

A WORD ABOUT STATISTICS

For several years, the Golf Trip has employed a couple of statistical formulae in an effort to lend predictability to the Calcutta. They are referred to as “Projected Plus or Minus” and “Relative Value Factor.” The predicative qualities of these formulae are largely ephemeral; randomly having a blind-folded monkey draw players’ names from a hat is as likely to predict a winner on a given day. Despite their utter lack of predictive value, the stats continue to be employed as a novelty intended for the entertainment of their audience, and seem to be widely accepted by that audience.

Projected Plus or Minus

The first of these is the Projected Plus or Minus, or “PPM.” PPM was introduced in 2004 as a possible way to handicap the Calcutta. It is calculated by using a player’s average scores each day for the last three appearances in the tournament. If a player has less than three appearances, then the available rounds are utilized. In some cases, such as Dennis McClane’s reappearance this year after seven-year hiatus, the data are somewhat stale and possess little or no predicative value, but, hey, it’s all we’ve got.

In calculating the PPM for a day of the tournament, the player’s average score for the same day is accorded more weight than the average for the other day on the same course. The weighting is 60% for the day for which the calculation is performed, and 40% for the other day. The result is then compared to the player’s adjusted quota for the day for which the calculation is made. The resulting number is that player’s PPM for that day. PPM tends to be fluid as the tournament moves through its progression, so typically PPM is emphasized at the beginning of play. For that reason, PPM’s are calculated and included in the player profiles that are prepared before the tournament begins. Nonetheless, PPM’s can be and are calculated for Days 2-4, and figure in the Calcutta odds for later rounds. An example of these calculations appears below.

| Year | Day 1 Pts | Day 1 ± | Day 2 Pts | Day 2 ± | Day 3 Pts | Day 3 ± | Day 4 Pts | Day 4 ± |
|------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| 2006 | 12 | 0 | 8 | -4 | 13 | 3 | 12 | 1 |
| 2007 | 9 | -2 | 13 | 3 | 20 | 9 | 12 | -1 |
| 2008 | 9 | -4 | 19 | 8 | 17 | 4 | 14 | -1 |
| | 10.00 | -2.00 | 13.33 | 2.33 | 16.67 | 5.33 | 12.67 | -0.33 |

Here you have the performance scores for Richard Matlock over the years 2006-2008. His three-year average score for Day Two, in this case Mid Pines, over this period is 13.33. His three-year average for the second day on the same course, in this case Day Four, is 12.67. Richard’s point quota at the beginning of the 2009 Tournament is 15. In an anomaly, the first round of this year’s tournament is being contested on Mid Pines, rather than its usual starting course, Pine Needles. Mid Pines is usually the venue for Days Two and Four. Therefore, the calculation of Richard’s PPM for Day One this year (to be played on Mid Pines) employs data gathered from rounds 2 and 4 from the prior three years.

The calculation of Richard's PPM for Day 1 of the 2009 tournament is thus expressed by the following formula:

$.6(D2)+.4(D4)-Q = \text{PPM}$, where D2 is the Day Two three-year average, D4 is the Day Four three-year average, Q is Day One Quota, and PPM is the Projected Plus or Minus for Day One.

The result is $.6(13.33)+.4(12.67) -15 = -1.93$

This result yields a relative rank among the other players in this year's field of 13 out of 16. This would tend to indicate that Richard is not a particularly good bargain in the Day One Calcutta, despite his known affinity for Mid Pines. Similar calculations are employed for subsequent days, the only changes being the adjusted quotas based on results, and the weighting accorded the prior year's averages based on the day for which calculations are performed.

Relative Value Factor

Relative Value Factor, or "RVF," is an effort to evaluate a player's ability to earn money in the Calcutta for his handlers. Is it less likely than PPM to predict a win on a given day, and is more a measure of general earning potential over the course of a four-day tournament. Introduced in 2003, RVF is calculated using several assumptions about the nature of the Calcutta.

First, the total Calcutta pots for the four-day tournament are accorded a value of 100. The assumption here is that if a player could win all three places each day, he would win one hundred percent of the Calcutta money that is available for the entire tournament. It is of course impossible to place first, second, and third on the same day; the best a player could hope for is to place first every day.

