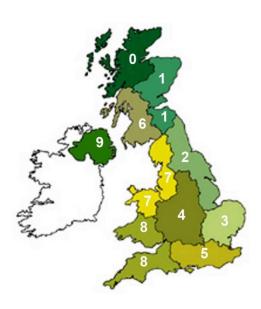
## **NADIS Parasite Forecast – April**

Use of meteorological data to predict the prevalence of parasitic diseases

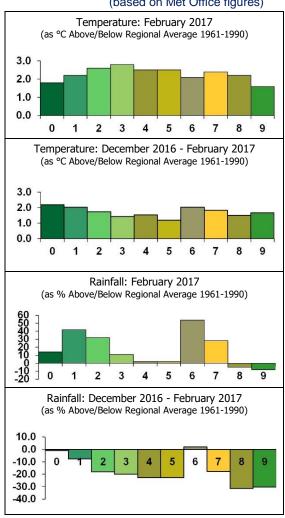
### **Regional Weather**

(based on Met Office figures)



#### **REGIONS**

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



February started mild and unsettled becoming colder with some snow in the second week. Mid-February onwards was mild turning wet and windy from the third week with snow to parts of Scotland. The UK mean monthly temperature was 5.3 °C; the ninth warmest February since 1910. Mean maximum temperatures were 1.0 -1.5 °C above average, with mean minimum temperatures more than 2 °C above over much of England and Wales, but nearer 1 °C above over much of Scotland. Rainfall was mostly near. or above, normal except in northern Scotland and parts of SW England.

## **April Parasite Forecast/Update**

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

#### SHEEP

#### Worming ewes at lambing time

- With lambing now well under way, attention should be focusing on controlling parasite burdens in ewes.
- The principle aim of worming ewes is to minimise the future contamination of pastures by worm egg output during the 'peri-parturient rise" (PPR).
- Eggs passed in the faeces of infected ewes hatch and develop into infective larvae, which can cause disease in lambs later in the season.
- Worm faecal egg output is much reduced in well fed ewes in good condition.

- Provision of 'safe grazing' for ewes and lambs available at turnout will also help avoid the risk of worm infections in lambs later in the season.
  - 'Safe' pastures should not have been grazed by lambs the previous year and include fields grazed by cattle last year; and re-seeded pastures.
- If only limited safe grazing is available, then this should be reserved for ewes with twin lambs whilst those with single lambs can graze the more contaminated pastures.
- As wormer resistance is becoming more common, advice on worming ewes is changing, influencing both the choice and frequency of treatment post-lambing.
- The timing and choice of wormer are both important in controlling the PPR, as the ewes can guickly become re-

- infected, particularly when grazing heavily infected pastures post turnout.
- Current worming advice recommends leaving a proportion of the ewes untreated by targeting treatments to include;
  - Gimmers and young ewes
  - Ewes nursing twins and triplets
  - Ewes in low body condition
- Ewes with single lambs or those in good body condition can be left undosed unless there is a risk from fluke or haemonchosis
- Persistent, or long-acting wormers, which provide a prolonged period of protection if given later in the lactation period before ewes become re-infected from the *in refugia* population can be highly selective for resistance.
- Worms in refugia include the population of worms present in untreated sheep and the free-living population of eggs and larvae not exposed to wormers.
- The recommendation for long-acting formulations of moxidectin, is to use these products prior to lambing, or at turnout.

Further details can be found on the SCOPS website at <a href="https://www.scops.org.uk">www.scops.org.uk</a>.



Ewe worming treatments should aim to reduce pasture contamination during the periparturient rise whilst at the same time not selecting for anthelmintic-resistant strains of parasites.



Some ewes nursing singles could be left untreated; seek veterinary advice for your farm.

#### **Nematodirosis**

- Severe outbreaks of nematodirosis can occur in 6 to 12week-old lambs usually from April to June in some years, depending on prevailing weather conditions.
- Cold late springs followed by sudden changes in temperature can trigger a mass synchronised hatch of infective larvae leading to severe production losses and even death in lambs grazing contaminated pastures.

- Monitor the SCOPS website (<u>www.scops.org.uk</u>) for regular updates on risk of disease in your area.
- As weather conditions during March and April can significantly alter early season predictions of nematodirosis for flocks lambing during March/April, an updated disease risk will be included in the NADIS May parasite forecast.

