Editor: Ciarán Carroll

Welcome to the April Newsletter

Ciarán Carroll



Welcome to the April edition of our monthly newsletter. The past month has been very busy for the PDD. The annual Pig Health Society Symposium took place on April 9th. The Teagasc Pig Development

Department were very busy fielding questions from both producers and industry. It was great to see such a big turnout on the day, a reflection of the improved pig prices no doubt!

This month also saws the official announcement of the new *Pig Supply Chain Lean Initiative*. Based on the success of the pilot programme collaboration between Teagasc, Bord Bia, DAFM and Enterprise Ireland funding has been made available via DAFM to roll out the programme on a broader scale. This will support the application of lean principles in pig production in Ireland to address current and future challenges for the pig sector. More details in this newsletter.

Last week we held our fifth annual Pig Research Dissemination Days at Horse & Jockey and Cavan. Our research team and students gave a thorough overview of current and upcoming projects and generated a lot of discussion during the Questions & Answers. The

proceedings will be up on our website shortly at www.teagasc.ie/pigs

We also launched the Teagasc Pig Production Model (TPPM) this month. This model can be used by farmers to produce reliable economic predictions of the outcome of various scenarios for their farm and help in the prioritisation of actions. In addition to the model, user-friendly decision tools have been developed for the farmers. It will be rolled out via our Discussion Groups and can be downloaded from our website at the above address.

Finally, congratulations to Dr. Laura Boyle who was recently announced as the recipient of the 2019 British Society of Animal Science (BSAS) and Royal Society for the Prevention of Cruelty to Animals (RSPCA) award for Innovative Development in Animal Welfare in recognition of her long-standing research into the welfare of pigs and dairy cattle.

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Your role in the fight against African Swine Fever

Emer McCrum

2019 is the Year of the Pig according to the Chinese lunar calendar and ironically, from a pig point of view at least, there is little to celebrate. With the news on Friday26th April that African Swine Fever (ASF) was detected on the southernmost province of Hainan, officials in China have now admitted that the virus has spread to all 31 mainland provinces, municipalities and autonomous regions in less than nine months since it was first confirmed at a farm not far from the Chinese border with Russia. There are also further reports that the virus has spread to Cambodia, Laos, Vietnam, Thailand and Myanmar. Aside from the massive ramifications for millions of Chinese pig farmers and the world's largest consumer market for pork meat, the reverberations will be felt on a global scale with meat, grain and financial markets inevitably impacted. Latest forecasts point to a loss of swine this year equivalent to the European Union's total annual supply with Rabobank predicting a fall in Chinese output of 20% to 30% throughout 2019. As China is the world's largest consumer of pork at 55 million tonnes per year, around half of the global total, the country has turned to imports to make up the shortfall with an increase of 10% in the first two months of this year. This is expected to increase dramatically throughout the year while a domestic recovery from the outbreak is expected to take years.

ASF free countries such as Ireland stand to benefit from the increasing demand for pork albeit on the proviso the virus is successfully kept out of the country. The map above illustrates the spread of ASF through Europe with the majority of cases detected to date in wild boar whereas domestic outbreaks were predominantly on backyard pig small-holdings.

ASF can be considered one of the most feared epidemic diseases of pig production that has the potential for very serious and rapid spread with devastating consequences both at farm and industry

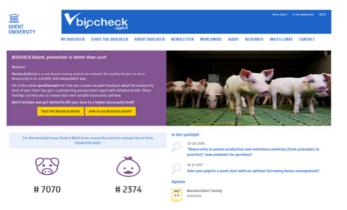


level. A notifiable disease, ASF has the potential to wipe out herds and the export markets of affected countries overnight with the USA estimating a cost to the economy of \$16.5 billion dollars in the case of an outbreak. The decision to cancel this year's Word Pork Expo in the US over concerns around ASF is an indication of the severity of the threat level. With this in mind, biosecurity has never been more relevant or important than it is today.

Multilingual posters issued by the Department of Agriculture provide useful tips around managing biosecurity in the face of ASF and should be displayed on farm visible to both staff and visitors.



