



## “Empowering the Veterinary Behavior Team Through Education”

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The Behavior Perspective

Summer 2002

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2001-2002

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## President's Message

Here we are at the end and the beginning of our fiscal year. Our membership has increased to 136 members. We are making ourselves known as the people to contact for behavior continuing education. In less than one year our society has become a real presence and it is thanks to each and every one of you. I applaud you all.

Now that we have laid the groundwork for our organization, our attention has turned to creating specialty status for veterinary technicians in animal behavior. At the annual business meeting in Nashville we will be discussing how to begin this work. Obtaining specialty status is a long term goal, which will take many years to come to fruition, but is well worth the work and time we intend to devote to it. It takes ten years to become a fully recognized specialty group within NAVTA's guidelines. We intend to be here, at the end of the ten-year period, with a fully recognized behavior

specialty for veterinary technicians. Provisional recognition can be granted by NAVTA as soon as we develop the criterion for the candidates and write the examination.

Full recognition was granted to veterinarians in the specialty of behavior only this year. So even though it may seem that we are moving slowly we are indeed moving forward and intend to continue our steady progress.

Be assured, where this task is concerned, we will be as tenacious as bulldogs. We will continue to update you to our progress toward accreditation in upcoming newsletters.

Sincerely,

*Ginny Price*

SVBT President

## Thank You to Our Benefactors

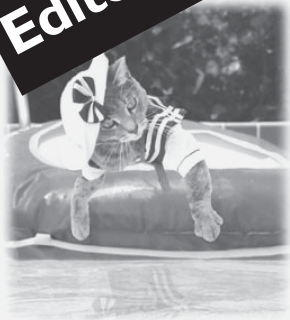
Our reception at AVMA will be a great place to get acquainted and network with fellow members. It will also be an opportunity for all of us to personally thank the people who have helped us get to this point.

Many of our newer members may not be aware that SVBT just came into existence in September of last year. The ideas for how this society should be organized were born at the AVMA/AVSAB conference last year. We determined that our group would benefit greatly from close working relationships with the veterinary behavior community. We asked a few prominent veterinarians to help advise us as we carved out the path we thought this organization should take.

We are so grateful to those veterinarians who agreed to be on our Advisory Panel. They are Dr. R.K. Anderson, Dr. Guy Hancock, Dr. Wayne Hunthausen and Dr. Karen Overall. Dr. Andrew Luescher is a member of our Board of Directors and as our mentor has been the voice of wisdom for this group. All of these people are extremely busy individuals. **Please let them know how much we appreciate their willingness to assist this fledgling group with their advice and counsel.**

Representatives from our corporate sponsors, **Premier Pet Products, Hill's Pet Nutrition, Novartis Animal Health and Campbell Pet Products** will also be attending our reception. **Please make a special effort to let these people know how much we appreciate their support.** These groups have donated cash and have paid to print and mail the newsletters and brochures. They have helped to distribute our brochures at veterinary conferences and in mailings to their clients and have provided the nametag holders for our meeting in Nashville. Our group would not exist without their generosity.

## Editor's Bark



Due to lack of space I will attempt to keep the Editor's Bark as short as possible in this edition.

You will notice an equine focus in this issue. I would like to thank Dr. Houpt and Dr. Miller for making this possible.

**We have added a Professional Opportunities page on the Member's only section of our website. Please contact me if you know of job opportunities directly related to animal behavior and I will add them to the site.**

To access the member's only pages your "user name" is usually your last name in lower case letters. Your password is your svbt member number with the letters in lower case followed by numbers. Please let me know if you have problems accessing the pages.

I hope to meet many of you at our annual meeting at the AVMA in Nashville this year. Beware, my digital camera will be in full action capturing pictures for the fall edition of the Behavior Perspective! I will show no mercy in this daunting task.

## SVBT Members Dominate DOGS! 2002

Twenty-five percent of this year's DOGS! Course participants and volunteers had one thing in common, they were SVBT Members. The general demographics of this year's participants also indicated a dramatic increase in veterinary professionals attending the course. This significant increase is in part from the networking and professional support SVBT offers its members.

Watch for details for the SVBT sponsored DOGS! Course 2003 scholarship contest in the January 2003 Behavior Perspective.

