



# Great Britain miscellaneous and exotic farmed species quarterly report

**Disease surveillance and emerging threats** 

Volume 34: Quarter 3 of 2022 (July to September)

# Highlights

- Presumptive neoplasia in an alpaca page 5
- Cerebellar hypoplasia in a red deer calf page 6
- Chronic abomasal endoparasitism in a bison page 6
- Emaciation in a wallaby page 6

# Contents

Introduction and overview2	) -
Issues and trends2	
New and re-emerging diseases and threats5	)
Diagnoses from the GB scanning surveillance network including unusual diagnoses5	;
Horizon scanning6	5
Publications7	,
References7	,
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# Introduction and overview

This quarterly report reviews disease trends and disease threats for the third Quarter of 2022 (July to September).

It contains analyses carried out on disease data gathered from the Animal and Plant Health Agency (APHA), SRUC Veterinary Services division of Scotland's Rural College (SRUC) and partner post mortem providers and intelligence gathered through the Miscellaneous and Exotic Farmed Species Expert Group networks.

In addition, links to other sources of information including reports from other parts of the APHA and Defra agencies are included. A full explanation of how data is analysed is provided <u>on the APHA species disease surveillance reports: data analyses page on GOV.UK</u>.

# **Issues and trends**

#### New post-mortem providers join APHA's Scanning Surveillance Network in England and Wales

The APHA's post-mortem examination and diagnostic testing service provides a major component of the Great Britain scanning surveillance network. The network works closely with vets and farmers to detect and investigate new or re-emerging disease and diagnose endemic diseases in farm animals.

The APHA Surveillance Intelligence Unit and Surveillance and Laboratory Services Department were very pleased to announce that during January and February 2021, 3 additional post-mortem examination (PME) providers have joined the scanning surveillance network. These are the Universities of Cambridge, Liverpool and Nottingham.

This broadens the expertise of, and contributors to, livestock disease surveillance in England and Wales and also brings livestock premises in the areas they cover closer to a post-mortem provider.

The new PME providers join the 7 current PME providers: the Royal Veterinary College, the Universities of Surrey, Bristol, Cambridge and Liverpool, the Wales Veterinary Science Centre, and SRUC Veterinary Services St Boswells that work together with the 6 APHA Veterinary Investigation Centres (VICs), all of which will continue their valued contribution to scanning surveillance.

Key points about accessing PME in APHA's scanning surveillance network:

- each PME provider has an assigned area as shown in colour on the <u>APHA scanning</u> <u>surveillance network</u>
- within each assigned area, the hatched area shows where premises are eligible for free carcase collection and delivery of animals to the PME provider

- premises within non-hatched areas need to arrange to deliver animals themselves
- the <u>postcode search tool</u> identifies and provides contact details for the allocated PME provider and indicates if the premises is eligible for free carcase collection. This is based on the postcode of the premises from where an animal is to be submitted rather than a veterinary practice
- to arrange a PME, the vet calls the relevant PME provider to speak to the duty Veterinary Investigation Officer (VIO) or vet
- there will be some livestock premises for which the allocated PME provider has changed, and the free carcase collection service may no longer be provided for some holdings. The APHA postcode search tool allows farmers and vets to see the situation for individual premises

More information about APHA's scanning surveillance and diagnostic services is available on <u>Vet Gateway</u> and in the attached farmer and vet information leaflets which include a map showing the PME sites.

If you have queries which are not addressed in this communication, please contact the APHA Surveillance Intelligence Unit by emailing <u>SIU@apha.gov.uk.</u>

# **Diagnostic Submission Data**

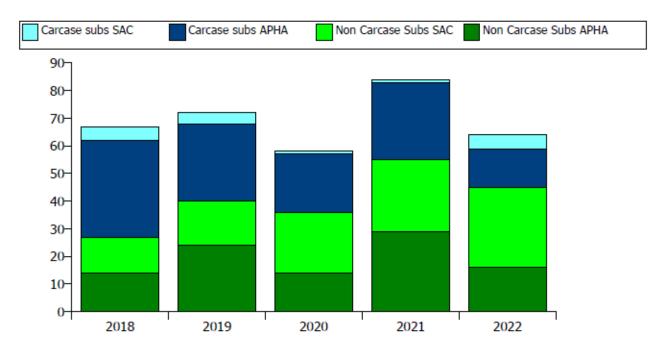
The number of diagnostic submissions in Quarter 3 of 2022 (July to September) for alpacas, llamas and farmed deer (see Table 1). The APHA figures include submissions to partner post-mortem providers (PPP). Other miscellaneous and exotic species may also be received in small numbers.

Carcase and non-carcase submissions for the same Quarter (July to September) for period 2018 to 2022 are shown in Figure 1.

Table 1: Diagnostic submissions in Quarter 3 (July to September) for alpacas, llamas and farmed deer.

January to March	Non-carcase submissions APHA	Non-carcase submissions SRUC	Total non-carcase submissions	Carcase submissions APHA	Carcase submissions SRUC	Total carcase submissions	Grand total
2018	14	13	27	35	5	40	67
2019	24	16	40	28	4	32	72
2020	14	22	36	21	1	22	58
2021	29	26	55	28	1	29	84
2022	16	29	45	14	5	19	64

Figure 1 - Diagnostic submissions in Quarter 3 (July to September) for alpacas, llamas and farmed deer in a graph.



