

Western Hog JOURNAL

Canadian Publication Mail No. 40062769

**The future for Canadian
pork processing**

**Potential for weaning
40 pigs per sow**



MAX THRU PUT™

MAX THRU PUT - BECAUSE - Genesis Duroc sired progeny delivers extraordinary growth, feed conversion and carcass traits. 1.85 A.D.G. wean to finish - 2.489 feed conversion. MAX THRU PUT is recognized by knowledgeable swine production experts to be maximum way to enhance profitability.

THE TOTAL PACKAGE



The First Power In Genetics

GENESUS

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

Western Hog JOURNAL

Volume 33 | Number 2

Fall 2011

Date of Issue: October 2011

Published quarterly by Alberta Pork with cooperation from the British Columbia Hog Marketing Commission, Sask Pork and Manitoba Pork Council

Subscriptions

For new subscriptions, change of address or other subscription queries, please contact Alberta Pork
Phone: 780-474-8288
Fax: 780-479-5128
Email: info@albertapork.com

Publications Mail Agreement

No. 40062769
Return Undeliverable
Canadian Addresses to:
Circulation Department
4828 - 89 Street
Edmonton, Alberta T6E 5K1

Publisher

Darcy Fitzgerald

Business Manager & Editorial Director

Bernie Peet
Phone: 403-782-3776
Fax: 403-782-4161
Email: bjpeet@telusplanet.net

Advertising

James Shaw
1 Burnhamthorpe Park Blvd.
Islington, Ontario
Canada M9A 1H8
Phone: 416-231-1812
Fax: 416-233-4858
Email: jamesshaw@rogers.com

Cover Photo

A healthy litter of piglets suckles vigorously at a farm in Alberta

The trouble with sharks!

Page 61

Editor's Notes..... 4
News and Views..... 6
Industry Viewpoint..... 14

Swine Breeding Management Workshop

Extending gestation length tightens farrowing date spread..... 19
Nutritional strategies to address litter birth weight phenotype..... 22
Experience with single fixed-time insemination protocols..... 26
Experience with implementing post-cervical AI programs..... 30

Special Features

The future for Canadian pork processing..... 33
Using AFSC's Hog Price Insurance Program..... 48
Combination of management tools and technology required to help make heavier hogs more profitable..... 53
Feeding increasing canola meal levels to weaned pigs..... 56
Potential for weaning 40 pigs per sow..... 59

Health

The trouble with sharks!..... 61
Mortality insurance for swine reaches milestone..... 65

International Round-up

..... 67

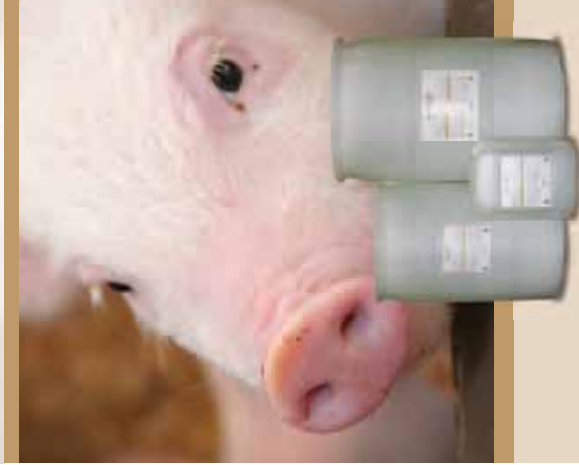
View from Europe

Doing a farm trial: Are statisticians too expensive?..... 70
Yorkshire producer brings home the bacon..... 75

Ad Index

..... 78

AgriACID®



Benefits of acidification.

Organic and inorganic acids have been shown to control pathogenic bacteria.

AgriACID® is a CFIA registered blend of organic and inorganic acids designed to lower the pH of water, resulting in improved water quality and maximizing the efficacy of water medication.

To learn how you can incorporate AgriACID® in your swine operation contact your feed rep and ask for it by name.

Distributed by: **HALCHEMIX CANADA INC.**
1-800-540-4756



Western
Hog
JOURNAL

Editor's Notes

The pork industry has experienced a shortage of skilled labour for a long time. Very few Canadians seem to be interested in starting a career in pig production or attending specialist college courses. The industry also has very limited training initiatives to develop skills and knowledge in the workforce. Yet, there is no national strategy or any coordinated initiatives in place to rectify the situation. Producers have to muddle through and either train new entrants themselves or employ foreign workers.

The influx of foreign workers over the past 5 years, notably from the Philippines, has been extremely beneficial. However, the process can be cumbersome and slow. There are also a seemingly never-ending set of hurdles erected to make employing people from overseas that much harder. Recent legislation has removed the ability of anyone other than lawyers and authorized immigration representatives to advise or represent producers on any aspect of obtaining a work visa. Rather than pay thousands of dollars, most producers will take on the work themselves, leading to errors, which could lead to refusal of applications.

As if this wasn't enough, the wage structure imposed by Human Resources and Skills Development Canada (HRSDC) is hugely discriminatory. For example, when a producer in the Red Deer area of Alberta employs a Swine Technician from overseas, a starting wage of \$18.91 per hour must be paid. In neighbouring Saskatchewan, the wage is \$15.30, but HRSDC doesn't make this mandatory. However, in Ontario, no specific wage rates are imposed and producers could, if they wish, pay the minimum wage of \$10.25. If that was the case, the Red Deer producer would be paying nearly 85% more than the producer in Ontario! HRSDC say the wage rates reflect the actual amounts paid regionally for the particular job class. But their policy is completely inconsistent and unfair. What it does is to reduce the competitiveness of producers in certain regions.

Skilled, well educated labour is essential to achieve the top performance necessary to prosper in today's competitive environment. The industry needs new blood and not just from overseas. So far, provincial producer organizations and the CPC have not addressed this challenge adequately. The industry needs a coordinated, creative and aggressive initiative to develop better skills and knowledge in the workforce while promoting a career in the pork industry as worthwhile and fulfilling. ■

Bonnie Peck

Now, more than ever,

Paylean® Pays



MEATIER PIGS, HEFTIER PROFITS

Since its launch, Paylean has delivered value to producers all across Canada. Today, Paylean pays more than ever. When fed an average of 28 days, Paylean can improve average daily gain and feed efficiency more than 10% and pay you back as much as \$2 per pig.¹

Eastern Canada: 1-800-265-5475
Western Canada: 1-800-661-6801
Web Site: elanco.ca

ELANCO

Paylean®

¹Reference: J. et al. 2006. "Effect of Rectopamine in Finishing Swine Diets on Growth Performance, Carcass Measurements and Pork Quality." Prairie Swine Centre Inc. Data on file.

ELANCO® Paylean® and the diagonal colour bars are trademarks of Eli Lilly and Company. Used under licence by ELANCO/Division of Eli Lilly / Canada Inc.

11-11-0218-01212009

New student award in nutrition launched

The Prairie Swine Centre and Gowans Feed Consulting have teamed up to create a new, first of its kind, student award in nutrition. In an effort to address the expanding need for qualified swine nutritionists the Prairie Swine Centre and Gowans Feed Consulting have created the Gowans Nutrition Award. The award, which is available at the PhD or Masters level, targets graduate students who have some industry experience and wish to increase their skills and future earning potential through advanced nutrition training and offers up to \$20,000 per year of study in addition to the normal Graduate Research Assistantship stipend.

"There is definitely a need for more trained personnel in swine nutrition and we are very excited about this partnership with Gowans Feed Consulting (Alberta) because it represents

a perfect fit to provide the academic program paired with hands-on nutrition training," notes Lee Whittington, President of Prairie Swine Centre. "The PhD program (Masters level candidates will be considered) will be a first of its kind where we are inserting specific practical training modules on feed formulation, conducting large scale commercial trials and mill management right into the academic program planned for the student."

"There are tremendous opportunities to assist pork producers with diets and feeding programs that reduce the cost of production"

Dr. Malachy Young, business partner and nutritionist with Gowans Feed Consulting is optimistic that this approach will succeed to fill vacancies in their expanding business.

"There are tremendous opportunities to assist pork producers with diets and feeding programs that reduce the cost of production and still provide the growth rate, feed efficiency and carcass composition producers and consumers demand. This program will ensure that

students receive a well-rounded perspective of the role of a commercial nutritionist working directly with pork producers and the financial support that the student needs to dedicate more time to furthering their skill sets and experience". The Gowans Feed Consulting Student in Nutrition Award will allow the student who has some industry experience and wishes to increase their profile and lifetime earning potential through advanced nutrition training, while at the same time providing a competitive salary and unique industry experience.