**Back Row Left to Right:** Jennie Lane, Sherrie Yuschak, Sarah Braun, Sarah Lahrman, Nicole Hendrich, Michelle Quintana-Sousa, Shawn Dillard, Annette Wilcox, Julie Shaw

**Front Row Left to Right:** Marcia Ritchie, Jennifer Krack, Donna Ishizu, Rhonda Aja, Emily Bright



## CE Opportunities

**July 8-12, 2002**

**Live Long and Prosper: A Shelter Dog Workshop**  
Accord, NY

Sue Sternberg

Contact Voundout Valley Animals for Adoption at 845-687-7619 or [www.suesternberg.com](http://www.suesternberg.com)

**July 13-17, 2002**

**American Veterinary Medical Association 139th Annual Conference**  
Nashville, TN

Email: [sgran kog@AVMA](mailto:sgran kog@AVMA) [www.avma.org](http://www.avma.org)

**July 13-17, 2002**

**Animal Behavior Society (ABS) 39th Annual Meeting**  
Bloomington, Indiana

Contact Emilia Martins at [emartins@bio.indiana.edu](mailto:emartins@bio.indiana.edu) or Meredith West at [mewest@indiana.edu](mailto:mewest@indiana.edu)

**July 31 - August 4, 2002**

**Seminar on Equine Behavior at "Ride with the Stars"**

**Dr. Robert M. Miller Kentucky Horse Park, Lexington, KY**

Contact Pam Alford at 800-411-0857

**August 11 - 17, 2002**

**Chico Basin Conference - Dr. Robert M. Miller**

**Chico Basin Ranch, Colorado Springs, CO**

Contact Duke Phillips at 719-683-7960

**August 16-20, 2002**

**Society for the Study of Social Problems**  
Chicago, Illinois

"Exploring irrationalities in the human-nonhuman relationship"

Contact: Email [Izilney@utk.edu](mailto:Izilney@utk.edu)

**August 17-20, 2002**

**Central Veterinary Conference, Kansas city, MO**

Drs. Andrew Luescher and Julie Shaw, R.V.T., Petra Mertens, and Amy

Marder. Contact: 800-255-6864 ext 6, [cvc@vetmedpub.com](mailto:cvc@vetmedpub.com)

<http://www.vetmedpub.com/cvc/>

**August 22-25, 2002**

**Conference on Homeless Animal Management and Policy**  
Reno, Nevada

516-883-7767, FAX 516-944-5035

**September 12-15, 2002**

**Tufts Animal Expo 2002, Boston, MA**

Contact: Susan Brogan, phone 800-642-2200

[SBrogan@infonet.tufts.edu](mailto:SBrogan@infonet.tufts.edu), [www.tuftsanimalexpo.com](http://www.tuftsanimalexpo.com)

**October 15-17, 2002**

**Atlantic Coast Veterinary Conference, Atlantic City, NJ**

Dr. Vint Virga, DVM, Dipl. ACVB - 12 hours of behavior lectures

**October 26-27, 2002**

**Animal Behavior Conference 2002, Dallas, TX**

Fear and Anxiety in Companion Animals: Prevention, Detection, and

Treatment - Drs. Sharon Crowell-Davis, Debra Horwitz, Katherng

Houpt, Gary Landsberg

Contact: [l.denny@elsevier.com](mailto:l.denny@elsevier.com)

[www.mosby.com/CET](http://www.mosby.com/CET)

## Advances and the Future in Equine Behavior and Misbehavior of the Horse

Robert M. Miller, DVM

*Editor's Note: The following article was submitted by Dr. Robert Miller and reprinted with the permission of Veterinary Clinics of North America: Equine Practice Vol.17 No. 2 August 2001. The article has been edited.*

The horse presents a unique problem to the veterinary practitioner. It is the only common domestic animal that depends on flight as its primary survival behavior in the wild state. It is a large, muscular, physically powerful creature, and when these qualities are combined with its timid flighty nature, its extreme perceptiveness, its remarkably fast reaction time, and its swiftness, we have a potentially dangerous animal. Although food animals like cattle are of similar size and strength, it is customary to use physical restraint to manage them. This might include chutes or crushes, stanchions and headgates, nose rings, and nose tongs. Zoo practitioners often rely on squeeze cages to protect themselves from injury caused by unruly patients. When necessary, small animal practitioners use muzzles and other physical restraint devices such as a "cat bag." The equine practitioner, on the other hand, is usually expected to step up to a frightened animal that outweighs the doctor many times and do whatever is necessary. For these reasons, competence in the science of equine behavior is essential for the veterinarian who is going to work with that species. In the past, most of that competence was gained by means of experience. This was sometimes painful, literally. Today, most students have little or no experience in handling difficult horses, and it is necessary that training in behavior shaping and modification be a part of basic veterinary education. This applies to all the species we commonly treat, but it is especially important in the horse.

