**PorkFest: get more pork on your fork!**

PORK is his favourite ingredient and he’s got a cheeky personality, so Colin Fassnidge was the perfect PorkFest ambassador.

The award-winning chef and pork aficionado has been sharing his tips and recipes as part of the campaign that encourages people to have fun with pork and try a new recipe.

“I love the flavour of pork,” Colin said.

“I love its versatility and what it offers,” Colin said.

“I love the variety of uses it offers,” Colin said.

And try a new recipe.

“PorkFest is a celebration of the evolution of the Australian pork industry from being involved in producing pigs and marketing pork over the past decade has been an interesting and exciting journey.”

What I mean by this is the industry’s shift in focus has gone from just being pig farmers focused on growing pigs to farmers who are producing a food commodity called pork.

Colin Fassnidge was the perfect PorkFest ambassador since 2011 and this year they have been sharing his tips and recipes bursting with flavour.

PorkFest has been held every April since 2011 and this year runs from April 1-25.

In addition to Colin’s recipes, many other chefs will be serving up special pork dishes in their restaurants and pubs, while butchers and retailers will be helping people find great fresh pork.

For more information, visit www.pork.com.au.

**Starting a conversation on industry transparency**

OBSERVING the evolution of the Australian pork industry from being involved in producing pigs and marketing pork over the past decade has been an interesting and exciting journey.

What I mean by this is the industry’s shift in focus has gone from just being pig farmers focused on growing pigs to farmers who are producing a food commodity called pork.

The realisation our industry has made in this time is that our success ultimately rests in the hands of our customers.

If they don’t like what we do, or if they don’t like our product, we will fail.

I really believe that our industry is ahead of many others in this shift in attitude.

There have been a number of drivers behind the change, including the leadership shown by some of our directors who have come out of the food industry (foremost being our chairman Enzo Allara, ex head of Unilever Australia).

I think the shift has also been facilitated through the consequences of our import competition – very few agricultural industries compete in their own market with imports.

This competition has taught us through the school of hard knocks what is really important to a prosperous future for our industry.

But leadership has also come from those running the pig farms, whether marketing large volumes through our major retailers or presenting niche products to fine-dining establishments.

They have been prepared to take that leap of faith into a 21st century best practice business model.

And what are the symptoms of this change?

What is the difference between these two states of mind?

The voluntary sow stall phase-out, ‘Shaping Our Future’, is clearly one of our flagship initiatives, but it is not the only one.

Over 90 percent of our production now occurs through APQ’s quality assured establishments.

We have agreed on our own standards for free range and outdoor bred production, avoiding the inconsistencies dogging some other livestock industries.

We have one of the best product integrity and traceability systems for our pork anywhere in the world.

We have new research and development programs targeting the further improvement of the eating quality experience for our consumers.

None of these attributes make doing what we do any easier – that is not their target.

What they do is improve the experiences, trust and confidence around Australian pork.

They come about as a result of asking the question: “What is the right thing to do for our customers?”

As an industry, we should never stop asking that question.

Trust in our product is not the same thing as trust in our production and perhaps this is the next area in which to do the right thing for our customers.

At the Delegates’ Forums in Melbourne during November last year, I presented a set of principles for how I think our industry should aspire to relate to others.

It read as follows:

- We tell the truth.
- We speak about what we believe in, what our values are.
- We can and do produce meat without cruelty.
- We want people to know that we care.
- We are consistent, united and coherent.
- We tell the same story, no matter who you are.
- We are not afraid of others seeing what we do.

The last point is one we need to think long and hard about.

Nearly all our research with consumers tells us that people don’t want to know a lot about what happens to produce their meat.

They do however want to be assured that people are doing the right thing in producing it.

Industry transparency, even if ultimately it is not accessed and explored, is how to demonstrate our lack of fear of exposure.

We have started the conversation with some producers about how to take the next steps along a path of greater transparency of activities on pig farms.

We aim to make that a broader conversation across the industry because we believe the time is right to make ourselves accessible to those who would like to know more.

We can take pride in others looking over our shoulders any time of day or night, secure in the knowledge we’re doing the right thing.
Measuring RD&E industry impact

Absolutely necessary but not so easy

IN this issue I focus on the question of Australian Pork Limited revenue development and extension investment and its impact on the industry bottom line.

Over the past seven years we have seen an invaluable assistance of numerous industry personnel, implementers, in transparent and effective RD&E process to ensure APL is investing in Australian pork industry’s and public monies (via the RD&E matching contribution) to effectively reduce production cost, increase producer revenue and mitigate industry risk.

It is a process that has stood up to and continued to stand up to significant scrutiny internally from the R&D Advisory Committee and APL Board, external audits and is seen by other Rural R&D Corporations as a benchmark.

Rest assured that I have still got the fact that we have not been able to say we have done our work done to date, but we must ensure continually to look to improve our RD&E systems.

One area I would love to improve is my ability to demonstrate the dollar return to pork producers, as a consequence of APL’s RD&E investment.

The fact of the matter is it is not so easy to do; it is even more difficult to demonstrate this return on investment for small to medium producers.

Much of this difficulty may relate to an issue around RD&E impact data.

I look on cautiously at the APL’s production and its ability to use point of sale ‘scan’ data and its methodologies to demonstrate the impact of its activities on various ROE key performance indicators.

The marketing team will also be the first to admit that this type of data, demonstrating ROI to producers has been far from easy.

So let’s take a generational look at APL’s RD&E investment impact as a whole and also look at some individual projects to better understand the issues around demonstrating producer ROI.

APL currently invests about $6-$8 million a year on RD&E projects.

Roughly 60-70 percent of this investment is within an in-kind contribution from research providers.

Presently, for every one dollar spent by APL, the corresponding in-kind contribution is about 52-54 percent, demonstrating that APL is effectively leveraging its RD&E investment to the tune of 1:2.2.

If we include the APL investment into the Pork CRC, this RD&E leverage ratio increases to 1:6.

In addition, APL has been reasonably successfully...

continued P3

Table 1

<table>
<thead>
<tr>
<th>Project: Dietary requirements for finisher pigs</th>
<th>Benefit: The optimal lysine requirement for male and female pigs between 60kg and 100kg LW was estimated to be 0.81g to 0.84g available lysine/MJ ME.</th>
<th>Adoption: ~0.60 percent adoption.</th>
<th>Impact: $2.50/pig based on rate of gain, feed efficiency report by commercial facilities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project: Physi-Trace</td>
<td>Benefit: Cost-effective, rapid and enhanced traceability offers an opportunity for pig, park and country of origin for processed ham and bacon); protecting industry from mandatory use of individual ID tags.</td>
<td>Adoption: ~77 percent of all pigs slaughtered.</td>
<td>Impact: Reduced sampling costs from $0.02 to $0.03/pig (to ~$0.05/pig by June 2015). Defence against RFID cost ~$2/pig for Physi-Trace system. Other impacts: Compliance with on-pack labelling claims (fresh and processed); opposite in retailer engagement; business continuity.</td>
</tr>
<tr>
<td>Project: Pork – Australian Export Meat Inspection System</td>
<td>Benefit: Ongoing science-based reform of Australia’s animal health management cost impacts to industry – particularly risk-based abattoir monitoring frameworks, ante- and post-mortem inspection and condemnation feedback reporting.</td>
<td>Adoption: ~85 percent of all pigs slaughtered (all export abattoirs).</td>
<td>Impact: Gross benefit to industry about $30 million, mainly around export abattoirs not having to employ a food safety officer at each plant. Other impacts: Supporting risk management for salmonella through processing interventions (not on farm); acceptance of Pork AEMIQ model by competent authorities of importing countries to support industry initiatives for market access/export development.</td>
</tr>
<tr>
<td>Project: Biosecurity R&amp;D (PRRS &amp; PED)</td>
<td>Benefit: Demonstrated industry EAD preparedness; science based defence supporting novel for import risk assessment; evidence against fresh pork imports.</td>
<td>Impact: Industry and regulator awareness; PEDV study basis of categorisation and AUSVET plan; PRRS reviews basis of AUSVET plan. Other impacts: Anticipated impact is 30-40 percent of industry will exit if fresh pork import contracts granted or $150 million risk avoidance. Other impacts: PRRD notifiable and Category 4 classification; producer compensation – quantifying costs of EAD in naïve herds; 60 Minutes Voiceless campaigns and farm raids; information used in Shaping Our Future initiative (gestation stall free definition).</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1

![Figure 1](image-url)
Measuring RD&E industry impact

From P2

ful in attracting external RD&E funding from a range of sources (mainly government programs) and this does not even begin to encompass the approximately $3 million over the past seven years. In general, APL implemented a Pork RD&E strategy in conjunction with the Pork CRC.

