A newsletter for pork producers

PigBytes

Issue 49 October 2021

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Don't cut yourself short on carbon credits

Kirsty Cooper

Are you thinking of building or expanding a piggery? It might be a good time to install a biogas digester.

If you're interested in receiving carbon credits, make sure to register with the Emissions Reduction Fund now, before planning and development commences to ensure that you are eligible.

If your project has commenced before you apply for carbon credits you will not be eligible.

For help, contact Kirsty Cooper, APL Environmental Policy Manager on 0437 177 527, or the Clean Energy Regulator on 1300 553 542.

Understanding pig health and biosecurity in NSW - Survey

Nic Schembri

The ongoing threat of an emergency animal disease (EAD) outbreak in the pig sector due to the widespread and continuing transmission of African swine fever (ASF) through mainland China and south-east Asia remain strong.

In response to this threat, NSW DPI and Local Land Services (LLS) have partnered with Charles Sturt University, the Commonwealth funded ASF liaisons and industry on a 2-year "Understanding pig health and biosecurity in NSW" project.

We are seeking to better understand, via an online survey, current pig owner and producer practices and thoughts about pig health and biosecurity in NSW, ASF awareness and how these may have changed over the past 2 years.

In addition, we are keen to understand how well we are or aren't doing in supporting your needs. The information you provide will help us in ensuring we continue to develop targeted educational resources where it is needed most, supporting your needs and assist your ASF planning and preparedness.

To take the survey, please click the link: https://www.surveymonkey.com/r/PigHealth

The survey closes October 17, 2021.

All survey responses are anonymous and will remain confidential.

To view the Participant Information Sheet (PDF,122KB), or visit Understanding Pig Health and Biosecurity in NSW for more information about the project or 2021 Online survey for more information about the survey.

Introducing Leah Starick

Regina Fogarty

I would like to welcome Ms Leah Starick to the PigBytes and pig health community. Leah has taken up a new two-year position as Pig Health Project Officer within Agriculture Victoria.

Leah is an agricultural scientist from the University of Adelaide, bringing with her a family, personal and academic interest in pigs, pig keeping and the pig/pork industry. This interest was rewarded last year with an undergraduate industry placement award from Australian Pork Limited to develop her skills through working at….you guessed it, a pig farm.

COVID-19 caused some delays in her move from South Australia to work in Bendigo, but by the time this goes to press she will have made the move.

The Pig Health Project Officer position provides a linkage and communication point between pig producers, veterinarians working with pigs, other sectors of industry as well as national and state-based industry associations and research teams.

Leah will be working on major programs on the delivery of improved pig health disease surveillance and EAD preparedness outcomes including in biosecurity management planning and on abattoir-based monitoring of pig disease.

Contact details for Leah:

Work mobile: 0460 025 208

Email: Leah.Starick@agriculture.vic.gov.au

Updates on African swine fever

Regina Fogarty

ASF continues to spread internationally

The main change in the last few months is that ASFv has been detected in the Western Hemisphere for the first time in this outbreak – the Dominican Republic and then Haiti, have both seen disease and detected the virus. Both of these countries are on the island of Hispaniola. This has raised concerns in the US, and they are now very actively supporting control operations in those two countries.

ASF expected to hang around in Germany

The infection in Germany has just hit the one-year mark and experts predict that African Swine Fever (ASF) virus is likely to be around in Germany for at least another 5 years.

The situation in Eastern Germany appears substantially different from that in Belgium or the Czech Republic, which so far are the only countries that have managed to successfully eradicate ASF infections in wild boar (our feral pigs). That is most likely because in those cases they only had to fight one spot of infection.

The situation in Germany is different, with the country currently exposed to ongoing infection pressure from Western Poland along the entire border. In Poland ASF is not under control.

The five-year expectation is based on the situation in Estonia, where after 5 years of fighting and also because of natural causes, ASF infections disappeared.

Germany has a more active plan i.e. the German states bordering Poland are currently working to build a second permanent fence a few kilometres into the country, complementing an already permanent fence running immediately parallel to the country's border rivers Oder and Neisse.

