

Salvaging Stored Wet Feed and Grain

DRYING, MARKETING AND SAFE FEEDING

Time is of the essence in salvaging wet feed and grain. Both will begin to heat and mold very quickly, leading to spoilage as well as the possibility of spontaneous combustion. As soon as possible, you should remove dry portions of grain and store them separately. Dry bales of hay should be removed and restacked in a dry location, since capillary action will draw water up into the stack.

Wet feeds should be presumed harmful to animals until tested. They may contain contaminants from floodwaters, as well as mold spores which sometimes produce dangerous toxins.

USE DRYER IF POSSIBLE

If part of a grain bin has been flooded, remove dry grain *from the top* using a vacuator or any other means. Use one of the following methods for handling wet grain:

- ◆ Get the wet grain to a dryer quickly, if possible. This is the surest way to save wet grain.
- ◆ If the grain depth can be kept below 6 feet, use a natural-air bin drying system with a perforated floor and a high-capacity drying fan. Supplemental heat should only be used during periods of high humidity. Do not raise the air temperature more than 10 or 15 degrees F.
- ◆ If a dryer is not available, spread the grain in as dry a place as possible. Don't pile it any higher than 6 inches. Stir it daily to prevent overheating and to speed drying. Watch for and remove molded grains.
- ◆ Wet grain can be ensiled if it is intended for feed and the moisture content ranges between 25 and 35 percent. If using a conventional silo, see your county agricultural agent about treating the grain with propionic acid to prevent mold.

DRY AND SHELL WET EAR CORN

Separate dry corn from wet and store it on high ground. If the ground is wet, first cover the area with plastic or building paper. Handle wet ear corn as follows:

- ◆ Dry the corn if facilities and equipment are available. Remove corn from crib, since mud and debris washed into the crib may make drying difficult or impossible. Then place the ear corn over a drying tunnel and force air through the corn with a fan.
- ◆ Shell the corn if shelling equipment is available.

GUARD AGAINST HAY FIRES

Flooded hay should be disposed of or used on fields as a fertilizer. It is probably unsafe for animals and not worth the time and expense of drying. Because of hay's tendency to heat and mold quickly, it should be spread out to aerate as soon as possible and turned often. Hay bales that are 30 to 40 percent wet pose the greatest risk of fire. Check hay storage often for pungent odors, hot damp areas on the stack, emission of water vapors and other signs of heating.

REPLACING HAY WITH GRAIN

If you must replace conventional roughage feeds with grain because of flooding, consider fibrous grains such as oats, barley, ground ear corn or one of the high-fiber byproducts such as brewers grains, corn gluten feed or soy hulls.

Continue to feed hay or straw unless you have had experience with high grain feeding. You must maintain a minimum amount of forage in cattle diets. Check with your nutritionist or county agricultural agent for guidelines. Spread any major changes in a feeding program over a period of several days. Observe animals carefully during the transition.

- ◆ To check a stack's temperature for fire risk, drive a sharp pointed pipe into the hay, lower a thermometer inside the pipe, and leave it there for about 20 minutes. At 150 degrees F., the hay is approaching the danger zone. At 170 degrees F., hot spots or fire pockets are possible. Have the fire department on standby.

FIND A LOCAL MARKET

If it is not possible to dry grain artificially, try to find a local market for it. Usable flood-damaged grain must be sold at a salvage price, possibly to a large livestock feeder who can use it before it spoils. Grain should be kept in airtight storage to prevent spoilage.

SEED GRAIN AND SILAGE OFTEN A LOSS

Wet seed grain probably will not be suitable for seed, as wetness causes the seed to germinate. Subsequent drying would stop germination and likely kill the seed or reduce its viability. Do not feed seed grain to livestock, since it may contain toxic additives.

Flooded silage likewise will be a loss. Its waterlogged state will hurt feed value, as will any contaminants from the water. Like hay, it might be spread on fields as a fertilizer.

SAFETY WITH WATER-DAMAGED FEEDS

- ◆ *Testing.* Do not feed flood-damaged grains until they are tested for *mycotoxins*, toxic substances produced by fungi. Ask your county Extension agent for locations of testing laboratories. Even if the feed is deemed safe to use, watch animals carefully for signs of illness.
- ◆ *Nutritive value.* Mixed feeds, grains and roughages which have heated or spoiled will have little nutritive value for livestock, depending on the extent of the damage.
- ◆ *Safety.* Do not feed heated, molded or sour feeds, or moldy legume hays (such as alfalfa or clover) to any livestock. Reduced performance, sickness, abortion or death may occur.

Additional resources:

Consult your veterinarian or county agricultural agent before using flood-damaged feeds.