One of the main components of this strategy was to ‘base fund’ six R&D facilities. These facilities were deemed to be critical for the pork industry’s RD&E needs. This focus on key facilities was brought about in recognition of significant reduction in RD&E costs as a consequence of reduced project technical personnel cost and also upscaling of proof of concept and demonstration directly to commercial scale.

This base funding of R&D facilities has also brought with it other benefits including:

• R&D is now conducted in the most appropriate facility rather than the facility linked to research providers;

• Regional RD&E silos are now almost nonexistent;

• Greater collaboration between universities and state department of primary industries research providers (and students) and industry;

• In many cases the conduct of R&D at commercial facilities has accelerated technology adoption; and

• More industry to industry collaboration.

Before I talk about some specific examples of APL projects and their impact on industry bottom line, it is important that I provide an overview of how APL gets its RD&E outcomes.

Positive reproduction and welfare outcomes from Pork CRC sow space science

A LARGE Pork CRC study (Project IC-105) by Prof Paul Hemsworth, Animal Welfare Science Centre, University of Melbourne and scientists from Pork CRC participant Ririvela suggests minimal long-term impacts on reproduction and welfare from the higher cortical levels and aggression exhibited by sows immediately after mixing at lower floor space.

After investigating how floor spaces between 1.45 m2 and 2.92 m2 affected the welfare and performance of sows grouped within four days of mating, Paul, like his AWSC/University of Melbourne colleague Dr Jean-Loup Rauch in another Pork CRC study, found that aggression, intemperations and cortisol levels at day two after mixing declined with increasing floor space, but there were no effects at day nine.

Our Pork CRC researchers, who lead the world in sow welfare, have now clearly shown that mixing sows at weaning or after mating has no long-term effects on welfare and excellent reproductive performance will be achieved if sows are appropriately fed and facilitated by carefully managed.

Figure 1 on the previous page is a very simple overview of the process undertaken by APL to facilitate the adoption of R&D outcomes. This process starts with the Stakeholder Engagement Plan and ends with the reporting of R&D adoption and impact to industry and government. In case you’re wondering what on earth a Stakeholder Engagement Plan is, it is just a fancy name for an APL plan around which we need to speak to, how we get information to these influencers and in what format.

Using a simple example such as nutrition, we know we have to speak to between five and eight key nutritionists that cover approximately 85 percent of production facilities in order to facilitate the implementation of nutritional R&D outcomes.

Each R&D discipline is different but it would be fair to say the adoption of R&D outcomes foron-farm production management is by far the most difficult.

So getting back to some individual APL R&D projects to see if we can articulate industry impact, let alone ROI.

The projects in Table 1 on the previous page are a small sample of APL’s RD&E investment and are chosen on the basis that they have attracted relatively large investment (greater than $100,000) but also across APL’s R&D remit to highlight some key issues that we are currently grappling with in our bid to do R&D.

Looking at the projects outlined in Table 1, I would say that one thing that all the projects have provided significant benefits to the pork industry. Measuring adoption, while difficult, especially for the welfare and biosecurity areas, is doable in terms of is: this still able to be defined by a range of surveys that we conduct annually?

However, trying to articulate industry impact in terms of dollars is more challenging as well as having relative benefits. Within these CBAs we will continue to look to articulate both tangible and intangible benefits, as well as private and public benefits.

Given the issues around a single CBA, maybe we need to change our methodologies to articulate a number of short term impact models.

To the APN readership, I would love to hear from you if you have any ideas to improve our methodologies around demonstrating the benefit and impact of APL R&D investment to producers.

For further information on any of the topics discussed in this column, please do not hesitate to contact me on 02 6270 8804 or darryl.douglas@australianpork.com.au.

Prof Alan Tilbrook, research chief, Livestock and Farming Systems, South Australian Research and Development Institute participated in Pork CRC Project IC-105.

Initiatives

by DR ROGER CAMPBELL

CEO

Bendigo Exhibition Centre,
April 14 and 15

Entry for producers and their employees is free. As with previous Fairs, in addition to the trade show the Pig Fair program will be crammed full of many different events including the seminar program, cocktail party and networking session.

For more information, call John Bourke on 0419 552 768.

Bendigo Pig Fair ENTRY TICKET

Tuesday April 14, 1pm - 8pm
Wednesday April 15, 8am - 4pm

Bendigo Exhibition Centre
Prince of Wales Showgrounds,
Homes Rd, Bendigo

Name:
Piggery:

Australian Pork Newspaper, April 2015 – Page 3

Measuring RD&E industry impact

Figure 1: Effects of floor space on plasma cortisol levels measured at days two and 26 after grouping in sows mixed shortly after mating.

Figure 2: Effects of floor space on the farrowing rate and born alive litter size of sows grouped shortly after mating.
Solid-Liquid Separation Systems

Agricultural and Industrial

Distributors of:
- Submersible pumps
- Slurry Mixers
- PTO Slurry Pumps
- Bedding Recovery Units
- Bio-Gas Equipment

AUSTRALIAN WASTE ENGINEERING P/L
Ph: (08) 8738 2021
Fax: (08) 8738 2475
E: edan-awe@bigpond.com

Design of Effluent Systems our Specialty

Statement from PIC Grong Grong

THE tragic accident that occurred in February at the PIC Grong Grong piggery, in which about 500 healthy eight-week-old weaner pigs perished due to heat stress, was just that, a tragic accident.

Any loss of an animal’s life on farm is to be avoided and is one of the many reasons why PIC places its staff through certified training courses. This ensures the animals under PIC’s management receive the very best of care.

Unfortunately, like natural disasters, this incident was literally a case of all things that could have gone wrong, did go wrong.

Electricity failure to the Grong Grong site caused part of the ventilation system of some sheds to cease operating.

The day in question was a warm Sunday when skeleton staff were on deck. The drop-out mechanisms on the ventilators failed, causing a second and, unfortunately, a third tragedy. 500 animals died, the 3800 animals in the unit survived.

The emergency system was not working as planned. Litter size was adjusted to 14 and the lightest piglet in each litter was supplied so they could test the sows’ milking ability.

Valine had no effect on any aspect of sow or piglet performance, so we can, once again, forget that.

The sows (568 in total) weaned 13 piglets, and litter growth rate over lactation was just under 3kg/day. Milk production was 11 litres/day.

Resilient sows

You might think this is not much different to our sows, except on average the sows lost 22kg (9.6 percent) of their postpartum body weight during lactation.

And while there was an effect of body weight loss and feed intake in lactation (averaged 6.1kg/day), but restricted to this level only on subsequent litter size, average weaning to oestrus interval was 7.1 days. This is in line with the body weight loss, but 94 percent of sows remated and subsequent average litter size was 18.2 total born.

I think the DanBred sow is a little different to most of those available here and I’m not sure we could handle them, but maybe a DanBred or two might help.

The researchers concluded litter weight gain and subsequent reproduction was positively related to feed intake in lactation. Danish nutrition (The Danish nutritional approach might also interest nutritionists).

The lactation diet, which is used commercially, contains 15M ME/kg and 0.71 percent SID lysine. Is it little wonder, therefore, that the sows lost so much body weight and body protein in lactation?

