

## **High-Performance Lawn Bowling With Barry Pickup**

This is not about your typical draw game, although it will help you in these games. This is a column for bowlers that seriously want to improve their game. As such we will spend little time on the basics and fundamentals of grassing a bowl, assuming the reader has a command of these elements.

Rather, this column will concentrate on various strategies and tactics which can help one improve their game. First, strategy and tactics are two aspects of the same picture. You might think of strategy as the art of determining what you want to try to do to achieve a winning head. Tactics, then, would be the art of knowing how to implement your strategy to make it work.

The most important element of strategy in any arena of competition is to visualize and understand the big picture. In military terms, this could mean visualizing three divisions executing a pincer maneuver to entrap an advancing enemy, rather than visualizing a squad advancing to secure the left flank of hill 907.

In lawn bowling terms it would involve visualizing what you would like the next head to look like after all 18 bowls have been delivered (the ideal head) then changing that vision, adjusting to the reality of each delivered bowl as it comes to rest.

During the process of this pursuit, tactics would involve such elements as the efforts of individual bowlers in a team environment (teamwork), communicating needs and requirements from each player throughout the game and revealing as little as possible of your strategy and tactics to your opponents. And, of course, playing each bowl to, as closely as possible, contribute to the overall vision you have for the completed head. All of this within the understanding that sometimes a bowl in motion simply will not stop precisely where you want it while your opponents bowl often seems to stop precisely where you don't want it.

For most of this discussion we will assume a triples game, occasionally pointing out deviations that might apply for a pairs game. Let us begin with a discussion of the Lead's function and responsibility. First is the positioning of the mat and placement of the jack. This will be done in response to an on-going evaluation of your team's and your opponent's strengths and weaknesses during the game at hand. Suffice it to say here, it is important for the Lead to know the Skip's strategy for mat and jack placement and be able to consistently deliver a playable jack to the desired length.

Thence, and most importantly, the Lead should determine the best hand (fore or back hand) for that particular spot on that particular rink. The Skip may be consulted in making that determination. Once the first bowl is played, the Lead should unvaryingly play the same hand throughout that end. Do not change hands unless directed to do so by your Skip.

On each end, the Lead should try to deliver all bowls so as to establish a pattern at the head similar to figure 2. (figure 1 for a pairs game). Contrary to the conventional wisdom for a club draw game, the complete Skip does not want the lead to bowl shot. It is more important to place bowls in selected positions to facilitate the Skip's job of finishing the head with a score. So, as a Lead, one should draw to a selected position rather than to the jack, and place less importance on back bowls (but remember that severely short bowls are never welcome).

The reasoning is that a jack by itself is a small target. A jack with a bowl beside it is a larger target. A jack with two bowls beside it is a huge target. A competent opposing player may easily drive those bowls away from the jack leaving your skip with fewer (or no) playable bowls to use in completing a winning head.

Tactics tip for leads:

(1) practice to become proficient at placing playable jacks at whatever distance the Skip may call for.

(2) Practice to become proficient at placing bowls wherever the Skip may call for them.

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## **High-Performance Lawn Bowling II With Barry Pickup**

Last month this column discussed the general concept of strategy and tactics, and some of the most important functions of the Lead position. Here follows an illustration of these lessons.

In his book Bowling Along, Glyn Bosisto tells of a game skipped by the late, great Jack Bunce. His side was down 6 going into the final end. He told his team, "I want you to bring the mat up the green, send the jack to within 12 feet of the ditch and then place every bowl behind the jack. Try to keep it off the line so that I can drive the jack into the ditch without getting wrecked. I will censure you for every bowl you put behind the jack and encourage you to draw close. But take no notice of me. You just keep putting 'em behind." The opponents never caught on. As Bunce's team delivered back bowl after back bowl their opponent kept drawing to the jack and Bunce, with his last bowl, ditched the jack for seven and won the game.

This story illustrated development of a strategy, a tactic for implementing it, communication with the team, and concealing one's intent from the opponent, all points discussed last month. This month we will finish our primer on the Lead's role in strategy and tactics, with some review.

First, do not roll the jack, do not toss it, do not throw it, BOWL IT. You will be surprised how this simple act will give you a feel and touch for the green and allow your subsequent bowl to be surprisingly accurate.

Second, if you have the mat, place it to your team's (not your individual) advantage. Place it so your bowls will have a clean take-off down the green, and avoid placing it so bowls must pass through rough or furrowed areas when grassed from the preferred hand. If there is no other advantage to distinguish one mat position from another, select the position that affords the best aiming point(s),

Third, the combination of mat and jack placement should always reflect the distance at which your team is having its greatest success. Always look to the Skip for direction in both mat and jack placement.

Fourth, try to place your bowls so as to encompass the head. If your first shot is close on the jack, try to envision where the jack would most likely go if the head is disturbed, then put your second bowl in the path you think the jack would travel.

We'll conclude this column with a discussion on "the favored hand". First, an explanation of what it is. The "favored hand" is simply the hand (fore or back hand) on which you feel most comfortable and confident for that particular end of that particular rink, in positioning your bowls at the head at or near where your Skip wants them.

