

PCHS NEWS

Premium Cattle Health Scheme

2024 Issue



SRUC



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PCHS NEWS

Welcome



Welcome to our 2024 issue of the PCHS Newsletter. We are delighted to announce that the team at Veterinary Services has been awarded the Queen's Anniversary Prize 2023

for improving animal health and welfare through excellence in veterinary services. Please read the [full story](#) if you are interested in learning more.



We hope that this issue gives you plenty of useful information. We share some tips from our colleagues in SAC Consulting, a case study from Harri Parri's farm in Wales, some CHECS rule updates and a focus on Johne's Disease and Neospora.

We hope that you, your families and livestock are keeping safe and healthy. Please pop by for a chat when we are out and about at events as it gives us a chance to hear your feedback. We also enjoy learning about your farm and your animals and we can answer any queries you may have. We all wish you a successful year and thank you for your continued support!

[Alison Braddock](#)



Sarah Balfour
SAC Consulting

Improving On-Farm Efficiencies

Improving on-farm efficiencies strongly relates to reduced production costs per kg of beef sold, therefore representing improved profitability for the farm business. Instead of being seen as a burden, lowering greenhouse gas emissions of suckler herds represents a challenge with clear opportunities. Improving livestock productivity helps to reduce emissions.

Improving herd health is an immediate mitigation measure farmers can concentrate on, to improve herd efficiency and reduce emissions from livestock. With funding available under the Scottish Governments Preparing for Sustainable Farming (PSF) programme, focused on animal health and welfare interventions, there is an opportunity for farmers to work alongside their vet to identify health issues which may be limiting herd performance.

Reducing the prevalence of key diseases such as bovine viral diarrhoea (BVD) and Johne's disease will deliver immediate production gains on farm, while reducing emissions. Studies have shown that Johne's disease is estimated to increase greenhouse gas emissions by approximately 40% per kg of beef produced. Reduced fertility is also associated with the disease.



BVD Free Database

Currently in England, there is no one place where you can look up the BVD status of an animal or herd. In order to try and rectify this, CHECS and BVDFree England are working together by seeking permission from farmers who are CHECS accredited for BVD in England to enable their CHECS health scheme to upload the farm's BVD status to the BVDFree England database.

By giving permission for your CHECS BVD accreditation status and CPH number to be shared with BVDFree England, you will be helping to ensure that the industry has a more robust view of the BVD status of holdings in England. In turn this will support the need for mandatory control of BVD in England to protect herds like yours from transmission. In addition, it will allow potential purchasers to search for your CPH number via the BVDFree England database and see that you are BVD accredited (no further information will be shared). There will be no charge for adding your CPH number and accredited status to the BVDFree England database.

[Click here to give permission](#)



Parasitic diseases, fertility, lameness and respiratory disease all impact production efficiency and rates of emissions. A lame or sick animal has a higher carbon footprint; therefore, farmers should look to improve herd health and look at the potential gains for improved health and better disease management.

Increasing calf sales, is another carbon mitigation strategy to consider. Managing and improving fertility of suckler herds is a key way to improving cow margins, which has never been more important with input costs continuing to put pressure on businesses.

Ensuring cow fertility is not compromised is crucial to maximising the number of live calves. This includes good management practices such as selecting breeding replacements from fertile cows, use of EBV's in bull selection, condition scoring of cows and health planning. Routine annual fertility testing of bulls is something which many herds are undertaking. Sub-fertility is common among bulls – approximately 30% of bulls are sub-fertile at any time – and a fall in conception rate can be costly. For those farmers who may have purchased a new stock bull at the recent autumn bull sales why not take advantage of the funding available for bull fertility testing through PSF?



Reducing the prevalence of key diseases such as bovine viral diarrhoea (BVD) and John's disease will deliver immediate production gains on farm, while reducing emissions.

Improving health and actively looking at reducing disease challenges within your herd is one of the most important factors farmers have within their control to reduce emissions.

Ensuring accuracy while rationing the beef herd



As a nutritionist there are realistically three rations on farm:

1. The ration formulated

2. The ration made

3. The ration the animal eats

A number of factors can potentially impact the ration fed to cattle such as variations in feed quality, ration presentation, feed space and grouping. This highlights the importance of ensuring that the first step, getting the formulated ration right, is of utmost importance to ensure the overall health and productivity of the herd.

