

BREEDING FOR QUALITY MULES, PART 2

MEREDITH HODGES - LUCKY THREE RANCH

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Cindy Roberts (Interviewer):

The mules are in the corral. Welcome to Mule Talk, and I'm Cindy K. Roberts, your host, and our author, TV personality and world-renowned mule trainer, Meredith Hodges of the Lucky Three Ranch. Covered a lot of good info on the last episode about breeding, and of course, you have more to share with us. This will be part two of that episode on breeding. Go ahead.

Meredith Hodges:

Well, thank you for saying so. I've had plenty of experience. I learned about breeding for mules at my mother's mule ranch in California from 1973-1979. The name of it was *Windy Valley Ranch* located in Healdsburg where we produced 30 mules a year and sold them as yearlings and 2 year olds.

It was a 1000-acre ranch with lots of stalls, pens and turnout areas. We had 60 head of brood mares, five jacks and seven jennets to produce mules and more jacks. On this ranch, we not only did *live cover*, but we also did *Artificial Insemination*. We covered not only the ranch mares, but outside mares as well. When we weren't breeding mares, we were collecting semen from the jacks. It was a full-service operation. We got quite an education in *Selection of Mares and Jacks*, because we had lots of clients that wanted a lot of different kinds of mules. So when my mother was putting the ranch together, she went out and bought many different breeds of mares.

About the only ones that she really didn't have were Warm Bloods. Warm Blood horses are a cross between a Hot Blooded Breed of Saddle Horse and a Cold Blooded Draft Horse Breed. The Morgans we bred, oddly enough, were really difficult to get pregnant. I learned a lot about all these different breeds of horses and the effect their characteristics had on their Mule Offspring.

Athletically, all these horses had very different talents and skills! Their personalities and dispositions were also very different. Within the types of horses, personalities were as diverse as human personalities. All the horses except the Draft mares were quite reactive instead of calm and intelligent about things. Of course, that could have a lot to do with the way they were approached back then. People did complain about Thoroughbreds and Arabians being exceptionally difficult to handle, but in my experience, they just seemed to be more intelligent and less patient than the other breeds.

As the mule's popularity grew, so did the need for more carefully organized Breeding Programs to produce only the most superior mules in overall appearance and athletic ability. This is what we tried to do at *Windy Valley Ranch*. In *Phase One* of the breeding program, my mother, Joyce Doty, successfully bred Attractive, Athletic, and Versatile mules at the *Windy Valley Mule Ranch*. They were bred for Pleasure, Work and Show from 60 head of Assorted Breeds of mares. The mares included Arabians, Thoroughbreds, Tennessee Walkers, Morgans, and Belgian Draft horses, but no Warm Blood horses. We learned that jacks would produce a stronger and more durable offspring than stallions, but the heavy-boned Mammoth jacks were not necessarily producing the most Athletic or the most Attractive, Saddle Mule Offspring. They reflected the heavy bone in the face and legs that is typical in the Mammoth Donkey. It seemed that the smaller, more refined, Large Standard and Standard Jacks were better for the production of *refined-looking* and more *versatile* Saddle Mules.

In *Phase Two* of our mule breeding program, I started the *Lucky Three Ranch* in Loveland, Colorado and drastically decreased the number of breeding animals that we used. *Little Jack Horner* was a Large Standard jack and was our *Sire Supreme*. He was the last jack born at *Windy Valley Ranch* before its dispersal in 1979. In 1980, I brought him and his half-brother, *Lucky Three Sundowner*, the last mule born at *Windy Valley Ranch*, to the *Lucky Three Ranch* in Colorado. I began showing *Lucky Three Sundowner* in halter classes while *Little Jack Horner* was maturing. When *Little Jack Horner* turned three years old, we began breeding him to different breeds of mares, including Quarter Horses, Appaloosas, Paints and Arabians.

All of the mules that I bred from him and these mares were extremely Attractive and Outstanding Performers. I wanted to show people that mules were good for anything horses could do and then some. The “*and then some*” gets really interesting. (laughs). At the World Champion Mule Show in Bishop, California they even rope steers from mule-drawn chariots!

While training in Dressage, I was looking for the ideal mare to breed the jack to for Exceptional Performance. Why did I finally choose a Trakehner cross? I spent years breeding donkeys before I finally got *Little Jack Horner*, a sire that predictably produced Refined, Attractive and Athletic Offspring that became some of the top Halter and Performance Show Mules in the country. I bred him with multiple breeds of mares and crossing him on a Warm Blood mare seemed like the natural thing to do next.

Numerous breeds of Warm Bloods were readily available in Europe, but they weren't obliged to sell their best breeding stock to Americans in general. People were finally importing some from Europe and began building Trakehner Farms in the West. I thought, “*Okay, I think I'm going to look around these farms and see if I can get one from America,*” I surely was not able to import one from Europe. They wouldn't let me have one, especially if they knew I would breed for a *Trakehner Mule*! I looked around to try to find the right mare. The Trakehner horses really did have the high action, energy and endurance that I was seeking. They were more Arabian-like than they were like any other breeds of horses.

I couldn't get one from any of the Breeding Farms. They wouldn't sell them to me. They knew I was going to breed her to the jack. They wanted to keep the Trakehner breed pure. I was looking around and I found a Trakehner mare that was privately owned. The owner bought this mare from a Breeding Farm complete with Registration Papers. She was ***beautiful***. Her name was *Vinesse* and I bred her to *Little Jack Horner*. She settled easily with the jack and I got three outstanding Trakehner Mules from her.