Determining your favored hand for the rink and existing conditions is one of the critically important factors in your success in positioning bowls around the head. Once you have successfully determined your "favored hand" you should bowl that hand 90% or more of the game. Your Skip and/or Second may help you in your determination, but it is an individual decision based on your skill and abilities as affected by current conditions of rink, weather and competition. It is important to note that your "favored hand" may be the opposite of your Skip's and/or Second's "favored hand" for the same rink or end.

What are the variables? First is your rink. One side may bowl more narrow than you would expect, or it might bowl wider. There might be slight imperfections that will send your bowl wide (or narrow) of the head, especially at certain jack distances. There may be skinned or rough spots that need to be avoided. And, one side of the rink may just simply be narrow(or wide) of your expectations for no apparent reason.

Now, here's a clinker. Your "favored hand" bowling one direction is not necessarily the "favored hand" coming back. You have to determine your "favored hand" separately for both directions on the rink.

Weather is also a big (and usually variable) factor. You may bowl the same hand differently on a damp or wet green than for a dry one. And remember, a green will usually dry out as the day progresses, necessitating your continual adjustment to keep your bowls on target throughout the game, or from one game to the next. Wind, of course, is the potentially biggest factor in influencing the travel of your bowl, and it will differ for each direction.

Greens maintenance is also a factor. We've already mentioned big issues such as rough spots, uneven surface, etc. But, there are more subtle differences to consider as well. For example, has the green been very recently mowed, or not mowed all week? Has the green been "ironed" (rolled) just before the game? Are the plinth's green-high? All these factors will make a difference in the travel of your bowl.

So, how do you analyze all these factors to determine your "favored hand"? Observation and consultation is the answer. In a tournament you will usually have two trial bowls up and back to start the day. These can be the most important four bowls of the day. Try very hard to hit your aiming point 'spot-on' with your average weight, observe carefully how your bowl travels on each side of the rink as opposed to how you expected it to travel. Then observe very carefully, how each of your opponents and team mates bowls travel.

Also important, observe the condition of the green, before you begin your trial ends. Is it damp, is it well maintained? Be alert for variations in the running surface and where they are.

If you are bowling a club game, use the first four ends to bowl each end of the rink on both hands, back hand up and forehand back, for example, observing your bowls and your opponent and team mate bowls as they travel. Now you have enough information to decide which is your "favored hand", at least until something changes.

By now you may be thinking, "gee, there's a lot to concentrate on and remember". If you are, you've discovered the prime secret of high performance bowling, but that is a subject for a future column.

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### **High-Performance Lawn Bowling III With Barry Pickup**

We concluded last month by suggesting that concentration and memory were the keys that unlock the door to high performance bowling. But, how does one go about improving concentration and memory. Following is an exercise to both demonstrate and provide a means to practice these vital elements.

#### **Part One**

Select as true a rink as possible and place a mat six to 12 feet from the ditch. Carefully select your aiming point which you think will give you "perfect" grass to the center line. (You won't need a jack for this exercise.) Then place a chalk mark on the green, about 10 to 12 feet up the green, exactly on your line of aim. Then move out about two feet and place another chalk mark again exactly on your line of aim.

Then, deliver all four of your bowls, being extremely careful that each of them passes exactly over the center of both chalk marks. This is the first element in a concentration exercise; concentrating on delivering four bowls exactly the same, in succession, so that each one travels through the exact center of both chalk marks on the way to its resting place. Block out everything going on around you and concentrate solely on the centers of those two chalk spots and rolling your bowl directly across the centers of both.

If you have done this precisely correctly, all four bowls will have come to rest in a nearly perfect straight line down the rink. If you have employed the exact same weight for each of the four bowls they will be in a small cluster each touching the others rather than forming an approximately straight line down the rink. This is marvelous if it happens, but don't worry about weight at this point, we'll come to that later. For now just keep practicing until you can consistently achieve an approximately straight line with your four bowls, end after end.

At first you may be surprised how difficult it is to deliver four bowls exactly over your aiming spots. An eighth of an inch off center of either chalk mark can produce an amazing variation at the other end. Just keep concentrating on the chalk marks, your delivery technique and follow through and analyze the travel of the bowl through the two chalk marks and try to predict the resting spot of each bowl before it reaches the critical point and begins to curve in.

#### **Part Two**

When you are able to consistently place all four bowls in a reasonably straight line down the rink or even better, in a tight cluster, you have begun to acquire the skill necessary to draw right on the jack. Remembering that point shot is not necessarily

the desired objective for the Lead, it is time for the next step. First, move your outer chalk mark about an inch to the left and deliver your four bowls as above. If, again, done with precision and concentration, you will have a perfect line of bowls about 18 inches to the left of the center line, perfect placement shots to form the desired pattern around the jack.

This exercise provides excellent practice in concentration both generally, and specifically on sending your bowls on a precisely prescribed course to arrive at a precisely pre-selected resting place. It also provides training in sending your bowl to a position other than drawing to the jack.

### **Part Three**

Once you have become proficient at sending your bowls across the center of your two chalk marks time after time after time, you can start to consider weight; the distance your bowls travel down the rink. Weight is the function of the speed, or force with which you bring your arm forward before releasing your bowl. Therefore, you must concentrate on the position of your arm as you begin your delivery, and the amount of force or swing with which you bring your arm forward to the point of release. Starting from a typical position leaning forward at the waist, if your bowls are too long, you may want to start your delivery with your arm back slightly from that previous starting position. If that helps shorten your bowl, you must remember your arm position for that length, and train your mind and body to automatically find that arm position for that length under those conditions.

