

Pork CRC Initiatives APN September 2016

By Pork CRC CEO, Dr Roger Campbell

Blistering pace set by CRC CEO

I spent most of August on the road and in the air.

And I flew to Canada August 28 to September 3, hence thought I'd give you a travelogue and what's occurred along the way.

I spent time in WA at the WA Pork Producers' Association AGM and industry day (August 12), fishing for barramundi in Darwin and in New Zealand where our board met. I also spent a couple of days in Melbourne at the annual review of our programs.

WAPPA WA

The industry seemed buoyant during my visit and I enjoyed good presentations from Andrew Spencer and Deb Kerr of APL on how they are preparing for Standards and Guidelines (Model Code) review which has been brought forward by APL delegates theoretically to 2017-18. I am sure you will hear a lot more about this in coming months, but when and how it happens is up to government and the best the industry can do in the meantime is plan for it and a committee has been established to do this – watch this space.

Darwin appeal

The fishing was great and it was largely a matter of keeping the lures away from the numerous crocodiles that live in the couple of remote rivers in which we fished. As good as the fishing was, spending seven hours in an open boat under a beating sun didn't do my 'Scottish' skin or humour much good. Although the blisters may now have gone, I still have layers peeling off from every part of the body remotely exposed during the day on the water. I encourage anyone thinking of such an adventure to take the half day option.

NZ board

The NZ Pork Board signed the APRIL member's agreement during our visit, which unfortunately was only a day after they won the Bledisloe cup match in Sydney, so a bit hard to take but we got the agreement signed.

Pork CRC Board visited Patoa farms a 5500 outdoor sow unit owned by Steve and Holly Sterne. The sows are kept on some 550 hectares of sandy/gravel (even rocky) soil, with some spending time in pine plantations. They wean at 21 days and are weaning 10.5 piglets/litter, which seems pretty good and the operation I must say looked magnificent. The progeny are all kept in eco-shelter type accommodation, with growers and finishers housed in groups of 800 in large, specially designed eco-shelters with a roofing material and system I've not previously seen. Wind is a real problem where they are and all housing has been redesigned over time to prevent losses (of roofs and huts etc.) during times of some really wild weather. They have 47 employees, including management and the whole operation is a credit to Steve and Holly and their team. If you ever get the chance to visit he farm, do so as it's an eye opener.

The board meeting concentrated on ensuring APRIL will be up and running before the end of 2016 and in ensuring current and future Pork CRC projects will deliver adequate revenue for APRIL and address welfare issues around group housed sows and farrowing and lactating sows and their piglets for the Standards and Guidelines review.

Melbourne review

Pork CRC's annual review in Melbourne made it clear that our R&D and training programs are running well and I have said it before and will say it again, that I am very happy with the programs.

In **Program 1** we have several projects investigating new welfare and performance indicators for group housed sows and at least six very innovative projects on establishing and improving the welfare of farrowing and lactating sows and their litters in crates.

I mentioned in a previous column the findings of Dr Kate Plush on porcine appeasing pheromone (PAP), which was shown to significantly reduce aggression in sows at and after mixing. The product, which is produced by a French company, has implications for farrowing and lactating sows and probably even for weaner and grower pigs and we are following up on negotiating a supplier in Australia. The product is currently being investigated for sows during farrowing and lactation and I will let you know the outcomes when the study is complete.

In **Program 2** we have projects on the development of vaccines against APP and swine dysentery, the development of an on-farm kit for assessing immune challenge and health on a herd basis, a means of enhancing vaccination efficacy and a couple of projects with real potential to reduce our reliance on antibiotics. One of these includes the Anata product Detach and the other Lauric acid which based on some APL research by Professor John Pluske seems to have real potential for grower and finisher pigs. I look forward with some excitement to the outcomes from these projects.

In **Program 3** we have a potentially system changing project on the use of near infrared spectroscopy (NIRS) to rapidly determine boar taint and a couple of projects looking at the critical control points during processing which affect ultimate pH, which is one of the better indicators of eating quality.

We also have a project with University of Melbourne looking at the effects of modified atmosphere (MAP) and vacuum packing on the eating quality of the loin. You may remember me mentioning previously that the initial results on packing suggested that MAP may be preventing the aging of pork.

In **Program 4** we have three projects on the effects of grain particle size and fibre on rate of passage and feed efficiency. They are very novel and somewhat complex, but potentially represent the next major advance in pig nutrition. I certainly hope this is the case because we have seen few technologies since the introduction of PST and Ractopamine that improve feed efficiency. Some of the work I have seen recently on means of manipulating feed intake by John Pluske, Karen Moore and Frank Dunshea and others using Lauric acid and other materials gives me a new level of confidence that we may be on the verge of a few genuine breakthroughs – only time will tell.

