Pork CRC Initiatives March 2018

Wake up to weights and vary volumes

I'll set the scene this month by summarising our global position for 2016 (**See Table 1**).

Table 1 Business and performance indicators for selected countries - 2016

Country/KPI	AUS*	USA	Canada	Denmark	Netherlands	GB*
COP	2.70	1.56	1.81	2.10	2.34	2.29
Feed ($/tonne)	365	256	314	328	370	340
Feed ($/kg CWT)	1.38	1.02	1.22	1.22	1.27	1.25
Other costs ($/kg CWT)	1.32	0.54	0.59	0.88	1.07	1.04
HFC	3.73	3.97	3.87	3.70	3.43	3.67
Pigs weaned/sow/y	23.9	25.7	23.2	32.1	29.8	24.8
Pigs sold/sow/y	22.8	23.4	21.9	30.8	28.4	23.2
Carcass weight (kg)	76.5	94.0	99.3	84.2	93.0	82
Carcass/sow/y (kg)	1687	2202	2178	2531	2640	1901
Wean-finish Morality (%)	4.4	9.02	5.5	6.4	4.8	5.04

* AUS = Australia & GB = Great Britain

Cost comparisons look different to last year due to change in exchange rates between 2015 and 2016. While there is nothing wrong with a COP of $2.70 if you're getting $3.00 for your pork, unfortunately this not generally the situation in Australia at the moment. COP varies from below $2.40 to above $3.00 and is most affected in the short term by feed costs, which vary from less than $350/tonne to above $450/tonne. While it's difficult to do much about grain/feed costs, except use the feed more efficiently, the greatest opportunity for reducing COP lies in volume and this is independent of grain price and hence more under your control. I discuss this in more detail below.

Feed costs were generally higher in Australia, but there is some relief, with the exception of Queensland in 2017 and it's looking similar for the start of 2018 at least.

Great Britain was the biggest improver in COP from 2015, due, in part, to lower feed cost and improvement in HFC from 3.85 to 3.67. GB also marginally improved volume sold/sow/year and you will note had lower other costs than us. The larger than usual difference in costs between Australia and GB was also influenced by the exchange rate, as the British pound weakened against our dollar and most currencies in 2016. On the other hand, GB reported improved COP, expressed in local currency, of 19.2% between 2013 and 2016.

HFC competitive

For HFC we're competitive with all other countries except the Netherlands, which has tended to lead the world in this KPI for the past five years, during which time HFC has remained relatively constant globally. The best three herds in our benchmarking project averaged 3.48 for HFC in 2016. At average feed cost, this represents a nine cents/kg carcass weight lower COP than the average. Given we generally have higher feed costs than most other countries, it's important to target HFC and do everything possible to minimise feed wastage and ensure pigs are fed with maximum efficiency.

Aside from Denmark and the Netherlands, we're not that far behind in pigs sold/sow/year, due, in part, to our good wean-sale survival compared with the US and even Denmark. Looking at born alive, we're consistently achieving 12.5, which is similar to the UK. The average for the EU is 13.8 – we need to get to 13.5 and I think we're on the way. I say this because the best Australian herd in Pork CRC's benchmarking project reported 12.8 born alive and weaned 11.3 per litter in 2016-2017. Also,

at the recent SA Pig Industry Day several producers reported weaning 11 plus pigs per litter. I would not have believed this possible five years ago.

Fat chance

The 'problem' and greatest opportunity is carcass weight and volume sold/sow/year. We have the lightest carcass weight and carcass weight sold/sow/year of all countries in the comparison. The difference in volume across the countries is reflected in costs other than feed (see line 4 in Table 1) where we are 23% higher than the next most expensive i.e. Netherlands.

The low carcass weight in Australia reflects retailer demand. Even if they are willing to cover the additional production costs (a minimum of 32 cents/kg), it causes inefficiency through the supply chain, making it difficult for Australian producers to compete in a globally competitive market.

It may not look like it from the table, but we're seeing consistent improvements in sow productivity, with better herds in the Pork CRC benchmarking group weaning 11 piglets/litter and 26/sow/year. If we get our average to this, we will take nearly 20 cents off other costs and this will be independent of feed cost or carcass weight. If we can get carcass weight up 5 kg, we could reduce other costs by another 8-10 cents. The good news is Richard Horsham from Primo said at the SA Pig Industry Day that Primo was increasing carcass weight.

Champion data

While things aren't all going to happen at once, these are relatively small changes with potentially big outcomes. Researchers will address further improvement in pigs weaned and sold, but we have champions out there to learn from. How do they wean 26^{+} /sow/year? The carcass weight 'issue' is best addressed at a business level. The Brits did it by working with likeminded retailers, which we too can do and Primo might be leading a welcome change.

