



# Turning Pointe Donkey Rescue

## Quarterly Newsletter

### Summer 2007

## **Purchasing Hay**

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Purchasing feed is a never-ending process once you have obtained an equid. Since roughage (hay or pasture) should constitute the majority of the ration, it is essential that the hay fed be of appropriate quality for the donkey. Even if your animal is boarded, you should still be an informed consumer—be knowledgeable of the ration and its appropriateness for your donkey. We all desire to maintain our animals in optimal condition (review article “How Does My Donkey Score”), however, feeding is a major area of expense associated with keeping an equid. Before purchasing hay, certain questions need to be addressed. How can I optimize my nutrition program while holding down cost? What is the equid's level of activity? How do I evaluate the quality of the hay purchased? When should hay be purchased? What sources of hay are available for purchase? What are the storage capabilities of my facilities?

### **Terminology**

Before getting into hay quality, let us briefly review some terminology. Hay is cut multiple times during the summer and is referred to as *first cutting*, *second cutting*, etc. The maturity of the hay at the time of cutting is reflected by the terms: *early bloom*, *mid-bloom*, and *late bloom*. The greater the percentage of bloom present in the hay field, the more mature will be the hay harvested. The amount of hay made will be greater when the amount of bloom is increased, but the nutritional value will be markedly reduced. This decrease in nutritional value is a result of the stem becoming a larger portion of the plant in relation to the leaves. In Michigan, first cutting hay should be made no later than the middle of June to be of reasonable quality. Subsequent cuttings should be harvested about every 6-8 weeks after removal of the first cutting.

Hay is also categorized according to the type of plant used for hay. *Legume hay* refers to hay made from one of the following: alfalfa, red clover, sweet clover, or birds foot trefoil; while *grass hay* refers to hay made from the following grasses: brome, timothy, rye, or orchard. Often hay is referred to as *mixed hay* where the hay is a combination of both grass and legume. The percentage of grass to legume varies and is determined by the amount of both present in the hay field. The amount of each plant present in the field is a factor of seeding percentages and the hay cutting. Grasses tend to grow better in cooler weather, while legumes prefer warmer weather. Therefore, a mixed hay field will produce a higher percentage of grass in the first cutting hay and a higher percentage of legumes in the subsequent cuttings of hay. The most common forages used in mid-Michigan are alfalfa, brome, timothy and grass-alfalfa mixtures.

### **Selecting the Hay**

When purchasing hay, the first consideration is what group of equids are to be fed. Lactating animals and weanlings have the highest nutritional requirements, while maintenance animals have the lowest nutritional requirements. Remember that all equids should receive at least 50% by weight of their ration as roughage. Most animals that are mature and not working do best when roughage is the primary/only component of the diet. If one is primarily feeding the inactive equid, the hay purchased need not be of the nutritional quality necessary for the lactating or growing equid. As with most things, cost is related to quality. Alfalfa hay will normally cost more than grass hay, because the protein and energy available per pound of hay will usually be greater in alfalfa hay as opposed to grass hay. This extra protein and energy is necessary to meet the nutritional requirements for lactating and growing individuals to allow the concentrate (grain) portion of the

ration to remain below 50%. Alfalfa hay is **not necessary** for the inactive donkey that will do just fine on a 100% diet of good first cutting grass hay. Mature donkeys fed alfalfa hay will become fat and will be at a higher risk of founder/laminitis and other metabolic disorders. By selecting the hay necessary for the individuals being fed, one will be able to reduce the dollars spent on both the hay and grain portions of the ration while providing a more appropriate diet for your donkey.

### **Evaluating Hay Quality**

To evaluate the hay quality, there are two considerations. The *nutritional quality* of the hay and the *production quality* of the hay.

➤ The *nutritional quality* is determined by the type of hay (grass, alfalfa, or mixed hay), the maturity of plant growth, the amount of rainfall damage, and the time of hay storage before feeding. As previously stated, good alfalfa hay will be of greater nutritional value than good grass hay. However, plant maturity is of great importance, for the older the forage is before cutting, the poorer will be the nutritional quality of the resulting hay. If alfalfa hay is cut when it is in full bloom or later, it may be of lower quality than good, pre-bloom or early-bloom grass hay. If hay has been rained on, the quality will be reduced due to leaching of nutrients, especially the water-soluble vitamins and minerals. When hay is stored for greater than six months, there is a significant decrease in the vitamin content.