Our Bioenergy Support Program continues to kick goals and Dr Stephan Tait, Alan Skerman, Janine Price and all the producers involved are to be congratulated.

Next round

The next investment round (2017-18) will be the last for Pork CRC. APRIL will invest in R&D and training starting 2018-2019, at the same time the Pork CRC will be closing down.

The 2017-18 call will be for shorter term innovation proposals across the programs but with emphasis on programs 2 and 4. We will be looking for genuine new ideas and proof of concept proposals that may lead to longer term projects in APRIL and/or generate revenue for APRIL, although this will ultimately be the decision of APRIL members. Funds will be available to ensure

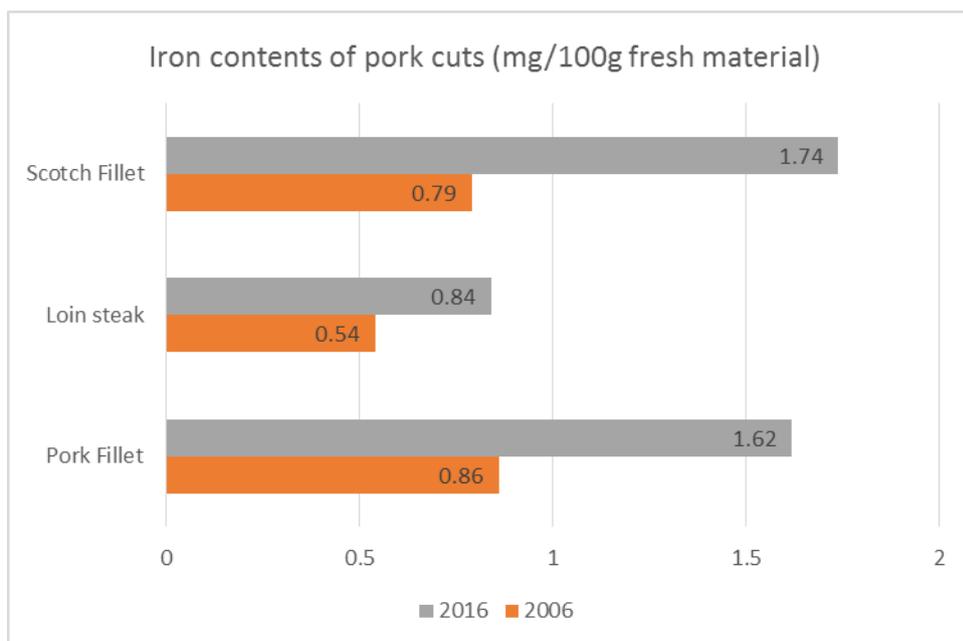
current projects deliver the outcomes promised and expected and to ensure those with commercial potential are brought to market.

We will guarantee that any genuine new ideas that improve the industry and/or could result in commercial products will be given serious consideration.

Ironic pork

The results of a survey of the nutrient contents of three pork cuts procured retail ready from NSW, Victoria, WA and Queensland, conducted in 2016 by Dr Ken Ng from the University of Melbourne, showed there had been a marked increase in the iron content of all three cuts since the previous survey in 2006. The results of the 2006 survey meant no claims could be made on pork as a source of iron. You will note from the graph below that the iron levels measured in 2016 were 55% to 120% higher than in 2006. We don't know why and this could be associated with improvement over time in the analysis of iron or maybe changes that have occurred in industry. Regardless, it is good news for Australian pork. Ken also reported significant increases in the levels of Mg, Ca and thiamine in the three cuts between 2006 and 2016.

The comprehensive report (3B-112: Nutritional composition of pork – Ken Ng, University of Melbourne) can be found on our website.



Iron content of three pork cuts measured in 2006 and 2016

Campbell comment

I am speaking at a couple of industry days in Canada organised by Jefo Canada.

I know what I am going to say and you have all probably heard it before, but there are some interesting other speakers on the program, including:

Dr Marcio Goncalves from PIC USA who will speak on "Recent findings on sow nutrition" and "Feeding pigs for maximum profit" – both will be interesting, as US nutritionists have recently

suggested there is little exciting happening with sow nutrition – but PIC always have something up their sleeves.

Dr Jean Noblet will speak on net energy for pigs and poultry and on achievements and perspectives in pig nutrition. Jean is a smart man and there is a good chance I'll learn something.

Paul Hubilla, nutritionist from the Philippines, will be speaking on 'Improving sow reproduction through better feeding' – let's wait and see.

I will summarise the more interesting and applicable lessons learned for you.

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