

SELECTING AND CULLING BROODMARES

What separates successful horse breeders from the rest of the pack/ Clearly, the quality of their broodmares is the most important of many factors that contribute to success.

It is true that those few breeders who have been fortunate enough to find a superior breeding stallion will rise above the average. Quarter Horse history shows that true breeders are those who have assembled the best mares. How then should broodmares best be selected.

To select broodmares effectively, the breeder must first have clear and specific goals for the horses they plan to raise. Many factors affect the value of a horse, but a breeder must place definite priorities upon these characteristics. Placing correct and achievable priorities is the first step towards progress.

Performance breeders need to really study champions of their chosen event. These champions will be different in many ways, but consistent similarities identify traits that deserve priority.

Since our breeding goal at Hilldale Farm is to raise world class reining horses, I will share our experience. Studying finalists in major Reining events has revealed some characteristics that are shared by all the top horses. These are:

Big Stoppers - horses that stop in deep and willingly, rounded in their frame and confident in their approach.

Good Movers - horses that flow in their circles, not only demonstrating obedience to being guided, but attractive in the self carriage and body frame in both fast and slow circles.

Discipline - horses that have accepted training and are really "broke" to avoid penalties and earn plusses.

Soundness - structural integrity to withstand the rigors of preparation for major events.

Quickness - natural athleticism that allows the trainer to develop the freedom in the shoulders necessary for plus-quality spins and rollbacks.

It is interesting to note that the above list is also applicable to cutting and reined cow horse competition with the addition of "Cow Sense" or natural tendency to lock into a cow.

THE SELECTION GUIDE

Our actual selection criteria are as follows: pedigree, conformation, attitude, performance and production.

Let's consider each of these in relation to their value in choosing mothers of champions.

Pedigree: In comparing performance champions, it is readily apparent that most are related. Greatness or excellence in an event doesn't occur by accident. Still, if pedigree were the sole answer, anyone with enough money to buy them could own the best.

My answer is to use pedigree to sift potential broodmares. We will not buy a mare because of pedigree alone, but will not consider a mare with an ill-bred pedigree. There are two examples of "bad" pedigrees. The most common is the "tweener" intended for use. For instance, a mare whose sire was bred for halter and dam was bred for pleasure is unlikely to cross successfully on your cow-bred stallions. Even if she did, who would buy the foal?

The other type of undesirable pedigree is one in which none of the close-up ancestors have been tested. Because of ownership issues, many horses do not get an opportunity to be trained. If a mare from such a background meets all your other criteria, she may deserve a chance. Expect to sell her first foals for less than they would otherwise bring. If this mare becomes a proven producer, she can move upward in the market.

Besides popularity, pedigrees can also be used in planning matings to minimize inbreeding and to make bloodline crosses that have been proven. If you plan to use a line-bred stallion, you may be wise to choose mares with pedigrees that provide an outcross for these stallions. Also, certain families seem to cross particularly well with certain others. If such a genetic "nick" has been identified, this knowledge may give an advantage in mare selection.

Conformation: The study of conformation is one of the very best selection tools available for the serious breeder. The performance traits we discussed are profoundly influenced by specific conformation features.

We have learned that born stoppers are built to stop and learn this key maneuver easily. Balance and hindquarter construction are the physical features that reveal stopping potential. In selecting the conformation which produces stoppers, I have learned to prefer moderation. We look for hips that are relatively long, but not massive, moderate length and slope of croup, definite but not excessive muscling and a forward placed angular stifle.

The bony arrangement of the hind limb is critical. Look for short cannons producing a low hock, moderate length and slope of pasterns (50-55 degrees) and no extremes in the set of the hock as viewed from the side. (I consider post-like hocks and sickle hocks to be undesirable.)

Placement of hocks, as viewed from the rear, will dictate the flight of the hind feet and have big effect on soundness. A straight vertical column of bone is desired. Hocks that turn in or out cause problems. A cow-hocked horse will usually fork as they slide, putting more stress on the joints and limiting the length of the slide.

It is particularly useful to watch from the rear as the horse walks away. Any tendency of the hocks to twist as they feet land is a problem. A horse that lands evenly on its heels is most desirable. Viewed from the side, the biggest stoppers track up well underneath themselves, often over stepping the tracks left by the front feet.

The most athletic horses are always well balanced. Balance problems (such as heavy fronted, light behind) are very difficult for a trainer to solve. A horse built downhill will be heavy in front in its movement. Since a horse uses its neck so much for balance in motion, a relatively trim neck and well placed withers are to its advantage.

Conformation of the front limbs is critical to movement, agility and soundness. Properly sloped shoulders and pasterns contribute to each of these. Feet should be durable, with thick walls and adequate size and shape for shock absorption.