The Trakehners were right up there with the Arabians and the Thoroughbreds in their reputation for being *intelligent hotheads*. The Dutch Warm Bloods were calm and the Hanoverians were even calmer. I guess I am just attracted to *Hotheads*. (laughs). Even my jack was a *Hothead*. (laughing), but he didn't have a bad Disposition and he wasn't mean. Nothing my *Hotheads* ever did was mean.

It seemed to me that they were all just *super-intelligent over-achievers* and were always trying too hard to please me with everything they did! ***After all, I was just trying too hard to test these athletes to their maximum ability and they were trying too hard to comply with my wishes!*** We were all like the intelligent kid that gets bored with school.

Cindy Roberts (Interviewer):

There you go. You're a *Hothead* magnet. (laughs)

Trakehners had all the Action I could ever want and were incredibly Athletic! Training was challenging and very difficult at best. It took a little extra time to show them what I expected from them, but once they got it, they learned faster going forward. I gave the first one, *Vicki*, the molly mule, to a gal that from England and she took her after she was weaned. I kept *Vinnie* for myself and sold the other male, *Willie*. For many years, *Vinnie* was afraid of his own shadow. It took him 10 years to settle down and stop spooking at everything that moved, but eventually he became a real *snuggle-bunny*!

I bred *Little Jack Horner* with the Trakehner mare because she was a Gorgeous, Versatile and Durable horse with extraordinary Refinement, Elegance and Grace. The combination of *Little Jack Horner* and *Vinesse* produced outstanding mule offspring just *oozing* with Athletic Ability. Read more on my website at www.luckythreeranch.com under *TRAINING/MULE CROSSING/BREEDING QUALITY MULES*.

Cindy Roberts (Interviewer):

Okay.

(laughs)

Meredith Hodges:

When you're looking to breed your mare, take a look at the jack, but also consider the condition of the facility, because your mare is going to have to be there for a minimum of a week. The best time to breed your mare is on the third and fifth day of her heat cycle.

SELECTION OF THE MARE

Selecting the mare is basically the same as selecting the jack. Pick a mare with a kind Disposition and one who is Well-Conformed. Disposition is paramount in the case of the mule. The mare's traits should be complementary to the contributions of the jack. Conformation will vary slightly with the breed of the mare. Just be sure she represents her breed well in her Conformation.

Since donkeys typically have short necks and straighter angles in the hips and shoulders, you should try to pick a broodmare that has a longer neck and a better angle at the hip and shoulders to help offset the Conformational Faults in the jack. This is also true of other undesirable traits. You might not completely eliminate the possibility of a fault, but the odds are better if you choose wisely. ***In any case, it is always best to pick two individuals who are relatively free from conformational defects to produce the best results in the offspring.***

Mules have but one life to give to their owners, so it is important to select a mare that exhibits the kind of Disposition and Athletic Ability that you wish to have in the mule. If you want an animal that is *versatile*, you should pick a mare that is a breed of horse with *exceptional versatility* such as a Quarter Horse. If you want an animal with a lot of action for Dressage and the power to Jump, you might choose a Thoroughbred or a Warm Blood mare. If you want Endurance, you might consider an Arabian mare. If you want a smaller mule, select a Pony Breed mare. If you want a larger and heavier mule, use a Draft mare such as a Belgian or Percheron mare. When you're looking to breed the mares, you should always make sure you're breeding the BEST to the BEST! ***Their conformation should be impeccable.*** For more information check out my website at www.luckythreeranch.com and look under TRAINING/MULE CROSSING/CONFORMATION, MULE CONFORMATION INTERVIEW & ASSESSING YOUR EQUINE or you can purchase your own copy of ***A GUIDE TO RAISING & SHOWING MULES*** in our STORE that covers Breeding for Color (page 41), Breeding for Mules (Page 119) and Caring for Mule Foals (Page 137).

BREEDING TIMES

My mother had an exceptional breeding facility. I didn't have a place to keep my Half-Arabian, Half-Quarter Horse mare for the six years that I was working at my mom's ranch. So I told my mother in exchange for the board for my horse, she could breed her and take the offspring. (laughs) That turned out to be a joke.

When deciding when to breed a mare, breed mares on the 3rd and 5th day of their cycle. This is when she will be most likely to conceive and will be amicable toward the jack. My Half-Arabian, Half-Quarter Horse mare was named *ANGELIQUE*, but she was no angel!

She would absolutely NOT allow us to breed her any other time, but on Day 3 of her estrus cycle. To be sure that we got her settled, we could try all we wanted on Day 5, but never had any success! She became pregnant *every time* on Day 3 and delivered to me five offspring, 2 males and 3 females in five years with that behavior.

If we tried to breed her at any other time, or more than once each season, she would put up such a fight with us you simply could not get the job done. She definitely *KNEW* what *would* get the job done and I had no alternative but to *trust* her. The foals she gave me were *BEAUTIFUL, Athletic, Easy births and Show Champions*. Prior to moving to my ranch in Colorado, she had spent 6 years on my mother's ranch with no successful breeding! My mother told me she was just too dangerous to consider for breeding mules! As soon as we were together again in Colorado, things changed dramatically and she got pregnant for the first time right away. ***I think she just missed me!***

There are certain times of the year that are better for breeding than others. Naturally, mares generally begin to develop a strong estrus cycle in the spring and will cycle every 21 days until fall. Then they become dormant until the following season. In warm climates, they might continue to exhibit signs of estrus but are not as fertile as during their natural cycle. In colder climates, mares are sometimes kept indoors and under 16 to 18 hours of artificial lights so they can be bred sooner and have foals earlier in the year. This allows for an extra two to three months of growth on an animal that will be raced or shown. Gestation for mules and donkeys is roughly twelve months from the date of conception as opposed to eleven months for horses. It is advisable to consider the time of the year that the foal will be born so it will not be stressed by inclement weather. Foals that are born in the fall may have difficulty staying healthy through the winter months.

