

Pork CRC Initiatives APN March 2016

By Dr Roger Campbell, Pork CRC CEO

April much more than just another month

With meetings and events almost every day through February, the start to 2016 has been hectic, but, I must say, also enlightening.

In this March Pork CRC Initiatives column I want to remind everyone about APRIL (the company that is) and highlight a few things I learned at the recent South Australia Pig Industry Day.

APRIL ahead

As you're aware, APRIL (Australasian Pork Research Institute Ltd) is the entity which will replace Pork CRC which when we wind-up on June 30, 2019.

Pork CRC has generated significant additional research and training activity since its inception in 2005 and has helped keep Australia up with and often ahead of our international competitors. We don't want to lose this momentum, especially as the Australian industry continues to improve its global position and, more importantly, consolidates and expands its domestic success.

APRIL is established, is likely to start investing in research and training in 2017-2018 and is looking for inaugural members to sign up before June 30 2016.

Inaugural members will have a say in how APRIL funds are used to support research and training before 2019-2020 and will have the opportunity to nominate a director to the board, which is currently proposed at eight. Members will also have a seat on the R&D Advisory Committee, which will determine research priorities and recommend research and training investments to the board.

Details are spelt out in the prospectus, which is on our website at www.porkcrc.com.au, but in summary:

- Membership will be \$75,000 per year on a three year rolling basis
- Those wanting to join after June 30, 2016 will pay a joining fee proposed at \$100,000 and need to obtain the support of a majority of the inaugural members
- Revenue will come from membership, IP generated by Pork CRC and from cash contributions to APRIL projects and is projected to approach \$1 million annually.
- Total revenue is expected to be around \$ 2.6 million annually
- Members will be given priority in respect to training and for base funding support
- Other levels of membership will be decided by the inaugural members and board
- The constitution is almost complete, as is the membership agreement

This is a great opportunity for companies and perhaps individuals to play an active role in directing the future of research and training and helping ensure the continued success of Australia's pork industry.

For details, or further information, don't hesitate to email me at Roger.Campbell@porkcrc.com.au. If you are interested, our Chairman, Denis Mutton and myself will happily visit you to cover everything you might need to know.

Pig day

Pork SA held its annual Pig Industry Day on Friday, February 26.

The meeting was very well attended and we heard some excellent presentations, including from Dr Kate Plush on what herds in SA are doing in terms of reproduction. Caleb Smith told us how the Smith family is achieving 26.5 pigs weaned/sow/year and Dr William van Wettere discussed a couple of simple technologies to improve live born and post weaning survival.

Farrowing house

Kate and her team, as part of an APL project, reviewed the records of 21 SA producers and visited them all to establish variation in reproduction and what might be causing it. As you might expect, the variation in all reproductive parameters was large and ranged from what you might term terrible to very good and it seems that the secret to improving reproduction comes down to farrowing house management and oestrus detection.

Ovugel coming

In the farrowing house, maximising sow feed intake and minimising sow weight loss are the keys to good subsequent reproduction and maximising sow longevity. Oestrus detection is a matter of good management and can and will be improved or made easier when we have a reliable technology for synchronising oestrus in weaned sows. The latter is likely to be made possible when Elanco releases its Ovugel product in the not too distant future. Ovugel will allow you to mate sows after weaning, using only one insemination and without the need for heat detection. I think it's a technology that could revolutionise the Australian industry. Pork CRC also holds patents on the use of Ractopamine to minimise sow body protein loss in lactation, so we could see some marked improvements in reproduction when these technologies are made available to industry.

Meanwhile, I suggest you keep an eye out for Kate's report and discuss with your semen supplier or veterinarian the use of post cervical AI (PCAI). This technology is available now and makes AI simpler and faster. You can also reduce sperm numbers, but some training is required.

Smith benchmarks

Tom and Val Smith started in pork production in the 1970s and have built their herd up to 2000 sows. I learned at the Pig Industry Day that they were the first Australian piggery to use liquid feeding. The Victorian business (Kia-Ora) is managed by Tom, Val and their sons Caleb and Jarad.

They are in the Pork CRC benchmarking project and based on what Caleb told the meeting, are clearly one of the best herds in the project.

Caleb told us that some two years ago they changed how they selected replacement sows, using an index based on litter birth weight, number weaned and other litter traits to try to overcome a relatively high live born, but less than satisfactory numbers weaned.

It seems to have worked, as they now wean more than 11 piglets per litter and some 26.5 pigs/sow/year, weaning at 30 days. Interestingly, there is further room for improvement, since our benchmarking results show that the better producers weaning between 19 and 28 days differ little in farrowing rate, born alive or in pre and post weaning survival or progeny growth performance. Those weaning earlier do produce more litters/sow/year.

Caleb is working closely with Kia-Ora's genetic supplier to implement the changes and ensure they continue to head in the right direction.

Caleb also told the meeting that they tend to load up lactating gilts (piglets to match teat numbers) and he showed us how this has no adverse effect on second litter size.

The Smiths are excellent producers and I suggest you take the chance to listen to what Caleb has to say. He will be speaking again at this year's Pan Pacific Pork Expo, which will be held on the Gold Coast, May 25 and 26.

I also encourage you to join Pork CRC's benchmarking project (contact Rowan O'Hagan, email rowanohagan@bigpond.com) where you will learn from people such as the Smiths and the other producers involved. Australia is heading in the right direction and there is no reason all serious producers can't achieve 24-25 pigs weaned/sow/year, with the potential to get to 27 with current genetics.

Serving coffee

Dr Will van Wettere showed Pig Industry Day attendees the results of APL supported experiments to investigate the effects on live born, piglet viability and survival, of feeding sows creatine at 2.5% of the diet for five days before farrowing, or caffeine at 6g/d for three days before farrowing.

Creatine, which plays a critical role in brain development and metabolism, had no effect on born alive, but improved survival to day 18 from 85% to 94%.

Caffeine, which is a respiratory stimulant, tended to increase gestation length and significantly reduced still born number (from 0.69 to 0.29 piglets/litter) and increased the number of piglets alive at day 18 from 9.74 to 10.49.

Interesting results I think, especially as there appears to be quite a gap between total born and born alive in herds with 'bigger' litter sizes and caffeine may reduce this, while creatine may have a role in improving piglet viability and pre weaning survival.

Small but consistent changes in born alive and/or pre weaning survival can result in quite significant improvement in the number of pigs weaned/sow/year. For example, the creatine results suggest the number weaned per sow/year for sows with a born alive of 12 and weaned at 21 days could potentially be improved from around 24 to 26.8. It may be unrealistic to expect to achieve 95% survival to day 18, but any improvement to pre weaning survival will improve the efficiency of production and revenue. The eventual outcome will also depend on farrowing house facilities and management.

The creatine technology costs around \$4.00 per gestation and the caffeine strategy around \$2.00.

Both strategies need to be validated commercially, but watch this space and contact Will (Tel 08 8 313 7911) if you want more information.

I'm off to the USA for a week this month. I'll see how they are adjusting to low margins again and what is happening in research and commercial production and let you know the more interesting and relevant outcomes when I return.

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