

Advanced Handicapping

Quirin Speed Points – The Basics

Quirin speed points (*Qpts*) are a popular computer handicapping tool and appear on many of the HTR reports. At face value they are a worthwhile factor to consider in any race. We'll go deeper than the basics this time and test them in various scenarios that may help us understand the entire outcome of the race related to early pressure.

The Quirin speed points were an original concept first published in 1979 by Dr. William Quirin in his classic book *Winning at the Races – Computer Discoveries in Thoroughbred Handicapping*. The speed points were an attempt to quantify the potential amount of early speed in the race. Horses are assigned point values based on their ability to be on or close to the early pace in recent races. Rather than rehash the details of the formula for computing the speed points (*re: chapter two of Quirin book*), I'll make some thoughts about their practical use and their application within HTR software.

- The Quirin speed points calculation includes various rules for route and sprint distances and even a 7-furlong adjustment. Extra credit is given for sprinters stretching out. Each horse's most recent four starts are reviewed initially. If an entrant has less than three useful races in the past-performance lines, then an estimate is made based on any available information. I have made slight modifications to the original Quirin speed point rules in HTR over the years. Most of these were done to accommodate the inclusion of the speed points into the various HTR software reports. The most obvious change is listed next.
- The original speed points ranged from 0 to 8 points. Zero points was the initial starting point and minimum value, with "8" as the maximum and strongest indicator of probable early speed. I modified that slightly in HTR and made 1 the minimum and eliminated the 0 (zero) as a rating. This allows the zero to be used as a "not available" item for horses that cannot be computed or have data missing. The difference between 1 and 0 speed points is almost insignificant in actual handicapping anyway. However, this does result in a larger group of horses receiving the minimum value.
- Quirin speed points were designed to predict a horse's tendency to exhibit early speed only. They are not to be used to estimate comparative running position in the race. Use running style (*RS*) designations or velocity figures to project early positioning.

The chart below gives you a summary of what the Quirin speed points mean at a flash.

<u>Item</u>	<u>Explanation</u>
8-Qpts	Always makes the lead
7-Qpts	Usually makes the lead
6-Qpts	Frequently on or close to the lead early
5-Qpts	Often close up.
4-Qpts	Sometimes close to the early leaders
3-Qpts	Infrequently up close
2-Qpts	Rarely runs toward the lead
1-Qpts	Very Rarely or Never runs to the front.

I can't remind you enough, do not use the speed points as an estimate of running style. It is very possible that pace stalkers ("*P*" running style) will have just 1 or 2 speed-points. These horses may be sitting a few lengths behind the early lead in every start, but the low Quirin point value has no relationship to their ability to affect the outcome of the race. The speed point number only estimates the probability that the horse will be close up to the lead. Do not assume a low speed point rating indicates the horse will be at the back of the pack down the backstretch in today's race. Check all early speed indicators before making that judgment. Lightly raced horses are especially prone to change their tactics while developing – be cautious when reviewing point numbers for races involving 2yr and early season 3yr olds.

Advanced Handicapping

Quirin Speed Points – The Facts and Figures

Now we'll look at some interesting statistics. The charts below detail the demographics of the speed points as well as the effectiveness of the rating in predicting early speed. As a singular handicapping factor, Quirin speed points are not especially profitable, but the figures for win% and ROI appear below also. I have separated dirt-sprints, dirt-routes, and turf-route for the three tests. Maiden races were not included in the test samples below. Removing the maidens avoids problems with estimating the speed points on lightly raced horses. More than 240,000 horses, entered in races during the last 365 days, were tested for the data this month. My database tilts toward major track races about 2 to 1.

Quirin Speed Point Performance Tests

Qpts = number of Quirin speed points

Horse% = percentage of all entrants with that number of points (*population survey*)

Rwin% = percentage of all race winners with that speed-point total

I.V. = Impact Value

ROI = Return on Investment (per \$1)

Early% = percentage of time a horse with this speed point total is 1-2-3 at the first call.

<u>Dirt Sprints (no wet tracks or maidens tested)</u>					
<u>Qpts</u>	<u>Horse%</u>	<u>Rwin%</u>	<u>I.V.</u>	<u>ROI</u>	<u>Early%</u>
8	3.1	4.3	1.38	0.78	91.2
7	10.3	14.6	1.42	0.86	82.7
6	8.5	10.4	1.22	0.83	66.3
5	14.2	16.2	1.14	0.83	49.6
4	10.5	12.0	1.14	0.87	41.0
3	16.0	14.6	0.91	0.73	35.4
2	9.2	8.2	0.89	0.85	27.5
1	28.2	19.7	0.70	0.63	18.3
	100.0	100.0			

Comments

The Quirin speed points are a very reliable method of determining the likely early speed in a given sprint race. As a single handicapping factor they are not particularly useful. The "8" point group is always the most interesting to study, and it is obvious from the ROI that these horses are terribly over-bet by the public. The "1" point runners are very unproductive in sprints and since they are the largest category of horses, Qpt=1 could be part of an elimination method.