From your normal stance, you can also vary distance by changing the amount of "bend" in your stance, starting slightly more upright for a longer bowl, slightly more of a bend (and possibly shorter stride) for a shorter bowl. Again, if you find a position that achieves the desired results, you have to remember exactly what that position is so you can duplicate it. A variation of an eighth of an inch can dramatically alter the results eighty feet up the rink.

As a last resort, you can also try moving your aiming point up the green a little bit for a longer shot, or back a little bit for a shorter shot.

### **Part Four**

The above are good exercises and should be practiced until you become comfortable and satisfied with your performance. (these are also good exercises to review and check your technique and practice concentration periodically throughout your career.)

When you are satisfied with your performance bowling over the chalk marks, it is time to inject a dose of realism into your routine. That is to go back and practice the above without the chalk marks. This means selecting your aiming point(s) among a myriad of dark spots, clumps of grass, bare spots etc. Then remembering that exact spot for the next bowl and the next after that.

This provides a whole new dimension to concentration and an additional tax on your memory. Go back to whatever you normally use for an aiming point, but now you must concentrate on hitting that aiming point precisely without benefit of artificial aids, and you must remember precisely what aiming point you should use for a desired placement of your bowl to left or right of the jack, and precisely what weight you must use to put the bowl ahead of or behind the jack.

Like all elements of lawn bowls, concentration is something to learn and practice. Likewise, memory can improve as more and more you employ your memory to improve your game.

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### **High-Performance Lawn Bowling IV With Barry Pickup & Earle Howey**

This is the point where we emphasize that lawn bowls is a team game. All members of the team are equally important, but each member plays a different role and different shots. Effectively molded together, teamwork wins bowls matches. Three individuals each doing their own thing may be on the same side, but are not working as a team, and depend much more on luck for their wins.

It often is the lot of the Second to be the team catalyst, following the Skip's directions to fulfill his vision for the head, but also being his representative at the opposite end of the rink, and providing help and encouragement to the Lead when appropriate. The Second also acts as measurer/scorer, and usually serves as scorekeeper for the team.

It is critically important for the Second to remember the Skip is the captain of the team and director of the head. As a Second, resist the temptation to tell the Skip how or where to deliver a bowl. Try to learn what the Skip's plan is, and how he is attempting to implement it.

A good Second will also take responsibility to know and understand the Skip's system of quiet communications (hand signals, mid-green conferences etc.). Especially important, don't yell information or directions down the rink to the Skip if it is desirable that your opponent not have that knowledge. Instead ask your skip to come up to the head.

The Second should be prepared to implement four basic tactics:

1. Improve the head. This would include such things as placing a strategic back bowl when asked, or drawing on the jack, advancing a previously played bowl or just avoiding adding to the clutter of the head if the Skip so directs.

2. Clear the head. There will be times the Skip will ask the second to try to remove a specific bowl with a firm shot, or perhaps break the head up if it is inalterably stacked in the opponents favor with no room for the Skip to play on the jack.

3. Leave, (or clear) a good lane or channel for the Skip to play to the jack.

4. Occasionally, the Second may be asked to place a blocker against an opponent's likely play to remove your point or to re-arrange the head.

In order to accomplish these tactical shots, the proficient Second should have a good draw shot, be able to place a position bowl wherever the Skip asks for it, and be able to grass a firm shot or a drive without having to pray about it first.

Some General Do's and Don'ts for Seconds:

Don't pick at the head with random draw shots. Every shot should serve a purpose towards setting the skip up to win the end.

Don't ditch your bowl (as a general rule). Your bowl on the rail won't score any points, or even be a factor in the head.

Don't stand in the head discussing the end when there are still bowls to be played.

Do retire from the head as soon as your Skip's bowl has been delivered.

Remember, the head belongs to your opponent as soon as your team's bowl comes to rest. It is a violation of ALBA rules and lawn bowls protocol to deny your opponent his rightful possession of the mat and rink. Here is a tip for Leads also, do not interrupt the Seconds as they count the score. Stand at least six feet away, or even better, stand on the bank.

Don't tell the Skip anything until he asks.

Don't overload the Skip with information when he does ask. Answer the Skip's specific questions with specific answers. The questions a Skip might ask could be:

Which bowl is shot?

Which bowl is second shot?

How far behind (in front) of the jack is the bowl to your right?

Whose bowl is that to your left?

Answer the Skips questions specifically and succinctly. Do not do the "chicken dance", pointing to bowl after bowl after bowl, signaling: "ours", "away", "ours" "away" "ours' etc..

If a Skip asks for a shot you aren't comfortable attempting, it's ok to tell him so. The Skip may want you to try for it anyway, but he will know how you feel, and you should give it your best try, it is obviously important to the Skip's vision for the head.

Don't feel that every bowl has to be the shot bowl. Your object is to position your bowls to build a head the Skip can work with, or protect a favorable head from disruption.

