



National Diploma Animal Production Livestock Production Part 5

Handout 1 Correct Feed Storage Procedures

HANDOUT 1

CORRECT FEED STORAGE PROCEDURES

INTRODUCTION

Animal feed is the one item that needs to be stored well, or it spoils. Storing hay to maintain its quality can be done in several different ways; the main thing to remember is that you want it covered. Tarps work and they're cheap, but they aren't a good long-term option. They tear, or blow away, unless very well secured in the first place; and sunlight eventually rots them, so they only last a season or two. One thing that can help is weighing tarps down well with old tires or blocks, or using tent stakes to tie them down. When using tarps, don't tightly enclose your whole pile of hay, or any moisture that is in the bales will cause them to rot in no time. Hay needs to have some air movement in and around the pile. Small hay piles benefit from being stacked on wooden pallets; this keeps soil moisture from ruining the bottom bales.

If you are dealing with large quantities of hay, a pole shed with just a roof, or a roof and one wall that blocks the predominant wind, protects hay well yet lets the air move around it. These structures are also relatively inexpensive to build. Hoop houses are also good for hay storage. Hay that is being stored in any type of enclosed structure must be adequately dry, or it may start on fire. As the hay cures, it heats up, and sometimes it can heat up enough to spontaneously combust!

Livestock kept with grass-farming strategies don't generally need grain in such large quantities that bulk storage space is necessary. The best way to store the small amounts of grain is in garbage cans or 55-gallon (208 l) drums. (Metal or plastic is fine, but make sure the drum contained food-grade materials before: You don't want to poison your stock.)

As with hay, grain must be well dried before it goes into storage. Dampness breeds mold (and possibly mycotoxins) and fire. Grain or premixed feeds that are being purchased from a reputable feed dealer should always be adequately dry, and most of the time area farmers whom you buy from directly won't be selling you wet feed. But when you buy grain at harvest time, make sure the grain has been tested for moisture. Most feed stores can provide this service, or you can test your own sample.



Haystacks covered with a tarp.

APPLY STOCK CONTROL AND RECORDS OF ANIMAL FEED

INTRODUCTION

As feed often makes up to between 60% and 70% of the costs of a farming operation, it is critically important that it is correctly stored and used. It is very important that you make sure that you understand the control of feed on a farm. The farmer must always know the rate of the feed-flow on the farm. In other words the farmer must have full control of the use and supply of feed on his farm. Keeping that in mind, it is important that the people who practically feed the animals on the farm must regularly report to the farmer or manager on the use and stock of feed.

WHAT LOSSES CAN BE SUFFERED IF FEED IS NOT CORRECTLY STORED

QUANTITY

- ❖ Birds and rodents will eat the feed or, carry it away.
- ❖ Loose roaming animals might eat the feed.
- ❖ Human theft.
- ❖ Fire could destroy feed that are not stored away.
- ❖ Insects can turn grains into dust.
- ❖ Wind blows loose meal away.

QUALITY

- Birds, rodents and other animals eating freely will contaminate the feed with a danger of disease transmission to livestock.

- If the feed gets wet, it will become mouldy and is then dangerous to feed to pregnant animals. It is likely that it will need to be discarded or used to make compost
- High temperatures can turn oily / high fat feeds rancid.
- Open containers of molasses attract rodents that may fall into it and drown.
- If feed storage is such that the identity of the feed / mix is lost, it means that the feed may have to be discarded if it contains potentially dangerous substances such as antibiotics or urea
- Always work on a FIFO (First in - first out) basis, so that feeds do not become too old.

WHAT CAN BE DONE TO ENSURE PROPER STORAGE OF FEEDS

- ✚ Ensure that feed storage areas are waterproof.
- ✚ If feed is stored loose, ensure that area is protected from wind, rain and pests/loose roaming animals.
- ✚ Store high cost feeds / supplements that can easily be loaded, in an area that can be safely locked.
- ✚ Small quantities of feed can be stored in plastic bins or drums.
- ✚ Make sure that fire control apparatus is available and working.
- ✚ Stack bags / bales in such a manner that cats can get to the rodents, but that the rodents do not have "nice" hiding places.
- ✚ Ensure an active rodent control program (use cats, dogs, baited traps, eco-friendly poison).
- ✚ Always keep stock control sheets up to date

RECORDS TO BE KEPT

- ❖ All feeds that are regularly stored should appear as an item on a stock control sheet. Before any new consignment of feed arrives, the existing levels of stock need to be controlled and an area prepared for the new consignment. Do not load fresh food on top of old food.
- ❖ All consignments of feed delivered to the farm need to be checked, as it is off-loaded on the farm. Check that the label corresponds to that on the delivery note. Check the condition of the bags (are they torn, punctured or badly worn?) Count / weigh the

feed as it is off-loaded and jot the actual number /weight received down next to the amount on the delivery note. Make a note on the delivery note of any problems encountered. Once the entire load has been checked, the delivery note is signed and a copy is kept for the farm records.

- ❖ Whenever feed is taken out to be used in a mix or to be fed, the amount of stock that is removed from the store needs to be jotted on the stock control sheet.
- ❖ The stock levels need to be controlled on a regular basis and maintained at a specific level. This is done as follow:
 - Take the last actual count / weight of bags / bales / feed.
 - Add all deliveries / new mixes made.
 - Subtract all stock used.
 - Jot down figure calculated - this is the Expected Stock Level.
 - Now do an actual count / weigh and compare it to the expected stock level.
 - The Stock Control sheet indicates what the minimum acceptable level of every item is. Once stock levels have been checked, follow workplace procedure to order stock that is below the minimum required level.
 - Whenever stock levels are checked, a check on quality can also be done. Check e.g. for signs of mould, rancidity, wet, dung contamination, separation of components.
 - Report any signs of quality problems on the stock control sheet.