

Livestock diseases following floods

There are a number of plants and diseases that thrive during and following wet conditions, which can have serious impacts on livestock.

Producers that are impacted by flooding should check their livestock for unusual symptoms of illness.

Animal diseases

Three-day sickness

Three-day sickness, also known as bovine ephemeral fever is spread by biting insects. It can cause temporary or permanent infertility in bulls, loss of body condition, decreased calf-growth rates and milk production and abortion. In a small percentage of affected animals, it can be fatal.

Initial symptoms include signs of a fever, muscular stiffness, lameness, shivering, drooling saliva and discharge from the eyes and nostrils.

Treatment with anti-inflammatory drugs has been shown to reduce the course of the disease.

Consult your veterinarian for an appropriate anti-inflammatory drug, considering the withholding period of the drug for meat and milk.

Akabane

Akabane is spread by midges which affects the nervous system of foetus in pregnant females. It causes deformities such as limb malformations and brain lesions in calves.

Diagnosis cannot be made until a calf is born. There is no successful treatment or means of control. In an area known to be endemic, breeding stock should be introduced to the area at an early age to gain immunity prior to joining.

Blackleg

Blackleg most commonly affects young, fast-growing cattle younger than two years of age. It is caused by bacterial spores from contaminated environments entering the animal through small wounds or being ingested. This disease may not occur immediately and it may be some time before symptoms of the disease show. Erosion and movement from floods provide favourable survival conditions for blackleg spores.

Common signs include fever, severe depression, gassy swelling under the skin or in muscles even before death, or sudden death usually with rapid bloating of the carcass.

Vaccinations are highly effective in preventing the disease if a full course is given.

Leptospirosis

Leptospirosis is most commonly found in warm, wet climates and affects all farm animals, including dogs and horses. It is generally spread by the urine of infected animals, either through ingestion or contamination of cuts and abrasions.

The disease can be fatal and common symptoms include fever, abortion, infertility and weak newborns. In young animals, disease can result in severe depression, high temperature and blood in

the urine. In cattle, a specific form of mastitis known as 'milk-drop syndrome' can occur. Horses can develop blindness due to inflammation of eye tissues.

Even if already infected, vaccination can prevent clinical leptospiral disease from developing, though the animal will remain infected and able to transmit disease organisms, albeit in reduced numbers.

Botulism

Botulism is a progressive paralysis and is generally fatal to livestock. Botulism is caused by the ingestion of a toxin found in rotting animal and plant material including carcasses.

Following floods, decaying vegetation and carcass materials can be a source of botulism toxin. Animals may consume decaying material inadvertently, or deliberately if hungry or when protein or phosphorus deficient.

Maintaining an up-to-date vaccination program is the best approach to preventing botulism. Phosphorus supplementation may also assist.

Equine Infectious Anaemia

Equine infectious anaemia (EIA) is a viral disease found in horses which is transmitted by biting flies and some mosquitoes. Central and Western Queensland river systems are known to be areas of endemic EIA infection. The increase in biting flies following flooding can be expected to result in an increased transmission of EIA.

It can present as a very mild condition up to an acute disease resulting in death

Symptoms include temperature rise (often with fluctuations), jaundice, anaemia, wasting, and may be of long duration with no response to treatment. Owners are advised to take some preventative measures, such as testing of horses and removal of known infected animals.

Plant poisoning in livestock

Toxic plant seeds can become displaced during flooding and spread easily, prompting new growth in areas previously not infested.

Crotalarias

There are 33 species of Crotalaria known in Queensland. Most of which are toxic to livestock. Crotalaria predominantly cause Pyrrolizidine alkaloid poisoning but are also responsible for Chillagoe horse poisoning aka oesophageal ulceration of horses (see *C. aridicola* or *C. medicaginea*) and Kimberley horse disease (also known as walkabout disease). Whilst some species are not toxic, all Crotalaria should be treated as potentially lethal.

Common signs of crotalaria poisoning in cattle include poor growth or wasting, jaundice, weakness and collapse, aimless walking, staggering and apparent blindness. Skin irritation and reddening

(often progressing to some skin death), drooling and diarrhoea occur occasionally.

Horses affected by crotalaria poisoning show similar symptoms to cattle, but can also experience paralysis of the tongue and larynx and breathing difficulties. Two species of crotalaria are known to cause ulcers in the oesophagus of horses which results in inability to swallow food and water.

In most cases damage, is generally permanent but some animals can recover with supportive therapy that includes good feed and nutritional supplements if discovered early.

Grasses and sorghum

Common plants can also become toxic during overcast conditions or if plants are stressed or wilted,

Under these conditions, urochloa grass, button grasses, sorghum species and the common native couch grasses can accumulate nitrites or prussic acid that are toxic to livestock.

These grasses and sorghum species can be fatal to livestock, but prompt treatment can save affected animals.

Signs of nitrite poisoning from ingesting urochloa and button grasses include rapid, gasping breathing, bluish/dark gums, convulsions and muddy brown looking mouth and eyes. Affected livestock may also walk through fences or into objects.

Signs of poisoning from prussic acid, which can build up in native couch grass and sorghums, include rapid deep breathing, salivation, a rapid weak pulse, muscle twitching or trembling, spasms, staggering and sometimes a bluish discolouration of the gums.