In other words, the Second should go to the mat with an open mind for each shot, prepared to give the Skip whatever shot he wants.

Here's a final note for everyone. There seems to be an unfortunately common tendency for people to jeeringly applaud a miscue by an opponent (or participant in most any competitive activity for that matter). In lawn bowls this frequently takes the form of some version of "Nice shot, thanks for the point", perhaps accompanied with mock applause. While probably not meant to be hurtful, such behavior is not in the best tradition of good sportsmanship, and certainly does not ease the embarrassment of the hapless bowler who has just put the opposition up three. I would like to suggest we all try to refrain from such comments however innocuous we think they might be. If one simply must say something in these situations "Oh, bad luck" should suffice.

## High-Performance Lawn Bowling V

With Barry Pickup & Earle Howey

### It's a Numbers Game

Lawn bowls is a game of numbers. Here are a few important numbers you should know:

- Lawn bowls is played on a square 'green' which can be 34 to 40 meters (115.55 feet to 131.23 feet) to a side.
- A green is divided into rinks which can be 5.5 meters to 5.8 meters (18.04 feet to 19.03 feet) in width. Note: On the west coast 14 foot wide rinks are common and allow 8 rinks of play on a standard 120 foot green.
- A bowl must travel at least 14 meters (45.93 feet) to remain in play as a live bowl
- The mat line must be at least 2 meters (6.56 feet) from the rear ditch.
- The mat line must be at least 25 meters (82.02 feet) from the front ditch.
- A playable jack must be at least 23 meters (75.46 feet) from the mat line.
- A playable jack must be at least 2 meters (6.56 feet) in front of the front ditch to begin an end
- A mat shall be 300 cm by 600 cm (23.62 inches by 14.17 inches)

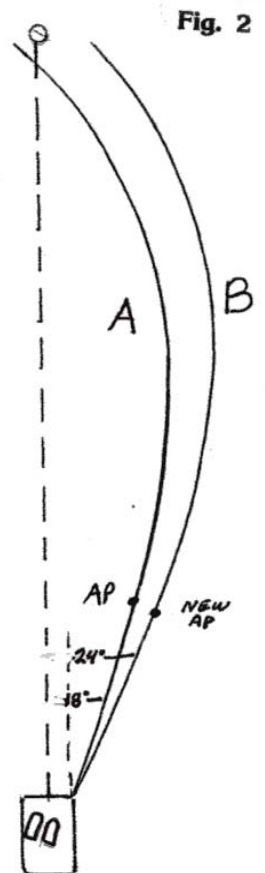
This latter requirement may appear to be superfluous information. After all, how much can a lawn bowler do with a 334 square inch mat. Well, maybe more than you might think.



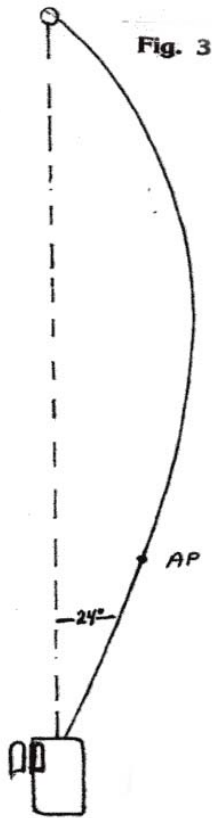
For example, Fig. 1 shows the standard track of travel for a medium bias bowl. Each time the bowl is released from the same point down a testing chute it will invariably follow this same track. Note that Fig. 1 assumes the release point for the bowl to be the front center of the mat, and the aiming point is  $24^\circ$  off the center line. Don't worry about the degree of angles as we move along here, it's just to help give you a reference for understanding the difference in aiming points.

Fig. 2 shows variations in a bowl's travel when released from a typical bowler's stance approximately in the middle of the mat with the release point over the right hand corner of the mat instead of across the centerline... Track A shows the path of a bowl released over the same aiming point as shown in Fig. 1, (The Test chute aiming point). Notice that the aiming point is now only  $18^\circ$  off a line perpendicular to the corner of the mat and parallel to the centerline. See how this track results in a narrow bowl slightly short of jack high.

Fig. 2 Track B. shows the track for a bowl released from a typical stance on the center of the mat with the aiming point adjusted to be  $24^\circ$  off a line parallel to the center line. This results in a slightly wide bowl at the head.







The point of Figure 2 is that, using the dynamics of the standard test chute, a bowl delivered wide of the centerline at the mat, will not result in a bowl on the jack. This means that the bowler must either assume a stance that allows their delivery to release the bowl at the centerline of the mat, (Fig. 3) or adjust their aiming point to provide the proper track to the jack (Fig. 4), allowing for a release point other than at the centerline. This is not difficult, most bowlers, (assuming consistent weight and delivery), can find the proper aiming point after 2 or 3 bowls, without doing the math. It helps to know the principles involved, however, and understanding that delivering your bowl off the centerline does add another variable to your considerations in selecting an aiming point which will deliver a bowl "on-the-jack". In other words, where you stand on the mat does make a difference at the head.

