

# January 23 a “Black Letter” Day for Canadian Pork Industry

## Special PED Reports from Alberta Pork, Sask Pork and Manitoba Pork

### Alberta Pork’s fight to keep PED out of the province

Submitted by Geoff Geddes, Alberta Pork

Every industry has its share of jargon and acronyms. But in reflecting on the tumultuous two months since the first case of PED was reported in Canada, I was struck by two thoughts:

1. Has it only been two months?!
2. It’s all about the letters.

#### **PED**

A year ago, it was less prominent here than TGE or PRRS. When it began appearing in the United States last May, Alberta Pork wasted no time advising producers through our website, E-Newsletter and Industry Review. But with Canada PED-free at the time, many seemed to think of the virus as mainly a U.S. issue.

#### **BPS**

That all changed on January 23 of this year at the Banff Pork Seminar. During the Boar Pit session that afternoon, it was announced to a packed house that the first case of PED in Canada had been reported in Ontario. You could actually hear

the clinking of ice cubes at nearby tables as people stopped mid-drink and absorbed the news. Many then proceeded to polish off those drinks and order another one. Who could blame them? I remember thinking that I was seeing history in the making that day, and not in a good way.

#### **CBC, CTV, etc.**

I’m told that the drive home was scenic, with towering mountains on all sides capped by snow and low hanging clouds. But I wouldn’t know. I was too busy fielding inquiries from television, radio, newspapers and online media (my co-worker was driving!). It seemed all the people who never got around to returning my calls on “lesser issues” suddenly found my number and felt compelled to “reconnect”. But cynicism aside, it was a great opportunity to arrange interviews for our executive director and chairman and spread the word that PED, while not a threat to humans or the food supply, had found its way to Canada and posed a serious threat to our animals and our industry.

#### **DR.**

They say a crisis is a great time to learn who your friends are, and we quickly realized how lucky we are to have some of the most skilled and dedicated swine veterinarians in our own backyard. Alberta Pork immediately reached out to the veterinary community to help inform producers and industry partners on PED – What it is, how it spreads and the best methods for keeping it off your farm. Veterinarians throughout the province responded rapidly, doing media interviews, working with us at our telephone and in-person meetings and making themselves available day and night when we had questions or concerns.

#### **TTH**

Given the need to get as much information on PED out to as many people as possible in short order, Alberta Pork organized bi-weekly telephone town hall meetings led by industry experts from across the country. We’re encouraged by the excellent attendance and feedback for these meetings, with over 1,000 producers and industry partners taking part to date.

#### **FYI**

We wanted to take a multi-pronged approach to helping producers protect their farms, so we conducted nine in-person meetings across the province in January, February and March. Over 500 attendees heard the latest updates from PED experts, saw videos on proper biosecurity protocols and received handouts on every aspect of the disease.

#### **URL**

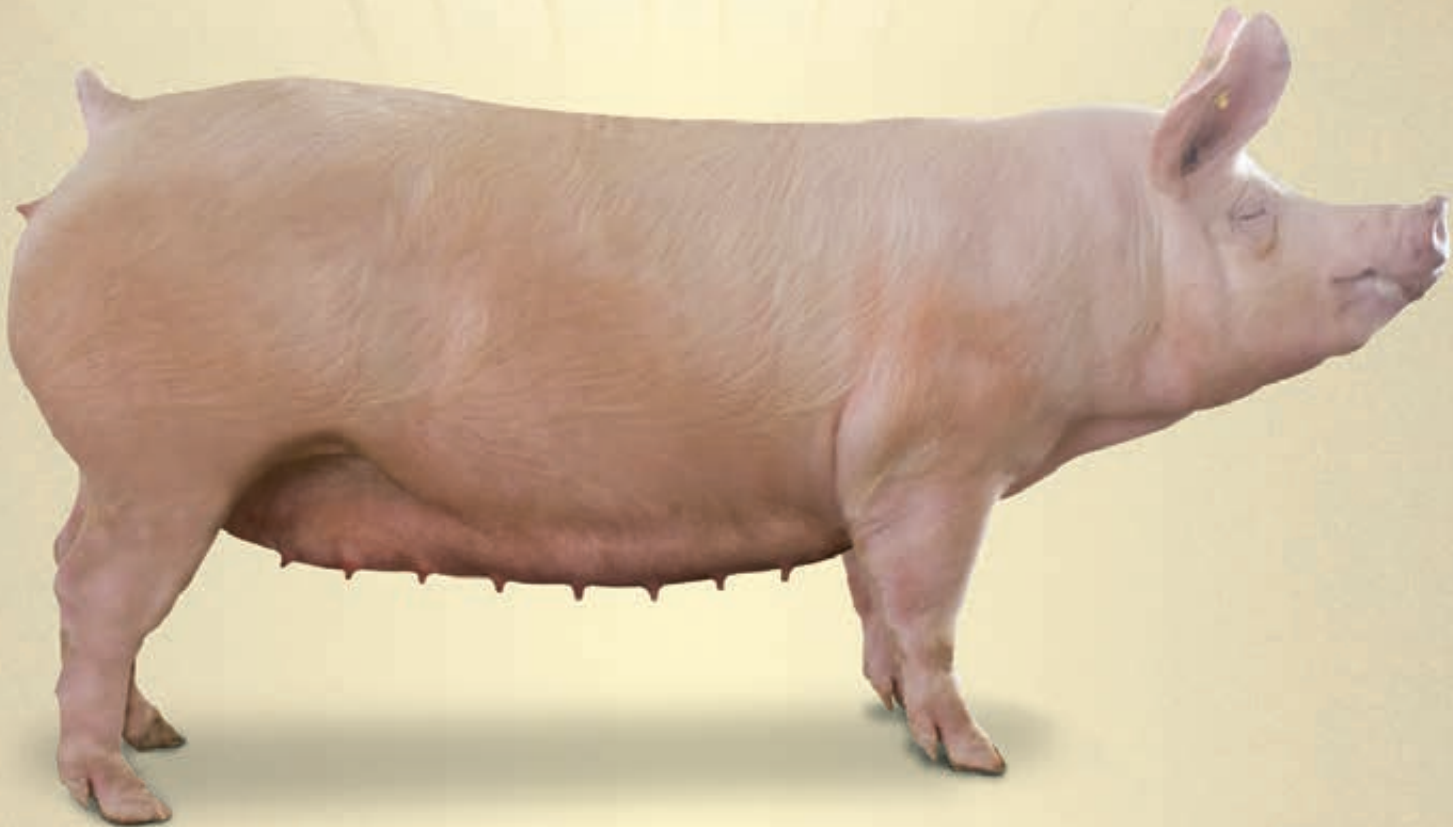
A key part of our PED strategy involved adding a new portal to our website. It offers daily updates on the situation in

**nutritionpartners**  
*The New Way*

Leading Nutrition Net Energy      Performance Data collection/Analysis  
Quicker Improvements  
Optimal performance  
Custom micro / Premix      Cost effective rations  
Specialized Micro manufacture plant /ingredient expertise

Phone: 403-912-0735  
www.nutritionpartners.ca

CONTINUED ON PAGE 38



## We deliver.

Your source for leading pig genetics over the past 30 years.

Backed by world-class service and technical support, Fast Genetics delivers a superior portfolio of terminal and maternal products. We understand your bottom-line focus and go beyond the norm in today's market. Aided by biosecurity advantages, we deliver industry-leading health. Our prolific parent females produce large litters that make it to market, and our terminal sires deliver rapid growth and excellent carcass composition. At Fast Genetics we pride ourselves on delivering quality service from people you can count on.

Fast Genetics Corporate Office  
#2-2175 Airport Drive  
Saskatoon, SK Canada S7L 7E1

T 306.667.1420  
F 306.667.1421  
E [contactus@fastgenetics.com](mailto:contactus@fastgenetics.com)

[www.fastgenetics.com](http://www.fastgenetics.com)

Canada and the U.S. along with a wide range of documents and videos on truck wash protocols, cold weather disinfection, proper detergent use and on-farm biosecurity procedures, to name a few. To ensure that everyone gets the information they need to fight the disease, we fax and email producers and industry on a regular basis with the latest news and resources.

**ARD**

No discussion of PED would be complete without tipping our hats to Alberta Agriculture and Rural Development. They have worked tirelessly to provide funding and expertise in support of our efforts at PED prevention, including the early re-opening of Growing Forward 2 to help with biosecurity projects and a significant investment in our prevention work on behalf of producers and industry.

There's much more to be done, and with cases of PED now reported in Manitoba and Montana, the threat is ever-present. We will need to stay vigilant to keep our farms clean and PED free.

But since Ben Wooley, Vice President of Sunterra Farms, stood up in Banff on January 23 and said, "The world will be watching how we respond to this crisis," I'd like to think we've given them an eye-ful and that, for the most part, they like what they see.

**Saskatchewan's Pork Sector Vigilant in PED Prevention**

Submitted by Sask Pork

With confirmations of clinical cases of Porcine Epidemic Disease (PEDv) in Ontario, the Maritimes prevention and mitigation in Saskatchewan herds has taken on a far more urgent tone.

Our discussions with the Chief Veterinary Officer for Saskatchewan, Dr. Betty Althouse, began last July to develop a Saskatchewan response template. In early January, we brought together 20 representatives from a wide cross section of the pork value chain to review all the current information available on this disease and to mobilize key personnel immediately. We owe a debt of gratitude to Saskatchewan's herd veterinarians, stakeholders and the Ministry of Agriculture who have provided immeasurable support to the industry in their dedication and willingness to assist us in getting ahead of this disease.

Two PED working groups were struck at the January meeting: *Transport, Sanitation and Testing, and Contingency Planning*. The *Transport, Sanitation & Testing* group met via conference call January 29 to identify areas of immediate focus and action including a review of truck washing protocols in Saskatchewan; development of needed changes to the protocols in place and identifying personnel and timelines for conducting plant surveillance testing. The Saskatchewan Ministry of Agriculture began environmental sampling at select Saskatchewan packing plants, assembly yards and rendering facilities in March.

The *Contingency Planning* group (CPG) met in early February. Our contingency plan has been developed which incorporates increased communications with industry leaders and veterinarians in the event of a clinical case in Saskatchewan, plans for bio-containment of the affected farm with increased monitoring and suggested methods to see the farm revert to a non-infectious status. The plan was completed by Warman Veterinary Services and Dr. Al Theede using the U.S. and Ontario experiences to guide our response to the situation.

In the case of a PEDv clinically positive herd in Saskatchewan, the Contingency Planning Group and the Ministry of Agriculture will work with the producer and herd health veterinarian to implement the plan in order to limit the spread of the virus. Costing scenarios to implement the plan in the case of a clinical positive response for a 2,700 sow farrow-to-wean farm, 600 sow farrow-to-finish and an 8,000 sow finisher unit have been developed. Sask Pork is working with the Ministry of Agriculture in determining how the response will be best funded.

The Ministry of Agriculture and Sask Pork initially developed an early cost estimate for an infection in a farrow-to-finish operation at \$278/sow based on 5-year average prices. (Given current record breaking prices in the industry, this will be higher if a positive occurred now. This estimate does not include ongoing reproductive costs or cleanup costs.)



Sierens Equipment Ltd.

**Standard Features Include:**

- "XLE PLC" scale system
- Robust construction
- 2 level alarm system
- G-diamond grit non-slip floor
- Fail safe system default
- Easy exit air
- 2 x LED lights
- Locking gates
- Maximum sort feature
- Super Quiet Operation
- PC compatible electronics
- Identifies 5 weight ranges
- Nylon bushings at all wear points
- Shipping weight: 583 lbs



Model # SSGEN2-3

- EXCELLENT SERVICE
- EXCELLENT RELIABILITY
- EXCELLENT RESULTS

Products Available in Powder Coated Stainless Steel

**Optional Features Include:**

- 2 or 3 pen destination
- Safety release system
- Wheel option
- Double entry gate option
- 2 colour dye marker
- PC Software "Sortrite"

Box 10  
Swan Lake, MB  
R0G 2S0

*Proudly Designed & Manufactured in Canada*

[www.sierensequip.com](http://www.sierensequip.com)

Toll Free: 1-877-836-2243  
Ph: (204) 836-2243  
Fax: (204) 836-2892

The two PED producer information meetings Sask Pork hosted February 13 in Swift Current and February 14 in Saskatoon attracted nearly 100 producers/stakeholders who fully supported enhanced industry and producer biosecurity protocols to prevent a break and spread of PED. Additional important information has been sent directly to producers to keep them up to date with the current situation including notices of Alberta Pork's Town Hall conference calls and in-person meetings. The excellent flow of communication between the provinces has greatly strengthened the overall efforts of the industry as a whole.

Support from the Government of Saskatchewan came swiftly with confirmation of funding of \$150,000 for the Saskatchewan Swine On-Farm Biosecurity Program 2014 (SOFBP) under Growing Forward 2, allowing eligible farms to claim \$1,000 for biosecurity related equipment and \$300 for a veterinarian farm visit. The program will run between February 1 and June 30, 2014, with an application deadline of July 15, 2014. Sask Pork has also committed funds to cover \$300 for the cost of a second veterinarian farm visit with a biosecurity focus to be done by December 31, 2014.

