



21 April 2010

Guidelines for livestock owners in areas where there is downfall of volcanic ash

Farmers are advised to follow closely information in the media regarding possible downfall areas. A simple way to monitor downfall on own farm is to put out a white dish. Once downfall of ash is established the recommendation is to put all animals that are outside into stables and feed and water the animals inside during the downfall period and as long as the ash persists on the ground. In Iceland, most sheep and cattle are kept indoors over the winter. However, it is more common to keep horses outside where they have wind shelters and are fed baled hay. Horse owners are urged to provide their animals that are kept outside with plenty of hay and clean running water and prevent the animals from grazing contaminated ground and drinking from stagnant pools or ditches. Most farms in Iceland are connected to safe water supplies from underground sources, but where this is not the case, it is important to prevent ash and surface water from reaching the water supplies, for both Public and Animal Health reasons and safe milk production.

The main problem that can arise from the downfall of volcanic ash is from high content of fluoride in the ash. Intake of fluoride is known to cause problems in bones and teeth, especially in growing animals. Problems with calcium metabolism is also known. The ash can also have mechanical effects on feet and teeth of the animals and cause problems in respiratory and digestive systems.

The fluoride content of the ash from the volcano in the Eyjafjallajökull glacier in samples taken on the first day of the eruption was 25 – 35 mg/kg (dry ash), which equals 700 – 1000 mg/m² in a layer of ash of 1 cm thickness.

Samples collected April 19th show same composition as early in the explosive phase, but fluorine content is considerably higher. Samples collected April 19th have 850 mg/kg (initially it was 25-35 mg/kg). This is due to the change in eruptive style – tephra is now not washed to the same extent by water in the eruptive plume.

The Icelandic Food and Veterinary Authority will publish on its website www.mast.is further information, as it becomes available.

On behalf of the The Icelandic Food and Veterinary Authority,

Halldór Runólfsson
Chief Veterinary Officer