Regu-Mate (altrer

Solution 0.22% (2.2 mg/mL) OAUTION: C-

his drug to use by or on the order of a line DESCRIPTION: Regu-Mate@ (altrenogest) Solution 0.22% contains the active synthetic pro altrenogest. The chemical name is 17c -allyl-178-hydroxyestra-4,9,11-trien-3-one. The CAS Registry Number is 850-522. The chemical structure is:

legu-Mate® (altrenogest) Solution 0.22% mg of altrenogest in an oil solution.

ACTIONS: Regu-Mate® (altrenogest) Solution 0.22% produces a progestational effect in marks.

CONTRAINDICATIONS: Regu-Mate® in mares having a previous or current or synthetic gestagen therapy may exa-

DOSAGE AND ADMINISTRATION: While wearing prot result.)

CH MARES WILL RESPOND TO REGU-MATE® (altrenogest) SOLUTION 0.22%

IFIC USES FOR REGU-MATE® (altrenogest) SOLUTION 0.22%

and the transition period from the transition pe

te Weight in Pound

ONAL INFORMATION: A 3-year well or treated control mares. Treated mares receiv .0 Ib body weight (2x dosage recommended tion. This study provided the following data: clitoral size was increased. ter interval from Feb. 1 to first ovulation thar solution 0.22%, to day 325 of ge

- as only. and cycle and set

- ated mares were pregnant (91.7%) and 4/4 untreated mares v
- . treated and control mares reached puberty at approximately the same age
- ly). ed and control mares showed no di n, spermatozoal motility, and total si

VARNINGS: Skin contact must be avoided as absorbed through unbroken skin. Protective s product. <u>Pregnant women or women who suspect they are j</u> <u>...Mate® (altrenogest) Solution 0.22%</u>. Women of child bearing ution when handling this product. Accidental absorption could

Mate® (altrenogest) Solution 0.22% is readily absorbed by the ski

PEOPLE WHO SHOULD NOT HANDLE THIS PRODUCT.

- ich developed during the use of oral

set should not perioda ole, spillage, etc.), the o

not induce vomiting. Regu-Mate® (altrenogest) Solution 0.2 ting should be supervised by a physician because of possibl oil base. If possible, bring the container and labeling to the p

CAUTION: For oral use in horses only. Keep this and all medication out of the reach of ch Store at or below 25°C (77°F).

NADA# 131-310. Approved by FDA

e® (altrenogest) Solution 0.22% (2.2 mg/mL) contains 2.2 mg altrenogest in an oil solution. in 1000 mL plastic better IOW SUPPLIED:

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/IERCK Animal Health

HEALTHZONE Breeding Preparing the Young Stallion for Breeding

BY HEATHER SMITH THOMAS



Young stallions transitioning from racing to the breeding shed need to be introduced to mares patiently

MOST YOUNG STALLIONS that begin a breeding career have already proved themselves in racing careers. If the young horse has done well on the track during his 2- and 3-year-old years, for instance, he may begin breeding mares as a 4-year-old. Before entering the breeding shed he needs some re-training, a fertility evaluation, and some time to refocus on his new job and prepare for his first breeding season.

Dr. Peter Sheerin, owner of Nandi Veterinary Associates in New Freedom, Pa. (an equine practice with a strong emphasis on reproduction), says the biggest thing is that horses coming off the track need to be given time to let down before we start doing anything with them.

"If the owner is considering first-season infertility insurance, that needs to be done before anything else," Sheerin said. "The insurance exam has to be done before semen is obtained from the horse, and is based on testicular size, a physical exam, etc. You don't know what his semen is like, but obviously if he has decent-sized testicles, he should produce adequate semen. The insurance companies have enough information (on a lot of stallions) to know that if the horse passes this type of exam, he will likely do fine."

The horse will also be tested for EVA (equine viral arteritis) and CEM (contagious equine metritis), both of which are transmitted by breeding.