Dr. Althouse also confirmed Ministry of Agriculture support for PEDv related funding to cover:

1. \$5,000 matching funding to Sask Pork's contingency planning funding;
2. \$50,000 for site surveillance at plants, assembly yards and renderers;
3. \$20,000 for transport surveillance;
4. \$15,000 for a first case response to match Sask Pork funding allocated for a first case response.

*Important Information for Transporters* brochure adapted for Saskatchewan is being distributed to truckers at U.S. border crossings in Saskatchewan by the Canadian Food Inspection Agency via the Canadian Border Services Agency. A second publication, *Porcine Epidemic Diarrhea Virus* developed by the Ministry of Agriculture and Sask Pork, has been widely distributed throughout the province. Our website includes a click-thru on the homepage to PED information from trusted sources and is updated as new information becomes available.

Media interest in the potential threat to Saskatchewan's pork industry was brisk during the initial news of outbreaks in Ontario, the Maritimes and Manitoba. Chairman Florian Possberg and directors and staff continue to respond to interview requests with local TV/Radio and weekly rural newspapers. CTV News conducted two separate in-depth interviews with Dr. Henry Gauvreau, Harvey Wagner and Steve Balzer of Transall Express. Interestingly, no questions have arisen about the safety of pork products though there is interest in potential supply disruptions given the effect PED has had on the U.S. pork industry.

Our producers continue to demonstrate the strength of the Saskatchewan pork sector and its resiliency by once again

CONTINUED ON PAGE 40

**START HELPING THE ENVIRONMENT TODAY!**



**Difference through Innovation**



**NEW ZINCO-PLUS™**  
**Zinc Performance Additive**

Innovative blend of zinc oxide and hydrogenated vegetable oil **designed specifically for swine.**

**Jefo** is a leader in high-performance additives, committed to the livestock industry since 1982.



**Jefo**  
 Species-specific additives

**Contact-us for more information!**  
[jefo.ca](http://jefo.ca) | [info@jefo.ca](mailto:info@jefo.ca)

rising to the challenge to ensure their farms are protected. Sask Pork Chairman Florian Possberg credits the vigilance of the province's pork industry for keeping Saskatchewan free of PED adding that "our producers have been very responsive in stepping up biosecurity and feeding programs to accommodate the reduction of risk."

## Manitoba Pork tackling PED head-on

Submitted by the Manitoba Pork Council

Manitoba Pork communicated with assembly yards and transporters in the summer of 2013 about the risk of PEDv transmission. As well, a presentation on PEDv and the U.S. experience was made by Manitoba Pork staff at the Manitoba Pork Fall Producer Meetings, October 29 and 30, 2013.

Manitoba Pork prepared and distributed PEDv pamphlets and Canadian Swine Health Board Wash/Disinfect/Dry

protocols in December of 2013 to producers, veterinarians, feed companies, packing plants, assembly yards, and wash facilities. The aim was to further educate these groups on the disease and encourage them to distribute the materials to transporters. The package was also given to Canadian Border Services Agency (CBSA) to hand to livestock transporters returning from the U.S. The materials emphasize the need to wash and disinfect trailers returning from the U.S. and from assembly yards.

In January of 2014, Manitoba Pork allocated \$100,000 for a provincial PEDv surveillance program, which is being managed by Manitoba Agriculture, Food and Rural Development and consists of swabbing for PEDv at high pig-traffic sites, such as assembly yards, provincial abattoirs, and federal packing plants. Manitoba Pork applied for and received funding from Growing Forward 2 for up to \$67,875 for the Surveillance Program.

A PEDv presentation was prepared and veterinarians were funded to deliver it to their clients. Manitoba Pork applied and received funding from Growing Forward 2 for up to \$10,500 for these PEDv Vet-Producer Meetings.

Manitoba Pork has also hosted PEDv Town Hall phone-in meetings (January 31, February 19, and March 21) to update Manitoba producers on current activities and information. Manitoba Pork applied and received funding from Growing Forward 2 for up to \$4,500 for PEDv Town Hall calls.

We worked closely with the Chief Veterinary Office in Manitoba to perform trace-outs from the one infected premise. We continue to work with the affected producer to maintain biocontainment on his farm and arrange for the orderly marketing of his pigs. Manitoba Pork provided some financial assistance to the producer to offset the extra costs arising from improvements made to his biosecurity and from production problems as a result of the quarantine restrictions. We worked closely with the producer and others to develop a marketing strategy to minimize the potential of spreading the disease.

Manitoba Pork encouraged CFIA and CBSA to seal unwashed trailers at the border returning to Manitoba from the U.S. The exemptions to this are direct-to-slaughter movements (including a direct return) from Canada to the U.S., which only require a scrape-out, and trailers that have been washed and disinfected in the U.S. (provided they have proof of wash). We are working with the federal government to get the regulation changed to close this loophole.

Manitoba Pork established procedures for unwashed trailers to be sealed at the border until they are washed at an accredited wash facility in Manitoba. A veterinary consultant was hired to audit and certify wash facilities. Manitoba Pork purchased tag-seals with unique numbers for transporters to use. We have tags available to transporters free-of-charge at the Manitoba Pork office and we have also sent 1,000 seals to CBSA. Transporters can pick up seals at the Manitoba Pork office or at the CBSA controlled border points such as the Emerson border crossing. Manitoba Pork is assisting with the establishment of some new washing/drying facilities.

We are also continually liaising with other organizations and individuals to enhance biosecurity protocols in their everyday practices.

Manitoba Pork has also recently produced a "Prevent PEDv" series of stickers and posters to be put up in-barn and at other pig sites in order to maintain awareness and vigilance for the disease. The stickers and posters are available free-of-charge to Manitoba pork producers and other industry stakeholders, and can be ordered or picked up from the Manitoba Pork office.

We continue to deliver pertinent updates to producers through our e-newsletter, Chop Talk, our website ([www.manitobapork.com/pedv](http://www.manitobapork.com/pedv)), numerous direct phone calls and meetings, Farmscape articles and radio broadcasts.

We are in continuous dialogue with provincial government officials and CVO staff, other provinces and national pork organizations. ■



**PigWIN**®

**Pork production record system**

- Breeding Herd
- Gilt Pool
- Rapid data entry
- Drill-down reporting
- Growing pigs
- Share reports via the Internet

Call Toll Free: 1-877-474-4946



[www.pigwin.com](http://www.pigwin.com)

# Manitoba-based company developing PED vaccine

By Myron Love

Over the past year, Porcine Epidemic Diarrhea Virus (PEDv) has wreaked havoc with America's hog industry. The industry in the United States has suffered over \$1 billion in losses and now the virus is showing up in Canadian herds.

In January the virus was diagnosed in 23 barns in Ontario and in Prince Edward Island, and the first case has showed up in southeastern Manitoba.

Terence Sellen however may have the silver bullet that stops PEDv dead in its tracks. Sellen is the president of Manitoba-based company Zyme Fast Inc., which is developing a vaccine that promises to inoculate hogs against the PEDv strain currently affecting North American herds.

Zyme Fast Inc. is a 12-year-old biotech company that focuses on developing antibodies for diseases affecting livestock. "We work from the genome of the virus," Sellen explains. "Working with live viruses is old technology which we moved away from eight years ago. It is also more dangerous (working with live viruses). If the genome is available, we can create a vaccine."

Zyme Fast technicians integrate antibodies into egg yolks that they have dried into powder. The powder is incorporated into

feed, (one kilo of powdered egg yolk for every tonne of feed) or put it in the water system for piglets to ingest.

**The people at the Canadian Food Inspection Agency (CFIA) are aware of the work we do. When they approached us to ask if we would be doing something about PEDv, we were ready. ~ Terence Sellen, president, Zyme Fast Inc.**

Sellen explains that the advantage to inoculating herds by means of introducing antibodies into their feed through egg yolk powder is threefold. The method used is quite inexpensive compared to other methods. Egg yolks are easily assimilated. And, if you vaccinate the sow, the sow will pass on the antibodies to the piglets thereby neutralizing PEDv within four days. Because the piglets' digestive tracks take time to mature, it would take three or four weeks to kill the virus if the inoculant is given directly to the piglets.

CONTINUED ON PAGE 42

## NOR-AG LTD.

Serving the Intensive Livestock Industry

Electronic Sow Feeding System



Product Features and Advantages:

### SOW CARE SOLUTIONS

- 24/7 Service
- 60 - 70 sows per station.
- Group size from 40 to 400 sows.
- Static or dynamic groups.
- Computer-Controlled feeding.
- Feed up to three types of feed.
- Can eat meals on own schedule.
- Protected from other sows.
- Automatically sorted - selection data.

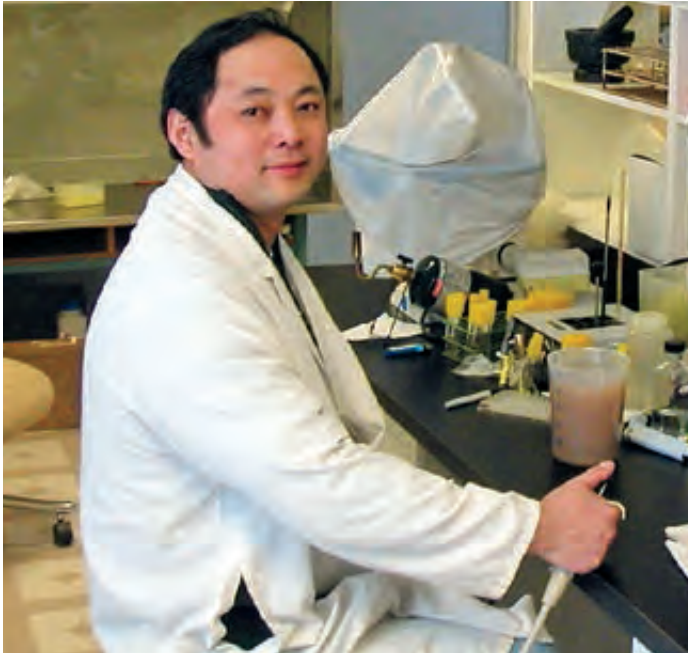
**Toll Free: (866) 893-3302**

Phone: 403-341-3767

Fax: 403-341-3765

Email: [norag@noragltd.ca](mailto:norag@noragltd.ca)

Website: [www.noragltd.ca](http://www.noragltd.ca)



Dr. Lin Fang as he works in the Zyme Fast Inc. laboratory.

Sellen reports that his company has thus far developed 55 different egg yolk structures for various diseases. Zyme Fast's ace-in-the-hole, Sellen notes, is Dr. Lin Fang, the company's chief research scientist. Fang was an established veterinary researcher in his native Shanghai who came to Winnipeg to study biotechnology under the mentorship of Professor Ron Marquardt at the University of Manitoba.

Marquardt is vice President of Zyme Fast Inc., as well as a professor emeritus at the University of Manitoba. His research on egg yolk antibodies and enzymes has been ongoing for 40 years. He originally approached Sellen, who has a long history working in the private and public sectors of science and technology development, about commercializing Marquardt's research.

"Dr. Fang is very good at what he does," says Sellen, adding that Marquardt and Fang are internationally renowned scientists with many breakthroughs and technical innovations recognized in Asia, Europe and North America.

"The people at the Canadian Food Inspection Agency (CFIA) are aware of the work we do," Sellen notes. "When they

approached us to ask if we would be doing something about PEDv, we were ready. We had already developed a vaccine against PEDv for China four years ago."

Sellen explains that PEDv has been active in Europe and Asia for 20 years or more. "The European strain isn't virulent, so there hasn't been that much damage," he notes.

He reports that the Asian and American strains are very similar, although not entirely the same.

He notes that an American company has developed a PEDv vaccine, but that it has not been very successful. He adds that Merck has announced that they are on track to develop a vaccine some time over the next year.

"Our vaccine will be ready for testing by the beginning of April," he says.

He reports that on average, it takes Zyme Fast six to nine months working from the genome to develop a vaccine. It took the company six months to develop its vaccine for the Asian PEDv strain.

While regulatory approval can often be a cumbersome process, Sellen is optimistic that Zyme Fast's PEDv vaccine will receive approval fairly quickly. "The CFIA is focused on this disease," he notes. "We expect that our vaccine could be fast tracked for approval."

The situation is becoming more urgent, he points out, because the geese will soon be returning to Canadian wetlands and marshes after stopping en route in American fields, some of which have been sprinkled with hog manure, which may have been contaminated with PEDv.

Sellen reports that Zyme Fast is also beginning to turn its attention to combating human viruses and bacteria as well as animal diseases. "We are researching treatments for antibiotic-resistant superbugs," he says. "We are in discussion with the University of Calgary about starting human trials.

"We have entered the age of the small protein. The body does not recognize chemicals, but it does recognize biology. If we can figure out what the body needs at the genetic level - to combat superbugs, for example - we can provide biological antibodies that the body will be able to use properly to fight infections." ■

### Naturally it's A.I.

- ... for the success of it
- ... for the consistency of it
- ... for the worth of it



### ALBERTA SWINE GENETICS CORPORATION

The A.I. Place Phone: (780) 986-1250

Toll Free: **1-800-691-3060**



## The Next Western Hog JOURNAL is July 2014

For advertising contact James Shaw at 416-231-1812 or jamesshaw@rogers.com

# You find PED - what now?

By Bryan Passifiume

With PED claiming upwards of five million hogs in the U.S. in a little under a year, producers can be forgiven if they're nervous about the future of their herds.