As the situation within both the Czech Republic and Belgium took roughly a year to calm down, once contained, it is hoped that after the fence is completed in November 2021, the situation behind the protection corridor will be under control within a reasonable timeframe.

ASF vaccines showing promise

A vaccine developed in the US Department of Agriculture's Plum Island laboratories has been found to be very effective in Vietnam trials providing protection against the virulent strains of ASF virus found in both native and European pigs in that country.

The vaccine has found to be effective with a minimum dose, and with protection appearing in the fourth week post vaccination. The vaccine is now ready for field trials in Vietnam.

This vaccine will need to be further tested against US regulatory standards prior to its wider development but looks to be the first really effective vaccine ever developed against ASF virus.

Over the last year there were reports of vaccines being developed in China that further complicated disease spread and diagnosis. These were found to be related to the spread of lower virulent strains of the disease in parts of China, but ASF disease, nevertheless.

Benchmarking – a catalyst for change

Sara Willis

"What a business needs most for its decisions — especially its strategic ones — are data about what

goes on outside it. Only outside a business are there results, opportunities and threats."

Peter Drucker, American management consultant, educator and author

Since 2008, a group of Queensland family pork businesses have been meeting as a benchmarking group. The objective is to ensure their businesses continue to be profitable, innovative, and competitive.

From inception, members committed to recording their financial and production data and sharing with full disclosure their analysed results to allow benchmarking with their peers and the national and international industries.

Benchmarking brings objectivity to the analysis of results and identifies strengths and weaknesses of the business allowing management practices to be improved or new practices adopted.

Networking is important to business operators for information gathering and decision making with networking extending far beyond the meetings.

Unplanned events such as the Covdid-19 pandemic, pig health issues, business re-structuring, fire or flood can have a considerable impact on business progress.

The limitations to change include the individuality of family businesses, the age of members, herd size, business goals, the individual's ambitions, and market sustainability.

The participating farms collect financial and production data on a quarterly basis. The data is analysed, and summaries of key financial and production performance indicators are circulated to the members to allow the group to benchmark their businesses with their peers, the national and international industries at quarterly meetings.

Financial results are reported as costs and returns per kg carcass weight sold. The financial KPI's include feed, labour, health, electricity, R&M, water, breeding and other non-feed costs which when deducted from average pig meat price received gives the operating margin (excluding depreciation and interest)/kg of pig meat sold.

The meetings are held within 6 weeks after the end of each reporting period to allow the members to make timely, accurate business decisions. Group meetings provide a platform for information to be shared between themselves and with experts from a range of disciplines which contributes to their continuous business improvement.

The group discuss the results and identify the key drivers of efficiency and profitability to fine tune management practices and quantify the adoption of new technology.

The presentation of the analysed data enables the members to rank their performance relative to their peers and identify the strengths and weaknesses of their systems.

Members implement change when appropriate to their business and results are reviewed and shared with their peers at subsequent meetings. Practices are refined based on results and experiences.

A key tool in enhancing improvements and practices has been the virtual farm tour. It provides the members with the opportunity to see their peer's operations without compromising biosecurity standards.

Benchmarking of financial and production results allows business performance to be compared with similar-sized businesses producing an equivalent product.

Benchmarking allows a business to:

- identify opportunities to be more competitive
- assess areas for reducing costs, increasing output and improving efficiency
- explore opportunities for the profitable adoption of new ideas and innovative practices
- forecast the impact of any changes and implement plans for sustainable growth.

While benchmarking is primarily external (comparing performance with other businesses in the industry), it is in some instances internal (comparing performance between different sites and teams within the business) where the family own more than one unit. Within the successful group, the following types of benchmarking have been embraced.

- Process benchmarking – to identify and observe the best management practices from activity analysis. The objective is to benchmark cost and efficiency of the production system.
- Strategic benchmarking – to compare performance against other industries, nationally and internationally.
- Performance benchmarking - to assess their competitive position by comparing production performance
- Financial benchmarking – to perform a financial analysis and compare the results in

an effort to assess the overall competitiveness and productivity of each business.