Fig. 5 and 6 illustrate a practical application of how mat position might affect shot selection. Figure 5 shows a shot blocking the jack from a bowl delivered so as to duplicate the dynamics of the test chute (as in Fig. 3)

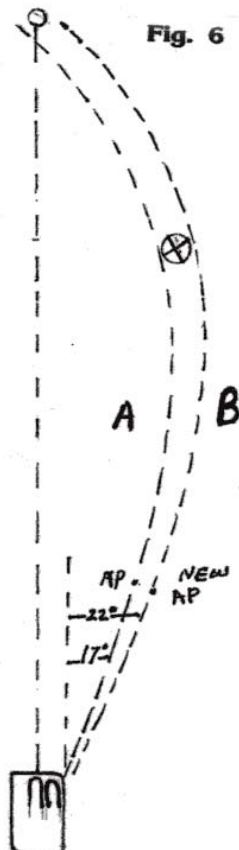
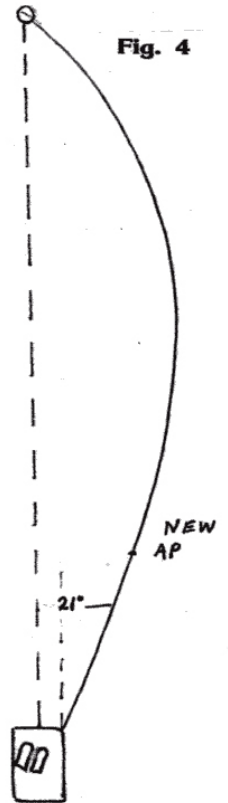


Fig. 6 shows how this blocker may be circumvented by changing position on the mat.

Note the bowler has changed position to the front right hand side of the mat. To bowl a slightly narrow bowl (Track A) to avoid the blocker the bowler uses the same aiming point as in Fig. 5, but moving to the right side of the mat reduces the angle from 24° to 17° off a line parallel to the centerline and perpendicular to the right edge of the mat. This results in a slightly narrow bowl close on the jack.

Fig. 6, Track B is also delivered from the right side of the mat, but the aiming point is moved to the right so as to be 22° off the line perpendicular to the centerline. This results in a bowl jack high and slightly right of the jack.

Are you one of those bowlers who have found your aiming point for backhand shots is a different angle off the centerline than it is for forehand shots? Your position on the mat could be the reason.

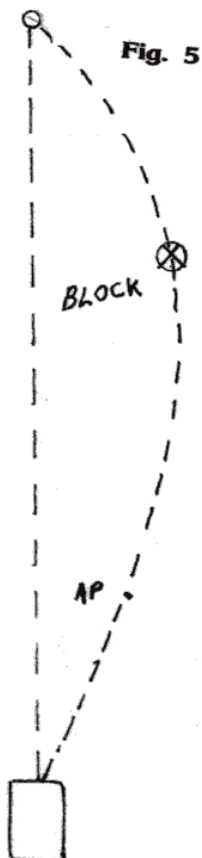


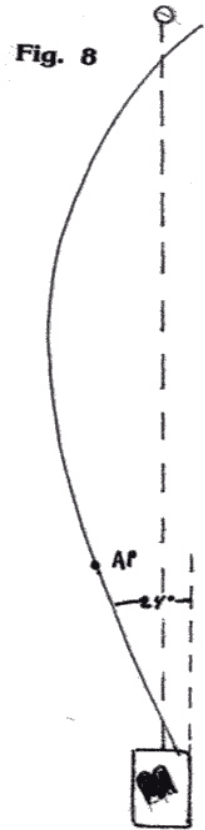
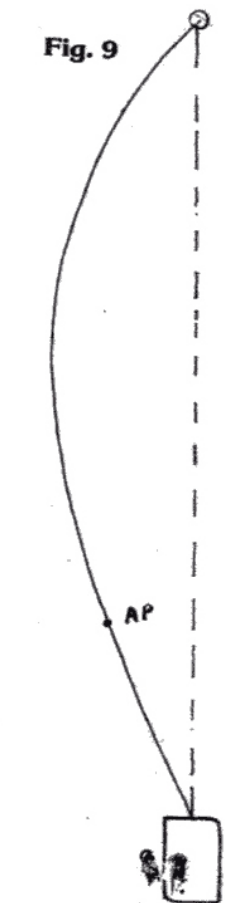
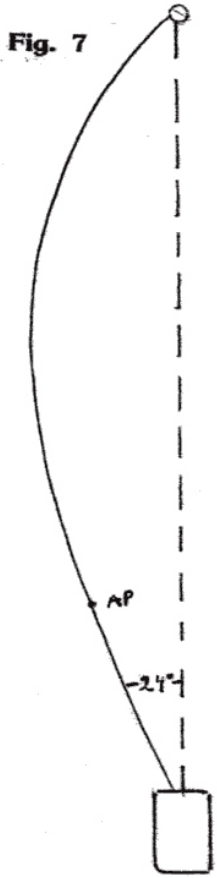
Fig. 7 shows the track for a back hand shot from the standard test chute.

Fig. 8 shows the travel of a back hand shot by a bowler standing approximately on the center of the mat. Notice the point of release is at the right hand corner of the mat, which results in a narrow bowl if delivered to an aiming point  $24^\circ$  off a line perpendicular to the right side of the mat and parallel to the centerline.