Even though Canadian cases have been – for now – contained to farms in southern Ontario, pig farmers across Canada are rightfully concerned about the disease spreading to their herd.

With stories about PED's almost indestructible virility, what happens when a producer finds himself facing an infected herd?

While the virus affects hogs of all ages, unweaned piglets are the most susceptible to the disease, with mortality rates between 90 - 100 per cent in infected animals.

With anxiety among Canada's pork producers reaching crisis levels, many are left wondering what a PED diagnosis would realistically mean to their business.

Dr. Chris Byra is manager of the Canadian Swine Health Intelligence Network, and says that once a veterinarian makes a positive PED diagnosis, the producer needs to immediately stop the movement of all animals until marketing, quarantine and dead stock plans are in place.

Stopping movement of all animals, people and equipment out of the farm is essential to keep the virus from spreading. He also suggests ceasing all unnecessary farm visits from suppliers, and ensuring that those deemed essential to visit the facility follow proper biosecurity protocols to prevent avenues for the virus to escape.

A diagnosis of PED usually comes from an in situ diagnosis from a vet, or a biological report from a processing plant. In either case, Byra stresses that containing the virus is key.

The age of the infected animal determines the course of the disease, and the actions taken by the farmer. While PED is almost always fatal in suckling piglets, weaned young fare better.

"Weaners get diarrhea and vomiting, they may be sick for a few days and then recover," Byra said. "Signs in grower and finisher barns range from significant diarrhea to almost no signs at all – these are the difficult ones to diagnose. Sows and boars will have some diarrhea and be off feed for a few days, but fully recover."

Dr. Julia Keenlside, a veterinary epidemiologist with Alberta Agriculture, stresses the importance of developing a sound plan of action with both animal health providers and processors.

"The herd vet and the producer will work together to reduce the impact of the disease, clean up the site and prevent the

CONTINUED ON PAGE 44

The right science,  
the right performance,  
**right now.**



Grain Management  
**BIOGALS PLUS**  
NUTRAMIX

Gut Health  
**MICRO-BAC**  
MAXI-CID  
MAXI-GEN PLUS

Contact **Doug Richards** 403.540.8333  
or **Mark Peters** 204.791.4079  
to receive your **Power of 5** package



Once you've requested  
your **Power of 5**  
information package,  
you'll automatically  
be entered to win an  
**iPad mini**





virus from spreading further,” she said. “They both work with the processor to ensure hogs are shipped to market in a way that minimizes the risk to other farms.”

When pigs from an infected facility are sent off for slaughter, the processor will often arrange special transport for the animals as well as ensure the truck goes through extra decontamination steps.

Animals that survive a PED infection do not typically lose their saleability when brought to finish.

“Most of the affected pigs will continue as normal and go to market,” Dr. Keenlside said. “PED does not affect food safety or human health.”

For the animals that do succumb to the disease, Dr. Byra says producers should ensure the dead stock isn’t accessible by scavengers, especially if the farmer plans to dispose of the animals on site. For those who dispose of their animals through a rendering operation, he says it’s vital to let the renderer know what he’s picking up so they adjust their pick-up schedule accordingly to avoid cross-contamination and take proper measures to disinfect their trucks.

Before a facility can be declared PED-free, both Byra and Keenlside suggest working closely with the farm veterinarian, especially if they’ve had experience in working with recovering operations. He says the best way to eliminate the virus from the farm is through good old-fashioned hard work.

“Begin a repeated process of cleaning and disinfecting,” he said, adding that doing so after a spell of warm weather is the standard. “This involves pressure washing the entire facility, chlorination of the pits and then environmental testing when this is done before the introduction of naive animals.”

“The best method will vary depending on the size of the farm,” added Dr. Keenlside. “The producer will need to work closely with their veterinarian to develop pig flows and sanitation procedures to shorten the length of the outbreak that fits the operation.”

An important part of the infection chain is knowing where the virus came from. Knowing how the infection took root in the first place is key to preventing future infections. Dr. Keenlside says that resources are available to assist producers in tracking down the cause of the infection.

“Alberta Agriculture will assist with communicating in the industry, providing laboratory testing and follow-up investigation as needed to trace where the virus came from and how to prevent it from spreading further,” she said. “Alberta Pork will provide support to the producer as well.”

The effectiveness of a producer’s cleaning regimen at this stage is decidedly unscientific. If animals manage to live in the barn without becoming sick themselves, it can be declared disease-free.

“You only know that you are negative for sure after the introduced animals have been in the barn for a couple of months,” said Dr. Byra.

While PED certainly isn’t a picnic for the unfortunate producer dealing with an infected herd, sticking to established biosecurity protocols and keeping in close contact with processors and animal health practitioners is the best way to not only ensure a quick and complete recovery, but to prevent future outbreaks. ■

Improve feed efficiency – improve profitability

prairieswine.ca

Pork Insight

Turn knowledge into a powerful tool to help you improve your bottom line.

PRAIRIE SWINE CENTRE

Prairie Swine Centre  
Phone: (306) 373-9922  
Fax: (306) 955-2510

Pork Insight brings you the world's knowledge

The Prairie Swine Centre is dedicated to supporting a profitable Canadian pork industry with reliable information to reduce costs and improve productivity. Check out the new Pork Insight research website, powered by prairieswine.ca. If you're looking for practical, science-based information, the Pork Insight database contains over 5,500 articles. It's comprehensive, easy to search, and will help improve your operation's bottom line.

Pork Insight www.prairieswine.ca

Agriculture and Ag-Food Canada Agriculture et Agroalimentaire Canada

Canada

ALMA

4 TON SOW™

THE TOTAL PACKAGE

The First Power In Genetics

GENESUS

www.genesus.com

## PED threat hangs over otherwise buoyant Manitoba Swine Seminar

By Myron Love



Jason McNaughton, president of Winnipeg-based Standard Nutrition (Canada) Ltd.



Robyn Harte seminar co-chair and Manitoba Agriculture, Food and Rural Initiatives Swine Specialist

The mood was buoyant at this year's annual Manitoba Swine Seminar February 5-6 at the Victoria Inn Hotel and Convention Centre in Winnipeg.

"Our attendance, (435, including about 100 walk-ins) this year was excellent," says Robyn Harte, Manitoba Agriculture, Food and Rural Initiatives Swine Specialist and seminar co-chair. "And the discussions among the attendees at lunch and coffee breaks have been very positive."

Jason McNaughton, the president of Winnipeg-based Standard Nutrition (Canada) Ltd., also remarks on the attendance. "This was the best attended swine seminars in at least the last five years," he says.

Dave Jolicoeur, who represents Fast Genetics in Manitoba and Minnesota, says that this was the best-attended series of swine seminars here in the last ten years.

Laura Kunzelman, the Manitoba Pork Council's director of Communications, adds that this was the best turnout that she has seen to date.

Jolicoeur also observes that there was a lot of optimism among the attendees. "With feed prices down and market prices up, producers are feeling more positive than they have in several years," he notes.

Mark Waldner of the Sturgeon Creek Hutterite Colony near Winnipeg and Travis Hofer from the James Valley Hutterite Colony in Elie (about a half hour west of Winnipeg on the

TransCanada Highway) spoke glowingly of the seminar speakers. Waldner singled out for praise Dr. Tim Blackwell from the Ontario Ministry of Agriculture and

CONTINUED ON PAGE 46



Thank you to these recent Western Canadian customers who installed the Pro-Sort Auto-Sort Management System by Envirotech Ag Systems Ltd.

- Sunnyside Colony, MB
- Rosedale Colony, MB
- Rosebank Colony, MB
- Blooming Prairie Colony, MB
- Skyview Colony, MB
- Aspenheim Colony, MB
- Albion Ridge Colony, AB
- Greenwood Colony, AB
- Keho Lake Colony, AB
- New Rockport Colony, AB



Select Sort

With over 800 units sold and 125 active sites we are your Auto-Sort Management experts!

**ENVIROTECH**  
AG SYSTEMS LTD.

6 Nicolas Ave. Winnipeg, Manitoba Canada  
Phone: 1 800 233 6913 or Cell: 204 781 2377

[www.envirotechagsystems.com](http://www.envirotechagsystems.com)



*Dave Jolicoeur, Fast Genetics representative in Manitoba and Minnesota*



*Laura Kunzelman, the Manitoba Pork Council's director of Communications*



*Don Bridge, Champion Alstoe Animal Health*



*Eric Aubin, national account leader for DNA Genetics in Canada*

Food whose topic was 'Communicating On-Farm Welfare'. Both Manitoba producers also appreciated the presentation on weaning pigs by Dr. Steve Dritz, a professor at Kansas State University's College of Veterinary Medicine.

Eric Aubin, national account leader for DNA Genetics in Canada, liked the presentation by Dr. Julie Menard, a swine specialist from Quebec, who also provided tips on weaning.

Although the mood over the two days was generally upbeat, there was a dark cloud hanging over the proceedings in the form of the porcine epidemic diarrhea virus (PEDv) potentially crossing the border and infecting Canadian hogs. The concern was such that conference organizers tacked onto the program a panel discussion on the subject at the end of the first day, and substituted a panel and question and answer session on the subject to the program on the second day in place of a previously scheduled presentation.

Don Bridge (Champion Alstoe Animal Health), from Whitby, Ontario, reports that five PEDv cases have already cropped up in Ontario. "Producers are paying closer attention to biosecurity measures," he says.

Standard Nutrition's Jason McNaughton reports that his company is taking a new approach to preventing outbreaks of PEDv in Manitoba. The company has begun testing the preventive power of baking trucks and trailers at its site in Brandon.

"We bake the insides of trucks and trailers in our facility at 160 degrees Fahrenheit for ten minutes," McNaughton says. "That should destroy any PEDV present. "If our initial tests prove successful, we hope to open this up on a commercial basis some time in March."

Hutterite Colony members Waldner and Hofer sum it up best. "We will do our best in terms of bio-security and look to God to do the rest." ■



**Committed To Quality You Can Depend On**

For More Information Contact ... [husky@huskyfarm.ca](mailto:husky@huskyfarm.ca)



**A Full Line Of Liquid Manure Handling Products**



**Reels, 3PT & Trailer**

**Truck Mounts**



**Husky Farm Equipment Limited**  
 Alma, ON. NOB 1A0  
 (519) 846-5329 1-800-349-1122  
[www.huskyfarm.ca](http://www.huskyfarm.ca)

# Scenes from the Seminar



Federal Agriculture Minister Gerry Ritz participates in a media scrum after his funding announcement. Photo by Terry Hockaday



Jurgen Preugschas, an ALMA board member and producer, asks a question at the Boar Pit. Photo by Terry Hockaday



It started with strong energy, delivered in spades with excellent speakers and discussion, and concluded with a call to action on a new threat. The backdrop was great weather and stunning scenery. All in all it was a dynamic opportunity for a broad cross section of the pork sector to talk progress and innovation to build a successful future.

BPS program director Ruurd Zijlstra kept his closing remarks short and simple, since many had stayed overtime for an extended Boar Pit session.

"Obviously the day ended with not the message we wanted to hear on PED, but of course we are very happy with the conference." says Zijlstra. "The success is largely because of our great sponsors, our advisory board and our conference coordinator. We strive to have a good program with excellent networking opportunities and this is the tradition we plan to continue. Your feedback is important and we welcome it. We look forward to another great event in 2015." Photo by Terry Hockaday



Geoff Geddes (right) chats with Ron Gietz at the Alberta Pork booth on the trade show floor. Photo by Sheri Monk



Dr. William Flowers, (left) and Dr. George Foxcroft after the tradition of the Foxcroft Honourary Lecture. Each year the Banff Pork Seminar pays tribute to swine research pioneer and industry icon, Dr. George Foxcroft with an honorary lectureship.

The 2014 lecture featured a presentation by Dr. William Flowers of North Carolina State University entitled "Gilt and sow management on farm with high sow longevity." Photo by Terry Hockaday



What would a pork seminar be without ham? Photo by Terry Hockaday

## PepSoyGen®

### An All-Natural Fermented-Soy Protein

PepSoyGen® is a functional soy-protein ingredient from solid-state fermentation technology. Our all-natural manufacturing process significantly increases the protein content of PepSoyGen. Patented strains of *Aspergillus oryzae* and *Bacillus subtilis* are also utilized in this manufacturing process. University trials validate PepSoyGen as an outstanding source of protein, performing equally to or better than other protein sources for young animal diets.

**Contact us today for research data and to learn how PepSoyGen can optimize your piglet nutrition program.**

Available exclusively in Canada from:  
Pro-Ag Products, Ltd.  
1051 Marion Street • Winnipeg, MB, R2J 0L1  
www.pro-ag.com • 800-806-2737

**nutraferma®**  
Innovative Biotech Solutions  
+1-605-242-5212  
info@nutraferma.com  
www.nutraferma.com

# The Boar Pit - honest, real-time dialogue about the industry's most important issues

The PED news struck the afternoon the Boar Pit was held, and while it headlined the session, it wasn't the only star of the show

Summary by Terry Hockaday

## Boar pit tackles PED bombshell

Just before the BPS boar pit session kicked off a bombshell had dropped - news of the first case of deadly pig virus "PED" confirmed in Canada. Understandably this topic dominated the session, which is designed as an open-format, no-hold-barred, frank and interactive discussion of the hot issues in pork production.