You would think they’d have been better off in an insulated housing system, rather than valine in lactation. There were a number of other papers on feeding sows from the meeting. The outcomes were similar to what we saw in previous Pork CRC research; few positive effects of increases in feed intake, or even in lysine levels, in mid and late gestation.

I will summarise this and other interesting events and research outcomes from the meeting and get them to you in the near future.

www.porkcrc.com.au 57

University of New England Animal Genetics and Breeding Unit senior researcher Dr Kim Bunter took part in Pork CRC Project 1C-105.
Fresh take on west side story

**Management systems don’t define intensive versus extensive animal husbandry definitions**

**Australian Pork** Limited standards and guidelines deem all pig farms as intensive farming operations. This policy position is based on the carrying capacity of the land, not the piggy practice undertaken on farm. APL’s industry standards and guidelines are aligned with the planning regulations across Australia. The intensive classification of piggeries is based on the ability of a pasture-based diet to provide adequate nutrients for pigs to thrive. To be classified as extensive, the majority (greater than 50 per cent) of pig nutrition must come from pasture.

The D’Orsogna family has played a key role in the long-term success of Westport, ever since Ken Boughton and D’Orsogna co-founder Tommaso D’Orsogna started the business. The D’Orsogna commitment remains, with cousins Marco and Eugene D’Orsogna being long-term board members of Westport. D’Orsogna is the second-largest shareholder. The partnership delivers pigs to D’Orsogna of a set quality and weight criteria 52 weeks of the year. The consistency and long-term nature of the partnership has allowed D’Orsogna to grow with confidence.

The openness of the D’Orsogna has enabled D’Orsogna to read changes in consumer demands and expectations and for this to be fed back to the production system, enabling D’Orsogna to remain at the forefront of producing premium-quality smallgoods. D’Orsogna buys pigs on a weekly basis from Westport and from well-located WA Great Southern farmers Dawson Bradford and Mt Barker. D’Orsogna’s pork producer suppliers offer a range of production systems including:-outdoor reared where adult breeding sows live in open space with access to paddocks; • Loose housed deep bedded and intensive systems because this means producers can ensure they are meeting the best environmental practice appropriate to their property and environment.

By ensuring you are following the standards set out in the National Environmental Guidelines for Rotational Outdoor Piggeries (2013) and the National Environmental Guidelines for Pig Piggeries (2010), or are part of a quality assurance program such as APQ-P, applying for a permit from your local council should be a relatively straightforward process.

A number of consultants are available to assist with developing planning applications on your behalf. Utilising consultants can assist in the collation of the appropriate information councils need to make an assessment, thus avoiding a protracted process and possibly saving you time and money.

APL can also provide advice on planning requirements and direct you to information that may assist with your applications. If you have any questions, please feel free to contact APL’s Research and Innovation Manager Environment Janine Price on 02 6270 8827 or Janine price@aus traliapork.com.au.

**The D’Orsogna family has played a key role in the long-term success of Westport, ever since Ken Boughton and D’Orsogna co-founder Tommaso D’Orsogna started the business. The D’Orsogna commitment remains, with cousins Marco and Eugene D’Orsogna being long-term board members of Westport.**

---

**Rent for just $26.14 a day including bacteria supply**

BioAmp is by far the lowest cost odour reduction system available. Monthly rent includes the unit AND all daily doses of bacteria. No minimum term required.

---

Great Southern WA pig farmers Steve Lynham and Dawson Bradford, Massimo Valentini of D’Orsogna and Neil Ferguson, Westport general manager.

WHILE fresh pork so often gets the glorygoing, the spotlight of industry promotions aimed at uplifted consumption levels, processed pork products, other proteins and smallgoods, account for a very substantial proportion of the pigmeat produced on Australian farms. Leading West Australian smallgoods producer D’Orsogna has always prided itself on maximising its use of the best available, locally grown WA pork in its smallgoods product.

And that commitment has grown exponentially in the 30 years since D’Orsogna first invented, as a foundation shareholder, in Westport. Starting with a base of 400 sows, the business now controls more than 10,000 sows at its well-run sites at Gingin, Serpentine, Kojonup and Mt Barker.

The D’Orsogna family has played a key role in the long-term success of Westport, ever since Ken Boughton and D’Orsogna co-founder Tommaso D’Orsogna started the business. The D’Orsogna commitment remains, with cousins Marco and Eugene D’Orsogna being long-term board members of Westport. D’Orsogna is the second-largest shareholder. The partnership delivers pigs to D’Orsogna of a set quality and weight criteria 52 weeks of the year. The consistency and long-term nature of the partnership has allowed D’Orsogna to grow with confidence.

The openness of the D’Orsogna has enabled D’Orsogna to read changes in consumer demands and expectations and for this to be fed back to the production system, enabling D’Orsogna to remain at the forefront of producing premium-quality smallgoods. D’Orsogna buys pigs on a weekly basis from Westport and from well-located WA Great Southern farmers Dawson Bradford and Mt Barker. D’Orsogna’s pork producer suppliers offer a range of production systems including:

- **Outdoors reared** where adult breeding sows live in open space with access to paddocks;
- **Loose housed deep bedded** and intensive systems because this means producers can ensure they are meeting the best environmental practice appropriate to their property and environment.

By ensuring you are following the standards set out in the National Environmental Guidelines for Rotational Outdoor Piggeries (2013) and the National Environmental Guidelines for Pig Piggeries (2010), or are part of a quality assurance program such as APQ-P, applying for a permit from your local council should be a relatively straightforward process.

A number of consultants are available to assist with developing planning applications on your behalf.

Utilising consultants can assist in the collation of the appropriate information councils need to make an assessment, thus avoiding a protracted process and possibly saving you time and money. APL can also provide advice on planning requirements and direct you to information that may assist with your applications.

If you have any questions, please feel free to contact APL’s Research and Innovation Manager Environment Janine Price on 02 6270 8827 or Janine price@aus traliapork.com.au.

---

**Rent for just $26.14 a day including bacteria supply**

BioAmp is by far the lowest cost odour reduction system available. Monthly rent includes the unit AND all daily doses of bacteria. No minimum term required.

---

**Management systems don’t define intensive versus extensive animal husbandry definitions**

**The D’Orsogna family has played a key role in the long-term success of Westport, ever since Ken Boughton and D’Orsogna co-founder Tommaso D’Orsogna started the business. The D’Orsogna commitment remains, with cousins Marco and Eugene D’Orsogna being long-term board members of Westport. D’Orsogna is the second-largest shareholder. The partnership delivers pigs to D’Orsogna of a set quality and weight criteria 52 weeks of the year. The consistency and long-term nature of the partnership has allowed D’Orsogna to grow with confidence.**

The openness of the D’Orsogna has enabled D’Orsogna to read changes in consumer demands and expectations and for this to be fed back to the production system, enabling D’Orsogna to remain at the forefront of producing premium-quality smallgoods. D’Orsogna buys pigs on a weekly basis from Westport and from well-located WA Great Southern farmers Dawson Bradford and Mt Barker. D’Orsogna’s pork producer suppliers offer a range of production systems including:

- **Outdoors reared** where adult breeding sows live in open space with access to paddocks;
- **Loose housed deep bedded** and intensive systems because this means producers can ensure they are meeting the best environmental practice appropriate to their property and environment.

By ensuring you are following the standards set out in the National Environmental Guidelines for Rotational Outdoor Piggeries (2013) and the National Environmental Guidelines for Pig Piggeries (2010), or are part of a quality assurance program such as APQ-P, applying for a permit from your local council should be a relatively straightforward process.

A number of consultants are available to assist with developing planning applications on your behalf. Utilising consultants can assist in the collation of the appropriate information councils need to make an assessment, thus avoiding a protracted process and possibly saving you time and money.

APL can also provide advice on planning requirements and direct you to information that may assist with your applications.

If you have any questions, please feel free to contact APL’s Research and Innovation Manager Environment Janine Price on 02 6270 8827 or Janine price@aus traliapork.com.au.

