

Know when to foal her . . .



The "average" gestation length for broodmares is 340 days. The range to produce a live, normal foal starts around 305 days and extends to over 390 days. That is roughly an eighty-five day spread - which translates into pregnancies ranging between ten and thirteen months!

For centuries, this large range has frustrated horsemen as they await the birth of the next genetically engineered generation of horses. In an effort to reduce the risk of an abnormal birth, most herdsmen have determined that they have a greater peace of mind by attending the "blessed event".

This is the crux of the matter. Mares are notoriously secretive about foaling. They want to be alone at this very private moment and are not willing to signal that the long awaited event is eminent.

Trying to outsmart motherhood and predict in advance the time of this happening is a tough problem. Several companies have invented products that alert managers of the impending delivery. There are alarm systems triggered by the mare lying down or the breaking of a seal on the lips of the vulva. Blood values and milk constituents are also used as indicators. While each of these methods has produced a measure of success, to date the only fool-proof method is to have the mare under twenty-four hours a day surveillance.

For the past twenty years we have been trying to work out a system that will narrow this range for any given mare. Initially we began our research by examining some of the variables which old-timers thought influenced the length of gestation: sex of the foal, age of the mare, and time of year bred.

Analysis of these variables showed that, on the average, colts are born three days later than fillies. Old mares tend to carry longer than young mares. Mares bred early in the year tend to carry longer than those bred late in the season. Still, all these factors accounted for less than seven percent of the variation in gestation length found within mares.

Over this period of time, we also had several mares that remained on the farm producing foals year after year. Continuous examination of their records

revealed a trend: Repeatability. Each mare seemed to want to repeat the pattern of her last gestation period.

To test the validity of this observation, we went back to the computer with data on one hundred and eight mares that had produced two or more foals - none of which were first foal pregnancies. Again we tested the variables that had been found significant in the previous research (age of the mare, sex of the foal, month of breeding) but this time we added repeatability of the mare's gestation length into the model. When the computer flashed the results on the screen, the analysis said it all!

None of the previous variables were as significant because 70% of the difference in gestation length among mares could be accounted for by the mare's own individual timetable.

The moral of this story: To get the best "estimate" of your mare's foaling date, look to her own unique reproductive history. Try and obtain the breeding records for as many breeding cycles as possible. After determining the length of each ges-

tation, calculate the average duration of her pregnancies.

Use this average as the central focus of your mare's "best guess" time of foaling. Use of other foaling aids within a two week period around this ETA should help horse owners outsmart the wily broodmare.

In spite of all these simple calculations derived from twenty years of observations and run through sophisticated computer analysis, never forget that there is a 1% chance each year that your mare will not fit the pattern. Every mare is an individual and each pregnancy has it's own distinct set of problems which influence the length of gestation - two important considerations which lead to the undeniable conclusion that Mother Nature is still capable of outsmarting potential spectators during the birth of a foal.

— Dr. Jim and Lynda McCall

For more information, visit the McCalls at their Web site: www.the-old-place.com