shot dispersion.

## AVERAGE TEE SHOT



**TOP TIP: TRY NOT TO OVER VALUE THE FAIRWAY WHEN LIGHT ROUGH WILL PROVIDE AN APPROACH TO THE GREEN.**

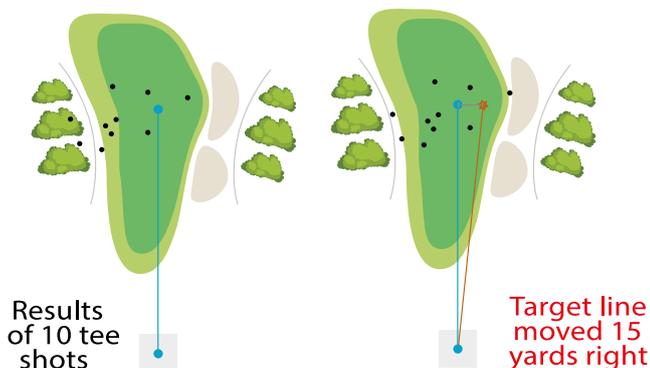
## WHAT THIS MEANS... FOR FADERS



**Shot Scope** found that golfers who predominantly miss their tee shots to the right will hit 7/10 drives into trouble – trees, fairway bunkers or deeper rough. This happens due to an overvaluation of the fairway: the player has aimed down the middle of the fairway and has not considered that the left rough should be thought of as an acceptable place to play from.

But if that player moves their target point 25 yards further left, into that playable light rough, it results in a dispersion with only one ball in the fairway bunker, and none in the trees. The number of shots now lost is now 2. It means that just by moving your target point, a golfer can save 5 shots from 10 tee shots.

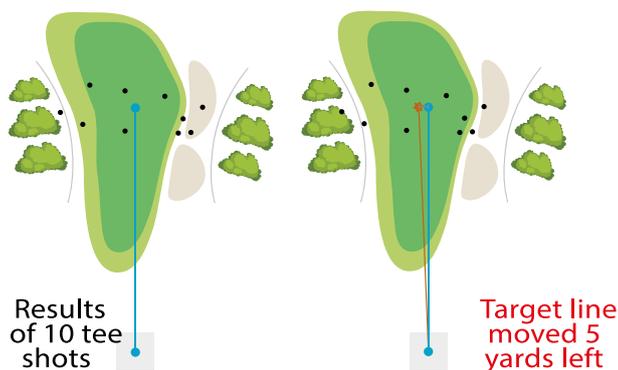
## WHAT THIS MEANS... FOR DRAWERS



The golfer who normally misses tee shots left is not punished as much as the fader/slicer due to the lack of bunkering down the left side. However gains can still be made by understanding which areas will allow an approach shot to the green, rather than a recovery shot back into play.

Aiming straight down the middle of the fairway results in 3.4 shots lost left. But if this golfer adjusts their target line by 15 yards to the right, it frees up more space for the left miss. This results in 0.9 shots lost – and a gain of 2.5 shots.

## WHAT THIS MEANS FOR... BOTH WAYS



The golfer who can miss tee shots both ways can still find value from changing their target line, and should be attempting to pick the middle point between hazards.

Aiming straight down the middle loses the golfer 4.8 shots (mainly right, where the majority of the trouble is). By adjusting their target line by 5 yards to the left, they are losing only 3.4 shots – so gaining 1.4 shots.

