RAMA (SQP) – CPD Programme

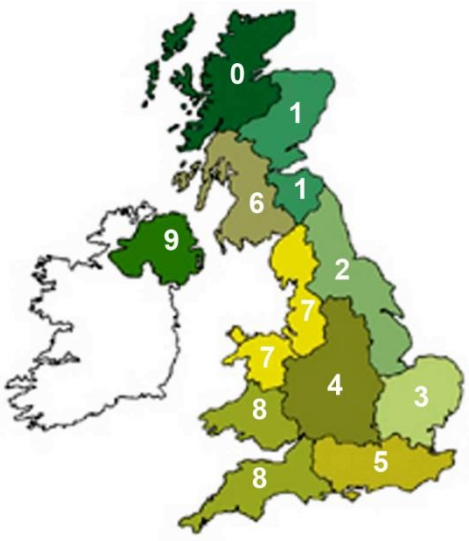
As part of AMTRA`s online CPD Programme for livestock RAMAs (SQPs), each month AMTRA will send you the Parasite Forecast which will highlight the parasitic challenge facing livestock in your area for that month. At the end of the Parasite Forecast you will find a series of multiple choice questions (quiz button) based on its contents. Answer the quiz online and you will be emailed a certificate with your score. This will form part of your RAMA (SQP) CPD requirement. The Parasite Forecast has been developed by NADIS (National Animal Disease Information Service) and is written by leading veterinary parasitologists and based on detailed data from the Met Office

NADIS Parasite Forecast – May 2020

Use of meteorological data to predict the prevalence of parasitic diseases

Regional Weather

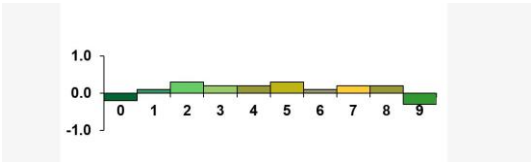
(based on Met Office figures)



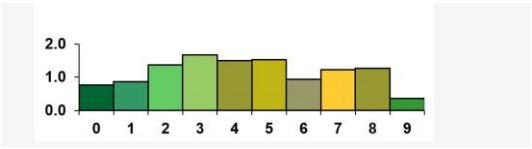
REGIONS

0	N W Scotland	6	S W Scotland
1	E Scotland	7	N W England & N Wales
2	N E England	8	S W England & S Wales
3	E Anglia	9	N Ireland
4	The Midlands		
5	S England		

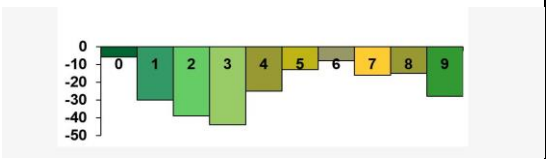
Temperature: March 2020
(as °C Above/Below Regional Average 1981-2010)



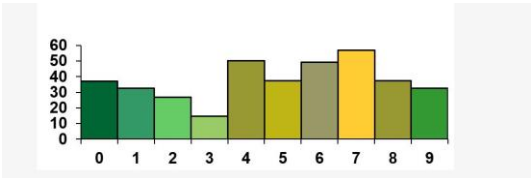
Temperature: January – March 2020
(as °C Above/Below Regional Average 1981-2020)



Rainfall: March 2020
(as % Above/Below Regional Average 1981-2020)



Rainfall: January – March 2020
(as % Above/Below Regional Average 1981-2020)



The most recent version of this monthly parasite forecast may be accessed at www.nadis.org.uk

Weather report

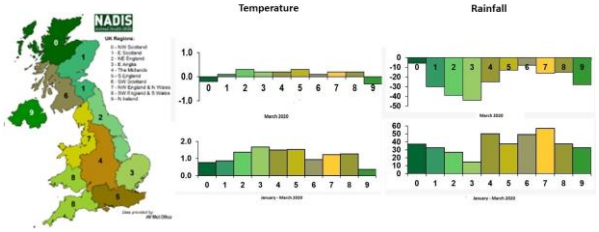


Figure 1: Temperature and rainfall by region for previous months.

March began cool and showery, with most areas seeing warmer, sunnier weather in the second half of the month. Mean temperatures and rainfall were similar to the average for 1981-2010. For the preceding three months, both temperature and rainfall were higher than usual for the time of year.

Chronic fluke infections

Advised actions:

- Monitor for signs of disease such as

weight loss, anaemia and fluid accumulation (e.g. bottlejaw)
- Ask for abattoir feedback and perform faecal egg testing (Figure 2)
- If treatment is necessary, avoid the use of triclabendazole at this time of year.

Figure 2: Chronic liver fluke (Photo credit: Ben Strugnell, Farm post mortems Ltd.)

SHEEP
Parasitic Gastroenteritis (PGE)

1. Nematodirosis

Peak risk for Nematodirus was forecast to be mid April for some parts of southern England, with the peak due to occur before or around the beginning of May in most other areas of the UK. Pastures grazed by last season's lambs should be considered high risk.

Advised actions:
- Consult the SCOPS and NADIS forecasts
- Avoid high risk pastures or use prophylactic treatment with a group 1 BZ
- Monitor for signs of disease including sudden onset diarrhoea, dehydration and death (Figure 3).
- Treatment with group 1-BZ is usually effective.

Figure 3: Nematodirus battus infection can cause sudden onset, severe diarrhoea in first season lambs

2. Other PGE-causing roundworms

Advised actions:
- Regular worm egg count testing in lambs to inform treatment (Figure 4).
- Monitor for signs of disease, particularly anorexia, diarrhoea, dehydration, weight loss and death.
- Treat ewes only if thin or in their first season
- To reduce disease risk in lambs later into the grazing season avoid turn-out onto pastures grazed by last season's lambs.

