

PEGGED OUT ENDINGS

by Jonathan Kirby

It seems that there is very little in the croquet literature about pegged out endings, so in order to give a course on them I have to write something. This is that something.

General matters

We will assume that Red has gone to the peg and pegged out Black, with Blue and Yellow still to make some hoops. Thus RaY has two balls and BaB has one. We assume that the two players are reasonably expert, and can expect to run a laid three ball break with only a small chance of breaking down. Given a dolly rush they are likely to be able to rush to and make any hoop, although they may not expect to make the hoop with control and get a rush out of the hoop.

As it says in the CA Coaching Manual (almost the only thing it does say on the subject), pegging your opponent's ball out does give you an advantage, but it is not a decisive advantage. Later we'll consider exactly when it is worth pegging your opponent out.

The first thing to think about is how each player can win the game. If either of them can get a three ball break together then they are likely to win in that turn. Thus both players should be looking for opportunities to establish a 3bb, whilst trying to deny the opponent from obtaining one. The other ways to win for each player are making the hoops on some combination of two ball breaks and single hoops. If the game goes on long enough, the two ball player should be able to manufacture a 3bb. If the single ball player has a lot of hoops to make then they won't be able to make them all in bits and pieces before this happens, so she has to go all out to get a 3bb herself. If she has only a few hoops to make, she may be able to get them without making a break.

The single ball player's point of view

The single ball player usually has fewer options, so it is easier to start with her. What are BaB's options when it's her turn to play?

1. Shoot at her hoop, or the peg if for that
2. Take position at her next hoop, or play gently towards the peg
3. Shoot at Red (the peg ball)
4. Shoot at Yellow (the backward ball)
5. Corner
6. Lurk

Cornering means going to a spot (usually a far corner) where RaY is least likely to be able to pick up a break. It more or less invites RaY to go to the opposite corner and leave a longer shot than last time, or to run to a wired position leaving no shot at all. Lurking means going to a place somewhere where you hope RaY will try to use you and break down in doing so, or somewhere where you expect to get a shorter shot next time than you have now. Note that "lurking" near her own hoop is unlikely to be helpful in itself.

If RaY is joined up and BaB takes position or otherwise leaves B in the middle of the lawn, RaY has a reasonable chance of rushing R somewhere into the lawn, getting a rush on B to his hoop and establishing a three ball break. Thus this is a bad plan. However if RaY is separated then taking position is often a good plan. This way BaB should be able to make one hoop without giving much away. If she has only a few hoops to make (and often she will start the ending on 4b) this may be enough for her to win.

Shooting at your hoop is okay if you are likely to make it (basically if you have taken position in the previous turn). Otherwise there is a high chance that you will hit the hoop and stay in the middle of the lawn. If your opponent is separated this may not be too bad, but you are probably better shooting at them. Sometimes shooting at penult from the North boundary is your last chance at the end of the game and it's do or die. (Alan Wilson did this in the last turn of the doubles semi-final at Edinburgh a few years ago. I did it in the Solomon trophy last year.) Shooting hard at the peg is often safe, because either you hit it and win or you end up on the far boundary.

If B shoots at R or Y and hits, then she must try one of three things.

1. Establish a break or at least make some hoops
2. Separate R and Y, preferably with both off boundaries, and take position at her hoop
3. Make a squeeze

If she doesn't, she doesn't gain anything from hitting. Number 2 is much easier than 1, but less useful. The choice depends on how many hoops are left and how easy each is to achieve. A squeeze is a special version of number 2 and is more or less the only way that the single ball player can take the initiative (apart from finishing!) To do this, B must be on an odd numbered hoop. A squeeze is the leave when you end up in front of your hoop, with both the opponent's balls in front of the hoop but not close to each other. For example, if B is for 3b, with R a couple of yards N of 3b but wired from B and Y near the North boundary open on R. The idea is that, whichever ball RaY plays, B will be able to run the hoop to the other ball. RaY can't afford to shoot because then B will have an easy break. This position is relatively easy to reach from a contact when B is on an odd hoop, and is quite common at the top level after a tpo.

Often the only way BaB can attempt to make a break is to try to roll up to her hoop from distance. If this can be done off the peg ball it is not so bad to have a go at a difficult hoop and fail, but doing this off the backward ball may give more away. It is sometimes easier and less risky to take off to her hoop and then at least take position at it, but there is less to be gained too.

Because of the possibility of the squeeze, it is often better for the single ball player to be on an odd numbered hoop. This is especially important if she has a lot of hoops to make, as she can't win without getting a break anyway, so making one hoop is no real gain. (There is perhaps an exception at hoop 3, because it is easiest to start a break at hoop 4 due to the relative likelihood of being able to make 4 and 5 with some control even on a two ball break, giving a chance of picking up the third ball.) At the highest level a player may choose whether or not to go to the peg and peg out the opponent depending on whether their other ball is for an odd or even hoop. They may even POP it through an odd hoop to deny the opponent the squeeze.