(continued on page 48)

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¹ Data on file, Merck Animal Heath

The Science of Healthier Animals

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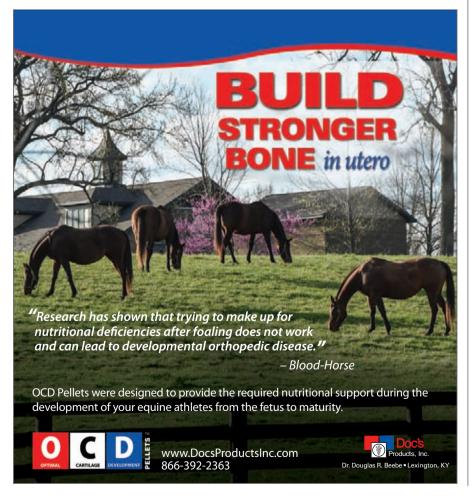
O^{CD[™]} Pellets were designed to provide the required nutritional support during the development of your equine athletes from the fetus to maturity. The most recent scientific information points out the importance of adequately "feeding" these newly forming tissues of the fetus. Research has shown that trying to make up for nutritional deficiencies after foaling does not work and can lead to developmental orthopedic disease. The mare must provide the necessary nutrients stored within her own bones to create the skeleton of the foal in utero. Initial mineralization of the cartilage of the bones of foals will continue at an accelerated pace through the first year of life. OCD Pellets address the nutritional requirement for a stronger bone matrix with increased bone density permitting the horse to achieve his potential free from injury in all stages of life.

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(continued from page 46) INTRODUCING THE YOUNG STALLION TO MARES

After the horse has had a chance to transition from racing and has been "let down" with some turnout time, it's time tostart working with him and introducing him to mares.

"The key is to have a good team working with that stallion, and cooperative mares," Sheerin said. "You don't want to try his first breeding with a maiden mare. You need a dependable, mellow mare that will be patient with a young stallion.

"This all takes a lot of patience. This is the biggest challenge—with the horses that don't pick it up quickly—when everyone is impatient and maybe wanting to use drugs to get him going. You may have to introduce the stallion to multiple mares. He may have been disciplined enough in his life that it takes him a long time to figure out that it's OK to have an erection or be loud around a mare. It's OK for him to be a stallion."

Larry McGinnis, stallion manager at WinStar Farm near Versailles, Ky., says this may take longer for some young stallions than others. "When we first get them off the track, they've been told all their life not to rear up or try to mount mares," McGinnis said. "They had to have good manners for their racing career. So when I get them, and they are first presented with a mare, they may be confused and wonder what they are supposed to do. They might look at you as if you are trying to set them up for trouble, and they may be reluctant at first.

"Some of them change gears quickly, and the first trip to the breeding shed they'll breed a mare, but it generally takes a little time," he continued. "It might be the first trip or it might be the sixth trip before they feel comfortable about it. The urge to breed takes over, and instinct kicks in, and they go ahead and jump on that mare.

"I had one young stallion get up on his first mare and just start looking around—as if he thought it was a neat view from up there! He wasn't sure what to do. Some will try to jump from the side. But the main thing is to make sure their first attempt is a positive experience," he explained.

Sheerin says the key to success is a really good stallion handler.

"You walk a very fine line with discipline and safety and need to give that stallion as much leeway as you can—while

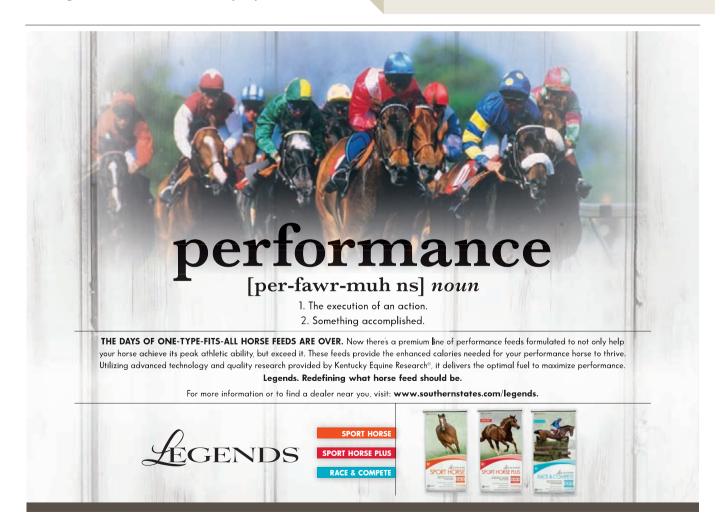
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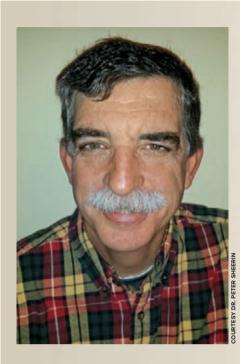
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"If the owner is considering firstseason infertility insurance, that needs to be done before anything else."

- DR. PETER SHEERIN



still keeping him under control, with manners and respect for the mare and his handlers," he said. "If some of these horses get a little carried away and then get overtly corrected, you've taken a huge step backward.