Advanced Handicapping

Quirin Speed Points – The Facts and Figures

Dirt Routes (no wet tracks or maidens tested)

<u>Opts</u>	<u>Horse%</u>	<u>Rwin%</u>	<u>I.V.</u>	<u>ROI</u>	<u>Early%</u>
8	1.9	2.7	1.42	0.94	90.6
7	12.2	14.7	1.20	0.89	78.5
6	10.2	12.9	1.26	0.88	64.3
5	13.4	14.6	1.09	0.83	52.6
4	11.0	10.9	0.99	0.75	37.0
3	13.6	13.4	0.99	0.80	28.8
2	8.6	7.9	0.92	0.89	22.3
1	29.1	22.9	0.79	0.71	12.7
	100.0	100.0			

Front runners in dirt routes are among the best bets in racing. The “8” point group is a very small category, but they perform far, far better than expectations. An ROI of 0.94 is outstanding for horses that stand out on any past-performance sheets. The public does not bet the obvious early speed in routes they way they do in sprints – consequently the “6” and “7” point groups also did well and have promising ROI considering the size of their sample. The “1” horses are always poor bets, just as in the sprints.

Turf Routes (non-maidens only)

<u>Opts</u>	<u>Horse%</u>	<u>Rwin%</u>	<u>I.V.</u>	<u>ROI</u>	<u>Early%</u>
8	1.8	2.4	1.33	0.93	84.9
7	9.8	10.2	1.04	0.95	70.6
6	7.8	8.6	1.10	0.81	61.6
5	11.9	11.9	1.00	0.84	48.6
4	11.2	11.7	1.04	0.95	38.4
3	15.2	15.8	1.04	0.85	23.5
2	10.2	9.7	0.95	0.72	19.0
1	32.1	29.8	0.93	0.70	11.6
	100.0	100.0			

Looking at the Impact Values, there is almost no distinction between the numbers in terms of the ability to predict the winner. However, the ROI make the story somewhat interesting. The “8” and “7” point groups have excellent returns compared to the bottom numbers. A “7” or “8” point grass-route entrant will stick out like a sore thumb on paper, and most of them quit in the stretch. Those that hold on pay good prices – often boxcars.

Turn to page 9 and we’ll begin to look at ways of using the Quirin speed points that will help us determine pace advantage and pace pressure in many races. As always, we try to answer the question “can money be made using this?”

Advanced Handicapping

Quirin Speed Points – The Lone Front Runner

The speed points are most interesting to examine at the top levels. The “8” and “7” point horses are the most likely entrants in any race to run to the front – that we have proven. But is there an advantage to being the only such runner in the race?

We look now at the same three categories of races but the test is very specific =

- A single “7” or “8” point horse qualifies if entered in a race where all the other entrants have a maximum of 5 speed-points.

An example race please. Below is a fictional five horse field and the corresponding speed points.

BigMama 8 Qpts
TallTom 5 Qpts
LilAbner 4 Qpts
JohnnyO 3 Qpts
FatVinny 1 Qpt

“BigMama” stands out here with her “8” Qpts. None of the other entrants has more than 5 speed-points. The horse would qualify for the test below.

**Lone Quirin Speed (an “8” or “7” in a race with no other horse more than a “5”)
No Maiden races tested.**

Type = race distance and surface category

Occurrence = the average frequency of races that a qualifying horse will be found

Win% = win percent of these horses

Front% = percentage of time the qualifying horse will make the lead at the first call

<u>Type</u>	<u>Occurrence</u>	<u>Win%</u>	<u>ROI</u>	<u>Front%</u>
Dirt Spr	1/6	20.5	0.89	83.6
Dirt Rte	1/8	18.7	0.83	80.9
Turf Rte	1/11	17.7	1.07	80.4

While there is improvement in the ROI under these favorable circumstances for the “8” and “7” groups, the results are disappointing on the dirt. The problem here is that the public can easily spot these runners on paper. The turf sample is far smaller, but the ROI is acceptable because many wire-to-wire turf winners pay huge prices – but they just don’t win very often.

Let’s strengthen the “lone front” group by adding a couple of stipulations that should beef up confidence in the qualifying horses. Here are the rules for the second test ----

1. “8” or “7” Quirin points in a field where none of the others has more than “5” (same as above).
2. Horse must be ranked “1” in Fraction-1 velocity (Fr1 or Ev). Paceline method (5).
3. Horse must receive an “F” or “E” running style designation from HTR.

<u>Type</u>	<u>Occurrence</u>	<u>Win%</u>	<u>ROI</u>	<u>Front%</u>
Dirt Spr	1/12	25.0	1.05	87.0
Dirt Rte	1/14	17.8	0.83	84.1
Turf Rte	1/13	17.4	1.06	80.7

You’ll get about half as many plays when requiring all three rules for qualifying the “lone speed”. The results improved dramatically in the dirt sprints, so take note as a spot play. The sprints are easily the largest sample group, so confidence is high. Surprisingly the route data went south a bit. The turf results remained about the same, so there is no advantage in requiring the extra rules.

