7-1-1978

Management of the Breeding Stallion

R. A. Battaglia
Management of the Breeding Stallion

Cooperative Extension Service, Purdue University, West Lafayette, Indiana
## Contents

Introduction .................................................................................................................. 3  

Development of the Stallion ......................................................................................... 3  
  Establish discipline .................................................................................................. 3  
  Establish an exercise program ............................................................................... 4  
  Establish an expected behavior pattern ................................................................. 4  

Preparation for Breeding ............................................................................................. 5  
  Equipment needed .................................................................................................. 5  
  The ‘teasing’ area ................................................................................................... 5  
  Preparing the animals for breeding ....................................................................... 6  

The Breeding Event ..................................................................................................... 6  
  The approach ........................................................................................................ 6  
  The mount ............................................................................................................. 7  
  The dismount ......................................................................................................... 7  

Breeding Records and Contracts ............................................................................... 8  

Nutritional Management of Stallions and ‘Visiting Mares’ ........................................ 10  

Related Publications .................................................................................................. 10
Management of the Breeding Stallion

R. A. Battaglia, Extension Horse Specialist, Animal Sciences Department, Purdue University

There are probably as many ways to 'start' a young stallion (i.e., initiate him into the breeding program) as there are horsemen in the industry. Each person has his own preferences, goals, set of limitations, etc., and, therefore, his own variations in the breeding regime. But the successful programs are those that have been carefully thought-out and then consistently followed.

The horse, by nature, is very easily conditioned. He responds to a given pattern of activity, expects that pattern to be repeated and will react unpredictably if it is not. Thus, it is imperative that you retain the breeding management pattern started, and change only if it proves totally unworkable.

This publication presents one suggested program for starting a young breeding stallion. It has evolved over time and has proven successful for the author. It divides management activities into four distinct areas — the stallion's physical and behavioral development, preparation for breeding, the breeding event itself, and nutrition of the stallion and 'visiting mares.' Although you might add, delete or alter certain activities to fit your own situation, the important thing is to have a management plan for each of these areas.

Development of the Stallion

One of the earliest management tasks for a horse breeder is preparation of the young stallion physiologically and psychologically for his breeding duties. This involves establishing discipline, a conditioning program and an expected pattern of behavior.

Establish Discipline

A sound breeding management program begins with discipline of the young stallion, for discipline is essential to success and safety in horse breeding. A disciplined animal is one trained to respond to his master, not to his environment. For the breeding stallion, that type of training at the least includes: (1) understanding and heeding the word, 'whoa,' (2) responding correctly to a lead shank, and (3) becoming accustomed to being washed in the genital area.

Responding to 'Whoa'

From early halter training on through subsequent longeing work, the young stallion must learn to understand and immediately respond to the verbal command, 'Whoa!' In fact, this is probably the greatest good that comes out of longeing a horse. Developing proper response to verbal commands should be done at a time and in an area completely separate from the breeding event.

Responding to a Lead

Every time the stallion is led from his stall (for water, footwork, exercise or whatever), he should be haltered and handled with a chain lead. This not only accustoms him to respond correctly to a lead, but also keeps him from 'second guessing' what you have in mind when he is moved. If he associates the lead solely with mating, there could be many dangerous trips to and from the breeding arena.

The lead can be either leather or a length of rope, as long as it has a chain and snap attached to the end of it. All three components should be strong and made of
The stallion should always be led with a sturdy lead line and chain. The chain can be placed either over the nose or below the jaw.

Being stalled, can lead to some anxious moments for his handlers. Therefore, opportunity for daily exercise is a must.

Two types of exercise, totaling 1 to 1½ hours per day, should be adequate to keep the stallion physically and mentally well-conditioned. One type is 45 to 60 minutes of free exercise; the other is 30 minutes of forced exercise on the end of a long line. Again, longeing is not meant to be solely a 'legger-upper', but also a disciplinary tool to constantly reinforce the animal's need to respond immediately to verbal commands and tugs on his lead.

In addition to maintaining physiological soundness and control, a vigorous exercise program offers at least four other benefits:

1. Libido or sex-drive (desire to service mares) is likely to be stronger in a well-exercised, non-'stall-bound' stallion. This increased libido does not lead to control problems if the horse is disciplined. Rather it's the unexercised, unused, undisciplined animal that causes trouble — and not because his libido is high, but simply because he's finally out of the stall and intends to make the most of it.

2. The number of live, motile sperm will be high and remain so in an exercised stallion. Exercise works up an appetite and, therefore, he consumes his total daily ration.

