

What is the probability of a long-shot winning a race at Belmont Park?

by Phillip W. Weiss

To try to answer that I question, I surveyed the results from 3,307 races run at Belmont Park, Elmont, New York, from April 27, 2012 through November 1, 2015.¹

For research purposes, I arbitrarily defined a long-shot as a horse that paid at least \$20.00 to win on a two-dollar bet.

Findings

1. Of the 3,307 races, a total of 488 were won by long-shots, or 14.756 percent of the races.
2. Of the 488 long-shot winners, the first race on the card yielded 35 winners; the second, 33; the third, 41; the fourth, 49; the fifth, 67; the sixth, 52; the seventh, 55; the eighth, 56; the ninth, 59; the tenth, 32; the eleventh, 8; and the thirteenth, 1.
3. Below is a breakdown of number of races run and long-shot winners by month.

| | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> |
|-------|-------------|-------------|-------------|-------------|
| April | 30/6 | 30/4 | ---- | 17/0 |
| May | 199/29 | 212/32 | 218/28 | 216/24 |
| June | 189/24 | 214/34 | 207/20 | 179/30 |
| July | 86/14 | 89/9 | 94/13 | 114/15 |
| Sept | 154/27 | 167/28 | 172/20 | 133/16 |
| Oct | 190/33 | 185/28 | 182/25 | 217/27 |
| Nov | | | | 9/2 |

4. Eight races were won by long-shots that paid at least \$100.00.

April 27, 2012, race 10 - \$107.50
May 19, 2012, race 5 - \$116.00
May 20, 2012, race 3 - \$115.50
September 29, 2012, race 3 - \$100.00
June 4, 2014, race 4 - \$109.00
September 7, 2014, race 7 - \$112.00
May 10, 2015, race 5 - \$135.50
October 25, 2015, race 1 - \$146.50.

5. On fourteen dates there were at least four long-shot winners.
(May 23, 2012; June 30, 2012; September 21, 2012; September 27, 2012;
October 14, 2012; October 26, 2012; May 5, 2013; May 18, 2013; June 8, 2013;
September 15, 2013; May 3, 2014; June 7, 2014; September 13, 2014;
June 20, 2015).

Conclusion: Based on the statistics compiled, in any given race at Belmont Park the probability of a long-shot winning is approximately one in seven. However, it must be understood that probability alone cannot predict outcome. The likelihood of an event occurring does not guarantee that it will actually occur. That is especially true in thoroughbred horse racing.

¹ Source: Belmont Park. <https://www.nyra.com/belmont/> - online