When I graduated from veterinary school in 1956, the horse population of the United States was down to 2.5 million (this from a 1910 high of 22.6 million horses and mules). Today, we are back up to about 7 million horses. The increase is entirely in recreational horses. Indeed, the number of working horses has continued to diminish. Increasingly, pleasure horses are owned by women. Most women are much less coercive than men typically are in handling horses, which is no doubt one reason why this easily intimidated species bonds readily with women (and children). It behooves us as

practitioners to use methods of handling horses that are humane, as gentle as possible, and avoid presenting an image of brusqueness and insensitivity.

Originating in the Pacific Northwest of the United States a couple of decades ago, a revolution in horsemanship swept the country, which had reached the far corners of the earth by the end of the century. Actually, there is nothing new about the kind of horsemanship we are talking about. It has always been used by talented trainers; however, for the first time, this nonconfrontational, humane, swift, and effective training philosophy, is becoming popular worldwide. It is because today's horse owners are better educated and more receptive to the science of psychology and because of the information explosion that is occurring in most technologies. Video, publications, and jet travel, which allow clinicians to travel rapidly, are spreading the word. Below are some of the better known trainers who are masters at behavior shaping in the horse. These people have produced books and videos and also do clinics all over the world.

If you are involved with horses professionally or recreationally, I urge you to become familiar with as many of these fine horsemen as possible. After 6000 years of domestication of the horse, these people are advancing the art of horsemanship so rapidly that most of the traditional methods of the past have become obsolete. This list is by no means complete. There are other progressive horsemen, but it is my policy to only recommend those whom I have personally seen work with horses and students and whose techniques are particularly valuable to the veterinarian.

By means of natural selection, each species acquires genetically fixed physical and behavioral characteristics that help to ensure its survival in its natural environment. In the case of the horse, the principal physical characteristic that has helped it to survive is speed, and the principal behavioral characteristic that enables speed to be an asset to the wild horse is flightiness. The horse is a grasslands dwelling species. Its major natural predators are the great cats, and its primary means of survival is instantaneous flight when frightened by an unfamiliar sensory stimulus. The stimulus may be visual, olfactory, tactile, auditory, or a combination of any of these. The flightiness of the horse is the reason it so often injures itself or the people

who handle it, and is also the reason why the horse is so often perceived as a stupid animal. The horse's flightiness is not stupidity; it is nature's wisdom and helps the horse to survive in its natural open environment. The horse is a timid creature, and his timidity and flightiness are genetically fixed traits that have been modified but not eliminated by generations of domestication.

Fear is contagious to a horse. This serves as a survival mechanism in wild horse herds. It is the reason why a young horse gets excited when another horse runs by him.

To cope with any species, the basic behavioral mechanisms of that species in the wild state must be identified and accepted. As a result, the less a horse is frightened when you are working around it, the less refractory is its behavior. The horse is a powerful but timid creature, which although lacking in reasoning power, is highly intelligent from the standpoint of memory, speed of learning, and adaptability. Like other species, humans probably elicit chemical substances called pheromones during times of emotional stress such as anger or fear. I believe that horses smell these pheromones; thus, to get along with horses, the handler must be relaxed and have a positive attitude. Anger, even if concealed,

### Recommended Horsemen:

1. Afonso Aguilar, APDO, Postal 20 6, Morelia, Mich, CP 58193, Mexico
2. Buck Brannaman, 642 Highway 14, Sheridan, Wyoming 82801 (telephone: 307 672 5876)
3. Ray Hunt, Rocky Bar Stage, Mountain Home, Idaho 83647 (telephone: 208 587 4192)
4. Marty Martin, PO Box 379, Lafayette, CO 80026 (telephone: 303665 5281)
5. Dr James McCall, PO Box 90, Mt Holly, Arkansas 71758 (telephone: 501 554 2450)
6. Pat Parelli, PO Box 5950, Pagosa Springs, CO 81147 (telephone: 970 731 9400 or 800 642 3335)
7. Dennis Reis, 411 Highland Avenue, Penngrove, CA 94951 (telephone: 800 732 8220 or 707 792 0629)



is absolutely detrimental to one's ability to communicate with horses.