Leading the session were three panelists, including producer Claude Vielfaure, Dr. Doug MacDougald of SouthWest Ontario Veterinary Services and economist Steve Meyer of Paragon Economics, along with moderator Shannon Meyers of Fast Genetics.

## Managing a potential crisis

Porcine epidemic diarrhea (PED) has become a major problem for the U.S. pork industry recently. Dr. Doug MacDougald has been at the forefront of Canada's effort to understand and rally support for precautions to limit PED risk. He provided an update based on the day's news.



Steve Meyer (left), Claude Vielfaure and Dr. Doug MacDougald (right) form the panel of the 2014 Boar Pit. Photo by Sheri Monk

"There's a 500 sow farrow-to-finish operation confirmed positive as of today," says MacDougald. "It's a closed herd. At this point there is no short-list of probable introductions of the virus. The direction today is containment. The direction is also to follow contacts on where people, supplies and equipment have gone. As of today and tomorrow the focus is marshalling resources and doing extensive investigating. We will know 30 hours from now on at least the initial contacts to this farm if it has spread by those means or not."

There is no need to raise panic, he says. "There are a lot of misconceptions on the manner and speed of how this has spread in U.S. It may be acting like a super virus, but folks it's not. It's a coronavirus, there's good history and knowledge, and we know if it's handled right in most situations, the track record is sow herds can eliminate this in 90 to 100 days."

"The most important thing in a case like we've found today is put your arms around and contain it. That's what's happening now."

More cases are likely and the industry is expected to enter a lock-down mentality to limit spread. Several participants noted the risk has been very high given the close interaction between the Canadian and U.S. industries, so while the news is not welcome it is also not surprising. The tone in the room reflected a resolve to make good decisions and work diligently to turn a challenging situation into a speed bump that will not derail a Canadian pork sector that has been looking very strong.



Save up to 75% of your energy costs with **Altra-Seal insulated sliding panel. Tested and Proven!**

Ventilation Design - Natural, Fan or Dual  
Big projects or small - all done with care  
Several panel and screen options  
Basic or customized panel systems  
Insulated chimneys

Tel: 519-527-2470  
Fax: 519-527-2560  
www.sunnorth.com

P.O. Box 668, 92 Railway St.  
Seaforth, On N0K 1W0  
sunnorth@sunnorth.com



Jim Haggins asks a question about the PED discovery during the Boar Pit session. Photo by Sheri Monk



Jean-Guy Vincent of the Canadian Pork Council asks the panel a question. Photo by Sheri Monk

head for most operations and up to \$40 per head from some of the top ones.” He noted he doesn’t see any further inroad of PED in Canada affecting price in a negative way.

### Dissecting the Code of Practice

Also discussed was how Canada is closing in on a major milestone to complete a new Code of Practice for the care and handling of pigs. There has been a lot of debate around this particularly on the issue of sow housing. Consensus has been reached on the new Code but details will not be officially released until it is finalized in a couple months, likely in March.

Producer Claude Vielfaure has been involved in the Code development process and was asked, “In your mind what’s real in this new Code that will affect producers when it hits the ground?”

“Four things were probably the most contentious around the Code development table,” says Vielfaure. “Group housing. Space requirement for nursery and finishing. Euthanasia and enrichment. These were by far the hottest topics negotiated.”

On sow housing the clause in the draft Code has changed significantly based on producer and industry response during a Public Comment Period. “I think with this change the result reached will keep our industry competitive and hopefully most producers will be comfortable with it.”

U.S.-based Steve Meyer was asked his opinion. “We approach this differently in the U.S. The short answer is we see the Code approach as ‘Canada’s PED,’” he quipped, “We’d like it to stay on your side of the border.” ■

## Optimism and new Code

There was more to the Boar Pit session than PED.

### Glass half full

The boar pit blocked time to make sure other topics could be discussed and one of these was the generally encouraging indications of what the future holds for the prospects of pork producers and their industry. Despite the news on PED, the overall outlook for Canadian pork production is very positive, says Steve Meyer of Paragon Economics. “In fact it’s excellent, particularly for the next two years.”

“It’s a very good outlook in terms of reduced costs and profitability,” he says. “We’re looking at profits of \$25 per



## Be a Superhero

Play your part in protecting Canada's pork industry

### PigTrace Canada

Our national swine traceability program means protection, prosperity and peace of mind for our pork industry.

PigTrace provides the opportunity to ensure business continuity on the farm and in the marketplace while we work hard to feed the world.

Now is the time to safeguard our businesses and our bottom lines in the event of a food safety or animal health issue.

Join us in securing Canada's position as a world leader in pork production.

Contact your provincial pork office or visit [pigtrace.ca](http://pigtrace.ca) for more information.






Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada



Protection. Prosperity. Peace of Mind.  
Protection. Prospérité. Tranquillité d'esprit.

## BREAKOUT SESSION 7

### Getting Pigs to Slaughter

Taking your game to the next level for improved results Summary by Bryan Passifiume

Speaker 1 - Brian Melody, Wean to Finish Technical Service, PIC, Iowa

### Triple 2 Wean to Finish initiative: Preparing for a worthwhile journey

With increased production a priority of every industry-minded person, it's certainly no secret that producers look to take every advantage possible to make sure their herds are returning the biggest bang for their buck.

Brian Melody, technical service manager of PIC spoke during the morning breakout session, speaking about PIC's ability to maximize returns.

"For over 50 years, PIC's focus has been on improving the financial competitiveness and profitability of our customers," Melody said. "This drive has been highlighted throughout the years in the establishment of aggressive goals. The by-product of these goals has been an acceleration of progress by production teams with support from PIC technical services to capture the genetic potential of the females and market pigs in the barns."

The benchmark for many producers is the elusive "30 Piglets per Sow Year" goal.

"The speed at which 30 PSY has been achieved in multiple farms serves as a recent reminder of the power of people and genetics in reaching a previously unthinkable reality," he said. "Today's continuation of the tradition takes the form of the Triple 2s within the wean to finish discipline of our business."

PIC's Triple 2 concept is key to ensuring maximum productivity. Triple 2 is a set of performance goals defined as a 2 lb average daily weight gain, a 2.0 feed to weight gain conversion ratio, and a 2 per cent mortality rate.

Based on a 270 lb finishing weight, these numbers translate to 516 pounds of feed required for the animal to gain 258 pounds in 129 days.

Lofty goals, Melody says, considering the current industry averages sit at a 1.48 lb average daily gain, a 2.52 feed conversion ratio and 8 per cent mortality rate.

---

#### The benchmark for many producers is the elusive "30 Piglets per Sow Year" goal.

---

Melody says that PIC bases strong growth and return on production based on genetic potential.

"PIC levers multiple practices to accelerate genetic progress, ranging from genomics, Genetic Nucleus Crossbred in formation, extensive performance testing information, and traditional BLUP selection processes," explains Melody.

PIC bases these goals on a carefully selected breeding stock in order to better leverage genetic potential. However, sometimes the limits of the breeding stock can often affect production on the whole.

Melody explains that Leibig's Law of Minimum, originally developed in regards to crop production but found to apply to raising animals, states that growth is controlled by the availability of its scarcest resource, rather than the total amount of resources available. Applied to crop growth, the concept states that increasing the amount of plentiful nutrients doesn't necessarily result in an increased growth.

"Only by increasing the amount of the limiting nutrient, the one scarcest in relation to need, was the growth of a plant or crop improved," Melody explains. "This can be demonstrated by a barrel with different staves at the

length of limitation. The water level within the barrel of performance can only rise as high as the most limiting trait."

"When we apply this philosophy to understanding constraints within a wean to finish system," he continues, "we begin with a basic framework of multiple factors contributing to the results reviewed on lot closeouts. These constraints include facility design, water and feed availability, and husbandry practices."

An image of a disposable boot with the word 'TREADER' printed on the side.

**ITSI Select™ TREADER - Disposable Boots with BITE!**

- ▶ Elasticized top
- ▶ Textured bottom to reduce slipping
- ▶ Cost-effective
- ▶ XL or Jumbo size
- ▶ US and other patents pending

The only Disposable Boots with Bite!

**ITSI** Main Office Ontario: 1-800-692-4874  
Sales Office Manitoba: 1-866-563-2360  
e-mail: info@itsi-ai.com • www.itsi-ai.com

The amount of available water can have a drastic effect on production yield for pork producers.

“Taking a look at one specific factor of production, water, we can find data that indicates that less than ideal water availability can cause production results to change,” Melody says, citing a 2008 study undertaken by the University of Iowa that concluded that 25 pigs per cup see an 11 per cent decrease in daily weight gain compared to eight pigs per cup in the nursery.

A previous 1989 study came to a similar conclusion.

“Barber and others in 1989 found that when water flows through the nipple at 175 mL/minute in the nursery vs. 450 mL/minute, the gain is slowed by 20% and the pigs require 7% more feed to a common weight,” Melody said.

What does this mean to the average producer? Melody suggested that producers need take a close look at their facilities to determine what might be limiting their herd’s growth.

“We recommend evaluating each facility to understand the most limiting factor relative to ideal production parameters and eliminating the lowest staves on the barrel within your system,” he suggests.

**Speaker 2 - Matt Shoonderwoerd, Olymel, Red Deer, Alberta**  
**Optimizing Returns from Slaughter**

While the ultimate goal of every producer is to send their finished animal off for slaughter, Dr. Matt Schoonderwoerd of Olymel wants producers to ensure they’re doing everything they can to keep their business operating at peak levels by providing healthy and salable animals to their local packers.

“Producers don’t realize what they are leaving on the table when shipping hogs for slaughter,” he explains. “There are numerous areas where one can improve the returns once you are aware of it. These improvements cannot be made overnight; they will take some concentrated efforts over time.”

Correct and legible tattoo placement is critical in ensuring producers get paid for every animal they deliver.

Producers, Schoonderwoerd says, need to ensure they’re following correct tattoo requirements provided by the slaughterhouse. Otherwise, animals provided to the processor run the risk of not getting credited to the producer.

“When the carcass is hanging on the line, one should be able to read the tattoo on the shoulder from left to right, with all digits completely visible,” he explains, stating that many producers incorrectly assume that slapping a tattoo anywhere on the animal is enough to prove ownership.

“If you want to be assured that each hog you deliver is the hog you get paid for, the tattoo requirements must be followed exactly,” he says.

Common tattoo mistakes other than it being in the wrong location include the tattoo being applied upside down or sideways, not using enough ink and not all digits being completely legible.

Dead loss is another issue that producers can actively reduce. Schoonderwoerd says that loading procedures account for a majority of animals that arrive at the packing plant deceased.

Situations that can prove fatal for animals include overcrowding on the trailer, loading chute width, presence of feed in the stomach and even how the animals themselves are loaded.

Many producers use electric prods to coax stubborn animals down the chute. Schoonderwoerd advises against this, as this can increase stress levels in the animal to fatal levels and can cause the pig to die during transport. Pigs who have recently eaten are especially vulnerable, as they can be difficult to get moving during loading. Pigs can also resist loading if they encounter a strong wind or a drastic change in lighting levels on the loading chute, such is the case when the animal is suddenly moved from a dark holding area to a bright sunny day outdoors.

“The more we use the prod, the higher the dead losses,” he explains. “Yearly dead losses can vary markedly among

CONTINUED ON PAGE 52

**SO MANY GENES ONE GOAL**

**think Magnum Force**  
 the A.I. Solutions Company

CELEBRATING 16 YEARS

**GET MORE BOAR**

www.magnumswine.com  
 1.888.553.4844





producers from 1 to 65 per 10,000. You might say, okay, I have insurance. But is the insurance really necessary? How much do I pay per year for that, and what did I really lose?"

Schoonderwoerd recommends taking animals off feed as a standard practice. This not only makes the pigs easier to move and reduces dead loss during transport, it also reduces feed costs and can reduce carcass contamination at the slaughterhouse.

---

**Currently sitting at about 9.3 per 10,000 animals, the most common reasons for a condemned carcass are abscesses – usually the result of wounds sustained in tussles with other animals. Peritonitis, an inflammation of the lining of the abdomen, is another common reason for carcass rejection.**

---

Feed given to an animal prior to its slaughter usually just ends up on the kill floor along with the rest of the animal's gut. While the ideal gut weight for an animal is roughly eight kilograms, Schoonderwoerd says that he has seen animals with gut weight in excess of 15 kilograms containing five kilograms of feed, although the average amount of feed found in killed animals is around 3.5 kilograms. Schoonderwoerd says that for producers that ship tens of thousands of hogs per year, that represents a significant amount of waste.

"A standard guideline is to take the hogs off feed 12 hours prior to loading for same-day kill, and six hours prior to loading for next day kill," he says. "These hours will vary depending on the fibre content of the feed and the setup of the farm facilities."

He also suggests that animals coming from bioshelters require even more time off of feed. Water, however, should still be offered to the animal.

Merely anticipating the time the animals spend in transit and waiting to be killed is not advisable, he says. Schoonderwoerd stresses that withdrawal from feed needs to begin while the animal is still on the farm.

While the total number of condemned carcasses has been on the decline over the past 15 years, Schoonderwoerd says that it is still a concern. Currently sitting at about 9.3 per 10,000 animals, the most common reasons for a condemned carcass are abscesses – usually the result of wounds sustained in tussles with other animals. Peritonitis, an inflammation of the lining of the abdomen, is another common reason for carcass rejection.

