Feeding livestock water-damaged fodder

After a flood event, it’s vital to give good nutritious feed to livestock in flood-affected areas.

This is particularly important for pregnant and young animals because they're less able to tolerate stressful events.

However, if the availability of feed has been compromised, you might need to begin by feeding water-damaged fodder. Water-damaged fodder can be a risk to both your health and safety, and that of your livestock.

Talk to your vet, our staff or your livestock consultant about managing a feed program for flood-affected stock.

# Effects of water damage on feed

## Silage

Bales that have been inundated by water will be sodden because of seepage into the baled material, despite being wrapped in 4 layers of plastic.

Inundation with water leaches the preservation acids contained within the bale. This allows air to enter rapidly and silt to deposit inside. The pH will rise and undesirable bacteria will multiply in the air, resulting in decomposition.

Signs of water damaged silage include bales that are:

* black
* oozy or slimy
* have an odour.

Silage bales that have been inundated, but not moved, by water might be salvageable.

By feeding whole bales of water-damaged silage to livestock, the animals can freely choose the unaffected portions of the bale.

## Silage stacks

If a stack has been partially inundated and safe access is possible, it might be possible to move the unaffected upper section of the stack to another site.

Once moved, the silage needs to be rerolled and resealed. Do this quickly to minimise further losses.

## Hay

Some portions of shedded and unshedded hay stacks may be salvageable if they’re readily accessible and alternative 'dry' sites are available.

Hay inundated with water poses a serious risk to the health and safety of both humans and animals. Wet hay, particularly that at the bottom of hay stacks, carries a high risk of spontaneous combustion (self-ignition), or of collapsing under the pressure of bales above them as the bottom ones rot.

Only attempt to move hay when:

* access to the hay is good
* the correct equipment is available
* a suitable alternative dry site is available.

## Shedded hay

The residual moisture will 'wick' its way up into the drier bales immediately above, spoiling them.

If possible, consider removing the upper drier bales to a suitable site. Ideally, move suspect bales to another site. Suspect bales include:

* wet bales
* bales subject to 'wicking'
* outside stack bales exposed to rain fall.

Alternatively, put these on top of the drier bales, allowing any heat build-up to dissipate while redrying.

These new stacks need good ventilation and protection from further rain.

## Unshedded hay

The top layer or 2 of large rectangular stacks will need to be kept separate from the drier bales further down.

The outer rows of bales exposed to prevailing winds and heavy rains will most likely need to be considered 'suspect' and removed.

Move bales at the bottom of the stack that have been inundated with water to avoid collapse or spontaneous combustion.

# Risks of feeding water-damaged silage

Given that water, silt, manure and possibly some dead animal tissues will have entered the silage bales and stacks, the risk of contamination by soil and carcase-born botulism bacteria may be quite high. An outbreak of deadly botulism is a possibility under these conditions, although it's not common.

Don't feed silage showing signs of mould to sheep, horses or pregnant stock. It’s best practice not to feed mouldy silage to any stock, however small amounts can be fed to healthy livestock of other classes as a last measure.

Mouldy silage can lead to decreased production and weight loss either due to reduced intake, liver damage or through reductions in the feed quality as a result of the spoilage.

# Risks of feeding water-damaged hay

Moulds develop easily on hay that has been damaged by water, especially in warm weather. Moulds can dramatically decrease the nutritive value and palatability of the stored feed. Some moulds are toxic and may cause sudden death or longer-term health problems such as liver damage.

If potential toxicity is a concern, you can send mouldy feeds for testing, but this is costly and can take a long time.

If livestock need more grain to balance the hay ration, use mould-free grain if available.

For farmers using a mixer wagon, there are several products that are designed to 'absorb' moulds and toxins. Speak with company representatives before you do this.

Bales that have been covered by water for many days will most likely be starting to rot and can be very difficult to move with normal hay moving equipment. Remember that spontaneous combustion is a concern.

## Signs of toxicity in livestock

Some of the signs that your livestock are suffering from toxicity include:

* weight loss or stomach pain
* poor appetite, sometimes with a scour
* photosensitisation (swollen, red ears, muzzles and white skin that dries, cracks and peels)
* enlargement of the abdomen
* sudden death.

Sometimes affected animals can have neurological signs such as tremors, wobbliness or convulsions. Mouldy hay can also cause abortion in pregnant animals.

Botulinum toxin causes animals to lose muscle tone, and to sit down and be unable to rise or eat or drink. They can appear normal otherwise.

## If your stock are showing signs of toxicity

Immediately seek veterinary advice through your local vet or from our animal health staff.

Remove the suspect fodder as soon as possible and give a good quality replacement.

There might be subsidies available to cover the costs of testing. Call our Customer Service Centre on 136 186.

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