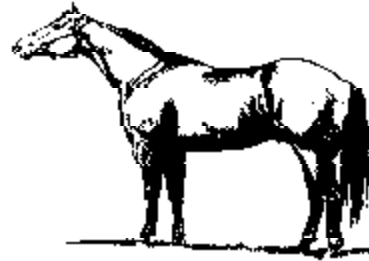


Extension Animal Science Horse Information Series

Phone: 423-974-7294

Fax: 423-974-7297



DOES A BROODMARE'S AGE AFFECT HER FOALS' PERFORMANCE?

**Dr. Frederick Harper
Extension Horse Specialist
University of Tennessee**

Everyone is in awe that a 63-year-old woman had a child. But, it is possible for a 26-year-old mare to have a foal. She would be about 80 years old in human terms.

In today's equine economy, the emphasis is on performance. The highest-priced horses are those with the greatest potential to be successful in their area of expertise, as champions, Olympic-caliber winners, cutting, team penning or polo horses, hunter, jumpers or three-day event horses, etc.

Sale prices of broodmares also are based upon her production of winning foals or her potential to produce winners based upon her performance record, conformation and pedigree.

So, does her age or the number of foals she has produced enter into this formula?

Data from England may indicate that it does. In one study, 100 broodmares which had produced eight or more live foals born between 1947 and 1986 were evaluated. Mares had to

produce at least two foals with a Timeform rating of 110 or higher. There were 1,196 individuals in the study.

A Timeform rating expresses racing ability in pounds. Top-class English Thoroughbreds rate 110-145. Inferior race horses are rated 40-50.

Racing ability, as measured by Timeform ratings, increased until mares reached 9 years old. After 9 years of age, the racing ability of their foals declined.

Interestingly, racing ability declined even more rapidly after mares become 16 years olds. Mares 16 and older also have a pronounced decrease in their reproductive ability.

The order in which a foal was born also seemed to affect its performance. Performance increased up to the fourth foal, then steadily declined with subsequent foals.

Foals born early in a mare's reproductive life were better race horses than ones born later.

Another study noted that the best runner a mare produced was her third foal.

Can an older mare have a champion performer? Yes. But, then one reviews a large number of mares and the performance of all her foals, it appears that foals born early in her reproductive life are better performers.

This information, if supported by additional research, causes a problem in the selection of future broodmares. Often, horse breeders select broodmares that have already produced a winner. If a mare's best foals are born early in her reproductive career, then one may have to use other selection criteria than a mare's production record.

The mare's own performance record is an excellent indicator of her future ability to produce champions. And, it is available before she starts producing foals.

Should one cull, older mares? No, not based upon these data alone. But, since older mares also have serious reproductive problems, the fact they also may produce foals of less ability makes them likely candidates for culling.

And, if they are not economical producers, this increases the selection pressure to replace older mares with younger, proven performing broodmares, which may be more profitable producers.

#