BOWLING ON SOUND BIOMECHANICAL PRINCIPLES.

(Biomechanics is the field of study concerned with the mechanics of movement of the human body). Bowling biomechanically aims to provide an easy, relaxed delivery. Biomechanically, in any action, sporting or otherwise, it is important that there be as few movements as possible to avoid the risk of fault(s). Each additional movement is another variable that needs to be compensated for.

When you have done what's below enough times, your body learns and knows what to do. It doesn't then need your mind to give instructions. You mind's job is to tell your body **WHAT** to do, not **HOW** to do it. Bowling can and should become just like driving a car. You do that subconsciously, why not bowling?

Aiming your bowl:

- 1. Stand on the mat. Take in the situation before you the rink, jack, position of skips, bowls already bowled.
- 2. Decide on an aiming point on or beyond the far bank. Take up your bowling stance. Visualise a line from that mark back to you on the mat.
- 3. Find a mark, or imagine one, on that line between 4 and 6 metres in front of you, no further. This governs what your bowling line should be. Once found, don't take your eyes off it until your bowl passes over it. This keeps your head down and helps to avoid 'hooking' your bowl narrow.
- 4. If your bowl finishes narrow or wide, adjust your bank mark the same distance.

Stance on the mat:

- 1. Hold your bowl in one hand, the other hand on your knee or thigh or even rest your forearm there. Check your grip so that, on release, your bowl is perfectly upright.
- 2. Stand with your feet apart as you would normally to give natural balance.
- 3. Adopt the 'shooters' stance' (or archers') as if you were about to fire a rifle or arrow along your bowling line. It is not sound biomechanically to stand square to your bowling line nor to point your feet at your aiming point. Standing at a 45 degree angle allows a more natural swing of your arm. It also brings your (bowling) shoulder and eye over your bowling line and gets your hip out of the way. Bowls is a target sport when all is said and done.

Delivery:

- 1. Have 2 or 3 practice swings over the your bowling line. The longer your bowl travels along the line you want it to, both back and forward, the more likely it will be to do that.
- 2. Develop a smooth pendulum swing to help with weight control. Weight control comes from having the same action for all draw shots. The only variable then is the speed of delivery slow for short ends and/or fast greens, faster for long ends and/or slow greens.
- 3. Take a normal length of walking step to maintain balance. A long step results in lunging, a short step lurching. Neither is conducive to good balance.
- 4. Lean forward so that your head is over where you release your bowl but leave your back foot on the mat so that your weight is distributed 90% on your front foot, 10% on you back foot. Only plovers and other birds can balance successfully on one foot.
- 5. After releasing your bowl, imagine your hand reaching out over your aiming point on the green to avoid hooking your bowl narrow.

 Doug Cole / June18