Less-serious abscesses can be trimmed by the processor, but this is still not a desirable trait to commonly find in a producer's animals. Such penalties are called demerits, and refer to condemned portions of an animal that don't necessarily result in the rejection of the entire animal. Arthritis, which can occur in one to 35 out of 1,000 animals, is also a common reason for demerits.

Evidence of infection from roundworm larvae can also cause a carcass to be rejected. Evidenced by liver spots on the animal caused by the larvae travelling throughout the body, they aren't as common as they once were among farm animals. Producers can see a condemn rate of up to 38 per cent, with animals coming from bioshelters especially vulnerable.

Another uncommon, but still prevalent reason for rejection is mycoplasma pneumonia. Producers take various steps to ensure their herds remain free from pneumonia, but still need to monitor their abatement measures to ensure they are addressing the problem efficiently.

More common among producers are high rates of chest adhesions, resulting from systemic infections that can cause the animal's lungs to adhere to the inside wall of the pleural cavity. Separating the lungs from the abdomen wall is time consuming for workers on the kill floor, and multiple affected animals from the same producer can cause the processing line to quickly grind to a halt.

"As a producer, you need to ask questions," says Schoonderwoerd. "What is my standing in any one of the above areas? There has to be a valid reason why I am much higher in one or more of the above conditions. Can I really continue to operate like that?"

Producers should contact the packinghouse to get an idea of how their animals fare in these areas, and identify where problems lie, not only to ensure continued productivity for the packing plant, but also to ensure maximum return on their investment. ■



**drySTART™**

**READY-TO-USE DRYING POWDER FOR LIVESTOCK PRODUCTION**

**HELPS ABSORB MOISTURE & CONTROL ODOURS**

**the STARTline™** Tel 1-866-810-1286 • Fax 519-228-6560  
™ Trademark of Kenpal Farm Products Inc info@drySTART.com • www.drySTART.com

# Sow Lameness, Longevity and Temperament Workshops

Contributed by the Prairie Swine Centre

The lameness, longevity and temperament of sows was the topic up for discussion at the recent set of workshops across Canada. Nearly 100 pig producers and allied industry representatives attended the workshops in Manitoba, Quebec, and Ontario to discuss the latest research in the areas of lameness, longevity and temperament and what we need to consider when selecting a sow for the future.

The agenda covered some recent research outcomes of the Canadian Swine Research and Development Cluster (CSRDC) funded by Swine Innovation Porc. The conclusions of research papers such as the new quantitative lameness assessment options and lameness levels in different sow housing systems were complemented by other up-to-date topics in this area, such as hoof trimming sows and economic analysis of lameness in sow barns.

Dr. Laurie Connor from the University of Manitoba introduced the day by explaining the vision behind the cluster research program. This vision brought together likeminded researchers from across Canada to address the issues surrounding lameness in our sow barns, looking specifically at the welfare and economic analysis of lameness and its impact on longevity. This research used conventional and new technologies to identify and evaluate factors such as social characteristics, sow temperament, lameness, calcium and phosphorus balance and early reproduction management that may impact sow welfare and longevity in the sow herd. Dr. Connor went on to focus the group on what lameness is and where it occurs in the herd. Dr. Connor presented figures to show it is not just an old sow issue – recent Irish work found that 39 per cent of replacement gilts and 48 per cent of pregnant gilts were found to be lame in a study of over 68 sow herds (Quinn & Calderon Diaz. 2010).

One item covered in the workshops was the new options available to the industry that can quantify lameness.

Previously, lameness scoring has been subjective and differences could be found between assessors, and this had led to barns abandoning this practice. Dr. John Deen from the University of Minnesota suggested a simple two-scale scoring system was easiest – “Is she lame or not lame?”

Dr. Sabine Conte and Dr. Nicolas Devillers researched kinematics and force plate analysis as a way of objectively measuring lameness. The force plate takes measurements of pressure from all four feet as the sow stands in the crate. This analysis can therefore look to see if there is any weight differentiation among the four legs and therefore, any lameness. It is likely the force plate system would be the most economical to adopt in genetic company barns, and in the future could also be incorporated into an ESF feeder to provide a time-free lameness analysis for all gilts and sows over a long period of time.

---

**Even within different group sow systems there are options for group sizes, flooring types, partitions, space per sow, dynamic versus static, and for feeder types. All of these factors impact the lameness levels that you will see.**

---

Dr. John Deen discussed why lameness is underestimated in sow barns and how we might be able to learn from the Dairy industry, which continually works on lameness issues. Along with mastitis, dairy cattle lameness is cited as the most prolific production issue facing modern dairy farmers today, so why not also the pig industry? The trend for research in sows however, is increasing. In 2008, only six publications were available on sow lameness, but by 2013 there were already twenty nine.

CONTINUED ON PAGE 54

**TOGETHER WE WILL SUCCEED**

with **Magnum Force**  
the A.I. Solutions Company

CELEBRATING **16** YEARS

**GET MORE BOAR**

www.magnumswine.com  
1.888.553.4844



Longevity of sows is essential for improving costs of production. It is widely regarded that gilts do not pay for themselves until their third parity, therefore drop out prior to this is very costly. Dr. Deen showed that lame sows are less productive (see Table 1). So is it lameness or low productivity that leads to culling decisions? The sows that are being culled out prior to third parity on productivity issues could indeed be lame.

**Table 1: The Effects of Lameness on Production.**

Lameness Effects	Non-Lame	Lame
Pigs born/day	0.049	0.028
Days to removal	137	90
Avg days in herd	215	147
Replacement rate	49%	67%
Mortality/removals	0.24	0.35
<b>Calculated Productivity</b>		
Pigs produced by sow	10.5	4.1
Pigs produced by replacement	6.6	8.7
Pigs produced	17.1	12.8

The afternoon started with temperament research with Dr. Jennifer Brown from the Prairie Swine Centre. Dr. Brown covered the different temperament types in sows and how they affect productivity in the barn. As the industry thinks about moving forward to group sow housing, the interaction between sows and stock people will grow, and more information will be needed in this area. The diverse range of group housing systems available will only add to the matrix

of which sows will “perform” best in which systems. Recent work from the cluster found that sows with more passive and fearful traits had greater numbers of piglets born and born alive in the free access system, and confident sows showed a greater improvement of body condition score in slatted ESF systems. Temperament is heritable and is related to important production traits, so will we have specific sows for specific housing systems?

Dr. Laurie Connor also discussed housing systems and how it impacts lameness. Unfortunately, in this area there is not a one-size-fits-all answer. Even within different group sow systems there are options for group sizes, flooring types, partitions, space per sow, dynamic versus static, and for feeder types. All of these factors impact the lameness levels that you will see. Dr. Connor also reminded us that stock people are still incredibly important, and this echoed a point Dr. Deen made about using our eyes more when it comes to observing problems in pig production.

To finish the session, Dr. Yolande Seddon of the Prairie Swine Centre, presented work carried out outside the cluster on hoof trimming sows. Hoof trimming in other species is very common – cattle, sheep and horses husbandry is synonymous with hoof management, so why not sows? The FeetFirst®Hoof trimming chute developed by Zinpro Corporation allows easy and stress-free immobilization of the sow so trimming can be quick and efficient.

The day ended with general discussion, and many topics were addressed such as what can be done now to look at lameness in barns, and what else do we need to know before the industry can create a blueprint for reducing lameness levels. Areas of research that need to take place in the genetic barns were also discussed, such as the foot and leg which is so important, but currently it has no direct marketing value – unlike the P2 level or ham size. Will the industry need to forgo something to achieve selection for lameness or can we manage our way through it by considering flooring types and stockmanship first?

The bottom line on lameness:

- Lame sows wean on average six per cent fewer pigs per year. This equates to a loss of \$5 per market hog sold from lame sows.
- Total costs per head associated with lameness could vary between \$161- \$447 per lameness diagnosis.
- This does not include the opportunity cost on lost production of an early culled sow.

Archived videos of the presentations can be found on-line at [www.prairieswine.com](http://www.prairieswine.com) ■



**Does your Manure Pit or Lagoon Have CULTURE?**

**Graduate** to a much better solution for sludge and odor problems. Forget liquid or powdered enzymes and feed additives that fail

**Now available in Canada! 30 years of proven results in the pig industry, its time for you to get the results you deserve!**

A *New* bacterial culture has been developed by **TOMCO LIVESTOCK** that:

1. Liquifies solids and crusts
2. Reduces odors
3. Increases fertilizer value
4. Minimizes fly population

[www.tomcochemical.com](http://www.tomcochemical.com) 1- 800- 645-3285 or 403-681-3023

## On-farm trial confirms the impact of overcrowded pens in the grower-finisher barn

Miranda Smit<sup>1</sup>, Murray Roeske<sup>2</sup>, Audrey Cameron<sup>2</sup> and Eduardo Beltranena<sup>1\*</sup>

<sup>1</sup>Alberta Agriculture and Rural Development, <sup>2</sup>Alberta Pork \*Email: eduardo.beltranena@gov.ab.ca

**The revised pig Code of Practice released in March 2014 requires more space per grower-finisher pig. What does this mean for the bottom line of pig producers?**

### Introduction

Crowding pigs during the growing and finishing phases reduces feed intake and weight gain, and negatively affects carcass backfat and loin depth. A trial at a Hutterite colony in Northern Alberta was set up to investigate the effect of stocking density in pigs from ~ 70 kg body weight until slaughter weight on live performance and carcass characteristics. An economic analysis was performed to calculate the cost vs. benefit.

### Trial set-up

Six pens measuring 8' x 17.5' (2.4 x 5.3 m) were used for the trial. Pigs were randomly allocated to pens with 15, 18 or 24 pigs/pen by sex, at a body weight of 70 kg. Standard stocking density in the barn was 24 pigs/pen. Pigs stayed in their pens until they reached slaughter weight. The trial was repeated three times between December 2012 and August 2013, giving a total of 18 pens, 6 per stocking density. All pigs were fed the same mash feed diet, based on a finisher ration, for the entire trial. Water nipples were located on the opposite wall from the feed trough. Body weight and feed intake were measured throughout the trial. At 118 kg, pigs were shipped for slaughter to Olymel (Red Deer, AB) and were processed following typical commercial procedures. Carcass grading information was obtained for each individual animal.

### Crowding

For each pen and each one- or two-week period, it was calculated if the pen was crowded. Crowding was defined

as having more pigs in the pen than allowed by the revised pig Code of Practice. The pens at the colony were 12.8 m<sup>2</sup>. Dividing the pen space by the space requirement per pig (calculated as  $k \times BW^{0.667}$  with  $k=0.0335$  and  $BW$ =body weight) provided the number of pigs that could be housed in the pen without being crowded. Table 1 shows how many of the 6 pens per stocking density were crowded during the trial.

**Table 1. Number of pens (out of six pens per stocking density) that experienced crowding during the trial**

Pigs/pen	Days on trial									
	0	14	28	42	49	56	63	70	77	84
15	0	0	0	0	0	0	0	0	0	0
18	0	0	1	6	4	0	0	0	0	0
24	6	6	6	6	6	5	3	1	0	0

Pens with 15 pigs/pen never experienced crowding. Some pens with 18 pigs/pen experienced crowding between d 28 and 49 of the trial, while all pens with 24 pigs/pen experienced crowding until d 49, and some pens until d 70 of the trial.

### Live performance

For the first 42 days of the trial, average daily feed intake (Figure 1) and weight gain (Figure 2) were lower for pigs in pens with 24 pigs than for pigs in pens with 15 or 18 pigs. Feed conversion, however, was not affected by stocking density. After the first pigs were sent for slaughter (first pull),

CONTINUED ON PAGE 56

# **BUILD A BETTER PIG**

*with* **Magnum Force**

*the A.I. Solutions Company*

# **GET MORE BOAR**

CELEBRATING 16 YEARS

www.magnumswine.com  
**1.888.553.4844**

average daily feed intake and weight gain were no longer affected by stocking density. Feed conversion was again similar among pens with 15, 18 and 24 pigs/pen.

Weight gain progressively decreased in the weeks before pigs were sent to slaughter (first pull), but there was an increase in growth rate in the weeks after the first pigs were shipped for slaughter (d 50–56 for pens with 18 pigs/pen, and d 57–63 for pens with 24 pigs/pen; see Figure 2). This increased weight gain coincided with the timing where most pens went from a crowded to a non-crowded situation (see Table 1). For pens with 15 pigs/pen, weight gain did not increase after the first pigs were shipped for slaughter, as these pens were not crowded before the start of shipping for slaughter. After this short weight gain increase in crowded pens, weight gain decreased again until the end of the trial, reflecting that pigs shipped after first pull were not the fastest growing.

These results clearly showed that crowding negatively affects weight gain, but crowding is alleviated immediately after first pull, benefiting the remaining pigs.

## Carcass traits

Shipping for slaughter started at d 43 for pens with 15 and 18 pigs/pen, and at d 50 for pens with 24 pigs/pen. The last pigs were shipped for slaughter after 91 days on trial. **It took the pigs from pens with 24 pigs 8 days longer to reach slaughter weight than pigs from pens with 18 pigs** (Table 2). There was no difference in days to market for pigs from pens with 15 and 18 pigs.

