Weaning Lessons Learned...
Eileen A. Coite, REINS Coordinating Agent

I recently experienced first hand the process of breeding, foaling, and weaning after deciding to breed my mare and raise my first foal. I must admit it had been many years since the foaling management class I took in college, not to mention the fact that the mare was already bred and I didn’t work through weaning before the semester was over. So, I thought it might be a good time to share some of my “lessons learned” through this experience.

First, I cannot express enough appreciation and confidence in the NC State Horse Education Unit and the NCSU College of Veterinary Medicine for their assistance throughout this entire process. Deciding to breed my mare to one of the University’s stallions and having Dr. Anne Shramme and Lawson Walston to ask for advice before, during, and after the foaling and weaning was a definite plus. I would advise anyone who goes through this experience for the first time to find someone equally knowledgeable and experienced to consult through the entire process.

Though there have been many lessons learned; too many to list them all in this article, I wanted to focus on the weaning process. I must say weaning was the most stressful part of the entire experience for me! My mare and foal have coped with a realistic amount of stress. I on the other hand have probably gone overboard. The following lessons are in no particular order but things I have learned and noted along way:

Lesson 1: A group is always better. Having one mare and foal I learned tends to be considerably more difficult than having multiple mares and foals. Especially when it comes to outdoor liv-

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In order to meet your needs and provide the most useful information, we would like input on what topics you would like to read about. Please send any comments or suggestions to us anytime! Feel free to email your ideas to eileen_coite@ncsu.edu and we will work to find a solution or answer to your questions.
the nutrient requirements of weanlings and yearlings, and as long as these requirements are met, healthy foals will do just fine (I keep having to remind myself of that). The important thing is to make sure we feed a balanced ration with the right amount of energy, protein, critical amino acids, vitamins and minerals. There are many feeds on the market today that will meet these needs, and the rule of thumb after weaning is to feed approximately 1 pound of concentrate per month of age.

Lesson 5: Make sure to follow your veterinarian’s vaccination and deworming recommendations. According to my vet, a series of vaccines should be given at 5, 7, and 9 months of age. Deworming should be done by body weight on a monthly basis. Definitely ask your vet what is right to get your foal off to a healthy start.

Finally, keep open communication with others and ask the experts. I have done my share of asking questions throughout this process. Having a friend or two that have raised foals can be wonderful assets to a positive experience. Make sure to keep in touch with your vet on a regular basis and follow his or her advice. Keep in touch with the breeding farm where your mare was serviced and ask them for tips. Sometimes I think I have read so many books, articles and publications that I have added to the stress, but its best to know all the options and seek advice from those that have been there and have the training. Most of all, have fun with your new filly or colt. As with any youngster, they will grow up very fast!
We’ve all seen the destruction wrought by a wood-chewing horse. Is the behavior dangerous or merely a benign vice? What causes it? What can be done to prevent it? Can we stop it once it begins?

In addition to being destructive to property, wood chewing can harm the horse. Ingesting splinters can cause problems in the gastric track that can lead to colic. Clearly, this is more than a benign vice.

Two reasons commonly put forth for wood chewing are boredom and nutritional deficiency. Horses stalled for extended periods and fed twice a day have little to do. To amuse themselves they often develop behaviors such as cribbing, weaving, and wood chewing. Horses turned out without companions can also become avid creatures of bad habits. Horses standing under a shed may prefer to chew it down rather than go out to graze in the cold winter rain.

While wood chewing can happen all year around, controlled research has shown that it increases in wet, cold weather. Wet wood is softer and easier to chew. In addition, in the winter, there may be a nutritional issue at work as well. Clearly, the horse needs more energy to combat cold. Much of its internal heat is generated from the fermentation of fiber in the hindgut. If a horse isn’t getting adequate roughage from its hay, it may turn to wood as a substitute.

Many cool season forages might not meet the need as they tend to be high in moisture content and low in fiber. To increase the “scratch” effect in the hindgut, the horse will try to eat more fiber to restore normal gastrointestinal tract motility. Fiber sources may include wood, hair (often from another horse’s tail), or even dirt. Long stem fibers such as alfalfa or other legumes may prevent wood chewing caused by the low “scratch” effect. Finer stem forages, such as the coastal bermudagrass hays we commonly feed in this area, may have to be fed at higher intake levels to provide adequate fiber.

So what’s the solution? Clearly, it helps to know the cause. And there’s the rub. The cause may actually be from either boredom, nutritional inadequacies, or both.

The solution set involves ensuring that your horse is receiving adequate roughage in its diet throughout the day. Remember that these grazing animals expect to eat small amounts frequently. Feeding twice a day in a stall may be convenient for us, but it doesn’t work well for the horse.

Combating boredom involves providing the horse with adequate exercise. The closer you can replicate its natural environment, the better. Turnout 24/7 is ideal. Remember also that horses are social animals. Lacking a grazing companion, a horse will often develop destructive behaviors.

