

Case Study: The fastest racehorse in the world

Name: Winning Brew

Year born: 2006

Sex: Mare (Female)

Colour: Chestnut

Location: United States of America

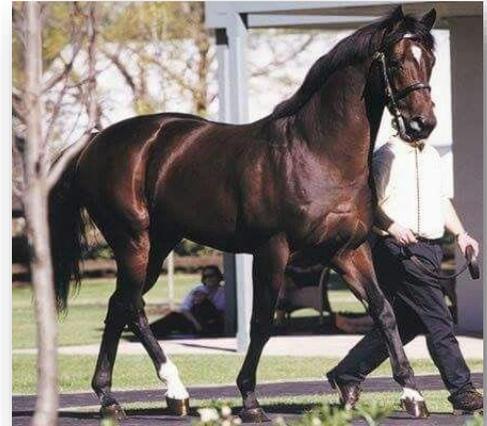
Breed: Thoroughbred, Milwaukee Brew.

Trainer: Francis J. Vitale

Number of races won: Two

Career Earnings: \$36,682

Owner: Ronald A Francoeur



The highest race speed recorded over two furlongs (402 meters) is 70.76 km/h (43.97 mph) on the 14th May 2008.

This Guinness World Record was achieved by a horse called Winning Brew. She was trained by Francis Vitale in the United States. The race was recorded at the Penn National Race Course, Grantville, Pennsylvania, United States.

Winning Brew covered the quarter-mile (402 metres) in **20.57 seconds**. The previous record for 1½ miles (2,414 metres) is 60.86 km/h (37.82 mph) by 3-year-old *Hawkster* at Santa Anita Park, Arcadia, California, USA on 14th October 1989 with a time of 2 minutes 22.8 seconds.

Winning Brew was only a **two-year-old filly** when she broke the record in 2008 at the Penn National Race Course, Pennsylvania, USA. For comparison, the average Kentucky Derby winner typically runs about 37 mph. *Secretariat* won the race running 38 mph.

Thoroughbreds race long distances and have to pace themselves over the course. Thoroughbreds have long legs with a lean muscular body. They are also taller and lighter weight than quarter horses. Thoroughbreds are specifically built for **distance running**.

Stride is the distance a horse travels in a single leap. In other words, the distance from the point a horse's front foot hits the ground to where that same foot next lands is the horse's stride. The average length of a racehorse's stride is **20 feet**.

The stride rate or turnover ratio is the number of strides a racehorse completes in a given time. Most racehorses' stride rate is between **130 and 140 strides per minute**. The fastest horses can speed up their stride rate without shortening it. Some champion horses' stride rates are over **160 strides per minute**.