As Ireland is an island nation, we have great potential to keep this destructive disease out of the country and protect our industry. The biggest threat in the Irish context comes from infected meat and for this reason, meat or meat products should not be brought into the country from infected areas. On farm, it is best practice to ban any food containing pork or pork products entering the unit and any leftover food should be carefully disposed of away from pigs. People can also be vectors and any persons travelling to infected areas should avoid contact with pigs and remain free from pigs for at least 72 hours upon return. Wild boar is a known carrier of the disease and presents a significant threat across mainland Europe. While wild boar is of less concern in Ireland, hunting of the species remains a popular sport across many EU member states with in excess of 3 million wild boars harvested across the continent each year. Any persons involved in hunting or who have been in contact with carcasses should be free from pigs for a minimum of 72 hours upon return and any clothing, footwear and equipment used while hunting should be thoroughly cleaned and disinfected and preferably not enter the farm again. Going forward, serious consideration should be given to investment in on farm biosecurity. Biosecurity is a key prevention tool and is the most efficient means available to producers in the fight against ASF. As every farm is unique, there is no one size fits all and consequently every unit should develop a Biosecurity Plan with their vet, with input from farm staff and it should be reviewed and updated regularly. Once you have a plan, farm staff and any potential visitors should be educated on it. For assistance with this, under the current Rural Development Programme funding is available to pig herd owners through the Targeted Advisory Service for Animal Health (TASAH) to have a comprehensive biosecurity review carried out on your farm by a trained private veterinary practitioner. Animal Health Ireland is delivering the service using the University of Ghent BioCheck scoring tool (introduced to Ireland





by Teagasc Pig Development Department). This tool involves a comprehensive and objective review of the internal and external biosecurity practices and infrastructure. To avail of this service, contact AHI who have a list of trained, participating vets and their contact details.

As the saying goes, prevention is better than a cure. In the case of ASF however at present there is no cure and as such the emphasis must be upon prevention through the adoption of strict biosecurity measures, especially external biosecurity. The growing demand for pigmeat this year brings with it a positive outlook for profit margins. With this in mind, producers can examine possible future capital investment projects on their units. Improving biosecurity is essential not only in the fight against ASF but also against numerous diseases affecting swine and should therefore be given serious consideration. Biosecurity is an investment in the future performance, health and welfare of animals, and in the security of our farms and pig industry as a whole.

New Pig Supply Chain Lean Initiative

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Based on the success of the pilot programme collaboration between Teagasc, Bord Bia, DAFM and Enterprise Ireland we are delighted to inform you that funding has been made available via DAFM to roll out the programme on a broader scale in a new *Pig Supply Chain Lean Initiative*. This will support the application of lean principles in pig production in Ireland to address current and future challenges for the pig sector.

A collaborative effort by Teagasc, Bord Bia, DAFM and Enterprise Ireland the programme for 2019 will comprise of two key elements; 1) On-Farm Initiative: large roll-out of Lean Start and Lean plus projects for pig producers, 2) Bord Bia market research component.

Teagasc will lead the Operational and Technical management of the on-farm initiative. The targeted outcome of this part of the programme is to achieve real and significant efficiency improvements at pig producer level.

Bord Bia, in conjunction with DAFM, will administer the project and lead the market research component of the initiative which will entail research across a number of International markets that highlight opportunities for Irish pig meat export plants.

The focus for 2019 is a series of Lean Start and Lean Plus projects on a number of pig farms. The on-farm programme will be available to all ROI pig producers who are members of the Bord Bia Pigmeat Quality Assurance Scheme (PQAS). The aim is to get Lean out to as many producers as possible. This new initiative is limited to a maximum of 50 participants in 2019. Participants will work with a carefully selected panel of lean consultants established by Bord Bia and Teagasc. A Producer application form for this programme has been circulated to all farms in the ROI. All information provided in the application will be kept strictly confidential.

On-Farm Programme

A key part of the on-farm programme will focus on farm feed efficiency through a best practice benchmarking process. An improvement in feed efficiency at farm level will lead to reduced waste, a reduced cost of production, an improvement in international cost competiveness and better sectorial sustainability through lower nutrient wastage.