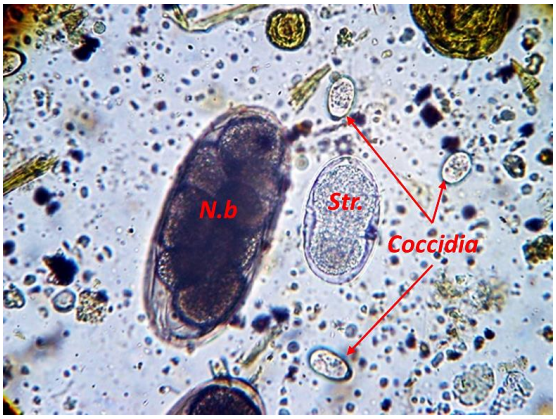


Figure 4: Faecal egg counts can be used to identify Nematodirus eggs (N.b) and those of other PGE-causing roundworms (Str.) as well as coccidial oocysts (arrows).

3. Coccidiosis

This can affect housed animals as well as those at pasture (Figure 5), and is associated with high stocking densities. Coccidiosis typically affects later born lambs aged 4-8 weeks. Signs include anorexia, weight loss, diarrhoea (with or without blood) and death in severe cases. Coccidial oocysts can be detected in faecal egg counts (Figure 4).

Figure 5: Coccidiosis can affect both housed and grazing lambs.

To reduce risk of disease outbreaks:

- Reduce stocking densities
- Avoid putting younger animals out to pastures heavily used by older lambs earlier in the year
- Ensure adequate provision of creep feed, particularly during bad weather.
- A number of anticoccidial products including feed medication are available for both prevention and treatment of coccidiosis.

Blowfly strike

Blowfly strike risk is currently low and an early start to the blowfly risk period is not forecast this year.

Figure 6: Blowfly strike is caused by adult female greenbottles laying eggs in wounds and soiled fleece. Maggots then hatch and cause extensive damage.

Figure 7: Wounds and footrot lesions are a common site for blowfly strike.

Advised actions:

- Consult the NADIS blowfly alert for up-to-date disease risk in your area and further advice on treatment and control strategies.
- Inspect stock daily for evidence of strike, particularly during high-risk periods.
- Keep sheep clean and in good condition to reduce the risk
- Application of a suitable product will give between 6 and 19 weeks protection by inhibiting the development of the fly larvae. See SCOPS for a list

CATTLE

Parasitic Gastroenteritis (PGE)

PGE most commonly results in suboptimal production, and as young cattle in their first two seasons are at highest risk, this may be shown as reduced growth rates. Anthelmintic dosing can be used either strategically or therapeutically.

For strategic dosing:

- Treatment should be started within 3 weeks of turnout onto contaminated pasture
- For example, a bolus wormer or long acting injection given once at turnout. Alternatively, a group 3 ML product with a persistence of 3-6 weeks can be given at turnout and then repeated after 6-8 weeks. A third dose may be needed if turn out was early.
- This approach will lead to selection pressure for anthelmintic resistance, therefore worm egg counts are useful to check treatment is effective

Therapeutic dosing:

- The aim is to reduce the amount of anthelmintics used and thus reduce selection for drug resistant worms. However, the down side is that pasture contamination builds up throughout the season and cattle are at risk of clinical disease as well as production losses
- Close monitoring is required to avoid significant losses
- Perform targeted selective treatment in animals felt to be at risk of losses

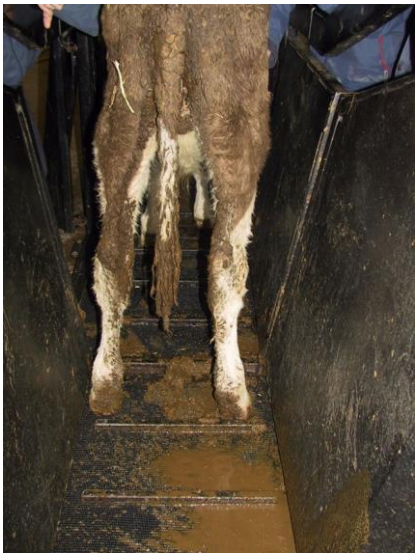


Figure 8: Common signs of PGE in young stock include loss of appetite, body condition and diarrhoea.

Lungworm

- If calves have been vaccinated against lungworm, avoid using long acting wormers until at least 2 weeks after the second dose. Turn vaccinated calves out onto lungworm-contaminated pastures in order to allow their immunity to be naturally boosted
- Alternatively, parasite burdens can be managed with strategic early season treatments or boluses, as for PGE

Ectoparasites: Fly and tick control

Figure 9: New Forest Eye ("pink eye" or infectious bovine keratoconjunctivitis) is a potentially serious bacterial infection of cattle which can be spread by nuisance flies.

Control options:

- Insecticide-impregnated ear tags and tail bands provide season-long protection against flies
- Pour-on, spot-on and spray-on synthetic pyrethroids can be used during periods of high fly activity

Don't forget to try the interactive quiz

Local farm conditions may vary so consult your veterinary surgeon. Parasite control should be part of your veterinary health plan.

To watch a webinar (video) based on this article and take an electronic quiz worth 3 CPD points, click WEBINAR

To see the full range of NADIS livestock health bulletins please visit www.nadis.org.uk

Control options:

- Insecticide-impregnated ear tags and tail bands provide season-long protection against flies
- Pour-on, spot-on and spray-on synthetic pyrethroids can be used during periods of high fly activity
- Some synthetic pyrethroid and group 3-ML products may provide protection against ticks, although these products do not carry a licence for this purpose.
- Fly traps and pasture management to reduce tick numbers.