I'd like to present an advanced lane play targeting method, a 3-Point Target System, which is based on research and has been developed to help provide you with the biggest margin of error. This should provide you with guidance to play any lane condition more appropriately, insuring more pocket shots, more strikes and less splits. Consequently, with this 3-point system, you will be less likely to overplay the lane.

As a full-time bowling coach, one of my missions is to develop simple-to-use systems for bowlers in order to significantly improve their margin of error and increase consistency. With this goal, I have taken the ideas of two BTM contributors, modified them, and built a hopefully, improved targeting system.

Accordingly, to begin, I want to acknowledge Del Warren and Neil Strommelen's previous contributions that acted as inspiration for this targeting model. Specifically, I have attempted to draw on and expand on the ideas of the exit point as well as focal point targeting. Both contributions appeared in the pages of BTM. Warren's article, Sport Bowling: Targeting for Success, appeared in the December, 2005 issue and Neil Strommelen's Entry angle, Part 3 appeared in the April 2006 issue.

From two ideas in these articles, along with other previously known targeting facts, I have developed a 3-point targeting system that should lead to improved targeting for advanced bowlers, offering more consistency and accuracy in hitting the pocket. With the 3-point system, you should have the most margin of error and keep yourself on a higher scoring pace for a longer period of time.

The three targets

The 3-point targeting system uses three targets: an exit point, a focal point and a visual target. With three targets, you should be able to establish a more accurate ball path by subconsciously creating more accuracy and better preparation for execution in your mind...prior to the shot.

Point 1: Initially, in this process, the bowler determines an exit point based on an easy-to-use formula. The exit point is the actual board, at the end of the oil pattern, in which research informs us the ball should leave the oil pattern to increase the likelihood of hitting the pocket and striking.

Point 2: We choose a focal point at the end of the lane to establish an appropriate launch angle and body position.

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Point 3: Lastly, a bowler chooses a visual target. This is the actual place a bowler will look at and attempt to hit. Using both the exit point and focal point guides a bowler to the best visual target to use.

The bowler should visualize the actual path through these three targets, from focal through the exit to the visual target. This visualization process prepares the subconscious mind to execute an outstanding shot with more accuracy. Here are more details of each of the independent steps that lead to the 3-Point Advanced Targeting System.

Step #1: Determine the exit point based on the pattern length

Exit Point = Pattern Length – 35 + 4

After reading Neil Stremmel's article in the April issue of BTM, I immediately reflected heavily about the implication of this research. The article featured more than the exit point findings, but I felt strongly that the exit point had huge implications for lane play. In essence, this research creates a new term that bowlers should be aware of, the exit point. The exit point is the board location in which the ball should leave the oil, at the end of the pattern, to maximize the chances of hitting the pocket.

In a nutshell, Stremmel discovered that the exit point was the same for all players regardless of style. For example, to maximize pocket percentage, high speed and high rev players had the same exit point as low speed and low rev players. True, the high speed and high rev players had a breakpoint further down the lane, due to the length of the ball push past the pattern, caused by presence of both speed and revs. But, the ultimate exit point was the same.

From the findings presented in the April issue, I rounded off the data for the exit point locations for 5 degrees of entry angle. Stremmel presented three data sets, including 4, 5 and 6 degrees of entry angle. The data presented illustrated that a bowler had a margin of error at the end of the pattern. So, I used the middle set showing exit point values achieving 5 degrees of entry angle. This would provide the bowler with miss, at the end of the pattern, left and right. With this approach, the data fell into a simple formula, pattern length – 35 + 4. Rather than using pattern length minus 31, I wanted to retain the accuracy of the data set in which 35 is the base. Since most patterns a bowler will face are between 35 and 45, this will work.

The biggest benefit from using the exit point to determine where to play the lane is your ability to maximize the margin of error hitting the pocket as well as choosing a more appropriate focal point for the lane condition. In regard to the exit point, at 35 feet you actually have nearly 2 boards to the left and 2 boards to the right to hit the pocket with between 4 and 6 degrees of entry angle. But, of course, you have to play the lane properly by choosing the axis rotation, speed and revolutions that match the bowling ball and lane.

Step #2: Determine a focal point to set launch angle
Del Warren developed the Focal Point System to help bowlers set more appropriate launch angles on more difficult patterns such as Sports Bowling lane conditions with ratios of 2.5 to 1 or lower. The idea is to project your target to the end of the lane in order to set the stage for the angle in which you will play the lanes. Clearly, the ball will not get to this point but you want the ball to be in position on this line before it makes a move toward the pocket.

As a rule of thumb, use the exit point to help determine where you want the focal point to be. To start, project a line straight down the lane from the exit point to the pin deck. Start with this intersection as your initial focal point. This will also help guide your visual target and starting position on the approach. You will bring the line back through the exit point to a visual target on the same trajectory line.