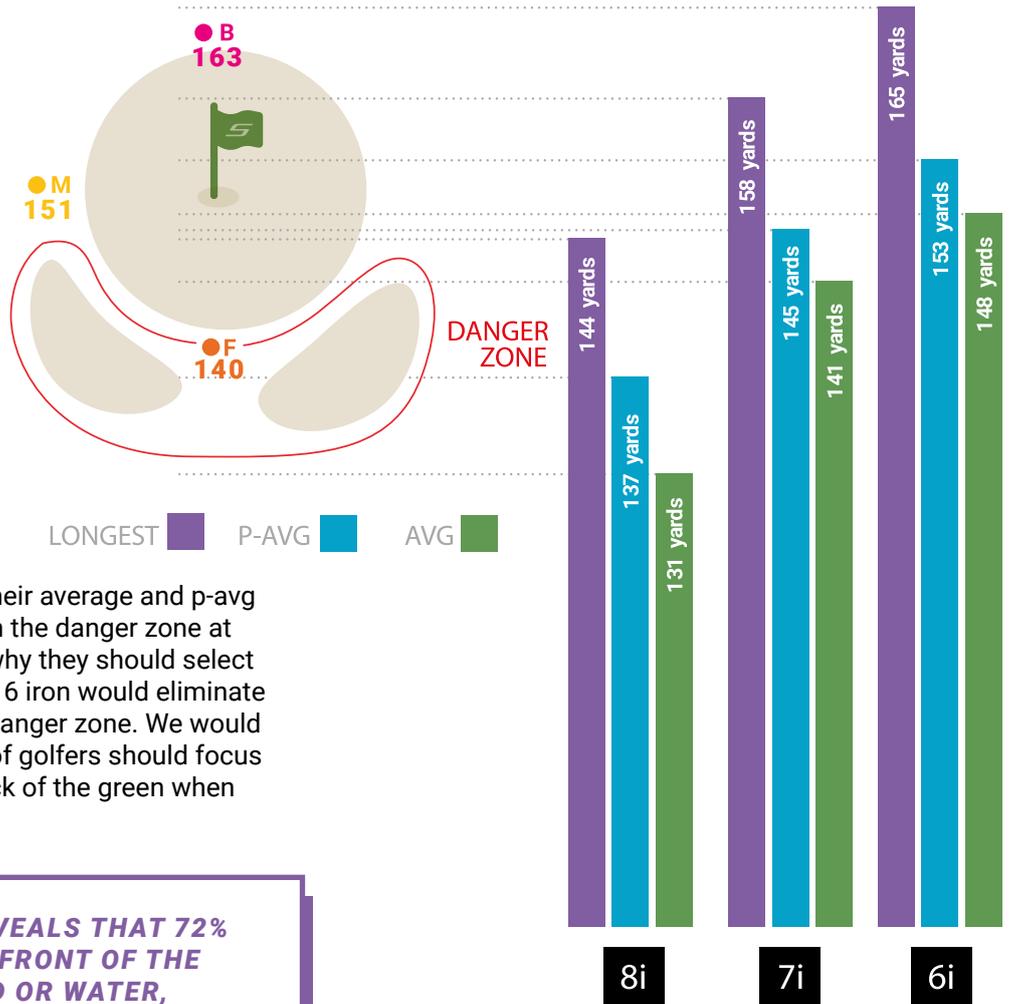




# 150 YARD FAIRWAY SHOT

Firstly, understanding the distance each of your clubs go will help you make better decisions with regards to approach play.

Fortunately, **Shot Scope** users have access to this type of information on their game and find that they don't hit the ball as far as they first thought. But once they know their actual club distance (see image), they can use the information to make better decisions and ultimately shoot better scores. As mentioned earlier, we recommend that **Shot Scope** users always refer to their p-avg statistic.



In this instance, if this golfer were to hit a 7 iron, i.e. to the middle of the green yardage, their average and p-avg show that they would end up in the danger zone at the front of the green. This is why they should select a longer club than they think, a 6 iron would eliminate the chances of landing in the danger zone. We would recommend that the majority of golfers should focus on the GPS distance to the back of the green when deciding which club to select.

**SHOT SCOPE DATA REVEALS THAT 72% OF DANGER IS AT THE FRONT OF THE GREEN, USUALLY SAND OR WATER, WHEREAS THERE'S ONLY 28% BEHIND THE GREEN. THEREFORE MISSING LONG IS SIGNIFICANTLY LESS OF A PROBLEM THAN MISSING SHORT.**



# 100 YARDS AND IN

**Shot Scope** data reveals that hitting it close within 100 yards is where scores are formed. Performing these shots well, allows you to enhance your game and reduce your score.

**Shot Scope** allows us to break down the effect that different lies have on green hit %, and proximity to the hole. It highlights the importance of finding the fairway on short par 4s and also with the second shot on par 5s.

You can see that hitting these shots from the fairway gives you up to 25% more chance of hitting the green. Not only that, but the end result will be much closer than if the shot were to be played from the rough or bunker.

Improving your wedge approach play is easier to understand if you have access to statistics based on your shots. **Shot Scope V2** provides this level of shot tracking and analysis. **Shot Scope** records every shot hit and plots all short game and approach shots on an interactive 'green' for further analysis.