The programme will comprise a number of Lean Start and Lean Plus projects.

Lean Start for Farms: the key action area here will focus on factors affecting Wean-Sale Feed Conversion Efficiency (FCE), as this is the main cost factor. To ensure that there is consistency the Lean consultants will use a Teagasc-developed Pig Benchmark questionnaire to highlight the operational areas on the farm that don't meet Best Practice. The frame work for the project would be based on each farm completing the initial in-depth questionnaire of Wean-Sale FCE best practices. This would then form the basis for a specific 'lean practice' implementation programme for each pig farm. The programme on each farm would then be judged on a re-evaluation of the best practice questionnaire, allied to a PDD standardized financial saving calculator and a standardized cost of production per kg.

Lean Plus for Farms: the key focus in this programme would encompass all of the 'Lean Start' action areas and deliverables. In addition it would assess energy usage and production flow deliverables amongst other things.

We look forward to your involvement in this initiative and if you have any further queries, please do not hesitate to contact us.

News Updates

Researcher Success

Dr Laura Boyle, Senior Research Officer in the Teagasc Pig Development Department, has been announced as the recipient of the 2019 British Society of Animal Science (BSAS) and Royal Society for the Prevention of Cruelty to Animals (RSPCA) award for Innovative Development in Animal Welfare. The award was presented at the BSAS Annual Conference in April.



The award, introduced jointly by the BSAS and the RSPCA, is in recognition of Laura's long-standing research into the welfare of pigs and dairy cattle.

Known to all in the Irish pig sector and beyond Laura has been a passionate researcher and advocate for livestock welfare for almost 25 years, focusing her efforts on the welfare of pigs and dairy cows in particular as well as on ethics in animal research. Speaking about her award, Laura said: "I am honoured and humbled to receive this prestigious award. I hope to use the recognition it affords me to progress both the science and the cause of animal welfare in Ireland and abroad. In an era of increasingly polarised views about animal production I'm particularly keen to use my background in agriculture and animal welfare to bridge the gap between farmers and society."

It's great to see international recognition for Laura and her work. Congrats Laura, well deserved!

China Pig Market update

The Chinese government issued official statistics this week on the tonnage of compound feed produced in China during 2018. The data makes very 'interesting' reading as it shows that the volume of compound pig feed produced only reduced by 0.9%. This is an amazing statistic considering that 65% of all meat

produced in China is pigmeat and the two main regions for pig meat production (Guangdong & Shandong) are reporting sow herd culling at 30% - a recent industry tour to China found the Hubel region had culling as high as 50%. The low reduction in feed usage statistics would also lead us to question the 'interesting' data on ASF outbreaks. To date there have been 117 reported cases across the whole country which is very small considering the size of the country. However these 117 cases have caused the reduction in the Chinese sow herd of 6.5 million sows and approximately 50 million pigs to date (with more reductions in the pipeline). This appears to be an amazing reaction to relatively few ASF cases considering that China has a similar land mass to the U.S. To put it another way the 117 cases equate to one case per 32,500 square miles!

Teagasc Pig Production Model

The Teagasc Pig Production Model (TPPM) was launched earlier this month. This model can be used by farmers to produce reliable economic predictions of the outcome of various scenarios for their farm and help in the prioritisation of actions. In addition to the model, user-friendly decision tools have been developed for the farmers. Teagasc has already developed economic models for dairy, beef and sheep. With the development of the TPPM, Teagasc has economic models for all the main livestock industries available. The TPPM has been built with data from more than 60 commercial pig farms in close collaboration with farmers and advisors. It has already been used for cost-benefit analysis of the main options considered by farmers under the Targeted Agricultural Modernisation Scheme (TAMS), to quantify the effects of different pathologies commonly found in Irish pig farms (Porcine reproductive and respiratory syndrome (PRRS), flu, enzootic pneumonia and pleuropneumonia), and is now being used to optimise diet formulation and feeding practices. It will be rolled out via our Discussion Groups and can be downloaded from the "calculator" section of our website at the following address:

https://www.teagasc.ie/animals/pigs/advice/downloads/