Managing Cranky Mares

We have more tools at hand then ever before. Unfortunately, there is no one-size-fits all solution.

Spring is in the air as the buds and blossoms poke their way out of the thaw and the sun lingers in the afternoon sky. For many, spring is a time of jubilance and appreciation for outdoor recreation - especially with horses! Winter coats have all but shed, and it’s time to hit the trail or head to a show.

However, for some mare owners, spring marks the beginning of a cyclical battle to achieve harmony amid a hormonal roller coaster. In this article, we’ll discuss ways to manage the mare in heat, so you can enjoy a smooth ride.

WHAT’S GOING ON IN THERE?
The mare’s reproductive system can be active all year round, but predominantly will be active when days are long. So, between March and September, most mares are in full-swing heat cycles. Because mares gestate for about 335 days (11 to 12 months), it makes sense that they would be most sexually active during the warmer seasons - not only so that their offspring will fare well in mild climate, but also because food is most plentiful in the spring and summer when the mare needs to be producing milk.

Unlike humans who experience a menstrual cycle, mares function on an estrous cycle that is dominated by alternating waves of estrogen and progesterone, the two sex hormones instrumental to reproduction. The average equine estrous cycle is 21 days, with 5 to 7 days of estrogen dominance called estrus (“in heat”) and 14 to 17 days of progesterone dominance termed diestrus (“out of heat”). The two major phases of the cycle are separated by ovulation, when the egg erupts from the ovary to begin a migration through the uterine tract.

During the time of the migration, the tract environment changes so that conditions are optimal for fertilization and subsequent conception. The chart here depicts the rise and fall of the predominant hormones involved in the mare heat cycle. Kind of looks like that roller-coaster, doesn’t it?

SIGNS OF HEAT
Estrus behaviors can vary from subtle to embarrassingly blatant. These are the more typical behaviors associated with being in heat.

Subtle Signs of Heat:
• Slight lifting of tail at rest and/or when horses walk by
• Turning haunches towards other horses or people
• Increased frequency of urination
• Occasional vocalization (squealing) when touched in perianal or perivulvar area
• Throws head and moves away
when touched in flanks/belly
• Herd-bound more than usual.

**Subtle Signs of Heat:**
• Squatting and urinating frequently
  • Vulvar “winking” in which the distal portion of the vulva opens and closes
  • Squealing and/or threatening to kick when touched
  • Arching back and hopping when brushed over lower back or perianal region
  • Aggressively backing up to try to kick other horses or people
  • General agitation and inability to focus

The most important thing to remember when you’re enduring a mare in heat is that this is natural behavior for her. While it’s never OK for a horse to kick or be aggressive toward people, owners should keep in mind that the mare is driven by a strong instinct to reproduce and that the behaviors that she exhibits naturally entice stallions. Therefore, we can hardly blame them for the cyclical predicament that they’re in!

**Physiology and Behavior**
Many of us who have to endure cranky mares in heat find ourselves asking them, “Why all the fuss?!” Believe it or not, there is a method to the madness.

A heat cycle will reach its pinnacle at the point of ovulation. From that point, there’s a short, finite window of time that the egg must be fertilized by a spermatozoa in order for an embryo to be conceived. If the mare is bred too early or too late, conception is far less likely. Therefore, her behavior will change accordingly, as the table on page 24 explains.

**Bottom Line**
No two mares are exactly alike. Some mares show no adverse behaviors during their heat cycles, while others become fire-breathing dragons. The average mare may show signs for about 1 week each month during the spring and summer, while a smaller subset of mares are reported to have heat.

### Supplements for Cranky Mares

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<th>Supplement</th>
<th>Description</th>
<th>Comments</th>
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<tr>
<td>31 Mare Moods</td>
<td>A proprietary blend of edible powder containing Eleuthero, Sarsaparilla, Damiana, Kelp, Red Raspberry, Slippery Elm, Uva Ursi, Valerian, Dandelion, Dong Quai, White Willow and Goldenseal. Scoop included.</td>
<td>Made by Silver Lining Herbs. Runs a little over $1 per day</td>
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<tr>
<td>Easy Mare</td>
<td>An edible powder or top dress liquid containing Vitex agnus castus seed (also called Monks Pepper seed and Chasteberry seed), Valerian root, Milk Thistle seed, Chamomile flowers, Cramp Bark, Vervain herb, and Yarrow herb.</td>
<td>Made by Hilton Herbs. A one-month supply is runs around $48 + tax and shipping</td>
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<td>Chastetree Berry (Vitex angus)</td>
<td>The chaste tree is native to the Mediterranean and Central Asia. Its berries have long been used for a variety of abnormalities including “corpus luteum deficiency,” mastalgia (breast pain), and menstrual abnormalities.</td>
<td>Wwww.HerbalCom.com: Select Vitex Angus Castus (Europe) under Bulk Herbs products. If purchased as a bulk powder, it can be fed for pennies per day</td>
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<td>Evitex</td>
<td>A liquid top dressing of Chasteberry to assist in balancing hormones and reducing discomfort in mare cycling.</td>
<td>Made by Emerald Valley. 1 month supply is around $75 + tax and shipping</td>
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### Surgical Options for Cranky Mares