Stocking density did not have an effect on ship weight, carcass weight, dressing percentage, loin depth, lean yield, index and loin bonus. Backfat tended to be 1.4 mm thicker in pigs from pens with 15 pigs compared with pigs from pens with 24 pigs, reflecting a mild feed restriction for pens with 24 pigs/pen (Table 2).

**Table 2. Effect of stocking density on carcass traits of growing-finishing pigs**

	Density (pigs/pen)			P-value
	15	18	24	
Days to slaughter	59.9 <sup>b</sup>	58.1 <sup>b</sup>	65.9 <sup>a</sup>	<0.01
Ship weight (kg)	117.7	117.9	117.2	0.15
Carcass wt (kg)	95.8	95.9	95.5	0.77
Dressing (%)	81.6	81.3	81.4	0.86
Backfat (mm)	18.5	18.3	17.1	0.08
Loin depth (mm)	62.6	63.2	62.2	0.68
Lean yield (%)	60.8	61.0	61.4	0.17
Index	110.8	112.5	112.4	0.27
Loin bonus (\$)	2.25	2.78	2.87	0.72

<sup>ab</sup> Within row, means with a different letter differ from each other (P<0.05)

## Economics

Feed cost was not affected by stocking density, both when expressed per pig and per kg of body weight gain. The income-over-feed-cost **per pig**, calculated as the average pen revenue from carcasses minus the feed cost for that pen, was also not different among pigs from pens with 15, 18 or 24 pigs, but was greater **on a pen basis** for pens with 24 pigs compared with pens with 18 or 15 pigs.

An economic analysis was performed by Prairie Swine Centre to estimate the economic impact of decreasing stocking density from 24 to 18 pigs/pen. Some assumptions for this model were:

- Revenue per pig was the same regardless of stocking density
- Total costs for labour, feed for nursery and grower diets, certain miscellaneous costs and fixed costs were the same regardless of stocking density
- Finisher diet costs depended on feed conversion ratios obtained in the trial
- The number of pigs marketed per year depended on ADG obtained in the trial, and was based on a barn marketing around 17,500 pigs/year when having 24 pigs/pen.
- Certain miscellaneous costs and costs for water and manure handling were fixed per pig, and were therefore higher as stocking density increased

The analysis showed that net earnings per pig were \$ 5.75 lower for a stocking density of 18 pigs/pen compared with 24 pigs/pen, which for a barn shipping 17,500 pigs/year meant a loss of net earnings of 223,000 dollars.

## Conclusion

Under the conditions in this trial, when pigs were kept in pens of 15 or 18 pigs, pigs performed similarly; their overall weight gain, feed intake and feed conversion were not different, days to market weight was not different and carcasses from pigs of these pens were similar as well. However, when pigs were housed 24 pigs per pen, their feed intake decreased. This decrease in feed intake was likely due to difficulty to get to the feeder, and/or competition for space at the feeder. Therefore, results could be different in barns with other layouts and feeders. In this trial, stocking densities in pens did not influence feed conversion. Therefore, the decreased feed intake in pens with 24 pigs resulted in a lower growth performance. Consequently, it took pigs from these pens longer to reach market weight than pigs kept in pens with 15 or 18 pigs. Stocking density in pens had minimal effects on carcass characteristics and income-over-feed-cost per pig. An economic analysis showed that, although a stocking density of 24 pigs/pen resulted in less barn turns per year, it was economically more beneficial than a stocking density of 15 or 18 pigs/pen.

The revised pig Code of Practice allows a decrease in space of up to 15% for grower-finisher pigs at the end of the production

phase if the higher densities don't compromise the welfare of the animals as determined by weight gain, mortality, morbidity and treatment records, as well as the absence of or no increase in vices such as tail-biting. Pens with 24 pigs/pen were crowded for the first 56 days of the trial and showed decreased weight gain. Pens with 18 pigs/pen only experienced crowding for about 2 weeks, and did not show decreased overall weight gain compared with pigs housed 15 pigs/pen. Therefore, for this barn a stocking density of 18 pigs/pen would be recommendable under the revised pig Code of Practice.

**Acknowledgements**

We would like to especially thank the pig barn manager and the members of the colony for their great efforts weighing feed and pigs, and for managing the trial. We also thank Ken Engle for performing the economic analysis. ■

Figure 1. Average daily feed intake of pigs in pens (8' x 17.5', 2.4 x 5.3 m) with different stocking densities (15, 18 or 24 pigs/pen). Means based on 6 pens per stocking density. Within period, columns with different letters (a, b, c) differ (P<0.05).

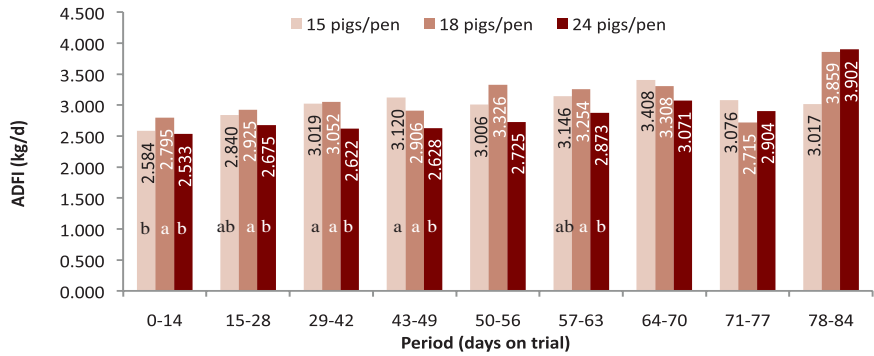
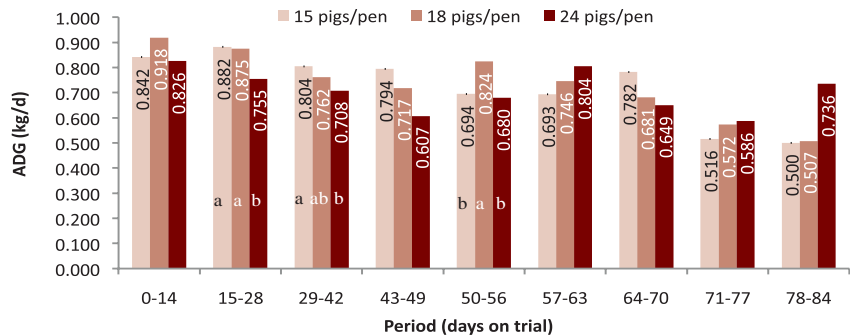


Figure 2. Average daily weight gain of pigs in pens (8' x 17.5', 2.4 x 5.3 m) with different stocking densities (15, 18 or 24 pigs/pen). Means based on 6 pens per stocking density. Within period, columns with different letters (a, b, c) differ (P<0.05).





# I SWITCHED TO BLUE

**MORE THAN 7 MILLION DOSES OF FOSTERA™ PCV VACCINE HAVE BEEN PROTECTING CANADIAN SWINE.**

*“When Fostera PCV came out, we decided to see how it worked on our farm. We vaccinate more than 12,000 pigs/year with Fostera PCV and are very satisfied, although the real reason we rely on Zoetis is the service. It is nice knowing that our Zoetis representative and their technical veterinarian are there to help us if we need them.”*

**STEVEN WALDNER, HOG BOSS**  
Fairlane Colony, Alberta

SWITCHTOBLUE.CA



FOR ANIMALS. FOR HEALTH. FOR YOU.



\*Zoetis and Fostera are the property of Zoetis or its licensors, used under license by Zoetis Canada Inc. ©2014 Zoetis Canada Inc. All rights reserved. 19398-4 4/14 WHJ

## Research into New Pig Pathogen Looking for Solutions

Contributed by Alberta Livestock and Meat Agency Ltd.

*Brachyspira hampsonii* (*B. hampsonii*) is a newly emerged pathogen that causes diarrhea in grow-finish pigs. This pathogen was originally identified in Alberta, and shortly after in the U.S. mid-west. It is a Western Canadian problem with new cases each year and no effective vaccine. The bacterium targets the large intestine causing inflammation and cellular damage. Unfortunately, how the bacterium causes diarrhea is unknown.

Although it can result in death in the most severe cases, most pigs recover from the diarrhea. However, the disease can cause major economic losses with increased mortality, reduced growth rates and feed efficiency, and added medications. In partnership with the Alberta Livestock and Meat Agency (ALMA), a team of University of Saskatchewan researchers, led by Dr. John Harding, is studying *B. hampsonii* to discover how it causes diarrhea in affected pigs.

“In order to create an effective vaccine, we need to know how the pathogen causes disease. To do this, we have created a unique multidisciplinary team with experts in physiology, microbiology, pathology and swine medicine”. Dr. Harding explains “Although *B. hyodysenteriae*, the cause of swine dysentery, was discovered about 40 years ago, we know very little about the mechanism by which it causes diarrhea. We know less about *B. hampsonii*, a relative of *B. hyodysenteriae*, discovered in Western Canada in 2010. Clearly, there are large knowledge gaps to be filled.”

To study *B. hampsonii*, Dr. Harding’s team will develop cell lines to better understand the interactions between *B. hampsonii* and other pathogenic *Brachyspira* and the animal’s intestinal cells.



The research team: Back (left to right) Matheus Costa, Cole Enns, Roman Nosach, Dr. Susan Detmer, Dr. Matt Loewen. Front (left to right) Champika Fernando, Dr. Janet Hill, Diana Murcia, Courtney Ek, Dr. John Harding

“There are several different ways that bacterial pathogens, such as *Brachyspira*, cause diarrhea. Some release toxins, other directly damage intestinal cells.” Dr. Harding said, “Developing appropriate cell lines to mimic what is happening in a live infected animal will enable our team to precisely identify specific changes in the intestinal cells over time that ultimately lead to the development of severe diarrhea.”

The work being done by Dr. Harding’s team is a necessary step towards creating a novel vaccine to combat *B. hampsonii*. A vaccine, in turn, will help to control the pathogen, thereby reducing the need for antimicrobials, preventing production losses and improving animal welfare.

Clint Dobson, ALMA’s Senior Policy and Research Manager said, “Obviously we never want to see a new pathogen emerge, especially one that can cost the producer \$7 a pig. But these pathogens do appear. Dr. Harding’s research is the first step in determining the best approach to treatment, control and ultimately prevention of *B. hampsonii* infections.”

For more information, contact Dr. Harding directly. ■



Get the **MAXIMUM** advantage  
We have buyers waiting to pay top dollar  
for your weaner and feeder pigs

Maximum Swine Marketing has extensive industry contacts to consistently market your hogs at all stages of the life cycle.

You receive extra value through:

- Clean, Dependable Transportation
- Prompt payment terms
- Veterinary Consultation
- Professional After Sales Service and Support

Knowledge and skill to market swine throughout the life cycle

Contact David Scott @ (204) 834-2707

[www.maximumswine.com](http://www.maximumswine.com)



# Prairie Diagnostic Services Upgrades Testing Technology, Broadens Service Offering

Contributed by Alberta Livestock and Meat Agency Ltd.

Located at the Western College of Veterinary Medicine in Saskatoon, Prairie Diagnostic Services (PDS) provides commercial testing services for animal health. It handles a significant amount of the laboratory diagnostics for large animals in Western Canada, including cattle, pigs, poultry and bison. PDS has the largest capacity and the most diverse test offering of the three publicly-funded veterinary labs in the West. With support from the Alberta Livestock and Meat Agency (ALMA), Western Economic Diversification Canada (WD), the Saskatchewan Ministry of Agriculture's Agricultural Development Fund (ADF), and the federal-provincial-territorial Growing Forward 2 framework, PDS is looking to broaden the diagnostic services it offers to Western Canada's meat and livestock industries.

PDS and ALMA are currently involved in two projects that began early in 2013: a research project in partnership with the Saskatchewan ADF and a strategic project in partnership with the federal government through WD.

The research project is aimed at improving the diagnostic significance of testing for enteric and respiratory diseases. Comparing the detection rate of specific microbiological agents from cattle and pigs infected with the disease to those in clinically unaffected animals will help improve current diagnostic methods. The target pathogens selected for this project were chosen because of the challenges that clinicians and laboratory diagnosticians have in providing a definitive diagnosis for these diseases.

The research will increase the collective knowledge of the industry when it comes to enteric and respiratory diseases. The data generated will help develop more comprehensive testing for a growing number of target pathogens, resulting in increasingly accurate and convenient testing. More importantly, increased testing will lead to better disease monitoring, revealing new insights into which pathogens play a role in wider outbreaks. This information will allow industry to prepare for and prevent future outbreaks.

Marilyn Jonas, CEO of PDS, said, "Improving our testing technologies pays off in terms of helping veterinary practitioners in identifying targeted treatment for the specific pathogens that an animal is infected with. As we improve our detection abilities, we, and the veterinarians that we work with, gain a better understanding of which pathogens are most prevalent as the source of these diseases. We also gain a better understanding of how disease evolves and how it

presents itself in new ways. That information can then be used by practitioners to work with livestock producers to develop more effective management strategies to prevent and treat disease. Our job is to provide support to veterinarians in the field, and through them, to the industry as a whole."