When choosing a focal point decide how open your shoulders should be for the specific pattern. In general, for a longer pattern you want your shoulders more square. Consequently, you will choose a focal point closer to the head pin. Conversely, for shorter patterns, you might want your shoulders more open to increase the launch angle. The focal point might start at the 10 pin and move right, 7 pin and left for the left-handed bowler.

I recommend choosing focal points in segments (e.g., middle of two pins, left side, middle and right side of the pin). But, you can also use the middle of the masking unit or 7 pin on the next lane. Be creative in your use of the focal point. Base your decision on where you are playing the lane and how the ball is reacting. This will allow complex adjustments while allowing for more accuracy and various ball reactions appropriate for the lane condition.

**Step # 3: Choose an appropriate visual target**

The visual target is what you actually are looking at to hit. If you look closer, the ball will usually roll earlier. If you look longer, the ball will usually go straighter to the target. So, when choosing a visual target:

- Make the visual target closer to the exit point on shorter patterns
- Make the visual target closer to the arrows on longer patterns

Use the exit point and focal point as a guide to where to start with your feet. If you are playing short oil, move your feet out. Conversely, for longer patterns, move your feet in.
In general, to start out on shorter patterns, choose a visual target down the lane, closer to the exit point. This target can even be past the exit point. One mistake many bowlers make is to play a short pattern from deep inside. Rather, get as far right as possible. For longer patterns, choose a visual target closer to the arrows. I recommend a target somewhere between the arrows and about 25 feet. This closer target will get the ball rolling earlier and help you. You can also adjust your visual target up and down the lane to make finer adjustments that don’t radically change the launch angle.

In essence, you are choosing a visual target based on the roll characteristics that you want to achieve to best play the lanes. For shorter patterns, you should be outside with more of a skid-snap trajectory. Conversely, on longer patterns, you want to be inside with a more arcing trajectory. These are general principles to start out with and then adjust from there accordingly. As I always say, begin with research and then use common sense to make adjustments.

**Step # 4: Draw an imaginary line:**

Focal → Exit Point → Visual Target

One of the most important factors of the 3-Point system is to better set the mind for executing a quality shot on the intended target line. Now that all three targets have been chosen, literally draw an imaginary trajectory line in your mind, from the focal through the exit to the visual. This will set your mind to execute more accurately on this ball path. If you choose a visual target length that is past the exit point, then be sure to go in order when you draw the imaginary trajectory line, focal → visual → exit. Then, go back to the visual target.

**Step # 5: Set your feet parallel and body perpendicular to target line**

After choosing the exit point, focal point and visual target, you now have to set your starting position. Utilize the focal, exit and visual targets to set your body position. Draw the target line back to the focal line and set your body perpendicular to the target line. And, set your feet parallel to this target line.

With the 3-Target System, you need to think differently about adjustment. Your exit point will remain constant as the lane transitions. But, the focal point and visual target will change. So, move your body and feet according
to your target adjustments. Just draw the trajectory line back and set your body, set your feet.

**Step # 6: Visualize a successful shot in your mind on the target line**

After setting the body and feet, visualize the target and trajectory line, focal point ➔ exit target ➔ visual target. Literally, see this line in your mind. After seeing the line, visualize the shot you want to execute. Be sure to take the time to actually visualize executing a successful shot on this target line with the trajectory you intend. Be specific. Think about the actual trajectory. Is it more skid-snap or more of an arc? Take the time and commit to an excellent shot before executing each and every shot. Finally, do the same on your spares. Commit to each shot by visualizing a successful shot and setting the stage in your mind.

**Lots of moves**

With the 3-point target system, you can do many things with your target before having to adjust your feet. For example, many bowlers get into trouble by making moves on the approach with their feet. This often causes problems because the launch angle created is adjusted too radically. This can lead to an over/under reaction.

For example, you can change your visual target up and down the lane and cause varying reactions by adjusting the amount of skid and roll on the bowling ball. The best thing to do is to practice with different lengths with the visual target. This can help you to adjust during transitions as well as to start in a more appropriate place to score.

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**3-POINT TARGET SYSTEM FOR ADVANCED LANE PLAY PRACTICE SHEET**

**Step # 1: Determine the Exit Point Based on the Pattern Length (PL - 35 + 4)**

**Step # 2: Determine a Focal Point Based on the Desired Launch Angle**
- Project a line from the exit point to the pin deck
- Target closer to the headpin for longer patterns
- Target further from the headpin for shorter patterns

**Step # 3: Choose a Visual Target**
- Target closer to the exit point on shorter patterns
- Target closer to the arrows on longer patterns
- Target past the exit point if you need

**Step # 4: Draw an Imaginary Line:**
- Focal ➔ Exit Point ➔ Visual Target
- Actually draw a trajectory line in your mind
- If your visual target is past the exit point,
  - Focal ➔ Visual ➔ Exit

**Step # 5: Set Your Feet Parallel & Body Perpendicular to Target Line**

**Step # 6: Visualize a Successful Shot in Your Mind on the Target Line**

**Step # 7: Breath-In, Exhale, Go**