

NADIS Parasite Forecast



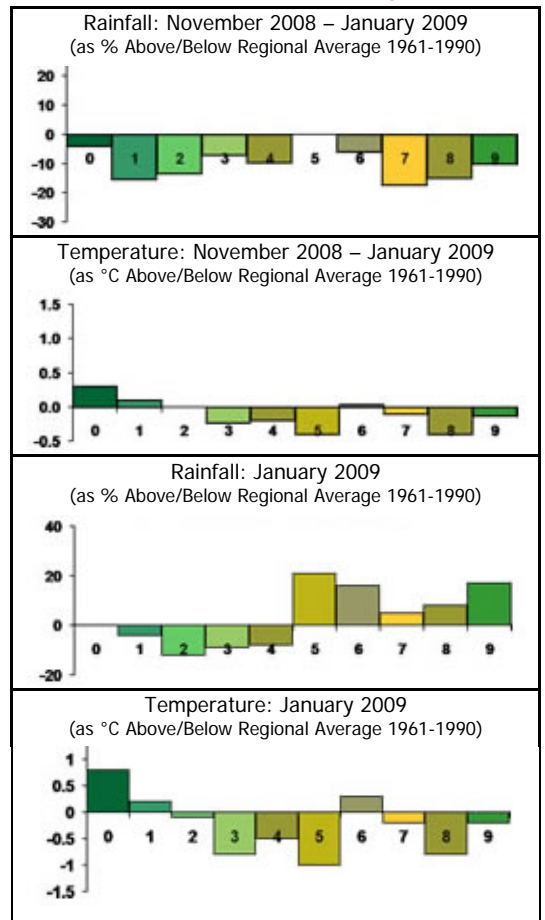
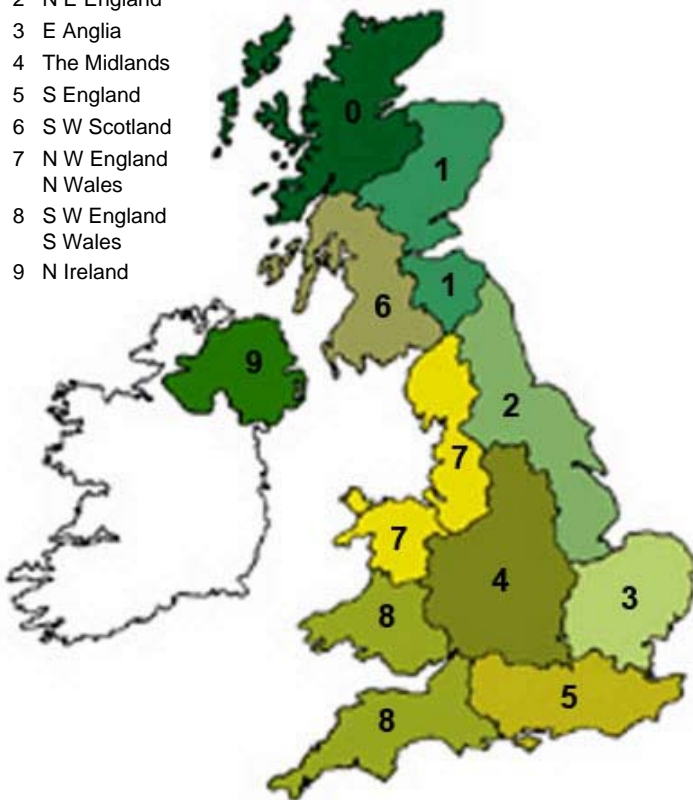
Knowledge transfer to farmers

REGIONS

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

March 2009

Regional Weather (based on Met Office figures)



January 2009

Mean temperatures were generally below the 1961-1990 average in England and Wales, particularly below a line between the Wash and the Mersey. However, mean January temperatures were slightly above the long-term average in Scotland, particularly in the north. The 3-month temperature figures follow a very similar pattern.

The rainfall picture was also mixed, with eastern regions receiving slightly less rain than expected, and western regions slightly more. Rainfall over the last three months has been below average in all regions other than the south-east and central southern England region, where it has been around the average figure.

February has started with heavy snow, freezing temperatures and widespread disruption to transport and other services. It is forecast to stay cold for the rest of the month.

March often begins and ends with wet and windy weather, with storms in the first and last week. The first of the spring anticyclones often appear in mid-month with sunshine during the day, and hard frosts at night. How these patterns will be affected by global warming is not clear. into May. The changing climate may affect this, however.