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<td>Flank Ovariectomy</td>
<td>Surgery that involves general anesthesia and flank incisions to remove just the ovaries.</td>
<td>Can cost upward of $2,500 depending on anesthetic used, size of ovaries. Mares can be extremely colicky for three to four days following the surgery.</td>
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<td>Flank or Ventral midline Ovariectomy</td>
<td>Surgery that involves general anesthesia and either 2 opposing vertical flank incisions or a ventral midline incision to remove both the ovaries and uterus.</td>
<td>Literature suggests that the uterus can be left in the body, however reports of recurring uterine infection following ovary removal may make complete reproductive tract removal a better choice. Post-operative complications such as colic have been reported.</td>
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<td>Laparoscopic surgery</td>
<td>A camera is inserted into the body to visualize the structures. Using specialized instrumentation, the ovaries or the ovaries and uterus can be removed.</td>
<td>This technique is minimally invasive and in some circumstances can be performed with the mare standing under sedation. Healing time will be less due to smaller incisions. Cost can be the same or lower than traditional surgery.</td>
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<td>Transvaginal Laparoscopic Ovariectomy</td>
<td>Performed in the standing mare under sedation, this procedure involves making two incisions in the vaginal wall (inside the vagina) to access the ovaries for removal. The surgery is laparoscopic (fiberoptic camera-assisted) and involves specialized instrumentation.</td>
<td>Reduced healing time and no external scarring.</td>
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issues up to 10 months out of the year!
Many owners also report that mares seem to have the worst heats as they near the end of their annual cycle. Clearly, no two mares go through it the same. Therefore, management plans must be custom formulated to suit the needs of each horse and owner.

If you’re lucky enough to be able to throw the mare in the back 40 for one week per month, so be it. But if the mare is in work and handled daily, additional measures will likely have to be taken to calm her. Natural supplements are a great place to start, and we’ve included our favorites in the chart on page 25. They have a proven track record and in general are affordable, especially if you only give them during the week that the mare shows signs of heat. Remember, no two mares are the same, so you may have to experiment a bit with supplements to see which gives you improvement.

Any medication (see chart on this page) must be prescribed, which means that your veterinarian will be involved with the decisions. Medical management is effective in most cases, provided that it is affordable.

Surgery is also an excellent option, with several strides being made in the past decade to both diversify and improve sterilization technique. A chart is on page 25. When you stack up surgery costs to medicines and supplements over time, it can actually save money in the long run.

But, any surgery carries some risk. Post-operative complications such as colic and infection are reported with spaying procedures and if the mare undergoes a procedure involving general anesthesia, there is a small additional risk there. However, for those who want to be done riding the hormonal roller-coaster once and for all, surgery is the only way.

**Medical Solutions for Cranky Mares**

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<td><strong>Marbles</strong></td>
<td>One or several sterile plastic or glass marbles are placed in the uterus permanently (until the owner wishes for them to be removed).</td>
<td>It’s thought that the physical presence of the marbles keeps a mare from coming into heat because they cause continual stimulation to the uterine lining, causing continual release of a hormone called Prostaglandin F2 alpha. This in turn prevents estrogen levels from rising. This procedure does not effectively control heat in all mares. Rare occurrences with marbles shattering have been reported.</td>
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<td><strong>Medroxyprogesterone</strong></td>
<td>An intramuscular injection of progesterone is given every 21 to 28 days.</td>
<td>High levels of progesterone can suppress heat behavior yet still allow ovarian function to occur naturally. A mare can ovulate and complete the normal physiologic functions, without the accompanying behavioral signs. Like marbles, this procedure does not work on all mares. Some mares have only a partial response. Dosage and frequency vary depending on the individual animal and “fine tuning” will be likely throughout the season to get the dosage and timing right. Injection works within 24-48 hours. Complications have been reported rarely.</td>
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<td><strong>Regumate</strong></td>
<td>Oral administration of progesterone oil given on a daily basis.</td>
<td>This method works extremely well on nearly all mares. The oil is tasteless and can either be squirted in the mare’s mouth or top dressed on feed. Like the hormone injection, it allows the body to carry out the complete heat cycle according to natural physiologic function while masking the behavior that goes along with it. It is costly and labor intensive since the oil must be given daily. Women should be extremely cautious when handling this medication since it can absorb into their skin and cause alterations to menstruation. Special nitrile gloves should be worn when handling since the oil can penetrate latex. Women who are nursing or pregnant should not handle this medication. It has no known deleterious effect in men. The product works with 24 hours of administration. Some give it for 7 days at the first sign of heat. This saves money by only administering it during the estrus portion of the heat cycle when the mare exhibits disruptive behavior. There are no reported negative side effects in horses.</td>
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<td><strong>Altresyn</strong></td>
<td>Oral administration of progesterone oil given on a daily basis.</td>
<td>A generic version of Regumate.</td>
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<td><strong>Oxytocin</strong></td>
<td>An injection on day 7 and day 14 of the heat cycle.</td>
<td>This hormone, when given in extremely small quantities, can actually prolong the diestrus portion of the heat cycle (when the mare isn’t displaying signs of heat). It is inexpensive but requires injections. If oxytocin is given in too high of a quantity, it can cause violent and painful uterine contraction, resulting in colic. At the described levels, those side effects are rarely seen in mares, but overdose potential does exist.</td>
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