It being the case that Calcutta pots are split sixty percent for first, thirty percent for second, and ten percent for third, a player winning outright all four days would come away with sixty percent of all available Calcutta money. A player winning all four days would have a relative value of 60, representing 60% of the value of 100 accorded the total Calcutta pots for the four-day tournament. Sixty is the highest RVF that can be achieved in any one year. A win on any one day has a value of twenty five percent of sixty, or fifteen. Therefore, for every day a player wins the Calcutta outright, with no ties, he is awarded a relative value score of 15.

Similar calculations are used to determine RVF's for second and third. The value of sole possession of second for all four days is thirty. Therefore, the RVF for second place finish on a day is one-fourth of that, or 7.5. The value of sole possession of third place for all four days is ten. Therefore, the RVF for a third place finish on a day is one-fourth of that, or 2.5. In the event of ties, the relevant RVF's are added together, the total is divided, and the portions awarded prorata to the players who are tied.

At the end of the tournament, each player's RVF's for all four days are simply added together. For the purposes of RVF rankings that are published before the tournament, each player's Relative Value Factors for the last three appearances in the tournament are averaged. If a player has less than three appearances, then the available rounds are utilized.

As an example of the application of RVF scoring, reproduced below is the 2008 final Leaderboard.

| Player | Day 1 Pts | Day 1 ± | Day 2 Pts | Day 2 ± | Day 3 Pts | Day 3 ± | Day 4 Pts | Day 4 ± | Wins | Seconds | Thirds | RVF |
|-----------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|------|---------|--------|-------|
| Moore | 18 | 10 | 12 | 2 | 13 | 2 | 12 | 0 | 1.00 | | | 15.00 |
| Walton | 14 | 4 | 15 | 3 | 18 | 5 | 17 | 2 | | 1.00 | 0.50 | 8.75 |
| Goddard | 30 | 4 | 21 | -7 | 35 | 9 | 31 | 3 | 1.33 | 0.33 | 0.83 | 24.58 |
| Matlock | 9 | -4 | 19 | 8 | 17 | 4 | 14 | -1 | 1.00 | | 1.00 | 17.50 |
| Lawler | 19 | -1 | 25 | 5 | 24 | 2 | 22 | -1 | | | 1.00 | 2.50 |
| Thompson | 26 | 0 | 32 | 6 | 25 | -3 | 25 | -2 | | 1.00 | | 7.50 |
| Wood | 24 | 2 | 23 | 0 | 19 | -4 | 24 | 3 | 0.33 | 0.33 | 0.33 | 8.33 |
| Abernethy | 30 | 6 | 24 | -2 | 28 | 3 | 18 | -8 | | 1.00 | | 7.50 |
| King | 8 | -2 | 5 | -4 | 8 | 1 | 10 | 3 | 0.33 | 0.33 | 0.33 | 8.33 |
| Kimmet | 19 | -1 | 19 | -1 | 23 | 3 | 17 | -4 | | | | 0.00 |
| Hyke | 10 | -3 | 14 | 2 | 12 | -1 | 7 | -6 | | | | 0.00 |
| Logue | 16 | 1 | 6 | -9 | 11 | -2 | 13 | 1 | | | | 0.00 |

Dan Moore had one win on Day One, resulting in a RVF of 15 for that day. He did not finish third or higher on any other day, so his final RVF for the tournament was 15.

Monty Walton had sole possession of second place on Day 3, yielding an RVF of 7.5 for that Day. He also tied with Greg Goddard for third on Day One, resulting in a split of the available value of 2.5. Thus Walton received 1.25 relative value for Day One, which, when added to his 7.5 for Day Three resulted in a final RVF of 8.75.

In addition to his split with Walton on Day One, Goddard won outright on Day 3 with a record performance, and tied for first with two other players, Michael Wood and Mike King, on Day 4. In that situation each player receives a third of a first place, a third of a second place, and a third of a third place. Therefore, the formula for calculating Goddard's RVF is:

$$\begin{array}{r}
 \text{First} \quad 1.33 \times (15.00) = 19.999 \\
 \text{Second} \quad .33 \times (7.50) = 2.500 \\
 \text{Third} \quad .83 \times (2.50) = \underline{2.083} \\
 \text{Total} \quad 24.582
 \end{array}$$

This RVF is exemplary for any player. For a player in the tournament for the first time it is truly remarkable. Goddard of course has the highest RVF going into this year's event.

--C. D.--