



## PIC® Newsletter - April 2016

Thank you to all of you whom were able to attend one of the four PIC UK road show meetings in late February and for your excellent feedback. This was demonstrated in the interest in the nutritional aspects of the roadshow, and the many on-going and planned nutritional trials with PIC® products and progeny. During the week the members of the PIC® Global Nutrition team, Uislei Orlando and Marcio Goncalves, met with key UK nutritional suppliers to discuss all aspects of feeding the PIC® products and progeny to optimize returns. We will continue to strive to share our technical knowledge to assist you with capturing the genetic potential of PIC® genetics.

This newsletter focuses on selecting the best terminal sires. In line with this quarter's theme we would like to update you on the progress we are making with the PIC®337 and PIC®327 terminal sires in our Gene Transfer Centres (GTC).

Throughout 2015, we placed over 300 high indexing terminal boars resulting in a significant genetic advance for our PIC®337 and PIC®327 sires. This is demonstrated in the raised average index value of the terminal boars of approximately 13 points – which means an additional £ 0.85 per pig produced in overall economic performance from the farrowing house through to slaughter. To further increase the genetic potential of your terminal sires, consider upgrading to the Profit+ sires for a 20 points in index and the potential of £1.30 per pig margin.

We have also placed the PIC®359 Profit+ boars in stud. This boar's progeny have excellent on farm performance with a high level of full market pigs and low morbidity.

In summary, PIC UK re-started the boar imports from North America in January 2015 and is delivering world class genetics with the reconnection to the Genetic Nucleus herds in Canada. That connection is resulting in your operation accessing greater levels of accelerated genetic improvement, which means faster rates of improvement on your farms.

Yours  
 John Jeckel  
 Commercial Director PIC UK

### *Impressions of the PIC UK Road Shows 2016*



*Uislei Orlando talked about nutritional aspects of the growing pig.*



*Craig Lewis gave an update about the significant genetic improvement.*

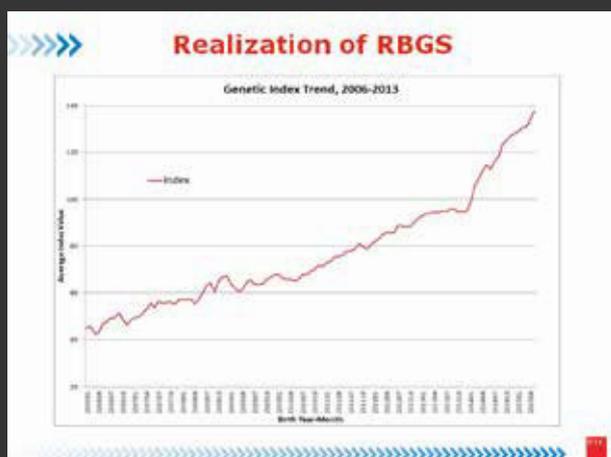


*Marcio Goncalves discussed "Why should we feed the Camborough® different to other females?"*

## Selecting Terminal Sires for Customer Profitability

PIC® is committed to continually improving our products in an effort to maximize the success of our customers. From a genetic improvement perspective, we accomplish this with a clear focus on improving the total economics of commercial pork production. To deliver this advantage in profit potential our terminal sires are objectively evaluated for those traits that influence the performance of their progeny, such as growth rate, feed efficiency, carcass value and robustness via PIC's industry leading performance testing and genetic evaluation system.

We are strong believers in the mantra of "you must measure what you want to improve" and this guides our continued investment in performance testing. From specialized and detailed testing of elite individuals with serial growth and intake measurements, to expanding utilization of our real-world progeny test GNXbred program, we are continuously focused on proving the merit of individual animals as parents of the next generation. In particular, the PIC® GNXbred program utilizes elite nucleus sires to produce single-sire commercial pigs in typical commercial conditions to ensure that our customers realize the growth, efficiency, robustness and carcass value that are the targets of our selection program.



Increasing investment in genomic science has allowed us to lead the world in implementation of Relationship Based Genomic Selection. This innovation, first implemented by PIC® in 2013, utilizes high density SNP chips to increase our ability to evaluate the genetic relationships between animals. Combining more accurate data with a significant increase in our ability to accurately utilize that information has allowed us to accelerate our rates of genetic progress by over 50% for the last 3 years – resulting in greater profit potential for our customers.