Be careful about breeding your jack too often. If he has to cover too many mares at a time, it could not only decrease his interest, but it can lower his sperm count and the mares might not settle on the first breeding and will need to return. Watch your jack carefully and observe how he reacts to each individual mare. Jacks do have their preferences. Each mare will smell different to him and he will be more attracted to the ones that have a scent that he prefers.

We had a mare to breed that quite literally stunk. She sweated yellow and I believe she was on some kind of mixed grains that were excessively rich. At any rate, *Little Jack Horner* refused to breed her, so we had to send her home. By the same token, there may be mares that he is not at all attracted to and no matter what you do, he will not breed them. Take his hint and send the mare home. We had a mare come in by the name of *Mayday*. I thought she was aptly named for the lovely spring flowers in May since she was born in May. Apparently that was *NOT* the case. Every time we got her settled into the breeding chute, she exploded and broke her way out...like a bomb going off! If a mare has a hateful disposition, send her home. It will only be amplified in the mule offspring.

If I was going to take a mare to a Breeding Facility, I would take her on the first day of heat and then tell the breeder that I think it's probably best to breed her on Day 3 and 5. In my breeding experiences, that's when my mares would be most receptive and most likely conceive.

Cindy Roberts (Interviewer):

Okay.

BREEDING SEASON

Since breeding horses with donkeys is not a natural occurrence, steps must be taken in breeding to assure success. Mares do not typically show heat to a jack so it becomes necessary to tease her to a *stallion* before breeding her to the jack. If she shows heat to the stallion by showing interest, peeing and backing up to the stallion, she is ready to be bred to the jack. If you do not have a stallion around, a mare might not show heat. There are even more mares who will never show heat, but actually do cycle. In these instances, you should call the veterinarian and have a rectal palpation done to determine where she is in her cycle. Most vets can predict this fairly accurately.

SIGNS OF ESTRUS

The mare will begin to show estrus, but is not really fertile and ovulating until days 3 to 5. They are in heat normally for 7 days. Semen will stay alive for 48 hours, so mares are generally bred on days 3, 5 and 7 at the same time each day. By Day 8, the mare is usually unreceptive and going out of estrus.

There are signs that you can look for to determine whether your mare is approaching estrus. She will have an obvious interest in the opposite sex. Sometimes this might even include a response to geldings. She might graze, but her grazing will be interrupted from time to time to seek out a nearby male. She will stand nose to nose with a stallion for awhile and may appear to be rubbing heads with the stallion. He might reach over, nip her along her neck and down her back which will result in her turning her tail to him if she is in estrus.

The mare will urinate frequently, casting small amounts of thick and creamy urine. You might see eversion of the vulva in caslicked mares that are sewn up after conception. You might see a lengthening of the lips of the vulva with an accompanying *oiliness*. She will have a slow and deliberate walk with an easy gait as opposed to a stilted walk. The body of the mare, particularly the muzzle becomes soft. The in-season mare will roll more often and a pleasurable squeal and kick is not unusual. Her Temperature might be slightly elevated, her Temper a little short and she might exhibit Sore Muscles along the back and loins.

Mare Mules, or Mollies that exhibit estrus have the same symptoms as horse mares, but they seem to be more intense because of their intelligent responses. They simply do not appreciate being messed with when they don't feel well. There are surgeries and shots available to alleviate some of the symptoms, but it is my experience that they don't always work. If you simply don't ask as much from them at the time they will do just fine. The Molly that has had extensive Balanced Core Strength Training will be less apt to get as sore as one that has gone without that kind of Management and Training. If estrus occurs at the same time you are showing, your mule might not be at her peak, but with the benefit of good, solid training she can still make a decent showing without having to revert to shots and surgeries that could permanently upset her metabolism in a negative fashion.

Cindy Roberts (Interviewer):

(laughs)

MATING THE JACK & MARE

Breeding jacks to mares is unnatural for them, so *Little Jack Horner* made me rethink my breeding program if I was going to have jacks that would breed mares easily. I decided when my jacks were very young, right after they were weaned I should put them in a pen with an older and docile mare, so that her chances of settling pregnant after being with him would be significantly reduced. I just left them together for two years so the jacks got used to being around mares.

We have an area in the Tack Barn where we constructed a Breeding Chute with a platform behind it. It's one that my mother's husband designed and is not like a simple stanchion. You can open the side of it, stick the mare in there and close the partition. It's open all the way across the top and there's a removable bar at the rear to measure how wide the mare is behind. There is a second bar positioned at her chest to keep her steady against the rear bar. There is a platform behind to accommodate the Large Standard and Standard jacks if the mare is too tall.

I learned to clean the mare with a hand towel and just dip it in water to clean her off. Of course she's peeing and I would catch some pee in the hand towel and hang it on the hitch rail about 10 feet away. Then I would get *Little Jack Horner*, bring him in, tie him to the hitch rail and let him sniff the towel. I put a drop Nose Band on him so that he would only grab the mare enough with his teeth to hang on. With this approach, he would usually drop down within 20 minutes.

Then I would wash him with warm water and no soap. Of course he sucked it back up again. Then he resumed sniffing the towel and dropped down again in another 20 minutes. Then we could go ahead and cover the mare. It was a *great plan* and I was no longer waiting to get the mares covered for more than an hour. This works wonders and the mares didn't get scared because he was wearing the drop nose band and couldn't hurt them. That's really important.

