

HOLE HANDICAPPING THE SEVILLE COURSE for 2018

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For the SMGA

Agenda

- Method of Hole Handicapping
- Explanation of Hole Handicapping
- Classic Example = Hole 14 and Hole 16
- Hole Handicapping Using SMGA Data
- Player Handicap Distribution Analysis
- Ranking Based on Statistical Data
- Calculated Hole Handicap
- Effect of Handicap Group Split Point
- RECOMMEDATIONS
- End of Presentation

Method of Hole Handicapping

- USGA Section 17
- Three Suggested Methods
 - Subjective (Hole Length, Hazards, Fairway Width, Obstructions, etc.)
 - Linear Regression of Actual Scores
 - Two Group Comparison of Average of Actual Scores
- Current Hole Handicap Rating used Group Comparison in 2008 on 400 Rounds
- Proposed changes using Two Group Comparison of **+9000 Rounds**

Explanation of Hole Handicapping

- **USGA Handicap System Manual** – Section 17 ALLOCATION OF HANDICAP STROKES
 - To ensure that the handicap strokes are used as an equalizer and should be available where it most likely will be needed by the higher-handicapped player in order to obtain a halve on the hole.
 - Common Sense Suggestions
 - Allocate strokes based on the tees played most often by a majority of the members.
 - Allocate the odd-numbered strokes to the front-nine holes and the even-numbered strokes to the back-nine
 - Avoid allocating the low numbered holes to the beginning or end of the nine holes

“Difficulty in making *par* on a hole is not an effective indicator of the need for a stroke”

Repeat - Repeat - Repeat

- “Difficulty in *you* making *par* on a hole is not an effective indicator of the need for a stroke”
- Avoid personal feeling on how difficult it is for *you* to par a hole in the decision on how a hole should be handicapped.

Classic Example = Hole 14 and Hole 16

- Hole 14
 - Low Group Average: 3.456 or 0.456 Over Par
 - High Group Average: 3.963 or 0.963 Over Par

- Hole 16
 - Low Group Average: 4.067 or 0.067 Over Par
 - High Group Average: 4.688 or 0.688 Over Par

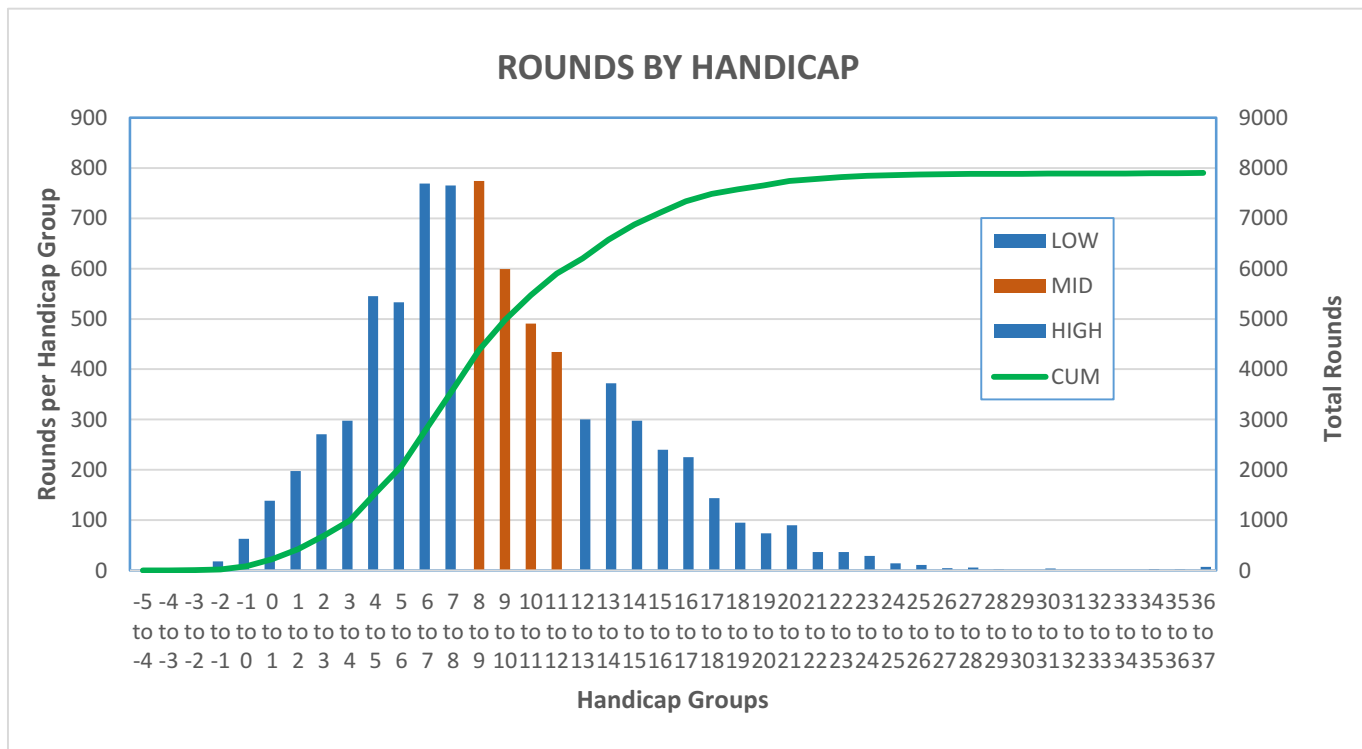
HOLE	14	16
PAR	3	4
LOW RANGE	3.456	4.067
HIGH RANGE	3.963	4.688
DELTA	0.507	0.620
CURRENT HANDICAP	18	16
CALC. HANDICAP	18	16