3. Boredom is reduced, thus minimizing such 'stall vices' as cribbing, eating of bedding and masturbation.

4. A horse exercised each day simply looks better because of good muscle tone, adequate sunlight, good appetite and that certain bearing which only a physically-sound animal can exhibit.

Establish an Expected Behavior Pattern

A final aspect in developing the young stallion is establishment of the behavior pattern expected of him. And it is your philosophy of handling plus your attitude that determines the pattern eventually set.

A stallion should never be badgered, but rather treated with the respect that is due any potentially dangerous animal. Constantly 'pecking' at him can only cause you problems later on. Nor should he be reprimanded unless it is a thorough, comprehensive and vigorous reprimand. Half-hearted disciplining simply serves to aggravate and may create an animal which is doubly dangerous because he is waiting for his chance to get even.

The best way to establish proper behavior is: (1) decide at the outset what you will and will not accept from the stallion; then (2) the first time he deviates from this expected behavior, punish him vigorously on his chest and shoulder with a whip. The whip, which you carry at all times, should be 24-36 inches long and made of plastic or nylon material but containing no 'popper.' Such an instrument stings sharply, which should be sufficient for reprimand, but does no more than superficial (surface) damage.
Preparation for Breeding

‘Success’ in the breeding arena doesn’t just happen. It’s the result of careful planning and preparation. Three areas to consider in preparing for breeding are: equipment, ‘teasing’, and washing the animals. Following is a discussion of each.

Equipment Needed

● Buckets. Have a separate wash bucket and rinse bucket for each breeding stallion, and enough additional wash and rinse buckets so that each mare bred on a given day will have a separate set. Reserve stallion buckets only for the stallion to which they are assigned. You can, however, reuse mare buckets for different mares on another day, provided they are disinfected after each day’s use. Any good veterinary- or dairy-type disinfectant will do. The buckets can be either galvanized, plastic or rubber.

● Hot Water. A source of hot water is essential. A portable or desktop hot water heater is probably best, but a portable bucket heater will do. If the latter is used, consider heating a 15-20 gallon container so you have a constant source of hot wash and rinse water to dip into for the day’s breeding activities. (Caution: Be sure the heater is electrically safe; unplug it before doing any dipping; and use a clean, disinfected bucket to dip from the hot water container to the wash or rinse bucket.)

● Soap. Select a mild soap for the washing process, such as bar or liquid ‘Ivory’. Do not use a detergent. If a bar soap is chosen, store it in a plastic soap container with a lid.

● Washing and Drying Material. Cheesecloth or roll cotton is usually used for washing and rinsing; it should be disposed of after each use. If cotton is selected, it need not be the sterilized type. Sponges will also work for washing and rinsing, but can only be reused if disinfected after each use. Paper towels should be available for drying both the animal’s genital area and the handler’s hands.

● Clothing. The handler should wear coveralls for two reasons. First, they protect the better clothing underneath; and secondly, they play a part in the animal’s conditioning process. Any stallion can be conditioned not only to the handler’s voice and mannerisms, but also to his appearance, including clothing. A change in what he’s used to seeing, even type and color of clothing, can upset his breeding performance.

● Tail Wrap. A supply of either track bandages, Ace® bandages or gauze plus adhesive tape should be available for wrapping the mare’s tail. The bandages should be 2½-3 inches wide, and tape about ¾ inch wide.

● Restraint Equipment. Finally, some type of restraint equipment is needed for the mare. It could be as elaborate as hock- or fetlock-type hobbles or as simple as a nose twitch. Some breeding farms use both. But since the mare should not be bred unless willing to accept the stallion, my advice is to tease thoroughly, attempt breeding only when she is truly in heat and use only a nose twitch. Twitch and hobbles together should be reserved for the mare that must be forcebred or for the acknowledged kicker.

The ‘Teasing’ Area

For some breeders, it is necessary to ‘tease’ and breed with the same stallion. Therefore, regardless of the limitations of your particular facility, try to establish separate locations for these two activities; and train the stallion to act differently in each spot. The breeding process is much more workable if the stallion realizes that teasing takes place at one location and he is to act one way, and that breeding takes place at another with different behavior expected. Establishing this type of behavior pattern is not really that difficult with a properly conditioned, disciplined animal.

The difference between teasing and breeding is that during teasing a barricade is present to prevent the stallion from mounting. This barricade will help the ‘green’ stallion distinguish between the two events until he learns the appropriate behavior for each one. Use of different restraints can also reinforce this distinction — e.g., lead chain over the nose for teasing vs. a chaffney bit for breeding. But whatever variation you choose, use it consistently with that stallion.