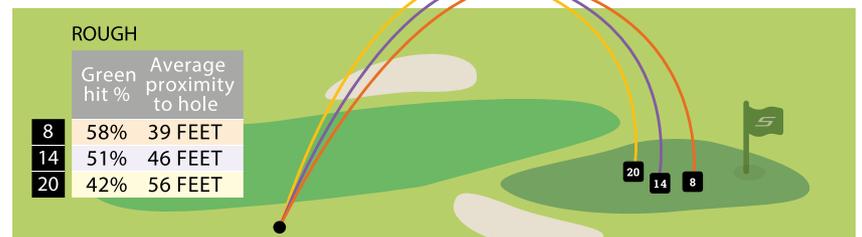
**Shot Scope** shows us that an average golfer typically misses short right with wedge shots or wedge approach shots. This is highlighted in the image below, which showcases an example of a 14 handicapper's shot dispersion with their wedges, versus what it could be if they were to adjust their aimpoint.

## APPROACHES WITHIN 100 YARDS

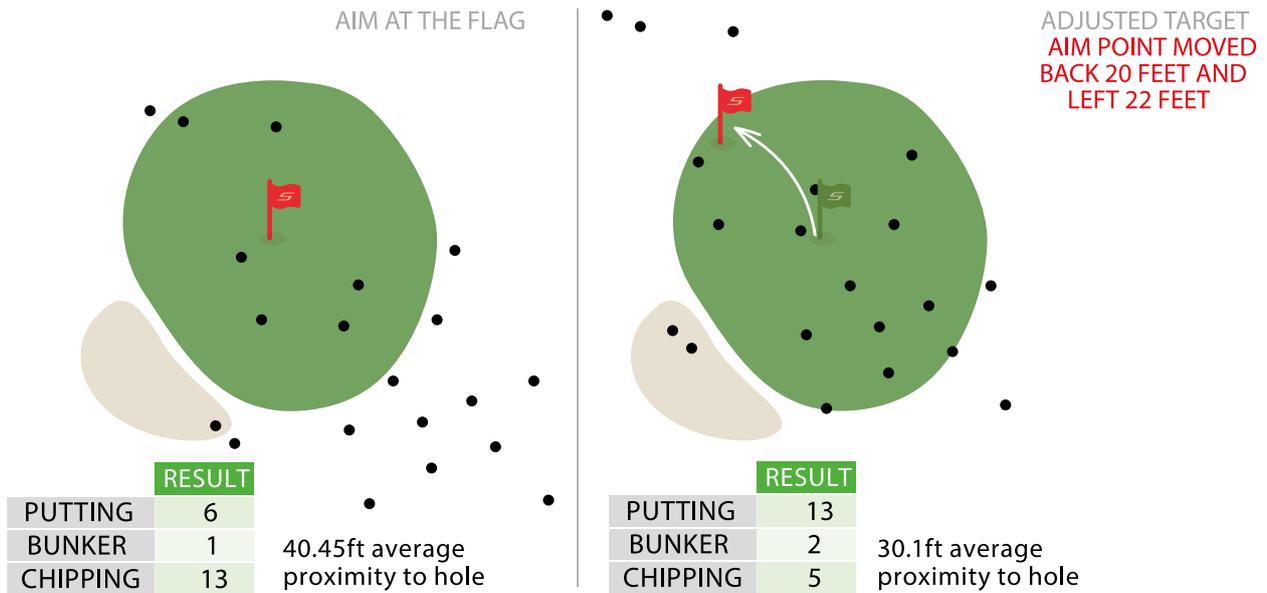
Effect of lie on performance

AVERAGE DISTANCE TO HOLE AND GREEN (60-100 YARDS)

FAIRWAY  
LIGHT ROUGH  
BUNKER



# HITTING THE TARGET How to improve your wedge approaches



Above are two examples of a 14 handicapper's average shot dispersion with their wedges. You can see that simply by adjusting the initial target, more than double the number of approach shots can hit the green. The average proximity to hole can also be reduced by 33%. That equates to a lot of shots saved during the course of the year.

Hitting the fairway with a tee shot or second shot on a par 5 presents great benefits compared with being in the rough. Hitting from the fairway from under 100 yards offers the golfer a great chance to get up and down for par or birdie, if you can hit a good wedge shot onto the green.





# THE HYBRID VERSUS IRON BATTLE

Shot Scope have identified just how much more effective an amateur is with a hybrid as opposed to a long iron.