Thus it is more important for the two ball player to prevent the single player making even hoops and more worthwhile for the single ball player to make a single hoop if it is an even hoop.

We now consider under what circumstances BaB should shoot at RaY. If RaY is separated then it is almost always safe to shoot at the peg ball (R). If you miss, RaY will have to play R and so will not be able to take advantage of having your ball. He will probably also have to roquet B, so won't be able to wire both his balls and will have to leave BaB a shot. If RaY is joined up but not in a position to pick up a break (or perhaps not even make a hoop) if BaB misses then she must shoot. This is a free shot and, if she hits, BaB can probably get a rush to her hoop while getting the other ball at least slightly off the yardline. If the shot quite short, then BaB will usually have to shoot even if it gives away a break opportunity because she probably won't get a better chance.

Against a very strong player, you should expect to get only one or perhaps two shots before they finish. Sometimes you can decline a long shot in the hope that you will get a shorter one, in particular a lift shot, but this can't be guaranteed. Thus you should almost always shoot. Conversely, if your opponent is not very strong and is unlikely to pick up a break if you miss, then again you should usually shoot. In the middle the decision is more difficult.

The two ball player's point of view

Now that we have considered the single ball player's point of view in some detail, it is easier to see what is important for the two ball player. Clearly he wants not to give away a three ball break, and can't afford to give away too many individual hoops. Provided he can do that, he doesn't need to hurry to make his own hoops (unless there is a short time limit, in which case it may have been a mistake to peg out the opponent if you are behind). However, he must have a clear idea of what he is trying to do otherwise he won't make any progress and will give away more chances than he needs to.

There are essentially three ways for RaY to proceed.

1. Try to establish a three ball break
2. Play cat and mouse, making one or two hoops at a time and trying to keep his balls wired from B or at least only giving long shots
3. Take a more aggressive line, making hoops on two ball breaks wherever possible and risking giving more away.

Strategy 1 is the best option if it can be achieved without giving your opponent a good chance of taking the break from you. Strategy 2 is very good if you are genuinely good enough not to give away too many shots, either by being precise enough to get the wiring each time or if you can expect to pick up a break the first time your opponent shoots and misses. Strategy 3 is more risky, but it keeps the initiative in your hands if you don't know what else to do. In practice a mixed strategy is usual. You may want to consider all three options at the start of each turn.

Consider a situation where you have lost control – most likely in strategy 3 but possibly in any. If you don't take on difficult hoops but instead run away from them, then you shouldn't ever leave both your balls in the middle of the lawn. That way BaB

shouldn't ever have an easy pick up. For example, if you approach penult badly off partner while B is near corner 2 open on R then you can run to corner IV with Y. B can't shoot at Y because it's a long shot that gives you back the game. To take advantage of R in the middle of the lawn she can either take position at her hoop or shoot at R. To discourage the latter you should in fact put Y somewhere further North on the East boundary to guard this shot. Somewhere about one to two yards South of the BR line is ideal (but don't leave a double). If BaB takes position at her hoop then you have to decide what to do. If the shot is very short, it may be worth shooting at her. Usually however you will want to join up on the yardline. The distance of the join is important. Too close and you risk leaving a double or giving a dolly rush if BaB hits. Too far apart and you might miss yourself next turn. One rule here is to ask which ball you would play if BaB missed your peg ball. If you'd play the peg ball rather than taking the longer shot with the backward ball then they were too far apart. If BaB is unlikely to shoot then you probably want the balls close enough together than you can take some sort of rush at the start of your next turn, even if only into the furthest corner from B or to a wired spot.

What should you do if you know that you will be giving away a short shot? How short? Certainly if you're giving away contact on the turn after you peg black out, and probably if you're giving away a lift shot for running 1b or 4b. In this situation it is usually a good idea to separate your balls to make it very hard for BaB to establish a break or even to get a squeeze. An exception would be if you're not giving contact and she's for penult or rover, when you can't afford to give up one hoop. Separation here means having your balls on opposite boundaries (and away from baulk lines if you're giving a lift or contact). A wide join is rarely a good option here because it just makes it easier for BaB to do something if she hits. Remember that if she misses, you get the innings back immediately so a wide join is no better for you than having the balls on opposite sides of the lawn.