The cornerstone of any successful breeding operation is ‘teasing’. It should only be attempted with a barricade placed between the stallion and mare.
Preparing the Animals for Breeding

Washing the Stallion

Pre-breeding washing of the stallion’s genital area should be done in the same place in the building each time, preferably in the breeding arena approximately 15-20 feet from where mating will take place.

For this task, the stallion is best handled by two people — one to hold the lead shank, the other to do the actual washing. Each should thoroughly understand his role ahead of time.

Both handler and washer need to be extremely cautious and alert during the entire washing process. Anticipation of the breeding act makes the stallion both powerful and unpredictable. Although hopefully the animal has already learned to accept this handling without dancing and ‘talking’, nevertheless, the handler should stand in the ‘safety zone’ about 45 degrees off the horse’s near shoulder; the washer should approach at about 45 degrees from the front of the horse.

To wash the stallion, saturate a handful of cotton in warm washwater (around 100°F) and carefully place it on his umbilical, scrotal and sheath area. Wet this area several times, using new cotton each time; then insert some into the sheath to wet the inside and the penis. Avoid splashing the water or dribbling it down his leg; this can frighten or aggravate the stallion, thus making him difficult to manage.

Next, soap wads of cotton and wash twice the umbilical and scrotal area and the outside of the sheath. For the inside of the sheath and the penis, soap more cotton and wash repeatedly until the area is completely clean of scale, odor and other detritus.

After washing, rinse with cotton and clean, warm water until all soap and residue are gone. Then thoroughly dry the genital area, since remaining water has a sperm-killing effect. Although the washing process would be easier if the stallion had an erection during this time, it is not essential to doing the job properly.

Washing the Mare

If enough competent help is available, it is best to wash the mare at the same time as the stallion but about 25-50 feet away. Her presence will help initiate an erection during washing of the stallion. If both animals cannot be prepared at one time, wash the mare first in her stall, then the stallion in the breeding arena, and finally bring the mare to the stallion for breeding.

Wash, rinse and dry the mare’s vulva, hips and area between her legs. Remember that incomplete washing may permit introduction of bacteria, which can lead to resorption of the fetus; and incomplete drying will allow water to come in contact with the sperm, thus killing them.

Also wrap the mare’s tail at least to the end of the tail bone, and tie the remaining switch back onto the wrapped area. Tail-wrapping reduces the possibility of hair cutting the penis head during intromission and prevents the penis from passing through the tail hair where it could pick up filth.

The Breeding Event

Careful conditioning and disciplining of the young stallion plus thorough preparation for breeding goes a long way toward insuring a safe and successful mating. But now comes the breeding event itself, which includes the approach, the mount and the dismount. Each is discussed with suggestions for the handlers that emphasize control and safety!

The Approach

When ready for breeding, the mare is first restrained in the manner selected — hopefully with just a nose twitch, as suggested earlier. The mare’s handler stand in the safety zone (about 45 degrees off her near shoulder) with one hand on the lead shank and the other on the twitch. He remains alert during the entire breeding for two possible undesirable animal reactions — (1) the mare bolting ahead or striking out with a foreleg, and (2) the stallion flailing a hoof during mounting and dismounting.

The stallion’s handler then walks him to the mare, approaching at a 45-degree angle from the rear on her near side (not directly from the back). Never allow the stallion to charge or become unruly. If he should charge, stop him immediately and reprimand sharply with the riding whip carried for that purpose. Since he is undoubtedly excited, make sure that you have his attention during the reprimand and that he understands exactly what you want. Be especially careful when handling an aggressive young stallion that he does not suddenly whirl and kick when approaching the mare.

The stallion may ‘visit’ or ‘talk’ to the mare as he approaches. This is fine and should not be discouraged. A visiting interval may range from 15-20 minutes for a totally ‘green’ stallion to only 15-20 seconds for an experienced one. He will likely visit from the mare’s withers area back to her hips, until he is ready to mount. (You will learn to sense when that time is as both you and the stallion gain experience.) At that point, he should be allowed to move to the mare’s rear.

Don’t let a young stallion mount until he has a full erection. It will only cause turmoil and aggravation for both him and the mare if he is not truly ready for intromission. If he seems ready to mount before a full erection, ‘change his mind’ by tugging on his lead shank before he shifts weight to his rear legs.
And finally, don’t permit nipping or biting. For most young stallions, slight but persistent tugs on the lead shank will prevent this habit from getting started. In a few cases, however, where the habit seemingly is set, it may be necessary to protect the mare’s withers and crest area with leather or blanket material, or simply muzzle the stallion.