To maintain and drive performance and success forward, SAC Consulting has been working with **DietCheck** Ration Formulation Software over the last couple of years to ration beef and dairy, and more recently sheep. This has replaced our original software package, Feedbyte, with results being extremely successful as we use the **DietCheck** to continue to formulate well-balanced high-quality rations gaining performance and results on the farm.

The beef module is based on current UK beef requirements from AFRC 1993 and allows well balanced diets to be formulated for bulls, bullocks and heifers throughout growing and finishing, specific to on farm requirements and tailored to the feeds available.

For further information, please do not hesitate to get in contact with Lorna Shaw from SAC Consulting at lorna.shaw@sac.co.uk



Lorna Shaw
SAC Consulting



Harri Parri Crugeran, Sarn Meyllteyrn, Gwynedd

The Parri family moved to Bodnithoedd, a lowland farm on the Llyn Peninsula on a tenancy in 1948, having previously been farming in Pencaenewydd, an upland area in Eifionydd. Continuing the beef and sheep enterprises that his great grandfather started when he moved, Harri now runs the business alongside his wife, Elin and parents, Richard and Rhian. Crugeran, which is adjacent to Bodnithoedd, was bought by his grandfather in 1968 and became the base for the business. In 1984, upland farm Maesog was bought from a retiring great uncle, in the area where the family originated from. Although 45 minutes away, covering 340 acres made up of a combination of improved grassland, permanent pasture, steep hill and rough peaty bog, it complements the lowland farms Crugeran and Bodnithoedd that comprises of 385 acres between them.

As well as the 200 cow suckler herd, other enterprises on the farm also include a flock of Lleyen and Lleyen x NZ Suffolk sheep, arable and 32,000 free range laying hens. The business has also developed to offer holiday cottages, managed by Rhian. Across all enterprises the farm employs three full-time workers and eight part-time members of staff.

The Crugeran herd is a multiplier for the Stabiliser Cattle Company, with Richard being one of the first farmers in the UK to sign up to the multiplier agreement. Having been to America in 1999 to find out more about the breed, Richard used AI from the first batch of embryos that was born in the UK and their first crop of Stabiliser sired calves was born in 2001. Harri explained that their reason for the change was that through the '80s and '90s the farm was sourcing Angus x Friesian or Limousin x Friesian that were excellent, moderately sized, fertile suckler cows. But by the late '90s the Limousin x Holstein heifers were entering the herd and were genetically inferior to the

ten-year-old cows exiting the herd. Infertile genetics and difficult calvings from 20 years ago also resulted in a split herd, with up to 30% of cows being empty after a nine-week bulling period, meaning that over time an autumn calving group emerged in addition to the main spring calving herd.

Both herds have been run completely separately since the introduction of the Stabiliser genetics, having now reached pure status. The autumn calving herd has been brought back to calving in summer, so that they are able to run with the bulls in the autumn before housing. The spring calving herd are housed at Crugeran where they calve (mid-March to late April) and are run at Maesog over the summer and into mid-winter when the last of the cows come down to be housed. The calves are weaned in early October and continue to graze on the better land, while the cows are put onto rougher/less productive land. The bull calves come down from Maesog to Crugeran where they continue to graze and are introduced to home

grown barley before housing early November. The heifer calves stay on the upland farm until housing at Crugeran in mid-November. The cows start to come down to be housed in this period too up to January, starting with the first calvers and the mature cows coming later.

The summer calving herd stay on the lowland farm, grazing through spring and early summer, calving outside between the end of June and August. After running with the bulls, they are housed in early November with calves at foot, which are weaned in December and remain housed until spring. Running the herds in this way benefits the cash flow of the business, as well as allowing more cattle to be kept in total; with half of them being dry, leaving more grass for the cows with calves at foot and land to be shut up for silage.