- Achievement benchmarking – to study how the leading business best achieves a specific key performance indicator

- Operational benchmarking – to compare standard operational procedures (SOP's) to achieve best practice and outcomes

Stated benefits

In discussion with group members, the benefits of membership include:

- Sharing of problems and achievements
- Nurturing of younger members.
- Access to members who have experienced significant changes in the industry
- Commitment to collect data regularly in a structured format
- Peers identifying individual's problems
- A range of information flows – producer to producer, specialist speaker to group, facilitators to group
- Access to market intelligence
- A rapid introduction to a producer network for new entrants to industry
- Moral support in adversity
- Information for staff development
- Time out from the farm to gather information
- Opportunities for co-operative actions

In summary, benchmarking has allowed the groups businesses to become more competitive, increase output and improve efficiency, adopt new ideas and implement plans for sustainable growth.

Pig Biosecurity Management Planning

Nic Schembri

The single biggest threat to the pork industry's sustainability is an outbreak of an emergency animal disease. African swine fever (ASF) continues to spread globally and in neighbouring countries. New, more subtle strains make the detection of ASF more challenging.

An outbreak of ASF could cost up to $2B over many years to control and will impact pet, hobby, and commercial operations alike. All pig owners and producers need to remain vigilant and report any unusual signs of disease or death to their veterinarian or government agency.

As a pig owner or producer, the number one way to protect yourself from biosecurity risks is to keep diseases, pests and weeds off your property.

A biosecurity management plan is the simplest way to document what practices you have in place to minimise, and where possible, eliminate those risks.

Additionally, a biosecurity management plan can potentially save a producer from significant economic loss and lend assurance to consumers that products are safe.

To effectively begin to develop a biosecurity program it is important to review the risk areas that may be present on a farm.

A risk assessment helps to determine the areas or factors that are most likely to lead to the spread of infectious agents. Risk management is the second step. Here a preventive plan is developed and implemented.

The final step is risk communication. In this step, all members of the farm management team, suppliers, and service personnel are informed of the plan to ensure cooperation and implementation.

NSW DPI and Local Land Services in partnership with the Commonwealth funded ASF Industry Liaison Officers developed a suite of resources to support on-farm pig health and biosecurity practices.

These resources support on-farm risk assessment and the development of a plan at all levels of pig keeping and production, whether you have one or two pet pigs, a farm stay operation, hobby farm, keep pigs for your

own consumption or are a small or large commercial operation and may be quality assured (APIQ accredited).

The pig biosecurity management planning resources were developed in consultation with the NSW Small Commercial Producer Group, Queensland Department of Agriculture and Fisheries, Agriculture Victoria, Department of Primary Industries and Regions, South Australia, Rivalea, Holyoake Consulting and all the pig owners and producers who were part of and provided feedback in field testing activities.

The following pig biosecurity management planning toolkit housed by Animal Health Australia on the FarmBiosecurity website, consists of a suite of resources to suit all levels of pig keeping and production across Australia.

The toolkit also meets the requirements of the updated APIQ standards with a worked example provided to guide accredited producers in developing their plans.

Although developed in NSW, the following resources are available and applicable to all pig owners and producers nationally on the website.

Pig Biosecurity management plan tools:

- Checklist for a simple plan, OR,
- Template for a detailed plan
- Template site map
- Video: How to use the template to produce a biosecurity management plan
- Worked example of a detailed plan
- Information guide

Pig health and biosecurity record keeping templates

- Visitor log template
- Treatment record template
- Deaths record template
- Pest animal and rodent pest control record template
- Pig movements record template

Graphics

- Pig pest and disease entry pathways graphic with key veterinary contacts (post card)
- Pig pest and disease entry pathways graphic with key veterinarian contacts (poster)
- 8-point- biosecurity checklist graphic with key veterinary contacts (post card)

For more information on the pig biosecurity management planning resources or the online survey please contact Nic Schembri via nic.schembri@dpi.nsw.gov.au

Purchased feed - is it safe for your pigs?

