

# HIT IT CLOSER PINPOINT IRON PLAY

Hugh Marr continues his series designed to get you closer to the hole by examining accurate ironplay – and the role played by balance in creating precise contact.

PHOTOGRAPHY BY TOM CRITCHELL

**A**ccurate ironplay means control both of direction and distance. It demands a technique that controls the club's path, the angle of its face, and the low point of the swing. That may sound a tall order, but in fact there is one quality that brings all these desirables together – balance.

A balanced swing means a balanced movement of the club – and it's only through this that you will achieve the consistency and precision needed for accurate ironplay. The golfer needs both static balance (set-up) and dynamic balance (swing). To find these we must work in harmony with human physiology, and gain a better understanding of the role of posture. With help from my colleague and expert biomechanist Mark Bull, I will look at both to explain what we truly mean by great balance in the golf swing – and show you simple ways to achieve it.



## NEW SERIES: THREE PARTS TO A BETTER GAME

This new series uses a blend of tour-level instruction backed up by the latest scientific research to help you get the ball closer to the hole – wherever you are on the course. In each article, Hugh Marr's technical vision is complemented by Mark Bull's compelling scientific insight. Last month, we revealed the secret of a powerful

X-Factor stretch. This month, it's the truth about balance, and how that fits into the technique for consistent ironplay. Next month, we will give you a statistical approach to the short game which, allied to a more honed action, will improve your performance. It's a unique approach that gives you the trust and the tools to hammer that handicap.



### HUGH MARR

Works with a host of Challenge and European Tour players. He has just been appointed Lead Coach for EGU's Under 18 squad.



### MARK BULL

Works with 50 tour professionals, plus a range of national and county squads. Find out more at [www.markbullgolf.co.uk](http://www.markbullgolf.co.uk)

# SET-UP: CREATING BALANCE

Why the old adage of 'put the weight on the balls of your feet' is flawed.

One of golf's biggest myths is that we should feel pressure through the balls of our feet as we stand to the ball. Later, Mark explains the swing problems this can cause. For now, though, let us reach an obvious conclusion – that whenever you are on the balls of the feet, you may be balancing, but you are NOT balanced.

## SETTING THE LOW POINT

Accurate ironplay is promoted by a slight downward strike on the ball. It allows clean contact, applies maximum pressure on the ball and makes it easier to apply consistent loft. Executing this strike is about setting up with the ball before the low point – and making a swing stable enough to keep the low point in the same place.

## HIT DOWN

A downward strike means making contact before the swing arc's lowest point – roughly under the lead shoulder. So at set-up, ensure the ball is behind this point. A ball position of centre – or just forward of centre – promotes a downward strike.

## 50-50

To describe the correct set-up weight distribution I use the term Absolute Balance. This is 50-50 left foot-to-right, and 50-50 between toes and heels. In other words, bang in the middle of both feet.



## ESTABLISHING ABSOLUTE BALANCE

Here is an easy way to feel the correct weight distribution through both feet:

Stand upright. Make a little squat, then jump in the air.



When you land, you will intuitively stabilise yourself. Once you have done this, take a moment to sense where your weight is; you will find yourself in Absolute Balance. This represents the position of most resistance you could offer to someone trying to push you over – and it's where you need your weight at address.



# POSTURE: THE KEY TO DYNAMIC BALANCE

Great posture boosts stability and will make your swing plane more consistent.

Having established balance at set-up, we now need a framework that will allow us to maintain it through the swing. The secret of this is posture. Great posture boosts stability while the club is moving, and in so doing stabilises the plane of the swing. Key to establishing great posture is retaining the spine's natural curves as you bend down to the ball.

Anatomical diagrams show the spinal column to be a subtle S-shape; it curves in at the small of the back and out around the shoulders. The spine works best in this natural position, permitting fluent rotation without strain; after all, we can all rotate quite freely around our spine when stood upright. We need to retain this freedom of movement when we address the ball. Focus on two key areas:

## 1. NEUTRAL LOWER SPINE

When you stand upright you will notice a natural, slight hollowing in the small of your back. As you address the ball, ensure you preserve that slight inward curve by letting your rear stick out. This keeps the pelvis in a position where it can stabilise rotation from the torso.

## BUTT TO BUCKLE

As a final posture check, feel the shaft line of the golf club runs up through your belt buckle. This is an effective guide for how far the ball should be from you. It also helps you position the club and build your stance around it correctly.