In support of the improvement of current testing methods for enteric and respiratory disease in pigs and cattle, ALMA, PDS and WD have partnered on a strategic initiative that is adding new testing capacity to the lab, primarily in molecular diagnostics and toxicology. The test development in molecular diagnostics supports a number of new test methodologies, including those used for the enteric and respiratory project. The addition of Liquid Chromatography–Mass Spectrometry (LCMS) to the lab adds capacity to do organic toxicology, a service new to PDS. This new testing service is one that offers significant opportunity to add value to health management in the livestock sector.

A first area for development was setting up a complete quantitative analysis for ergot and mycotoxins in feed. Currently, if contaminated feed is suspected, samples are most often shipped to the United States for this testing. This new diagnostic capability—a first for Western Canada—is possible with the investment from WD for the equipment and ALMA's funding for a technologist and laboratory supplies to support test development. Once this capacity is fully developed, the resources will be applied to introduce additional organic tests to support the livestock sector.

Jonas said, "One of our priorities is to consistently increase the range of services available to the livestock industry in Western Canada. The new toxicology service is going to reduce wait times on testing and also reduce our dependence on American labs to support our industry."

Gordon Cove, ALMA's president and CEO, said, "PDS handles most of Alberta's large animal testing, so any increase in their diagnostic abilities has a direct benefit to our industry in terms of more accuracy and quicker results and treatment. What sets these projects apart is that the benefits are shared across Western Canada to improve animal health." ■



# Wine and Swine Me

## Of salt and spring...

The battle of the sexes is fought in the kitchen, and the weapons are wine and swine.

By Sheri Monk and Pierre Laberge

I always really look forward to our Swine and Wine Me cook-off, but it seems we have such a hard time making the time for it! Nonetheless, we finally did just before deadline, and it was a fun time as always.

This time I selected back ribs, purchased from Sobeys in Pincher Creek. I've started to notice that we have too few cut selections available in most grocery stores. Obviously, this is the result of consumer preference, but it shows that we need to do more as an industry to educate our consumers about the different cuts that can be available, and how to prepare them. (Easier said than done, I know.)

That said, back ribs have long been a favourite of mine, and they are so versatile. Technically, I guess even a large roast can be versatile, but

CONTINUED ON PAGE 62

## Baby Back Pork Ribs with Milanese rub

### Ingredients

4 full racks baby back pork ribs

### For the Milanese Rub

3/4 cup coarsely chopped garlic

5 tbsp chopped lemon zest

3/4 cup kosher salt

1 cup loosely packed fresh sage leaves, stemmed

1 cup fresh rosemary leaves

1 1/2 cups finely minced pancetta

**Tip:** Put pancetta in a freezer for a half-hour, but not longer, before mincing, to stiffen it up and make it easy to cut.)

2 tbsp freshly ground black pepper

### Directions

Add garlic and lemon zest in a food processor and combine. Add salt and blend until smooth. Add sage and rosemary; pulse again. Finally, add pancetta and pepper, and process until the mixture looks like a very coarse, moist

salt rub. *Editor's note:* I need a food processor. I have a blender, a mixer and a juicer, but not a food processor.

Preheat oven to 300 degrees. Rub the meat with the rub and leave on for 30 minutes before cooking. Stack the racks, one on top of the other, on a roasting pan or baking sheet and put in the oven. Rotate the stack every 15 minutes by taking them out of the oven and moving the bottom rack of ribs to the top of the pile.

Cook for approximately one hour, then allow ribs to cool to room temperature. While they cool, light the barbecue. Barbecue the ribs on hottest part of the grill for five minutes per side then serve immediately.

**Sides:** Maple-flavoured cooked beans, steamed sugar snap peas

**Wine:** Stoneleigh Marlborough Pinot Noir, New Zealand

**Dessert:** Lemon Bliss cake, Sobeys

**MAX THRU PUT™**  
**THE TOTAL PACKAGE**  
**GENESUS**  
*The First Power In Genetics*  
[www.genesus.com](http://www.genesus.com)

**CANADA FARM DISTRIBUTORS LTD.**  
Exclusive Canadian Distributor

**BURN-EASY** Animal Carcass Incinerators

**INCINERATORS FOR THE 21ST CENTURY**  
**FEATURING... our new refractory block lined incinerator**

- Patented Burning
- Heavy Duty Construction
- Pollution Free Disposal
- Completely Automatic

**For All Pricing & Technical Inquiries Contact:**

**Energy Sustaining Technologies**  
 Winnipeg, Manitoba  
 Ph: (204) 222-2712  
 Fax: (204) 222-5573  
 Email: [estbizmail@mts.net](mailto:estbizmail@mts.net)

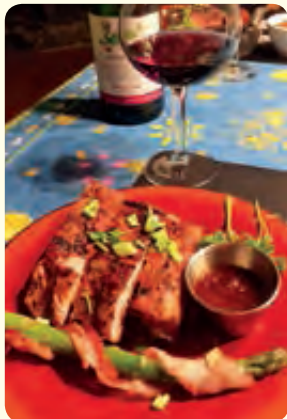
Unit shown is a model 36 in a typical setting. Other models and configurations available.

## Sheri Monk's Jägermeister back ribs, inspired by Scott Hibb

### Ingredients

- 2 baby back rib racks
- Fresh coarse ground black pepper
- 1 tablespoon ground red chili powder
- 2 1/4 tablespoons vegetable oil
- 1/2 cup minced onion
- 1 1/2 cups water
- 1/2 cup tomato paste
- 1/2 cup white vinegar
- 1/2 cup brown sugar
- 2 1/2 tablespoons prickly pear cactus honey
- 2 tablespoons Worcestershire sauce
- 2 teaspoons salt
- 1/4 teaspoon fresh coarse ground black pepper
- 4 ounces of Jägermeister
- 2 teaspoons garlic powder
- 1/4 teaspoon paprika
- 1 tablespoon dark molasses

*Sheri's dish, with the disappointing bacon-wrapped asparagus.*



*The traditional annual gopher cake – apologies to artists everywhere.*

### Directions

Preheat oven to 300°F (150°C). Cut each full rack of ribs in half, so that you have 4 half racks.

Sprinkle salt and pepper (more pepper than salt), and one tablespoon chili pepper over meat then wrap each half rack in aluminum foil and bake for 2.5 hours.

While the ribs are baking, heat oil in a medium saucepan over medium heat and cook and stir the onions in oil for five minutes. Stir in water, tomato paste, vinegar, brown sugar, honey, and Worcestershire sauce. Season with 2 teaspoons salt, 1/4 teaspoon black pepper, Jägermeister, garlic powder, paprika, dark molasses, and 1/2 tablespoon ground chili powder.

Bring mixture to a boil, then reduce heat. Simmer for 1 1/4 hours, uncovered or until sauce thickens. Remove from heat, and set sauce aside. Preheat an outdoor grill for high heat. Remove the ribs from the oven, and let stand 10 minutes. Remove the racks from the foil, and grill the ribs for three to four minutes on each side. Brush the sauces over the ribs at the last minute otherwise the sauce will burn, which will alter the flavour. Serve leftover sauce in a small dish with the meal.

**Sides:** Bacon-wrapped steamed then grilled asparagus

**Wine:** Splattered Toad Shiraz, South Africa

**Dessert:** Carrot cake, gopher style

## New IMAGO S

BY ECM FRANCE



- 1,8kg
- Magnesium
- Interchangeable
- Probe (2)
- Battery 5 hrs

- Save Measure
- USB, Video out
- DC out, bluetooth



## New ANYSCAN PREMIUM

FROM KOREA



- 1,2 KG
- Aluminum
- Freeze button
- Battery 10 hrs

## LIFE SAVIOR 2 Made to Reduce crushing



Use them the first 6 days



Ange-Gardien, Qc  
Toll free: 1.888.446.4647  
www.securepro.com  
louis@securepro.com



Cell 450 776 0596

## Pork Culture and Trends *Continued*



*Pierre's meal, with lemon slices that really brought out the flavour of the dish.*

ribs just seem to naturally fit with so many different flavour variations. Plus, they are perfect for barbecuing and somewhere in the back of my head, I was convinced that spring might actually show up sometime before Christmas.

Pierre turned to mensjournal.com and found a tantalizing formula called Baby Back Pork Ribs with Milanese rub. (It almost sounds like a high-end spa treatment in an upscale hotel). We had two racks of ribs each to work with, so Pierre had to scale his recipe back accordingly. He chose to augment his dish with maple-flavoured beans and steamed sugar snap peas.

After some Googling, I found a recipe on Food.com called Scott Hibb's Amazing Whisky Grilled Baby Back Ribs. They

did look amazing, but I decided to use that recipe as a base, and switch it up a little. (For the record, I have no idea who Scott Hibb is, but I'd like to thank him for his recipe!) For my side dish, I chose asparagus, then decided later to wrap them in bacon when I saw Pierre's recipe called for pancetta, which is an Italian bacon! I switched out very little from the original recipe. I cut out liquid smoke, replaced the honey with cactus honey, used chilli powder instead of ground chili pepper, eliminated the onion powder, and used Jägermeister instead of the whisky. In fact, I used a lot more of it too. The recipe called for two tablespoons of whisky, but I used four ounces of Jäger.

For the dessert, I made a carrot cake, which is Pierre's favourite kind. I obtained the recipe from an old neighbour in Winnipeg, and have stood by it ever since. The icing was a cream cheese icing for which the recipe also came from my neighbour... but with a twist. Every year, it has become a tradition to make a carrot cake, decorated with a gopher to herald the coming of spring (and the opening of gopher season!).

## He said

### **Pierre's Baby Back Pork Ribs with Milanese rub - 4/10**

I never follow recipes very well, and this meal was no different. I never cook with kosher salt, and assumed I could use good natural salt as long as I cut the quantity by half. The recipe

called for about an hour in the oven, which I tried to follow blindly. It turns out that I should have just followed my heart – or my stomach – this time. My ribs were not as tender as I'm used to, and way, way too salty. The dry rub added a nice texture, which I always like, and the overall taste was good, so I'll have to try this recipe again, once I tweak it a bit. I used snow peas as a side dish, and steamed them when I should have blanched them. Overall, not very good results.

But really, I should have known. I tried a similar dry rub recipe on one of the first dates Sheri and I had, with similar pitiful results. She kept me around then, I'm hopeful she'll keep me around now.

### **Sheri Monk's Jägermeister back ribs - 7/10**

Sheri's ribs tasted better, even Tanner said so - Sheri's youngest son. It was sweet and tangy. The meat itself was similar, as she decided to not follow her recipe, and cooked it the same amount of time as mine. Same action, same result. The bacon-wrapped asparagus were not as inspiring-looking as expected, and we both ended up pushing the asparagus aside. When I looked at Sheri eating her bacon, she said, "What? The bacon fell off!"

I love spring, and Sheri believes it's time to celebrate when the gophers are out. So she used this Wine and Swine as an excuse to make her famous gopher cake – a carrot cake that became a tradition in our family. Just for the cake, that meal was a 7 out of 10.



www.wsta.ca 1.403.782.7057



Canadian Centre for  
Swine Improvement

www.ccsi.ca 1.613.233.8872

### **eFarm is a suite of online applications for swine breeders and producers**

- ✓ Use 24/7 from any web browser, including smart phones
- ✓ Use it alone or add value to your existing software
- ✓ Option to link automatically to your genetic supplier
- ✓ Track and manage in-house replacement programs
- ✓ Link to Canada's national swine database
- ✓ Access genetic improvement tools and expertise
- ✓ No need to burn data on CDs or install any software
- ✓ All you need is a computer and internet connection

**See for yourself what is behind Canada's world leading swine genetics**  
**For more information, please contact CCSI or WSTA**

Our choice of wine brought a nice surprise. My Stoneleigh (Pinot Noir) was drab, but the Splatter Toad was absolutely refreshing! We opened another bottle right after!

### *She said*

#### **Pierre's Baby Back Pork Ribs with Milanese rub – 5/10**

This would be an awesome recipe if it weren't so salty. When I was typing this report up, I realized how much salt it called for, and at 3/4 cup, it seems very excessive regardless of what kind of salt is used. But other than that, the flavour was excellent. As soon as I saw Pierre zesting the lemons, I thought I would be beat... I am a huge citrus fan in cooking and in desserts. And then once I saw the Italian bacon come out, I started to panic, which is when I decided to wrap my asparagus in bacon. I really want to try this again – after cutting down on the salt.

The beans were a nice touch, but I like my peas raw. The Pinot Noir was just rather... bland. It had no life. But huge kudos to Sobeys for their aptly named Lemon Bliss cake. It's THAT good. In fact, it's probably the single-best dessert I've ever had that came out of a grocery store. And it's reasonably priced, and in a portion size that makes sense. Too often I skip buying cakes at the grocery store because I really don't need to eat cake several days in a row, and even if I did, there isn't usually enough room in my fridge for it.

#### **Sheri Monk's Jägermeister back ribs – 9/10**

I'll be honest – this rating is coming as a direct result of the ribs, because I really, really enjoyed the flavour they had. I'm not much of a vegetable girl, so the failure of the asparagus didn't bother me in the least. In fact, it was more like, "Free bacon!" I guess if I had to include the asparagus, I would lower it to an eight.

This recipe was super easy to make, and I enjoyed it much more than I thought I would. I suppose, after reading Pierre's

report, that they weren't as tender as they could have been. The recipe did call for baking them for 2.5 hours, but when I saw Pierre's called for just one hour, I decided to stray from the recipe to better co-ordinate preparation times. Maybe I shouldn't. However, the tenderness factor didn't bother me when I was eating my ribs, or Pierre's... so maybe I'm just not fussy when it comes to that.

