

# Averages for the breed

Statistics for average racing careers provide a baseline in stallion selection

ONE OF THE established tenets of modern genetics is the concept of regression to the mean. Simply put, the fact that each cast of the genetic dice is governed by the laws of probability means that the offspring is most likely to be closest to the genetic mean than either parent. Thus, even if you mate two Triple Crown winners, you are more likely to get a modest runner than a Triple Crown winner.

But exactly how modest is the average Thoroughbred?

With that question in mind, we went to the Jockey Club's database to procure statistics that effectively would define the racing career of an average Thoroughbred. To produce thoroughly reliable data, we chose to look at an entire decade of foal crops born in North America, and to ensure that all those foals had essentially completed their racing careers, we generated data for all North American foals for the crops of 1993-2002.

Statistics include all racing in the Jockey Club's database, regardless of where the horses raced. Thus, whether a North American foal of 1993, for example, raced in the U.S., Japan, or England (or all of the above), its racing career is accounted for in the statistics—if that career, or a portion of it, is included in the Jockey Club's files.

That "if" does acknowledge some incompleteness to the data. While Jockey Club data are complete for all North American racing back to the 1930s, complete data for England, Ireland, and France are available only beginning in 1987, and data from other racing countries are incomplete prior to various points in the 1990s. Thus, if a horse raced in Australia in 1993 and won a stakes race, most likely it will be counted as a winner and a stakes winner, but it is uncertain whether its number of starts will be accurate or that its earnings will be complete.

Still, the Jockey Club's database is the best in the world, and it gives us the most complete picture of the average North American Thoroughbred available.

The basic results of this inquiry are presented in the left-hand column of the accompanying table—statistics for all North American foals born in 1993-2002.

Of the 349,587 named North American foals in the period, 72.3% started somewhere in the world at some time during their racing careers. That means slightly more than two of every three named foals born in North America in 1993-2002 were sound enough to race at least once.

Only 49.1% of named foals won a race, however, and only 37.3% captured at least two races (repeat winners).

In the decade, 13,067 eventual stakes winners were born, which amounts to 3.7% of the total foals born and 5.2% of all starters. The percentage of group or graded stakes winners is much smaller—only 0.8% of foals—while the 774 horses that won a Group 1 or Grade 1 race totaled a minuscule 0.2% of the total.

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	All foals, 1993-2002	Foals by top 1% of sires
Starters/foals	72.3%	83.7%
Winners/foals (starters)	49.1% (68.0%)	63.6% (76.0%)
Repeat winners/foals (starters)	37.3% (51.6%)	50.2% (59.9%)
Stakes-placed/foals (starters)	5.8% (8.1%)	10.5% (12.5%)
Stakes winners/foals (starters)	3.7% (5.2%)	7.8% (9.3%)
Graded SW/foals (starters)	0.8% (1.2%)	3.1% (3.7%)
Grade 1 SW/foals (starters)	0.2% (0.3%)	0.9% (1.1%)
Two-year-old starters/foals	34.8%	44.4%
Two-year-old winners/foals (2yo starters)	11.5% (33.0%)	16.5% (37.3%)
Two-year-old SW/foals (2yo starters)	1.1% (3.0%)	1.9% (4.2%)
Three-year-old starters/foals	61.7%	74.5%
Four-year-old starters/foals	48.5%	56.6%
Five-year-old and up starters/foals	31.8%	36.5%
Average career starts/foal	15	17
Average career starts/starter	20	20
Average winning distance in furlongs	6.77	7.15
Average winning turf distance in furlongs	7.98	8.19
Average earnings/starter	\$46,262	\$90,274
Average earnings/starter male (female)	\$54,841 (\$37,346)	\$114,559 (\$64,270)
Average earnings/start	\$2,304	\$4,577
Average earnings/start male (female)	\$2,362 (\$2,221)	\$4,573 (\$4,584)
Average Racing Index	1.13	2.04

Only 34.8% of named foals started at age two, and only 11.5% won. Percentages of two-year-old stakes winners and group or graded winners are correspondingly low.

Less than 62% of all named foals started at three, which is not too far removed from the overall percentage of starters from foals (72.3%). This indicates that almost all horses sound enough to race are sound enough and developed enough to race by age three. (Some race at two and do not race beyond that age.) After age three, percentage of starters declines.

The average foal, including the 27.7% that failed to start, raced only 15 times in its career. Those sound enough to race had an average career of 20 starts.

With the preponderance of sprint races in this country, it is no surprise the average winning distance was 6.77 furlongs. Winning distance on turf averaged 7.98 furlongs. Both average overall winning distance and average winning distance for turf races are increasing.

Males had higher average earnings than females, \$8,579 higher than the \$46,262 average, while females averaged \$8,916 lower than the mean.

### The best

Users of the THOROUGHBRED TIMES *Stallion Directory* presumably are not very interested in breeding an average horse. Most breeders aim much higher, attempting to find that perfect stallion that will allow their mare to produce an elite racehorse. The right-hand column in the accompanying table illustrates averages of the foals by the best sires.

For the same 1993-2002 group of foals, data were extracted for offspring of the top 1% of all sires by total progeny earnings during the period. This amounted to 44,252 named foals by 94 sires. This does not include every good horse of the decade, and even the best sires produce more bad than good racehorses, but the data present a fair picture of the career

of an average good sire.

Percentages and numbers are higher in every category than for the breed overall. More than 80% of foals by the best sires started at least once, and 63.6% of those foals by top sires won, far higher than averages for the breed. Similarly, percentage of repeat winners was 50.2%.

The percentage of stakes winners from foals sired by the top 1% of sires, 7.8%, is more than two times as high as the average for the breed, while percentage of graded stakes winners, 3.1%, is nearly four times as high. The biggest discrepancy in measures of quality is in the number and ratio of Grade 1 or Group 1 winners to foals. The top 1% of sires produced 394 of the 774 Group 1 or Grade 1 winners (50.9%), which represents 0.9% Grade 1 or Group 1 winners from foals.

Offspring of the best stallions also are more sound than average. The 37,040 starters by the top 1% of stallions averaged 20 starts during their careers. Average career starts, including the non-starters, was 17, compared with 15 for the breed. Average winning distance, 7.15 furlongs, also was higher.

By definition, offspring of the best stallions earned significantly more money than the mean, averaging \$90,274 per starter, which results in an average Racing Index (RI) of 2.04, compared with the 1.13 average of the breed. So, while it is obvious that prospects for a Thoroughbred picked at random from the total population may not be very promising, it is equally obvious that selecting at least one high-class parent is an effective way of increasing your chances.

The THOROUGHBRED TIMES *Stallion Directory* has been designed to help the user choose sires that will be among the top 1% of the breed and thus have the best chance of producing high-caliber racehorses. Averages for the breed give the user an idea of just what they are shooting for.—*John P. Sparkman*