AHDB Pork Field trials

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AHDB Pork business plan strategic themes

• **Closing the Gap** - Narrow the technical performance gap between English pig producers and our competitors.

• **Protect the Environment** - Help pig producers and processors comply with existing and emerging legislation and achieve recognition for progress made.

• **Enhance Welfare** - Help pig producers comply with existing and emerging legislation and achieve recognition for progress made.
AHDB Pork business plan strategic themes continued:

• Encourage Safe and Traceable Pork - Help producers and processors produce pork that continues to be safe and which consumers can have confidence is fully traceable from farm to finished product.

• Help Sell More Pork – Stimulate demand for pork by rejuvenating the image of pork among consumers of 55 years and under who consume little or no pork and by securing and developing export markets.
AHDB PORK Field Trials-

- The field trials program is a wide ranging set of experiments that are protocol based, scientifically robust and are driven by the AHDB Pork strategic theme of “Closing the gap”
- The areas for study are proposed at regional forums. Northern regional forum comprises: Steve Winfield, John Richardson, Guy Wade West, Ian Wellock, Patrick McDonnell, Mark Howells, Ryan Noble, Phil Stephenson, Dave Morgan, Steve Tuer, Phil MacDonald.
Field trials cont.-

The regional forums meet twice a year and were set up to:

• Discuss how best to go about improving key performance indicators for closing the physical pig performance gap in the region

• Get feedback on AHDB Pork knowledge transfer activity and collect new ideas

• Achieve better coordination within the regions and work more effectively with other businesses to avoid duplication

• Be a ‘critical friend’ to AHDB Pork.
Field trials cont.-

• Once the regional forums have fed information back into the innovation team ideas are prioritized dependent on current market conditions, regulatory pressures and importance to the levy payer.

• The trials are designed and proposed to a technical sub-committee who then comment on alterations and are ultimately responsible for approving the work.

• Field trials are fully funded by AHDB pork (and on occasion other stakeholders)
Innovation Fund

The innovation fund projects differ from the field trials program in several key ways;

• These are normally part funded (50%) by AHDB and part by the interested party (normally a producer)

• These are for producers who have a good idea, or wish to investigate some new technology on farm and want financial support and support in how best to assess its effectiveness.
Current field trials

• Omega 3 PUFA supplementation in the gestating and lactating sow—conducted at Leeds and HAU

• Optimising the potential of the small pig through the implementation of best practice in the Farrowing house.

• Impact of allocating 50% and 100% additional trough space to weaner and grower/finisher pigs.

• Impact of varying stocking density in grower/finisher pigs.

• Optimal design and SOP for farrowing tents
Current field trials

• Evaluation of UHF tags to optimise pig marketing strategies on farm.
• Evaluation of ammonia emissions factors from various different types of grower finisher buildings.
• Evaluation of a carcass cooling container.
Omega 3 PUFA supplementation in the gestating and lactating sow

- This trial is a large scale long term one over Leeds and HAU herds
- A commercially available supplement has been incorporated into both the Lac and Dry sow diets.
- These are fed for one production cycle to half the herd.
- Two production cycles are monitored, one post supplementation to look for any carry over effect.
- Literature suggests that there may be impacts on BA and piglet mortality
Optimising the potential of the small pig

• Trial has been conducted on a large scale commercial unit

• “Best practice” was used on trial group with the control group being “normal management”

Results have recently been finalised and examined by an external statistician.

On this particular unit, in the current financial climate there is no financial benefit to the “best practice” as it did not significantly impact performance figures.
Impact of allocating 50% and 100% additional trough space

• Trial has been completed on weaner pigs at Writtle college farm. Data has been recorded and had initial analysis.

• Early indications are that in weaner pigs allocation of additional trough space had no significant impact on either DLWG or FCR.
Impact of varying stocking density

• Pigs in a slatted commercial scale unit were allocated 0.68 (control), 0.77 or 0.85 m$^2$ per pig.

• DLWG and FCR were quantified throughout the trial via regular weighing and use of a Roxell multi fast feeder.

Early indications from this unit are that varying the stocking density had non significant impact on either DLWG or FCR over the grower/finisher period as a whole. However more in depth analysis is required.