The effects of pigs sold/sow/year on costs other than feed, HFC and COP are shown in Table 2. Assumptions behind the calculations – feed at $360/tonne, 75 kg carcass weight, 1200 kg sow feed annually. Sow feed use/utilisation contributes 20% to HFC, so increasing number sold/volume has a double whammy effect on COP. I've not shown volume, but it's easy to calculate and the difference in COP between selling 22 and 24 pigs is equivalent to an increase in carcass weight from 75kg to 81 kg. Similar effect between selling 26 and 24. The good news is we have producers selling 24 pigs/sow/year, but need to wean consistently near 11 per litter, 2.35 litters/year and keep post-weaning mortality around 4%.

Table 2 Effects of pigs sold/sow/year on HFC and costs

Pigs sold	Costs other than feed ($/kg cwt)	HFC	COP
20	1..33	3.72	2.70
22	1.21	3.64	2.52
24	1.11	3.60	2.40
26	1.03	3.54	2.29

Bottom line

So to the bottom line – difficult to beat the US. Everything is big about their systems. Input costs, especially feed, are low and if they ever overcome their health problems they will be unstoppable and that is their intention. They won every cost category and no performance category.

Labour and depreciation and interest costs for five countries are shown in Australian dollars in Table 2. The low cost nature of the US system is obvious.

While I don't have enough information on Australian herds to make any valid comparisons, at the SunPork Conference in September, 2017, Rod Hamann suggested labour costs ranged from $0.40 to $0.45/kg carcass weight. Queensland benchmarking results showed labour cost averaged 40 cents. At the SA Pig Industry Day, Kenton Shaw from Rivalea summarised their COP. Feed at greater than 50%, labour above 20%, with herd health, freight, R&M and energy all at around 3%. Different sources and values on labour costs may suggest something about wage rates across countries, but it's influenced also by volume. In contrast, Rod suggested finance costs were quite low, but not so sure about depreciation.

Table 2 fixed costs ($AUD/kg carcass weight) for selected countries in 2016

Country	USA	Canada	Denmark	NL	GB
Labour	0.11	0.22	0.27	0.27	0.24
Depreciation and finance	0.20	0.16	0.34	0.31	0.29
Total fixed costs	0.31	0.38	0.61	0.58	0.53

Feed costs in the US in 2018 will be similar to 2016 and 2017. We tend to lead the world in innovativeness and the rapid move to genuine sow stall free production was a game changer. Can we create a similar level of differentiation between our global competitors and us in the areas of enrichment and antimicrobial use? We seem to have somewhat of an advantage in the level of resistance to antibiotics of human importance in the industry, but can we go further with antibiotic use? It's definitely worth thinking about and is on the agendas of APRIL and APL.

Global ladder

We have to sell what we have rather than worry too much about what others are doing. Climbing the global ladder is largely about increasing volume and using feed as efficiently as possible. The good news is some producers are selling 2000^{+} kg carcass weight/sow/year and are globally competitive. I'm sure there are others doing better, so it can be done. If our researchers can come up with a technology for increasing the average number weaned/litter by 1.0-1.5 (to 12), we will be hellishly competitive and this is their challenge. Remember, however, that the genetics and knowhow to wean 11 per litter and 26/sow/year already exists.

Some KPIs for the top three Australian herds are shown in Table 3. These should be your targets this year. If you are beating any of these, I want to hear from you. I have also included a column showing longer term targets. If we can achieve these, we will be batting with the big boys.

Table 3 Some KPIs for the best three Australian herds in Pork CRC benchmarking project and longer term targets for Australian industry

KPI	**Best 3**	**Targets**	**Your value**
Pigs weaned/sow/y	25.3	26-28	
Born alive	12.5	13.5	

Weaned/litter	11.0	12.0	
Farrowing rate (%)	88.9	88+	
HFC	3.48	3.40	
Progeny carcass weight sold/sow/y	1923	2,100	

Hard times

It was clear at the SA Pig Industry Day that price at best remains static but low and producers are doing it hard. Those in Queensland are doing it very hard because of high feed costs (averaging around $450/tonne) and malaise is being felt more now in WA. APL suggested at the SA Pig Industry Day that price might return to trend by June 2019, but let's hope we see a turnaround before this. Meanwhile, it's a matter of controlling costs and improving efficiency, with emphasis on pigs weaned and HFC.

Novel ways

With novel ways of monitoring and improving pig health and reproduction, alleviating summer infertility and enhancing genetic progress across the Australian pig herd covered in some exciting research proposals submitted recently to Australasian Pork Research Institute Limited (APRIL), I'm optimistic producers will come out of this smarter, stronger and, ultimately, more profitable.

While our genetics are excellent and very efficient, this efficiency is not being achieved commercially. The reason is probably multifaceted, but includes feed wastage, clinical and sub clinical disease, activation of the immune system, overstocking for short periods as pigs approach sale weight and pigs being below and to a lesser extent above their thermoneutral zones.

Tough times

There's undoubtedly lots to be done and the best driver of focussed research is tough times.

They say that's when the tough get going and I know how tough our producers and researchers are.