

Lecture 11

HEALTH AND DISEASE MANAGEMENT

Health Problems Associated with Pasture and Range Feeding

A disease is any process which disrupts an animal's normal function. There are different types of diseases and there are different routes to which these diseases are transmitted. Some are transmitted through

- 1) Ingestion
- 2) Inhalation
- 3) The skin
- 4) Infection from fomites (fomites are objects which can convey infectious organisms e.g. beddings, vehicles, harnesses etc).

Some important diseases of animals arise as a consequence of their environment or the way they are managed by their owners. These include infectious diseases, metabolic disturbances, nutritional deficiencies and imbalances poisons and others.

Poisons

Diseases caused by poison are amongst the most troublesome to diagnose because of the difficulty to detect and identify the poison. Poisoning can be divided into two biological toxins and non- biological toxins.

Plant poison: There are numerous plants in pastures that are poisonous to livestock. The poison of these plants are mostly secondary compounds not involved in plants basic metabolism and they often have a bitter taste e.g. alkaloids and cardiac glycosides which makes them unpalatable. Grazing animals usually ignore poisonous plants but may be forced to overcome their aversion to eat them under certain circumstances such as:

1. Drought
2. Overstocking
3. Prolonged dry season
4. Range fires
5. Unfamiliar grazing
6. Condition of the livestock

Diarrhoea

Diarrhoea occurs in many diseases and is not itself a specific disease. Diarrhoea is often a major problem and is usually caused by a few specific micro-organisms, either singly or in combination. Neonatal diarrhoea (diarrhoea in young domestic animals) for example can be caused by bacteria, viruses and protozoa. It can also be caused due to gastro-enteritis. Helminths of the stomach and intestines can cause varying degrees of inflammation to the lining of the stomach and intestine resulting in diarrhoea leading to an additional loss of nutrients which pass too quickly to be digested. Roundworms are particularly important in this respect.

As a result of excessive fluid retained in the intestine, this fluid is passed out in the faeces which are watery and passed frequently as a result i.e. diarrhoea. If the organisms cause haemorrhage in the intestines, then the diarrhoea may be stained with blood i.e. dysentery. In diarrhoeic animals, if fluid lost into the intestines exceeds fluids taken in by drinking, the kidneys attempt to compensate by concentrating the urine which is reduced in output. If this fails, dehydration (which is the reduction in the body tissue fluid and the blood thickening) occurs. It is generally accompanied by weakness, loss of appetite and low body temperature.

Diarrhoeic animals should be isolated from others. Electrolyte solution should be administered as a drench to replace lost fluid. Pens, yards, stalls should be cleaned out to prevent faecal contamination of beddings etc. Overcrowding should be avoided.

Bloat

Bloat is the distension of the rumen with gas. The left side of the abdomen behind the ribs becomes swollen. In some cases, Animals are distressed and have difficulty in breathing and may die if untreated.

There are two types of bloats

Frothy bloat and Gassy Bloat

Other aspects to be discussed are a) Helminths b) Snake bite