#### Nematodirus control

- Control is best achieved by grazing lambs on pasture not grazed by lambs the previous year ('safe pasture').
- Where this is not possible, and local weather conditions are such that an early hatch occurs, then late January/February-born lambs may need prophylactic anthelmintic drenching before the end of March. Consult the SCOPS website regularly for disease risk in your
- Late March/April-born lambs may require prophylactic anthelmintic drenching in May if prolonged cold weather during April delays hatching.
- While incidents of wormer resistance have been reported with Nematodirus, white drench (1-BZ) wormers are still generally recommended to control this parasite.
- As disease is primarily caused by developing larvae, faecal egg count (FEC) monitoring is unreliable in determining risk and the need to treat.
- When a white drench (1-BZ) wormer is used in outbreaks of nematodirosis, the FEC of several lambs should be checked 10 days later for the presence of other worm species, which if present, would require treatment with a wormer from another group.



Nematodirus infection in lambs. These lambs suffered a serious and costly check in growth rate.

#### **Coccidiosis**

- Outbreaks of coccidiosis may be encountered during April in lambs between 4-8 weeks of age, particularly in twin lambs grazing contaminated pastures.
- Coccidiosis is a disease of intensive husbandry with stress a major factor in triggering outbreaks of disease.
- Adverse weather conditions, poor colostrum supply, overcrowding, wet muddy paddocks previously grazed by sheep, and/or extended housing periods all predispose.
- Reduction of stocking densities, batch rearing of lambs, creep feeding and avoidance of heavily contaminated pastures/premises are measures that can be taken to reduce the risk of disease outbreaks.
- Disease prevention can also include strategic dosing lambs on contaminated pastures with diclazuril or toltrazuril at around 3-4 weeks of age, or administration of medicated creep feed containing decoquinate for 28 days.

#### Liver fluke

 Sheep on premises with known fluke populations, or in high risk areas, should already have been dosed in the autumn and early winter and may need to be dosed again this spring.

- Chronic liver fluke may still be encountered in sheep flocks and can be confirmed by checking for the presence of fluke eggs in faeces.
- On positive farms, the presence of fluke eggs in faecal samples reflects inadequate control of fasciolosis and control should be reviewed.
- Limiting pasture contamination with fluke eggs from patent infections will help reduce subsequent fluke challenge later in the year.
- Flukicides containing closantel, nitroxynil, oxyclozanide or albendazole (at the fluke dose rate), are all effective against adult flukes present during the spring and should be used to reduce reliance on triclabendazole.
- Sheep should always be moved to clean pastures after treatment; and supplementary feeding may be necessary to maintain condition.

#### **CATTLE**

#### **Ostertagiosis**

- Housed, yearling cattle not dosed in the autumn, may be at risk from type II ostertagiosis towards the end of the housing period.
- Prevalence of clinical disease is usually comparatively low and only a proportion of animals in a group may be affected.
- The disease presents as intermittent diarrhoea with loss of appetite and rapid loss of body weight.
- Mortality in affected cattle can be high unless early treatment with a wormer effective against both arrested and developing larval stages is given.

#### **PGE Control**

- Decisions should have been made on the parasite control plan for the forthcoming grazing season.
- Prevention of PGE in growing cattle on a sustainable basis is best achieved by annual rotational grazing (cattle/sheep/crops) but this is not often possible on many farms.
- Parasite control plans based on anthelmintic use may be strategic (early season dosing) or "wait-see" (monitor/treat in the latter part of the grazing season).

- To be effective, strategic worm dosing needs to be initiated at, or around turnout, to limit pasture contamination up to mid-July by which time the overwintered larval population should have declined to insignificant levels.
  - Strategic treatments include administration of a bolus at turnout. or administration of pour-on, or injectable macrocyclic lactones (MLs) at defined intervals.
- Cattle treated strategically should remain set-stocked, or moved to safe pastures (aftermaths) when these become available.
- If "wait and see", then ensure that effective, regular monitoring and diagnostic procedures are in place to act quickly if required.
- Where lungworm is a problem, there is still time to discuss control, including vaccination, with your veterinary surgeon before turnout in most areas.
- Vaccination of calves over two months-old requires two doses of lungworm vaccine four weeks apart with a second dose at least two weeks before turnout.
- For more information see the COWS (www.cattleparasites.org.uk) website.



Unless safe grazing is available, dairy calves and suckled calves born during the previous autumn require preventive treatment in their first full grazing season to control PGE

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

NADIS hopes that you have found the information in this forecast useful. Now test your knowledge by attempting the quiz below. You will be emailed an animal health certificate for this subject if you attain the required standard.

Click here

Health Quiz



### **Supporting Knowledge Transfer**

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