The horse can be quickly habituated to any frightening but non-painful sensory stimuli, including sound, sight, touch, and odor. Once habituated to a specific frightening but non-painful sensory stimulus, the horse retains its familiarity with that specific stimulus indefinitely. Habituation to such frightening but non-painful sensory stimuli is accelerated by repetitious exposure. For example, a gunshot may frighten a horse and cause him to attempt to flee, but if confined and exposed to repetitious gunshots, the horse habituates to that sound. Habituation is still further enhanced if repetitious exposure is rhythmically applied. Habituation is still further enhanced if repetitious rhythmic stimuli are simultaneously applied. Tactile, auditory, and visual stimuli applied simultaneously and rhythmically quickly habituate the horse to all these multiple stimuli. The stimuli may be frightening but non-painful; it is essential that the subject not be allowed to escape before habituation occurs, or future exposures to such stimuli may result in increased panic rather than acceptance.

A good example of the habituation process is the "sacking out" of a colt by the horse breaker. The colt, confined so that he cannot escape, is repeatedly stroked with a waving sack or blanket. The sight, sound, smell, and touch of the sack are frightening; however, when it is rhythmically and repetitiously applied, the colt is soon habituated to the sack, and he remembers this lesson permanently. If only one side of the horse is "sacked out," however, the horse lacks the power of reasoning to apply what he has learned to his other side. We are now dealing with a different eye and a different side, and the lesson must be started anew. The moment of habituation can be detected. The fear response ceases, and the horse's eye wanders from the source of the fear provoking stimulus. He is no longer aware of it. He is habituated to it, and, provided that it is identically presented in the future, he does not fear it again. Be warned, however, that even minor variations in the stimuli may elicit future flight responses.

The calming effects of rhythmic stimuli have been used for centuries by horsemen, as in the jiggling of a halter, repetitious hissing or whistling, and patting or stroking. The exposure of such multiple, simultaneous, rhythmic, frightening, but non-painful sensory stimuli to a horse often

produces a mesmerizing effect. Similarly, in humans, repetitious visual, tactile, or auditory stimuli are often used in mesmerization (a pendulum, a circling spiral, stroking, or the monotonous voice of a hypnotist).

Horses are herd dwelling creatures and are equipped by nature to accept dominance. Except for the rare superdominant individual, most horses can be readily brought to a submissive attitude toward the handler. Dominance, it must be understood, is a quality not related to physical strength. The dominant horse in a herd is frequently an old decrepit mare. Small ponies sometimes dominate a herd of full sized horses. Dominance does not necessarily reflect athletic ability, aggressiveness, or intelligence. It is a personality characteristic of its own. To use a human analogy, we tend to think of politicians and warriors when we think of dominant individuals, but religious leaders and entertainers also have that charisma, which evokes the desire to be submissive to them among their followers.

Veterinarians work under a great handicap when handling horses. Almost everything the veterinarian does to a horse is either frightening or painful. In addition, the veterinarian is often short of time and impatience and haste are intimidating to the horse. As a result, horses are frightened by veterinarians, and this evokes the flight response. No other horseman, trainer, groomer, or farrier must handle as many horses as does the equine practitioner in a normal working day and under such disadvantageous conditions. It is necessary that the veterinarian dominate his patient, but this must be accomplished while minimizing the horse's fear.

Because escape (instantaneous flight) is the horse's principal survival mechanism, one of the keys to dominating the horse is to deny him the ability to flee. The use of such mechanical restraining devices as halters and hobbles is instrumental in rendering the horse submissive to the handler. For example, after parturition, some mares display aggressive behavior when their foal is approached. This is a useful protective device in the wild. Note, however, that once haltered, the mare usually abandons her aggressive display and shows only anxiety for her foal. The old bronc breaker's trick of tying up a hind leg served less to prevent kicking than it did to render the colt psychologically impotent by removing its ability to flee. The old time horse tamer's trick of tying an outlaw horse down on the ground and crawling all over it did much the same thing. The horse is intelligent enough to be able to quickly choose between the lesser of two evils. Unless undesirable behavioral characteristics have been established previously, the horse accepts a frightening painful stimulus. For example, a needle shy horse stands quietly for an injection if given a choice between it and a lip chain judiciously and expertly used by the handler. An even better example is the use of a lip chain to train (not restrain) a horse to accept a stomach tube. The stomach tube is a perfect example of a frightening but nonpainful stimulus. The horse sees

it, smells it, and feels it. Moreover, the horse is defensive of its body openings. The bot is a cosmopolitan equine parasite, and the horse is particularly reluctant to allow anything up its nose. To compound the problem, if the horse has been previously twitched for tubing, he may associate the tube with the pain of the twitch, which is only a couple of inches away. The twitch gives the horse the choice of slight or intense pain. Most horses' striking is related to the presence of a twitch.

