Sutton Gun Club - Handicap Rules - 2022 (Amended 2023)

The objective

- To give shooters of all abilities a chance to win, when they shoot well above their norm, rather than just the few top shots winning all the time.

The objective is achieved when we get near the following

- Winners from across the full spectrum of shooting abilities win approximately in proportion to their attendance.

The handicap system is based on a shooter using their main gun.

- The main gun is the gun used for normal competitions.
  Scores must be voided if you don't use your main gun, unless it does not adversely affect your average score.

- In case of a dispute the committee will decide if your score has been affected, and that decision is final.

Handicap Rules

- Handicaps are calculated at the end of each quarter: March, June, September, December; and used from the 1st of the following month.
- A shooter's score for Side by Side and Semi Auto competitions, and Void cards are disregarded.
- As shoots vary in how hard or easy they are, we create a PAR (Player's Average Round). PAR is added to a shooter's score when calculating their handicap. See appendix for its calculation.
- Scores for the quarter are totalled then divided by the number of shoots: this gives a shooter's PAR adjusted average.
- Having added PAR, if a score is more than 10 below its last 12 months PAR adjusted average, we adjust it to the shooter's last quarter PAR adjusted average minus 10.
- The shooter's PAR adjusted average is deducted from 80, and the result multiplied by 0.75, then the results are rounded 0.5 up. This is the shooter's new handicap if they have shot 3 or more times in a quarter.
- If a shooter has shot fewer than 3 times in the quarter, then if the new handicap is lower we use it; otherwise their handicap will remain the same as last quarter.
- Example:
  - Last quarter's handicap = 12.
  - PAR average over the quarter = 54.
  - So we have 72 - 54 = 18; 18 x 0.75 = 13.5, round 0.5 up = 14 handicap.
  - 3+ shoots in quarter, new handicap = 14, Less than 3, new handicap = 12.
- 43 is the maximum handicap that can be given.
- Should a member win 2 trophies in a quarter, their handicap is recalculated using the current quarter's data.
- We calculate handicaps for visitors, but they can't be used until they become members.

Appendix

Notes on various aspects of the system.

PAR is calculated by:

- Ignoring scores for Visitors, Side by Side, Semi Auto, Void cards along with anybody who has not earned a handicap.
- Taking the PAR adjusted yearly average for each shooter shooting that day, and dividing by that number of shooters: this gives us an average that this group of shooters achieves on an average shoot. Example, say 40 shooters' PAR adjusted yearly average totals 2000, therefore 2000 / 40 = 50, this is their yearly average and what you would expect them to score on an average shoot.
- Add all their scores for the current shoot, divided by the number of shooters will give the average for the day. Example, say 40 shooters and their scores total 2120, therefore 2120 / 40 = 53, and is the day's average.
- The difference between the two determines the PAR. We take the PAR adjusted yearly average and deduct the shoots average, which equals PAR. Using the above figures 50 - 53 = -3.
- If the shoot's score is higher than the average it must have been easier, that is if today's average score is 53 and the yearly average was 50 that means it was 3 easier, and PAR is -3 and visa versa: if it had been harder by 3 it would be +3.

PAR Notes:

The PAR system was introduced to help correct the situation that occurs when you have shoots that vary in difficulty.

In the real world, 1 or 2 shooters in a quarter would manage to shoot only easy shoots, or only hard shoots, usually because they only shot a few times in the quarter. This had the effect of making their handicap go up or down even though their ability had not altered. This either gave them an advantage in competitions (if their handicap went up), or give them no chance (if it went down disproportionately to their real ability). Also if they shot fewer than 3 times and happened to go on easy shoots, their handicap would shoot down.

So PAR was introduced to reduce or eliminate these problems.

Void shoot cards:

If it is a practice shoot, a shooter has the right to have his card voided. This score will not be included in calculating their handicap. Cards must be voided at the start of the shoot and signed by the Cashier.

Side by Side and Semi Auto shoots:

Side by Side and Semi Auto shooters' scores in designated competition shoots for those types of guns will not be used for calculating their handicap. All other not voided cards from that day will be included.

Shoots that are not for 80 targets:

The number of targets will be divided by however many have been shot and then multiplied by 80 to normalize it.