The introduction of hybrids changed how long shots were played into the green. Marketed as easier to hit consistently and easier to get up in the air, lots of golfers jumped on the idea. Only recently have manufacturers started producing sets of irons without 3, 4 and 5 irons. This might point towards a reason that a 4 iron/4 hybrid use is now 50-50 among club golfers.

It is interesting that not many handicap golfers would elect to carry a 3 iron, but that the 3 hybrid is the most commonly carried hybrid. In general terms, a hybrid will travel 8 to 12 yards further than the corresponding iron, but in reality accuracy and consistency are the keys.

Due to the fact that most golfers carry either a hybrid or an iron, it is very difficult to compare them directly. Instead, **Shot Scope** has looked at the data regarding the distance the club was hit from, and the result.

Interestingly, from over 200 yards a hybrid is almost twice as effective compared to a long iron. It is still more effective between 180-200 yards, but that gap closes within 180 yards. This proves that most golfers should not be carrying irons which they can hit over 180 yards – instead, swap them for a hybrid.

If you can hit more consistent shots from this distance range (160- 220 yards) then your scoring will reduce dramatically. Finding the green from this distance can save you more than a shot a round.

GIR (200-220 YDS)

	HYBRID	IRON
8	17%	12%
14	12%	6%
20	9%	4%

GIR (180-200 YDS)

	HYBRID	IRON
8	23%	22%
14	17%	11%
20	12%	7%

GIR (160-180 YDS)

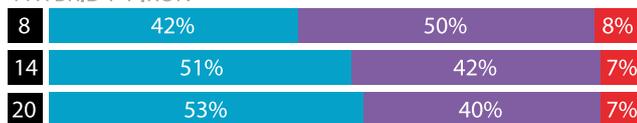
	HYBRID	IRON
8	27%	29%
14	22%	20%
20	17%	16%

## THE HYBRID v IRON BATTLE

3 HYBRID v 3-IRON



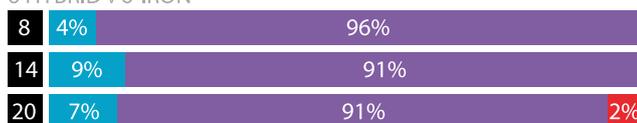
4 HYBRID v 4-IRON



5 HYBRID v 5-IRON



6 HYBRID v 6-IRON



HYBRID IRON DON'T CARRY IN BAG

### FINDING THE GREEN

2.2 SHOTS TO FINISH

### MISSING THE GREEN

3.5 SHOTS TO FINISH





## SHORT GAME CLUB USAGE

Short game is an area of the game that requires a high amount of skill and imagination. You need to be able to picture which shot is the best type of shot to play for the shot that you face.

Not all shots can be played with the same chip shot with a sand wedge. Some shots are more suited to a low 'bump and run' type shot or some require more time in the air.

PGA Tour pro's get up & down 90% of the when just off the green. This is not due to putting, but because they hit the correct shot for the situation.

**Shot Scope** data clearly shows the benefits of adjusting clubs around the green rather than using the same one all the time. Poor short gamers pull the lob wedge 42% of the time around the green, while better players use it only 8% of the time as part of a much more even spread of club usage from 8 iron to putter.

**TOP TIP: SELECT THE SHOT THAT GETS THE BALL RUNNING ON THE GREEN AS SOON AS POSSIBLE.**

### POOR SHORT GAME PLAYERS

CLUB	PW	GW	SW	LW	Putter
USAGE	16%	9%	24%	42%	9%

The data shows that poor short game players don't use a variety of clubs around the green. Oddly, they rely on higher lofted clubs which require more skill and an exacting strike to get the ball close to the hole. They are most likely manufacturing a shot to try and get the ball close to the pin.

### BETTER SHORT GAME PLAYERS

CLUB	8i	9i	PW	GW	SW	LW	Putter
USAGE	12%	14%	22%	12%	6%	8%	18%

Better short game players on the other hand, use a larger selection of clubs around the green, with 48% of shots played with a combination of 8 iron, 9 iron and PW. We know that these clubs have better margin for error than higher lofted wedges. The better short game player will select the club that gets the ball rolling on the green quicker.