The lip chain, on the other hand, causes no pain at all until pressure is applied. When the horse uses evasive head action to avoid the stomach tube, the chain is tightened. When the horse keeps his head still and allows the tube (actually, I use my forefinger for the initial training) to enter his nostril, the chain is left slack, and the horse is praised in a soothing voice and caressed (rubbing around the eye is especially appreciated). This is positive reinforcement.

Please realize that I do use a twitch. It is a legitimate means of restraint, but as a training device, the lip chain is more effective on most horses for the reasons I have stated. You must also realize that, as a busy practitioner, I can only devote a few minutes' time to train a horse to a nasogastric tube. In most cases, this is sufficient time, but if I think too much time is needed, I do use conventional restraint methods or sedate the patient if the latter is deemed preferable.

It is worth the time it takes to train the horse. That horse is likely to be a more cooperative patient in the future. The horse respects me and is submissive to me rather than fearing me and frightening me. It is safer to work on that horse in the future. I can work more quickly. I like horses, and I like them to like me. Certainly, such methods present a better image of the equine practitioner than conventional restraint methods, which look brutal even if they are not. How can we veterinarians hope to get along with our clients and our colleagues if we do not learn to get along with the animal we profess to love.

We should mention the concept of imprint training. The horse is a precocial species in that like many prey species, the young are fully developed at birth and can run from danger soon after birth. Foals learn quickly in the first few days of life. Ideally, training should begin at the time of birth, and by 1 week of age, the foal can

already be trained to many procedures that are customarily delayed. For example, the 1 week old foal should lead, stand tied, load onto a trailer, stop, turn, back on demand, allow any part of its body to be handled, pick up its feet on command, and be submissive to humans. A foal trained in this manner retains its memory of these experiences even if not handled for months afterward, although it is preferable to periodically reinforce the lessons. I try to teach my clients the concept of imprint training. Although horsemen are resistant to new ideas, many clients accept them. I have many farms now training their foals, and those foals are a pleasure to handle as weanlings and yearlings if the procedure is done properly during the postpartum imprinting period.

Using these principles enables a veterinarian to treat horses with a minimum of restraint, brutality, risk to the horse, and risk to the doctor. Practicing in this manner is less hazardous, less stressful, more enjoyable, and more effective.

## Books

1. *Understanding the Ancient Secrets of the Horse's Mind: The Russell Meerdink Company*, 1555 South Park Avenue, Neenah, WI 54956 (Telephone: 920 725 0955)

2. *Imprint Training of the Newborn Foal*: Western Horseman Publishing, PO Box 7980, Colorado Springs, CO 80933 7980 (Telephone: 719 633 5524)

## Videotapes

1. *Understanding Horses: Video Velocity*, PO Drawer K, Virginia City, NV 89440 (Telephone: 775 847 9847).

2. *Safer Horsemanship: Video Velocity*~PO Drawer K, Virginia City, NV 89440 (Telephone: 775 847 9847).

3. *Early Learning: Video Velocity*, PO Drawer K, Virginia City, NV 89440 (Telephone: 775 847 9847)

4. *Influencing the Horse's Mind: Miller's Harness Company*, PO Box 883, Rutherford, NJ 07070 0883 (Fax: 201 460 1260)

5. *Control of the Horse: Video Horse World Productions*, 22160 Riley Road, Lakeville, IN 46536 (Fax: 219 784 3773)

## Client Education

### Guidelines for the Owners of Foal Rejecting Mares

By K.A. Houpt, DVM, DACVB, Dr. S. Lieb

The following guidelines are presented to help broodmare owners in the prevention of foal rejection and the management of mares and foals involved in rejection. They are based on the results of scientific behavioral observations and a summary of the observations of the many respondents to our survey on foal rejection conducted in early 1992.

#### Types rejection behavior observed in rejecting mares

1. Mare ignored and tended to avoid her foal if it attempted to approach and nurse. Mare did not show overly aggressive tendencies against the foal unless it tried to search nurse her. These mares were often not being observed during foaling or were the mares that had been accidentally separated from their foals at foaling time.
2. Mare showed some initial interest in her foal but became progressively negative towards her foal, especially when it attempted to initiate the search for the udder and suckling. The negative attitude of the mare sometimes escalated to strong aggressions against the foal, such as biting and kicking. These mares were usually being observed through the foaling process and frequently had unusual barn activity or foaling problems associated with the foaling process.