- Definitely Hole 16 is Easier to Par for Both Groups
 - Then Why is Hole 16 Not Rated as the 18th Highest Handicap
 - Because Hole Handicapping is not based on Hole Difficulty but on the Difficulty Between the Two Groups
- Delta for Hole 16 is Higher than Hole 14: 0.620 versus 0.507
- So Hole 14 should Have a Higher Hole Handicap Ranking than Hole 16

Hole Handicapping Using SMGA Data

- +9000 Rounds Over 6 Years Available through SMGA Database
- 7900 Rounds of Gold Tees Used for the Analysis
- Main Analysis - Two Group Comparison of Average of Actual Scores
- Linear Regression also done with similar results
- Two Groups for Comparison
 - Low Handicap Group : Handicap -3 to 8
 - High Handicap Group : Handicap 12 to 36
 - Spread Between the Average Handicaps of the Two Groups = +20
 - Fairly nice normalized curve to the data

Player Handicap Distribution Analysis



Rounds	7901
Median Hdcp.	8.0
Mean Hdcp.	8.7
Low Hdcp Count	4379
High Hdcp Count	1998
Mid Hdcp Count	1524

Ranking Based on Statistical Data

HOLE HANDICAP ANALYSIS BASED ON DELTA BETWEEN LOW RANGE AND HIGH RANGE GROUPS																		
HOLE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PAR	4	5	4	3	5	4	4	3	4	4	4	5	4	3	4	4	3	5
LOW RANGE	4.264	5.156	4.560	3.281	5.208	4.520	4.249	3.394	4.522	4.519	4.449	5.440	4.294	3.456	4.634	4.067	3.338	5.261
HIGH RANGE	4.864	5.818	5.215	3.704	5.919	5.275	4.896	3.942	5.214	5.354	5.130	6.225	5.031	3.963	5.362	4.688	4.031	6.014
DELTA	0.600	0.662	0.655	0.423	0.711	0.756	0.648	0.549	0.692	0.835	0.681	0.785	0.737	0.507	0.728	0.620	0.694	0.753
DELTA RANK	7	4	5	9	2	1	6	8	3	1	7	2	4	9	5	8	6	3