# THE LOB WEDGE ADDICTION

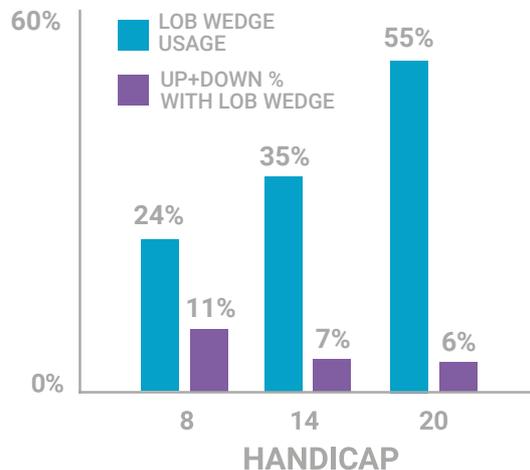
The lob wedge addiction identified by Shot Scope is predominantly by 8 to 20 handicappers within 20 yards of the green.

Why do they love it? Many golfers regard their lob wedge as the 'short game club', after watching tour pros pull one out to get the ball checking next to the hole. People see Phil Mickleson use is 60° wedge all the time and think '*I can do that!*' Well the harsh reality is – you can't.

8 to 20 handicap golfers use their lob wedge 38% of the time – yet this club, accounts for only 8% of up and downs made. Golfers will see an instant performance improvement by not using the LW as often around the green.



There is a place for an LW  
If you are here, 38% of the time you  
have another problem!



**TOP TIP: A GREAT PRACTICE IS TO USE A CLUB LESS THAN YOU NORMALLY WOULD. SO FOR INSTANCE, IF YOU THINK 'I WILL CHIP WITH MY SW', TRY USING YOUR PW INSTEAD. YOUR SCORES WILL THANK YOU FOR IT.**





## BUNKER PLAY

Pulling the right club for your approach shot (often one more than you think) can help you avoid landing in the greenside bunkers, but on the whole you can't avoid them completely.

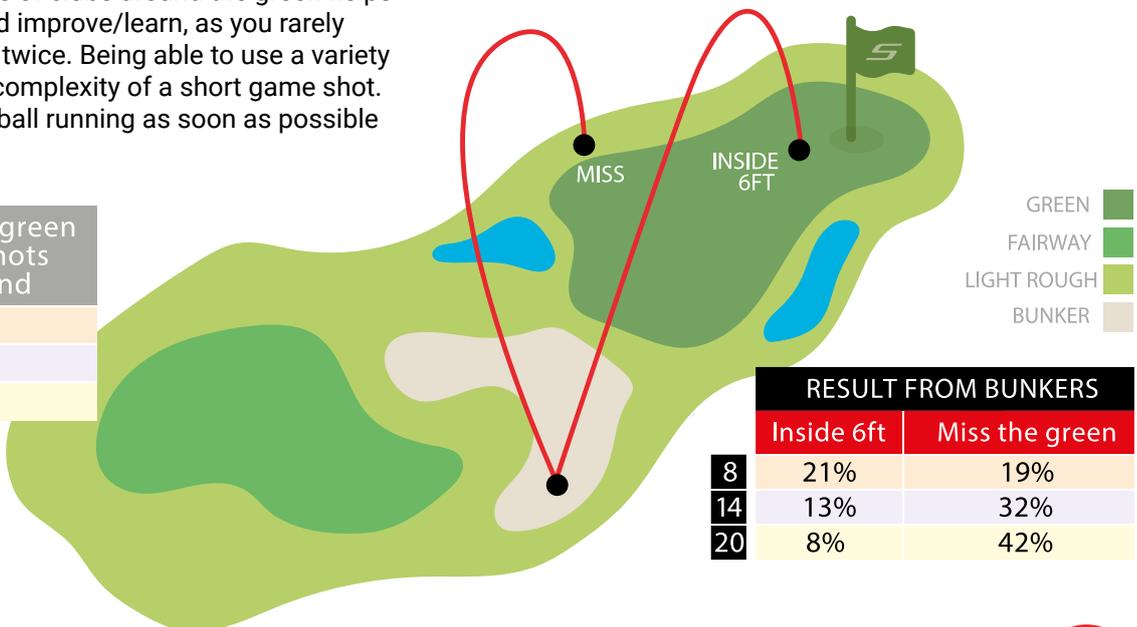
**Shot Scope** data tells us that on average you will have 1 or 2 greenside bunker shots per round. Consistently playing good shots from the sand requires a good technique and practice – poor play can cost you a lot of shots very quickly.

For higher handicap golfers, the goal should be to simply get the ball out and on the green every time; playing for the middle section of the green will increase your margin for error.