#### Foal rejection prevention prefoaling guidelines

1. The expectant mare should be taught to accept handling of the udder, especially during the week near foaling time when the udder is full and tender. This is important as many mare rejection case seem to involve mares that appear uncomfortable about nursing but otherwise are not rejecting the foal. Please read the HOW TO section attached.
2. Prepare an appropriate foaling location. Foaling can take place in a stall or paddock/pasture; however, the situation must be carefully controlled. Several rejection cases were reported as a result of them being accidentally separated from each other at foaling time. Two situations were reported: 1) the mares gave birth near the fence and the foal and mare ended up on opposite sides. 2) the mares gave birth in a pasture/paddock with other horses in it and the foal was claimed by other than its dam. In both situations, the dam probably never had the opportunity to imprint on the foal during the critical period (the first 15 min) after birth. Please read the HOW TO section attached.
3. Create a natural foaling situation. In nature, the mare will seek an isolated, quiet place to foal. The mare should be given her own safe stall/paddock/pasture, free of other horses, to foal in. Separation should occur well before her due date, especially if management does not allow for frequent daily observations. One month will allow the mare time to settle into her new location. The mare should not have to worry or be on the defense or anxious during the foaling process. The foaling location should be very quiet with little people or activity. Moderate lighting of the foaling area does not seem to cause problems. Creating a more natural foaling situation allows the mare to concentrate on herself and her foal.

#### During the foaling and immediate post foaling period

1. Experienced foaling mares can probably tolerate more distractions because they already know what is happening, but maiden mares may need extra quiet and a very low level of distraction because they are learning and experiencing new situations. Management activities, such as checking of the foal's position during the foaling should be done quietly with as few people as possible in the stall. If the foaling has proceeded normally, the foal's nostrils are not obstructed by the amnion and the foal begins to move and raise its head as soon as it is out of the mare, actions such as, removing the amnion from the foal's head and manual movement of the foal right at and directly after the birthing should be unnecessary and avoided. Of course, foaling problems and foals discovered to be abnormal will require varying amounts of intervention. When foaling problems have been corrected it is important to leave the foaling area and let the mare finish the process herself. If the foaling has occurred normally but the foal does not move, then of course emergency measures can be taken but every effort should be made to allow the mare access to the foal to allow imprinting to proceed. If the foal is alive but weak or abnormal then usually management measures can wait till at least 30 minutes for the mare to imprint. Management involving naval treatment, giving an enema and injections can safely be delayed until an hour or more after birth to give the mare time to imprint.

2. The time period during which the mare claims the foal (imprints) should be kept free of outside interference and distracting activities. Imprinting of the mare to her foal starts the moment the foal is born and appears to extend only for minutes, perhaps less than 30 minutes. The exact mechanism of imprinting is not known yet; but the activities of a normal mare during this period, licking the membranes and wet foal and licking the placenta, smelling the foal and birth fluids, staying attentive to and in very close proximity to the foal (mare's head over foal and her front hooves often only inches from it), nickering to the foal and protecting it from everything including humans, are all indicative of imprinting. Mares which take no interest in their foals immediately after they rise from the foaling, move away from the foal (which is still on the ground) and don't return to check on it are at risk to reject. Mares which approach the foal and paw at it are usually normal and just trying to get the foal to stand. Mares normally lick and sniff at their foals especially while the foal is still lying down and wet and may even accidentally step on the foal (especially if the mare has too much activity going on around her).