Limit the score to -10 below last 12 months PAR adjusted average:

This is done so that if you have a really off day or you are sandbagging, it does not advantage you too much. In the past we tried ignoring the score if it was 10% below, and then later 20% below average, This was very unfair and meant that some shooters got a tough handicap. For example even when we upped it to 20%, if you are a 50 average shooter you can drop 10 and your score still counts but if you are 30 average shooter you can only drop 6. It is generally much more likely for a shooter who averages 30 to lose an extra 7 clays than it is for a 50 average shooter to drop 11.

The other problem with dropping scores altogether, is that many shooters do vary in their shooting from week to week, and by dropping the low scores it does not reflect their true ability and would always give them a lower handicap than was warranted.

So the -10 below their average is to get closer to reality without giving too much advantage.

Multiply by 0.75:

We have used multiply by 0.5, but it gave a strong advantage to the top shooters whereas 0.75 seems to even it out much better.

3 shoots plus in a quarter for a handicap to be adjusted up:

This stops a shooter coming along shooting once or twice in a quarter, putting in poor scores and then having their handicap increased.

Maximum handicap is 49:

There have been various caps. Every time we made changes to the handicap system, we moved the cap proportionately. We have carried out analysis on it, and have found it causes no problem. It is rare for anybody to win with a very high handicap, and when they do they have typically shot a much higher score than their average and deserve the win. See **Understanding high handicaps** on next page..

Understanding high handicaps

(these are based on the old 75 bird shoots and not recalculated, but still show what is happening.)
(Now it's 80 birds with no deduction of 10% for head room, so the numbers are different but not the outcome.)

Something to understand about how our handicap system works - the poorer shooters have a big task if they are to win. It is often put forward as really easy to win with a large handicap, the grid below shows that it is not so. We should not forget that to get the handicap, they must have earned it over 3+ shoots.

Average Scores	Handicap	Average + Handicap	Gap to top Shooter
15	39	54	13
20	35	55	12
25	32	57	10
27	30	57	10
30	28	58	9
34	25	59	8
35	24	59	8
40	20	60	7
45	17	62	5
50	13	63	4
55	9	64	3
60	5	65	2
65	2	67	0

The Average + Handicap column shows what your total score is if you hit your average. So if your handicap is 39 and you hit your average of 15 your total is 54, that's 13 behind a shooter with a 2 handicap.

Therefore just to catch up with the top shooter you have to hit another 13 that's almost 100% more than your average; in other words, if you hit 13 more than your average then you have caught them up, but not gone ahead.

If your handicap is 30 you still have to hit 10 more, just to put you on level pegging - that's upping your game by a third.

These are not trivial increases and most shooters with high handicaps don't win.

See Results on next page.

(These are based on the old 75 bird shoots -10% for head room and not recalculated.**)**

(Now it's 80 birds with no deduction of 10% for head room, but this does not affect the numbers below.)

Actual results confirm winners come from all abilities

H/C = Handicap, HG = High Gun

Results Set Against Handicap Range 2016							
			Attendance				
H/C Range	HG Wins	Non HG Wins	Ave. Per Shoot	Per Year	Ave. % Per Shoot	Actual	Expected Wins
-5-0			0.80	40	2.01	0	1.0
01-05	1		0.56	28	1.41	1	0.7
06-10	5		7.46	373	18.72	5	9.4
11-15	14	16	16.64	832	41.77	30	20.9
16-20		7	8.28	414	20.78	7	10.4
21-25		5	4.24	212	10.64	5	5.3
26-30		2	1.80	90	4.52	2	2.3
31-35			0.06	3	0.15	0	0.1
In a perfect system, all handicap ranges would win according to the proportion of shooters that they made up, on average every week. The last 2 columns show the actual and expected wins, not perfect but close.							

It should be noted that the -5-0 range currently only has members who have not yet earned a handicap, and therefore should not expect a win.

Another aspect that the figures don't take account of, is that a number of the lower handicap shooters (01-10), often miss weeks and then come all-together: this will adversely affect the number of wins they could expect.

High Gun results for 2016: 20 wins - that is 40%.

The previous high gun results from 2012 - 2015 are as follows:

2012: 23 = 43%

2013: 14 = 28%

2014: 18 = 35%

2015: 16 = 30%.

Although shoots are handicapped, high gun still wins a great many shoots, as can be seen in the figures above.