Cindy Roberts (Interviewer):

Right.

Meredith Hodges:

I just let him sit on the rear of the mare for a bit after he was done. I let him jump off when he was ready...*no pressure*. When he finally got down, he hit the platform again behind the mare and would stick up his nose in the Flehmen position all happy with himself, "*Did I do my job? Isn't this cool?*"

Cindy Roberts (Interviewer):

Cool. (Laughs).

Meredith Hodges:

I say, "*Oh yes, LJ, this is, this is **super cool**. Now would you like some oats?*" And I give him the oats for a job well done.

Cindy Roberts (Interviewer):

(Laughs).

Meredith Hodges:

He would take his oats, I would wait for him to finish chewing and we would walk off the platform and back to the barn. He was a very Willing Breeder that way. And that's the way you want your jack to be. It's the same approach to *everything* so he can learn Good Manners and be *successful* at *all* his jobs. He will be happy that he is not just being used for breeding. He has a well-rounded life! If you just use this approach, your jack will be a Willing Breeder, a good Performance animal Under Saddle and in Harness, and will produce Outstanding Offspring. See more details on my website in the *STORE* about teaching jacks to breed mares in my manual ***Equine Management & Donkey Training Part 9 – Volume 3*** and in ***DVD #9: TRAINING THE DONKEY: INTRODUCTION & BASIC TRAINING*** & in the hardbound book, ***A GUIDE TO RAISING & SHOWING MULES***.

ARTIFICIAL INSEMINATION

Artificial insemination (AI) is a precise reproductive technique where a veterinarian inserts semen into a mare's uterus, bypassing natural mating. It enables the use of fresh, cooled, or frozen semen from superior stallions or jacks, improving genetic quality while increasing safety and reducing disease risks. Success rates are high, particularly with precise, ultrasound-guided timing. Artificial insemination is an alternative to breeding in hand, but it is a costly venture and will pay for itself only if you have a large number of mares to breed.

Semen is collected from the jack and the semen is diluted to accommodate several mares from one ejaculation. This process is successful so long as the semen is used within the allotted 48 hours or if it has been stored and thawed properly. Freezing jack semen has been done successfully, but only at select breeding facilities that have the required lab and equipment. If you wish to use a jack that is some distance from you and your mare, artificial insemination can be a viable option, but might be time consuming and expensive.

ULTRASOUND & PREGNANCY CHECKS

Fifteen to eighteen days after breeding, your mare can be checked for pregnancy by ultrasound. A veterinarian must do this. He will palpate the mare through the rectum with an ultrasound device that will pick up the fetus if it is present. It is the most accurate of the pregnancy tests, and you can actually view the heartbeat on the monitor. These machines can also produce a Polarized photo of the fetus. It's wise to ultrasound at 15 days and then again in two to three months if the test is positive, to make sure that the mare does not abort or reabsorb the fetus. This is the most common way to check for pregnancy.

Cindy Roberts (Interviewer):

So, but at that point, when you're able to ultrasound, are you able to detect if there are indeed twins?

Meredith Hodges:

Yeah, there'll be two heartbeats.

Cindy Roberts (Interviewer):

Okay, so you're able to detect that at that time. Which we know is not desirable.

Meredith:

My vet recommended *pinching* one of the twins in a mare that we bred, because he didn't think the other smaller one would necessarily survive if they were both left in there. But I said, "*Let's try it. Let's just try it.*" These machines can also produce a Polaroid picture of the fetus. After seeing the Polaroid picture and consulting with the mare owner, we decided to let the twins be.

Cindy Roberts (Interviewer):

Really?

Meredith Hodges:

The health of twins has a lot to do with management and feeding. There's a lot of bad management and feeding out there. If you're feeding too much of something, it can affect the babies and the size of the babies. One can get more and one can get less and one gets weak and one does not.

My views have a lot to do with my *experience* with these animals and not necessarily with research tests done in a laboratory. We were confident we could do the best for the mare and her babies. The owner of the mare opted to try to keep the twins and the mare successfully foaled with two healthy twins, one larger than the other, but still *Midget* and *Gidget* were both healthy.

Cindy Roberts (Interviewer):

Okay.

PALPATION

Palpation determines the exact time in the estrus cycle and can be used to check for pregnancy, like I said. The vet will reach into the rectum and feel the surrounding body organs with his hands and fingers. At 30 days from the day of conception, the fetus is about the size of a baseball. The vet can detect a pregnancy and tell you on which side it's located. A veterinarian must do this. He'll palpate the mare through the rectum with an ultrasound device that will pick up the fetus if it's present, so that's how you can check. When you take your mare for breeding, she can stay there until your vet can do this. It's the most accurate of pregnancy tests, and you can actually see the heartbeat on the monitor.

Cindy Roberts (Interviewer):

Okay.

MANAGEMENT OF EXPECTANT MARES

Pregnant mares should be kept in areas with adequate room for exercise, preferably with grass for grazing. Free choice hay can be a reasonable substitute. They should have plenty of fresh, clean water and a Free Choice Trace Mineral Salt Block.

Pregnant mares should not be fed *alfalfa hay*. I don't feed any of my equines *Alfalfa hay, Clover, Bermuda Grass, Fescue Gras, or any artificially processed Grass hay like Teff*. It's just too rich and can cause all kinds of problems.

It's advisable, *although this is counter-intuitive*, to take them off their oats mix six weeks before foaling and leave them off it until six weeks after foaling. Keep them on grass hay only and pasture. We have successfully produced an Orchard/Brome Grass mix for all of our equines. The oats and grains can cause severe colic in a pregnant mare. Lots of people think it increases milk production, but it just isn't healthy for them.