Total diagnostic submissions for Quarter 3 for all years (2018 to 2022) for each main species covered by this report and also for each main geographical area (see Table 2).

3.3.1				
All Years	Alpaca	Deer	Llama	Sum
Eastern England	60	18	7	85
Northern England	53	9	1	63
Scotland	41	22	7	70
Wales	18	2	1	21
Western England	44	18	4	66
Unknown	31	8	1	40
Summary	247	77	21	345

Table 2: Total diagnostic submissions for Quarter 3 for all years (2018 to 2022) in the different geographical areas.

## New and re-emerging diseases and threats

Nothing to report this Quarter.

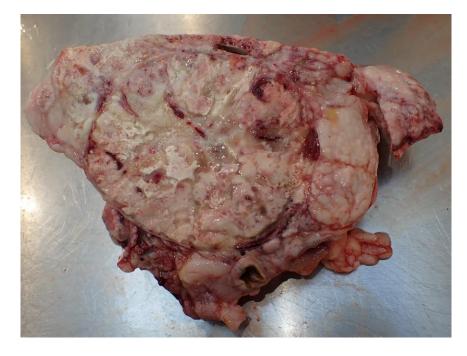
# Diagnoses from the Great Britain scanning surveillance network including unusual diagnoses

#### Camelids

#### Presumptive neoplasia in an alpaca

A presumed sex cord tumour was diagnosed in an eight-year-old alpaca submitted for postmortem examination having been euthanased on welfare grounds. The alpaca had displayed inappetence and lethargy for a period of 3 to 4 weeks and shown no response to supportive treatment. Biochemistry and haematology had been inconclusive. There was diffuse, ventral subcutaneous oedema with several litres of free, turbid fluid within the abdomen. A large, irregular mass occupied the left caudal quarter of the abdomen. The mass consisted of cream coloured tissue with necrotic foci and a circular pattern around the centre of the mass could be perceived, measuring 12cm in diameter (Figure 2). The caudal small intestine and proximal large intestine were encompassed within the mass. There was a profound, regionalised lymphadenopathy associated with the mass. Histology established the mass to be a highly cellular neoplasm with extensive coagulative necrosis within large areas of the tissue. Based on the location of the mass and the microscopic features the neoplasm was tentatively diagnosed as a presumed sex cord stromal tumour.

Figure 0-1 - Cross section of neoplasm consisted of cream coloured tissue with necrotic foci and a circular pattern around the centre.



#### Farmed deer

#### Cerebellar hypoplasia in a red deer calf

Cerebellar hypoplasia was diagnosed by histological examination of fixed tissues submitted from a one-month-old red deer fawn. The samples were from the second fawn to be born dead with gross abnormalities from a herd of 100 red deer. A third fawn had been born alive but with neurological signs of tremor and ataxia. Liver copper level was within normal range. Bovine viral diarrhoea (BVD) and Schmallenberg (SBV) viruses were not detected by PCR and the underlying cause was not determined.

#### Other

#### Chronic abomasal endoparasitism in a bison

A 3-year-old bison cow had been losing condition for several weeks but showed no scour and was still eating. The animal subsequently died, and ulcerations and haemorrhages were described throughout the intestinal tract. Tissue samples were received for testing, but BVD and Johne's bacteria were not detected by PCR. Histopathology confirmed severe, multifocal, chronic, mucosal hyperplasia and mucous metaplasia with abundant nematodes (*Ostertagia* sp.) and moderate, multifocal, acute, erosive abomasitis. The changes in the abomasum were severe and suggested that a chronic parasitic insult had led to a severe mucous metaplasia, accounting for the chronic wasting observed in this animal due to maldigestion.

#### Emaciation in a wallaby

A 5-year-old wallaby, one of a group of four, was submitted for postmortem examination after it had been observed with signs of dyspnoea. It was found to be in emaciated condition with no subcutaneous fat deposits present. There were oedematous gastric folds, and the lungs were dark and congested. Coccidial oocysts were detected in large intestinal contents and histological examination of a variety of tissues revealed moderate to marked acute histiocytic pneumonia. It was concluded that the wallaby had died due to emaciation and secondary pneumonia but the reason for the very poor body condition was unclear. Coccidiosis can cause disease in adult wallabies and could have been contributory.

# Horizon scanning

#### **APHA's new Endemic Disease Alert System**

This is a new component of the communications from our scanning surveillance network and a new system that the APHA will be using to keep you up to date with significant disease alerts and information, projects, publication of reports and other items.

This is independent of the notifiable disease alert system.

To receive these notifications please email <u>SIU@apha.gov.uk with your:</u>

- email address
- mobile number if you wish to receive text alerts

We hope that you find this new messaging system useful, and we welcome any suggestions or feedback. Email Surveillance Intelligence Unit <u>SIU@apha.gov.uk</u> for more information.

# **Publications**

None to report this quarter.

### References

None to report this quarter.



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The Animal and Plant Health Agency (APHA) is an executive agency of the Department for Environment, Food & Rural Affairs, and also works on behalf of the Scottish Government and Welsh Government.