- Hole Handicap Based on Highest Delta between the Low and High Group
- Delta Rank shows Suggested Ranking by Hole

Calculated Hole Handicap

CALCULATED HOLE HANDICAP BASED ON DELTA BETWEEN LOW RANGE AND HIGH RANGE GROUPS																		
HOLE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PAR	4	5	4	3	5	4	4	3	4	4	4	5	4	3	4	4	3	5
DELTA RANK	7	4	5	9	2	1	6	8	3	1	7	2	4	9	5	8	6	3
CURRENT HANDICAP	11	9	5	17	1	3	13	15	7	2	8	6	10	18	4	16	14	12
CALC. HANDICAP	13	7	9	17	3	1	11	15	5	2	14	4	8	18	10	16	12	6
POSITION DELTA	-1	1	-2	0	-1	1	1	0	1	0	-3	1	1	0	-3	0	1	3

- Position Delta shows Suggested Movement Up or Down on that 9 holes

Effect of Handicap Group Split Point

- Shifted high range cut point from 12 to 23
- Trend of suggested changes remained the same

HIGH RANGE GROUP LOWER CUTOFF VALUE	POSITION DELTA TREND																		Low	High
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
12	-1	1	-2	0	-1	1	1	0	1	0	-3	1	1	0	-3	0	1	3	4379	1998
13	-1	1	-2	0	-1	1	1	0	1	0	-3	1	2	0	-3	0	1	2	4379	1698
14	-1	1	-3	0	-2	1	2	0	2	0	-3	1	0	0	-2	0	1	3	4379	1326
15	-1	1	-3	0	-1	1	2	0	1	0	-3	1	1	0	-3	0	1	3	4379	1028
16	-1	0	-3	0	-2	1	3	0	2	0	-2	1	1	0	-3	0	0	3	4379	788
17	-1	2	-3	0	-1	1	2	0	0	0	-2	1	1	0	-3	0	0	3	4379	563
18	-1	2	-3	0	-1	1	2	0	0	0	-2	1	1	0	-3	0	0	3	4379	419
19	0	4	-4	0	-2	0	3	0	-1	0	-2	1	1	0	-3	0	0	3	4379	324
20	0	4	-4	0	-1	-1	2	0	0	0	-2	1	1	0	-3	0	0	3	4379	250
21	0	4	-4	0	-2	0	2	0	0	0	-2	-1	2	0	-3	0	0	4	4379	160
22	0	4	-4	0	-4	0	3	0	1	0	-2	0	0	0	0	0	0	2	4379	123
23	-1	3	-3	0	-4	1	4	0	0	0	-2	-1	3	1	-1	-1	0	1	4379	86

RECOMMEDATIONS

SMGA SUGGESTION FOR HOLE HANDICAPPING																		
HOLE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PAR	4	5	4	3	5	4	4	3	4	4	4	5	4	3	4	4	3	5
CURRENT HANDICAP	11	9	5	17	1	3	13	15	7	2	8	6	10	18	4	16	14	12
SMGA SUGGESTION	13	9	5	17	3	1	11	15	7	2	12	4	10	18	6	16	14	8
CALC. HANDICAP	13	7	9	17	3	1	11	15	5	2	14	4	8	18	10	16	12	6
POSITION DELTA	-1	0	0	0	-1	1	1	0	0	0	-2	1	0	0	-1	0	0	2

Based on the statistical analysis and other USGA suggestions

- Holes 2,3,4,8,9,10,13,14,16,17 remain unchanged
- Front
 - Hole 5 Changes from 1 to 3 and Hole 6 Changes from 3 to 1
 - Hole 1 Changes from 11 to 13 and Hole 7 Changes from 13 to 11
- Back
 - Hole 12 Changes from 6 to 4 and Hole 15 Changes from 4 to 6
 - Hole 11 Changes from 8 to 12 and Hole 18 Changes from 12 to 8

End of Presentation

Questions?