Having been members of PCHS since 2003, the Crugeran herd has achieved and continues to maintain accreditation for BVD and Risk Level 1 certification for Johne's Disease. The herd is also vaccinated for IBR and Leptospirosis. Due to IBR being introduced to the area a few years ago and causing an issue for herds that were naïve to the disease, Harri plans to pursue IBR accreditation for their herd, but is waiting to phase out a group of cows that were vaccinated with a non-marker vaccine.

Harri explains that herd health is of vital importance for reaching the breeding KPIs that they aim for with their herd, particularly the 98% in-calf rate which Harri believes isn't possible to reach without the right combination of management, nutrition and health that allows the genetics to thrive. Having had success in selling breeding bulls, heifers and cows, **Harri also notes that as the Stabiliser breed has developed there has been an increase in buyers actively asking for health status when purchasing.**

Calving their heifers at two years old, Harri takes what he considers to be the opposite approach to what many others may do and does not 'push them' to get

in calf for the first time. Instead, they hold them to between 0.3 and 0.5kg of live weight gain per day, then rely on quality grass two months pre-breeding to get them up to weight, condition and cycling. Although having the benefit of being cheaper, it does result in a higher empty rate among the heifers with those that are naturally less fertile or later maturing not having had the extra assistance. These heifers are then sold as fat while they are still under 24 months of age, while those that were in calf are retained in the herd or sold for breeding. Harri explains that he believes this is another way that they are able to reach the 98% in-calf rate with their cows, by identifying early on the heifers that do not get in calf as easily.



Harri is also conscious of producing cattle that are an efficient size, aiming to push the mature cow weight as low as possible without affecting the saleability of the end product. This cuts the cost of maintaining each cow and allows them to run more cows at the same cost as having fewer, larger cows. Harri admits grazing management could be better, with only limited rotational grazing implemented over the years. He now plans to work on mob grazing, with larger groups of cattle grazing taller grass and a higher density of cows per hectare with longer rest period. This practice in theory should increase stocking rates. Harri comments that the suckler cow shouldn't need the lush green grass that dairy cows require, and that although the nutritional quality could be lower, they will push the genetics of their herd to thrive on that. "It's our aim to push the management as hard as we can," adds Harri, "making breeding decisions to produce cattle that thrive on pasture and can almost survive on fresh air. You shouldn't need a lot of grass for a cow to produce a decent calf and get back in calf the same time the next year."

Follow the Crugeran herd on social media for up-to-date information by clicking on icons below:



Pen Card Reminder

Please ensure that you get your Pen Card applications to us in plenty of time. It is your responsibility to complete the form in full – any requests for information to be added after the pen card has been printed will incur further production and postage charges. Please check with your breed society if you're unsure of the testing or vaccination requirements for your sale. Note: if your pen card application is received within **one week** of the sale date we cannot guarantee that there will be enough time for card production. We also reserve the right to charge a late application fee.

DISEASE	HERD ACCREDITED (YEARS)	INDIVIDUAL TEST RESULT	VACCINATED
BVD	2 YEARS		
IBR	3 YEARS		
LEPTO			
TB 4	31/03/2016	10-Jan-18	
CHeCS TB			
NEOSPORA			
JOHNE'S	RISK LEVEL 2 50 Animals		

Animal Name: Bertie the Bull
 Herd Number: UK123456789100
 Veterinarian: George L. O'Leary
 Date: 27-Jan-18

Information Applies to BVD Control Fairs Sale
 This animal has tested free of BVD virus or is free of BVD virus and is BVD accredited (see field)

PCHS
 Premium Quality Cattle Health Scheme

The Johne's antibody ELISA has an exceptionally low false positive rate

There has always been debate about the quality of the diagnostic tests for Johne's disease. In particular the blood test (antibody ELISA) has been seen by some to generate too many false positives. However, all the research that has been done on this over several decades has shown the false positive rate to be less than one in every 100 uninfected animals that are tested. Within the PCHS we believed it to be even lower than that. To examine this further, we looked at all our results over five years from risk level 1 herds that kept their risk level 1 status and found the false positive rate to be no more than two in every 1000 animals that were tested in every year. The technical term for this aspect of test performance is specificity and these results translate to a specificity of 0.998, which is extremely high. This study involved 143,000 antibody tests and is the largest ever done anywhere in the world. Our data show that the probability of a positive result in the Johnes antibody ELISA being false positive is exceptionally low.