The Mount

The stallion should be allowed to mount from any angle not more than 45 degrees from the near side of the mare, as long as he is nearer her hips than her withers. Don’t try to ‘line him up’, but rather let him do his own maneuvering into the right position.

When the stallion begins to rear up on his hind legs to mount, the handler must allow the lead line (purposely made longer than usual) to be slack in his hands, or else he will inadvertently stop the mount or distract the stallion by tugging on his head. Unfortunately, this commonly happens in the excitement of a mount. Also, both handlers need to be alert at this point, since the stallion rises and flails his forelegs somewhat and the mare may strike or bolt. Again, watch out for biting.

The inexperienced stallion may have to have his penis guided for proper intromission. It is not uncommon for him to direct it into the rectum or to an area below the vagina. Therefore, simply grasp the penis, guide it towards the vagina and quickly step out of the way. Do this only after he has mounted, is done flailing and you are confident the mare won’t kick.

The Dismount

The actual time of intromission varies with horses — usually from at least 45 seconds to no more than a couple of minutes. A good sign that the stallion has ejaculated is the spasmodic and spontaneous ‘flagging’ of his tail. Let the stallion dismount on his own.

As soon as the dismount is completed, remove the mare’s twitch, pull her quickly to her own near side and lead her away at a brisk trot. Moving her in the same direction as the stallion prevents her from kicking out and prevents him from whirling and kicking her.

The mare should be walked for 15-20 minutes after breeding and not allowed to urinate or stop and strain. Then she should be washed, have her tail wrap removed and finally returned to her stall or to an outside paddock. The stallion is likewise thoroughly washed and/or rinsed at his prebreeding ‘washing spot’.

It’s psychologically good to reward the stallion after breeding. Give him about a pound of oats during the post-breeding washing and another pound or so when he’s back in his stall. Once started, continue the practice because he will come to anticipate it.
Breeding Herd Records and Contracts

Complete and accurate records are very important to a stallion owner. Perhaps the stallion owner who breeds only one mare per year can get by with napkins, matchbook covers or scraps of paper on which assorted miscellany has been scratched. But anyone with two or more horses needs good records and a definite, permanent place to store them. No one can or should be expected to remember all of the dates and figures involved with a group of breeding horses, especially 5 or 6 months later when a question or problem may arise.

Among the basic records to be kept are: teasing and breeding records for each mare (Figure 1), stallion breeding records showing mares served and dates of service, and a daily stall sheet for each mare indicating what feeding programs, farrier care and veterinary expenses were involved. Planning the coming weeks' teasing-breeding schedule, filling out breed association reports, and accurately and completely passing on mare-care expenses to the mare owner can only be done by reviewing clear, complete records.

Discipline yourself to keep good records!

A breeding contract is also a must between mare and stallion owners. Like good fences, they make good neighbors! With a contract read, understood and signed by both parties, there should be no misunderstanding after-the-fact. Your attorney or simply good common sense will dictate what needs to be included in the contract.

Figure 2 is an example of a good working contract. The horseman should feel free to alter it as necessary to fit his desires or needs. Two "original" copies should be created for each horse bred — one for the stallion owner and one for the mare owner.

<table>
<thead>
<tr>
<th>Codes:</th>
<th>H - Heat</th>
<th>F - Foal</th>
<th>P - Pregnant</th>
<th>Days:</th>
<th>Time between Heat Cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yr.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Jan.</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb.</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar.</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept.</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct.</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov.</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>Code Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Sample Teasing and Breeding Record.
BREEDING CONTRACT

It is hereby agreed to breed the MARE ____________________________ Reg. No. ________________
(Sire _______ Reg. No. _______; Dam ________________________ Reg. No. _______)
to the STALLION ____________________________ Reg. No. ________________
(Sire _______ Reg. No. _______; Dam ________________________ Reg. No. _______).

The fee for such service shall be $ __________, payable at __________ at book
__________ at time of service. Booking fee received $ __________.

Return privileges thru ________________ 19__.

Board for mare shall be at rate of $ _______ per day; $ _______ with foal.

The stallion owner or agent may have mare checked by veterinarian for normal breeding
condition, the cost of which mare owner shall pay. Stallion owner or agent shall assume no
liability for mare that will not breed, cannot conceive, or for accident, sickness or death of
the mare or colt, but will exercise every reasonable effort to settle mare and good judgment
in care and supervision of mare. Mare owner shall not be responsible for injury or accident
to stallion.

A live foal is guaranteed--meaning a foal that can stand up alone and nurse. Should the
foal die at birth, with certification of same provided to stallion owner, the stallion owner
will rebreed the mare the following year without further charge for stallion service. Mare
owner will be responsible for board and vet fees only.