If you notice any of the above symptoms in your livestock seek advice urgently. Some plant toxins can be fatal within the hour, therefore in many cases urgent action may be the key to saving animals.

Plants and insects

There are a number of other plants and insects which can have serious impacts on livestock following flooding.

Worrisome insects

Populations of biting insects usually increase significantly following significant rain falls. These insects include buffalo fly, midges, mosquitoes and some biting flies.

Persistent biting can cause distress to livestock and result in loss of production due to excessive walking and failure to feed properly.

If your animals are experiencing insect worry issues and you can access them, you may need to consider chemical treatment.

When using chemical treatments, always refer to the directions on the chemical label. The label gives directions on the species that can be treated, dose rates to use, retreatment intervals and withholding periods to observe before sale for slaughter or export.

Flystrike and lumpy wool

Prolonged wet produces conditions favourable to flystrike in livestock. Sheep in particular can be severely affected.

Flystrike causes wounds or sores that often become infested with maggots. Affected sheep often present with weeping wounds with a very strong smell, and staining surrounding wool. Common sites include the breech and around the pizzle of wethers and rams.

Prolonged wetness of wool can also lead to skin infections, the most common of which is lumpy wool in sheep. While mild infections may not cause serious discomfort to sheep, lumpy wool can predispose affected sheep to flystrike and can also cause difficulty at shearing.

Lumpy wool produces hard lumps, scabs and crusts in the fleece of affected sheep causing them to develop a ragged or lumpy appearance. Small scabs on the skin along the edge or upper surface of the ears and on the lips, face, shanks and scrotum may also appear. In extreme cases, the whole skin surface may be covered by scabs.

For small numbers of struck sheep, it may be possible to catch and treat individuals in the paddock. However, for larger numbers, yarding with crutching and/or chemical treatments may be more appropriate.

Worm infestations

Floods provide favourable moist conditions for worm eggs and larvae on pastures. Increases in worm infestations are likely in the immediate post-flood period while animals are still under stress and where they may be congregated for feeding or treatments.

Worm infestations can result in a failure to thrive and in serious cases can cause death. Symptoms of worm infestations include scours, diarrhoea, soiled tails and pale gums.

Sheep, in particular, may fail to move about in wet conditions, causing a build-up of worms in a short period of time. Goats can also succumb rapidly to worm infestations and should be monitored closely.

Unless already weakened by other diseases, most adult cattle will have sufficient immunity to resist infestation. Younger cattle are prone to become infested, show signs of disease and loss of production.

A worm check test should be carried out to confirm infestation. To perform a worm check test, collect approximately 30grams (a heaped desert spoon) of fresh faeces into a sample bottle (or small clip seal bag) and chill (don't freeze). Submit the sample to a veterinary laboratory through your local veterinarian or Biosecurity Officer as soon as possible. To give an indication of worm status, collect

10-20 fresh faecal samples from a mob. If worm infestation is diagnosed, treatment should be given as soon as possible as losses can occur within days.

Cattle ticks

Cattle ticks thrive in, warm and humid conditions. With a rise in tick numbers, there may also be an increased risk of tick fever, especially if tick numbers have previously been low or cattle have been introduced but not yet been challenged.

Tick fever can cause severe disease with animals showing depression, weakness, staggering, jaundice, increased temperatures and occasionally red urine. Without treatment, tick fever can be fatal.

It is recommended that owners undertake regular monitoring of stock and implement a vaccination program to provide stock with sufficient immunity.

Not all cattle ticks carry and transmit tick fever organisms, so it is possible for an animal not to be exposed to tick fever even when there have been moderate tick population on the property. Cattle owners with unvaccinated stock should remain vigilant if tick numbers suddenly increase after having been minimal over previous years as a large proportion of the herd may not have been exposed and become naturally immune to tick fever.

Whilst transmission of tick fever cannot be prevented by using acaricides to control ticks, it is still important to treat for ticks to prevent large burdens infesting cattle and to prevent further build-up of tick populations in the paddock.

Hoof abscesses in horses

Horses can experience hoof abscesses throughout extended periods of wet weather. Softening of the hooves due to contact with wet ground predispose the hoof to problems. Bacteria or foreign matter including sand, gravel or silt can enter the hoof and cause infection in the soft tissue via:

- a separation in the white line (sole-wall interface)
- penetration of the sole (bottom of the foot)
- hoof wall cracks
- old nail holes.

If affected, horses will usually become lame quite suddenly, varying from mild to non-weight bearing lameness. The hoof will also be hot to touch and if left untreated, the abscess can burst through at the coronet band. You can reduce the likelihood of hoof infections, and abscesses, by taking some basic precautions.

Precautions include:

- Move horses from flood affected or muddy areas. Horses need to have firm dry footings where their hooves can dry out.
- Keep hooves (including soles) clean of mud and manure. Disinfecting hooves that have been exposed to floodwater or mud can also help.
- Make sure proper hoof care is carried out, concentrating on a strong healthy white line. If unfamiliar with hoof care, obtain the services of a farrier or veterinarian.

More information

Contact your veterinarian If you:

- notice unusual symptoms in your animals
- suspect plant poisoning
- require advice on specific treatment products and how to administer them
- for more information about flystrike, lumpy wool and worms.

For further information on flood related animal and plant diseases and tick fever vaccinations call Biosecurity Queensland on 13 25 23 or visit www.biosecurity.qld.gov.au