Now suppose that you have control at the start of your turn, but don't have a rush to your hoop or to B. What should you try to do? If you're adopting strategy 3 then you may try to rush somewhere where you can roll off your next hoop, but this is almost never the best option. In strategy 2 you should rush to a wired position and, if possible, lay a wired rush to your next hoop. If it's not possible, then you get the wired rush next turn. Sometimes in the following turn you will rush not to your hoop but to a wired position close to it from which you are more likely to be able to rush to your hoop and make it under control before rushing to your next hoop or another wired position. If BaB is unlikely to shoot at you or unlikely to hit if she does shoot then a long distance away from B is nearly as good as being wired.

Usually you will hope at some point to be able to dig out a break, either when BaB shoots and misses, from BaB leaving B in the middle of the lawn, or from a precision or aggressive pickup. If you go straight for strategy 1, then you will want a leave where if BaB misses, you get a three ball break and you have some chance of making progress even if she doesn't shoot, thus encouraging her to shoot. Suppose you are for hoop 1 (it doesn't matter too much, although the central hoops are more difficult). The basic leave here is to have rush to 1 somewhere guarding corner I, with B as far away as possible, preferably near corner III. Y should be close enough to the boundary to pick up B if BaB misses, and R far enough out that B can be dug out of the corner, but close enough that Y can rush it near to hoop 1 from where they lie. R and Y must not

form a double for B. At long distance two balls near together is pretty much always a large target, so the best way to achieve this is to wire one of the balls from B. Make sure that one of them is open though, as giving away a lift to A baulk is a good way to lose the game!

We consider two improvements on this. The first is to put Y actually on the yardline and have it wired from B. This way B can only shoot at R, and even if she hits it will be difficult to get a rush on Y. If you are a good enough shot to be confident enough to leave R four yards away from Y and still rush it to hoop 1, this is a very strong leave. The second variant is even stronger. Assuming that B is for hoop 2,3,6, 1b, 4b or penult (or whatever, if Y is for something other than 1), leave Y about 3 – 4 yards from the yardline open on B and put R on the wire of 1 so that B can't shoot at it and it is impossible to rush to B's hoop. This is not easy to achieve, and can only really be done when playing R.

In principle none of these leaves giving a shot is as good as a wired rush to your hoop as B can always corner. However, if you roquet B in the turn you can't leave a wired rush, and obtaining a wired rush is not always easy even if you are not responsible for the position of B. Also for these last two leaves you actually want BaB to shoot, because you stand to gain a lot more if she misses than she does if she hits.

The balance of the game

Provided that the players are as good as I've been assuming, the two ball player RaY has the advantage in the pegged out ending, except in the following cases. If the single ball player BaB can get to rover with Y still having a number of hoops still to make then BaB is likely to win if she hits just one shot or if RaY separates. In this situation she usually has the advantage. If BaB can get a squeeze and is strong enough to play a two ball break or pick up a three ball break or if she is for penult then she has a very good chance of finishing in the next turn, and she has the advantage at that point. If B is for the peg and Y still has hoops to make then BaB is likely to have a few chances to win by hitting the peg from the side boundary.

Note that BaB ought to have a chance to make a single hoop each time RaY gives away a lift. Thus if RaY doesn't pick up a break and starts before 1b, BaB ought to reach rover from 4b and the game is fairly even.

To peg out or not to peg out

If your first ball is on or around 4b, your opponent is on (or around) 4b and peg and you are making a break with your second ball then you want to take it to peg so that you can finish in one further turn. If you don't peg out your opponent it's fine if they miss the lift shot, but if they hit it they should either finish (if they play the 4b ball) or peg you out (if they play the peg ball). Since the two ball player has the advantage from 4b and peg versus 4b and box, you should usually peg out your opponent.

If your opponent's backward ball is further advanced than 4b or your backward ball is further back than 3b it is less clear. If your opponent is on 2b and peg then it is usually worth pegging them out as five hoops is a lot for them to make and they don't have the immediate possibility of a squeeze. If their backward ball is any further back then you should certainly peg them out and they probably shouldn't have gone so far past 4b with their front ball while the other was yet to make 1b. If you are capable of peeling the opponent through rover and pegging them out while getting some sort of a

leave then this is also worthwhile in these situations. Depending on the degree of expertness, the same may be true for the dpo and tpo.

Pegging out your opponent on your first break (when partner has not yet made 1b and so you're giving away a contact) has the advantage that you don't give away the lift after the first break, but the disadvantages are such that this is only better than stopping at 4b with a reasonable leave against the top players who are very likely to hit the lift and finish, or if you are significantly better than your opponent and almost certain to win the pegged out ending.

In doubles if one opponent is stronger than the other then it can pay to peg their ball out, but since they didn't have any more hoops to make anyway the effect is perhaps marginal.

There are often large psychological effects of pegging out one ball. The single ball player can become much more focussed, and play much better. If the two ball player doesn't know what he's doing, he can relax or lose focus and play worse. Hopefully this won't happen to anyone who's read this article!