Fig. 9 shows a bowl delivered from a stance at the left rear of the mat which more nearly duplicates the track across the center line of the mat for a bowl released from a test chute (Fig. 7), with the corresponding result at the head.

This again demonstrates that not releasing the bowl across the centerline of the mat line can add another variable in your considerations towards selecting an aiming point which will bring your bowl to rest on-the-jack. All the above assumes a right handed bowler but, if reversed, should hold equally true for left handed bowlers.

There are several situations which could be affected by the bowler's position on the mat. This article has featured three of these situations. Obviously, one doesn't necessarily need to vary their position on the mat to achieve a desired shot. The point is that using mat position as one of the weapons in your arsenal might make it easier to calculate the proper aiming point for the shot you desire to make. This does not require a degree in advanced math or surveyor's instruments, but you do need to understand the principles involved, properly applied they can make your aiming point and shot selection easier.



## **High Performance Lawn Bowls VII**

### **By Barry Pickup & Earle Howey**

What would you say are the three key elements to being a high performance lawn bowler? Arguably they are: Practice, practice and practice.

The past six columns in this series contained good tips and wisdom gained over laborious years on the bowling greens. They are yours for free. Well, almost free. Just reading about them doesn't make them yours. You have to try them, test them, work with them to make them yours; in other words, practice and lots of it.

This raises the question, what exactly does one practice and how does one go about practicing it? The answer, so far as this column, is concerned is: Practice the draw shot. Perhaps more than everything else, lawn bowls is a game of drawing the shot. But lawn bowls is a game in much the same sense that chess is a game. You will only be in the game if you maintain a high degree of concentration.

It's the same with practice. If you don't approach your practice sessions with the same degree of concentration and focus as you would for a game, you are short-changing yourself. If you find yourself on the green practicing with a lack-luster attitude, more or less aimlessly rolling bowls from one end to the other, you might as well pack your bowls and save your time. Better to come back another day when your heart and attitude are entirely focused on what you are practicing.

To practice drawing to the jack, try to get your bowls all within a three-foot circle. It may help if you draw such a circle around the jack so you can see how you are doing. A piece of marking chalk attached to a string and a nail will give you a serviceable circle; you can even draw one freehand. Of course, you won't have much of a visual cue viewing the chalk circle from the mat end, but it will tell you how accurate you are when you come down to the head. If you want a more visible target, cut a three-foot circle of light blue or white plastic and place that at the head end. You'll be able to see that from the mat and get instant feedback on how you are doing.

Remember, a game is not practice. In a game, you have to react to specific situations. In practice you identify a weakness and work exclusively on that. Here then, are some tips to help maximize your practice sessions:

- 1) Analyze every shot! As soon as a shot leaves your hand try to predict where it will come to rest. Then watch it all the way to its resting place. Try to figure out why it didn't stop where you wanted it to, and what correction you need to make for your next shot.
- 2) Notice any imperfections in the rink, remember them, and work around them with subsequent shots.
- 3) Don't mix forehand and backhand shots in the same end of practice. Bowl all forehand one direction and all backhand on the return. Concentrate on each shot and correct any deficiencies with the next.
- 4) If you do grass a lazy, careless or inaccurate shot, run down, retrieve it, and bowl it again. Think of that as your penalty for losing your concentration.

5) Study the track your bowl takes en route to the head. Learn that track, memorize it. Learn to visualize that track before you deliver a bowl. A properly delivered bowl will always follow the same track unless deflected by a foreign object or uneven green. Learn that track well and you are a long ways towards bringing a bowl to rest exactly where you want it.

6) It may be that you are not happy or comfortable with your delivery. If this is the case, leave the jack on the bank, stand on the mat and practice delivering bowl after bowl without concern as to where they end up. Just practice, concentrate and dwell on your delivery form. Strive to achieve the EXACT same delivery form and style with each and every bowl. Just work at that until it becomes an ingrained part of your muscle memory.

7) Don't overdo your practice sessions. Thirty minutes to an hour will usually be sufficient. If you practice beyond your endurance level, you run the risk of letting up, losing concentration and setting down sloppy, lazy and/or inaccurate shots. This can be worse than useless practice because at that stage you are telling your brain that these kinds of shots are OK. Lawn bowls is primarily a mental game, and it is your brain you are trying to train. So practice when you are ready to, when you are focused, and when you are ready to commit the better part of an hour to intense training.

Now, I can almost hear someone thinking, "But my weak point is firm or heavy shots. How should I practice these shots?" If you are very proficient with your draw shot, see us for an advanced session on heavy shots. Otherwise, keep practicing draw shots until you can put one after another of your bowls on the jack anytime, anywhere.

It has been our observation that in club or social games, upwards of 90% of all hard shots are tactically uncalled for, but undertaken because the bowler was neither proficient nor confident enough in their draw shot to make the shot that could win the head.

Now I am imagining another question forming in the reader's mind. "What about weight, I'm having the devil's own time being too short - or too long?" And that will be a good subject for the next column. Meanwhile, start logging some practice time on draw shots, looking for perfect grass and doing your best to control weight as you do it.

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## **High Performance Lawn Bowls VIII**

### **By Barry Pickup**

"Getting the proper grass" is a fairly straightforward proposition. It is simply a matter of calculating the correct angle between aiming point and center line and then delivering your bowl precisely to your aiming point. Delivering your bowl to a precise distance down the rink, or "getting the weight", is another matter.

