RAMA (SQP) – CPD Programme

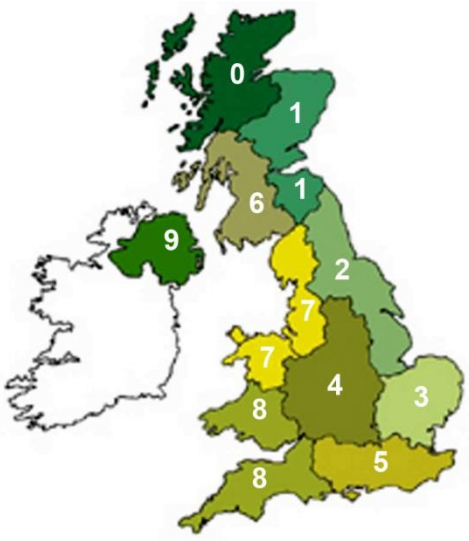
As part of AMTRA`s online CPD Programme for livestock RAMAs (SQPs), each month AMTRA will send you the Parasite Forecast which will highlight the parasitic challenge facing livestock in your area for that month. At the end of the Parasite Forecast you will find a series of multiple choice questions (quiz 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 – July 2020

Use of meteorological data to predict the prevalence of parasitic diseases

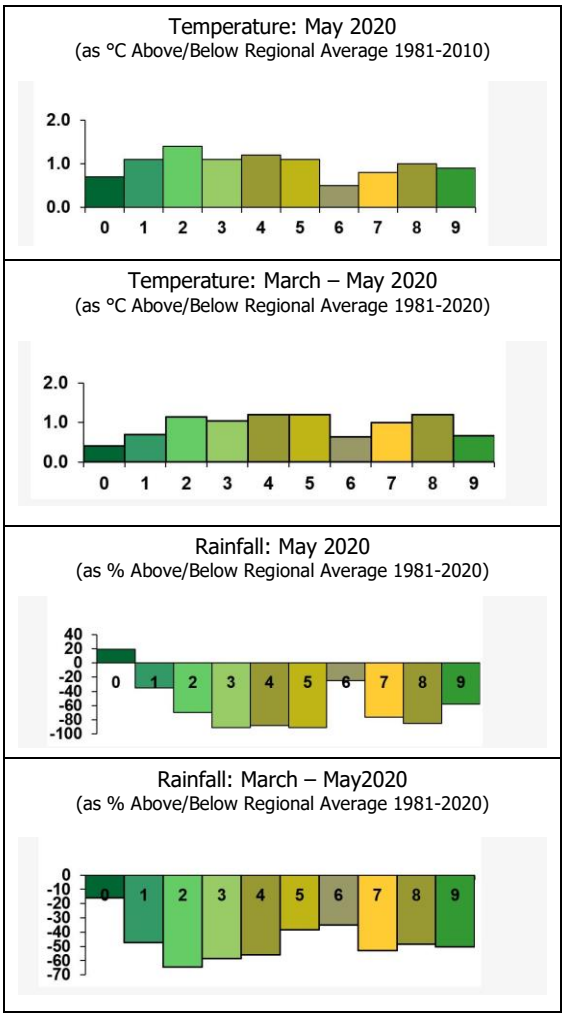
Regional Weather

(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		



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

Key points:

1. **Risk of PGE spike in grazing animals (sheep and cattle)**
2. ***Nematodirus* risk increasing inScotland and Northern Ireland**
3. **Blowfly risk increasing**

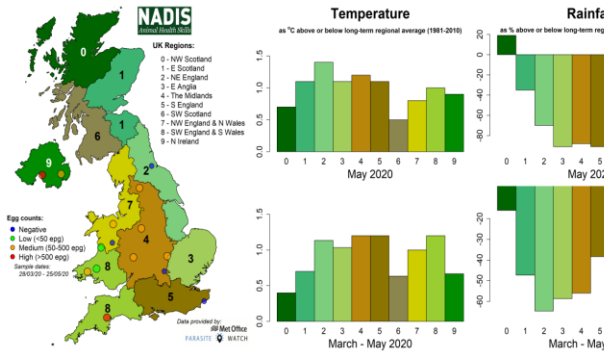


Figure 1: Egg count data shows the most recent counts for roundworms in sheep at each location between the sample dates stated. Temperature and rainfall by region for previous months.

May was exceptionally warm and sunny for most areas, with both monthly and 3 monthly figures warmer and drier than usual. (Figure 1).

SHEEP

Nematodirosis

The risk is forecast to be moderate to high in Scotland and Northern Ireland. Up-to-date risk in your area can be viewed on the SCOPS forecast. Lambs aged 6-12 weeks are at highest risk. Monitor for signs of disease (depressed, diarrhoea, very thirsty, rapid weight loss). If necessary, treat with a group 1-BZ.

Parasitic Gastroenteritis (PGE)

Weaning lambs are at greatest risk from PGE during the summer months, as they graze more and the pasture gets increasingly contaminated with parasite larvae. Look out for a spike in infection caused by the long hot dry spell followed by recent wet weather.

Earlier weaning could be one option to reduce the threat, but only if safe pasture (e.g. recently grazed by cattle, or silage aftermath) is available. Faecal egg count (FEC) testing is vital to understand which groups are most affected, and to prioritise the groups that need treatment the most. A mixed sample from 10-12 animals per group, taken every 2-4 weeks, is recommended. If treatment is carried out at weaning, it is recommended to leave the lambs on the same pasture for 4-5 days and instead remove the ewes. This will help avoid development of resistance. “Dose and move” is no longer recommended.