Applications are now being accepted and additional information can be found on the Prairie Swine Centre website www.prairieswine.ca. For more information, contact Lee Whittington, Prairie Swine Centre, at 306-667-7447, email Lee.Whittington@usask.ca, or Dr. Malachy Young, Gowans Feed Consulting, at 780-842-9221, email malachy@telus.net.

Key appointment at Gowans Feed Consulting


Gowans Feed Consulting has announced that Dr. Mario Ramirez has joined their team as Director of Nutrition. Mario



Dr. Mario Ramirez, who has joined Gowans Feed Consulting as Director of Nutrition

brings over two decades of experience to Gowans Feed Consulting and its clients. He spent the last 15 years with Trouw Nutrition, a Nutreco company, holding positions in nutrition, consulting and management. Most recently, Mario was the Technical Manager for Trouw Nutrition in Russia leading the technical department and providing nutrition and consulting services for key accounts. Mario received his Ph.D. in Animal Science in 1992 from the University of Hohenheim in Germany. He will be part of the Gowans management team and will be providing nutrition and consulting services for clients in Canada and internationally.


CONTINUED ON PAGE 8




NEW

Header Series Vertical Pit Pump

877-837-7323 • nutmind@nuhm.ca • www.nuhm.ca

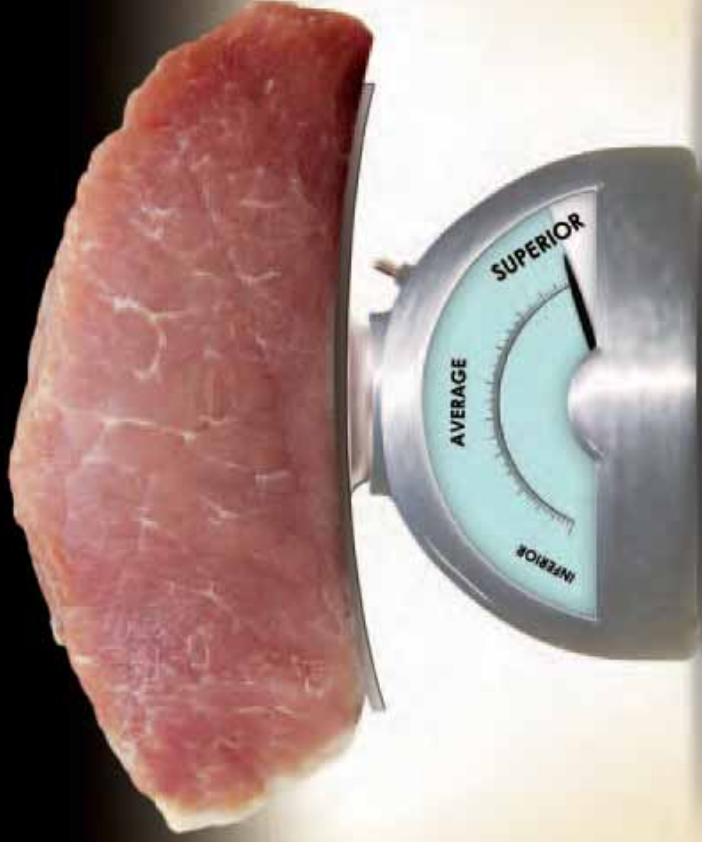


Vacuum Boom



Quad Train

Superior Genetics



Delivering more.

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
T 306.667.1421
E contactus@fastgenetics.com

Fast Genetics™
RESUMING PIG GENETICS FROM PEOPLE YOU CAN COUNT ON

™ Fast Genetics is a trademark of Fast Genetics Inc. 10039 06.10

www.fastgenetics.com

Alltech refreshes mycotoxin website with expanded resources

Alltech's KnowMycotoxins.com website now offers a fresh take on conquering the challenge of mycotoxins. The website features a new home page and refreshed content reflecting the interests of its key audience. KnowMycotoxins.com now has mycotoxin information segmented by animal species, enabling it to become an even more user-friendly resource for time-strapped industry professionals.

Toxins are naturally produced by all types of moulds and fungi. Hundreds of these mycotoxins exist and contamination of natural materials with multiple toxins, either from one or several fungi, is common. Animals are consistently exposed to multiple toxins and interaction between toxins makes diagnosis difficult.

Originally launched in 2007, the website includes up-to-date information on mycotoxin regulations and provides visitors with the opportunity to ask specific questions to world-renowned mycotoxin specialists. Additionally, KnowMycotoxins.com delivers mycotoxin training and features an interactive series of videos where specialists show the different mycotoxin hotspots at the farm level.

Blue Start now available for use in Canada

Pro-Ag Products Ltd., of Winnipeg and US company TechMix have announced the registration of Blue Start, a ready-to-use liquid vitamin, mineral and energy supplement for swine.

"TechMix is pleased to receive another product registration in Canada for Blue Start," says Mike Nelson, President of TechMix of Stewart, Minnesota. "With the success of Baby Pig Restart in Canada, we are now able to supply producers with another beneficial tool for use in the nursery phase.

Blue Start is designed to be an all-in-one liquid concentrate, containing high impact nutrients to combat the effects of feed interruptions and stress from weaning, health challenges and transport. The ready-to-use high density concentrate can be administered quickly through a medicator for the first 48 hours after weaning.

Blue Start is a complementary product to Baby Pig Restart, commonly used in baby pigs across North America. Blue Start and Baby Pig Restart were developed by the TechMix team of veterinarians and nutritionists. For further information, contact Pro-Ag Products Ltd. on (204) 231-0236, or go to www.pro-ag.com.

'Boar taint' vaccine approved in Canada

Pfizer Animal Health announced recently that its 'boar taint' vaccine IMPROVEST™ has received marketing clearance from the Veterinary Drug Directorate of Health Canada.

IMPROVEST is a protein that works like an immunization to help protect against boar taint

without physical castration. It uses the pig's own immune system to temporarily interrupt testicular function. IMPROVEST provides the same effect as physical castration but much later in the pig's life and the effect is temporary, not permanent. This allows animals to grow with all the advantages of intact males until the second dose.

"Intact male pigs eat less feed and produce more meat, increasing feed efficiency by 7-10%"

Studies confirm that intact male pigs eat less feed and produce more meat, increasing feed efficiency by 7-10%, says Pfizer. And since male pigs given IMPROVEST are not physically castrated, the risks of infection or death associated with the removal of testicles are eliminated, decreasing mortality by 1.5%.

"IMPROVEST creates an opportunity to capture more value from male pigs," says Peter van Vlieten, Team Leader, IMPROVEST, Pfizer Animal Health. "Male pigs are given IMPROVEST later in the finishing phase to manage boar taint as well as male behaviour,

CONTINUED ON PAGE 10

PARKS LIVESTOCK

A Member of The Parks Companies

With over 30 years of experience in the livestock industry, we continue to provide today's producers with **The Best Full Service Marketing in North America**

Feeder Pigs

S.E.W.'s



8 | Western Hog Journal | Fall 2011

Call today to talk to our team ~ Toll Free: 1-800-821-7418 ~ Email: jasonmills@parkslivestock.com

THEY'RE BACK... AND SO ARE WE!



FEED THEM LUNCH BEFORE THEY EAT YOUR PROFITS AWAY

AND GET YOURS FREE!
Receive a \$5 gift card for every \$75 purchase of Vetoquinol rodent control products at participating dealers. \$5
Valid until cards run out.

www.vetoquinol.ca

Vetoquinol
a Sign of Passion



so they're able to grow to their full potential more efficiently." Pfizer will begin pilot projects with IMPROVEST with a number of swine veterinarians, their pork-producing clients and packers across the country. Farms from a cross-section of different production models will be selected to fine-tune the IMPROVEST compliance process, says Pfizer.

IMPROVEST is administered in two doses at least four weeks apart. The first primes the immune system and the second stimulates the production of antibodies to control boar taint. Pigs are marketed four to eight weeks after the second dose.

For more information, contact Peter van Vloten at peter.j.vanvloten@pfizer.com.

CIRCOVAC® approved for use in piglets

Merial Canada Inc. has announced that its CIRCOVAC PCV2 vaccine is now registered and approved in Canada for use in piglets as well as sows. "As the first-ever PCV2 vaccine in Canada that is approved for use in both piglets and sows, CIRCOVAC gives pork producers two effective and efficient options for protecting their herds from start to finish," says a company news release.

"We are very pleased to offer Canadian producers this level of protection and flexibility," says Pini Williams, Product Manager, Avian & Swine, Merial Canada. "CIRCOVAC led the battle against PCV2 in the initial crisis. Today, CIRCOVAC is leading again by giving producers more options to protect their herds."

