

Postgraduate studentships

Each year the MLC provides support to a number of postgraduate students who are engaged on research projects relevant to the livestock and meat industry.

- 3 year PhD
- 1 year and 2 year research Masters
- 1 year taught Masters
- Summer vacation scholarships

A postgraduate students' seminar took place at the MLC, Milton Keynes, on 20-21 November 2007. This is an annual event, which allows MLC's postgraduate students to give short presentations of their research aims and objectives, and research findings to date, to MLC staff, selected guests as well as the other students. For further information contact Heather Leask (Email: heather.leask@ahdbms.org.uk Tel: 01908 844264).

COMMUNICATIONS AND INFORMATION DISSEMINATION

A wide range of leaflets, booklets and reports have been published by the MLC on behalf of BPEX. These provide both technical and practical information to help producers tackle many of the challenges faced by the British pig industry. Some publications are one-offs while others form part of a series and where appropriate they are produced in conjunction with other organisations.

The full catalogue of publications is available on the BPEX website, many of which can be downloaded to your computer; hard copies can be obtained, free of charge, from the Technical Division (Tel: 01908 844734).

Some of the most recent publications include:

Action for Productivity These advisory notes contain targets for producers to aim for and advice on how to achieve them, along with facts and advice aimed at stockmen. From a practical standpoint, they are made of durable wipe-clean material and can be stuck on the wall as a reference tool.

- 1 Regular worming
- 2 Strawing up
- 3 Heat stress (indoors)
- 4 Heat stress (outdoors)
- 5 Creep feeding
- 6 Enzootic pneumonia
- 7 Factors affecting killing out percent



- 8 Feed and straw management to reduce the risk of mycotoxins
- 9 Establishing the weaner
- 10 Cleaning and disinfection
- 11 Increasing uniformity of finished pigs
- 12 Papular dermatitis
- 13 Biosecurity
- 14 Newborn management (indoors)

Target Pork Quality

- 1 Opportunities for improving the quality of pork
- 2 Use of pH meters at pork processing plants

Other leaflets:

Increasing feed prices: a need for improved efficiency Although reducing COP can take the form of reducing input prices, for example switching to a cheaper ration or by purchasing in larger quantities, it can more often involve improvements in technical performance.

Climate change series: Focus on pigs Climate change presents new challenges and opportunities for pig farmers. Farmers need to consider the productivity impacts of climate change on businesses and the welfare issues for animals. The climate challenge fact sheets aim to empower farmers to understand and manage the challenges and opportunities of climate change and offer sector-specific advice on making the most of the opportunities afforded by climate change.

Biosecurity: general guidelines for farm visits Biosecurity is the set of practical measures you take to limit the spread of infectious diseases, both within a farm and from one farm to another. This document describes the basic working practices that should be adopted to limit the spread of disease and should be followed in conjunction with any specific advice from the unit's veterinary surgeon.

Soils strategy case study: water erosion Good soil management is fundamental for productive and sustainable agriculture. Under the Single Farm Payment Scheme land must be maintained in Good Agricultural and Environmental Condition (GAEC). New legislation, in association with production and environmental drivers, has resulted in a renewed focus on soil management. To complement existing provision on soil management, a series of soil-related best practice case studies have been produced.

Full technical reports are available for many research projects, including the **Finishing Pigs Systems Research** production trials 1 - 4, providing information on the following, each in two contrasting housing systems (fully slatted versus straw based):

Pigs Action for Productivity

Newborn management (indoors)

Newborn piglets are poorly equipped to keep warm immediately after birth and as the energy reserves to produce body heat (glycogen stored in the liver) are limited, the combination of factors below means that piglets often become chilled. Piglets are also born with no immunity and can only get this from colostrum soon after birth. 100 ml of colostrum within 16 hours is crucial to provide the energy, nutrients and antibodies needed for survival.

- Small size means they lose heat fast
- Lack of brown fat (no internal heat source)
- Little surface fat and no hair (no insulation)
- Born wet with birth fluids (further chilling)

Targets

- Reduce mortality (of piglets born alive) to below 9%
- Increase piglet survival post weaning to 90-95%
- Reduce weaning weight

How can you help the newborn piglet and ensure a good start in life?

Monitor damming

Being present at farrowing is a critical part of good farrowing house management. If you possible, or your work schedule allows, consider altering routine or raise to provide cover at the crucial time or discuss with your vet the possibilities of using products to prevent farrowing during the daytime, when you are not present.