March Parasite Update and Forecast

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

This month there are early indications that 2008 may see a **high incidence of nematodirosis** in young lambs.

FLUKE

Stock on premises with a known fluke population will already have been dosed in the autumn/winter and should not need dosing again until later in the spring. Stock at grass in March may be exposed to fresh infection from overwintered metacercariae but levels should be low, particularly following the prolonged freeze over the winter. Most fluke present within host animals should be adult by now, so fluke egg counts at this time may be useful for the following:

- Diagnosis of disease: signs of chronic fluke may include ill thrift, anaemia, peripheral oedema (e.g. bottle jaw), reduced production, metabolic disease in dairy cows and terminal diarrhoea. Additional diagnostic methods include post mortem examination, biochemistry

(raised GGT, low albumin and raised globulin) and haematology (eosinophilia).

- Monitoring for fluke infection on farms with potential fluke habitats but no previous evidence of infection. Biochemistry and post mortem examination are also useful methods, as is serology, particularly in cattle, on serum or bulk milk samples.

Fluke eggs passed onto pastures in the spring will develop over the summer and produce infective metacercariae in the autumn. Both fluke and snail populations could be starting from relatively high levels this year, following two consecutive wet summers. Another wet summer could lead to very significant problems this year.

SHEEP NEMATODES

Nematodirus

In March there are normally very few cases of nematodirosis diagnosed. However, December and January mean UK temperatures have been below the long-term average this winter (see Table 1). If this trend continues through February, as it is forecast to do, and into March, then there is likely to be a late *Nematodirus* hatch leading to a **high risk of disease** in main-crop lambs later this year, typically in May and June. A nematodirosis forecast will be produced when March

meteorological data are available. However, there is a significant risk of a high incidence of nematodirosis this year. If possible, arrangements should be made to graze lactating ewes and lambs on pastures that did not carry pre-weaning lambs last year, as the nematodirosis risk on such pasture should be low. Otherwise, prophylactic treatments will be needed during the risk period, which will be discussed when the forecast is available