CIRCOVAC has been shown to yield productivity gains. In studies looking at the impact of vaccination on productivity conducted on Danish and German herds, the CIRCOVAC results showed that piglets born from vaccinated sow herds had on average up to 3 percent improvement in average daily weight gain when compared to piglets born from reference non-vaccinated sow herds. In another large field study, sow herds vaccinated with CIRCOVAC had 1.13 more piglets weaned/sow/year.

CIRCOVAC is available in 50 ml bottles (100 doses for piglets; 25 doses for sows). It is available to producers through swine veterinarians.

For more information, please see www.merial.ca

Hylife Foods Neepawa upgrading processing plant

With files from Farmscape.ca Improvements planned for the Neepawa, Manitoba-based Hylife Foods hog processing plant will allow expanded slaughter capacity and additional value added processing.

In July the federal government announced that Hylife Foods, formerly Springhill Farms, a subsidiary of Hylife, will receive \$10 million under the Slaughter Improvement Program for improvements to its Neepawa hog slaughtering plant including expansion of the cooler and cutting areas and the purchase of new equipment.

The plant currently processes about 900,000 hogs per year, but will be capable of processing 1.4 million after the upgrade is complete. Denis

Vielhaire, the Chief Operating Officer of Hylife, says that the bulk of the additional capacity will be filled by hogs from within the Hylife system that are now being processed at other facilities. The company currently also processes pigs from the former owners of the facility and from some independent producers.

"The facility will be able to produce more fresh product and more value-added products"

Vielhaire notes that the upgrades will also allow more value to be added to the plant's products.

When the plant was originally purchased, 90 percent of the product was frozen, for export. Once the upgrades are complete, the facility will be able to produce more fresh product and more value-added products, involving more deboning of primal cuts, he says.

Manitoba Pork Council applauded the development, saying that the upgrades will allow Hylife to expand its markets, increase the demand for hogs, create jobs, and generate huge economic spin-offs. Manitoba Pork Council chair Karl Kynoch says the upgrades will make that plant very viable for the future and will add another 250 jobs.

However, Kynoch warns that, while Hylife produces a lot of its own hogs, the Manitoba government's extension of its moratorium on new hog barn construction or expansion could make it a challenge for the processing sector to access adequate supplies of hogs. He suspects that plants will have to look at bringing in hogs from the US and more hogs from Saskatchewan.



Andrew Rolfe has joined swine genetics company Hypor

New representative at Hypor

Andrew Rolfe has been appointed Sales and Service Technical Representative for Saskatchewan and Manitoba by swine genetics company Hypor.

He comes to this new position with a broad understanding of hog production thanks to 15 years in the agricultural equipment, animal nutrition and animal health industries. Andrew grew up on an 1800 acre / 120 sow farrow to

finish hog operation in South West Manitoba. He studied Livestock Management and Agribusiness at the University of Manitoba where he graduated with a Diploma in Agriculture in 1995.

Manitoba judge unfairly tars all hog producers

By Myron Love

Manitoba Provincial Court Judge Fred Sandhu's suggestion of widespread abuse of animals in the provincial hog industry

unfairly tars all producers based on the aberrant actions of one inexperienced truck driver, says Andrew Dickson, the Manitoba Pork Council's general manager.

Sandhu made his comments while levying a \$5,000 on 24-year-old truck driver Mike Maurice for "failing to take adequate steps to ensure the safe transport of 232 pigs bound for slaughter".

In August, 2008, the young driver – just two weeks on the job – was charged with driving a truck load of pigs from Niverville, just east of Winnipeg, to the Maple Leaf Foods plant in Brandon four hours to the west for processing. After arrival in Brandon, he had to wait another 90 minutes to unload. It was a very hot day and 22

of the pigs died of heat stroke during the journey.

During the sentencing, Judge Sandhu suggested that the case is representative of a general attitude in the industry of indifference to the suffering of the hogs. Dickson counters that the Maurice case is definitely not typical of how hogs are transported in Manitoba. "This is an aberration," he says. "This individual was inexperienced. He didn't know the procedures or how to use a hose nearby." Five million hogs are shipped annually to the Maple Leaf Plant in Brandon and the Hylife Foods (formerly Springhill Farms) in Neepawa.

CONTINUED ON PAGE 12

Impact 4e
HIGH PERFORMANCE NURSERY FEED PROGRAM

Always Pointing you to Higher PERFORMANCE at Lower Cost
Newly revised Easy Wean 1, Easy Wean 2 and Dynamic 1 diets. Newly adaptable feed budgets which can provide greater flexibility.

Conclusion?
A reduction in cost in the nursery of 2 cents/kg of gain

Landmark Feeds
THE POWER OF RESEARCH WITHIN YOUR REACH
Toll Free (MB): 1-888-332-9992
Toll Free (AB): 1-800-266-9365
www.landmarkfeeds.com

I-FEED - THE AD LIB FEEDER FOR SOWS

Easy access to feed at all times... And, NO WASTE

BENEFITS:

- Higher feed intake in lactation period
- Faster growing piglets
- Heavier weaned piglets
- Less stress
- Always fresh feed
- No adjustments needed

Protekta Inc.
457 Campbell Street, Box 190, Lucknow, ON N0G 2H0
Phone: 519-528-5888 Fax: 519-528 5999
Cell: 519-357 8454
Email: protekta@protekta.ca www.protekta.ca

Workshop features wide-ranging topics

The 2011 Red Deer Swine Technology Workshop program, being held on Wednesday November 2nd, includes a wide range of topics focussed on the needs of barn staff, managers and

owners. As always, the objective is to highlight practical measures that people can take to improve efficiency and reduce production costs.

The program includes a session on driving down feed costs by using alternative ingredients and also a panel discussion on how employees can save cost in the barn, led by four production managers. Other presentations examine a number of areas of management where output can be improved or costs reduced, including

“Experience with post-cervical AI”, “Mission critical: Piglet care in the first 48 hours” and “Managing nursery pigs in the first week after weaning”. The final session of the day deals with how producers can cut down on carcass demerits.

The workshop will be held at the Capri Hotel and Convention Centre in Red Deer. “Last year 220 people attended the workshop and the feedback on the event was extremely positive,” comments Bernie Peet, the workshop manager.

Registration costs \$75, with a special “5 for the price of 4” package available for \$300. For further information or to register, contact Bernie Peet at Pork Chain Consulting Ltd. on (403) 782-3776 or (403) 392-3104 or email bjpeet@telusplanet.net

Time to Replace Your Old Flooring?

Nursery Flooring

Seamless Summit Flooring

- Unique “Seamless joining” system for easier cleaning
- Manufactured of 100% virgin material - increased strength & durability
- Cost savings - Less rails are required



AGRI PRODUCTS
www.canarm.com

Corporate Office
 2157 Parkside Ave.
 Brockville, ON K6V 5V6
 PH: 613-342-5424
 Fax: 1-800-263-4598

Arthur Manufacturing Facility
 #7686 Concession 16, RR4
 Arthur, ON N0G 1A0
 PH: 1-519-848-3910
 Fax: 1-519-848-3548

agsales@canarm.ca

Farrowing Floors

Available Styles:

- Cast and plastic
- V-Bar and plastic
- V-Bar only



Are you reading someone else's copy of the Western Hog Journal?

If so, why not sign up for your own subscription? Just call Barb Kosak on 780-474-8288 or email your contact details to info@albertapork.com

Subscription is free!

Get the latest technical information and pork industry news sent direct to your mailbox – sign up now!



Proven protection you can bank on

With you all the way.

With Ingelvac CircoFLEX vaccinate early for proven protection, healthier growth cycle and an ROI you can take straight to the bank.

Safe. Efficient. Convenient.





Ingelvac CircoFLEX®

Ask your veterinarian about the Ingelvac CircoFLEX® vaccination from Boehringer Ingelheim or visit us online at www.boehringer-ingelheim.ca.

©2008 Boehringer Ingelheim Vetmedica, Inc. Ingelvac CircoFLEX is a registered trademark of Boehringer Ingelheim Vetmedica, GmbH, Ingelheim, Germany.

12 | Western Hog Journal | Fall 2011

Industry Viewpoint

By Bernie Peet

Over the last few years, the Industry Crisis column has looked at what has been going on in the Canadian industry as our producers have battled a series of unprecedented challenges which has seen the industry reduce in size by nearly a quarter. WHJ Editor Bernie Peet continues to review industry events and trends that will shape the industry in future, both in North America and around the world. He will comment on industry developments and how they impact Canadian producers, providing his unique perspective and personal viewpoint on the important issues.



