Drought Preparation

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The severe drought in South Carolina of 2007-2008 hit many horse owners' pocketbooks, while hay availability for horses was drastically reduced. Currently, the state is still under drought conditions with some improvement over the past few months. The National Weather Service is calling for some improvement for 2008 but not a complete lifting of the drought (see illustration). The southwestern United States is suffering under severe drought conditions and will compete for national sources of hay. With fuel prices increasing and drought conditions across the country this is a good time for horse owners across South Carolina to store hay for the coming months.

When planning for feeding your horses it is wise to remember to conserve your forage and pastures. Horses need 2.5-3.0% of body weight in feed a day. For a 1000 lb. horse that is 25-30 lb. of forages or forage/concentrate mix per day. For a maintenance diet, most horses only require forage; however those "hard keepers" will need some extra energy in the diet. For active horses, depending on use, they could require anywhere from 20-50% in supplemental nutrients in the form of concentrate or fat. Fat is an excellent source of energy for horses and is now considered safer than high starch diets. You can supplement up to 10% fat in a horses diet in the form of soy oil (best), vegetable oil or flax-seed oil. Remember to weigh and body condition score (optimal 5.5) your horse to determine their nutritional status and base your feeding practices on their needs.

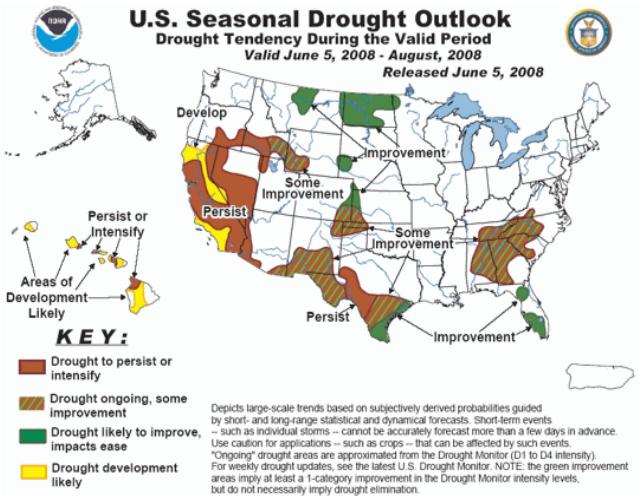

Figure 1. Drought forecast for the United States from the National Weather Service as of June 5, 2008.

During drought conditions, pastures suffer not only from lack of moisture, but overgrazing. Horses should be allowed to graze pastures when plants reach a height of 8-10 inches to a plant height of 3-4 inches, and then taken off to allow the pasture to rest. Additionally, this will limit horses from grazing any poisonous plants or other weeds, which increases when forage is limited.

If your hay supply is minimal you can supplement a horse's forage requirement with high fiber feeds. This can reduce the minimum requirement of long-stem forage to 1% body weight (~10 lb hay per day, 1000 lb horse), which can assist in stretching your current hay supply. The following table lists some good sources of supplemental fiber sources than can be fed.

Table 1. Sources of fiber than can be fed to horses to partially replace long-stem forage requirements.

Type	Notes
Complete Feed	These are "senior", "complete" or "hay extender" type feeds. They should exceed 15% crude fiber (CF).
Beet Pulp	Requires soaking and do not exceed 10 lb per day (dry weight).
Alfalfa Cubes	Recommend soaking, high in protein and calcium therefore horses require .85 lb per 1 lb of hay as a substitute.
Alfalfa pellets	Similar nutritional value as alfalfa cubes.
Rice Bran	Good source of fat (~15% crude fat), high in phosphorus and owner may need to feed more calcium if not balanced by manufacturer.

For more information on feeding your horses during drought please refer to the Clemson Equine Extension web site.
http://www.clemson.edu/cafls/departments/animal_vet_science/equine_extension/index.html

Some final tips are to always remember to change a horse's diet over a 2 to 3 week period to limit digestive upset. Not only weigh out any concentrate fed, but weigh each portion of hay. If feeding round bales, put them in a hay ring or fence off potions to limit horse's access and prevent hay loss. Avoid feeding kleingrass, johnsongrass, sorghum-sudan crosses, russian-foxtail-german millet hay, and all cattle feeds. If you have any further questions please refer to the Clemson extension website or contact your county extension agent.