I loved the Splattered Toad wine, and I have since bought two more bottles to keep in-hand. At \$16.99, it's affordably priced, and it's a peppy, lively enough wine to satisfy veteran wine drinkers, but entry-level enough not to alienate

newer drinkers who may not have developed their palate yet. The gopher cake is a fun tradition, but I wish I could make fancier cakes with the amazing three-dimensional decorating that some people are so gifted with. The truth of the matter is that I can hardly draw a stickman, and my lack of artistic skill is clearly demonstrated in my cake. But as always, it tasted great and didn't last very long in our house.

*If you have a recipe you would like us to try, please send it to [sherimonk@gmail.com](mailto:sherimonk@gmail.com), and if you've tried one of ours, let us know how it turned out! We would love to publish your results and a photo of your dishes. ■*

# Carlo Genetics



## Boar Unit

[www.carlogenetics.com](http://www.carlogenetics.com)  
204 355 4012

# Quality

*is still  
the  
Answer*



# YOUR DAILY BACON

BY BUDDY SIMMONS

Hello there, fellow bacon connoisseurs! It's time again for Your Daily Bacon!

For this installment we are going to take a look at celebrity bacon. That's right, pork isn't limited to memes and extreme recipes! Of course there will be memes in this issue's offering as well. But first we are going to take a peek at a few of our porcine pals in literature, television and film. Not only that, we are going to decide whether the celebrity porkers should be famous, or just bacon.

First on the agenda we have Napoleon. Not the French military genius, but one of the protagonists from George Orwell's famous allegorical novel, *Animal Farm*, in which the animals on a British farm stage an uprising against the

farmer when his love for drink causes him to fail to care for and feed his stock. The animals, inspired by an old boar by the name of Major, run the farmer off the farm, and take it over for themselves. Led at first by a pair of boars - Snowball and Napoleon - the newly in charge livestock create their own society, a model of Communism. Napoleon eventually takes all the power for himself, banishing Snowball, thus becoming a dictator of Animal Farm and changing the set of governing rules the animals had set forth for their society. Before it was all over, Napoleon and his pig cronies reduced the rules the animals had established for themselves to one credo, "All animals are created equal, but some animals are created more equal than others." It ends with the other farm animals realizing that the pigs had become non-discernible - literally and figuratively - from the humans they overthrew.

**The charges:** backstabbing, political manipulation and corruption, and of course, dictatorship. He's probably the most deserving of a bacon verdict, if any pig has PED coming to him, it would be Napoleon. But every pig gets their day in court here at "Your Daily Bacon"!

**The Verdict: BACON**

Next on the docket, Wilbur the Pig, from the charming children's story, *Charlotte's Web*. Wilbur learns of the fate he faces when he reaches adulthood. A compassionate spider devotes herself to saving him from that fate. She spins seemingly miraculous webs extolling Wilbur's "virtues". "Seemingly" because she's just good with words, but the people who come to see Wilbur and the webs Charlotte created for him don't know that they had been fooled by a spin-doctor.

**The charges:** Willful self-misrepresentation, fraud, and colluding with another in order to prey on the gullibility of simple farm-folk.

**The verdict:** Wilbur is not "some pig" - he is **BACON!**

Okay, now here we have an interesting subject, Porky Pig. This little piggy runs around in a jacket, but with no pants!

**The charge:** social deviancy and indecent exposure.

**The verdict:** Th-th-th-that's all folks! **BACON!**

## ALBERTA FARMS FOR SALE



### LARGE FINISHING HOG OPERATION

ID#1724

Large finishing hog operation with 3x2000 head hog barns (finishing), 160 acres, very well setup, home, tractor, generator, nice isolated location for high-health hog operation. **PICTURE BUTTE, AB**



### MODERN 350 SOW FARROW TO FINISH OPERATION

ID#1710

Isolated from other hog operations, new hog finishing barn, new feedmill, permit to expand to 500 sows. 1762 sq.ft. home and a shop. Livestock included, loose housing sows, electronic feed system. **CHIN, AB**



[www.farmrealestate.com](http://www.farmrealestate.com)

Next we have a plucky little pig who dreamed of being a sheep-dog. We are talking about the movie *Babe*.

**The charge:** Okay, the prosecution does not have much of a case on this one. The pig **COULD** herd sheep quite well, after all. But it is our considered opinion that any pig with such deep-rooted delusions could only serve to be a danger to himself and others, and should be remanded to a mental institution. Unfortunately, there are no such institutions for pigs, so that'll do, pig!

**The verdict:** BACON!



We had hoped to place mug shots of the culprits here for all to see, but decided we did not wish to become bacon ourselves by violating copyright laws, so just imagine pictures of them with "BACON!" stamped across their images in big red letters. Instead of mug shots, we chose to bring you some memes that are sure to make you chuckle. ■



## Performance focused nursery feeding.



BioSURE™ is a new line of nursery feeds designed to provide the most aggressive growth rates in the industry today **without the use of any porcine origin ingredients**. BioSURE™ Nursery Feeds contain an improved combination of milk proteins, cooked cereals and Bionic® Oil Blend targeted to optimise post weaning growth and feed efficiency.

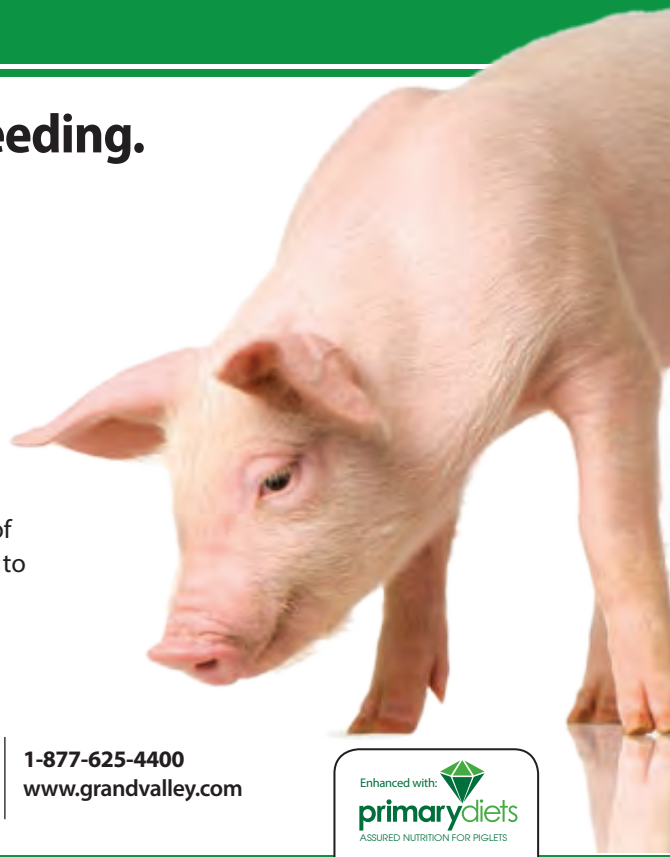
For more information contact your Fortified Nutrition or Grand Valley Fortifiers Swine Specialist.



AB 1-866-610-5770  
SK 1-877-242-8882  
MB 1-866-626-3933



1-877-625-4400  
www.grandvalley.com



The foundation for lifetime performance.

# Ad Index

AFSC.....	24	Merck Animal Health .....	67
Alberta Swine Genetics .....	42	Merial Canada Inc.....	34/35
Bayer.....	21	MS Schippers.....	20
Boehringer Ingelheim .....	9	Nor-Ag Ltd.....	41
Canada Farm Distributors .....	60	Nuhn Industries.....	30
Canadian Bio-Systems .....	43	Nutrition Partners .....	36
Canadian Centre for Swine Improvement.....	62	Parks Livestock.....	8
CANARM/SowChoice Systems .....	15	PIC.....	7
Carlo Genetics .....	63	PigTrace Canada.....	49
Champion Alstoe.....	18	PigWIN .....	40
Dupont Danisco.....	17	Prairie Swine Centre .....	10/16/44
EastGen .....	66	Pro-Ag Products.....	11/23/47
Envirotech AG Systems.....	45	Protekta Inc. ....	14
Farmwise Software/Agrovision.....	12	Ralco Nutrition.....	28
Fast Genetics.....	37	Real Estate Centre .....	64
Genesis .....	2/10/16/44/60/68	RMS Roller-Grinder.....	31
Glass-Pac.....	33	Sand Ridge Farm Ltd.....	66
Grand Valley Fortifiers.....	65	Schauer.....	22
GSI Electronics Inc.....	25	S.E.C. Repro Inc.....	61
Halchemix Canada Inc. ....	4	Sierens Equipment Ltd. ....	38
Husky Farm Equipment.....	46	Signature Genes .....	19
Hypor Swine Group .....	29	Smart Sort Innovations.....	32
ITSI.....	50	Sun-North Systems.....	48
Jefo .....	39	Tomco Livestock.....	54
Kenpal Farm Products/dry START.....	52	Topigs .....	13
Longarm .....	6	Vétoquinol .....	5
Magnum Swine Genetics .....	51/53/55	Western Hog Journal .....	18/42
Maximum Swine Marketing.....	58	Zoetis .....	27/57

## SAND RIDGE FARM LTD.

Proven Methods. Superior Results.

Ken Hamoen

P. 780.674.5135 Box 216, Neerlandia, AB T0G 1R0

C. 780.674.7498 sandridgegenetics@hotmail.com

[www.sandridgegenetics.com](http://www.sandridgegenetics.com)



**EastGen** Your Canadian IMV Distributor



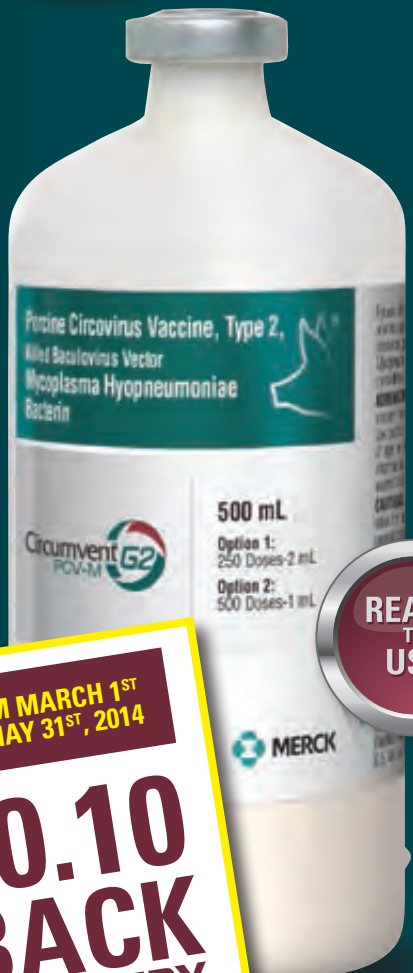
*Our focus is on the SMALL THINGS that make a BIG DIFFERENCE.*

**john.wiebe@eastgen.ca Phone: 226-820-1633**

**[www.eastgen.ca](http://www.eastgen.ca)**



**NOW,  
EVEN MORE  
OPTIONS**



**READY  
TO  
USE**

**FROM MARCH 1<sup>ST</sup>  
TO MAY 31<sup>ST</sup>, 2014**

**\$0.10  
BACK  
FOR EVERY  
FULL PIG DOSE\***

**OF CIRCUMVENT® PCV-M G2  
OR CIRCUMVENT® PCV G2**

\*Full dose 2 mL/pig

**INTRODUCING THE ONLY**

# **1-DOSE READY-TO-USE COMBO**

**WITH 5-MONTH PCV2  
DURATION OF IMMUNITY**

**New Circumvent® PCV-M G2 vaccine fights 2 costly diseases: Porcine circovirus Type 2 (PCV2) and Enzootic pneumonia caused by *Mycoplasma Hyopneumoniae*, in 1 convenient bottle.**

**1 DOSE  
OR  
2 DOSES**

**5-  
MONTH  
PCV2  
DOI**

**3-  
DAY-OLD  
PIGS\***

\* In the event of high maternal antibodies, vaccination of 3 days of age is not recommended.

**Further details at [www.circumvent-g2.ca](http://www.circumvent-g2.ca)**



**THE SCIENCE OF HEALTHIER ANIMALS**

© Circumvent is a registered trademark of Intervet International B.V. used under license. Merck Animal Health, operating in Canada as Intervet Canada Corp., a subsidiary of Merck & Co., Inc., Whitehouse Station, NJ, USA. MERCK is a trademark of Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Whitehouse Station, NJ, USA. © 2013 Intervet International B.V., a subsidiary of Merck & Co., Inc., Whitehouse Station, NJ, USA. All rights reserved.



CA/CRC/014/0002E-PROMO



# 4 TON SOW™

Genesis 4 TON SOW -BECAUSE- 30.58 hogs sold per sow x 276 lbs per market hog = 8,440 lbs sold a sow. 1.85 A.D.G. wean to finish - 2.489 feed conversion. Genesis global leader in total lbs and profit produced per sow per year.

## THE TOTAL PACKAGE



*The First Power In Genetics*

**GENESUS**

[www.genesus.com](http://www.genesus.com)

**Genesis produces more pigs, better pigs and more profit for you.**

\*Genesis customer record on file – Genesis Duroc bred to Genesis F1 females