

# Effects of volcanic eruptions on livestock and animals

Volcanic eruptions can cause a variety of issues for livestock and animals. Two of the most prominent concern water and feed supply. If animals are unable to access fresh feed and water, it can lead to dehydration and starvation. Other issues include injuries from falling debris, burns, respiratory issues, eye and skin irritation, teeth and hoof abrasions and gastrointestinal blocks due to ingestion of ash<sup>1</sup>. The information below will help safeguard livestock.

## FEED

- In areas where ash has contaminated the landscape, livestock will need to be provided with clean feed and water. Depending on the amount of ashfall, different animals will be affected in different ways. For example, sheep are more likely to be affected, even with light ashfall, due to their close-to-the-ground grazing habits<sup>2</sup>.
- Ash cover can cause animals to stop feeding and drinking. If possible, relocate animals to places with clean water and access to clean supplementary feed and water. The feed should be protected by covering it and ensuring no other animals can access it<sup>2</sup>.
- Though ash often physically impacts animals, its chemical composition can impact overall animal health. It contains minerals and elements such as fluoride, selenium and sulphur that can cause health problems. Fluoride toxicity is the most common issue. Symptoms include animals collapsing, convulsions, hair falling off around the mouth and lesions around the nose and mouth. High sulphur concentration in the ash may also induce copper and cobalt deficiencies<sup>2</sup>.

## SHELTER AND CARE

- Adequate shelter for the animals should be provided to ensure they are not exposed to inclement weather and to reduce stress. Each species should be considered separately when assessing the shelter requirements. For example, chickens and ducks will need to be provided with protection from predators and provided with dry raised areas to roost.
- The age of animals is also important when providing care. Young animals are more likely to be affected and special care should be given to them.
- Any livestock that have strayed or are introduced into the herd (during restocking) should be housed separately for an initial period to avoid introducing diseases. If animals are evacuated to other areas, care should be taken to keep them away from new livestock in these areas.

### References and further information

1. Volcanic ashfall impacts working group [https://volcanoes.usgs.gov/volcanic\\_ash/animals\\_livestock.html](https://volcanoes.usgs.gov/volcanic_ash/animals_livestock.html)
2. Beef lamb New Zealand [https://volcanoes.usgs.gov/volcanic\\_ash/animals\\_livestock.html](https://volcanoes.usgs.gov/volcanic_ash/animals_livestock.html)

