

An Explanation of the New Tour Points System

A highly-regarded and successful NHC tournament player e-mailed me recently to grumble about the new [2014 NHC Tour points system](#). Admittedly, the new tour points system is quite a bit different from the old one and will take some getting used to. But I think it is a big improvement over the old one and I hope you will as well after you understand how it works and get a chance to see how it plays out over time.

To explain the new system, I am going to use as little math as possible and just try to appeal to your intuition with examples.

The biggest difference between the old scoring system and [the new one](#) is this: the old system only considered how many people finished AHEAD of you. It did not factor in at all how many people finished BEHIND you. The new system factors in both. What do I mean by that? In the old system if you finished first in a contest with 30 people in it (i.e., nobody finished AHEAD of you), you got the max points (3530 points for an online contest). Similarly, if you finished first in a contest with 300 people in it (i.e., nobody finished AHEAD of you), you got the maximum points. To just about everyone (including me), this did not make much sense at all. In the 30 person contest only 29 people finished BEHIND you while in the 300 person contest 299 people finished BEHIND you; however, you got exactly the same number of points for winning in both contests! That infuriated a lot of tour players, including those that could not (or were not willing) to participate in the more exclusive large money events and/or did not have convenient access to the small, more affordable onsite contests. This was one of the primary issues we needed to address with any new scoring system.

The trick was how do you do it in a way that made sense and is simple and fair? That is where the new scoring calculator comes in. Taking an objective math-guy perspective the obvious thing to do was to make the 300 person contest worth 10 times more points than the 30 person contest since it is 10 times bigger. This idea was quickly rejected as being too radical and likely to alienate the smaller contests and some tour players. The compromise was to make the 30 person contest (actually the contest size for awarding tour points goes all the way down to a minimum of 25) worth a little more than half as many points as the 300 person contest with a linear sliding scale for all the contest sizes in between. This still was biased toward smaller contests (i.e., the winner gets more points than math-guy would like to give them) but it seemed much fairer than the old way and was a reasonable compromise that we felt most people could live with even though it was a drastic break from the past.

That takes care of the issue of how many points to award the winner based on contest size. The next issue we needed to address was how to assign points to non-winners in a contest. In the past, we gave points only to those finishing in the top 10% (or the top 30 finishers, whichever was smaller). This made sense in that it rewarded only excellent performance and kept the tracking of scores to a manageable level. What did not make much sense was how the points awarded changed as you moved down the leaderboard. Let's look at a 100 person contest as an

example. In the old system, if you dropped from first to second place you would lose more than a 1000 points, if you dropped from second to third you would lose hundreds of points and if you dropped from 22nd to 23rd you would lose only a few points. In all three cases, you finished ahead of exactly one less person than the next highest finisher but the cost of dropping that one spot was wildly different in all three cases. It was extremely top heavy and even worse (from the math-guy perspective) there was no recognizable pattern to the distribution. This seemed arbitrary and unfair and was impossible to explain or sufficiently defend. Some people may have liked it but it was far from an ideal system. This was not generating the same level of angst among tour players as the contest size issue but it still needed to be addressed.

So how should we distribute the points to the non-winners? That's where a little math comes into play as we wanted to look at BOTH the number people who finished AHEAD of someone as well as the number who finished BEHIND someone. Let's go back to the 100 person contest example. In that example, nobody finished AHEAD of the winner and 99 players finished BEHIND him. That is called the 100th percentile (this will be the only math term I will use), which means the winner finished ahead of or equal to 100% of the players (including himself or herself to make the math work out correctly). The second place finisher had one person finish AHEAD of them (the winner) and 98 players finish BEHIND. That is the 99th percentile. Math-guy says the solution to how to award the points is simple. Since the winner finished ahead of 1% more of the players than the second place finisher, math-guy would give him 1% more points. End of story. Unfortunately (for math-guy), that again was a bit extreme given that people have become very accustomed to the incredibly top-heavy points scheme. So the compromise was to give the first place finisher about 10% more points for finishing one percentile higher than the 2nd place finisher. You could then use this same rule to assign points for finishers on down the line. Each 1% drop in the percentile ranking costs you about another 10% of the winner's share for each finishing position all the way on down to the 10th place finisher (points are only awarded to the top 10 in a 100 person contest).

The beauty of this approach is that now you have one simple equation that you can use for any contest size. You first figure out how many points to award the winner based on the contest size as described earlier. Then you assign a fraction of the winners points to each of the finishers based on their percentile ranking, subtracting about 10% of the winners total for each percentile down you go. That's it. Now you can score any contest of any size consistently and fairly with one simple (at least for math-guy) formula.

The end result (and this is what will take some getting used to) is that winning a contest is still great in terms of qualifying for the NHC and winning cash prizes for a particular tournament but in terms of tour points, winning is no longer the dominant factor that it was before. Winning a small contest is now not worth as much as winning a big contest. In fact, it will not be worth as much as finishing in the top-10 of a much larger contest. It is all based on statistically equivalent performances using the percentile ranking of each finisher.

The other end result is that for big contests (those with significantly more than 100 players) the incremental drop off in points for each position as you move down the ladder (1st through 30th)

is much smaller and consistent than it was in the past. This is again because we are trying to consistently reward statistically equivalent performances. The statistical difference between winning and finishing second or third in a 300 person contest is not very much. In fact, it is less than one percentile, so several of the top finishers will get nearly as many points as the winner. In fact, every three spots down is only a one percentile drop so they will lose only about 10% of the winner's points if they drop three spots on the leaderboard. Thus 4th place will get about 90% as many points as the winner, 7th place will get about 80% as many points, 10th place about 70%, etc...). For small contests such as a 30 person contest, you will see the exact opposite, with the drop off being very large as you go down the leaderboard. The drop off from first to second is more than 30% of the winner's points and the third place finisher gets only about one-third of the winner's points.

This is not intended to diminish the accomplishment of winning a contest. You still get rewarded with NHC spots and cash and prizes for winning. But the tour is supposed to be about consistent excellence across multiple contests throughout the year and we want to "normalize" the scoring across those contests to make it as fair as possible.

The bottom line is that this year, unlike in previous years, someone who frequently finishes near the top of the leaderboard in big contests will get rewarded fairly (from a math-guy/statistical standpoint). In the past, the winners were way overpaid (from a statistical standpoint) and those finishing near the top were getting underpaid (particularly those outside the top five or 10). Also, someone who wins (or finishes in the top two or three) in several small contests will now get rewarded fairly (from a statistical standpoint). In the past, such winners were getting way overpaid.

Again, the intent was to try to reward excellent performance in every contest consistently and fairly taking into account contest size. Is this perfect? Of course not. But it is definitely more consistent and fair than the previous system. All we ask is that you give it a chance. See how it works in contests of different sizes. See how it plays out over time. The fact that after only two contests someone with two non-winning scores has more points than someone who has won a contest is not very relevant in the grand scheme of things. Keep in mind that those two scores were earned by defeating over 500 people in two different contests. Those were two very good performances. Why shouldn't that be worth more than just one somewhat better performance? If that contest winner comes back with another good performance in the next contest, he or she will vault back into the tour points lead and will have earned it with two performances that combined were better than the current leader's (from a statistical perspective).

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