Colostrum

- Colostrum is the first milk and an essential source of energy reserves and immunity for the piglet
- Colostrum is critical for development of the piglet's own immune system and maximum lifetime performance
- Phenazine colostrum replacer in the first 6 hours after birth, followed by fresh (100 ml) milk by 16 hours post farrowing
- Between 16 hours to two days as the piglet's intestine can no longer absorb the large antibodies found in colostrum
- Colostrum is only available in quantity for about 12 hours and after 20 hours the sow will be producing milk and not colostrum

Remember: Colostrum deprivation will reduce LRF (LWG) and overall piglet LRF (LWG) performance, see fact sheet

Benefits of using pH meters as a monitoring tool

These key processing areas can substantially benefit from pH monitoring:

- 1. Production efficiency:** Carcass pH is directly related to the amount of drip loss and thus the final yield of meat sold. The pH of the carcass is also greatly influenced by post-mortem pH.
- 2. Meat quality:** pH is a good indicator of your meat quality. pH information could be used to regulate carcasses for more efficient use and to monitor process performance.
- 3. Pig welfare:** Poor pH carcasses may indicate a potential stress-related problem. These problems can be properly addressed only if identified.

Monitoring of carcass pH will help to identify production efficiency, meat quality and welfare problems. Carcasses are not addressed from areas can only be taken after analysis of carcasses and/or identification of specific problems.

To improve productivity, quality or welfare at the factory: Measure and Monitor them FIRST!

	PSE	DSE
	Pale, soft and exudative meat	Dark, firm and dry meat
pH fall	Very rapid rate	Reduced extent
Drip loss	pH ₂₄ < 6	pH ₂₄ > 6
Carcase	Acute stress (strong far residual)	Chronic stress (strong far, low of residual)
UK pork production (meat)	15%	1%
Main associated problems	<ul style="list-style-type: none"> 1. Pale colour 2. Excessive drip or purge in packaging 3. Low pH₂₄ in processed products 4. Low pH₂₄ or pH₄₅ (not at length when cooking) 5. Dry, lean and poor texture 	<ul style="list-style-type: none"> 1. Dark colour 2. Poor processing potential (excess water holding, highly abnormal colour development) 3. Meaty flavour 4. Meaty purge to springs, no lean and no

- Liquid versus dry feeding
- Phase versus single diet feeding
- Cereal fermentation versus non-fermented liquid diets
- Low protein versus a control liquid diet

E-communications

BPEX website - www.bpex.org.uk

A considerable amount of valuable information is available from the BPEX website. Get up to speed with industry issues, market prices and technical information, download publications and presentations and find out about research projects as well as marketing activity.

Target Farm Action

This is a monthly page that features in Pig World magazine, formerly known as Tech Talk. Target Farm Action has been developed to bring levy payers practical advice, news and innovation and updates relating to the pig R&D that BPEX are involved with. As well as being distributed via email, back issues can be viewed and downloaded from the BPEX website. If you would like to be added to the email distribution list contact the Technical Division.

BPEX Weekly

BPEX Weekly is a newsletter sent out by email every Friday covering a wide range of topics that may be of interest to the pig industry. It contains a number of different elements, including technical, marketing, national news, international news and prices. It is sent to producers, processors, veterinary surgeons, civil servants, academics and allied industry. If you would like to be added to the email distribution list contact the Technical Division.



The BPEX website is a valuable source of information

CONTACT US

The BPEX Pig Team and BPEX KT managers provide technical information and support for the industry. Contact the BPEX Technical Division to request copies of technical publications or if you would like one of the team to be involved in an event you are planning.

BPEX Technical Division
BPEX Ltd
PO Box 44
Snowdon Drive
Milton Keynes
MK6 1AX

Tel: 01908 844734
Fax: 01908 844214

	Telephone	Email
Tess Howe	07779 321078	tess.howe@bpex.org.uk
Angela Cliff	07967 788484	angela.cliff@bpex.org.uk
Miriam Drewett	01908 844749	miriam.drewett@bpex.org.uk
Pinder Gill	01908 844142	pindergill@bpex.org.uk
Kayt Johnson	07973 977171	kayt.johnson@bpex.org.uk
Silvia Nicolau-Solano	01908 844105	silvia.nicolau@bpex.org.uk
Nigel Penlington	01908 844276	nigel.penlington@bpex.org.uk
Lisbeth Ravn	07891 656784	lisbeth.ravn@bpex.org.uk
Helen Thoday	07973 701202	helen.thoday@bpex.org.uk
Mark Wilson	01908 844105	mark.wilson@bpex.org.uk