The *normal* shots and vaccinations could interfere with pregnancy. Certain shots should be altered to accommodate pregnant mares. You will need to ask your vet about what shots are acceptable.

For safety, pregnant mares should be stabled with animals they get along with or by themselves. When the mare is close to foaling time, give her a space of her own. They should be kept by themselves when they are close to foaling so they can deal with the whole process without distractions. If she's expected to build antibodies against the foal (N.I.), she should be kept in a stall and monitored constantly, because you will have to catch the foal at birth to avoid a potential catastrophe. This is *Neonatal Isoerythrolisis*, which we covered in another Interview and two MULE CROSSING articles on my website at www.luckythreeranch.com under **TRAINING/MULETALK PODCASTS: Dr. JOSIE TRAUB-DARGATZ N.I. & ESTABLISHING MANAGEMENT PRACTICES FOR N.I. & TRAINING/MULE CROSSING: NEONATAL ISOERYTHROLISIS & ESTABLISHING MANAGEMENT PRACTICES FOR N.I.**

VITAMINS & MINERALS

Check the mare at least three times a day and have her tested. I would test 60 days from foaling and then be sure to test again at 30 days from foaling for NI.

The pregnant mares often will require extra vitamins and minerals, but you need to ask your vet about that. He might be able to give her some kind of an injection that will help her. If you manage your mares really well and consistently you shouldn't have a problem.

Many foals are, are deficient in some minerals and vitamins at birth, particularly selenium, and that will affect their growth. The vet will be able to detect this and give you the right supplement. Keep the mare and foal confined in the stall for about three days after birth.

This gives them time to bond before they're subjected to other distractions, and it allows the foal to gain some strength and growth before dealing with the new world into which he has been born.

PREPARATION FOR THE MULE FOAL

The foal will need a safe place to be born. This is why it's important, your pregnant mares need to be stabled where she will have a larger stall, plenty of room so she doesn't get cast in the stall, and she can be kept on pasture and brought to her stall at night. They generally like to foal at night and if you do have a positive test for NI, then you need to prepare to catch that foal as soon as he is born. Cameras in the stall with monitors in your house can be useful.

Fences should be foal safe. Beware of fences made from wire and barbed wire, are not safe at all. Check the fences to make sure it's not possible for the foal to wriggle under it. A lot of foals have been born and wriggled under the fence and were not able to get that Colostrum in the first two hours. These things are really important. Line the stall where the mare will be with a good clean bedding of shavings or preferably straw and make sure it's deep. Don't cheat on the bedding. The bedding will be very wet at birth and it needs to be able to absorb all that fluid. Try not to disturb the pair right after the foal is born. When you're cleaning the stall, be ready for any problems that crop up. You need to make sure the foal is able to break through the placenta at birth. If not, you'll need to assist, so keep a knife on hand for help, but use it carefully.

FOALING SUPPLIES

It's important to have your foaling supplies on hand and ready for the birth so that you're not running around once it happens. Have stall cleaning tools ready for you right there at the stall and a phone number for your vet for emergencies. Call the vet and make an appointment for the next day. You'll need blankets for the mare and foal in, in cold climates, Latex disposable gloves and a halter and lead for the mare. A flashlight is very handy when it's dark at night and if the lights go out.

- 1) Make sure you have clean straw or shavings
- 2) A bucket with warm water, liquid soap
- 3) A roll of cotton, cotton wool, not sheet cotton

- 4) A tail wrap. You'll wrap the tail and wash the mare's vulva after her water breaks.
- 5) Clean cotton string to tie off the umbilical cord in case of hemorrhage, about 12 inches. Have it in your pocket so you can find it easily.
- 6) An empty bucket for the placenta.
- 7) You'll need bath towels
- 8) Betadine solution
- 9) A Fleet enema
- 10) A foal muzzle for NI foals
- 11) Stall cleaning tools, because after the birth you want to clean it up. Make it nice and get all the moisture up and pick up the placenta before you leave them. Don't just leave it a mess.
- 12) Get the stall cleaned again so that the foal has a nice clean place to lie down.

SIGNS THAT THE FOAL IS NEAR

There are signs when the foal is near. Normally within three weeks of foaling, there's a dropping of the belly and the udder begins to form. As the foaling time nears, the udder grows larger, becomes rounder and stretches tight in appearance. This is called *bagging up*. The more foals the mare has produced, the more prominent her signs. A few days before foaling, there's a slackening of the sacral pelvic ligaments causing a sinking on either side of the dock of the tail, a dropping of the croup, and hollowing in the flanks.

Usually, within 48 hours of foaling, the teat orifices will become plugged and caked with wax. Within 24 hours, milk will begin to drip from the teats. The lips of the vulva will become swollen and moist within 12 hours of foaling. The mucous membrane of the vagina turns a deep red in color. This is the most consistent sign and does not vary. All of the other signs may or may not be present. Many times mares show no signs and the owner wakes up to find a new foal on the ground. They love to do it when you're not looking. We had a camera in our foaling stalls with the monitor in the house, and still missed a couple of NI foals. These mares are pretty tricky and unpredictable.

FOALING THE MARE

The forces involved in foaling are the muscles of the uterus and the belly or abdominal muscles. These muscles push the foal through the pelvic girdle. The foal is squeezed out in the fluid content in the amnion and the allantochorion facilitates this process.

In the *First Stage* of labor, the mare will exhibit pain, uneasiness, walking around, pawing the ground, intermittent eating, profuse or patchy sweating, retraction of the upper lip and milk squirting from both teats of the udder. Between these signs, there will be periods of normality. The duration of the signs will also vary from a short time to several hours. The first stage can often be missed, especially in older mares. Occasionally a mare will begin the first stage of labor some days before actual *parturition*.