"Then once he starts breeding mares, you've opened up some new challenges," McGinnis said. "He knows what the breeding shed is for. The second time you take him down there to breed he needs to learn a few manners, but you need to teach him gently. You don't want him to be bad, but you also don't want to discourage breeding behavior. We want him to be eager to go down there and breed a mare, but we don't want him to be out of control or savaging the mare. He still needs manners, and it's a fine line. My guy who handles the stallions, Israel Romo, is very good at helping that horse or teaching that horse, without going too far.

"We work together at the breeding shed, to make sure we end up with a good breeding horse that's not savaging mares," he continued. "He can act like a stallion, but he still has to be a gentleman when he comes to breed a mare. He needs to breed the mare, respect her, get back off her, and go back to his barn with no problems."

Sheerin added: "It often takes multiple small, short sessions in the breeding shed, just because the horse's patience, human patience, and attention spans, etc., can be tricky. If you try to do too much or go too far or too long, you end up taking steps backward. Everything you do should be in short intervals and end on a positive note."

Each horse is different, so you play it by ear with each of them. "The first thing you'd probably do is bring him into the breeding shed, without a mare being there," Sheerin said. "Then he can see what the breeding shed is like, get used to the new surroundings, and become comfortable with it. Then you'd introduce him the next time to an experienced mare that's in good heat. This can be a challenge because a lot of the time we are working with a young stallion in the late fall or in the winter, when mares are not cycling."

MARES FOR TRAINING A YOUNG STALLION

"For their first trip to the breeding shed, we often use a mare that's been ovariectomized (has had her ovaries removed), and we give her a shot of synthetic estradiol (a form of estrogen) to bring her into heat," said McGinnis. "Then the young horse can do whatever he wants to as he figures things out, and the mare is not going to kick him. I don't want him to have any setbacks or a bad experience that might make him think he doesn't like to breed mares.

"Some farms have older, retired mares and may treat them with estrogen to get them into heat, or they may have an ovariectomized mare that can be treated with estrogen," Sheerin said. "If mares are not cycling, you can treat them with exogenous hormones to get them to exhibit signs of heat. Having a mare in natural heat is preferred over a mare that's brought into heat with estradiol because the stallion can tell the difference."

Teasing is important, and this also takes patience.

"In a natural environment, with a stallion and a mare turned loose together, they spend a lot of time teasing head to head," Sheerin said. "They are facing each other during teasing whereas many people want to just take the stallion to the back of the mare and expect him to jump on her. That's not the natural way; left together on their own, they have lots of interaction head to head. And then the mare is the one that decides she's ready, and she'll spin around and get into position to be bred.

"We have to mimic this to the best of our ability in the breeding shed in a controlled environment. Some facilities have a teasing bar or teasing wall so the stallion can tease the mare over the wall and you don't have to worry about him getting tangled up. As he progresses and becomes more comfortable with the situation, then you can take them out in the open to see how he breeds the mare."

In some situations the mare may be sedated or have a front leg held up or have a twitch on her.

"A lot depends on the mare and the stallion, to make sure he doesn't get scared by



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an uncooperative mare," said Sheerin.

"Then it's just a matter of patiently letting him figure out what he needs to do. The young stallion may get an erection and then not know what the next step is. He may just stand behind the mare with an erection. Sometimes in that situation we just back the stallion up a little bit and then walk him forward until he bumps his chest against the mare's back end. This is often enough to motivate him to jump."

Then the next step is for the stallion to

stallions figure it out.

"One of the problems I hear about most is that the stallion doesn't show interest in the mare. You may need to try different mares or may house him in a situation where he is around mares so that he gets some sexual stimulation. He's led a very cloistered life, up until this point, and it may take him a little time to adjust to this new role.

"In most cases it just takes time," he continued. "The time of year when you are starting with that horse will deter-



Part of a stallion's breeding soundness exam involves collecting semen for evaluating an accurate sperm count

work on his aim. They don't always have this figured out until they gain more experience.

"They may try to go sideways on the mare, or maybe a little cockeyed," Sheerin said. "It's a slow, patient process. If you rush up to some of these horses and grab their penis to help them, it may turn them off. You need a good crew that can work with the horse slowly and patiently and give him the time he needs. The goal is multiple good experiences, and then the majority of young mine how much pressure there is on you to have him ready. If you are starting in the fall, you have plenty of time to keep at it, slowly but surely. But if you get that horse the middle of January and have to get him going by the middle of February, this will be more of a challenge."

