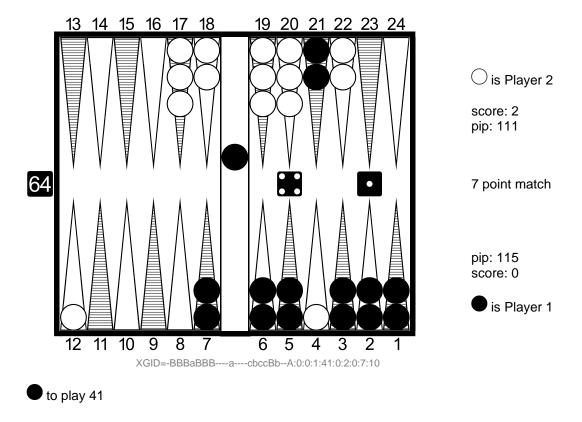
PROBLEM OF THE WEEK #13 - MARCH 9, 2021

THE POSITION:



THE TOURNAMENT AND THE GAME SITUATION:

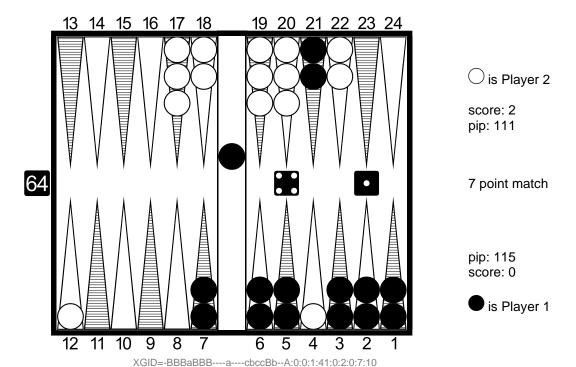
For this week's problem, I've taken another position from one of our weekly "For The Glory" online tournaments. Black is trailing in the 7-point match 2-0. He has a checker on the bar and he has just rolled 41 – not his best, but at least he didn't dance.

THE QUESTION:

So, what should he do here?

SOLUTION

EXTREME GAMMON ROLLOUT RESULTS:



to play 41

1.	Rollout ¹	Bar/21 5/4*	eq: -0.419
	Player:	34.26% (G:12.62% B:0.15%)	Conf.: ± 0.010 (-0.4280.409) - [100.0%]
	Opponent:	65.74% (G:16.94% B:0.63%)	Duration: 2 minutes 49 seconds
2.	Rollout ¹	Bar/21 3/2	eq: -0.610 (-0.191)
	Player:	31.04% (G:2.85% B:0.03%)	Conf.: ± 0.008 (-0.6180.602) - [0.0%]
	Opponent:	68.96% (G:6.79% B:0.26%)	Duration: 2 minutes 20 seconds
3.	Rollout ¹	Bar/21 2/1	eq: -0.622 (-0.203)
	Player:	30.64% (G:2.49% B:0.04%)	Conf.: ± 0.009 (-0.6310.613) - [0.0%]
	Opponent:	69.36% (G:6.58% B:0.24%)	Duration: 2 minutes 24 seconds
4.	Rollout ¹	Bar/21 7/6	eq: -0.662 (-0.243)
	Player:	28.38% (G:3.94% B:0.06%)	Conf.: ± 0.010 (-0.6720.652) - [0.0%]
	Opponent:	71.62% (G:7.72% B:0.20%)	Duration: 1 minute 35 seconds
5.	Rollout ¹	Bar/21 6/5	eq: -0.814 (-0.395)
	Player:	25.91% (G:2.50% B:0.04%)	Conf.: ± 0.010 (-0.8240.804) - [0.0%]
	Opponent:	74.09% (G:8.72% B:0.23%)	Duration: 1 minute 32 seconds
6.	Rollout ¹	Bar/24 7/3	eq: -1.000 (-0.581)
	Player:	20.39% (G:2.01% B:0.00%)	Conf.: ± 0.000 (-1.0001.000) - [0.0%]
	Opponent:	79.61% (G:18.02% B:0.88%)	Duration: 1 minute 27 seconds
¹ 1296 Games rolled with Variance Reduction.			
Moves: 3-ply, cube decisions: XG Roller			

www.eXtremeGammon.com Version: 2.19.211.pre-release, MET: Kazaross XG2

ANALYSIS:

Black must enter on the 21-point. With three checkers back, Black simply must get his third back checker into position to leap out into the outfield. If he enters on the 24-point, he'll be forced to play 7/3 with the four, breaking his bar-point in front of White's checker on Black's 4-point, leaving it exposed to a direct shot; in addition, it's likely that he'll be forced to break his 21-point anchor very soon, leaving his back checkers subject

to a possible attack. In fact, as the rollout shows, any play that involves entering on the 24-point will allow White to cash the game immediately.

Since Black must enter on the 21-point with the four, that leaves him with an ace to play, which can only be played on his own side of the board. The choices are not all that appealing -7/6, 6/5, 5/4*, 3/2 or 2/1 – each breaks a point and some leave one or two blots.

One play, though, stands out head and shoulders above the rest. For those of you that are old enough to remember the very first Problem of the Week – which came out oh so long ago – you may recall that a "banana split" play emerged as the best play in that position. I noted then that these kinds of plays look wrong because they usually are – also, while one can "look really cool" making these kinds of plays, to be correct they require that a certain blend of favorable circumstances be present.