George Caldwell,
Professor of Ruminant
Animal Health (SRUC).

We also looked at the impact that the tuberculosis skin test had on the specificity of the Johne's ELISA by comparing results from high frequency testing areas (high risk and edge) with those from Scotland that is officially tuberculosis free and routine testing is no more frequent than once in four years. The test specificity was very slightly lower in the high frequency TB testing areas in three of the five years examined, but we concluded that this was not at a level that had any significant impact on the testing programme. Furthermore, while some experts argue that the tuberculosis test increases the risk of false positives in the Johne's antibody ELISA there is a strong body of evidence that points to tuberculosis testing actually resulting in improved detection of Johne's true positives in the antibody test. This would explain the slight differences seen in specificity between high and low frequency tuberculosis testing seen in the study.

In conclusion you can have confidence in the precision of the Johne's antibody ELISA used by PCHS for the CHeCS Johne's control programme even if your herd is subject to high frequency tuberculosis testing.

[The full research article can be accessed for free here.](#)



Johne's Disease Update

The rules for the Johne's Disease scheme are still under review through CHeCS. We will update all PCHS members by email as soon as any changes to the rules are confirmed.



REMINDER

When dealing with Johne's Disease it is important to remember that testing for the disease and following the scheme rules is a matter of reducing the risk of infection. While a Risk Level 1 status is the best possible level of certification and carries the lowest amount of risk, there is never a guarantee of being 100% free of Johne's Disease. This is due to the epidemiological nature of the disease that means it is not possible to eradicate in the same way as other endemic diseases such as BVD or IBR.



***Neospora*:** What is it and should I be thinking about it when buying in cattle?

***Neospora* is a commonly diagnosed cause of abortion in cattle. Between 2017 and 2021, it accounted for 7% of the diagnosed infectious causes of bovine abortion. It is more commonly diagnosed in dairy herds. Over that time, when the herd type was recorded, it accounted for 14% of diagnoses in dairy herds compared with 4% in beef herds.**

In the figure shaded areas show regions of Scotland where abortion due to *Neospora* were diagnosed between 2017 and 2021. From GB Cattle Disease Surveillance Dashboard.

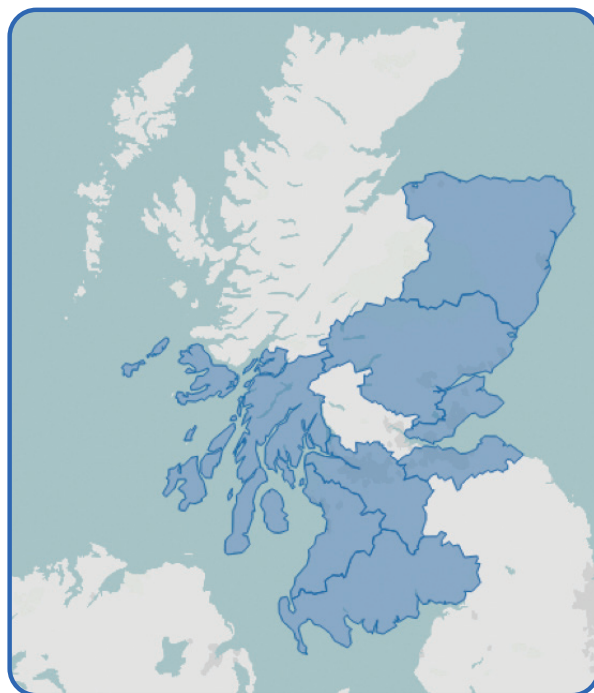
Cattle can become infected in two ways:

- As an unborn calf when *Neospora* crosses the placenta from an infected cow
- By eating *Neospora* oocysts (eggs), shed by infected dogs, that have contaminated pasture, feed or water

It should be remembered that you could bring *Neospora* into your herd with any bought in females. Infected females remain infected for life. The main way that *Neospora* infection is maintained in a herd is by infected cows giving birth to infected heifer replacements who in turn abort or produce further infected calves themselves. If dogs get access to aborted calves or placentae, they can become infected and shed oocysts for the next two to three weeks. Dogs cannot get infected unless they eat abortion material and they only shed for a short period of time. There is no evidence of direct cow to cow spread. There is no evidence that bulls transmit infection.

