## THE PIG ISSUE



#### October 2012

## Vet appointed in Scotland

After a number of years searching for a suitable candidate to look after Garth clients north of the border, and hastened by Garth securing the Vion pig production business, we are pleased to announce that the search is over.

Alasdair Macleod started with Garth at the beginning of October in Scotland and will initially be based close to Turriff, north of Aberdeen. He will look after the Vion production from 10,500 sows mainly situated around Elgin and once



the integration period is complete should find more time for him to visit and work with Garth's Scottish clients.

Alasdair qualified from Valencia and has spent time working on units in Spain. His more recent role was working in Yorkshire for one of the breeding companies. We are delighted he has joined us and look forward to strengthening our business in Scotland.

### **BPEX Real Welfare Project update**

A consultation on how Real Welfare audits can be included in Red Tractor assurance is likely to be announced in October, with a view to Real Welfare being included in Red Tractor assurance from next April. Producers are reminded of the cost and veterinary time implications of the project and should be prepared to plan accordingly. For further questions and answers on the Real Welfare project, see –

http://www.bpex.org.uk/R-and-D/welfare/documents/PWJune2010.pdf

http://www.assuredfood.co.uk/resources/000/678/31 5/Red Tractor Pigs Scheme RWO Methodology 1 1.10.12.pdf

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## **Legal reminders**

With the new welfare regulations soon to come into force and throw a spotlight on welfare issues, a gentle reminder of a couple of points from The Welfare of Farmed Animals Regulations 2003:

- Pregnant sows and gilts shall, where necessary, be treated against internal and external parasites. If they are placed in farrowing crates, [they] must be thoroughly cleaned.
- 2) In the week before the expected farrowing time sows and gilts must be given suitable nesting material in sufficient quantity unless it is not technically feasible for the slurry system used.

It is worth re-iterating that nesting material for sows fulfils several functions that can improve farrowing performance as well as welfare. In addition to the basic physiological need to make a nest, straw or paper provided for the sow helps to reduce farrowing times and improves milk production, both of which should lead to reduced stillbirths, stronger piglets and improved growth.

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## **Mycotoxin threat**

## What are Mycotoxins?

Mycotoxins are the toxins produced by fungi and moulds. They can have a major impact on pig productivity and health. The degree to which the pigs are affected depends on the toxin (or combination of toxins) involved, its concentration or amount ingested and the susceptibility of the pig which ingests it. It is worth noting that the presence of mould does not necessarily mean that mycotoxins are present. But equally the absence of visible mould does not mean that mycotoxins are not present. Cool temperatures and high humidity are ideal environmental conditions for the development of the mycotoxin Fusarium. After the wettest June on record since 1766, we anticipate that we may encounter increasing numbers of issues associated with mycotoxins this season.

While many producers are aware of the potential risk associated with feed contamination, the risk from mouldy straw can be easily overlooked. It is estimated that the consumption of straw in yard-based systems accounts for 10-15% of the total feed intake in weaned pigs.

Mycotoxins can have a negative effect on production either when eaten in large single amounts or in small quantities over a longer period of time. Diagnosis can be problematic and costly as mycotoxins often appear as 'hotspots' in feed, while symptoms are often non-specific and can be acute or chronic.

### Effects of mycotoxins on the breeding herd

- Increase in irregular returns
- Delayed oestrus or anoestrus
- Nymphomaniac (cystic) sows
- Mid-late term abortions
- Increased numbers of stillbirths
- Low viability piglets; splaylegs
- Swollen vulvas in pre-pubertal gilts associated with high oestrogen levels in the sow and the sows milk

### Effects of mycotoxins on the growing herd

- Scour
- Increased incidence of vaginal or rectal prolapses
- Decrease in feed intake
- Decrease in growth rate (some reports of a 50g/day reduction)
- Decrease in feed conversion efficiency
- Suppression of the immune system leading to an increase in incidence of other diseases and reduction in vaccination response



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## How to minimise the risk of mycotoxins

- Add a mycotoxin binder to the feed speak to your vet about the best product for your farm
- Ensure pigs are bedded on good quality straw.
- Store straw and cereals under cover in a cool, dry environment
- Ensure feed and storage bins are well maintained and leak-free
- Ensure feed bins and hoppers are completely emptied routinely to ensure feed is not bridging
- Treat bins with a non-toxic mould inhibitor/fungicide annually
- Liquid feeding systems: practice strict hygiene procedures to minimise the presence of mycotoxins within the mixer tanks, feed lines and troughs. Mycotoxins are extremely resilient and can survive in the biofilms of feed lines and equipment for significant periods.



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## New evidence showing the benefits of good ventilation

We already know that poor ventilation leads to disease and production losses. The levels of respiratory viruses and bacteria build up in stale air, increasing the infection pressure and leading to clinical pneumonia. In extreme cases of poor ventilation, such as occasionally seen in the very cold weather of recent winters, cases of meningitis tend to become frequent.