➤ The *production quality* is determined by the dryness of hay at the time of baling, the amount of rainfall damage, the storage facilities, and the time stored. If hay is baled too wet, it is obviously going to mold; however, mold may be present even if it is not visible. Hay should smell sweet and should not appear dusty when shaken. Many people do not realize hay may be baled when it is too dry. Even hay cut at the correct stage of bloom will lose quality during baling, as the overly dry leaves will fall off. The main source of nutrients in hay is in the leaves. If rain damage has occurred, the hay will appear bleached, brown, or possibly even black, depending on the degree of damage. If hay is rained on, the best time for the least damage to occur is right after it is cut. At this time, there will be less leaching of nutrients, drying time may not be significantly increased, leaves are less likely to be lost from the force of the rain or from the increased raking and turning required to dry the hay when rain falls on nearly dry hay. When hay is stored for long periods of time, it continues to dry and the dust level present may increase. A bale of hay in the spring always feels lighter than it did in the fall when it was put in the hayloft. Hay should be about 88-90% dry matter at the time of baling. If the hay is stored in excessively dusty areas, it will become dusty as well. Also, if it is very dry and dusty at the time of baling, the dust level in the hay will increase.

When looking for good quality of hay, the hay should be soft to the touch (an indication of the maturity at which the hay was cut—few coarse stems present), green, leafy, fresh smelling, dust and mold free. Visual inspection is the primary way of judging production quality, however, it is only a guesstimate when evaluating the nutritional quality. The best way to evaluate nutritional quality is by taking representative samples of your hay and sending the samples for analysis. Hay analysis should be done every year, even if taken from the same field, as conditions of growth and harvest are not constant. Equipment to acquire a hay sample may be obtained from your extension agent or your veterinarian, or they may come out and collect the hay samples.

### **Purchasing Hay**

To purchase hay at the most economic rate, some shopping around will be necessary. As previously discussed, the first step in holding down the cost is to purchase hay appropriate for the nutritional requirements of your donkey. The next obvious way is to buy in bulk if your storage facilities are adequate. If possible, buying all the hay needed for a year allows you to know the quality of feed and prevents any surprise increases in price that may occur after the last purchase. A hay analysis will only be cost effective and of major benefit to your nutritional program when hay is bought in bulk. In Michigan, most equid hay is purchased by the bale, rather than by the ton. The average Michigan bale weighs about 40 – 50 pounds, but considerable variation exists. The cheapest price per bale will normally be when the bale is bought directly from the field. This may or may not be the most economical way for you.

When hay is bought directly from the field, the buyer is usually responsible for collection and transport. You must be able to make arrangements for hay pick-up with often little advanced notice. If pick-up is delayed

and it starts to rain, you now own wet hay that may only be good for mulch—you still must remove this wet hay from the field to allow subsequent cuttings of hay to be made, and you still need to purchase hay for your equids. If you must rent equipment for transportation and hire all the labor necessary, it may be more cost effective to pay the delivered price. Delivery price may or may not include placing the hay in your barn.

If you need a larger quantity of hay than may be purchased from one producer, or you do not have the time to shop for a producer, hay may be bought from a hay dealer. Hay dealers will buy from the producers and then deliver to you the quantity of hay desired. When buying from a hay dealer, critically assess the quality of the product, especially when establishing a working relationship with this individual. Since the hay dealer is serving as a middleman, be prepared to pay somewhat more for the hay than you would from the producer.

Still the best time to buy hay is during the summer when hay is being made. The price will normally not go down during the fall and winter and often may rise, especially if the hay supply in the area is getting low. Prices in the spring will reflect the hay supply and the need for hay producers to clean out their storage areas before the new crop comes in. If hay is plentiful, prices may be very good; however, remember this hay is approaching a year old and will have lost some quality. If hay is scarce, as it is this year in many parts of the country, the price paid for the hay may be double, or greater than the price last summer.