The majority of golfers will use what they refer to as their 'short game club' and in reality this is a poor way to approach short game. As **Shot Scope** identified earlier, using a range of clubs around the green helps you score better and improve/learn, as you rarely face the same shot twice. Being able to use a variety of clubs eases the complexity of a short game shot. Remember, get the ball running as soon as possible on the green.

**TOP TIP: BUNKER PLAY IS AN AREA THAT VERY FEW AMATEUR GOLFERS ACTUALLY PRACTICE. NEXT TIME YOU ARE AT THE COURSE, HAVE A PRACTICE AT GETTING THE BALL OUT A BUNKER AND BUILD UP YOUR CONFIDENCE. IF YOU ARE UNSUCCESSFUL OR NOT SURE WHERE TO BEGIN, PERHAPS SEE A PGA PROFESSIONAL FOR SOME DETAILED ADVICE.**

Number of green bunker shots per round	
8	1.5
14	2.1
20	2.3



	RESULT FROM BUNKERS	
	Inside 6ft	Miss the green
8	21%	19%
14	13%	32%
20	8%	42%



# PUTTING

Shot Scope’s findings on putting arguably offer the biggest opportunity to save shots. The high percentages of three-putting across all levels, coupled with evidence of poor distance control, indicates a fast track to lower scores. Another neat feature of **Shot Scope** is the ability to track your performance with a range of different putters. This way, a clear pattern will emerge of which one works for you, and which ones don’t.

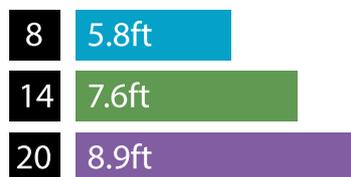
## THREE PUTT LIKELIHOOD

A quick way to reduce scoring for the handicap golfer is to avoid three putting – do this well and it can significantly reduce your score and your handicap. Three-putt percentage is surprisingly high over the various handicaps, with 20 handicappers three-putting 19% of the time. That’s roughly every 5 holes, meaning there is a lot of room for improvement!



## AVERAGE DISTANCE OF SECOND PUTT IN A 3 PUTT

A 3 putt often happens due to a poor first putt leaving a long second putt. What is more surprising is the average distance of the second putt when three-putting. A 20 handicapper has a second putt of nearly 9ft! This is predominantly a distance control issue, because the ball usually comes up short. Even Jordan Speith – one of the best putters in the world – only holes a 9 footer 24% of the time!



As **Shot Scope** suggests, most 3 putts are caused by coming up short... which is most often a question of strike quality. A pure strike means optimal energy transfer into the ball; miss-strikes mean less energy and less distance. To improve your strike on longer putts, let your core take control of the stroke.

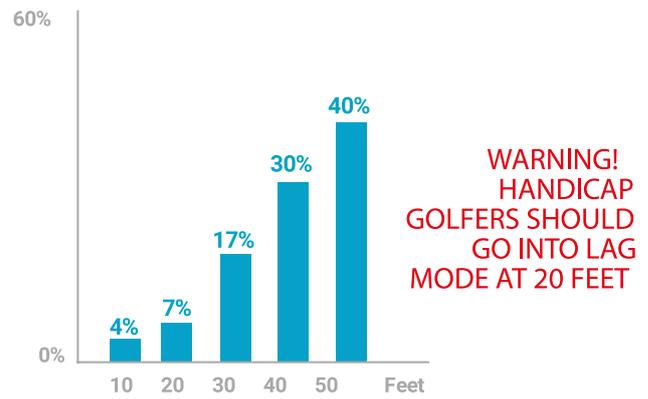
**TOP TIP: BEFORE PLAYING CONCENTRATE ON HITTING LONG PUTTS TO UNDERSTAND DISTANCE CONTROL.**



## HANDICAP GOLFERS % CHANCE OF 3 PUTTING

The average first putt distance for a handicap golfer is 18.5ft from the hole, the first putt determines whether you have a tap in or work to do for the second putt.

Effectively, most 3-putts are made from more than 20ft. So it is key to think 'lag' from around the 20ft mark. Lagging does not mean leaving it short, but the goal should be to two putt and make the second putt as short as possible to reduce stress. The shorter the second putt is, the greater chance you have of holing it and minimising the chance of a 3 putt.