The *Second Stage* labor, one may observe prolonged time lying down. Often mares will lie with their backs against a wall or a fence. They appear to be straightening their backs for the *chorioallantoic membrane* and ends when the foal is delivered. This should take 20 minutes. Taking any longer is abnormal.

The mare will get up and down, changing from side to side and will sometimes strain when standing. Between straining, she may actually nibble grass, straw or anything that happens to be around. Often, she will sniff the fluid and curl her upper lips. She may roll from side to side to help position the foal. Foals will have small stomachs and will nurse at frequent intervals. The foal will also be observed taking small nibbles of the mare's dung which serves the purpose of populating the *micro flora* in a large bowel aiding in the digestion of solid food.

WHEN YOUR MARE NEEDS HELP

If you have to assist with the birth, you can grab the front legs above the knees and pull in conjunction with the contractions. Do not pull against contraction. Keep a dry bath towel or two around to assist the mare in drying the foal should the weather be cold. Use Latex gloves to prevent spreading disease. If your mare has tested positive for *Neonatal Isoerythrolisis* or NI, have a muzzle on hand to put on the foal at birth. Check your foal all over at birth. Look for abnormalities such as contracted tendons, hernias, insufficient respiration, irregular heartbeat or listlessness.

Let the umbilical cord break on its own accord. Soak the umbilical cord in *Betadine solution* to prevent infection. The foal should be up and nursing the mare within an hour, so if he's having problems getting up, you can help him.

After he's nursed, it's advisable to give him a *Fleet enema*. That's a disposable enema to help with activating the digestive tract. They're really easy to use and they just help everything get started. Sometimes the meconium can get stuck up in there. And so rather than wait until he's constipated for a long time, I just give them the Fleet enema as a matter of course.

Make sure that the mare passes the *placenta* and make sure that it's all there. Check the whole thing and make sure there are no tears in it or pieces that have been retained. Then call the vet and make an appointment to have your foal completely checked over.

Use a stopwatch and a notepad for keeping the time that your mare spends in labor. Have the truck and trailer ready to go in case of an emergency.

AFTER THE BIRTH BOTTLE FEEDING

Keeping the foal with its dam in a small area or a stall for the first 36 to 48 hours, allows the foal and mare to bond, but also gives you the time to assess that the birth was normal and that the mare and foal are both fine. Sometimes the mare will reject the foal in which case you might need to bottle-feed. It's best to go ahead and try to get the foal to nurse the same way you would if you've got an NI foal. Just tie up the mare and then bring the foal up to her flanks and try to push his face down to the teats. If she stands but offers to kick at the foal and won't let him nurse, then you're probably going to need to bottle-feed the foal.

Cindy Roberts (Interviewer):

Yeah. Wow.

Meredith Hodges:

Mule foals are smaller than horse foals and calves. The bottles that they have for feeding calves and horse foals often have a nipple on it that's actually too big for a mule foal. That's why I used human baby bottles.

Cindy Roberts (Interviewer):

Okay.

Meredith Hodges:

I put an eighth of an inch hole in the end of the nipple, but made sure that the hole wasn't too large because you don't want the milk to come streaming out and choke the foal. If the foal is eating well, he could finish two to four eight-ounce bottles in one feeding, depending on his size and his appetite. Orphan foals should get Colostrum within the first 12 hours in order for it to be absorbed into his system. That should be the first milk that you feed him if the mare is rejecting him.

If you tested for N.I. or think there could be a problem, prepare by having tested Colostrum on hand in refrigerated storage. Colostrum is gold. Go ahead and ask your vet to get you some from a breeding farm that stores extra Colostrum so you will have it in case of any emergency. Foal Supplement milk can be purchased at local feed stores, but it does not replace Colostrum. When you have fed the allotted Colostrum, continue with the Foal Supplement milk, but I found that *goat's milk* was better. The foals really like it and it is high in all the nutrients that they will need.

Be sure to hold the bottle high enough and at the right angle so the foal is in the same position he would be in if he was nursing his dam. Be patient and make these times pleasant for you and the foal since this is an excellent time for bonding and imprinting. Keep a notebook on hand and take good notes. Keep good birth records and ongoing records.

ONGOING RECORDS

There are Record Forms that you can print out from your computer, but the forms from your computer can be a lot of paper in the folders. I just got paper folders that have pockets & brads in them. I got clear plastic sheet protectors and put all the documents in them. I included five-by-seven Health Cards. At the top of each card I wrote the animal's name and the date they were foaled. I keep their ongoing records with their Vaccinations, Farrier visits, Shots and records of any kind of work that's been done on them with the dates, all on one card. It is easier than having a lot of separate forms for everything. Just start stacking up those cards inside those clear sheet protectors in a folder with the animal's name on it: record their Registration papers and anything else concerning that animal all in one folder. It's a really easy way to keep records.

I started doing this when I had 32 animals. I only have 17 animals now, but it's so much easier. When the vet leaves, I just enter what I need to enter on those cards. Then it's always up-to-date and never takes very long to do. If the vet needs to see the Health Records History, then you always have it handy. If it's all in one folder, you can just pull it out and give it to any professional that is working on your animal.

Cindy Roberts (Interviewer):

Right.