### Hay Storage

Hay storage need not be fancy, just dry and preferably easily accessible if very much hay is to be stored and ultimately used from the storage area. Traditionally, hay was stored in the hayloft of a hip-roofed barn. If you have this type of barn, it may be where your hay is stored. There are a number of disadvantages to storing hay this way. The risk of fire is of major concern, as animals are normally housed below. A fire in the barn may result in a total loss of both hay and animals. The risk of fire increases when new fresh hay is placed in the barn, as spontaneous combustion may occur if the hay was baled too wet. Insurance rates are often higher when large quantities of hay are stored in the same facility as livestock. The hayloft is often without a drive-up ramp making storage and removal difficult and labor intensive. These areas are often very dusty and difficult to clean before the storage of new hay.

Pole barns provide same level storage, making storage and removal easier. If separated from the facility housing the animals, insurance rates may be reduced. If the floor is not cemented, store the hay on pallets, tires, etc. Do not store hay directly on the ground or on plastic, as plastic holds moisture next to the hay increasing the amount of spoilage that will occur. Hay stored on the ground should be stored with the cut side down rather than the string side down, as this seems to reduce spoilage and prevents string breakage. If excessive damage occurs to the bottom layer from dust and moisture, it may be necessary to discard this layer. Do not use the discarded, unsuitable hay for bedding, as equids will still eat it increasing their risk for digestive upsets and future chronic respiratory disease (heaves). The difficulty in appropriately storing the large round/square bales to prevent moisture damage makes these bales of questionable use for equids due to the increased potential for chronic respiratory disease. If storage is available to insure a good quality product, and equipment is present to handle these large round/square bales, they are often economical to use, especially from the reduced labor aspect. Outside storage of hay, whether it is large or small bales, results in too much moisture damage to make it a viable option for the Michigan equine industry.

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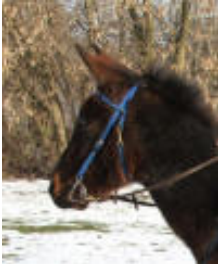


- Thanks to all who have new donkeys in their barn. We are deeply appreciative of all the new, and forever homes of our donkeys!

<b>Adopter</b>	<b>Donkey's Name</b>
Kevin and Tracy Janus	Summer
Dr. Jay and Michelle Lugthart	Oh! Sue and Little Richard
George and Jean Sparks	Nora and Nikki



- Thanks to all the volunteers who make TPDR a success!

As our list of supporters continues to grow, it becomes increasingly difficult to acknowledge everyone. Hence the TPDR board has decided to discontinue this section of the newsletter. However, we still greatly appreciate everyone's help for without you there would be no rescue!

- Donkeys available for adoption:  
To see if your favorite donkey is still available for adoption, visit us at our website [www.turningpointedonkeyrescue.com](http://www.turningpointedonkeyrescue.com) or at [www.petfinder.com](http://www.petfinder.com)