---

**Rent for just $26.14 a day including bacteria supply**

BioAmp is by far the lowest cost odour reduction system available. Monthly rent includes the unit AND all daily doses of bacteria. No minimum term required.

---

**Management systems don’t define intensive versus extensive animal husbandry definitions**

**The D’Orsogna family has played a key role in the long-term success of Westport, ever since Ken Boughton and D’Orsogna co-founder Tommaso D’Orsogna started the business. The D’Orsogna commitment remains, with cousins Marco and Eugene D’Orsogna being long-term board members of Westport. D’Orsogna is the second-largest shareholder. The partnership delivers pigs to D’Orsogna of a set quality and weight criteria 52 weeks of the year. The consistency and long-term nature of the partnership has allowed D’Orsogna to grow with confidence.**

The openness of the D’Orsogna has enabled D’Orsogna to read changes in consumer demands and expectations and for this to be fed back to the production system, enabling D’Orsogna to remain at the forefront of producing premium-quality smallgoods. D’Orsogna buys pigs on a weekly basis from Westport and from well-located WA Great Southern farmers Dawson Bradford and Mt Barker. D’Orsogna’s pork producer suppliers offer a range of production systems including:

- **Outdoors reared** where adult breeding sows live in open space with access to paddocks;
- **Loose housed deep bedded** and intensive systems because this means producers can ensure they are meeting the best environmental practice appropriate to their property and environment.

By ensuring you are following the standards set out in the National Environmental Guidelines for Rotational Outdoor Piggeries (2013) and the National Environmental Guidelines for Pig Piggeries (2010), or are part of a quality assurance program such as APQ-P, applying for a permit from your local council should be a relatively straightforward process.

A number of consultants are available to assist with developing planning applications on your behalf. Utilising consultants can assist in the collation of the appropriate information councils need to make an assessment, thus avoiding a protracted process and possibly saving you time and money.

APL can also provide advice on planning requirements and direct you to information that may assist with your applications.

If you have any questions, please feel free to contact APL’s Research and Innovation Manager Environment Janine Price on 02 6270 8827 or Janine price@aus traliapork.com.au.

---

**Rent for just $26.14 a day including bacteria supply**

BioAmp is by far the lowest cost odour reduction system available. Monthly rent includes the unit AND all daily doses of bacteria. No minimum term required.

---
A taste of success from Moore work on boar taint

Karen Moore

Manure Spreaders

SPREADER SIZES: 6-40 TONES

- Heavy-duty design and construction
- Ideal for all types of manure and compost
- Will also spread lime and gypsum
- Empties in less than 4 minutes
- Even spread width up to 24 metres

In contrast, 18 percent of boar taint occurred in light weight entire males and 33 percent of heavy weight entire males had boar taint, resulting in the sensory threshold for boar taint to be 0.2 ug/g. Of pigs fed ad libitum, 38 percent and 43 percent of light and heavy weight entire males had boar taint levels above the sensory threshold.

No boar neutered males exceeded the sensory threshold level for boar taint and only one heavy immunised male exceeded the sensory threshold level for boar taint.

Consumer perceptions of eating quality of the loin steak reflected differences in boar taint compounds, with the percentage of steaks ranked by consumers as unacceptable, or below average, being 29 percent for entire and 20 percent for immunised males.

When asked about their repurchase intention, 39 percent of respondents ranked the loin from entire males as ‘definitely would not repurchase’ or ‘unlikely to repurchase.’

The corresponding per cent of those grown to immunised levels was 27 percent.

According to Ms Moore, the results confirm immunisation against GnRH effectively reduces the incidence of boar taint, but slaughtering entire male pigs at light weights and at very high weights (64-72kg) does not.

‘Clearly, improving the eating quality of pork requires a more proactive approach to managing androstenone levels and especially skatole levels in carcass fat,’ she said.

In the past 10 years, it is suggested that a proportion of the increase in boar taint among group housed sows and their offspring can be attributed to the use of a diversity of grains, grain qualities, protein meals and by-product sources to formulate pig feeds.

It is a special formula for fermentation. It provides the opportunity to increase the fibre in dry feed and slow the rate of digestion at very low inclusion levels of 2-5 percent.

It assists in management of constipation challenges in sows, reduces stress by stabilisation of blood glucose levels, reduces hormone production to colon and may shorten parturition time.

It is suggested that applying a separate diet during the peripartum period improves productivity.

However, due to logistical constraints a number of farms are unable to do this.

These farms normally change the diet from gestation to lactation upon the sow’s arrival at the farrowing shed.

BEC Feed Solutions has developed a new product to support peripartum sow welfare.

Sow Buddy is designed to supplement nutritionally deficient diets of sows during late gestation and early lactation stages.

It is a special formula, improving the dry matter digestibility and utilisation of all grains, wheat, barley, corn, sorghum (and rice), protein meals and by-products, releasing more starch energy and important amino acids to the sow.

Formulating for calcium and phosphorus balance can be assisted with use of the Natuphos phytase enzyme, which promotes the release of phytabound phosphorus in feed ingredients.

Rovabio Excel and Natuphos are cost-effective nutritional tools to improve feed value for sows.

Both are available in heat-stable forms suitable for pellets and meal diets.

Matrix values are available to allow feed formulators to account for the extra release of nutrients from the enzymes and reduce feed cost/breeder year.

Fibre is a crucial ingredient in sows feeds and high-fibre diets are best suited for sows during gestation and pre-farrowing periods.

Pregnant sows are fed restricted amounts of feed.

BIOMIN Research & Development

Turning science into sustainable solutions

Our strong in-house research and development, and global cooperation with leading institutions and organisations form the basis by which innovative solutions are developed for our customers.

Benjamin Linn looks at E. coli

Benjamin Linn is in his final year of the University of Adelaide's Doctor of Veterinary Medicine program, having completed a Bachelor of Science (Veterinary Bioscience) in 2012. Benjamin has always maintained a strong interest in pig production and from six years of age was even raising his own pigs. He also has a strong interest in pursuing a career in veterinary consultancy in pig production following graduation at the end of this year. Throughout his studies, his achievements have been recognised with a number of awards, most recently the Chris Richards and Associates Prize in the DVM program, the Australian Agricultural Scholarship, the Cowan Roseworthy Scholarship and the prestigious Audrey Abbie Veterinary Perpetual Prize.

In June 2013, Benjamin commenced a Pork CRC supported project as his DVM-1 clinical research project, evaluating the prevalence of antibiotic resistance in commensal Escherichia coli isolated from pigs. Diarrhoea caused by enterotoxigenic E. coli is an important cause of morbidity and mortality in neonatal and post-weaning piglets, manifesting as two major conditions: neonatal and post-weaning diarrhoea.

The enterotoxins secreted by ETEC cause hypersecretion of fluids into the small intestine, resulting in watery diarrhoea and causing significant economic losses, decreased growth rates and treatment costs. Due to the highly virulent nature of ETEC strains, treatment tends to be aggressive, but resistance is emerging to medications commonly used to treat neonatal and PWD forms. In addition, treatment with antimicrobials may lead to colonisation of the gut with drug-resistant commensal E. coli. The piggy chosen for this study had a history of outbreaks of diarrhoea, and the population of pigs chosen for study had previously been prophylactically treated with antimicrobials for prevention of ETEC infection.

Rectal swabs were taken from 105 randomly sampled pigs from the piggy at various stages of production. Rectal swabs were obtained from pigs at one day of age (pre-treatment), at entry to the weaner (four weeks of age), grower (eight weeks) and finisher (13 weeks) phases of production, and just prior to market (18 weeks).

