



JSR Technical Conference - Speakers Summaries 2009

Dr Grant Walling – Scientific Solutions to International Instability

Largely due to poor decision making made in other industries global agriculture faces significant challenges coping with volatile markets out with their direct control. Following a series of sound scientific principles can help businesses to adopt strategies to cope with periods of global instability which are likely to be more typical of future economic climates. Businesses should challenge “received wisdom” using the scientific hypothesis testing to ensure that such “givens” genuinely hold within their sector of the industry. This can only be achieved using genuine control groups alongside experimental treatments and requires accurate data recording which despite significant efforts is still not sufficiently commonplace within the industry. The establishment of cause and effect is often misunderstood and the abuse of statistics by businesses, press and government has created widespread scepticism of “official figures”. Proper analysis of data with appropriate statistics to answer scientific uncertainty is therefore key to re-establishing public trust in such figures. Manipulating data to reinforce personally held opinions is poor science and leads to poor decision making. During challenging trading conditions many businesses consider diversification in order to produce more niche product in an attempt to capture additional premium. One such area is improved welfare however with even the five freedoms having such subjective categories such as “Freedom to express normal behaviour” and given the lack of understanding of what is “normal” for domesticated species (it can be argued that the 7.3 million dog owners in the UK fail to provide at least one of the basic freedoms) it is proposed that welfare should move to more quantitative measures such as blood cortisol levels, white blood cell point, muscle pH or measures of fertility and productive output. Further many niche areas appear to now be conflicting with areas such as organic and GM free contrasting with meeting world food demand, one planet living and meeting greenhouse gas emission standards. Whilst Western Europe may have the luxury of choosing lower output farming systems the moral obligation to achieve global production targets may one day be a higher priority in the eyes of the consumer. Finally academics and the wider industry should concentrate on appropriate solutions to challenges they face. Recent French research feeding blood plasma to weaner pigs to improve the immunocompetence of the animal, may achieve the stated aim but is ill conceived and inappropriate given the previous experience the agricultural industry has had from such practices. Strong evidence is now available to suggest a genetic solution would be far more appropriate. Similarly, the potential use of Improvac to eliminate boar taint divides opinion and whilst product quality for the consumer is improved, the handling and additional vaccination of the animals creates operational difficulties, increased costs and potentially divides public opinion. Again JSR has significant work and evidence to suggest the genomic route would be more sustainable for future profitable pig production.

Dr Mike Varley – Weaning Age Revisited

One of the most significant management decisions for a swine producing business is the average weaning age or the average lactation length for the sows. This not only determines building requirements but also has a bearing on the feed inputs and health status of the weaned piglets and even growth rates to slaughter. Many industries around the world have targeted 21 day weaning as an optimal operating value and this is normally based on the fact that physical productivity of sows is maximized for a 3-week weaning system. This was also based on research done many years ago and mostly in Europe.

It is the purpose of this paper to revisit this problem and explore the optimization of this management decision in the current economic climate. Using a complex computer simulation model to examine the real financial implications when weaning age is changed, it becomes obvious that the optimization of weaning age alters significantly over time and between different



global industries. What is also evident, is that for some swine industries later weaning might provide the most appropriate optimum whereas in another industry it could be quite different. One of the principal economic drives in determining the optimum position is the ratio between prevailing pig prices and the general feedstuff costs.

Ben Woolley – Managing Risk in the North American Pig Industry

While there are a number of similarities between Pork Production in Canada and in the United States, there are also a number of factors that have had significant, unique impacts on production in the two countries. In this presentation, I will examine the events and market influences that have impacted profitability in the two countries. In addition I will try to look at the impacts that Government policies have had on production and profitability in the two countries. I will also try to show what we have done to manage our business through these tough times and what we have done to position ourselves for the coming months and years. This will include looking at some of the tools we use such as the hedging ingredients and pigs, basis hedging, data-based health assessment, standard operating manuals and custom slaughtering to name a few. I will give you a brief overview of our businesses and how we offset risks in one area with stability in others.

Dr Ronald Klont – Challenges & Opportunities in Optimising the Pork Production Chain

Global demand for meats will double from 2008 to 2030, with increased protein intake in the developing world, and more focus on value and convenience in the developed world. The challenge for the pork production chain will be to produce a high quality product at a competitive cost and focused on customer needs. Pork production chains can either focus on a “niche-market” model targeted at specific consumer requirements, or a “large scale” model that targets the mass market for top efficiency and uses sorting to meet niche market and value added demands. Maximizing carcass value and developing value added products, while optimizing costs, will be the major opportunities for the pork industry. The pork chain will increasingly require efficient fast growing pigs, reduced feed conversion, high carcass value, improved animal welfare standards, lesser use of energy, increased sustainability, market-desirable meat quality and pork product innovations. Genetics, animal feed, farm management strategies, pig processing technologies and new product development all play a role in optimizing profitability for the pork production chain.

Rob Reece – Engaging All in the Cultural Shift

The world of food policy has moved at a chaotic pace in the last decade with so many advances in technology within the food chain. However what about the mindset of the general public? At a time when we struggle to move out of a global recession what hope is there for our local communities to engage in the food revolution that so many celebrity chefs indulge in. Is there real hope for the long term unemployed, young offenders and others or is the concept of artisan products, careers in the food industry and perhaps even fresh sushi just a step to far?

This presentation will highlight some ways of engaging the seldom heard in food related education and the inspiration that it provides to encourage them to simply do better within the context of their local every day lives.