**Saving Piglets
is Quick & Easy**

Pig Kare

Protein & Energy Supplement Just One Dose orally gets small, weak piglets or sows on their feet, active and thriving

GL Sow Replacer

Complete First Day Nutrition for Orphaned Piglets



**Save Piglets
Save Time
Save \$**

*For more information ask your veterinarian / distributor or:
call: 1-800-456-5758 or click: service@champion1stoe.com*

slightly over the past 12 months; however they have gone down by 29% over the last 6 years, with sow and gilt numbers 21% lower.

The other western provinces have not fared as well as Manitoba. Neighbouring Saskatchewan has seen total hog numbers go down by 41% in 6 years, with 30.5% fewer sows and gilts. However, over the previous 12 months, sow numbers increased by 4.2% as some empty barns were restocked. Alberta is still showing declining numbers, with 25.5% fewer hogs in total over the 6-year period and 26% less sows. In BC, pig numbers have almost halved since 2005, but now seem to be stable.

Tough conditions in Europe force contraction

The much anticipated contraction in the European pig herd seems to be under way, after several months of very high feed prices. Last December's European pig herd census reported a decline in EU sow numbers of two per cent compared to the previous year. Most nations within the EU reported declines in sow numbers, with greater falls evident in Eastern Europe, similar to the situation in 2007-8, which saw reductions of up to 20% in many eastern countries. The UK survey was in contrast to the rest of Europe with an increase of two per cent in sow numbers.

However, since these census figures were collected, on-farm issues have become much deeper and sow disposals have increased.

A more recent April census return from Denmark, reported that sow numbers were down by six per cent with replacement gilts falling by 14 per cent. Sow disposals for Denmark and the UK have increased strongly this year, by eight per cent

Industry Viewpoint

and 16 per cent, respectively. So far, these reductions have not affected overall supply of pigmeat in the EU, but this is predicted to decline in the final quarter of 2011. Observers predict that the forthcoming partial sow stall ban, which comes into effect at the end of 2012, will lead to a significant exodus from the industry across the EU countries.

A May census in France indicated a 2% decline in total pig numbers, with 1% less sows, although numbers of maiden and bred gilts were down by 5%, suggesting further falls in the sow herd in future. The industry has been affected by feed prices 50% higher than a year earlier and weak domestic demand for pork, leading to a decline in pig prices in May and June, whereas in other EU countries prices were stable. In the Netherlands, genetics company Topigs is reported to be selling ten percent fewer gilts, reflecting the fact that the national herd has shrunk by 33,000 sows in the first half of this year, with over 130 pig units closing, according to the UK's Pig World magazine. It is predicted that another 120 units will close in the coming months, with the loss of around 27,000 more sows. Pork production fell 1.9 percent in the first half of the year and pork imports are up 12 percent.

Next year will be a pivotal one for the EU as the partial sow stall ban approaches. Either a large number of farms will go out of production rather than invest in new facilities or conversion, or many producers will ignore the ban, triggering trade restrictions on those countries that have not converted their systems. It will be interesting to see how this saga plays out over the next couple of years.

Danes still confident despite gloom

The Danish industry, hit by high feed costs and moderate pig prices, remains cautiously optimistic about the future, according to the Danish Agriculture and Food Council (DAFC).

CONTINUED ON PAGE 16

The World's Most Balanced Sow

The Hypor Libra is a true LW x LR cross. This F1 is known for weaning large litters of uniform, high quality pigs in all types of sow systems. The Libra has also earned a reputation for its contribution to growth rate, carcass leanness and feed efficiency in the slaughter generation. And she's built to last – maximize Pigs per Sow per Lifetime.

For more information:
www.hypor.com

Hypor
A Hendrix Genetics Company

Libra

Better bottom line

High weaning capacity

Finishing and carcass advantages

Excellent longevity

Uniform and robust piglets

"Saskatchewan has seen total hog numbers go down by 41% in 6 years, with 30.5% fewer sows and gilts"

As ever, there are significant differences between provinces, due to their industries' varied structure and economic pressures. Manitoba and Quebec have fared the best in terms of attrition rates, with an identical 11% reduction in total inventory since July 2005. The number of hogs over 60kg in Manitoba has increased by 16% since July 2008, indicating the larger number of pigs being finished in the province rather than being exported to the USA. In Ontario, total hog numbers seem to have stabilized and even increased

Industry Viewpoint continued

Denmark is one country where producers have invested in groups sow housing and DAFG says that nearly 70% of producers had already completed this by 2010 and 94% of producers expect to continue in production after 2013. These 94% of producers also expected to have an average of 14% more sows by 2013. It concludes that "Danish producers are optimistic and have faith in the future."

"DAFC's latest report shows that the average producer is weaning over 27.5 pigs/sow/year and the top 25% achieve 29.9%"

Central to the unique position Denmark has in world pork production – with its high cost, high added value approach – is its investment in research to keep its industry competitive. This is reflected in the significant gains in productivity demonstrated each year. DAFG's latest report shows that the average producer is weaning over 27.5 pigs/sow/year and the top 25% achieve 29.9%.

Producer cooperative processing giant Danish Crown is considering becoming a limited company in order to raise finance for future growth. It sees its future growth outside Denmark, with institutional or industrial investors, or partners in a merger. The cooperative's chief executive Kjeld

Johannessen believes that some time in the next six months to two years the company will be part-owned by foreign investors, although a final decision has not yet been made. Recently the country's other processing co-operative, Tican, said it will also turn itself into a limited company in a bid to attract foreign money. The Tican group is a cooperative owned by 346 Danish pig producers. The group's activities range from slaughtering to food production in Denmark, the United Kingdom and Poland.

Brits continue creative campaign for fair prices

As reported in the last issue of WHL, the British pig industry has been not only very active but also extremely creative in its battle to get a fair deal for its producers. The National Pig Association and the British Pig Industry Support Group (BPISG) have continued to challenge retailers to pay a price which at least covers production cost, while continuing its Bamber Blitz and a host of other activities aimed at stimulating demand from consumers.

Seventy BPISG members gathered outside retail giant Tesco's annual general meeting to leaflet Tesco shareholders – many of whom proved to be sympathetic to the industry's cause,

CONTINUED ON PAGE 18

Feed costs too high?

This is just one of the challenges that Danisco can help you solve.

As leaders in delivering the greatest value from Porzyme and Phyzyme XP feed enzymes, we are able to offer both the ingredients and expert knowledge to help keep your feed costs to a minimum.

Concerns about DDGS variability? Use Porzyme and Phyzyme XP in combination to maximize the nutritive value of these diets.

Danisco
more profit from lower feed costs

To find out more please contact
Halchemix Canada Inc
Tel: 1-800-540-4756
halchemix@halchemixcanada.com
www.halchemixcanada.com

John Van Oort
Tel: 403-701-2445
john.vanoort@danisco.com
www.danisco.com/animalnutrition

email us at
lowercost@danisco.com

DANISCO
First you add knowledge ...

circovac[®]
SOW AND PIGLET PCV2 vaccine



Double Your Reasons for Choosing CIRCOVAC[®]

The first PCV2 vaccine for both sows & piglets

CIRCOVAC is the first PCV2 vaccine approved for use in both sows and piglets to provide total herd protection from start to finish. Now you have a choice in how you vaccinate your herd against PCV2 disease. CIRCOVAC gives you the flexibility for maternal or piglet vaccination. Either way, the choice is yours.

CIRCOVAC: One vaccine. Two options.



NEW SPRINTVAC[®] MH for Mycoplasma Protection.
Ask your veterinarian for details.

www.merial.ca

MERIAL
A SANOFI COMPANY
© CIRCOVAC[®] is a registered trademark of Merial Limited.
© SPRINTVAC[®] MH is a registered trademark of Merial Limited.
© 2011 Merial Canada Inc. All rights reserved.
PHEO-2026

Industry Viewpoint Continued

says Pig World. The leaflet "Scale and Responsibility" calls on Tesco, "in this new era of global volatility in food and commodity markets" to "recognize its societal responsibilities and to start building a risk-spreading pigmeat supply chain". BPIFG cites Waitrose and Morrison's as examples of retailers that have been rewarded by consumers for taking action to secure long-term supplies of British high-welfare pork and pork products. Referring to Tesco's dominance as the world's second largest retailer by profit, BPIFG says that unless Tesco can be persuaded to act responsibly and compassionately, there is little prospect of a meaningful future for the British pig industry.

The *Pigs Are Still Worth It* campaign continues its assault on the consumer media, with one recent initiative being a recipe book – *Choose It and Use It* – in which the country's leading celebrity chefs demonstrate their support for Britain's pig farmers.