Donkey name's	Pertinent comments
<p>Monty</p> 	<p>Monty is a 4 year old small standard gelding, recently rescued from an animal sale. He and his friend Winchester were both in the kill pen after their owner refused to pay for coggins tests on these great boys. Both donkeys have since been tested by TPDR and are negative. Monty is a quick learner and needs a home with someone interested in spending a little time teaching this great boy the basics. He has been in training at his foster mom's for the past two months and is very cooperative with everything that has been asked of him. Monty will make a great companion for another donkey and is very willing and eager to learn new things. If you are interested in giving Monty a new home, please contact Sharon Windsor at 517-623-0000 or: email <a href="mailto:akaminidonkeys@michcom.net">akaminidonkeys@michcom.net</a></p>
<p>Chester</p> 	<p>Chester is a lovable little mule with a great big heart. He has been started under saddle by Marirose Six. He is very willing and eager to please. Chester has been on the trails, thru water, along roads, woods, etc. He's been ponied, ridden in groups and alone. He has wonderfully smooth gaits. He will be a nice saddle mule for a kid or small adult who knows how to ride. He will test you simply because he is young and green. If you are interested in Chester please cont Sharon Windsor at 517-623-0000 or: email <a href="mailto:akaminidonkeys@michcom.net">akaminidonkeys@michcom.net</a></p>
<p>Marty</p> 	<p>Marty is a 5 year old gray dun standard donkey gelding who is a very attractive guy! He is young, ready and willing to start learning more. Marty already ties, leads well and is good with front feet trimmings! He's kind of a shy guy, but once the petting and brushing starts, he's all about it! Marty was adopted awhile back as guardians for a large flock of sheep, but Marty proved to be a bit too aggressive with the woolies so he came back to TPDR. He will make an excellent companion for other equines. If you are interested in giving Marty a home or have additional questions about him, contact his foster mom Toni Jones at 269-792-1438 or e-mail her @ <a href="mailto:boyzbulldogs@yahoo.com">boyzbulldogs@yahoo.com</a></p>
<p>Jill</p> 	<p>Jill is a shy, mature, grey, standard jennet that is about 7 years old. With the quiet kindness that she has received in her foster home, she is becoming as much of a treat-demander. Nevertheless, she needs someone with plenty of time, patience and an understanding of equine behavior. Jill ties, loads and leads, but continues to work on her confidence when being led in new settings or having her feet handled. Jill gets along well with other donkeys and would make a wonderful companion for another donkey or horse. For more information, contact Tia at 810-797-2229</p>

<p>Winchester</p> 	<p>Little Winchester is a high stepping, adorable little brown gelding standard. He doesn't seem to have been abused as much as neglected. When he arrived at his foster home, he didn't know much about humans and was extremely shy, but he is losing that shyness after some time at his foster farm. He definitely needs a home where he will be given lots of attention. He is learning the basics right now and does quite well as long as he is not overwhelmed. For more information, contact Sharon at 517-623-0000 or email <a href="mailto:akaminidonkeys@michcom.net">akaminidonkeys@michcom.net</a></p>
<p>Lonnie</p> 	<p>Lonnie is a 14-15 year old miniature and he is a for sure fixer-upper! A young man purchased him the end of December,2006 from the kill pen at a local horse auction. He got this donkey home and discovered that "He picked his back legs up kinda high." Well he decided to take him back to the same sale several months later (yes, was going to run him back through the same kill pen that he got him from) when we got word of this great little donkey. TPDR agreed to take him in, and what a good decision that was! Lonnie will do whatever is asked of him. He was PERFECT for hoof trimming, he leads very well, stands tied, and is just a great little guy. He certainly doesn't have the greatest conformation, but he doesn't know that! Best of all, Lonnie has a HEART OF GOLD. He had some much needed dentistry, was gelded, and had some minor surgery done on his left rear leg. This spotted miniature will be an ideal, safe pet for children and adults alike. If you are interested contact Sharon Windsor at 517-623-0000 or email her at: <a href="mailto:akaminidonkeys@michcom.net">akaminidonkeys@michcom.net</a></p>
<p>Wes</p> 	<p>Wes is a halter quality, five year old gray miniature gelding standing 33 inches tall. You can do just about anything with this handsome guy, but please NO FLY SPRAY! That just about scares the life out of him. If you must have an issue that one is not too bad! Wes is a bit submissive with his 2 much older gelding companions. He does try to get the other boys to play, but one is in his 20s, and the other is quite crippled. TPDR would love to place Wes with another younger equine. If you are interested contact Sharon Windsor at 517-623-0000 or email her at: <a href="mailto:akaminidonkeys@michcom.net">akaminidonkeys@michcom.net</a></p>
<p>Noble</p> 	<p>He is very dark brown, 8 years old and about 46-47 inches tall. He came from an exotic animal auction on May 5th 2007. He was in a pen with 4 other standard jacks consigned by the same individual. He carried pounds and pounds of old manure in his coat, and his legs had a fair amount of scaring from old manure that has worn off his legs. This wonderful boy was the picture of long term neglect. It evidently had been some time since his last visit with a farrier. Oh, and yes he is a real gentleman about picking up all four of his feet. It is difficult to explain just how kind this donkey is. At one time, someone cared greatly for this guy! He has now had his hooves trimmed, is gelded and is ready for someone to adopt him and take him home to his forever home. If you are interested contact Sharon Windsor at 517-623-0000 or email her at: <a href="mailto:akaminidonkeys@michcom.net">akaminidonkeys@michcom.net</a></p>
<p>Mr. Phips</p> 	<p>Mr. Phips is a real sweetie! He will mature to a small standard. My best guess is about 39-40 inches. He is the most lovely pale pink-silver color with a large white blaze with lots of small dots in that blaze. What a handsome young man he is! Phips has been pastured with other donkeys, mules, and horses both extra small, and extra big too and gets along with them all. This yearling gelding has been handled by children as well as adults. He has NO issues and would be a real easy one to train to drive, show, or be a best friend to your other equines. For more information, contact Sharon at 517-623-0000 or email <a href="mailto:akaminidonkeys@michcom.net">akaminidonkeys@michcom.net</a></p>