However, a study from Australia has just been published showing that even supposedly disease-free air can adversely affect pig growth and performance. Air was obtained from a commercial pig enterprise and used to inoculate experimental pigs. This air contained four species of bacteria that are normally regarded as commensals (natural and harmless) in pigs. The researchers then added various concentrations of ammonia (another common constituent of pig shed air) and monitored the effect.

#### Results

Despite being regarded as non-pathogenic, exposure to the bacteria alone caused a feed intake reduction of around 11% and a reduction in growth of around 100g/d over the two week period of the study compared to pigs in genuinely clean, filtered air. The feed conversion ratio (FCR) was also adversely affected. When ammonia was added at typical pig buildings levels, the growth reduction was almost 300g/d over the same period. Increased ammonia levels alone had little effect, but it is thought that damage to the surface defences of the airways allows bacteria to more easily enter the body. Interestingly, no pneumonia lesions were seen at slaughter in even the most severely affected pigs.

### Conclusions

Ammonia levels themselves do not appear to be harmful. However, they facilitate the entrance into the pig of bacteria that cause sub-clinical disease. This means that the pig is affected without showing any symptoms and this, along with the lack of slaughter lesions, makes it very difficult to identify the existence of a problem. There are several species of these bacteria and some or all are common to most pig farms. Some may also affect vulnerable humans

### From science to practicality

In the late 1980's it was recognised in poultry that summer broilers grew quicker than winter birds without any pathological differences. In a large-scale trial changes were made to increase winter ventilation rates while heating the ambient air to maintain the temperature of the shed. As a consequence the levels of dust and ammonia were reduced, and the increased costs (mainly due to heating) were repaid by improved performance. The Australian study demonstrates that airborne bacteria may be a part of this process and that pig farms may be similarly affected.

### **Summary**

Many bacteria previously regarded as commensals ("normal") probably have significant sub-clinical effects on pig performance. While they are difficult to identify and quantify, this is further evidence that the provision of good quality air by optimal ventilation is a vital component of efficient pig production.

#### **TOP TIP - WINTER VENTILATION**

It is important to keep fresh air moving through buildings throughout the year. Airflow is driven by heat, usually from the pigs. When outside temperatures are low, heat will be rapidly lost through poorly-insulated walls and ceilings leading to a significant reduction in airflow. This applies to both naturally- and fanventilated buildings.

Therefore, insulation is vital to optimise winter ventilation. The key points are:

- Insulation material deteriorates over time and is also damaged by mice.
- It needs to be checked regularly, especially in old buildings.
- Autumn is the time to ensure that your insulation is up to the job.
- You should have healthier, more profitable pigs as a result.



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## Posting samples to the laboratory

When sending samples to the laboratory in the post please note the following:

The Royal Mail has strict regulations governing the sending of pathological material through the post.

- Primary receptacle specimens should be enclosed in a labelled watertight, leakproof primary container which should be wrapped in sufficient absorbent material to act as a buffer to absorb all fluid in case of breakage. Blood tubes or swabs in their sheaths are examples of a primary receptacle.
- Secondary receptacle the primary receptacle must be placed in a second leakproof container, which would often be a sealable polythene bag. This serves to contain the absorbent material. Multiple primary receptacles, suitably wrapped and cushioned, may be placed within this layer of packaging.
- Outer packaging the secondary receptacle is placed in an outer package, e.g. a box or padded envelope, to protect it from physical damage and water whilst in transit. It must be clearly labelled "pathological specimen".

Please include a covering letter stating where the samples are from, a brief history such as age, treatment, vet etc.

The package should then be sent to:

Beeford Laboratories Ltd 97a Main Street Beeford East Yorkshire YO25 8AY.

We can supply outer packaging material if necessary. For more information please contact Sally on 01262 488176.

## Slurry spreading update

DEFRA has recently published a policy update on enforcing slurry spreading rules at the start of the closed period, following the wet summer. The Environment Agency has also issued advice. Producers must have justification for spreading and measures to prevent pollution must be practiced. For more information go to:

http://www.bpex.org.uk/Article.aspx?ID=302484



# Prescriptions for Medicated Feed (MFSPs)

The Veterinary Medicines Directorate (VMD) has recently published advice on the correct procedure for issuing MFSPs. This differs from our current system, but we believe our procedures are sound and efficient.

Most of the feed mills also seem to feel this way, so for the time being we intend to continue as before. It may be, however, that some mills will ask you to contact us first when requesting medicated feed. In this case, please do so and we will liaise with the mill.

For further information visit:

http://www.nfuonline.com/Our-work/Animaland-Plant-Health/News/Medicatedfeedingstuffs-prescriptions----best-practice/