"Pig farmers still need your help, so when you're deciding on the Sunday roast why not choose pork, and do please make sure you look for quality marks like the Red Tractor because that ensures high welfare standards," says Jamie Oliver, whose 2009 documentary "Jamie Saves Our Bacon" championed Britain's pig farmers.

The British Pig Executive (BPEX) is poised to launch a new marketing campaign, challenging shoppers to support higher-

welfare Red Tractor pork, sausages and bacon. The campaign was launched in September with eye-catching posters going up at busy locations across England.

The industry is seeking to increase recognition of its quality assurance standards and the "Red Tractor" quality mark, which appears on British pork products in the stores. Surveys show that over 50% of people already recognize the Red Tractor mark.

All this is in singular contrast to the lack of promotional activity in the Canadian industry, with the moribund body Pork Marketing Canada having issued the sum total of two news releases over the last nearly three years and recognition of Canadian product impossible in most stores.

Ethanol predicted to consume more corn than livestock

For the first time in US history, vehicles are predicted to use more corn than livestock this year. According to USDA estimates, 5.1 billion bushels of corn will be used to make ethanol, compared to 4.9 billion for livestock feed. Government mandates for biofuel production, as well as ethanol tax subsidies, have in part supported the demand for corn. Oil prices have also pushed ethanol demand. As oil prices rise, Meyer said, gasoline manufacturers use more ethanol in their blends since it becomes cheaper relative to oil.

Exports of corn also affect overall demand for the commodity. According to the USDA, developing economies such as China and India are helping to accelerate worldwide food consumption. As global incomes rise, consumers in other countries eat more meat, which is partly produced using US corn. All these factors contribute to the exploding global demand for corn, which has significantly increased in price.

In June, the US Senate voted to repeal the Volumetric Ethanol Excise Tax Credit, which had offered ethanol producers a 45-cent per gallon credit. VEETC was set to expire by January 1, 2012. The measure repealed the \$5-billion-annual VEETC subsidy immediately and also a 54-cent per gallon tariff on imported ethanol, which restricts imports, mainly from Brazil. Experts say that this change will not mean an end to the high corn prices experienced in recent years. ■

High Performance Precast and Pre-Stressed Concrete Products



PARKVIEW PRECAST IS PLEASED TO ANNOUNCE AN ADDITION TO OUR QUALITY PRECAST LINE WITH A NEW PRODUCT LINE OF HIGH STRENGTH PRE-STRESSED PRECAST CONCRETE PRODUCTS.

- HOG AND CATTLE SLATS
- UP TO 25' CLEAR-SPAN
- SUSPENDED SLABS
- UP TO 40' CLEAR-SPAN
- WEAVING WALLS
- L & T WALLS
- UP TO 16' HIGH
- INSULATED BUILDING WALLS
- BRIDGES
- BUNKER SILOS
- PRIVACY WALLS
- RETAINING WALLS
- COMMODITY STORAGE
- LIQUID STORAGE
- MANURE PITS
- SOUND BARRIERS
- BEAMS
- SUPPLIERS FOR: **EXTEL**

SALES CONTACT: JORDAN WALDNER (204) 212-2492
HOG SLATS: DARRYL WALDNER (204) 212-2476
email: info@parkviewprecast.com

Visit us on the Web @ www.parkviewprecast.com

Swine Breeding Management Workshop

Extending gestation length tightens farrowing date spread

Gestation length in pigs varies considerably, from as low as 112 days right up to 119 days, making it harder to manage a group of sows in a farrowing room. But what if we could tighten up gestation length so that sows and gilts farrowed mainly on one day? Manitoba veterinarian Dr. Tim Snider has been investigating the use of a synthetic hormone to delay parturition and says that this can lead to higher birth and weaning weights while eliminating the risk of gestation room farrowings. He explains how he has been using the technique and what the outcomes have been.

"The variable length of gestation means that even when a batch of sows has been bred within a couple of days, farrowings may be spread out over 5-6 days," Snider explains.

"This means that at weaning time, some litters will not only be younger than the average, but lighter and less likely to thrive in the nursery, especially when weaning age is low." He notes that in many barns farrowing is induced, typically at day 114, Altrenogest (Regumate/Matrix- Intervet Schering Plough)

so that sows that have not farrowed previously farrow on day 115. However, Dr. Snider points out, while this does narrow the spread of farrowing dates, it also reduces the average gestation length and does not affect those sows that farrow naturally prior to day 115. An alternative approach is to delay farrowing by administering a synthetic prostaglandin called Altrenogest (Regumate/Matrix- Intervet Schering Plough)

CONTINUED ON PAGE 20

WE DID OUR HOMEWORK!

Cost per RTU Gallon • SYNERGIZE @ \$2.11 vs. Trymol Based @ \$0.70 vs. Powdered Peroxygen @ \$0.85

SYNERGIZE - the #1 selling and veterinarian recommended disinfectant in the North American Pork Production Industry.

In trial after trial, SYNERGIZE continues to meet AND exceed all expectations! From PRRS to PCV2 to Ilicitis to E. coli F18 to Infectious A Viruses like H3N2 and H1N1...

Consider yourself covered!

SYNERGIZE
DISINFECTANT

FIELD TESTED • VET RECOMMENDED

Pro-Ag Products • Winnipeg • 800.806.2737 • www.pro-ag.com

Swine Breeding Management Workshop Continued

from day 111 until day 115 or 116 so that sows farrow within 24 hours of withdrawal.

Progesterone is the hormone produced by the corpora lutea in the ovary and it is the "hormone of pregnancy" because it suppresses oestrus. Its synthetic form, altrenogest, is licensed in Canada for synchronization of oestrus in gilts. In practice it is used "off label" for a number of other purposes, says Snider. "It is used for sows that are transitioning to batch farrowing, or to delay sows coming into oestrus that are not required to meet the current week's farrowing targets," he explains.

The recommended dose is 6.8 ml (15 mg) for gilts and 9.0 ml (20 mg) for sows. However, Dr. Snider points out, the dose for use with horses is 1 ml per 110 lbs, so it is possible that a lower dose would be effective. "If we could dose according to weight, it would reduce the cost of applying this technique." Giving the product, which needs to be consumed orally, presents something of a challenge when sows and gilts are housed in stalls. "It can be administered at the daily feeding, perhaps as an additional 'snack' using highly palatable feed," suggests Snider. "It is also possible to train gilts and sows to drink a shot of apple juice

from a dosing gun each day and then when they need to be treated, this is substituted with the product."

Snider suggests that the treatment should be started at day 111 and withdrawn on day 116 so that sows farrow on day 117. He believes that going beyond that could remove the "hormonal cascade trigger" that kicks off farrowing.

In one of his client's barns, the concern was that there were too many farrowings over the weekend and they also wanted to avoid the losses associated with sows that farrowed early.

"If a weaned pig is valued at \$40, you only need to save 1.1 pigs per weekend to pay for the treatment"

Normally, 6-7 sows farrow at the weekend and initially they just treated those so that their farrowings were delayed until the Monday. "The current cost of the Progestin for 3 days is \$6.30 per sow, so treating 7 sows costs \$44.10," notes Snider. "If a weaned pig is valued at \$40, you only need to save 1.1 pigs per weekend to pay for the treatment." Also, by delaying the introduction of treated sows to crates until the Monday, just before they

farrow, lactating sows in the crates can suckle for an extra couple of days, thereby increasing average weaning age and weight. "Different farms have a different spread of gestation lengths and this may be related to genetics, so this needs to be considered when looking at the economics," Snider observes.

The benefits of delaying and synchronizing farrowing depend on how the technique is used and individual farm circumstances, for example whether it is just used to prevent weekend farrowings or whether it is used for all sows. "It does not increase turns per crate per year but it does increase minimum weaning age and weaning weight," Snider stresses. "It also increases total lactation feed intake and should lead to reduced piglet culling post weaning because there are fewer light pigs." Overall, Snider believes that the biggest benefit is to small pigs at birth and the smaller weaned pigs. "If there is an inherent problem with viability of newborn pigs, this technology can help," he concludes. "Better quality pigs at weaning mean faster, more efficient pigs right up to market weight." ■

PROLIFIC. EFFICIENT. CONSISTENT. FAST GROWING. CANADIAN.



CAMBOROUGH®
THE WORLD'S BEST PRODUCING FEMALE



© 2011 PIC Canada, LTD. All Rights Reserved.

PIC

CALL 1-800-661-1543 or visit us on the web at www.pic.com

NEVER STOP IMPROVING

The Best in Ventilation and Feeding Equipment

Serving Hog and Poultry Producers of Canada



Paneltim Partitions

Can be supplied in any length up to 8 meters, is very simple to install, easy to clean and is very hygienic because nothing sticks to it!

