Sprouted Wheat For Livestock?
By Martha A Wright, Area Livestock Specialist

Summer rains have supplied much needed water reserves, but has also interfered with crop harvest causing much of the areas wheat to sprout. This wheat is then rejected for use in the milling, brewing and food industries, but makes an inexpensive feed for livestock.

Research has shown that the value of sprouted grains for ruminants (cattle & sheep) is similar to that of non-sprouted feed grains. Trials done with swine indicated a greater rate of gain by feeding sprouted wheat, but a slightly poorer feed efficiency.

So the general guidelines for feeding wheat are as follows:

**Ruminants**

- **Limit wheat to 40 percent or less of the total grain.** The starch in wheat is fermented more rapidly than the starch in corn, resulting in greater potential for digestive upset, acidosis, bloat, founder and reduced and/or erratic intake patterns. By combining wheat with more fibrous or slowly fermented feed grains, these problems are reduced. Rations high in wheat should have a minimum of 6 percent fiber, with some reports favoring above 12 percent. If supplementing beef cows, keep wheat levels under 5 or 6 pounds per head per day.

- **Bring cattle to full feed at a slower rate.** Careful management cannot be overemphasized when wheat is fed. Wheat should be incorporated gradually into rations and livestock should be brought up to a full feed over a longer period (25 to 30 days) than is used with corn. Self-feeding wheat should be avoided.

- **Dry roll vs. coarse grind.** Processing wheat substantially improves digestibility, due to the hard seed coat associated with the kernel. Dry rolling is the best way to process wheat; however, cracking or coarse grinding gives similar results. Avoid excess fines for good results with any processing method. Whole wheat can be fed, but it’s inefficiently used. Feed conversions are as much as 12 to 20 percent less for cattle fed whole than those fed rolled wheat in high-concentration rations.

- **Buffers may be needed, include ionophores.** For growing and finishing cattle, including an ionophore will help reduce over consumption and acidosis. Using buffers (such as limestone) in the ration, particularly as cattle are being put on feed, can be beneficial. Sodium bicarbonate has been used in some feeding trials and shown to improve rate of gain. With higher rates of wheat feeding, an ionophore is a must.

- **Vomitoxin and molds.** When moisture levels are high enough to cause sprouting, then there is a high chance that the wheat may also contain molds and toxins. If there is any suspicion that molds may be present, a sample should be taken and analyzed for mycotoxins. While wheat will be rejected from mills for having as low as 2 ppm of vomitoxin, it can be fed to cattle with as high as 21 or more ppm. Caution should be exercised. These molds and toxins may reduce feed intake and performance while increase risk of digestive upset and abortion in pregnant cattle. Therefore, young calves, gestating cows and animals under nutritional stress should not be fed wheat containing any vomitoxin.

- **Do not use wheat in creep rations.** The rapid rate of starch fermentation increases the risk of digestive problems such as acidosis, founder and/or bloat.

- **Check moisture content of stored wheat.** Wheat in storage should have less than 13 percent moisture levels to avoid spoilage. This may mean that wheat will need to go through a dryer before being placed in storage bins.

**Swine**

- **Diets containing wheat should be balanced on a lysine basis.** Good performance usually results when wheat replaces 50% of the corn in the diet, although it is possible to replace as much as 100% of the grain portion with wheat. Process wheat–based diets coarsely to avoid dustiness and increase palatability.

- **Do not feed wheat to swine if vomitoxins are present.** Toxins in wheat have shown to reduce feed intake resulting in poorer performance at levels as low as 1 ppm. Producers with sows should also test for zearalenone, which affects reproduction as levels as low as 0.5 ppm.
This season sprouted wheat will be available in many locations at a discounted price making it an attractive feed ingredient for many livestock producers. If cautions are taken to avoid digestive upsets and illness, this opportunity can significantly reduce feed costs and improve economic returns.

**On-Farm Cattle Handling Tour**
By Martha A Wright, Area Livestock Specialist

A handful of beef producers ventured out to Earth Works Farm during Empire Farm Days to tour the facility and talk with Ros & Gail Parks about their operation, despite the rains that came each afternoon. Ros gave his incites about pasture management using electro-net fence, managed intensive grazing, clipping, reseeding and the development of perimeter fences.

Once the rains had stopped, visitors surrounded the cattle handling facility. A small group of animals were moved through the corral and chute system and easily sorted into groups. Onlookers witnessed first hand the effectiveness of the curved alleyway and appropriately placed sorting gates. Although this facility may be more elaborate than some producers may wish to build, the design and layout are very easy to follow and appropriate for small farms across the Northeast. Play layouts were discussed and distributed to all present.

The unique features of this home-made system was the use of larch boards to create a curved alleyway, the load out chute allowing easy access to move animals off-farm and the availability to sort cattle in many directions with ease. The lodge pole pine posts used were part of a collaborative post order that saved substantial money for each producer in the local beef discussion group.

With the success of this field day, another tour has been planned to allow producers unable to attend during Empire Farm Days to come, learn and ask questions. At least three farms will be visited with the focus being on cattle handling facilities and what these local producers are doing to safely handle their cattle. Each farm will highlight a different system.

**The tour date is set for Saturday October 4th**
**10:00 AM – 2:00 PM in Seneca County, NY.** If you would like further details, contact Martha Wright at 585-394-3977 ext 36 or maw32@cornell.edu.