Samples were taken from two successive weaning batches, allowing for comparison between weaning groups. The swabs were then grown on antimicrobial-impregnated media specific for E. coli growth. Those that showed growth on this media underwent antimicrobial susceptibility testing using 18 antimicrobials commonly used in production animals and important to human medicine, as per Clinical and Laboratory Standards Institute guidelines. These isolates were also tested for genetic relatedness and virulence genes using Random Amplified Polymorphic DNA, PCR and ETEC pathotyping multiplex PCR respectively. Those isolates resistant to antimicrobials of importance to human health were also screened to identify the genes responsible for the resistance. In total, 86.7 percent of the swabs collected in this study exhibited multidrug resistance. RAPD PCR demonstrated that the resistance isolates were heterogeneous in nature, however PCR pathotyping revealed the absence of any ETEC-associated virulence genes, confirming that they were commensal E. coli.

This Pork CRC project identified that antimicrobial treatment of piglets results in persistence of multidrug-resistant commensal E. coli in the gut into the growing and finishing period. The resistant isolates were heterogeneous, indicating that more than one subtype of E. coli contains the resistance genes, which are most likely encoded on a plasmid. The study indicated that the prophylactic use of antimicrobials in pig production systems may predispose pigs to the development of resistance among enteric commensal E. coli populations in pigs.

Finding new ways to prevent/control ETEC infections in pigs will lead to less reliance on antimicrobial treatments. The financial contributions of the Pork CRC and its support for this project are acknowledged. Thanks must also be given to Hui San Wong and Tahlia Mitchell for their considerable contributions to this project.

For more information, email Benjamin Linn at benjamin.linn@student.adelaide.edu.au.

Vets welcome new Biosecurity Bills

THE Australian Veterinary Association welcomed Bills about to be considered by the Senate that will strengthen disease control measures to better manage the risk of diseases entering and spreading in Australia.

AVA president Dr Julia Nicholls said veterinarians are involved at all levels of Australia’s biosecurity system, from the quarantine and biosecurity systems.

“In large-scale outbreaks such as the 2007 equine influenza outbreak, an army of government and private veterinarians was on call to take on the emergency response,” she said.

“Strong, effective protection against imported pests and diseases is critical to our agricultural industries as well as the wellbeing of Australia’s animals and people.

“We welcome these Bills that incorporate critical changes to the way we approach biosecurity risk, including advances in technology and transport that the previous legislative framework did not cover. Australia needs a more seamless biosecurity system, which these Bills will provide.”

The Biosecurity Bill 2014 is supported by four other Bills that are designed to help ensure the smooth transition from the Quarantine Act 1908.

The financial contributions of the Pork CRC and its support for this project are acknowledged. Thanks must also be given to Hui San Wong and Tahlia Mitchell for their considerable contributions to this project.

For more information, email Benjamin Linn at benjamin.linn@student.adelaide.edu.au.

Benjamin Linn received the Chris Richards and Associates Prize in the Doctor of Veterinary Medicine program, University of Adelaide.
Fresh focus for Stockyard

STOCKYARD Industries is at the forefront in the supply of pig and poultry equipment to Australian producers. After more than 20 years as a market leader in the supply of equipment to the pig industry, Stockyard Industries has launched a new name and logo, signalling a fresh focus for the business.

Director Marcus Jones said, “Stockyard Industries will now be known as ‘Stockyard’. In fact, many of our customers already refer to us as Stockyard.”

“The new logo is intended to reflect Stockyard’s continued growth in both the pig and poultry Industries by combining all facets of the business. The image of the shed portrays to our customers that we are committed to providing all aspects of a building project from organising building drawings to installing equipment.”

While its name may have changed slightly, Stockyard will continue to be a trusted supplier of innovative and reliable agricultural equipment at a competitive price.

Visit the new website www.stockyardindustries.com for more information.

Alternatively, meet the Stockyard team in person at the Victorian Pig Fair from April 14-15 at the Bendigo Exhibition Centre, 52

STOCKYARD

Smart Farming Needs

Smart Storage

Poly Silos are the unbeatable option for your feed, grain and fertiliser storage.

- Expandable storage solutions
- Insulating properties
- Rust and weather resistant
- Light, safe and easy
- High UV protection
- Liquid storage option
- Finance available
- 1 – 46 tonne poly silos available

The perfect companion for intensive farming.

Poultry • Pork • Dairy

Global antibiotic use in animals estimated to increase significantly

A NEW study estimates that global use of antibiotics in food animals will be 67 percent higher in 2030 than in 2010, as agriculture intensifies to meet the growing demand for animal protein.

The study’s findings call for initiatives to preserve antibiotic effectiveness while simultaneously ensuring food security in low and lower-middle-income countries, according to Simon Levin of Princeton University, US and co-authors from a number of international institutions.

In the paper ‘Global trends in antimicrobial use in food animals’ published in Proceedings of the National Academy of Sciences of the United States of America, Levin and his co-authors explained that demand for animal protein for human consumption is rising globally at an unprecedented rate.

They also state modern animal production practices are associated with regular use of antimicrobials, potentially increasing selection pressure on bacteria to become resistant.

Despite the significant potential consequences for antimicrobial resistance, the researchers say there has been no quantitative measurement of global antimicrobial consumption by livestock.

They have addressed this gap by using Bayesian statistical models combining maps of livestock densities, economic projections of demand for meat products and current estimates of antimicrobial consumption in high-income countries to map antimicrobial use in food animals for 2010 and 2030.

The authors estimate the global average annual increase in antimicrobials per kilogram of animal produced was 172mg per kg for pigs, 184mg per kg for chickens and 45mg per kg for cattle.

Using these figures as a baseline, they estimate that between 2010 and 2030 the global consumption of antimicrobials will increase by 67 percent from about 63,151 tons to roughly 105,596 tons.

They attribute up to one third of the increase in consumption to shifting production practices in middle-income countries where extensive farming systems will be replaced by large-scale intensive farming operations that routinely use antimicrobials in sub-therapeutic doses.

For Brazil, Russia, India, China and South Africa, Levin and his co-authors have calculated that the global contribution of antibiotic consumption will be 99 percent, which is up to seven times the projected population growth in these countries over the same period.

The researchers call for better understanding of the consequences of uninhibited growth in veterinary antimicrobial consumption to assess its potential effects on animal and human health.

www.porknews.com.au
Hunts happy with Emu Rock during borderline season

ON the lookout for a high-yielding, short-season wheat that offered a different flowering window to the other varie-
ties in their program and which would handle a
sharp finish, South Aus-
stralian Michael Hunt, along with brother Roger
and son Josh, decided InterGrain’s Australian Hard
variety, Emu Rock, was the one.

After experiencing a tough 2014 spring in the
Canawigara area west of Bordertown, SA and
limited growing season rainfall of about 150mm and
only 30mm in the spring period from a few sporadic
10mm events, Michael was hoping his Emu Rock
would deliver at the business end of the season.

And he wasn’t disappointed, with 300ha of
Emu Rock yielding up to 3.45 tonnes/ha and averag-
ing 2.8 tonnes/ha; a result he described as solid, in
what was a tough season.

“Emu Rock might not be a showy or flashy wheat, but it’s the tonnes of grain in the bin that counts, and it did the job for us,” Mi-
called said.

With protein at 12.2 per-
test weight 82 and screenings 2.4 percent, Emu Rock easily made the H2 specification.

“So of our country can have screening issues in sharp finishes and for-
tunately Emu Rock lived up to InterGrain’s claim of being of good grain quality.”

“We were quite happy with its performance and intend planting a similar area this season.”

Though the 2014 spring was a tough one in the Bordertown district, the Hunts luckily escaped severe August frosts and then enjoyed very few hot

windy days, which meant their crops had time to adjust to declining soil moisture.

“We did have two areas quite badly frosted that only yielded 800kg/ha, but they were the first two paddocks sown to Emu Rock and were probably near a similar time, which was going to be a challenge.”

“Importantly, Emu Rock can be sown at the end of your program without compro-
mising yield potential,” Michael said.

At sowing, Meso10 insecticide was applied
at 65kg/ha, along with early foliar trace elements and UAN.

Additional nitrogen was top dressed in split ap-
plication ahead of rain.

