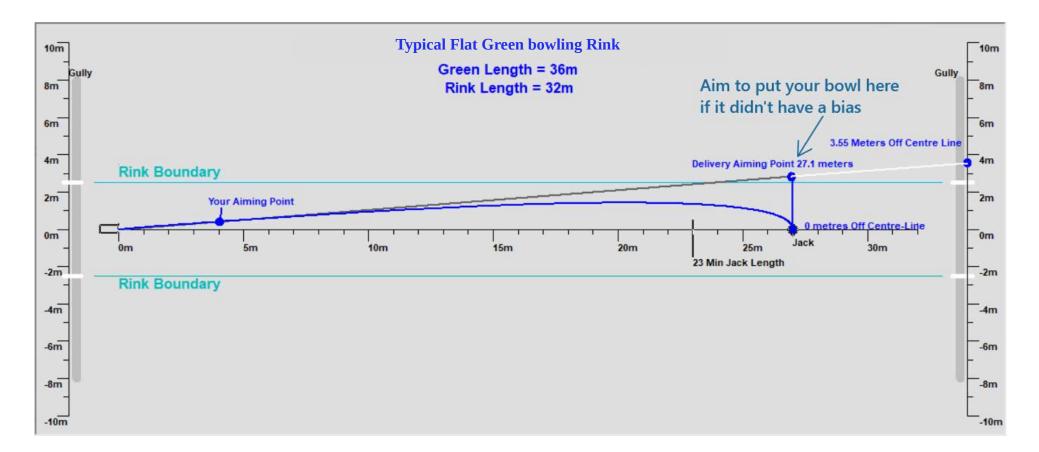
## AIMING HELP FOR NEW BOWLERS

Jonathan Barr Ledbury Bowls Club

The most important point in becoming competent in flat green bowls is to be able to deliver a bowl consistently and accurately over a given point about 4 metres in front of you. You can practice this by bowling into the same point of a cushion in front of a chair in your living room. Judging the weight required to get to the jack will only come with actual practice on the green.

A bowl is similar to an out of balance gyroscope in that at speed it will travel in a straight line, but as it slows down it will precess towards the heavy (out of balance) side, performing a parabolic curve. Therefore you must aim the bowl to a point that is off the centreline to the jack. How far off the centreline will depend on the rink speed and the type of bowl you are using. But the angle off the centreline is always the same whether you are delivering to a short jack or a long jack (see second picture).

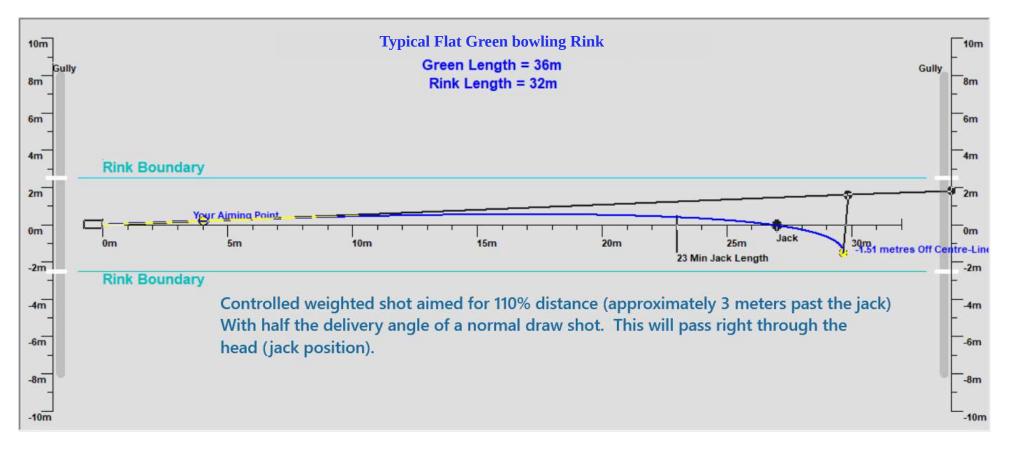
The first picture below shows a typical draw shot using a Taylor Ace bowl on a slow green.



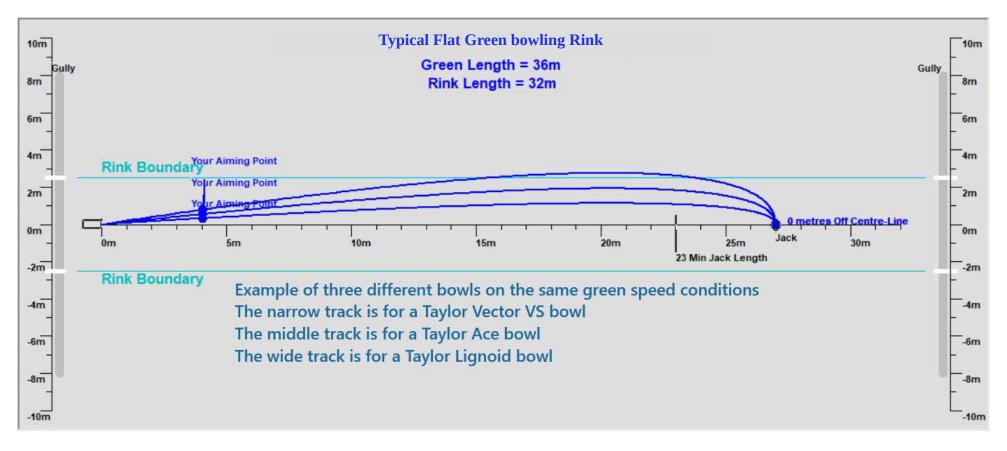
The second picture demonstrates that regardless of the length to the jack the delivery aiming line remains constant.



This third picture shows a controlled weight shot into the head by reducing the angle to half of a draw shot angle and increasing the weight to reach 110% of the jack distance.



The fourth picture shows the bowl track of different bowls on a medium speed green.



The fifth picture shows the same bowl (Taylor Ace) on different green speeds.