Also remember that pegging one ball out can slow down the game a lot. If there is a time limit you have to bear this in mind. Also, are you tiring faster than your opponent in the hot sun and more likely to make mistakes?

Other topics

Two ball endings

When the single ball is for the peg or for rover

Thin wiring lines

Contact leave

Waiting for lifts

When to go from three to two balls

What to do when the croqueted ball misses the peg on the peg-out stroke

OPENINGS

These notes are very brief, but an analysis of the first four turns in each case would take some space. (Keith Wylie wrote 33 pages on openings in “Expert croquet tactics”, almost all on the standard opening.)

We assume that the balls are played onto the lawn in the order bIUe, Red, black, Yellow. The object for each player is to get the innings, or to get the first chance of a break. Note that the player going first (BaB) should win the opening if no shots are hit on the second, third or fourth turns of the game, so often the second player RaY will deliberately leave a short shot called a tice on the second turn. The gain of hitting on the third turn is less than that of hitting on the fourth turn, since there are only three balls on the lawn to do something with. Most players will choose to go first when they win the toss, because it appears that this player has a slight advantage, but the advantage is only slight and is less significant than being a better shot than your opponent. Indeed, if you’re a better shot then going second and laying a tice that your opponent won’t shoot at and you’re likely to hit (such as a duffer tice) is a strong tactic.

The common openings are:

1. Supershot opening
2. Standard opening
3. Duffer tice opening
4. Corner II opening
5. Corner IV opening
6. Second ball shoots

with the first four being the most common.

In most openings the first ball U is played to the East boundary, about 8 yards North of corner IV. These openings have names depending on what is done with the second ball.

The other main opening is the supershot opening, where the first ball U is played into the middle of the lawn. This should be played from the end of A baulk, aimed to the right of hoop 2 and to end up about four yards NNW of hoop 5. The idea is that, wherever R goes, K will shoot at R. If K hits then U is a pioneer for hoop 1 and a three ball break can be attempted. If K misses R but joins up with it, Y has to hit something or K has the innings with an immediate chance of a break.

In the standard opening, R is laid as a standard tice on the West boundary, somewhere North of level with hoop 5 or thereabouts depending on how good each player is at shooting. K will either shoot at R to go into corner II or join with partner.

A duffer tice is played from B baulk to East of hoop 6. Somewhere between 1 yard North and 1 yard South of the hoop is about the right distance for good shots, but sometimes you can get away with much shorter. You should have a better than 50% chance of hitting it on turn 4, so not too long.

In the corner II opening, R is played just South of corner II. The ideal spot is where a miss into corner II by K will leave a perfect double. Usually K will join with partner, and then Y has to shoot at UK by the 3-1 rule (unless corner II is a very fast patch of lawn).

In the corner IV opening, R is played to IV, sometimes by shooting at U from B baulk. K will shoot at either U or R, can get a dream leave (DL) if he hits R but risks leaving a double. Y must hit on turn four to get the innings.

Finally, if R shoots at U he gains a little by hitting, but not much. If he misses, K will shoot at UR from either A baulk or B baulk. Hitting should give a DL or possibly a break. Missing from A baulk gives away a large target from B baulk. In each of these last two openings there is the possibility of obtaining a cannon on turn 4 or 5. This is the best way to set up an immediate break if you can play it. The promotion cannon is better than the usual cannons but harder to obtain.

BROKEN PLAY

Assume that you have the innings at the start of your turn, perhaps after hitting in, but there is no easy way of making a break. Perhaps you've hit in with your forward ball. What should you do? Either you should try to dig out a break but leave a fall back position or just play for a good leave, from which you should be able to make a break in the next turn. Note that just making one or two hoops is usually not worth anything, so if there isn't a reasonable chance of digging out a break you should play for a leave.

Assuming that you don't manage to dig out a break, you want to end your turn with your balls together with a useful rush, opponent balls separated, both off boundaries and preferably near your hoops or your next but one hoop. Oppo has no short shot and no double, and whatever shot he takes you should have a good break prospect in the next turn. Often this will mean giving away a break if he hits, but not necessarily if you are for different hoops.

If you start the turn playing U near K, try taking off moving K a yard off the yardline into the lawn. Roquet one oppo ball (say R) and send it somewhere useful going to Y. You may need to use a rush to make space to do this. Then roquet Y and croquet it to its position. If you don't lose too much in the process and stand to gain a break, you can try rolling to your hoop instead at this point. However it's usually not worth the loss of accuracy in positioning Y. Finally, shoot back off the boundary behind K, ideally not leaving a double but leaving yourself a useful rush.

Useful concepts

- Guarding the boundary
- Cross-wiring
- Forcing one ball to play
- The 3-1 rule