

# Farm Newsletter January 2024

# **NADIS Sentinel Farms**

NADIS (National Animal Disease Information Service) are looking for Sentinel Farm to help them monitor presence, emergence, and timings of diseases across the country. It involves being part of a WhatsApp discussion group with Phillipa Page (Flock Health Ltd.), Nikki Hopkins (British Cattle Veterinary Association President) and a select number of other farmers, to inform them when diseases such as fly strike and fluke are being seen in your area. All information is used anonymously.



If you are interested in joining this group, please let someone at Ardene House Vet Practice know and we can put you in touch. This information helps parasite forecasting across the country.

# Pre-calving nutrition

Metabolic profiling in cattle allows us to check how their diet is working for them. Pre-calving nutrition is an area we can target to maximise colostrum quality, prevent calving diseases, and aid recovery to improve fertility.

#### **Protein**

- poor quality silage and straw based diets are low in protein.
- low protein reduces colostrum quality and milk yields, impacting calf health and growth rates long-term.

#### Energy

 diets low in energy can result in small calves, poor milk production and increased mobilisation of fat stores, which leads to liver damage and poor fertility.



# Magnesium

- low magnesium increases risk of slow calvings, "staggers" (hypomagnesaemia) and "milk fever" (hypocalcaemia from decreased calcium mobilisation).

#### **Trace elements**

- copper, selenium, and iodine levels can also be checked.
- these can limit fertility, growth rates and immune system function.
- Cow selenium levels are important in the development of **White Muscle disease** in calves.

Samples are best taken **one month pre-calving** in order to give time to correct deficiencies.

### White Muscle disease

White muscle disease is caused by a selenium deficiency occurring from diets grown in deficient soils. It is commonly seen in Aberdeenshire. This condition can also be seen in fast growing lambs and kids born to deficient dams.

# Development

- Selenium acts as an antioxidant for muscles, and muscles become damaged through normal use.
- It can affect the breathing, heart or skeletal muscles and can present at birth or at turn-out.
- Fast growing animals are at the highest risk.

#### Risk factors

- Grazing pastures or eating forages grown in selenium deficient soils
- Calves born to cows with selenium deficiency are at risk of White Muscle disease.

#### Signs

- Still births.
- Weak calves that have a poor suckle reflex and appear slow.
- Calves at turn-out:
  - Sudden death
  - Stiffness and reluctance to stand.
  - High breathing rate
- On post mortem muscles are very pale and dry

### Prevention

- Ensuring cow selenium intakes
  - Oral bolusing
  - Mineral mixes
    - Check cows are adequately supplemented by taking blood samples pre-calving
- Supplementing calves
  - Injectable preparations (different products have different doses, always check)
  - o Timing depends on farm history and can be given when handling calves:
    - At calving
    - At disbudding
    - At turnout

Discuss with the team at Ardene House how to ensure you are protecting your calves against White Muscle disease.