Delivery Technique Article 2016 by Stephen Forrest, STROBE Sports

Introduction You need to "CHOOSE THE SHOT" before you start to prepare for each bowl delivery.

The pace of your delivery movement, the foot placement on the mat and choice of the *point of aim* are all based on a visualization of a single shot outcome before stepping onto the mat.

Three fundamental factors in a Lawn Bowls delivery are Line, Length and Balance.

Line is enabled by lining up your body toward the Point of Aim and focusing the eyes on that same Point.

Length is controlled by a combination of body movement toward the Point of Aim and the rhythmic swing of the arm as you deliver the bowl.

Balance is maintained by moving the body smoothly and rhythmically in a natural kinetic sequence.

The basic principles of delivery apply equally to any shot. The players' natural forward and downward movement is transferred to a balanced position over the front foot, combining rhythmic body and leg energy with a consistent backward and forward swing of the delivery arm. This whole action creates the smooth delivery of the running surface of the bowl onto the green along the intended *line of aim*, with the delivery arm still accelerating at the point of release.

There should always be an easy, relaxed rhythm in the delivery with the palm of the hand upwards, following the bowl or jack in a natural follow-through action aligned with the *point of aim*. The player's breathing should be deep, rhythmic and synchronized to exhale through the mouth from the start of the delivery movement or the bowling arm moving forward, continuing through the moment of release to the follow through. The timing of this takes practice. Throughout the whole motion it is essential that the eyes remain focused on a *point of aim* situated at a correct, consistent distance along the aiming line. This tends to be slightly different but very specific for each player. The whole delivery should be repeatable to the fraction of a second for every bowl played.

Line To maintain a consistent delivery line there are 6 elements that influence the bowling action.

- 1. Focus The eyes must remain focused on the *point of aim*. This helps maintain alignment right through the action.
- 2. Rhythmic delivery arm The rhythmic action of the delivery arm swings back and forward along the *line of aim* without any apparent force.
- 3. Peripheral vision The forward swing of the delivery arm must stop within the players' peripheral vision, below or no higher than shoulder height, and pointed to the *point of aim*, palm upwards or thumb uppermost and parallel to the ground. This helps avoid the development of a roundhouse hook (a pull across the body) in the action of the delivery arm.
- 4. Balance The delivery posture is held in balance until the bowl has traveled 10 metres. Stay down, stay balanced. Brace with your non-bowling arm on the knee if necessary.
- 5. Concentration Will the bowl to its target, don't just watch it. Your concentration only ends as you stand up. Never turn your back on any delivery while the bowl is in motion.
- 6. Step forward as you stand up, take a forward step along the line of aim, not a backward one.

Length

Many Players develop twists and turns to cope with their own physical, mental and physiological characteristics. Even a cursory glance at the average game of bowls will show that many players develop their own 'style'.

Maintaining a consistent length requires a rhythmic, repeatable, delivery action. Economy of movement along the *line of aim* improves that consistency quickly. Avoid the extremes of movement if possible.

The key element of developing a good length may be more mental than physical. The player must be able to translate a visual and mental image of the desired result – usually of a bowl stopping in an exact spot on the green - into a delivery action that has that result.

The physical controlling features that contribute to good length are:

- 1. Step onto the mat in a position that ensures the front foot is placed entirely on the green during the step forward.
- 2. Focus the eyes on the *point of aim* throughout the delivery.
- 3. Stay in balance with coordinated movement of arms, legs and body weight.
- 4. Time the release to deliver the bowl smoothly rolling onto the green from the fingers.
- 5. Coordinated breathing, with forward movement and release during exhalation through the mouth.
- 6. Step forward after release—as you stand up, take a forward step along the line of aim.

Mentally, the perfection of good length bowling is the combination of 6 distinct factors:

- 1. Structured practice on different greens over a long period with your own bowls, to build confidence.
- 2. Competitive experience over a long period with your own bowls, to build experience.
- 3. Selection of the exact spot (to the mm) where you want your bowl to rest, to maximize commitment.
- 4. Choice of the best hand on the rink to achieve the result, to maximize effects of the playing surface.
- 5. Visualization of the run of the bowl from release to the intended target, to improve consistency.
- 6. Belief in yourself, to make the shot possible.
- 7. Desire to do it now, to deliver the best result immediately.

Balance

You must start your delivery in balance, maintain that balance through the movement and end in balance in the follow through position before rising to a standing position in front of the mat – in balance of course.

Maintaining a consistent delivery requires dynamic balance of the bodies' center of gravity to be maintained over a constantly changing base of support during the delivery action. Your ability to maintain the center of gravity over your base requires strength and control of posture. While a lawn bowling delivery is quite a dynamic movement in kinesthetic terms, it is not stretching the bounds of the human frame and is well within the reach of most people with a little training in flexibility and mild strength exercises.

Static balance is maintained with minimal movement. This is different from dynamic balance, when the person is moving. Dynamic balance is used as one of two indicators of athletic potential in many sports. Athletic power is the other, which is far less important in lawn bowls except for stamina and flexibility and the infrequent drive delivery.

You should exercise using routines that progressively challenge and improve your dynamic balance and postural control. Dynamic balance exercises should be specific to the sport to increase the chances of success and minimize the risk of injury.

One-armed and one-legged exercises work well for lawn bowling, as do Yoga and Tai Chi. Changes in both sensory and motor systems also influence balance performance. Improve and test your balance by trying to play bowls blind-folded, playing left handed if a right- handed player, or without moving your feet.