CASTRATION OF MULE FOALS

Castration of mule foals is often a question. The answer is all male mule foals need to be castrated. They can be as dangerous if left a stallion, as the jacks. They're half jack, remember. They do need to be castrated, but the question is when. A lot of people let it go too long and they wean too early. I found that mule foals need to be castrated at about five months if I wean them at six months. *Castration* is a very traumatic surgery. You don't want them to get upset and become resistant and aggressive. If they have been weaned, they will be anxious. After surgery they will *need* to feel calm and ready to move around with their dam.

The incision needs to stay open to drain properly and not get infected. You don't stitch it shut. Mule foals need to be castrated not only with *ligation*, but also by actually *cauterizing* connective veins so they don't grow back. A lot of mules are not properly castrated have been known to grow back together. It's best to castrate at five months, both cauterized and tied and then leave the wound open to drain. If they're with their mom and you don't wean until six months, they develop a good, confident, secure attitude and they don't get depressed. They don't become resentful, will walk around with their mom and will drain the wound properly. There will be much less chance of infection after the castration.

Cindy Roberts (Interviewer):

Yeah.

WEANING

When he is healed properly, starting to eat solid food and eating the oats mix with his mom, at six months or maybe even seven months, you can wean him and he will have forgotten all about the castration trauma. It's also important when you wean him that he has a buddy to be weaned with. Don't just take him off somewhere else and leave him by himself. Isolation has a horrible effect on them, the same way it does on us. We don't like being isolated from our friends and neither do they. We want to keep this as trauma-free as possible.

Many people see a foal begin eating at three months, so they think, "*Oh, well, I can wean him now.*" If taken from their dam too early, they can also suffer a nutritional deficit and may not grow to their full potential physically. It's best to wean a foal at six months. Foals that are being weaned should be kept in a safe enclosure with fresh water, a daily ration of their oats mix and free-choice grass hay. They should not be kept completely alone.

If you don't have anybody that you can put in with the foal, then have somebody in a pen right next to them so they have a buddy and won't get lonely. The buddy can be in the same pen or in an adjacent pen. The buddy can actually be a gelding horse or another mule foal, or even a donkey. It would need to be a single donkey or it would not bond with the foal.

LEADING LESSONS

Donkeys don't, don't mix that well with other species, but will if there are no other donkeys around. During early leading training, the foal will do better if he has a friend along to help him feel confident and secure. Just take his friend along during his leading lessons. Tie his friend along the fence during his lessons. He can learn to be independent later as he gains confidence, just the same way that humans act with their friends. We all need a buddy to support us and to urge us on to do the right thing. That's what the buddy does during early leading lessons.

Then you won't end up fighting with the foal or having to put ropes on his butt to make him go forward. With a buddy, they usually do pretty well. If the foal starts to pull against you, just take him to the fence and tie him alongside his buddy.

Intermittently, pull with little tugs on the rope and if he steps toward you, loosen the rope and give him some slack. Then you can untie him from the fence and try to lead him. If he doesn't want to leave his buddy, then just walk around his buddy. Just walk around from one side to the other side and call it a lesson. It doesn't have to happen all at once.

Cindy Roberts (Interviewer):

There you go.

WEIGHT & MEASUREMENTS

When your mule foal is born, he will be small enough to be picked up by an adult and can be weighed on a regular scale. Take the weight of the adult first, then the weight of the adult and the mule. Subtract the weight of the adult from the total weight and you will have the weight of the foal. Your vet can often estimate the weight of the foal fairly accurately. When the mule is older, you can weight him on the scales at the Fairgrounds or Veterinary office. Keeping track of your mule's weight will tell you if he is growing properly. There are also Tape Measures that fit around the *heart girth* that will convert inches to pounds and give you a fairly good estimate of your mule's weight.

Measure your mule's height with an Equine Measuring Stick to determine how many hands (four inches to a hand) your mule is. Measure him from the top of the withers straight down to the ground. He should be within two inches of the height of his dam when he has matured. By measuring his height every six months or so, you can tell if he is growing properly.

People say a lot of things, "*Oh, if the cannon bone is this long, then he's going to be this or that.*" They're all individuals and if they're fed properly, cared for properly and healthy, most of the time they will be 50% the mare's height, 25% two inches taller than the mare, and 25% two inches shorter than the mare, just by genetics. And so that's kind of the best estimation you can do.

The vet can estimate weight, but I pretty much eyeball my animals. A lot of people, "*Oh, how much does he weigh and everything?*" And I'll go, "*Well, I don't know, but he looks good.*" If he's got a quarter inch of fat over his body, then I'd say he's doing pretty well. If the foal gets a little bit more than that quarter inch and starts start showing those fat ripples, then it's time to back off some feed. Usually foals can have free-choice grass hay, and it does not do that to them. It does not make them obese.

Cindy Roberts (Interviewer):

There you go.

FOAL HEALTH

Preventing disease starts from the moment the foal is conceived. Equines usually get sick because of poor management. Management involves paying attention to details and watching for early signs of problems so you can correct them right away. Take proper care of the Expectant Mother. It's just as important as taking care of the foal. Good Management means proper feeding and plenty of fresh clean water, providing well ventilated housing and enough room for daily turnout.

Take care not to overcrowd your mules. Crowding causes stress and stress decreases their Resistance to Disease. Showing is also stressful and brings your mule into contact with other animals that may not be healthy, even with their Health Papers and Coggins tests. Show animals require more stringent Routine Care programs that include regular Vaccinations and Worming. I have been known to take the foals to shows in the past, but I don't think that I would do that any longer unless they're two years old or older. It's just too risky for young foals.

Cindy Roberts (Interviewer):

Yeah.