Should the mare prove barren or should the foal die at birth, the mare owner will send
notice of same to the stallion owner, signed by a licensed veterinarian, within five days of
such barren determination or death.

The mare owner agrees that upon arrival, the mare will be halter broken, have the hind
shoes removed and be accompanied by a health certificate signed by a veterinarian. The stall-
ion owner will require a culture after arrival of the mare.

I have read the foregoing and agree to conditions.

MARE OWNER
Name __________________________________________________________
Address _______________________________ State ______
Phone __________ Date __________
Signature ________________________________

STALLION OWNER
Name __________________________________________________________
Address _______________________________ State ______
Phone __________ Date __________
Signature ________________________________

Figure 2. Sample Breeding Contract.
Nutritional Management of Stallions and ‘Visiting Mares’

The feeding program for a breeding operation should include a regime to satisfy the requirements of four categories of horses. Each has a different energy demand and should be handled individually to assure good condition as well as enhance the chances of an early settling.

● **Stallion.** If in heavy use, he will have an energy demand over and above his maintenance needs. If young, the manager must meet the stallion’s nutrient requirements for growth, use and maintenance.

● **Barren Mares.** A barren mare is one, other than a maiden mare, which for some reason did not foal the previous season. The primary nutritional problem with these horses is that they will probably be too fat.

● **Maiden Mares.** Maiden mares (ones being bred for the first time) are usually young and growing, and therefore demand more nutrients than the barren mares.

● **Foaling and Lactating Mares.** Upon arrival at the breeding farm, the foaling mare is probably in the last month of pregnancy, and certainly her energy demands will be above either barren or maiden mares. If the mare has foaled prior to arrival, she will be lactating and approaching the point where her nutrient demands are the highest of any category of horse.

The 14% protein ration in Table 1, containing approximately 70 percent digestible nutrients, will work nicely as a base ration for all four categories of horses. This contains enough protein to keep libido and sperm production up for the stallion, to insure growth for the young horses, and to supply the needs of the developing foal or early lactating mare.

The energy needs for the various categories can be met by feeding more or fewer pounds of the grain; legume-grass hay should be fed with this grain mixture (Table 2).

### Table 1. Corn-Oat 14% Protein Grain Mixture for Breeding Horses.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>14% protein</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Corn base</td>
<td>Oat base</td>
<td></td>
</tr>
<tr>
<td></td>
<td>percent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn</td>
<td>53</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Oats</td>
<td>26</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Soybean meal</td>
<td>14</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Molasses</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Limestone*</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dical phosphate</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Trace mineralized salt</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

*Delete the limestone if the hay portion of the daily ration is predominantly alfalfa or clover rather than grass.

### Table 2. Suggested Daily Feeding Program for Various Breeding Horses.

<table>
<thead>
<tr>
<th>Category</th>
<th>14% protein grain mixture*</th>
<th>Grass-legume hay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barren mare</td>
<td>3-4 lbs.</td>
<td>1 lbs./cwt.</td>
</tr>
<tr>
<td>Maiden mare</td>
<td>6 lbs.</td>
<td>1.25 lbs/cwt.</td>
</tr>
<tr>
<td>Foaling mare</td>
<td>7 lbs.</td>
<td>1.50 lbs./cwt.</td>
</tr>
<tr>
<td>Lactating mare</td>
<td>10-12 lbs.</td>
<td>1.50-2.00 lbs./cwt.</td>
</tr>
<tr>
<td>Stallion</td>
<td>6 lbs.</td>
<td>1.25-1.50 lbs/cwt.</td>
</tr>
</tbody>
</table>

*Composition of grain mixture shown in Table 1.

### Related Publications

Single copies of the following Purdue Extension publications are available free to Indiana residents from their County Extension Offices or from the Agricultural Publications Office, AGAD Building, Purdue University, West Lafayette, Indiana 47907:

- “Fencing for Horses in Indiana” (AS-418)
- “The Nutrition and Feeding of Horses” (AS-421)
- “Horseman’s Guide to Trail Riding” (AS-423)
- “Management of the Breeding Herd” (AS-426)
Cooperative Extension Work in Agriculture and Home Economics, State of Indiana, Purdue University and U.S. Department of Agriculture Cooperating. H. G. Diehl, Director, West Lafayette, Ind. Issued in furtherance of the Acts of May 8 and June 30, 1914. It is the policy of the Cooperative Extension Service of Purdue University that all persons shall have equal opportunity and access to its programs and facilities without regard to race, religion, color, sex or national origin.