



ARTHUR LITTLE

Design for all

Arthur Little reports on his research into how courses should be designed to enable golfers with slow swings to enjoy the game.

Seven years have passed since I wrote an article for the January 2016 issue of *Golf Course Architecture* about the design implications of providing proportional tee yardages to fit golfers with differing swing speeds.

The premise is that proportionally positioned tees allow golfers across the swing speed spectrum to use the same or very similar clubs for their approach shots. The concept is supported by data from testing done by Gene Parente at Golf Laboratories.

The testing data shows a considerable difference in the ball flight characteristics of golfers with driver swing speeds below 80mph. Their ball flights reach their peak height further from the landing spot; descend at a significantly shallower angle; have significantly less backspin

upon landing; and have a considerably higher percentage of roll than shots from golfers with higher swing speeds.

This is illustrated in the chart (right), which shows the difference between the seven-iron ball flight of the average woman with a driver swing speed of 65mph and the seven-iron ball flight of the average man with a driver swing speed of 95mph. With the slower swing, the total distance from roll is 12 per cent, compared to three per cent with the faster swing, caused by the combination of shallower landing angle and less backspin.

I believe these factors should significantly impact golf course design. Forced carries, whether over greenside bunkers, water hazards (both streams and lakes) or any obstacle that crosses a hole, make the

A sport of two halves

Data by Gene Parente of Golf Laboratories, a leader in independent testing for the golf industry, shows the differences between the average female and male golfer when hitting a seven-iron shot

Swing speed	65 mph	95 mph
Carry yards	93	152
Total yards	106	156
Peak height yards	14	34
Peak height as % of carry	59%	67%
Descent angle	37	50



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game much more difficult, frustrating, less fun and more time consuming for the slower swing golfer.

From the same yardage, the slower swing players must use a longer club to carry the ball to the green. However, as illustrated in the chart, even when using the same approach club, they are at a disadvantage as their shot often will not hold the green because it lands at the shallower angle with much less backspin.

These players need an option to roll their approach shot on the putting green without clearing an obstacle. This often means designing a closely mown area which connects the

fairway with the green through which they can bump and run a shot on to a portion of the green, even if it's not directly at the flag.

Cross obstacles, whether bunkers, berms or streams, require solutions that are more complex. At its simplest, position the forward tees so that the slower swing player can get their tee shot close enough to the obstacle so that their lower flying shot can clear it. It is important to not make them hit an extra 'wasted' lay-up shot, thereby effectively increasing the par of the hole.

A more nuanced approach is to add risk/reward by placing the obstacle

close enough so that the slower speed player has a chance to clear it, thus giving them a much shorter shot to the green.

The goal of my thinking in these areas is always to make the game more enjoyable for all players and to make it more fun and comfortable for people new to the sport. **GCA**

Arthur Little would like to acknowledge the contributions of Jeff Brauer and Gene Parente for this article. Arthur and his wife Jann Leeming offer free advice to courses, he can be contacted by email at arthurdiddle8@mac.com.