Meredith:

FOAL SCOURS

Foal Scours (diarrhea) is a common, often temporary condition in young horses and mules, frequently appearing as harmless "foal heat" diarrhea around 5–15 days old, or as more severe, life-threatening diarrhea caused by infection, parasites, or nutrition. Symptoms include loose, watery feces, tail/hindquarter scalding, dehydration, fever, and, in severe cases, lethargy and colic. While mild cases resolve on their own, severe cases require immediate veterinary intervention.

10 to 12 weeks after foaling, your mare will go through her full heat cycle, and it's at this time that most foals develop diarrhea called Scours. It usually doesn't last much longer than a week to 10 days, and it can be treated with an antibacterial paste. Your veterinarian can tell you where and what to purchase. It is not advisable to breed mares during their foal heat. The reproduction organs need time to recover from the birth.

DUMMY FOALS

Dummy Foal Management can be a little distraught and stressful. These foals are often born rapidly and they appear normal. The delivery is quick with no problems. The foal may attempt to suck normally, walk and follow the mare. The onset of signs of a problem is abrupt. The foal will completely lose his sucking reflex and will show jerky head and body movements. He may grind his teeth and make strange barking sounds. He will wander aimlessly. Most affected foals will eventually go down and paddle and become convulsive.

Call your vet if you think you have a *dummy foal*. He will need fluid and drug therapy. It's often advisable to keep him in a warm house instead of the barn for easier management. He may recover in a few days or a few weeks. Recovery is usually complete. Another therapy I know that they have for dummy foals that has worked pretty successfully is wrapping them in a tight blanket and massaging them periodically, quite often. And this often will bring them out of it.

Dummy foal syndrome (*Neonatal Maladjustment Syndrome - NMS*) treatment focuses on intensive, around-the-clock supportive care, including intravenous fluids, nutritional support via bottle or tube feeding, antibiotics to prevent sepsis, and anticonvulsants for seizures. *The Madigan Squeeze Technique* (using a rope to simulate birth canal pressure) can rapidly reverse symptoms, resulting in an 85% survival rate for many affected foals.

Cindy Roberts (Interviewer):

Okay.

TATTOOING & BRANDING

We are confronted with how desperate is it to have an ID number or a brand. I started out by tattooing the upper lips of my mule offspring. That seemed to work okay until it faded three years later. It didn't really work very well. I don't like the idea of branding at all. That's just burning their skin. At some level it has to be traumatic to the animal. You think they're big, they're tough, they're this, they're that, but I have had several encounters with my animals. They've let me know that they *DO* remember painful experiences. It affects their behavior later and sometimes throughout their lives.

Cindy Roberts (Interviewer):

So, what, what about freeze branding?

Meredith Hodges:

It's basically the same thing and leaves white letters on the neck. It is used to identify Wild Mustangs. It's still branding and is damaging the skin. How can that not be painful? People think that they don't feel these things. *WRONG!* My animals have let me know that it may only be for a minute, but they don't forget. They might decide to remember it at the wrong time. (laughs). It's better just to keep your interactions with them kind, non-abusive, thoughtful and comfortable.

Cindy Roberts (Interviewer):

There you go. Gotcha. (laughing)

CHOOSING AN ID NUMBER

I do not condone putting chips in anything. I think that's a fad that came along with Big Tech. I can't fathom it. You put something inside the body like that and it can migrate. Who knows what it's doing inside the body if it starts to travel? It's just not one of those things that I believe is safe. I have learned that when you do as much management with your equines as I do, and when you get to know them well, you'll come to know them as well as you know your human friends.

If somebody steals your animal and you can run them down, you will know that's your animal. You don't have to prove it to anybody. Just stand there and call them to you and they will come like dogs do...unless they don't like you!

Cindy Roberts (Interviewer):

Oh, sure.

It's people that demand that you prove this and prove that.

Meredith Hodges:

But when you have consideration for your equines the way that I do mine, first of all, it's going to be really hard for people to even steal your animal, because if they do and they take the animal to their place, they'll probably escape and come back home. Or, he will be difficult to relocate anyway.

Cindy Roberts (Interviewer):

(laughs)

For more information, go to my website at www.luckythreeranch.com and look under *STORE/BOOKS/A GUIDE TO RAISING & SHOWING MULES/Pages #42 - #65, #112 - #118, #119 - #155*.

Cindy Roberts (Interviewer):

Wow. Gotta go. My mule is looking for me.

Meredith: What did I just tell you?! (laughs)

Voiceover:

Mule Talk is an Every Cowgirl's Dream production.

RESOURCES:

WEBSITE at www.LuckyThreeRanch.com /TRAINING:

- 1) Another Augie & Spuds Adventure
- 2) Chasity's Challenges
- 3) Longears Music Videos
- 4) Mule Crossing Articles
- 5) Mule Facts
- 6) Podcast Appearances
- 7) Training Tips

- 8) Rock & Roll: Diary of a Rescue
- 9) What's New With Roll?
- 10) Video On Demand
- 11) Wrangler's Donkey Diary

BOOKS/VIDEOS IN THE STORE:

- 1) Training Mules & Donkeys: A Logical Approach to Training
- 2) A Guide to Raising & Training Mules
- 3) Donkey Training
- 4) Training Without Resistance
- 5) Equine Management & Donkey Training
- 6) Equus Revisited Manual
- 7) Equus Revisited Video
- 8) Rock & Roll Documentary
- 9) Building the Jasper Carousel
- 10) LTR Hay Production
- 11) The Road to Bishop
- 12) The Bishop Experience
- 13) The Bishop All Stars
- 14) Walk On: Exploring Therapeutic Riding
- 15) Build of a Nation
- 16) Give Your Equine the Athletic Edge
- 17) For Children: www.JasperTheMule.com for books & videos