There will always be faults and the breeder must weigh these carefully. Here are some faults that I will not accept at all in a broodmare prospect:

- Pig eyes, especially when close together
- Calf knees or back at the knee
- Upright stifles or "dog legs"
- Short, flat croup - high set tail
- Cow hocks and sickle hocks
- Low backs and weak toplines
- Upright shoulders and pasterns

Regardless of pedigree or even show record, mares with these conformation faults won't make the cut in our broodmare band.

Attitude: Attitude is of exceptional importance to the performance breeder and trainer. Trainability or the tendency to learn and retain from each training lesson separates the best from the average.

Good -minded horses are not negative and resentful, but friendly and willing. Some horses can handle pressure - some cannot. Attitude can best be evaluated under saddle. I believe that a mare that was a pleasure to train herself is most likely to produce trainable offspring. When we buy a breeding-age mare that is too old for aged-event competition, we try to evaluate her for a few weeks under saddle before she is bred. This short training period does not show her full performance potential, but is a good test of attitude.

Attitude can also be tested by handling in the stall. A mare that keeps her eyes on you and shows no tail switching or ear pinning while being touched on various parts of her body passes this test. I have known mares that showed a quirk, such as head or ear shyness, during this evaluation but still became good producers. In many cases, however, we still found these tendencies in their offspring.

Some behavioral problems make a mare so difficult to handle that she will never be satisfactory to manage. Mares that are terrible to catch, break halters and fight the breeding stocks are not only no fun to own, but are dangerous and set a bad example for their foals.

Hot-natured or nervous mares with a "lot of gas" present another challenge for the breeder. Successful trainers today prefer horses that only run when asked and have a lot of "come back." Certain stallions tend to cool a hot mare, but unless such a stallion is available, hot mares are a liability.

Performance: A good performance record will definitely make a broodmare more expensive. Many buyers of prospects seem to be willing to pay more for the offspring of a proven show mare. With multiple embryo transfers becoming commonplace, mares with substantial show earnings are selling for record prices. If you cannot afford such mares, do not despair. Performance records are affected so much by opportunity that I would rather compromise on show record than on any of the other major selections factors. Our own experience proves that good, but relatively inexpensive mares, purchased at reasonable prices because of their lack of a show record, can excel as producers.

Producers of Open caliber show winners are in the top echelon among mares, but producers of top Non Pro horses deserve credit for transmitting genetics for good minds. It is unfortunate that mares are usually getting up in years when they can be truly identified as superior producers. As such, these mares are often candidates for embryo transfers.

Culling: Culling has been described as "the cutting edge of genetic improvement." It is easy for most breeders to become attached to their mares and fail to cull - even when they really should.

The best breeders in Quarter Horse history had rigid culling standards. For many years the King Ranch graded every foal's conformation on a 1-10 scale. A mare that produced a foal grading 5-7 was switched to another stallion. If the next foal graded a 7 or below she was culled. Finally, the King Ranch sent all their young horses to the remuda for at least a year of cattle work. Only the best were kept for breeding.

I propose the following check list for culling:

Production - Eliminate mares whose foals have serious conformation or behavioral faults.

Management - Cull mares that are poor milkers, hard breeders and difficult to handle.

Economy - Eliminate mares whose foals fail to return your break-even cost when marketed.

Age - Consider selling older mares that become sub-fertile or require more individual care than the sale price of their foals justifies.

Failure to cull shows up first in your pastures and then in your bank account. Most farms, to some degree, have a "welfare program" in which their productive mares support not only themselves, but their non-productive pasture mates.

Hilldale Farm

The Selection principles described in this article have been used to assemble the Hilldale Farm broodmare band. Hilldale mares have produced multiple World Champions, an NRHA

Futurity Champion, to Congress Open Futurity Champions, a Tradition Futurity Open Champion and two mare top three finalist at the NRHA Open Futurity.

Hilldale Farm's Snip O Gun (One Gun x Miss Kim O Lena by Doc O'lana) has produced NRHA earners of over \$300,000 including 2004 All American Quarter Horse Congress Reining Futurity Champion Hot Smokin Chex and 2005 NRHA Open Futurity Reserve Champion Big Chex To Cash.

Charlie Hutton also selected and trained Katie Gun , owned by Eric Storey, a leading all-time NRHA producer with offspring earnings of more than \$287,000, and the dame of NRHA Hall of Fame member Gunner (APHA Colonels Smokingun)

Double Run Farm's Leolita Step, dam of the 2002 NRHA Futurity Open Champion Wimpys Little Step, was also selected by Charlie and Tammye Hutton. This mare was never shown. Wimpys Little Step was bred by Hilldale Farm.

Hilldale Farm, Fayetteville, Tennessee, owns Nu Chex To Cash who was number five on the NRHA 2005 Year In Review's 2005 Leading Sires (Offspring earnings in all NRHA approved events) list and will stand the 2007 breeding season at Cedar Ridge Stallion Station in Whitesboro, Texas.