## 2. SLIGHTLY ROUNDED SHOULDERS

In its natural, neutral position the upper spine has a slightly rounded look. Again you are looking to preserve this. This time, without letting your chin drop, allow your shoulders to hang forward in their sockets. Rotation comes from the upper spine; preserve its natural shape and you preserve its ability to rotate.



This neutral position offers one further advantage. Centrifugal force created during the downswing pulls your shoulder blades towards the ball; start with them there and you avoid having to make a downswing compensation to find the ball – and that aids consistency.

## FACE AIM

A final point on set-up that will help your accuracy. At impact the ball is on the clubface for a fraction of the second – but that is still enough time for the face to rotate. The direction the ball leaves is governed by the face's angle as the ball leaves the face, NOT the angle it first makes contact. Be aware of this as you align the face.



### A DRAW

A draw needs a face slightly open to the ball-target line as ball leaves club – so consider an open face at address.



### A FADE

A fade needs a face slightly closed to the ball-target line as ball leaves club – so consider a square face at address.

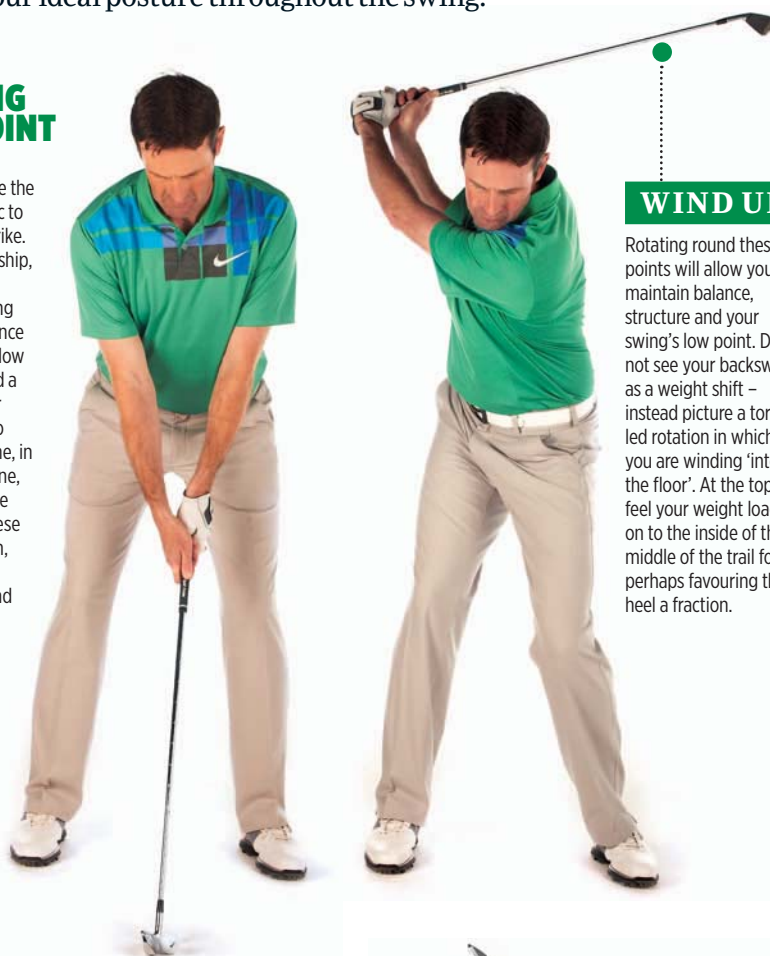


# SWING: PRESERVING BALANCE

How to keep your ideal posture throughout the swing.

## MAINTAINING THE LOW POINT

At address, we have positioned the ball before the low point of the club's arc to promote a downward strike. To preserve that relationship, we must ensure that low point does not shift during the swing. Your best chance of retaining a consistent low point is by rotating round a fixed point. Think of your backswing as having two pivot points; an upper one, in the throat, and a lower one, opposite your navel in the middle of your spine. These are where you pivot from, shoulders round the top pivot point and hips round the lower one.