Reduced to simple terms, weight is a function of the speed of the motion of your arm at the moment of delivery of the bowl. In other words, the faster your arm is moving forward at the moment you release your bowl, the further it will go. Simple, huh?

That's all there is to it. But exactly how fast must your arm be moving to produce a distance of exactly 80 feet, or 90? And just how can you consistently achieve that exact amount of forward motion, even if you do know precisely what it is?

The speed or force of the forward motion of your arm is determined by two main factors.

1. How far back your arm is when you begin your forward swing, and
2. How rapidly you accelerate your arm's forward motion.

To determine how much of each to apply, you must start with a benchmark. One way to do this is get out on an open rink about mid-morning and practice delivering your bowl to the minimum distance of 75.46 feet. Do this until you can consistently come within 3 feet of that minimum distance. Try to finish each bowl on the centerline as well. Remember, as time passes conditions change and you may find yourself having to make adjustments.

As you get to this point in your development, consciously analyze exactly how long a pace you take, what the position of your arm is at the start of your delivery, and what its position is as you begin your forward swing. Once you have done that, you have your benchmark. That is, you know exactly how much of an arc your arm must swing through with your normal acceleration of swing, to send your bowl exactly 75.46 feet down the green under average green and bowling conditions. Now work at committing this position and motion to muscle memory and mental memory.

Now that you have your benchmark, note again the four elements which went into achieving it: (1) the position of your arm just before you go into your delivery; (2) the length of stride you take as you begin your delivery; (3) the position of your arm just at the point you begin bringing your arm forward for your delivery (this defines the amount of "arc" in your arm's swing necessary to achieve a minimum length bowl); and (4) the amount of acceleration in your arm swing as you bring it forward to deliver your bowl.

So, there you have it. Four variables, very much interrelated, that work together to determine how much weight you put on your bowl, and thus how far down the rink it travels. If you want to deliver a bowl 10 feet beyond the minimum distance, it is a matter of lengthening your stride, and/or starting with your arm slightly forward of your benchmark position, and/or bringing your arm back slightly further in your back-swing. These latter two elements will also have an effect on the amount of acceleration you give your arm as you bring it forward for the delivery. In addition, you can also consciously add a small amount of acceleration as you begin bringing your arm forward for your delivery. Adding additional acceleration, however, is probably not desirable or necessary unless you are intending to send a "hard" shot down the rink.

Since the position of your arm as you assume your stance on the mat has an effect on the amount of back-swing you use, and thus the degree of arc in your overall delivery swing, that is a good place to start your adjustments for varying weight and the distance your bowl travels. To make this adjustment, we recommend a technique called elevation. That simply means going into your stance and starting your deliver with your arm a little further forward – or a little higher – (hence the term elevation).

1. If you keep your arm straight throughout your delivery, and swing it like a pendulum, you can simply swing your arm forward an inch or two for your starting point.
2. If you take a stance with your arm initially bent at the elbow, you can simply bend it a bit more to lift your forearm up an inch or two.
3. If your stance starts in a crouch, or a bend at the waist, you can simply straighten up slightly which will raise your arm slightly as you begin your back swing.

One of these three techniques should help you to add weight to your delivery and distance to your bowl's travel. It will, of course, require considerable practice to train your mind and muscle as to the exact amount of elevation you will need for any given distance down the rink.

As you increase your distance beyond that of a minimum jack, you may find yourself automatically increasing your stride as you deliver your bowl. This is, of course, another of our four variables for increasing weight and distance, and you will need to employ some practice time and considerable evaluation as you go. If, for example, you want to add 20 feet to your benchmark delivery, and you both elevate your arm two inches and increase your stride two inches, your bowl may travel 30 feet. Now, you probably won't know how much of that distance was attributable to elevating your arm two inches and how much was attributable to increasing your stride two inches. You're better off to change and evaluate one variable at a time.

Thus far, we have assumed a textbook smooth pendulum swing and follow-through on the part of the reader. But, you might have a jerky arm motion as you swing your arm forward for delivery, or bend your elbow. You might not straighten your wrist just at the moment of grassing your bowl, or you might flip your fingers up at that critical moment. Or you might release your bowl from a few inches or so above the grass. All of these habits or techniques introduce additional variables to your delivery which will affect your weight. With trial and error and practice, you can certainly adopt any variable into your delivery so as to grass an accurate bowl. You can not do it overnight, and you can not let a bad habit intrude into your delivery without suffering a loss of accuracy.

It takes a lot of practice to train your muscles and your memory to consistently deliver your bowls the same way, using the same technique, time after time after time. The fewer variables you allow into your delivery technique, the easier this muscle and memory training will be and the more accurate your bowls will be.

## The Theory of Elevation.

One of the more common misconceptions or flaws in lawn bowling is that the bowler should assume exactly the same stance (and position) on the mat for every shot. Actually the difference in stance, especially beginning position of the arm, can have very much to do with varying the weight or distance the bowl travels down the rink, as demonstrated below.



Figure 1 illustrates a typical baseline stance for a short (minimum) jack and/or extremely fast green. Note the low crouch and that the arm is just slightly forward of a perpendicular attitude to the green.