It can be ordered in many colors

and also slotted so that it doesn't interfere with

ventilation as a solid panel would.

*Thank you to
Pius Farrow Colony for
choosing Paneltim for their grassed
finisher room renovation.*

Contact us you'll love to call our plans your own!



702 9th Avenue North, Camstair, Alberta T0M 0N0 | (403) 337-3767 | fax: 403 337 3590 www.glass-pac.com

Nutritional strategies to address litter birth weight phenotype

The effects of individual piglet birth weight on growth performance are well known. Piglets with a low birth weight are usually smaller at weaning and grow more slowly up to market weight. In contrast to the effects of individual birth weight on growth, the effects of average litter birth weight on growth rate are less well understood, notes Miranda Smit from the University of Alberta. Low average birth weight in litters, especially in higher parity sows, is probably the result of high ovulation rates followed by good early embryonic survival, she says. This leads to intrauterine crowding (IUC), with negative effects on placental size and, therefore, nutrient exchange between the sow and the fetus. Smit describes the phenomenon of fetal programming, whereby the expression of the fetal genome may be altered due to nutritional and hormonal changes in the conceptus during critical periods of prenatal growth and development. She also examines whether the birthweight of piglets born to sows that are predicted to produce low birthweight litters can be increased by nutritional means.



The impact of fetal programming

Fetal programming results in a change in the number and type of muscle fibres, influencing the growth rate potential of piglets after birth. It has been shown that pigs born in low birth weight litters grow slower and have fatter carcasses than pigs born in high birth weight litters. Research also suggests that in low average birth weight litters more piglets are born dead and fewer piglets are weaned, suggesting that the pigs are weaker, most likely as a result of IUC.

"The difference in body weight between low and high birth weight litters increased over time from 0.56 kg at birth to almost 7 kg at almost 149 of age"

IUC affects all piglets in a litter, regardless of individual birth weight, notes Smit. "A piglet that weighed 1.5 kg at birth coming from a low average birth weight litter may still have a very different growth potential compared to a piglet weighing 1.5 kg at birth that came from a high average birth weight litter," she explains. "The difference in growth potential may only become apparent during the later stages of the finishing period. For this reason, sorting pigs by weight at the end of the nursery period does not address the issue of increased variation in body weight in the finisher phase." In an 'all-in-all-out' system, a large variation in body weights at market means that many low birth weight piglets will be either sold at sub-optimal slaughter weights or kept on farm for a few weeks longer, which affects room or barn usage and has a big economic impact.

A collaborative research project carried out with JBS United at their research farm in Indiana investigated the effect of low and high litter birth weight on growth performance of pigs from low or high birth weight litters. This showed that the difference in body weight between low and high birth weight litters increased over time from 0.56 kg at birth to almost 7 kg at day 149 of age (Figure 1). "This increase in body weight was due to better average daily gain in the high birth weight group during most of the nursery and grow-finish phase," comments Smit. There was no difference in feed efficiency between the groups, she adds. "As the pigs were slaughtered

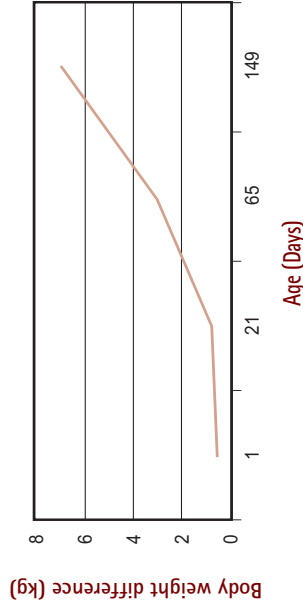
at a fixed end-weight, the pigs from low birth weight litters had to stay on the farm 9 days longer to reach the same weight as pigs from high birth weight litters," she continues. "Furthermore, the carcass quality of pigs from low birth weight litters was decreased, as could be seen by a higher fat percentage, and a lower grade premium."

Implications for nutrition and management

The growth potential of the different birth weight phenotypes also has implications for nutritional strategies and feed budgets, Smit points out. "Because pigs from low and high birth weight litters are mixed in pens in the nursery, all pigs will be fed the same diet and switched to the next diet at the same time," she explains. "This means that pigs from high birth weight litters

Figure 1: The difference in body weight between pigs from low and high birth weight litters increases over time

Difference in body weight between pigs from low and high birth wt. litters



CONTINUED ON PAGE 24

Masterfeeds
Swine Nutrition Solutions

MasterTECH

Experience the performance benefit when you use MasterTech and Vigor Blue, **NEW** members of the MasterWean family, complete with **AVIMEAL!**

Learn more about these products from your local Masterfeeds representative.

Red Deer 403.342.4488 • Edmonton 780.472.6600 • Picture Butte 403.732.5633
 Taber 403.223.4444 • Regina 306.721.2727 • Saskatoon 306.373.1010
www.masterfeeds.com

will be overfed with the expensive starter diets while pigs from low birth weight litters will be switched too fast." As a result, the pigs from low birth weight litters may experience higher morbidity and mortality rates, she adds.

"Separating pigs from low and high birth weight litters into two different flows in the barn will help save money"

Consequently, during the grow-finish phase, diets should be switched at different time points for the different birth weight groups, Smit advises. "Separating pigs from low and high birth weight litters into two different flows in the barn will help save money by feeding closer to the different needs of both groups," she says. "Moreover, if the birth weight groups are separated, different marketing strategies can be applied. For example, the low birth weight group could be sold to the Japanese market or they could stay on farm longer to optimize packer payments."

Litter weight can be predicted

Another part of the research project explored the repeatability of litter birth weight phenotype within sows. Analysis showed

that there is a high correlation between the average birth weight of two consecutive farrowings for a sow. "The more information about previous litter birth weights is available, the higher the correlation becomes for that sow," says Smit. "Thus, average litter birth weight can be predicted quite well in sows with previous litter birth weight information."

"How can we close the gap in growth rate between pigs born in low and high birth weight litters?" asks Smit. "One possibility is to use specific boars, with a high breeding value for survivability of their offspring, on sows with predicted low birth weight litters. Another option is to feed supplements to sows that are known to enhance piglet growth, such as omega-3 fatty acids."

Omega-3 fatty acid (O3FA) supplementation to sows

Piglets can benefit from O3FA supplementation to the sow in two ways, notes Smit. "Pre-natally the embryos have more access to O3FA from increased O3FA blood levels, which they can use in the development of their tissues," she notes. Post-natally the piglets consume colostrum and milk with more O3FAs, which they can then take up into their blood stream. Both ways may be helpful in the growth of piglets."

the Crystal Spring Wet/Dry Water-Space™

Nursery and Wean-to-Finish Feeders

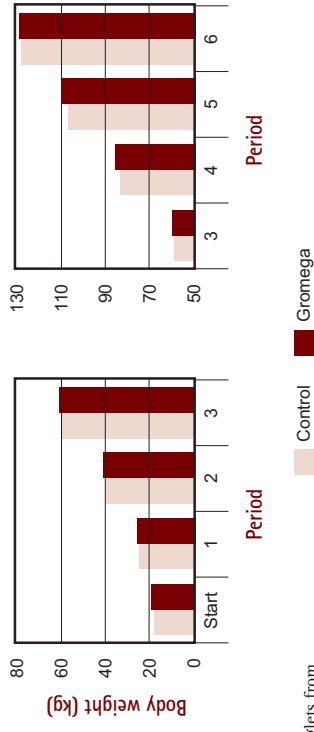


25% better

The Water-Space™ adds the advantages of Crystal Spring Wet/Dry feeding from Day 1 in the nursery or wean to finish pen, resulting in a 25% increase in gain after only 5 weeks. Try it. Believe.

creative ideas • simple solutions
Crystal Spring Hog Equipment, Ltd. • #204-433-7178 • #204-433-7540 • www.cshe.com • info@cshe.com • 1 Crystal Spring Dr. Ste. Agathe MB R0G 1Y0 Canada

Figure 2: Effect of O3FA supplementation (Gromega) to sows during rebreeding, gestation and lactation on growth performance during the grow-finish phase of pigs born in low birth weight litters. Grow-finish phase is split up in 6 periods. Body weight is significantly higher in pigs from O3FA fed sows (P-value start - Period 3 = 0.04; P-value Period 3 - slaughter = 0.07)



Research has shown that piglets from O3FA supplemented sows grow faster after birth, Smit adds. Results from previous research at the Swine Research and Technology Centre, where sows were either put on standard gestation and lactation diets or standard diets supplemented with 84 grams of a supplement rich in O3FA from day 60 of gestation onwards, also showed an increased body weight at weaning and the end of the nursery phase.