<p>Conrad</p> 	<p>Conrad and Paco were adopted together 15 months ago, and have had the most wonderful home, until a very short time ago when personal circumstances at their home forced their owners to return them to TPDR. Their owners were devastated to lose these two, but personal reasons dictate that they must find new homes for these two gorgeous boys. Conrad and Paco must be adopted as a pair! Their last home was a very caring one and their next one must be as well. Conrad is a 4yr old black standard gelding. He has very heavy bone and a wonderful temperament. We can't say enough nice things about this big guy, shhh, don't tell the others, but he's definitely a favorite! Conrad is inquisitive, curious, and super friendly. Conrad loves treats, leads and is confident enough to be a wonderful companion for horses. He'd love to keep company with any equine and will make some lucky family a wonderful pet. Paco is a 5yr old red roan standard donkey gelding. He came from St Johns auction and someone has definitely worked with this boy before. He is pretty good for leading and even accepts people on his back for riding, though we don't think he's been trained for it. He's a favorite with the kids and lets them hug him all over and even hang onto his legs. Paco is the first one up to you in the pasture and he just adores people! If you are interested in giving Conrad and Paco a new home please contact Sharon Windsor at 517-623-0000 or email her at: <a href="mailto:akaminidonkeys@michcom.net">akaminidonkeys@michcom.net</a></p>
<p>Paco</p> 	

- Do you have a desire to help and have some extra time?
  - Are you a great organizer with some extra time? There are always things to be done! Contact Sharon at [akaminiaturedonkeys@michcom.net](mailto:akaminiaturedonkeys@michcom.net)
  
- **What a Rescue is all about!** With Chris Wilson's excellent website and the addition of the web page "Donkeys in rehab", this section of the newsletter is being replaced by a "green" helpful hints section. Do you have "hints" that made your life, your donkey's life and the environment better? Please share your ideas or articles? Email your hints/articles to [marteniu@cvm.msu.edu](mailto:marteniu@cvm.msu.edu)
  
- **Green Hints for you, your donkey and the environment!**

### **A Guide to Composting Horse Manure**

*by Jessica Paige, WSU Whatcom County Extension*

If you've been stockpiling your manure in a single pile for as long as you can remember, you may have found that if you dig into the middle of the pile, you'll find something that resembles dirt more than it does manure. If this is the case, at least some of your manure has already gone through the decomposition, or composting, process. Manure that has been left uncovered in large, spread out piles will eventually compost. However, this version of composting often creates unpleasant odors because there is not enough air reaching the inside of the pile. These piles also rarely reach high enough temperatures to kill parasites, fly larvae, weed seeds, and pathogens. The following information on composting will help you learn how to compost all of your manure, instead of what's just in the middle, speed up the process dramatically, and help heat manure up to temperatures that will kill parasites, fly larvae, weed seeds, and pathogens.

## **The Benefits of Composting**

### *Horse Health*

**Reduce flies.** A well-managed compost pile will reach temperatures high enough to kill fly eggs and larvae in manure. By reducing the amount of uncomposted manure you have, you'll also reduce breeding grounds for flies.