The trial will also be being repeated looking at only DLWG on a large scale commercial unit in the coming months to add more data.
Optimal design and SOP for farrowing tents - outdoors

- Three different outdoor breeding units have developed outdoor farrowing tents.
- The designs vary two being similar and the third being radically different.
- Anecdotally the tents have reduced straw usage and decreased mortality. However this was only true once an altered SOP was developed.
- The initial inclination is to over-straw sows which can increase early mortality.
Optimal design and SOP for farrowing tents – outdoors cont.

• A meeting is scheduled for the 1\textsuperscript{st} of March to discuss the next generation and agree an outline for design. This will be AHDB funded and a full, scientifically robust trial will commence once this design is implemented.

• Some of the factors being discussed will be:
  – How easy it is to move?
  – Can ventilation be varied?
  – Optimal size?
  – Does water for piglets need to be included?
These pictures shows the idea behind the design of two of the tents, more of a “farrowing pen” design with a covered area and a rear passage for stockmen and for weaning into.

The sows can be shut out of the tent for working with the piglets
This tent uses traditional arcs under a tent. There is still a passage with back doors for arc access. Feed and water are still delivered in individual farrowing paddocks.
Evaluation of UHF tags-

- UHF tags are cheaper, more resilient and easier to read in “bulk” and from a distance than the older alternatives. They are similar to the EID tags used in sheep.
- The concept is to be able to track a pig from birth through to slaughter to allow problem pigs to be identified and a lifelong cost benefit analysis.
- I.E. does a poor farrowed pig ever come right?
Progress with UHF tagging

- 2400 pigs tagged (6 farms)
- Date of birth, weight
- Best practice:
  - Tagging on day 1 or 2
  - Male part on outside of the ear
  - Same ear
  - Attention to detail on tags and applicators
  - Retention rate >98% in abbatoir
At the abattoir kill data is linked to the animals Uhf tag number.

Providing for individually identifiable kill data, which can then be combined with on farm information.

One of the benefits is the ability to determine benefit/detriment of any changes made at a farm level more easily.

Cost:
Tags 30p
Reader C. £500
Annual license £100
Evaluation of ammonia emissions factors

• Two ammonia analysers have been built/purchased.
• These are being deployed on year long “missions” to determine levels of ammonia emissions from different types of buildings and the factors that impact them.
• Buildings are piped up and the analyser logs ammonia readings from 12 or 10 inlets/outlets to get a net ammonia emissions reading.
Evaluation of Carcass cooling container

- Does what is says on the tin. Fundamentally a large fridge for fallen stock.
- Reduces odour, pathogens, fly spread etc.
- Can fit a “sow bin” so doesn’t complicate collections.
- Energy use approx. 80p per day.
- Temperature remains stable between 2 and 7 degrees even during 30 plus degree environment
In Denmark the containers are used for two purposes, to reduce collection frequency (saving on collection costs) and to slow degradation of the renderable products from the animal. Increasing the value to the renderer and therefore reducing collection costs. The reduction is approximately 15% per year.
Future trials planned

• Lighting:
  – Blue lighting for use in grower finishers?
  – Optimal lighting regimen for fertility, growth, welfare, meat quality, reducing behavioural vices.

• Water:
  – Cleaning systems, ultrasonic, UV, chemical etc.
  – In water med delivery system?
  – Outdoor water for piglets?

• Expansion of existing trials
  – Farrowing house, stocking density etc.
Feeder Review - Whose seen it?

- Impartial review of a range of feeders, same farm, different feed types tested.

  bpex-feed-review-19dec-v2.pdf

- Any good? What about a creep feed one? Or other suggestions?
Current Marketing activity

• Pulled pork campaign went live for second tranche of advertising in Early Feb (10/02/2016).

• Goals
  – Increase fresh pork purchases
  – Better utilisation of carcass (shoulder joints)
  – “Halo effect” seen last time
  – Better educate consumer on how not to destroy a high quality product by cooking it poorly.