Research carried out at the JBS United research farm in Indiana investigated whether feeding O3FA supplements to sows predicted to produce low birth weight litters will close the gap in growth performance between low and high birth weight litters. Half of the sows were fed standard diets supplemented with 0.48% of a marine-oil based supplement rich in O3FA during the rebreeding period, gestation and lactation. "The results showed that O3FA supplementation had no effect on average daily gain, feed intake or feed efficiency," Smit points out. However, she says, body weight was improved in pigs from O3FA-fed sows during the grow-finish phase (Figure 2). "This means that O3FA supplementation to sows with predicted low birth weight litters will improve body weight of this group, which would decrease the variation in body weight between pigs born in high and low birth weight litters," she concludes. ■



Fixed-time AI after hormonal induction of ovulation produces similar results to conventional AI

onset of the LH surge relative to onset of behavioural oestrus, achieving consistent reproductive performance when a single FTAI breeding protocol is implemented is unlikely.”

“If at the first detection of behavioural oestrus an ‘intervention’ could be applied which synchronizes the LH surge; in the ‘late surging’ sows, the moment of ovulation would effectively be synchronized.” Zak continues. “As long as this advancement of ovulation in the population of ‘late surging’ sows does not reduce their fertility, an induced ovulation protocol of this kind would be consistent with the application of a single FTAI.”

In practice, the timing of ovulation can be controlled by the administration of homologous porcine luteinizing hormone (pLH; Lutropin-V, Bioniche Animal Health, Belleville, Ontario, Canada). “The induction of an exogenous LH surge occurs immediately after administration of an appropriate dose of Lutropin and has most of the characteristics of the sow’s natural LH surge,” explains Zak. “Ovulation is effectively synchronized by administration of Lutropin at the onset of recorded oestrus in the sow.” Giving the LH at the start of oestrus means that none of the sows will have had their own LH surge, so that ovulation will take place within a narrow

time period. Research suggests that ovulation occurs 38 ± 0.3 hours after administration.

Fixed-time AI protocols

Similar to traditional breeding protocols, the FTAI protocols described are based on the first observation of behavioural oestrus, combined with insemination performed only during the period of optimal sow fertility, thereby reducing the number of inseminations per oestrus period and reducing the number of sperm used per litter.

“The first stage in the development of FTAI breeding protocols was to determine whether the effect of combining Lutropin administration at the onset of oestrus followed by a double-FAI resulted in acceptable post-weaning fertility compared to sows inseminated at least twice according to conventional breeding protocols,” Zak says. She notes that insemination of Lutropin treated sows took place during the normal working day, at 24 and 30 hours after the start of standing oestrus.

“The timing of these inseminations was within the period of optimal sow fertility; the first insemination was 14 hours before and the second insemination up to 4 hours after the predicted time of Lutropin-induced ovulation,” she comments. The timing of breeding for the conventionally-bred sows was based on their weaning to oestrus interval and sows having a WEI greater than 4 days were inseminated immediately at detection of oestrus. About 95% of sows had a WEI of 5 or 5 days and it is this group of sows that was used for comparison with the treated sows.

“A single FTAI protocol facilitated by administration of Lutropin at the onset of behavioural oestrus still resulted in excellent reproductive performance”

“The results of this trial demonstrated that when ovulation is controlled by Lutropin followed by a double FTAI performed within the period of optimal sow fertility, reproductive performance is enhanced by one pig per litter born, compared

Now Available
30' for \$450
50' for \$995

LONGARM™
the only way to go

Move hogs faster, easier & safer by yourself with the light-weight and portable solution – the LONGARM.

Sales: 519-546-8697

www.thelongarm.ca

to untreated control sows bred according to a standard commercial breeding protocol which accommodates the variation in wean-to-oestrus interval.” Zak points out.

In light of the results from the double FTAI protocol, a second experiment was undertaken at the same commercial farm. The objective was to determine post-weaning sow reproductive performance of sows administered 5 mg Lutropin IM, in the neck at the onset of oestrus and inseminated once 24 hours later. The timing of a single insemination at 24 hours after Lutropin treatment allows the insemination to be performed approximately 14 hours before the predicted time of ovulation, which is within the period of optimal sow fertility.

The results showed that a single FTAI protocol facilitated by administration of Lutropin at the onset of behavioural oestrus still resulted in excellent reproductive performance that was not different to conventionally bred sows (Table 1). Conventional AI doses with 80ml of diluted semen were used. The control group that were bred conventionally received two inseminations with a total of 6.3 billion sperm and the treatment group received a single insemination with 3.0 billion sperm.

Conclusions

“Controlling the time of ovulation by treatment with Lutropin at onset of behavioural oestrus followed by fixed time insemination is a breeding protocol that can be readily implemented,” Zak concludes. “The success of these FTAI protocols, and indeed for all commonly used breeding protocols, relies on adequate oestrus detection and a reliable source of good quality semen.” She adds that because sows do not require checking for oestrus once the start of standing heat has been identified, there is less use of teaser boars, which improves worker safety.

Also, she suggests, the reduced labour demand associated with fewer inseminations and less time devoted to detecting the end of oestrus may lead to improved insemination quality on some farms, especially during the busy breeding periods. ■

Table 1. Effect of treatment with 5mg Lutropin at onset of behavioural oestrus followed by fixed time single insemination, compared to conventionally managed, untreated control sows bred at least twice, on sow reproductive performance, for sows having a WEI of 3-7 days.

	Treatment		P. Value
	Control	Lutropin	
n	129	109	NA
Wean to oestrus (days)	4.8±0.07	4.7±0.07	NS
Number of inseminations	2.07±0.02	1.00±0.02	<0.001
Total Pigs born	12.21 ± 0.30	12.23±0.30	NS
Pigs born alive	11.49 ± 0.30	11.27±0.30	NS
Litter Weight (kg)	17.91 ± 0.40	18.24±0.42	NS
Pregnancy Rate (%)	86.0	94.6	NS
Farrowing Rate (%)	85.0	90.0	NS

Adapted from Zak et al., 2010b

LOOKING FOR A HIGH-QUALITY, CONSISTENT PROTEIN SOURCE?

PepsyGen

PEPSYGEN OFFERS BOTH CONSISTENCY & QUALITY

PepsyGen is a functional soy protein ingredient from solid-state fermentation technology. Our all-natural manufacturing process significantly increases the protein content of PepsyGen, patented strains of *Aspergillus oryzae* and *Bacillus subtilis* are utilized in the manufacturing process.

CONSISTENT

Our unique manufacturing processes and rigorous lab testing help to ensure a reliable, high-quality protein source.

EFFECTIVE

University studies evaluating the efficacy of PepsyGen as a protein source for weaning pigs found that piglets fed PepsyGen performed equal to or better than fishmeal-fed pigs in terms of ADG and feed efficiency.

Available exclusively in Canada from: Pro-Ag Products, Ltd.
1281 Marston Street • Winnipeg, Manitoba, R2J 0L1 • www.pro-ag.com • 800.866.7373
MADE IN THE USA

Experience with implementing post-cervical AI programs

Although not a new technique, post-cervical AI (PCAI) has been little used until relatively recently, and the majority of production operations around the world continued to implement conventional AI. A series of trials carried out in Europe from 2000 to 2006 showed that by placing semen directly into the uterine body, excellent fertility could be achieved using half the normal number of sperm cells. Now a number of companies in Canada and the USA have been trialling PCAI and are getting excellent results. Julie Ménard from integrated production company F. Ménard Inc. in Quebec and John Sonderman, Technical Services Manager with Daunbred North America, explain the benefits of the technique and how it is carried out.




John Sonderman, Technical Services Manager with Daunbred North America

The advantage of using less sperm per semen dose (typically 1.5 billion rather than 3 billion) is that fewer boars are required. While this doesn't reduce the genetic cost component of the semen, it saves money on some other inputs such as extender, according to Sonderman. "The biggest benefit is that using fewer sperm per dose allows producers to spread the use of the highest indexing boars over more sows," he explains. He notes that the financial advantage of an "Elite AI boar" over a regular AI boar in the Daunbred system is just over \$2 per market hog. In addition, there are significant labour savings on the farm when PCAI is used. "It takes about half the time to inseminate a sow compared to the standard technique," Julie Ménard points out. "Time is also saved in semen preparation because there is no need to warm the semen dose prior to use."