For lambs grazing permanent pasture, treatment is likely to be needed, but to reduce resistance, leave some animals untreated. Body condition score, weight gain or FEC can be used to decide which animals would benefit most from treatment. At least 10% of the flock should be left untreated, but in practice you may only need to treat 40-60%.

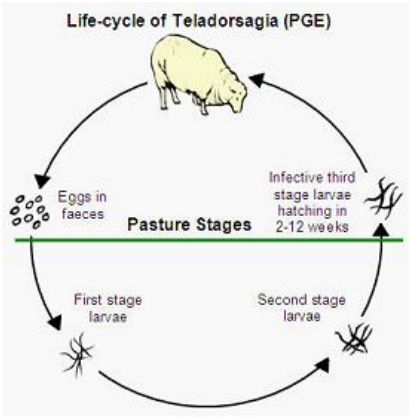


Figure 2: Pasture contamination results from the development of eggs passed in faeces to infective stage larvae. Without appropriate control, large numbers of eggs and warmer temperatures later in the season can lead to high levels of pasture contamination and disease.

Haemonchosis

Haemonchus contortus or the barber’s pole worm is another type of roundworm. It has become more widespread in the UK in recent years, possibly as a result of climate change. It feeds on blood and can cause sudden onset disease, with signs similar to liver fluke. High worm burdens can cause acute disease with anaemia and sudden death. In chronic disease, weight loss, decreased appetite, and anaemia are seen.

Diarrhoea is not a sign of this parasite. Both ewes and lambs are at risk.

Figure 3: Pale mucous membranes of the eyes are an indication of severe anaemia.

Haemonchosis can be treated with most anthelmintic products.

Moniezia tapeworms

Adult tapeworm segments may be seen in the faeces of lambs during summer months (Figure 4).

Moniezia species tapeworms are not thought to cause disease in most cases. Roundworm treatment with a white drench (1-BZ) is generally effective.

Figure 4: Tapeworm segments (Moniezia) are commonly seen in faeces passed by lambs during the summer months.

Blowfly strike

As of the 19th June, there was a medium risk of blowfly strike across most of the UK according to the NADIS blowfly alert. However, warm wet weather is ideal for blowfly strike so at this time of year, even though fly numbers have yet to peak, strike risk is increasing rapidly. Heavy summer rain makes ewes and lambs highly susceptible because fly eggs and maggots survive better in wet wool and a wet animal may be struck sometimes even though treated with the best of preventative products, so vigilance is needed to spot struck animals quickly.

Footrot, minor injuries and soiling due to PGE provide a suitable place for female blowflies to lay their eggs. These then hatch into maggots which feed on live flesh, and cause severe pain, debilitation and potentially death. The fly eggs hatch more quickly in warm humid conditions.

A number of chemical formulations can be used to aid in the prevention of blowfly strike. These should be used in conjunction with the management points listed above.

CATTLE

Parasitic Gastroenteritis (PGE)

The situation with PGE in cattle is similar to that described for sheep, although the worms that cause disease are different. Calves and youngstock in their first or second grazing season are at greatest risk of PGE (Figure 5).

As for sheep, the long dry spell followed by the recent wet weather may cause a spike in infectious larvae on pasture. Either strategic anthelmintic dosing (every 6-8 weeks until clean pasture becomes available) or a therapeutic treatment strategy (treatment only of animals that are thought to be at risk based on body condition or weight gain) can be used to control disease.

Figure 5: Clinical cases of PGE are typically characterised by loss of appetite accompanied by a profuse, green diarrhoea affecting large numbers of animals.

Lungworm

Lungworm infection (or “husk”) can occur from June onwards.

Unvaccinated calves and those not part of strategic dosing programmes should be considered at risk. Older cattle may also be at risk if they have not had chance to develop an effective immune response previously.

Advised actions include:

- Monitor for disease:
    - Widespread coughing in the group
    - Increased respiratory rate and difficulty breathing.
    - Rapid loss of weight and body condition
    - Milk drop in lactating cattle

    - Death
- Where infection is suspected:
    - Treat all animals within the affected group
        - Most anthelmintic products are effective.
        - Severely affected animals may require additional treatments (eg. anti-inflammatories and antibiotics)
    - Affected cattle should be removed from contaminated to "safe" pasture (e.g. aftermath) or housed in a well-ventilated building.
    - Infection can be confirmed by:
        - Post-mortem of dead animals
        - Presence of larvae in saliva or faecal samples (Figure 6)
        - Serum and milk sample antibody ELISAs are also available.

- For more information see "COWS" group guidelines and see our recent NADIS lungworm webinar.

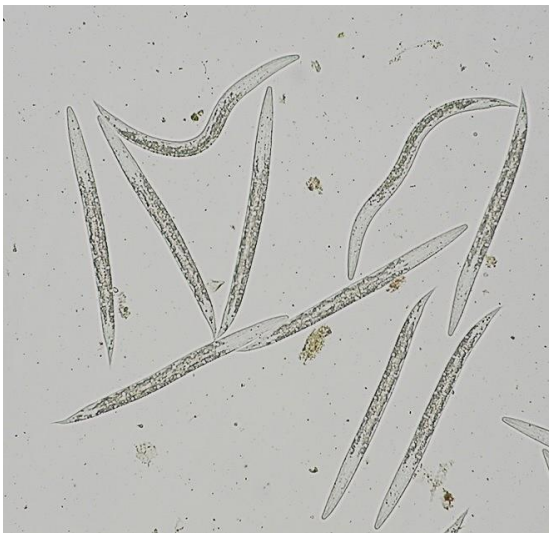


Figure 6: Lungworm larvae passed in the faeces of infected animals can be used to diagnose infection

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