## Proper semen storage and handling on farm



Every dose of semen brings the Genetic Improvement into your herd.

Semen storage and handling is not rocket science. Sometimes there are occasions where breeders use semen with suboptimal fertilizing ability due to inadequate storage conditions. This article will revisit some biological facts about sperm cells, particularly with regard to environmental influences and provide tips on how to store and handle semen on farm for maximum maintenance of fertilization ability.

Motility in freshly collected ejaculates is about 75–95 % and decreases over time. To preserve the sperm cells and maintain its fertilization ability, semen extenders are used to prolong shelf life from 2 up to 12 days.

This happens by lowering the metabolic activity of every sperm cell, providing nutrients and stabilizing the pH of the semen dose. Most extenders contain antibiotics to control bacterial growth and other substances that protect the cells against effects of high/low temperatures. It is important to keep in mind that extenders only slow down sperm death. The quality of semen doses does not get better over time. Some extenders claim to preserve semen for up to 12 days, however, wherever possible it is recommended to use all semen doses within 3 days of collection, (day of collection = 0). Thus, accurate planning of semen orders is necessary to have the right amount of doses on hand every day and avoid trashing more than 3% of the doses due to expired shelf life. Correct semen handling starts with an appropriate semen delivery point located outside the farm. This ensures that the semen courier does not access the biosecurity area. Avoid placing storage boxes in areas with environmental temperatures below 10 and above 32 °C as this can have a detrimental effect on semen quality. Once on-farm, the semen refrigerator should be set to a temperature of 16–18 °C equipped with an outer temperature display. An alert system or defined delivery times helps to ensure the transfer doses from the 'drop-off' point to the final on-farm semen storage facility happens as soon as possible. For optimum semen preservation the semen refrigerator should be maintained to the following recommendations:

- > Constant storage temperature between 16 and 18 °C
- > Fan-assisted, able to cool and heat
- > Sized for weekly delivery (Rule of thumb: 0.6 l total volume per dose)
- > Shelving should be open (wire racks)
- > Outer temperature-display, with a precision of  $\pm 1$  °C.
- > Space between wall and semen refrigerator in general 2.5 cm unless supplier says otherwise.
- > Place at room temperature in a clean environment.

The semen should be stored horizontal and loose without any packaging material at 16-18 °C. A once a day inventory check along with turning the se-



*Comprehensive Quality Control*





*Example for semen drop-off place:  
Thermocabinet which can be filled  
from outside the building*

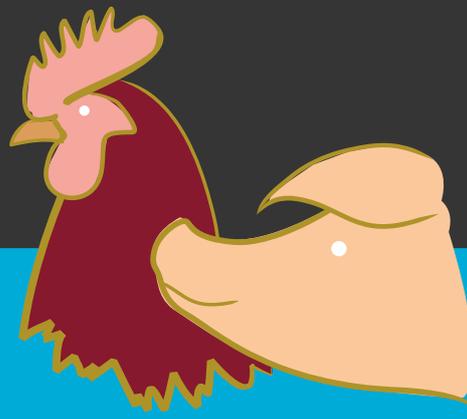
men doses and temperature control on a minimum-maximum thermometer is recommended. Most representative results are achieved if a thermometer is placed in a water-filled semen bottle placed inside the storage device. Semen inventory and temperature should be logged daily. Avoid placing other items in the storage device to keep opening times to a minimum and prevent temperature fluctuations. Semen doses should be transported to the breeding area in an insulated container and those doses should be used within the hour. Avoid returning warmed up semen doses to the semen refrigerator device as they can cause temperature fluctuations which can have a negative effect on the semen doses' shelf life. In case the semen arrives on-farm out of the optimum temperature range, contact your semen supplier to discuss how to handle the doses and potential prevention strategies for the future.

For further questions contact your local PIC® Technical Services Team.

## SAVE THE DATE: Pig & Poultry Show 2016

Gather advice to help grow your business,  
hear from industry experts and keep up to date with latest developments!

**Meet PIC®  
at Stand 70 (Hall 2)!**



**BRITISH  
PIG & POULTRY  
10-11 MAY 2016 FAIR**

**PARTNERED BY ABN | NAEC, STONELEIGH, WARWICKSHIRE**