Although there is a blood test to detect antibodies to *Neospora*, in infected cattle antibody levels fluctuate. Cattle are most likely to test positive in the last two months of pregnancy. Unfortunately, even infected heifers are likely to test negative until they are in late pregnancy. Blood sampling of heifers pre-breeding is therefore not a reliable way of determining if they are infected.

There is a *Neospora* certification programme within CHCS. Cattle from Risk Level 1 herds have the lowest risk of introducing *Neospora* to your herd because they have had at least three clear annual herd screens and they have a biosecurity health plan in place to prevent *Neospora* entering their herd.



Helen Carty
Disease Surveillance
Centre Veterinary Manager
(Ayr)

REMINDER

The CHECS rules state that in the case of abortions, stillborn calves or failure to calve after having been identified as pregnant, investigations must be carried out in order to comply with the requirements of the different disease programmes. The relevant excerpts of the CHECS Technical Document can be seen below:



BVD

4.1 – Reproductive Failure: Any animal that aborts, produces a stillborn calf or fails to calve having been previously identified as pregnant, it is advised should be blood tested for antibodies to BVD. It is at the discretion of the herd's Veterinary Surgeon whether this sample is also tested for virus. The interpretation of the result of this test must be made against the herd status and any knowledge of the seroprevalence within the herd. It is a statutory requirement to report abortions and it is good practice to fully investigate abortion events by submission of the aborted foetus and placenta to your regional APHA/SRUC/AFBI laboratory.

Leptospirosis

2.5 – Reproductive Failure: Any animal that aborts, produces a stillborn calf or fails to calve having been previously identified as pregnant should be blood tested for antibodies to L. Hardjo. It is a statutory requirement to report abortions and it is good practice to fully investigate abortion events by submission of the aborted foetus and placenta to your regional APHA/SRUC/AFBI laboratory.

IBR

2.5 – Reproductive Failure: Any cow that aborts, produces a stillborn calf or fails to calve having previously been identified as pregnant must be tested for antibodies to BoHV1.

Neospora

3.6 – At any risk level, any animal that aborts, was pregnancy diagnosed as in calf but subsequently did not calve, gives birth to a stillborn calf or where there is unexplained calf mortality within 24 hours of birth must have a full investigation according to section 3.6.1.

Useful links

ibTB – interactive map displaying bTB breakdowns in England and Wales:
[ibTB - Mapping bovine TB \(bTB\) in England and Wales](#)

Preparing for Sustainable Farming (Scotland):
[Preparing for Sustainable Farming full guidance \(ruralpayments.org\)](#)

Animal Health and Welfare Pathway (England):
[Animal Health and Welfare Pathway – GOV.UK \(www.gov.uk\)](#)

Animal Health and Welfare Strategy (Wales):
[Animal health and welfare strategy | Sub-topic | GOV.WALES](#)

Action Group on Johne's:
<https://actionjohnesuk.org/>

Events 2024

We will be exhibiting at the following events in 2024, please let us know if you are organising an event where SRUC Veterinary Services could be represented by either a trade stand or a speaker.



NBA Beef Expo	27th April	Kendal, Cumbria
NSA Scot Sheep	5th June	Dunbar, East Lothian
Royal Highland Show	20th – 23rd June	Ingliston, Edinburgh
Great Yorkshire Show	9th – 12th July	Harrogate, North Yorkshire
Royal Welsh Show	22nd – 25th July	Builth Wells, Powys
NSA Sheep Event	30th July	Malvern, Worcestershire

Meet the Team



David Wilson
Veterinary Manager,
SRUC Health Schemes



Alison Braddock
Marketing and Business
Development Manager



Colin Mason
Veterinary Centre
Manager



Tim Geraghty
Veterinary Centre
Manager



John Scholefield
Marketing and Business
Development Officer



Helen Carty
Veterinary Centre
Manager

Health Schemes office team, based in St Boswells.



Susan, Charlotte, Lisa, Heather, Kirsty, Hilary, Louise



Rachel, Tracey, Lisa, Hilary, Kirsty