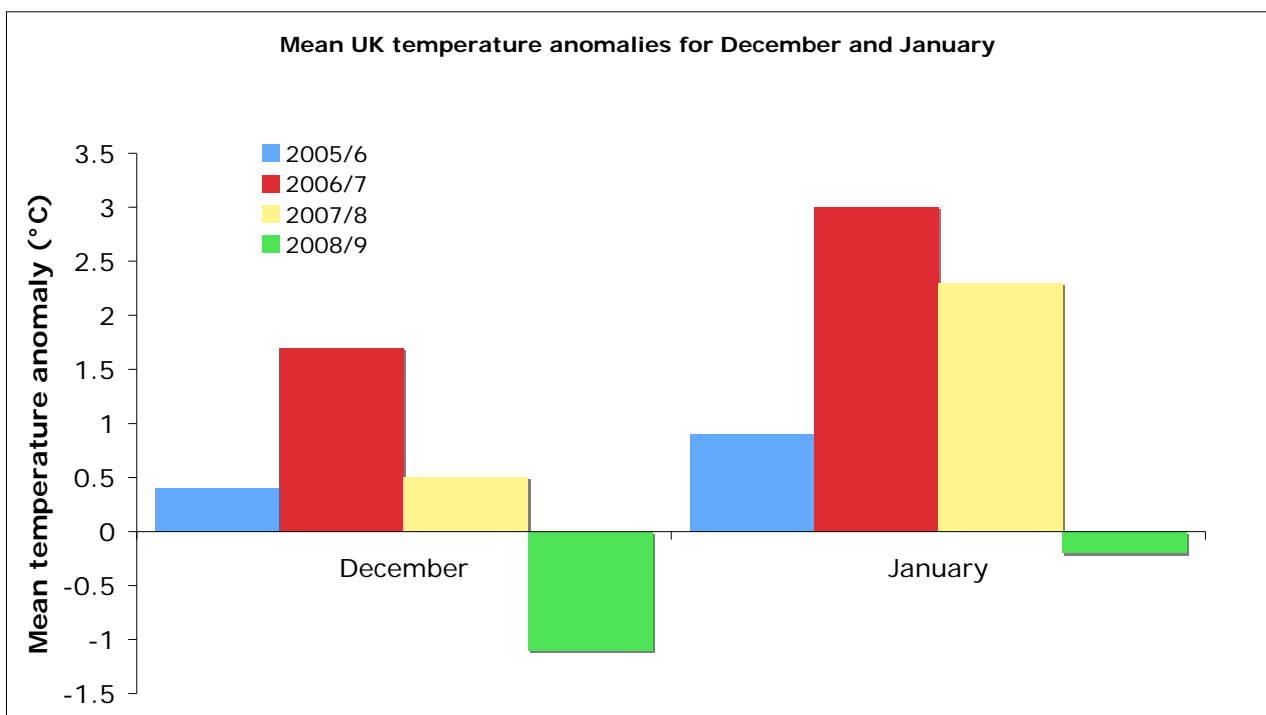


Table 1. The low December and January mean UK temperatures this winter give an early indication that this may be a high-risk year for nematodirosis

Parasitic Gastroenteritis

Parasite control should be planned between vet and client on an individual farm basis. The main aim around lambing time is to avoid the contamination of pastures by larvae developed from eggs passed by the peri-parturient ewes. Ewes on contaminated pastures may need a persistent anthelmintic to prevent immediate re-infection with overwintered larvae. The peri-parturient rise in faecal egg count of ewes turned out onto clean pasture can be controlled by a short acting anthelmintic before turnout. In order to avoid undue selection for anthelmintic resistance, SCOPS recommend that this dose be targeted so that not all ewes are dosed, and some anthelmintic-susceptible parasites are carried over onto the clean pasture. The dose may be targeted on the younger ewes, multiple bearing ewes, and/or those of lower condition score.

Many larvae that have overwintered on the pasture will be picked up by late pregnant or lactating ewes as well as early grazing lambs. Eggs passed by these animals

will maintain the infectivity of the pasture as the weather warms up, and lead to infective larvae being available as large numbers of susceptible lambs graze the pastures in early summer. Unless control is adequate, these infected lambs can give rise to the heavily infected pastures in late summer and autumn that cause clinical disease and reduced productivity.

High levels of rainfall in May, June and July are associated with a high late-summer peak in pasture larvae, and increased summer/autumn PGE. Drier conditions during this period, although often associated with fewer PGE problems overall, have been associated with more late autumn/winter disease and a larger overwintering larval population surviving into the following spring. Overwintering pasture larval populations may therefore be somewhat lower this year, due to last year's wet summer, although many other factors will influence this.

Coccidiosis

This is a significant risk in March, usually in intensively reared January and February born lambs, particularly in heavily stocked sheds and paddocks. Lambs show scour, dullness, dehydration, weight loss and abdominal pain. The earlier-born lambs pick up infection passed by the ewes and increase the environmental contamination, often without becoming ill. Disease is then more common when later-born lambs are exposed to this increased level of infection. Adverse weather conditions leading to poor colostrum supply, poor grass

growth, wet muddy paddocks and/or extended housing periods can increase incidence.

Control is best achieved through avoiding overcrowding or stress. Hygiene during the lambing period will keep oocyst numbers down. Later lambs should graze different areas to the earlier lamb groups. Chemical control if needed should be part of a veterinary health plan - coccidiostats may be given in feed to lambs and pregnant ewes, or prophylactic drenches may be used in 4-6 week old lambs.

CATTLE NEMATODES

Most cattle will still be housed in March and the major endoparasite risks are type 2 ostertagiasis, untreated liver fluke and lungworm in youngstock not adequately dosed at housing or in less susceptible groups not usually given a housing dose; for example, adults. The risk of type 2 ostertagiasis should be relatively low this year, as high-incidence years tend to follow dry summers.

health plan taking into account the type and age of stock, and the history of the available pasture. Vaccination (Huskvac) is often the best way to control lungworm in dairy replacements, and in suckler herds with a history of disease. Animals over two months old require two doses four weeks apart, ideally finishing two weeks before turnout or weaning.

Plans need to be put in place for parasite control during the coming grazing season as part of a veterinary

Copyright © NADIS 2009 www.nadis.org.uk

NADIS Health Bulletins are designed to improve farm income, animal health and welfare by promoting disease control and prevention.

Discuss how health planning can improve the profitability of your farm with your veterinary surgeon.

NADIS is supported by BPEX, EBLEX, HCC, QMS, Merial Animal Health and Pfizer Animal Health.