The Hunts employ the crop modelling tool Pro-
ductionWisec with help with management decisions, particularly nitrogen budgeting, as the software predicts crop outcomes.

“By the end of July, the Emu Rock crop potential was good and things were probably more advanced than usual, as the winter had been mild and our Emu Rock held reason-
able colour all the way through, even in areas where nitrogen deficiency was creeping in by the end of July,” Michael said.

The Hunts implemented a preventative rust fun-
micide program on their more susceptible wheats, but as Emu Rock has a more robust rust profile and spring was dry, it was

excluded.

According to InterGrain wheat breeder Chris
Moore, growers should seriously consider Emu Rock to diversify their portfolio for effective disease and risk manage-
ment.

“The risk manage-
ment front, Emu Rock fits well when growers near the end of their programs, as it has excellent grain size and lower tendency for screenings,” Dr Moore said.

On the disease front, Emu Rock boasts a good disease package, offering growers stripe rust resistance diver-
sity (MR-MS rating) and a useful level of crown rot resistance (MS). A crown rot resistance rating of MS is among the highest commercially available.

www.intergrain.com.au

Australian Pork Newspaper, April 2015 – Page 9

www.porknews.com.au

InterGrain’s Emu Rock did the job for Bordertown wheat grower Michael Hunt, averaging 2.8 tonnes/ha across 300ha.

Emu Rock crop potential

Thermal images used to detect disease in pigs

MEASURING the radiated temperature of a group of pigs by infrared thermogra-
y may be a useful tool for early detect-
tion of disease as some Canadian re-
searchers discovered.

Infrared thermog-
raphy technology is already being used in a similar way at air-
ports to screen people for possible disease, but it also has a role in veterinary diag-
nostics.

What offers is a way of measuring the temper-
ure of animals without need-
ing to handle or restrain them.

The researchers used vaccination as a model for disease, because it induces an immune re-

sponse in the animals.

Groups of weaned pigs were either treated with a drug containing a vaccine, injected with saline as a placebo or left untreated.

An infrared camera was fixed to the ceiling di-
rectly above the pen recorded thermal im-
ge of the groups of pigs at five-minute in-
tervals.

Higher temperatures were recorded when

the pigs clustered to-
gether, and this behav-
ior was seen more frequently in the groups of vaccinated animals.

The maximum image-
temperature was signifi-
cantly higher in vaccinated animals compared with control and placebo-injected animals.

Temperature increase in the vaccinated ani-

mals occurred as early as three hours post-

vaccination, peaked at 30 hours and remained elevated for up to 20 hours.

The researchers also investigated the effect of prevalence of dis-

ease on the ability of IRT to detect a ther-
mal response.

A thermal response to vaccination was detected in a pen of 24 to 26 animals when at least 80 percent of the ani-

mals were vaccinated.

These results suggest that measuring the radiated temperature of groups of animals could be a useful tool for detecting fever-in-

ducing disease in pig herds, and IRT offers an automated way of doing this.

www.jefo.com | wbradshaw@jefo.com

Jefo, exclusive distributor of EVONIK and HAMLET PROTEIN in Australia.

Jefo, Australia’s market leader in additives for livestock, poultry and aquaculture, is proud to announce its partnership with EVONIK and HAMLET PROTEIN, two industry leaders in the field of animal nutrition. This partnership will enable Jefo to offer a wide range of high-quality, scientifically validated products to its customers, ensuring optimal health and performance of their animals. With a focus on innovation and customer satisfaction, Jefo is committed to providing solutions that meet the ever-evolving needs of the animal health industry. 

Jefo is a subsidiary of the Australian Pork Newspaper, April 2015 – Page 9
Making genes fit for a pig

Pork CRC Projects 2B-101, 2B-102, 2B-103, 2B-104 in Subprogram 2B ‘Healthy Pig Genotypes’

Consistent performance

international research collaborations to develop international breeding objectives.

Information about genetic parameters for production and management practices. For example, environ- ments differed by about 35°F/day for growth and by more than 6°F for backfat across herds. Most of this variation in environments was also ob- served within herds. It was then established that breeds or progeny of sires differed in their re- sponse to environmental variation. These results offer op- portunities to select for less variation in performance in purebred herds; an out- come that is currently being investigated further.

New models

Economic models were developed in collabora- tion with Dr Peter Amer, University of Sydney, Australia, to establish new breeding objectives for carcass and meat quality traits. It was shown that ma- ternal genetic effects, which represent the genes of dams, were the second most important trait in ma- ternal breeding objectives.

This finding is signifi- cant because maternal genetic effects do not re- quire any additional in- vestment in data recording by breeding companies. Further, post-weaning survival was identified as the economically most im- portant trait for sire lines. This trait has not been investigated in detail yet despite the fact that infor- mation about post-weaning is available on most farms.

Genetic analyses of post- weaning survival will lead to genetic models that en- able breeders to include this important trait in their selection decisions.

One key aspect of these economic models is their simplicity, because eco- nomic benefits of improv- ing each trait by one unit are derived via independ- ent sub-models.

For example, the econ- omic value for feed con- version ratio ($/kg) to im- prove FCR by 1% per kg of simply feed price ($/kg) times live weight (kg).

These models are very simple for most traits and can be adopted easily.

Disease resilience

Genetic improvement of disease resilience leads to genotypes able to main- tain productivity when challenged by infection.

This topic was discussed at a workshop in Armis- dale, NSW as part of Pork CRC Project 2B-103 and led to the publication of a book, Breeding Focus on Disease Resilience, which was co-edit- ed by Susanne.

A keynote speaker at the meeting was Dr Andrea Doeschl-Wilson from Roslin Institute, Univer- sity of Edinburgh, Scot- land, who works with Susanne on developing genetic models for disease resilience and its underly- ing mechanisms: disease resistance and disease tol- erance.

Economic models for disease resilience lead to economic values because they quantify the change in environmental conditions when needed.

Further, it raises the question of whether the resource allocation theory is too linear compared to real physiological process. Alternatively, selection strategies for the new breeding objectives developed in the Pork CRC project are currently being investigated.

The breeding objective sets the direction for genetic improvement of pigs by multiplying the esti- mated breeding value of each trait with the corre- sponding economic value. Economic values are also known as marginal economic values because they quantify the change in profit due to changing a trait by one unit, while keeping all other traits in the breeding objective constant.

As such, economic val- ues can also be used to evaluate the economic implications of changing a husbandry practice.

Susanne outlined these aspects to industry in a recent series of webinars about PigEv, which were well received by partici- pants.

Fostering adoption

Susanne conducts her research in close collabo- ration with Australian breeding companies. Therefore, the research is directly linked to the adoption process.

Genetic gains achieved in purebred populations in traits describing pro- ductivity, robustness and survival will eventually be passed on to the commer- cial level.

Outcomes from these projects have been exten- sively published at indus- try events, conferences and in scientific journals. Publications and further information about PigEv, which is available to Aus- tralian pig producers, may be obtained via email by emailing Susanne.Hermesch@une.edu.au or calling 02 6773 2055.

Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Research collaborators Dr Hélène Gilbert, INRA, France; Assoc Prof Susanne Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Pork CRC Projects 2B-101, 2B-102, 2B-103, 2B-104 in Subprogram 2B ‘Healthy Pig Genotypes’

Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Research collaborators Dr Hélène Gilbert, INRA, France; Assoc Prof Susanne Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Pork CRC Projects 2B-101, 2B-102, 2B-103, 2B-104 in Subprogram 2B ‘Healthy Pig Genotypes’

Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Research collaborators Dr Hélène Gilbert, INRA, France; Assoc Prof Susanne Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Pork CRC Projects 2B-101, 2B-102, 2B-103, 2B-104 in Subprogram 2B ‘Healthy Pig Genotypes’

Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Research collaborators Dr Hélène Gilbert, INRA, France; Assoc Prof Susanne Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Pork CRC Projects 2B-101, 2B-102, 2B-103, 2B-104 in Subprogram 2B ‘Healthy Pig Genotypes’

Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Research collaborators Dr Hélène Gilbert, INRA, France; Assoc Prof Susanne Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Pork CRC Projects 2B-101, 2B-102, 2B-103, 2B-104 in Subprogram 2B ‘Healthy Pig Genotypes’

Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.