In looking at today's problem, note the following features, each of which favors making the hitting play, 5/4*:

- Positional Structure and Lack of Connectivity: Right now, Black's army is essentially divided into two non-connected parts he doesn't want to break any of the points in his front position, and is only doing so here because he is forced to. If Black can't escape his back checkers relatively quickly, though, his front position will crash, leaving him in very dire straits. The primary battlefield in this game is about to shift to a fight for outfield control where, right now, Black doesn't have any presence at all. White, on the other hand, has a checker on his midpoint, which is currently both an asset and a liability but if White finds himself on the bar and doesn't reenter quickly (and he is only a small favorite to do so after being hit), the midpoint blot will become much more of a liability. By hitting, Black begins to fight for outfield control; if Black can keep White on the bar, it will be much easier for him to extricate his back checkers and possibly pick up the White blot on the midpoint.
- Paul Magriel's Save-versus-Bold Criteria: Here, Black has more men back as compared to White, a stronger inner board as compared to White (notice that even after hitting with 5/4*, Black still has White out-boarded, 4 points to 3), and he has the safety of a defensive anchor. All of these criteria suggest that a bold play may be in order.
- Risk and Reward: With Magriel's criteria pointing to a possible Bold Play consideration needs to be given to the overall risks and rewards that go along with the candidate bold play of the ace, 5/4*.
 - o <u>Potential Upside</u>: There is good potential upside for Black here. When White dances (16 out of 36 rolls), it is <u>very</u> good for Black. He goes from being a decent-sized underdog in the game to being a favorite. In fact, he has a small double when White fans (while he is only a small favorite, the volatility in this position is huge and about half of Black's wins will be gammons). He can remake a five-point board with any ace, deuce or three on his next roll (other than double-threes), and he can also hit White's blot with a 54 roll (note that with 63, he won't hit, he'll instead play 21/15 7/4).
 - Risks of Hitting: It is risky for Black to leave two blots subject to direct shots having another
 man sent back would not be good for Black. However, these risks are mitigated somewhat by
 the anchor that Black has on the 21-point, which gives him some residual winning chances as
 well as protection against the prospect of getting gammoned.
 - Conclusion: All things considered, it would seem that the potential upside from making the hitting play seems to be sufficient to justify the risk that comes from it.

¹ To borrow an expression from *What's Your Game Plan: Backgammon Strategy in the Middle Game (2011)*, by Mary Hickey and Marty Storer.

² See *Problem of the Week #5* for a detailed discussion of this key idea. http://www.backgammononlongisland.com/wp-content/uploads/2021/02/Problem5Solution-January6-2021.pdf

- What are the Alternatives? One feature of this position that differs from that of the very first Problem of the Week is the fact that all of Black's alternative plays of the ace in this week's problem position are objectively poor. In the original Problem of the Week, there was an alternative to the "banana split" play that was relatively safe in our current Problem of the Week, Black will need to break his bar-point or his inner board. With a likelihood that there will be an exchange of hits as Black tries to escape his back checkers and White tries to bring his own checkers home, it is imperative that Black maintain as strong of a front position as he can. His stronger inner board is his greatest asset in this position. Plays like 3/2 and 2/1 break his inner board almost beyond repair. While 5/4* also breaks his inner board, Black puts White on the bar, retaining a four-point board, and he has very good prospects of remaking a five-point board (especially in those cases where White fans 16 times out of 36 rolls).
- Match Score Considerations: Magriel didn't really cover match play in his famous treatise, *Backgammon*, but the trailer in the match will usually have the greater incentive to make a bolder, riskier play. Here, Black is down 2-0 in a 7-point match. As noted above, if White fans, Black can and should double. In this particular case: (a) a doubled gammon will be very good for Black it will net Black four points and put Black ahead 4-2 in the match, and (b) when Black doubles, the cube that he gives to White will be somewhat "crippled," as White will be very reluctant to turn the cube to 4 since that will leave Black with the ability to subsequently recube to 8, putting the entire match on the line in this one game, essentially making White's current match lead meaningless.

BEST PLAY:

Black's best play in this position is the "banana split" play, **B/21 5/4***. All other plays are blunders.

EPILOGUE

As it turns out, Brian Cohen, playing the Black checkers, actually played B/21 2/1.
He passed a double several moves later, going down 3-0 in the match. Despite that slow start, though, Brian was able to stage a comeback and ended up winning the match 7-4.

REFERENCES

I list below some backgammon books that contain checker play problems. For each, the reference is directed to specific problems contained in the book that involve the possibility of making a "banana split" play. In each case, the author includes a discussion of the considerations that are involved in making the decision as to whether to make such a play. Overall, the quality of the analysis and discussion is quite good.

Hickey, Mary, and Storer, Marty, *What's Your Game Plan: Backgammon Strategy in the Middle Game*, GammonGo Publishing, 2011, Problems #30 ("A Perfect Storm") and #31 ("Prevent Defense..."), pp. 102-105.

Olson, Marc Brockmann, *Backgammon: Pure Strategy*, 2017, pp. 301-310.

Wiggins, Norm, *Boards, Blots and Double Shots*, self-published, 2001, Problem 50, p. 57.

Woolsey, Kit, and Heinrich, Hal, *New Ideas in Backgammon*, The Gammon Press, 1996, Problem 93, pp. 282-284.