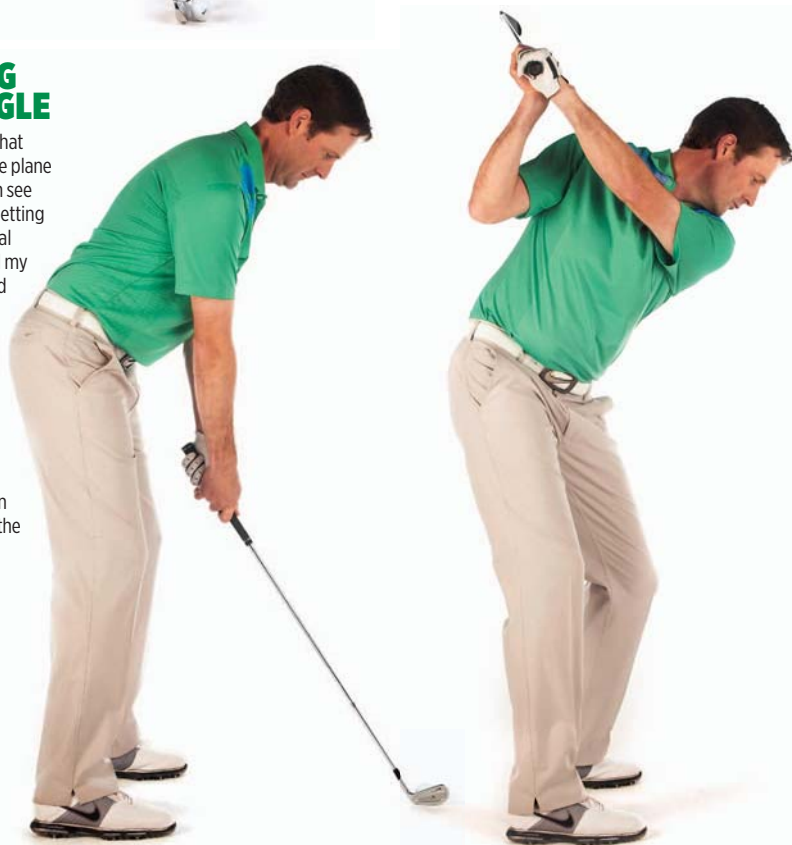


## WIND UP

Rotating round these points will allow you to maintain balance, structure and your swing's low point. Do not see your backswing as a weight shift – instead picture a torso-led rotation in which you are winding 'into the floor'. At the top, feel your weight loaded on to the inside of the middle of the trail foot – perhaps favouring the heel a fraction.

## RETAINING SPINE ANGLE

I mentioned earlier that posture stabilises the plane of the swing. We can see that in action here. Setting my spine in its neutral position has allowed my pelvis to contain, and my torso to turn. It means I can rotate effortlessly around the spine angle set at address. That's a pre-requisite for moving the club on plane through the swing – which in turn is vital to delivering the club down the line.



## FROM THE TOP

From the top the downswing sees a lateral movement towards the target – essentially the pro is taking the coil under the trail leg and pushing it forwards into the lead leg. This lateral move, however, does not come at the expense of balance. By impact, about 75% of your downward pressure is through the centre of a stable lead foot. It's not until the latter stages of the swing that weight shifts away from the centre of the foot, into the lead heel as the hips complete their throughswing rotation.



This lateral push actually increases the force applied by the lead foot into the ground, just as it does when you begin to push up from a squat. Indeed, as this image shows, this move has much in common with a squat. Forceplate technology from movement experts Science and Motion Sports shows a strong correlation between this increased downward force and power; the bigger the increase in force down through the lead foot you create with this move, the further you hit it.



# WHERE IS YOUR PRESSURE PATTERN?

Mark Bull explains why the body needs balance to work efficiently — and reveals the concept of pressure patterns to help you grasp how to rotate with stability.

Create good balance at address and you will activate the muscles that promote stable, fluent movement.

Good balance activates the inner thigh and glute muscles, the ones that stabilise the pelvis as you rotate. It also positions the segments of the body posturally correctly in their most stable alignment. Poor balance, in contrast, only creates a host of swing calamities as the body literally seeks to redress the balance.

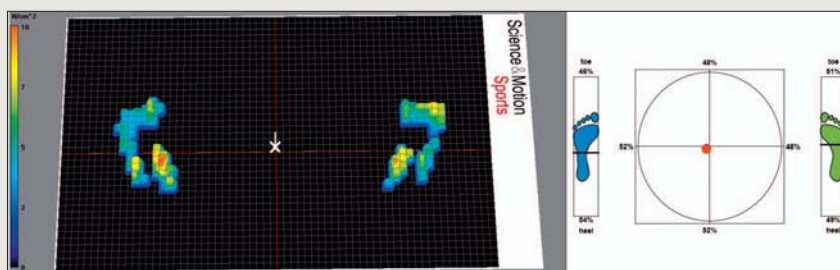
The first part of balance is, of course, the feet. Think about foot position and balance in terms of creating pressure into the ground. As Hugh says, at set-up you should seek to feel pressure evenly down through the middle of each foot — that means 50-50 left foot to right and heel to toe, but also from side to side. The feeling this should give you is of having your feet sitting flat against the floor.