Research collaborators Dr Hélène Gilbert, INRA, France; Assoc Prof Susanne Hermesch, AGBU, University of New England, NSW; and Dr Andrea Doeschl- Wilson, Roslin Institute, University of Edinburgh, Scotland.
New system delivers revolutionary method of odour control for piggeries

WASTE water technology provider BioEnergizer Australia has announced an agreement with international supplier Chemsearch to distribute its revolutionary BioAmp waste water bacterial delivery system to the piggery and abattoir markets.

BioEnergizer has serviced these markets for almost 10 years with a range of products designed to effectively reduce sludge and odours in effluent ponds.

BioEnergizer already supplies a wide variety of markets including water authorities and mining, dairy and food processing industries, but this is the company’s first foray into the piggery and meat processing market with a fully automated bacterial delivery system.

BioEnergizer CEO Marc Middleton was genuinely impressed by this system, telling them I wanted to add the system to our range,” Mr Middleton said.

“I was immensely impressed with this system. Compared to the existing range of bacteria that we, and indeed other providers, have had in our product ranges, I had never seen anything like it. Simple, easy to manage, fully automatic (which means no manual mixing, stirring, breeding or dosing) and yet it delivers huge colonies of pure bacteria into the waste water stream every day at an astonishingly low cost per unit.

There are over 63,000 BioAmp units in use around the world and Mr Middleton expects the take-up in Australian markets to reflect the appeal of the ease and sheer volume of microbial application.

“This system undercuts the costs of current bacterial dosing methods in Australia, including our own, by a huge margin,” he said.

Bacteria for waste water systems is rated in colony forming units per gram, which is basically the number of bacteria delivered into a waste water facility at a time.

Most are rated in billions of CFUs per gram, but Mr Middleton said BioAmp is rated in trillions.

“Thirty trillion to be exact,” he said.

“One small daily dose of FreeFlow bacteria is equal to about five 200-litre drums of other products that could cost up to 40 times as much.”

The unusual aspect of getting BioAmp systems into the market is that BioEnergizer doesn’t sell them.

Instead, the unit is supplied on a rental basis at a cost of just $26 a day, which includes the daily dosage of the bacterial product.

“This way the client has zero capital requirement or risk, and in fact, we don’t even expect our clients to commit to a long-term rental agreement with us,” Mr Middleton said.

“We’re so confident in the system’s ability to get rid of odour and accelerate sludge reduction that a contract really isn’t necessary.”

The final key to the success of this system is that the bacteria are ‘live and active’ when they enter the waste water stream and so are ready to digest the organic waste at the moment of dosing.

BioAmp pellets contain five different strains of bacteria that break down the organic waste, including solids, and convert it into water and CO2.

This in turn aids in meeting EPA effluent parameters (BOD, COD, TSS, VS and FOG) and H2S reduction, resulting in lower odour levels.

For more information, call BioEnergizer on 07 5580 6850 or email info@bioenergizer.com.au -7

THE pork industry overwhelmingly drove the Pineapple to help create profitable growth for producers between now and 2020.

While Queenslanders are suffering a grain cost premium of about $60/tonne, everyone else should be doing OK with the profitable bit right now.

So all is good on the home consumption front right?

Well it’s probably looking a bit better than that.

Here are seven reasons to be hopeful about the future:

1. On the growth front, we have good news right now. Per capita annual fresh pork consumption was 9.5kg per Australian resident in February 2015, up from 9.2kg in February 2014.

2. Currently, retailers and wholesalers are growing their prices and margins faster than producers are growing theirs because there is slightly more demand than supply.

3. So the whole supply chain is profitable.

4. Australian pork’s farm gate price continues to rise and display minimal seasonality.

5. Australia is growing its population at about 400 000 people a year, so there is more demand from new Australians.

6. In the longer term, fresh Australian pork per capita consumption has grown by 18% a person per year over the past five years, so that’s more demand from existing Australians.

7. Christmas saw a bump up in consumption that was the result of a good Christmas for pork. Since then fresh pork volume sales have stayed high despite pork being much more expensive to consumers since Christmas.

Through a combination of good management, hard work and no doubt some luck, as an industry we have managed costs and demand, and by the sum total of individual producer decisions it is probably going down a little.

Our next challenge is how to accelerate profitable growth. 7

Seven reasons to be cheerful

THE pork industry overwhelmingly drove the Pineapple to help create profitable growth for producers between now and 2020.

While Queenslanders are suffering a grain cost premium of about $60/tonne, everyone else should be doing OK with the profitable bit right now.

So all is good on the home consumption front right?

Well it’s probably looking a bit better than that.

Here are seven reasons to be hopeful about the future:

1. On the growth front, we have good news right now. Per capita annual fresh pork consumption was 9.5kg per Australian resident in February 2015, up from 9.2kg in February 2014.

2. Currently, retailers and wholesalers are growing their prices and margins faster than producers are growing theirs because there is slightly more demand than supply.

3. So the whole supply chain is profitable.

4. Australian pork’s farm gate price continues to rise and display minimal seasonality.

5. Australia is growing its population at about 400 000 people a year, so there is more demand from new Australians.

6. In the longer term, fresh Australian pork per capita consumption has grown by 18% a person per year over the past five years, so that’s more demand from existing Australians.

7. Christmas saw a bump up in consumption that was the result of a good Christmas for pork. Since then fresh pork volume sales have stayed high despite pork being much more expensive to consumers since Christmas.

Through a combination of good management, hard work and no doubt some luck, as an industry we have managed costs and demand, and by the sum total of individual producer decisions it is probably going down a little.

Our next challenge is how to accelerate profitable growth. 7

Seven reasons to be cheerful
Farrowing pens for the future

A COMMON issue among pig producers is the difficulty of combining loose housing systems and better animal welfare while also being competitive and maintaining a high level of pig production. For most pig producers, farrowing pens for loose nursing sows are obviously linked to an increased investment, and the main concern is probably the risk of greater piglet mortality.

At the same time, animal welfare is an important topic, which farrowing pens for loose nursing sows will address.

Scandinavian experience is trend setting

To facilitate animal welfare and the focus of piglet mortality, Denmark and the Nordic countries have been moving forward in the process of creating farrowing pens that will take these factors into account.

Turning the eyes of Scandinavian countries such as Norway and Sweden, legislation has required that sows are loose in farrowing units, meaning that this kind of pig production has been established for decades – and with success.

Though there are many different models of farrowing pens, the loose farrowing system has been integrated in pig production as a functional housing system.

The Danish Pig Research Centre (board member of the Danish Agriculture & Food Council, Pig Production) is in charge of research and development tasks related to live pigs and communicating knowledge obtained through these activities.

Among these activities are production systems and environmental technology focusing on effort areas such as animal welfare, animal health and food safety.

In 2014, the Danish Agriculture & Food Council dedicated several million Danish krone for establishment of farrowing pens for loose sows.

The support for this type of housing systems has resulted in research and development of farrowing pens for loose nursing sows.

Danish Pig Research Centre, several suppliers and relevant organisations have identified the natural behaviour and needs of the sow and piglets to determine the pen design that would meet the needs of sow and piglets as well as fulfill usability needs for staff.

Danish investment improves loose farrowing housing

Danish company Jyden, which specialises in the development and production of animal housing systems, has dedicated a huge amount of know-how and resources to developing farrowing pens for loose, nursing sows.

Jyden sales director Jesper Bech said, “We feel a certain responsibility to pig production in general and that’s why we want to be in front of development for optimal production systems that can meet both legal and consumer requirements.”

“From our point of view, it requires that we are proactive and contribute with our experience, expertise and know-how.

“It is not without reason that we have supplied the largest number of farrowing pens for loose sows.”