BPEX-GET-LAZY-TV-030-190116.mov
KT and KE activity

• Practical pig app
• Ventilation videos- guidance on pitfalls etc.
• Business Resilience/Survivability webinar/meetings
• Rodenticide regulation changes
• Supply of water to outdoor piglets
• PC AI work- Angela Cliff - see next slide
KT and KE activity

New AI techniques, what happens now?......

- UK: 390,000 sows, 85% sows mated with conventional AI, (cervix )
- Spain: 2 million sows, 80% sows mated with PC AI, (post cervical)
- Brazil: 1.6 million sows, 60% sows mated with PC AI
- USA: 1.5 million sows, 25% and growing mated with PC AI
GETTING THROUGH TOUGH TIMES: COPING WITH LOW PRICES

HOME \ EVENTS \ AHDB PORK WEBINARS \ 2016 \ GETTING THROUGH TOUGH TIMES: COPING WITH LOW PRICES

Monday, 15 February 2016
6:30pm - 7:30pm

What: With pig prices below cost of production, AHDB Pork is running a live webinar for pig producers exploring how we could reduce the cost of inputs and look at the industry’s opportunities. Regional meetings are also being organised for early March.

Irish pig producers are experiencing the same poor trading conditions and Clarán Caroll of Teagasc will be online to share the strategies they’re adopting to help get through the coming months.

Clarán will be joined by AHDB analyst Stephen Howarth for an up-to-the-minute analysis of prospects for the pig market – what is likely to happen next and why.

Plus Jonathan Eckley from AHDB’s export team will highlight the opportunities for the British industry to sell more pork both overseas and at home to help support the pig price.

Who: Open to all pig producers and the allied industry. Questions and ideas from producers will be welcomed to further the discussion. It will be hosted by AHDB knowledge transfer team lead, Stephen Winfield.

Join online from your own home or office

CLICK HERE TO REGISTER
Significant Diseases Charter
Exotic and emerging diseases are always threatening the UK pig industry

Introduction of these diseases threaten productivity and the health of the UK herd

Early detection is key to help in reducing the spread of disease
Starting Point

• Swine Dysentery was identified as a significant disease for the pig sector
• A Swine Dysentery charter was already in existence to help communicate the disease status of affected farms to other producers in the area in the event of an outbreak
• The old charter and the new significant diseases charter are voluntary schemes, which rely upon producer trust to work
Old Vs. New

• The ‘old’ Swine Dysentery charter only covered one disease and comprised of a simple spreadsheet of contact data.

• The ‘new’ Significant Diseases charter:
  – Covers two diseases (Swine Dysentery and PED)
  – Has the capacity for more diseases to be added should the industry need
  – Is linked to Pig Hub so easier for data to be kept up to date
  – Vets can now alert the charter through the ‘vet login’ to pig hub
SD Charter and PEDv

• PEDv is NOTIFIABLE in England since December 2015

• The best control of a significant PEDv outbreak has been seen in Canada

• The control has been run at a provincial level and has been led by local producers and veterinarians, with government providing support.

• The SD charter will act complimentary to the legislation and assist early notification of outbreaks
How it Works

• The vet of an affected farm notifies AHDB of an outbreak, which is confirmed by lab results.
• The charter utilises eAML2/Pig Hub to identify charter members within the ‘at risk area’ and emails/text message alerts are sent out.
• Basic information on the case is sent out via emails.
• Wider notification of the region where an outbreak has occurred is sent to allied industry and interested partners
Member’s Responsibilities

• Keep your information up to date - keep pig hub data current (e.g. email/mobile numbers) as this is how we send out alerts

• Members of the old Swine Dysentery charter need to re-join the new scheme and update their information

• The charter terms require farmers to alert their vet to the fact they are members and ensure that the charter is notified in the case of:
  – A suspected case of PEDv
  – A confirmed (via lab results) case of SD
Our Responsibilities

• **We will** ensure that your data remains private and that it is not shared with third parties

• **We will** only use the outcode (first part of the postcode) in any alerts

• **We may** identify a ‘High Risk’ holding in your area (e.g. high levels of pig movements or flow of people on and off) and we will then ask permission to notify this premises if outside the charter.
How to Join

• Join up directly on www.pighub.org.uk

Or

• Email the health team pighealth@ahdb.org.uk
Thank you for your time... and patience.
Any questions?