The benefits of this pressure distribution are perhaps best illustrated by a look at the most common balance error. At some stage, most of us have been told to 'get the weight on the balls of your feet'. Golfers who do this commonly come out of posture, lifting as they swing back; their hips develop a lateral slide; they suffer disconnection between arms and shoulders; or they rock erratically back into their heels, then forward again.

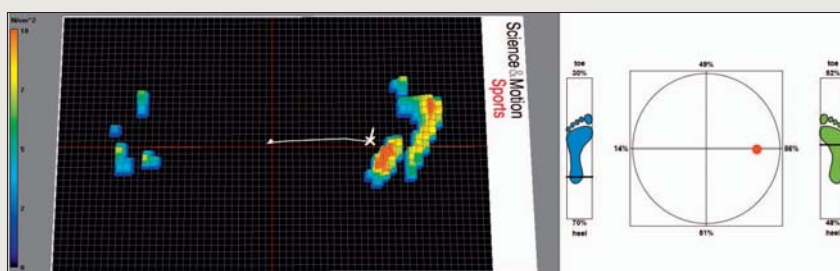
The second part of balance is posture. Here, it is vital you retain the natural S-shape of the spine when you address the ball. Again it allows the pelvis to remain stable, and helps you rotate correctly through the right parts of the spine — the thoracic and cervical. If you inhibit the natural curvature of the spine you start to affect the mechanics of how it moves.

Good posture provides the framework for balanced movement throughout the swing. As a reference: At the top you should feel 70-80% of your downward pressure through the middle of your trail foot. At impact feel 75-80% of downward pressure through your lead foot. Note this pressure is created through rotation, not lateral movement. We are not shifting our weight; we are simply moving pressure through rotation.

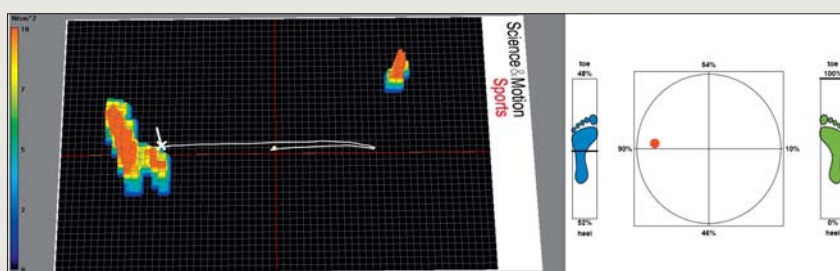
A good way to understand this tricky concept is to picture a dot on the ground, representing the position we are applying pressure to the ground. We can term this dot Centre of Pressure (right).



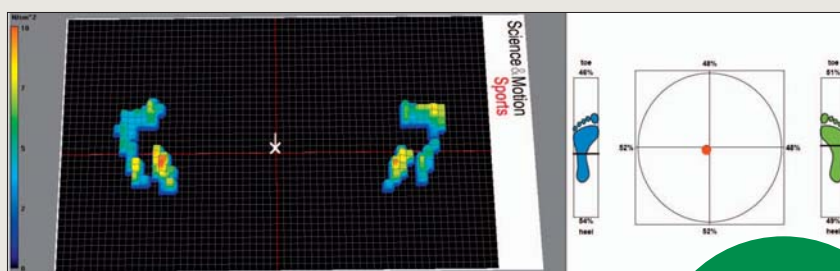
**SET-UP** At set-up, with weight evenly spread through the middle of each foot, that dot is dead between the feet.



**TOP** As we rotate back around a fixed point, that dot moves straight back towards the middle of the trail foot.



**IMPACT** On the way down lateral movement towards the target plus forward rotation moves pressure towards the middle of the lead foot. So our dot moves back along the same line; by impact it is towards the middle of the lead foot.



**FINISH** By the end of the swing pressure moves into the left heel; the dot finally leaves that line through the centre of the feet, creating an overall fish-hook shape. This linear pressure pattern has been proved to produce more balanced movement. That leads to better connection between club and ball, and a more centred connection and strike. And that will help your ironplay accuracy.

Graphics courtesy of Science and Motion Sports; [www.scienceandmotion.com](http://www.scienceandmotion.com)

**NEXT  
MONTH:  
FOUNDATIONS  
FOR A SOLID  
SHORT GAME**