Advanced Handicapping

Quirin Speed Points – Identifying Potential Speed Duels

Over the years, clever handicappers have thought of dozens of interesting ways to utilize the Quirin speed points to determine various pace scenarios. Quirin himself used a method called “percentage of total points” to determine the advantageous pace setter as we did on the previous page. Others methods include adding up the points in various mixes, averaging the total points and even adding, multiplying or dividing the speed points by final time speed figures or pace numbers.

The 3/20 Speed Point System

My favorite computation for speed points, and an easy one to figure at a glance, is the called the “3/20” method. I have seen this idea discussed in print by several good handicappers (possibly even Quirin) over the years and believe it has the most merit in terms of identifying a potential pace duel with the front runners. Here are the specs on it →

- Add up the speed points for the three highest rated horses in the race. If there is a tie, just take the top three numbers. See example below.
- If the total equals or exceeds 20, then race may have significant pace pressure. Possibly enough to hurt the front speed horses and promote a closer to win the race.

Example Race

SexySara = 8 Qpts
NaughtyJ = 7 Qpts
BadBobb = 7 Qpts
HorridJo = 7 Qpts
Monster = 6 Qpts

total top 3 = 22 Qpts (the points from ‘HorridJo’ are ignored)

Pretty easy method to figure right away from your HTR printouts. Maximum point total is 24 (very rare). So how can we test this premise that a “3/20” race will result in a debilitating speed duel and burn the front runners? I programmed my database to test only races with “3/20” situations. Then looked at the same data for the Quirin speed points that we saw on the charts on page 7-8 to see if any of the groups were hurt or helped in these races. Notice that the “Early%” is not on this chart because it is not relevant. These horses will still ‘run early’ at that same rate as before. What we want to know now is what dynamic the “3/20” race brings to the finish for the various speed point groups.

The “3/20” race occurrence is about 20%, meaning you will find them about 1 of each 5 races.

Quirin Speed Point Performance Tests – “3/20” races only.

“3/20” Races - Dirt Sprints (no wet tracks or maidens tested)

<u>Qpts</u>	<u>Horse%</u>	<u>Rwin%</u>	<u>I.V.</u>	<u>ROI</u>
8	8.7	11.3	1.30	0.73
7	21.1	27.5	1.30	0.86
6	12.3	13.9	1.13	0.96
5	13.4	13.4	1.00	0.90
4	7.7	7.7	1.00	0.99
3	11.9	8.7	0.73	0.71
2	6.8	5.3	0.78	0.93
1	18.1	12.2	0.67	0.63
	100.0	100.0		

Advanced Handicapping

Quirin Speed Points – “3/20” Method and Speed Duels

Referring to the “3/20” test on the previous page as compared to the test chart on page 7, the results are mixed. First thing to be aware of here is that the sample sizes are reduced by 80% for this specific test. That won’t sway my confidence in the dirt-sprint group because it is still a pretty large sample. But the routes may prove more volatile with smaller numbers to test.

The percentage of “8” and “7” point horses rises tremendously when testing only the “3/20” sprints. This happens because we are isolating races that are ‘top heavy’ with higher speed-point horses. The “8” Qpts group suffers a bit in both impact value and ROI when facing a “3/20” field. But the “7” point group did not decline in potency overall. The “6” group improved nicely – but why? We were hoping they would falter in the face of a predicted speed duel. The other numbers are a mixed bag and there is no real evidence that the lower groups have a better chance to win a race under the “3/20” circumstances.

Quirin Speed Point Performance Tests – “3/20” races only.

<u>“3/20” Races - Dirt Routes (no wet tracks or maidens tested)</u>				
<u>Qpts</u>	<u>Horse%</u>	<u>Rwin%</u>	<u>I.V.</u>	<u>ROI</u>
8	5.6	7.7	1.38	0.92
7	25.1	30.2	1.20	1.03
6	13.2	15.3	1.16	0.87
5	11.4	11.4	1.00	0.80
4	7.8	6.6	0.85	0.77
3	10.6	8.6	0.81	0.65
2	6.5	6.0	0.92	1.12
1	19.7	14.2	0.72	0.68
	100.0	100.0		

The “8” and “7” groups still perform well despite being stuck in a race with abundant early speed. The “3/20” tests for routes offer lean statistical evidence that potential speed duels ‘on paper’ result in burnout for the front runners.

Turf Races and the “3/20”. The sample size was too small to present the statistics. The incidence of “3/20” races in turf routes is rare.

Conclusion on the “3/20”

Despite a lack of overwhelming evidence to prove the “3/20” works magic, I think it is a viable tool for helping to formulate a guess as to the potential pace pressure in a given race. Smart horseplayers understand that ‘paper’ speed duels do not always materialize on the track. Trainers and jockeys read the *Racing Form* too, they may decide to take back to avoid a suicidal early tussle. Post-position draw and luck at the break can alter the predicted running in the early furlongs as well. And the Quirin speed points offer only one perspective on a horse’s early ability. Many other factors, such as early velocity or pace figures, need to be looked at before arriving on solid ground.

Finally, Quirin speed points are simple and effective method for early positional estimates. Statistics reveal their usefulness under many circumstances, particularly when the highest point horse is a longshot or when the runner catches a field without competitive early lick. Entrants showing just “1” Qpt are always at a disadvantage on dirt, even more so for the bettor if the odds are low.