Figure 2 illustrates slightly less of a crouching stance which raises the arm to nearly double the height of the bowl above the green in the initial stance. Note the slight bend of the arm at the elbow is almost the same as in Figure 1. From this stance the bowl should travel 10 to 20 feet further down the green than would be accomplished by using the stance shown in Figure 1.



Figure 3 illustrates the stance for a bowl to be delivered 95 feet to a maximum length down the rink. Note that in this stance the bowler has much less of a crouch, elevating the bowl about two and a half times the distance above the green as in Figure 1, and the arm is bent slightly more at the elbow.

Figure 4 illustrates an almost upright stance. In this stance the bowl is about 4 times as high above the green as in Figure 1. From this stance the arm will have nearly maximum back-swing resulting in the maximum arc and speed in the swing forward for delivery. This bowl, when delivered, will speed down the rink as a drive or hard shot with little deviation as a result of the bias of the bowl.



## **High Performance Lawn Bowls IX**

### **By Barry Pickup and Earle Howey**

Tournament season is upon us. Time to put all you have learned into practice. There are a few minor differences between tournament play and club games which we should go over in this column.

First, wear white clothes (or coordinated colors to match the team you will be playing with). You already know this, but since your tournament day starts with getting dressed, it was worth mentioning.

Second, give yourself plenty of time. It's bad form to arrive late. Also, an early arrival gives you some time to warm up if you desire or just getting yourself in the mood for some serious bowling and good fun.

Be sure there is a common understanding between Skips and team-mates how communications will be passed from Skip to team. Also, if you do roll a few warm-up bowls, be sure you bowl crossways to the direction you will be bowling in the tournament. The rink should already be set up with scoreboards, rakes etc. so it should be obvious what direction you will be bowling in the tournament. If you are still warming up when the organizers call for the meeting of competitors, stop immediately, pack up your bowls and attend the meeting. This is only common courtesy to the organizers. Besides, you might learn something useful at the meeting.

Virtually every tournament will start with trial ends. This can be the most valuable period of the tournament. It is your opportunity to learn how your rink "bowls" and to figure out which side is your favored side of the rink. Here is a suggested approach to trial ends:

If you are setting the mat and jack, set the mat the standard 6-feet out from the ditch and roll a medium long jack. Have the precise distance in mind and analyze the weight it will take to roll the jack that precise distance. After the jack has been centered, forget it; the jack has no further useful purpose for trial ends than to get the feel of what it takes to roll the jack a specified distance.

Study and analyze every bowl delivered by your team and opponents during trial ends. This is your advance opportunity to discover the narrow side, and find flat or hollow spots in the rink before it counts for score. When it comes your turn to bowl a trial end, try to put it on the centerline. If it is wide or narrow, analyze what adjustment you must make to get on the centerline. Don't worry about drawing the jack; just analyze the amount of weight it takes to bring your bowl to its resting place and how much more (or less) weight it will take to put it on the jack. During trial ends you should deliver one forehand and one backhand bowl to get a sampling of both sides of the rink.



## High Performance Lawn Bowls X

By Barry Pickup and Earle Howey

Lawn bowls is all about weight and grass. Weight and grass and practice, practice, practice. All the rest is 75% mental. Or 66.66 %, or 87.5% - take your pick.

The point is that lawn bowls is a mental game. Over the course of the past nine columns we have passed along several tips on improving accuracy of weight and grass, and lots of tips on how to approach the mental side of the game. Strategies, tactics, and memory skills that can help win the end.

Now it is up to you to get out on the green, identify your weak points and practice on them. Then, get in the games and practice your game in a competitive environment. Most importantly, if you want to improve your game you need to get into the tournaments, both local and divisional.

You can't soar with the eagles if you are sitting under the trees. Nor can you be a high performance bowler unless you play with high performance bowlers. So get in the game. Don't be intimidated because they will welcome you with open arms. They will be delighted you want to join in the competition and generally they are a friendly lot, easy to know and talk to.

That doesn't mean they won't be trying to beat you in the game. You will have to earn every point, every game, and the competitive bowler wouldn't have it any other way. So just determine what techniques constitute "your" game, practice them until they are as routine as breathing, and get in the game.

With this column we conclude our series on the fundamentals of high performance bowling. But that doesn't mean we aren't still here for you. As we end this column we introduce two new features which may be of interest to you if you have read our previous nine columns.

1. First is a new occasional column in MerryMack: "Ask Barry". This will be a column to which you can write your questions on lawn bowling situations, techniques or any other (lawn bowling related) question you can think of. Barry will answer each question in the next published Merry Mack.

2. We'll also present "Bowling With Barry". This will be an opportunity for a personal, customized session and critique with Barry Pickup. These sessions will be held on Saturday mornings. If interested, you can reserve a session for yourself on the signup sheet on the bulletin board. There is no charge.

This is a unique opportunity for MacKenzie Park bowlers. We don't know of any other club that has offered this kind of personal coaching by one of the country's premier lawn bowlers. Sign up. You will have a lot of fun and you'll get valuable instruction and wisdom about lawn bowling from a man with vast experience and finely honed skills through years of bowling at the top international level against icons of the game.