You can see that what appears to be a simple problem, wood chewing, may come from complex causes. A simple solution such as spraying pepper sauce on the fence, will offer merely temporary relief. For a more lasting solution, you’ll need to address the fundamentals of overcoming boredom and ensuring proper roughage in your horse’s diet. You’ll both be happier for it.
When you receive your forage analysis from the lab, the row of numbers can be very confusing. Most of the time hay is sent in to determine protein content and check for nitrates. As you scan down the list, the major things you are checking for your horse are the crude protein, acid detergent fiber, and nitrate ions. There are several proteins listed, the one you really look at is the adjusted crude protein. Ideally the crude protein is equal to the adjusted crude protein, but if the unavailable protein on the list is more that 10% of the crude protein, it must be subtracted from the crude protein. That’s how you get the adjusted crude protein. Numbers between 10% to 14% are ideal, higher is better. The acid detergent fiber is a measure of digestibility and available energy. This number is determined by the maturity of the forage when it’s baled. The lower this number, the better, usually in the mid 30%. Livestock can die from eating hay with high nitrate levels. You want this number to be as low as possible, 0.0 to 0.5% is the safest, anything over that has a risk. Animals that have been slowly introduced to hay with 0.5% are usually safe, with the exception of pregnant animals. They must be limited to less than 50% of their total intake. When you get 0.51% to 1.0% you cannot feed at all to pregnant animals, there is a slight risk to all other animals and they must be limited to 50% of their total intake. When nitrate levels exceed 1.0%, there is a high risk. You must be careful to limit only a small portion of their diet to the nitrate high hay, and when it is over 2.0%, do not feed at all. I hope this helps with the confusing task of reading your hay analysis. I know you want the best for Ole’ Paint, and knowing what you’re feeding him will help keep him in the best condition possible. If you need help sending a sample, or reading your analysis, feel free to call your counties Agricultural Extension Agent.

<table>
<thead>
<tr>
<th>Forage Quality Indicators</th>
<th>HIGH</th>
<th>AVG</th>
<th>LOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Matter %</td>
<td>&gt;80</td>
<td>80</td>
<td>&lt;80</td>
</tr>
<tr>
<td>Crude Protein * %</td>
<td>12-14 +</td>
<td>9-11</td>
<td>&lt;9</td>
</tr>
<tr>
<td>ADF %</td>
<td>&lt;30-32</td>
<td>33-37</td>
<td>&gt;37</td>
</tr>
<tr>
<td>TDN %</td>
<td>58-65</td>
<td>54-57</td>
<td>&lt;54</td>
</tr>
<tr>
<td>Nitrate Ion %</td>
<td>0-.25</td>
<td>.25-.75</td>
<td>&gt;.75</td>
</tr>
</tbody>
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*Adjusted CP = Crude Protein - unavailable protein. Ideally equal to CP. If UP exceeds 10% of CP, then subtract from CP to get adjusted CP value. Ideally 10-14%+

ADF = Acid Detergent Fiber. Measure of digestibility and available energy. More mature forages = high ADF levels. Usually mid 30s. Lower is better.

TDN = Total Digestible Nutrients. Indicator of energy levels for ruminants only. Usually 55-65%. Greater is better.

Nitrate Ion = indicator of nitrate not yet converted to protein in plants. High nitrates = low production or death if severe levels. 0-.5 is safest. Most dangerous to pregnant and unadapted animals.
Kid’s Corner

Submitted by Vivian & Elizabeth Rowe

ACROSS

1. how a horse is measured
3. a baby horse
6. leather riding apparel
7. small turnout
9. heavy horse blanket
11. what you clip your leadline to
12. equipment used to ride with
13. four beat gate
15. part of the bridle
16. English version of the jog
17. used to file hoofs

DOWN

1. a horse that resists
3. shock absorber
5. used to lead the horse
7. having its head, ears and face touched
8. English riding pants
10. holds the saddle on
14. used on the mane and tail

Answers on page 2
Calendarn of Events

Join us for upcoming "Elluminate" Series:

Elluminate is a web based program that allows us to offer Extension educational programming in several counties on the same date and time. This winter, Extension Horse Husbandry is teaming up with county extension agents to offer a series of educational classes through this technology. The following sessions will be offered in our REINS region this winter. We just ask that you call and let us know you plan to attend (phone numbers are listed below). All sessions will begin promptly at 7pm, so we ask that you arrive by 6:45 pm to receive any materials and introduction prior to the event. Light refreshments will be served at the sessions.

- November 17th Economical Horse Feeding Wayne & Wilson Counties
- January 19th Vaccination and Deworming Wilson County
- February 16th Pasture Management Wayne & Wilson Counties

For more information about this training please contact Kim Davis at (919) 731-1520

REINS Volunteers by County  (Volunteers may be contacted via Extension Agents)

Johnston County:  Julie Walls, Will Walls & Roger Davis
Wayne County:  Jerry Boone, Lynn Lepley, Vivian Rowe, Cindy Wheaton & Vickie Yelverton
Wilson County:  Carol Kyles & Kathy Moore

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Wilson County:  Walter Earle, County Extension Director (252) 237-0111  walter_earle@ncsu.edu

Hoof Prints is a quarterly newsletter written by a team of experienced and certified equine professionals for persons interested in equine information in Southeastern North Carolina. For more information on material and events presented in this newsletter, contact your local agent and Cooperative Extension office at:

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