Leah Starick

As the 2021/22 grain harvest becomes increasingly closer, you may be starting to think of your grain and straw requirements for the following year, where these will come from, and how you may store these on farm.

The delivery of these commodities increases the risks of disease-causing agents, weeds and chemicals entering the farm – each of which we don't want.

APIQ accredited piggeries are expected to comply with standard 2.3 in which 'systems are in place to ensure that pigs are not exposed to contaminated feedstuffs or bedding to minimise the risk of chemical residues and biological contaminants and to comply with the prohibition of swill feeding'.

Therefore, to comply with this standard all purchased feed, feed ingredients, and bedding materials that may be consumed by or may be in contact with pigs are accompanied by a Commodity Vendor Declaration (CVD) or, where CVDs are not available, sufficient feed or bedding samples must be kept enabling residue testing if required.

Even if your piggery is not APIQ accredited, a CVD form is a valuable tool which can be used to determine the quality and integrity of the straw or grain you wish to purchase by stating any products used in production and its withholding period (WHP) status.

By requesting and receiving a signed CVD when purchasing feed and bedding materials, you are playing your part in maintaining the integrity of Australia's pork industry.

It is likely that the grain and straw you purchase will be delivered by a transporter, another potential risk to farm biosecurity. To decrease this risk, it is important to ask if the transporter has been in contact with any high-risk premises, such as other piggeries, abattoirs, and poultry facilities. If the answer is yes, the truck should be thoroughly cleaned and disinfected prior to coming on your farm.

These relatively simple practices will help to contribute to good on-farm biosecurity and ensure the health and wellbeing of your pigs.

Know your paddock plants

Jayce Morgan

A dog poisoning case in Victoria where dogs died after consuming meat containing indospicine, a toxin from the native plant *Indigofera sp* was newsworthy recently. This plant was reportedly consumed by some horses sent to the Maffra District Knackery.

This was a rare case of secondary poisoning. However, it should remind us that in seasons flush with feed following drought, that plant species unseen for a few years can reappear; or new species may have been introduced with drought fodder or grain and be in the paddocks.

Poisonous plants contain chemical substances in amounts that can harm or kill animals that eat them. But it is incorrect to assume there are two types of plants - plants that are poisonous and plants that are not.

Reaction to plants eaten can depend on the amount and type of chemicals they contain, the type of animal eating them, the amount eaten relative to body weight (dose), the time taken to eat that amount, and the age and health status of the animal, which can all influence whether poisoning is likely to happen or not.

Seasonal conditions, fungal infections of plants (such as ergot, ryegrass staggers), mineral imbalances due to grazing lush pastures (grass tetany), changes in growing conditions – dry spell followed by wet weather can make sorghum species dangerous due to prussic acid poisoning; can all make useful plants dangerous. Wet harvests can result in grains subject to moulds and mycotoxins.

Not all livestock are susceptible to the same toxins either, so you need to educate yourself about the risks. If different or unusual plants appear after rain or change of season, find out what they are and whether they pose a risk to your animals. Pigs are hardy animals, but they can be affected by some plants.

Feed quality is also important. Weed seeds can enter the farm via contaminated grain or hay/straw supplies. This can be more common in drought when people are desperate for stockfeed or bedding but also, during the first harvest after drought.

This is also important if you make pasture hay or silage. You don't want to be selling or storing problems such as hay containing toxins or other substances which may taint meat or milk.

If you need assistance with plant identification contact your agronomist, local council weeds officers, Department of Agriculture in your state, local Landcare groups or use one of the many plant apps available online.

Other useful references include:

Australia's Poisonous Plants, Fungi and Cyanobacteria – A Guide to Species of Medical and Veterinary Importance by Ross McKenzie 2012, CSIRO Publishing.

"McKenzie's Maxim – The animal species, the dose and the circumstances make the poison."

Is that plant poisonous? An Australian field guide for livestock, pets and people by RCH Shepherd 2010. Published and available from RG and FJ Richardson Website www.weedinfo.com.au

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