One of the key features of Jyden’s farrowing pens is that they are designed with the knowledge that the sow will be loose while nursing.

The pen design then makes it possible to protect the piglets during the first critical days right after farrowing (when piglet mortality is greatest).

It is essential to Jyden that the design is focused on a farrowing pen for loose sows, with the possibility to use the integrated protection wings and not just to open a traditional farrowing crate.

With this in mind, it will be possible to achieve production results in line with traditional farrowing pens.

More solutions

Jyden has not only one but many solutions for farrowing pens for loose sows, depending on different needs.

Jyden’s most popular farrowing pens are the JLF10 (without protection wing), the JLF10 SWAP (with protection wing including base plate), the AP LF14 (square pen with protection wings including base plate) and the JLF14 (with protection wings without base plates).

At the Victorian Pig Fair from April 14-15, Jyden will be showcasing the JLF10 SWAP pen.

Worldwide interest

Jyden has designed the pens to leading Danish principles, and these pens will provide good opportunities on the international market as well.

Jyden export manager John Kongsgaard said, “Danish pig producers are known and taken seriously for their quality in pig production – and Denmark is a good model to many other pig producers worldwide.”

“For that reason, we experience huge interest in our housing systems for loose sows, which have given us more attention on the markets abroad.

“We have supplied large export orders worldwide, such as to England and Australia where there is great consumer demand for pork that is produced with animal welfare in mind”

www.jydendirect.com

The Danish Pig Research Centre (board member of the Danish Agriculture & Food Council, Pig Production) is in charge of research and development tasks related to live pigs and communicating knowledge obtained through these activities.

Among these activities are production systems and environmental technology focusing on effort areas such as animal welfare, animal health and food safety.

In 2014, the Danish Agriculture & Food Council dedicated several million Danish krone for establishment of farrowing pens for loose sows.

The support for this type of housing systems has resulted in research and development of farrowing pens for loose nursing sows.

Danish Pig Research Centre, several suppliers and relevant organisations have identified the natural behaviour and needs of the sow and piglets to determine the pen design that would meet the needs of sow and piglets as well as fulfill usability needs for staff.

Danish investment improves loose farrowing housing

Danish company Jyden, which specialises in the development and production of animal housing systems, has dedicated a huge amount of know-how and resources to developing farrowing pens for loose, nursing sows.

Jyden sales director Jesper Bech said, “We feel a certain responsibility to pig production in general and that’s why we want to be in front of development for optimal production systems that can meet both legal and consumer requirements.”

“From our point of view, it requires that we are proactive and contribute with our experience, expertise and know-how.

“It is not without reason that we have supplied the largest number of farrowing pens for loose sows.”

One of the key features of Jyden’s farrowing pens is that they are designed with the knowledge that the sow will be loose while nursing.

The pen design then makes it possible to protect the piglets during the first critical days right after farrowing (when piglet mortality is greatest).

It is essential to Jyden that the design is focused on a farrowing pen for loose sows, with the possibility to use the integrated protection wings and not just to open a traditional farrowing crate.

With this in mind, it will be possible to achieve production results in line with traditional farrowing pens.

More solutions

Jyden has not only one but many solutions for farrowing pens for loose sows, depending on different needs.

Jyden’s most popular farrowing pens are the JLF10 (without protection wing), the JLF10 SWAP (with protection wing including base plate), the AP LF14 (square pen with protection wings including base plate) and the JLF14 (with protection wings without base plates).

At the Victorian Pig Fair from April 14-15, Jyden will be showcasing the JLF10 SWAP pen.

Worldwide interest

Jyden has designed the pens to leading Danish principles, and these pens will provide good opportunities on the international market as well.

Jyden export manager John Kongsgaard said, “Danish pig producers are known and taken seriously for their quality in pig production – and Denmark is a good model to many other pig producers worldwide.”

“For that reason, we experience huge interest in our housing systems for loose sows, which have given us more attention on the markets abroad.

“We have supplied large export orders worldwide, such as to England and Australia where there is great consumer demand for pork that is produced with animal welfare in mind”

www.jydendirect.com

National Farmers’ Federation supports call for rational debate on tax reform

The National Farmers’ Federation has welcomed the Government’s release of its taxation discussion paper.

NFF CEO Simon Talbot said the paper would encourage debate and an examination of ideas which would assist the development of sector-specific policies to take to the next federal election.

“The tax system needs to be simplified,” Mr Talbot said.

“There are 130,000 farm businesses – and most of them are small to medium-sized enterprises.

“They don’t have time to waste on excessively complex taxation.

“Australian farmers are competitive, our taxation system is fair, efficient and in the national interest.

“It must encourage investment, innovation and job creation to deliver economic growth.

“In the NFF’s 2015-16 Budget submission, we stated our support for a substantial shift in policy settings – so that the level of economic growth can increase and a return to surplus can be achieved.”

Mr Talbot said together with NFF member bodies, the NFF will be carefully reviewing the taxation discussion paper; looking at issues such as the depreciation of assets and the role of tax incentives in encouraging innovation through research and development incentives.

“We look forward to outlining the agriculture sector’s views on tax policies ahead of the next election,” he said.

“There are important policy considerations coming from the Government that are of interest to the farm sector.

“Taxation is one.

“The release of the Government’s Agricultural Competitiveness White Paper is another, as is the review of competition policy.”
Cutter chops piggery waste

EFFLUENT pumps in piggeries are susceptible to choking when oversized, fibrous material gets flushed into the waste system.

One solution is to install a cutter pump to chop waste material and prevent clogging.

Tsurumi Pump, the world leader in submersible pump development, has produced a range of cutter pumps called the C Series that is designed to handle such waste.

Aussie Pumps product manager Craig Bridgement said, “Tsurumi’s breakthrough cutter impeller chocks through sewage, rawhide, plastic, aluminium and other materials in seconds.”

“We’ve seen Coke cans, wallets and various unmentionables handled by these extraordinary pumps.”

The C Series incorporates a large open-channel impeller with a cutter mechanism.

A sintered tungsten carbide alloy tip is brazed on the impeller vane. As the impeller rotates, the vane slices against the serrated edge of the suction cover, chopping fibrous matter into small fragments that won’t clog.

The three-phase heavy-duty pumps range from 50mm bore to 100mm. The largest pump in the range has an enormous capacity of 2750l/pm and a maximum head of 26m.

Search ‘Tsurumi C Series’ on YouTube to find a terrific video that shows the pump’s cutting ability.

“It’s amazing to watch what these unique pumps do,” Bridgement said. “You’ll never believe it until you see it. ”

The demo even shows the pump swallowing nylon rope.

Conventional submersible pumps choke on fibrous materials such as rope or cord.

The Tsurumi cutter makes mincemeat out of it. Like all Tsurumi submersible pumps, the C Series includes features that extend the life and enhance reliability of the pump.

Significant design details make a big difference.

These include an anti-wicking cable entry that prevents water from entering the motor if the power lead is damaged or nicked.

A double silicon carbide seal is standard on all models. Both seal surfaces are submerged in an oil chamber, away from the pumped liquid. This ensures lubrication and protects against ingress of foreign materials.

The mechanical seal design features a patented Tsurumi Oil Lifter that increases seal longevity. The lifter ensures both the upper and lower seals are lubricated and cooled, even if the oil level in the chamber is low.

“These features virtually knock out the biggest failure points on any submersible pump,” Bridgement said.

“Better products, lower operating costs and Tsurumi’s ‘total quality’ philosophy make this product particularly suited to piggery waste management systems.”

Further information on the complete range of Tsurumi cutter pumps is available at www.aussiepumps.com.au and from Aussie Pumps distributors throughout Australia.
Proven efficacy against PCV2 without compromising safety.

With Ingelvac CircoFLEX®, you’re in good hands.

- First and leading PCV2 piglet vaccine globally and in Australia.
- One dose from 14 days of age onwards is all it takes.
- Unique combination of PCA™ and ImpranFLEX™ – that’s the reason why!