MANAGING THE YOUNG STALLION

This training program is continually fine-tuned, and if there's time, the young stallion may be allowed to breed 20 to 30 times before the breeding season starts. "I've had stallions that I know won't be a problem, and I may wait on them awhile because that's all he's going to think about because he's already a bit studdish," McGinnis said. "We just finetune those stallions a little closer to the actual breeding season.

"When we get into the season, we work closely with these stallions. This is something they've never done before and they use some muscles they've never used before. Their back muscles may get sore. We have to watch them and make sure they are breeding OK. They'll tell us, and sometimes a horse that isn't breeding very well just needs a little break after he gets a month into it. He doesn't need a lot of time off but maybe just breed one mare every two days until he feels 100% again.

"Sometimes you can't give them much of a break and just have to go ahead and breed them," he said. "The horses that breed well and handle it easily, we just continue with, but you need to know the horse."

The first two years of a young stallion's breeding career are learning experiences for the horse and for the handlers.

"We put these stallions in different situations through that first year and learn about the things the horse likes and doesn't like," McGinnis said. "Some can't breed four days in a row, and you find out what works best for them and what doesn't work. It's a learning curve for the first couple of years, and the horse improves in many ways. By then he's usually a better breeding horse, knows what to expect when he goes to the breeding shed, and is more confident in what he's doing.

"By the third year it's easy because you know what this horse can do, and you can sometimes push him a bit and then give him a break. You know what you need to do to make him successful for the rest of the season. That helps, when talking with our clients, the farm manager, and general manager. We know what we'll need to do to keep that horse going."

You don't want him to burn out or have a problem and not be able to breed as many mares.

"The demands on a first-year stallion

keep him very busy," McGinnis said. "You walk a fine line to keep everybody happy. We usually manage to do that, but sometimes the horse needs a break or he's just not liking what he's doing at that time and we have to do something a little different."

The main thing is just getting novice stallions prepared mentally and physically.

"This also means getting a little more weight on them," said McGinnis. "They were very fit for racing, and we want them to have more fat. It takes energy for breeding. They will be burning a lot of calories, and we don't want to run them down. We try to get some extra weight on them and keep track of them during the breeding season. If they need more feed or turnout time, or whatever—to make them better physically—we will do it."

It's a matter of closely monitoring and doing whatever is necessary for that particular horse.

"Sometimes our stallions are checked again the next morning, after they breed their last mare, to evaluate whether they need to stay in or get turned out," McGinnis said. "We prefer to turn them out, with room to exercise, but sometimes it takes young stallions time to adjust to turnout. They've been in a stall most of their life, and a few of them won't lie down outside. For instance, for a long time Tiznow would not lie down outside. He does now, but not a lot. He just doesn't feel comfortable lying down out in the paddock, for some reason."

They are all individuals, and you just have to manage them the best way you can, for that particular horse.

BREEDING SOUNDNESS EXAMINATION AND FITNESS

The young stallion is first evaluated when he comes off the racetrack, looking at basic fertility, testicle size, etc.

"Then after we breed him a few times we can get an accurate sperm count," said McGinnis. "We have our reproductive specialist collect him with an AV (artificial vagina) and look at semen samples. By that point the semen is usually good; we hardly ever get one that has only fair or poor semen quality. These stallions are generally capable of handling whatever number of mares we are getting ready for them to breed."

"The demands on a first-year stallion keep him very busy."

- DR. LARRY McGINNIS

"Sometimes people pull blood and measure the various reproductive hormones, especially if the stallion seems to have low libido and low testosterone," Sheerin said. "There may be a link, but levels may also be low because of the time of year (stallions are seasonal breeders, just like mares). Low levels could also be due to treatment with a variety of different drugs during their racing careers. What you see in the fall will be different from what you'll see in the spring, but it can give you a baseline."

Some people put their stallions, as well as their mares, under lights.

"It doesn't seem to make a big difference, but it does essentially the same thing as with a mare," Sheerin said. "It may increase sperm numbers somewhat, and ejaculates will become a little more dilute. In the fall we tend to see a more concentrated ejaculate than we do in the spring, but total sperm numbers won't have a lot of variation.

"Once the stallion is breeding in the spring, I like to get him trained and comfortable breeding a mare before I collect semen from him. This gives a good idea regarding what the stallion is actually producing and removes the need to collect him multiple times to figure his daily sperm output.

"In some cases when you get the stallion up on the mare and put the AV on him, this is a completely strange thing, and it turns him off for the whole process," Sheerin continued. "If I have a preference, I would rather have him breed a mare a few times first and be comfortable with that before we try to collect him. Then we perform the normal breeding soundness exam with two ejaculates an hour apart, measure testicles, etc."

