

#### NADIS Parasite Forecast webinar: April 2019

- Sheep
  - Parasitic gastroenteritis (PGE)
  - Nematodirus forecast
- Cattle:
  - Parasitic gastroenteritis (PGE)
  - Lungworm vaccination
- Chronic liver fluke infection



#### About this webinar

- The NADIS Parasite Forecast is published monthly
- Based on detailed Met Office data
- Supported by Quality Meat Scotland (QMS)
- Many thanks to Phil Scott and others for their clinical images



# Weather summary

NADIS



#### Temperature

(as °C Above/Below Regional Average 1981-2010)



February 2019



December 2018 – February 2019

#### Rainfall

(as % Above/Below Regional Average 1981-2010)



February 2019



December 2018 – February 2019

Working to shape a sustainable and prospering Scottish Red Meat industry

## Sheep: Nematodirosis

- Infections pass directly from one season's lambs to the next
- Eggs survive over winter and develop the following spring
  - Temperature dependent
  - Mass hatch on pastures can occur
- Typically seen in 6-12 week old lambs
  - Sudden onset diarrhoea, anorexia, dehydration and death. Affected animals often have heavily soiled back ends
- Nematodirus risk forecasts:
  - The SCOPS forecast
    - Medium risk since beginning on March
    - High risk now emerging in some areas
  - The NADIS forecast is based on soil temperatures in March
    - Early hatch predicted in March and April





#### **NADIS** Animal Health Skills

#### Sheep: Parasitic Gastroenteritis

- Control of periparturient rise (PPR) in ewes
  - Increased egg output by pregnant ewes around lambing



**Duration of Pregnancy & Lambing** 



### **Sheep: Coccidiosis**

- Growing lambs 4-8 weeks
- Protozoal (single celled) parasite
- Accumulation of infective "oocysts" in the environment
- Housed and grazing animals
  - Anorexia, weight loss, diarrhoea (with or without blood) and death
- Disease associated with:
  - High intensity husbandry systems
  - High stocking densities
  - Stress factors
    - E.g. poor colostrum supply, adverse weather conditions, extended housing periods etc.





### Sheep: Advised actions

- Monitoring for disease
- For nematodirosis:
  - Consult the <u>SCOPS</u> and NADIS *Nematodirus* forecasts to determine peak risk period
  - Avoid grazing high risk pasture during risk periods
  - Where treatment is indicated group 1-BZs are usually effective
- For PPR in ewes:
  - Avoid blanket treatment
  - Leave a proportion of ewes untreated (around 10-20%)
  - If choosing to treat with ewes with a group 3-ML, seek veterinary advice first
  - Providing high protein feed in the run up to lambing can help to reduce egg shedding
- For coccidiosis:
  - Reduce stocking densities, batch rear lambs and avoid heavily contaminated pastures/premises
  - A number of anticoccidial products are available for both prevention and treatment of coccidiosis
- For more information please speak to your vet or SQP



## Cattle: Parasitic gastroenteritis (1)

- Type-II ostertagiosis
- Affects untreated, housed young stock
  - Intermittent diarrhoea
  - Loss of appetite and body condition
- High mortality in affected individuals
- Group 3-ML and some group 1-BZ effective
- For more information, please speak to your vet or SQP <u>COWS group guidelines</u>.





## Cattle: Parasitic gastroenteritis (2)

- Calves and youngstock are at greatest risk
- Set stocking with strategic anthelmintic treatments
  - Start treatment within 3 weeks of turnout
  - Move to "safe" pasture (aftermath) later in the season
- "Wait and see" approach reliant on monitoring and diagnostic
  - Use of pasture rotation to prevent significant pasture build-up
  - Targeted selective treatments based on weight gain and/or body condition score or worm egg counts
- Consider performance testing, diagnostics and treatment efficacy testing
- For more information speak to your vet or SQP and see the COWS group website









#### Lungworm vaccination

- Consider on farms with a history of disease
- "Live" vaccine
  - Order fresh for the current grazing season
  - Plan and order required doses well in advance
- Young stock over 8 weeks being turned out
  - 2 doses, 4 weeks apart
  - Second dose is ideally given 2 weeks ahead of turnout
- For more information please speak to your vet or SQP







## Liver fluke infection (fasciolosis)

- Joint press release from COWS and SCOPS
  - Continued vigilance
- Monitor for signs of disease:
  - Weight-loss, anaemia and fluid accumulation (e.g. bottlejaw).
- Diagnostic testing:
  - Fluke egg counts
  - The coproantigen ELISA
  - Post-mortems and abattoir feedback
- Where treatment is indicated:
  - Consider use of a flukicide product other than triclabendazole
- For more information and advice please speak to your vet or SQP and see the COWS and SCOPS group websites







Photo credit: Ben Strugnell, Farm Post Mortems Ltd

#### **NADIS** Animal Health Skills

#### Quiz

#### Click on the link below to answer a short quiz and print your Advanced Livestock Skills certificate