3. After birth, close observation of the mare and foal through the time required for the foal to stand and nurse is important. Rejection of the foal by the mare is most likely to be observed during the period the foal stands and attempts to approach and initiate nursing. It is important for the foal watch people to be aware of normal mare aggressions against the foal and to observe (quietly) a long enough period of time the mare/foal interactions to be sure what they see is abnormal and needs management intervention. Normal mare aggression during this time may include: mare pawing at the foal to get it to stand, mare squealing and sometimes striking out with a foreleg when sniffing noses with the foal or when the foal searches the mare's body for the udder and when the foal touches the udder with its nuzzle the first few times, the mare may want the foal to stay at her chest and constantly move position to maintain the foal in this position even to the extent of not allowing the foal to move by her side to nurse, mare biting the foal (especially its back and rear) and/or pushing the foal with her head to herd it around in front of her, mare may swish her tail and lift a leg as if to kick when the foal touches the udder to search for the teat or initiate milk letdown, mare often pins her ears and reaches around to threaten and even bite the foal on the rump when it searches for the udder and initiates nursing. The process of the foal learning to nurse the first time normally takes 1 to 5 hours (average 2.5 hours). The mare and foal are learning to relate to each other at this time. Excessive activity near the mare and foal should be avoided. Experienced foaling mares have been observed to exhibit excessively aggressive foal herding behavior and/or refusal to allow the foal to move from her chest area to nurse when anyone was watching but would quiet down and allow normal nursing once left completely alone. This indicates that observations during this phase should be from as much distance as possible and activities such as feeding and stall cleaning anywhere near the mare and foal should be avoided until after the first few nursings have occurred. If the mare has been given a couple of hours of quiet and she still refuses to allow nursing or ignores the foal, then she should be hand held and the foal assisted to establish the reverse parallel position of nursing until it has successfully nursed. In extreme cases the mare may be milked and the foal tubed with or bottle fed the milk; however, it should be realized that if this is done the foal still does not know how to nurse and you will have to wait for it to get hungry enough to search for the udder again and a true nursing to occur. Mares which show abnormal aggression to the foal may show aggressions such as leaving open bite wounds all over the foal, biting the foal on the top of the neck and even picking it up by the neck, kicking at the foal when it is approaching her or it is still at a distance from her. It is normal for a mare to pin her ears, and threaten to bite or lift a hindleg to kick at the foal to prevent it from nursing too roughly or frequently, but the foal will not normally be hurt. If the aggression is serious enough that the foal gets hurt, then it is not normal.

### Foal Rejecting Mares

**1. Rejecting mares exhibit one or more of several characteristics.** Some mares seem afraid of their foals and simply avoid them. The mares should be handled kindly and held for the initial and subsequent nursing bouts until she at least allows the foal to follow her and nurse. Sometimes exposing the mare and foal to the presence of a dog or other animal that might initiate actions on the part of the mare to protect the foal will sometimes make her more maternal. Other rejecting mares may accept the foal's presence but actively reject the foal when it tries to nurse. You should be sure that it is not just a very full or tender udder that makes her reject. Milking a pint out of each teat will relieve the pressure (what you get can be frozen in case it is needed in the future) and then the mare can be held with whatever restraint is necessary to allow the foal to learn to nurse. The restraint could include everything from simply holding the mare to use of chainshank, twitch, or tranquilizer (given by the vet) and combinations of these. Remember that the mare should associate positive things with the nursing bouts, so feeding her carrots or small amounts of grain while she is nursed or just after will help.

**2. What to do with rejecting mares after the first suckle bout.** Foals normally suckle four times per hour and each suckle bout only lasts for 2-3 minutes. Therefore, if the mare persists in refusing to let the foal nurse then some means of restraining the mare in a position to allow the foal access to her will have to be arranged. A method found to work well is to install a bar parallel and approximately 3 feet from one wall of a box stall so that the mare is in a standing stall arrangement. The bar should be placed at a height just above the mare's bottom line and stifle so that the foal may reach under the bar to get to the udder. If the mare does not try to bite the foal severely or to turn around, her head probably does not need to be tied. Care should be taken to be sure that the foal cannot get in front of or behind the mare (bales of straw or hay might be used) and that the bar is strong enough to resist the mare's breaking it (use 4x4, 2x10 lumber or heavy pipe). To cushion the rail and

to prevent splinters from injuring mare or foal cover with carpeting. Once the mare appears to be accepting the foal and its nursing bouts, then the mare should be allowed loose in the stall or a small paddock with the foal under supervision. These unrestrained periods should be increased in duration and frequency until restraint is no longer needed. The successful case reports that we have received have shown that mild rejecting mares often take only a few hours to a couple of days of manual regular (and frequent) restraint before accepting the nursing process and their foals. Very aggressively rejecting mares tend to take longer with many reporting successful bonding or mare and foal after two weeks of mare restraint (one mare after 3 weeks). Most of the mares showed rather strong resistance right up to the last few days. Once the mare stopped resisting it was only a few days before they could be safely left together unrestrained. When you initially discover that the mare is rejecting, do not separate the mare and foal unless the mare is very violent and then only long enough (minutes to no more than an hour) to develop your restraint methods. The more often and longer the two are separated, the harder it will be to get them back together. Also, the normal nursing frequency of 4 times per hour should be maintained in order to prevent the mare's udder from drying up and to provide maximum mare/foal contact.