## OVERALL PUTT % BY HANDICAP

This is a fascinating graph. There doesn't seem to be too many differences between handicaps, but on closer inspection there is a significant swing between 8 and 20 handicappers on one and three putts. Two putts stays relatively constant by handicap. This suggests that the key to reducing your handicap is to become a better putter, and in particular better at long putts.



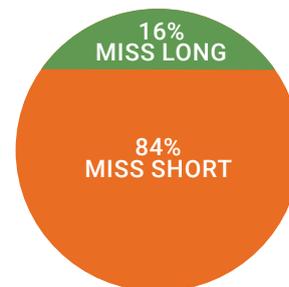
## MISSING SHORT OR LONG?

Most golfers will think of putting performance in make % or simply putts per round. In reality, for the handicap golfer, getting the ball past the hole is the key factor. 84% of all putts outside 5ft that are missed finish short – a frightening statistic which you will begin to notice next time you play. Just concentrating on getting the ball past the hole will improve your make % and lower those scores.

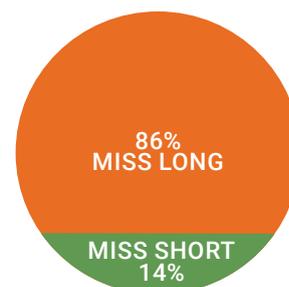
Be confident with the putt, and if it goes past the hole at least you know you gave it a chance of going in. Contrasting to putts missed over 5ft, 86% of putts missed under 5ft are missed long. You often see amateur golfers hitting their second putt from 3ft, and generally if they miss it, they have another 3ft putt on the way back – not the tap in we all hope for.

**TOP TIP: BE CONFIDENT, IF YOU HIT YOUR FIRST PUTT PAST THE HOLE AT LEAST YOU KNOW THE LINE FOR THE RETURN PUTT A LITTLE BETTER.**

## MISSED PUTTS OUTSIDE 5 FEET



## MISSED PUTTS INSIDE 5 FEET



## TRACK THE PERFORMANCE OF ALL YOUR OLD PUTTERS

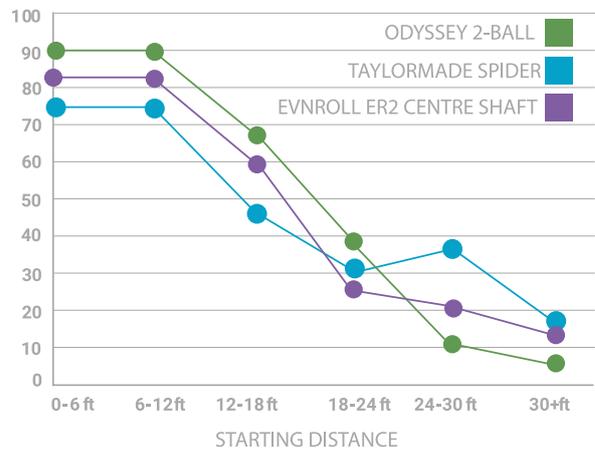
We all have a love-hate relationship with putters and generally pick a model based on looks. Understanding different types of putters – and which performs best for you – will reduce scores. The **Shot Scope V2** can track as many putter models as you want, so you can find out exactly which one works and performs the best for you. Putters are very individual, just because Jordan Speith putts well with his putter – doesn't mean you will putt well with it.

Pick a putter that works well for you, not because a tour pro putts well with it. Having confidence in your putter is key to putting well, you need to be able to rely on this club, especially since it is the most used club in the bag.

To conclude, with these putting findings from **Shot Scope** we can safely say that handicap golfers need to tighten up on their putting, particularly long putts and minimising the number of 3 putts. A 3 putt

is such a frustrating aspect of the game, especially if it has taken you a few shots to get to the green and you end it with a 3 putt. Reducing the damage of a bad hole by being able to one or two putt will make a difference to your game long term.

### MAKE %



## PLAY, TRACK & IMPROVE

### GPS watch with Performance Tracking

The No.1 GPS + Performance Tracking golf watch which conforms to the Rules of Golf. Automatically track your game to discover new strengths and weaknesses. The Shot Scope dashboard will provide you with over 100 statistics on your Clubs, Tee Shots, Approaches, Short Game and Putting.

- ▶ Improve your handicap by 2.7 shots on average over 30 rounds.
- ▶ Compete with friends on the course with Leaderboards and Medals.
- ▶ Industry-leading putting stats are collated using PinCollect technology.