**Kill parasites and pathogens.** The high temperatures achieved through composting also kill worms and pathogens (organisms such as bacteria, viruses, fungi, and protozoa that are capable of producing an infection or disease). This is especially important if you are spreading your manure in the same fields your horses graze in or on vegetable gardens.

#### Convenience and Aesthetics

**Reduce odors.** A well-managed compost pile will be free of the odors often associated with an uncomposted manure pile.

**Cut your pile in half.** Composting reduces bulk and has 40 to 60 percent less volume and weight than uncomposted manure. That means you can reduce the amount of your manure pile by about 50 percent by composting!

**Kill weed seeds.** The high temperatures achieved through composting will kill most weed seeds.

**Improve marketability.** Compost is much more marketable than uncomposted manure and is often used by topsoil companies, landscapers, nurseries, and organic farmers. You may be able to sell your compost and actually make money out of that mountain of manure!

**Even out grazing patterns.** Horses grazing in pastures spread with composted manure (instead of fresh manure) are more likely to graze normally and are less likely to restrict grazing to areas with the thinnest application rates.

#### *Healthy Soil*

**Improve aeration and water retention.** Adding compost to soil builds good soil structure and texture, increasing the amount of air that can infiltrate and the amount of water it can hold. Adding compost to heavy clay soil loosens the packed soil by opening up pore spaces that, like little tunnels, carry air and water down into the soil. Sandy soils, which tend to let water drain away too rapidly, are also improved with the addition of compost. The fine particles are united into larger ones that can hold a greater amount of water-100 pounds of compost can hold about 195 pounds of water! By increasing the soil's moisture-holding capacity, compost also helps control erosion that would otherwise wash topsoil away.

**Supply nutrients.** When fresh manure is spread on a field, about 50 percent of the nitrogen is in a highly soluble form and will be washed out by rain when it is spread on a pasture. In compost, however, 95 to 97 percent of nitrogen has been converted to a much more stable form and will be slowly released, allowing plants to use it over a longer period of time. Compost doles out nutrients slowly when plants are small and at greater rates as soil temperatures warm up and the major growth period begins. (Soil microorganisms that release the nutrients from compost work harder as temperatures increase.) The benefits of adding compost will also last for more than one season. Composted manure releases about 50 percent of its nutrients in the first season and a decreasing percentage in the following years. This means that with constant additions of compost, the reserves of plant nutrients in the soil are being built up to the point where, for several seasons, little fertilizer of any kind may be needed.

**Bacteria, earthworms, and pH.** Compost also supports essential soil bacteria; feeds earthworms and allows them to multiply; and gradually changes soil pH levels that are either too low (acidic) or too high (alkaline).

### *The Environment*

**Protect water quality.** Because the composting process converts nitrogen into a less soluble form, it is less likely to be washed out of manure and into ground water and surface water. Excessive amounts of nitrate in drinking water can cause health problems such as blue baby syndrome and may be linked to cancer and birth defects. Recent samplings of wells in northern Whatcom County have found nitrate levels above the U.S. Environmental Protection Agency's safe drinking water standards.

**Protect fish and shellfish.** When rain falls on soil rich with compost, raindrops seep into it. When rain falls on packed soil rain runs off the surface, creating erosion and carrying soil particles to nearby waterways. Sediment can smother trout and salmon eggs and make water cloudy, making it more difficult for fish to find insects to eat. Raw manure also contains fecal coliform bacteria which is commonly used to measure contamination of water from human or animal waste. The coliform bacteria may not necessarily produce disease, but can indicate the presence of other bacteria that may cause infections, hepatitis, and other illnesses. When coliform bacteria is found in the water around shellfish growing areas, it often leads to shellfish bed closures. Composting kills most of these coliform bacteria as well as viruses and parasites that may be a concern to human health.

**Conserve our natural resources.** Using compost instead of chemical fertilizers can reduce our use of non-renewable resources like natural gas. Approximately two percent of the natural gas consumed in the United States goes into the manufacturing of nitrogen fertilizer.