**Successful cases at getting the mare to accept the foal seem to be closely tied to the determination and persistence of the people involved.** We may never be able to calculate the percentage of mares that could successfully be trained to accept their foals. In most, but not every case, maiden mares do not reject their second foal, especially if they successfully raised the first one. One mare rejected her first two foals (in both cases attempts to get the mare to accept the foal extended for only a few hours), but when the mare showed rejection signs with her third foal and she was restrained for two days she accepted it and successfully raised it herself, as well as, her subsequent foals. Owners should weight the time and effort of a few days or weeks of time needed to bond the mare to the foal to the time and expense of hand raising the foal and/or cost of a nurse mare. Hand reared foals often do not thrive, may be aggressive to people and are difficult to teach normal herd behavior.

#### How To Hints:

- 1. Handling the mare's udder.** This can be accomplished easily by holding the leadshank of the mare in your left hand and, standing at her left shoulder, begin to rub with your fingertips between her front legs at the girth area and slowly work your way back along her underline. As you find her itchy spots she will relax or even reach around to initiate mutual grooming with you using her muzzle. Discourage the mutual grooming, especially if she wants to use her teeth, by just pushing her head back straight in front of her body. As you rub back towards the mare's udder watch for her reactions. If she swishes her tail and kicks, pull the leadshank and say "no" and repeat your rubbing, always starting in an area that she enjoys and working back to the udder until she accepts all contact. Handling the udder should include light rubbing of the whole body of the udder (both halves), cleaning the crease between the two halves, and pulling lightly on each teat. Do not over handle the udder and make it tender. With a mare that is cooperating, once a day is enough. A mare that is resisting a lot should be handled several times a day, to assure progress.
- 2. Prefoaling management.** If the udder or vulva are excessively dirty they should be cleaned the day or so before foaling. Use only warm water and no soap or disinfectant. The scent of the mare should not be interfered with prior to foaling. Wrapping of the tail which usually requires interruption of the foaling process should probably be avoided for maiden and previously rejecting mares.
- 3. What is a suitable foal location?** Any suitably constructed stall, paddock or pasture where the mare can feel she has privacy. She should be placed in the location where she is expected to foal two weeks to a month prior to her due date to allow her to settle in. She may show extreme restlessness for the first several days of separation from her pasture mates as normally she would seek isolation only hours prior to foaling if she were in the wild state.
- 4. What is a suitably constructed foaling location?** The area should allow for some degree of isolation without the mare feeling either alone or crowded. This means that if a stall is used it should be solid walled to any adjacent stall so that the mare does not tend to aggress against the horse in the next stall when being fed, as she may do the same thing to protect her foal and become very anxious immediately after foaling. If a paddock or pasture foaling is to be arranged, then it is very important that the fencing is such that no more than a 3-inch opening occurs between the fencing and the ground. Many mare/foal separations have been reported because the mare apparently foaled right against the fence and when expelled the foal was on the opposite side of the fence and/or squirmed there during the first few minutes after being born. Even older foals have been known to end up on the other side of pasture gates that were 6 to 10 inches off the ground by sleeping next to the gate and rising with their heads and then bodies on the wrong side. In paddock/pasture foaling situations, care should also be taken to assure that other horses nearby cannot break down the fence to reach the foal (we had several cases of injured and stolen foals from this situation; in these cases it was a gelding).
- 5. How to create maximum privacy for the mare and maximum observation for good management?** Place and construct the foaling paddock or stall such that it can be readily observed from a distant house window or an apartment/office window in the barn. One way mirrors for a room next to the stall will work provided noise from the observation room cannot be heard by the mare. Many people now use closed circuit TV cameras to bring the image directly into a nearby house.
- 6. Notes on aggression in normal mares.** Some mares have been observed to aggressively push and nip at their foals in an apparent attempt to herd their foals from perceived threats in the foaling area, especially right after the foal stands and begins to walk. This is exaggerated but normal protection behavior and can usually be reduced by removing all people and other apparent causes of threat from the sight of the mare and creating a very quiet, low light area for the mare at least for the first 12 hours after birth. This is another time when being able to keep an eye on things from a discrete distance is important.





# Welcome New Members

Debbie Arcidiacono, C.V.T.	Floral City	FL	Lisa Lynady	Spring Branch	TX
Karissa Barnes, C.V.T.	Greeley	CO	Cheryl Malheim, C.V.T.	Winthrop	MN
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Nancy Bauer, D.V.M.	Seattle	WA	Molly Mott, L.V.T.	Hermon	NY
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