"With PCAI, the semen is deposited at the top of the uterine body at the junction of the two uterine horns"

Sonderman described the PCAI routine used at a large production system in the US Mid-West which uses only 1.2 billion sperm per dose in an extender volume of 34 ml compared to the normal 80ml. "First, sows in heat are identified using teaser boars and then the boars are removed for a minimum of 20 minutes," Sonderman notes. "Then the vulva is cleaned and the catheter-cannula removed from its sterile container. The tip of the catheter is lubricated and inserted as with normal AI, but then the cannula is pushed




WSTA
WESTERN SWINE TESTING ASSOCIATION

www.wsta.ca 1.403.782.7057



eFarm



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

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

carefully through the cervix and up to the uterine wall," he continues. "When resistance is felt the cannula is pulled back slightly and the semen dose is squeezed in over a period of 10 seconds. Then the cannula is partly withdrawn and cervical stimulation carried out for about 10 seconds by manipulating the catheter." Spanish research suggests that this technique leads to improved results. Work by Gil et al, reported at IPVS in 2006 showed that while stimulation had no effect on farrowing rate, it did improve litter size significantly, from 11.06 to 11.91 total born.

The production company breeds its own Meishan cross boars specifically for stimulation and heat detection. "If you haven't used a Meishan cross boar you are missing out," believes Sonderman. "They are five times smellier than ordinary boars, they only think about eating, sleeping and sex – and sex comes first!"

"While boar presence is essential for good heat detection, his absence during insemination is essential"

Heat detection has to be excellent where PCAI is used, Julie Ménard stresses. "If the technician tries to introduce the post-cervical catheter too early or too late during oestrus, the cannula will bend and potentially cause damage to the cervix,

with possible bleeding or infection," she says. She also points out that while boar presence is essential for good heat detection, his absence during insemination is essential. "If the boar is present when insemination takes place, this causes the cervix to close up tightly, making it difficult to introduce the cannula," she explains. Ménard also notes that the PCAI technique is not suitable for gilts because of their smaller genital tract. This requires two separate AI techniques and sets of equipment to be used, making PCAI more suitable for larger production systems.

F. Ménard Inc. carried out an initial trial on PCAI in 2006, then gradually introduced it into more farms and by the end of 2007 was using it throughout their 26,500-sow system. On one farm, the 2006 trial indicated an improvement in



Julie Ménard, from F. Ménard Inc

CONTINUED ON PAGE 32



Medicator Promotion

Follow the wave!

Receive a mail-in rebate of **\$150 and up to \$250** when you purchase Soluble Products*.

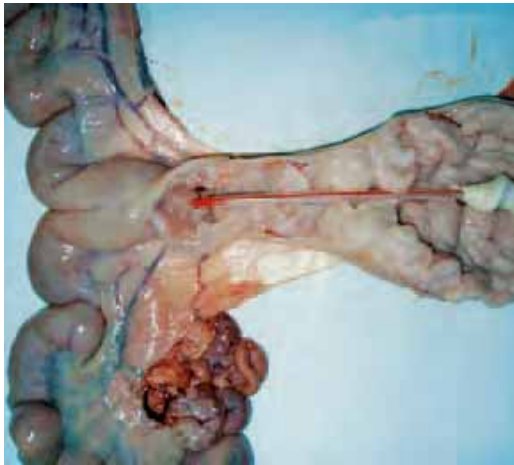
Soluble products constitute an efficient, economical and safe way to administer mess treatment in modern production units. You don't have the right 'tool' to administer them? Or you need a second medicator? Then take advantage of this offer!

To learn more, visit us on our website.

www.solublepowders.com

Vétoquinol
a Sign of Passion

*At the purchase of a medicator of your choice and of \$1,500 or more of our soluble products (net price before taxes), receive a mail-in rebate equivalent to 10% of your purchase of soluble products (maximum of \$250). The amount of the check may not exceed the value of the unit. Products must be purchased between July 1st & September 30th, 2011. Details on Website.



The sow's reproductive tract with the catheter in the cervix and the cannula extending to the uterine junction

farrowing rate from 86% to 97% and litter size was similar. "We always do trials at our best farms and when we do one, the results are always better than normal because they are carrying out the procedures correctly," Ménard comments. On a second farm, the results from both PCAI and conventional AI were almost identical, she adds. She notes that results vary considerably between farms and that some technicians have never really been successful at the technique.

F. Ménard Inc. uses the "Unic" system from French pork production cooperative Cobiporc, which uses sachets of semen. The insemination process is similar to the one described by John Sonderman. "After the catheter and cannula are in place, the sachet is attached and the semen is squeezed in," Ménard explains. "The semen is not warmed prior to insemination and is at 17°C."

The company was originally cautious about reducing the sperm dose and semen volume too much, but a recent trial showed that they could get similar results using a 1.5 billion sperm/50 ml dose as using a 2.0 billion/80 ml dose (Table 1). They also found that they could get similar results by using two inseminations rather than three.

Table 1 : Preliminary results of breeding with 1.5 billion sperm and 50 ml vs 2.0 billion sperm and 80 ml dose

	1.5 Bn/50ml	2.0 Bn/80ml
No. sows bred	267	264
No. sows with results	157	153
No. farrowing	145	142
Farrowing rate (%)	89.5	91.0
Adjusted farrowing rate (%)	92.4	92.8
Total born/litter	14.14	14.2

Ménard concludes that the benefits of using PCAI have been a reduction in boar inventory of 25%, even with a cautious approach to sperm numbers per dose. This has led to savings of \$150,000 per year, excluding the additional benefits of using higher index boars. In addition, she notes, in addition to the reduced time spent on insemination there is a big reduction in semen backflow. She emphasizes that the success of PCAI is very dependent on the ability of the technicians involved.

Sonderman stresses the time savings. "The breeding team on a 5200-sow unit using PCAI has been reduced from five to two," he notes. "On a good day it is possible to inseminate 100 sows in 30 minutes." The surplus technicians have been moved to work on day-one piglet care rather than reducing staff numbers. He also points out that the 53,000-sow system he works with has gone from 120 sows per boar to 400 as a result of using fewer sperm per semen dose. "Fewer boars means less variation in the progeny in addition to the benefits of using boars of higher genetic merit," he concludes. ■

The future for Canadian pork processing

By Bernie Peet

Canadian pork producer organizations have complained that our producers receive the lowest price for their pigs in the world and that processors need to pay more in order for the industry to be sustainable. But processors face some of the same challenges as producers, such as a high dollar and labour availability. In addition, they face a potential reduction in hog supply as the industry shrinks, which could lead to further rationalization of the processing sector. Producers need a strong processing industry and processors need a ready supply of high-quality hogs. But the pork supply chain is extremely fragmented, with poor communication, a low level of cooperation and little information flowing down (or up) the chain. With neither sector profitable, are there opportunities to create more value in the supply chain for both producers and processors? Can we capture an increased share of our domestic market by working together and promoting our product more effectively? We asked the companies that own the 8 federally-inspected plants for their views on these issues.

Background

Canadian pork producers are among the most efficient in the world and, as a result, have very low production costs compared to most other countries. Unfortunately, over the last four years, the production industry has been unprofitable, which has led to a 20% reduction in the number of pigs on Canadian farms. The high Canadian dollar has led to poor prices, while high feed costs have eaten away at profits.

Hog producers have made huge strides in productivity and cost reduction and Canada is estimated to have the lowest production costs in the world, excluding perhaps Brazil. The production industry continues to look for ways to reduce costs, especially for feed, and increase output. However, it also needs to explore ways of adding value in the pork supply chain in order to increase revenue. To achieve this requires improved cooperation between them, their processors, food retailers and export buyers.

"Hog producers have made huge strides in productivity and cost reduction"

The processing industry has been shielded from the full effects of the industry decline because of the effects of US COOL legislation, which resulted in a reduction in live exports from nearly 10 million in 2007 to 5.7 million head in 2010. Consequently the availability of market hogs for slaughter in Canada has not been badly affected to date. However, there are indications that US processors have adapted to the COOL requirements and it is possible that live exports will start to increase again in future, reducing availability to Canadian processors. This would reduce plant throughput and consequently economies of scale, putting further pressure on margins.

- or write a submission articulating their views on the challenges and opportunities their industry faces:
- Maple Leaf Foods: Brandon, MB and Lethbridge, AB plants
- Olymel – Red Deer plant
- HyLife (formerly Hyreck), La Broquette, MB
- Sturgeon Valley Pork, AB
- Donald's Fire Foods: Britco Pork Inc's Richmond, BC plant and Thunder Creek Pork, Moose Jaw, SK
- Sunterra Meats, Trochu, AB

Processor responses

We asked the following companies to respond to a list of questions, provide their views via a telephone interview

The questions we posed were:

1. What do you think are the main challenges that the Canadian pork

CONTINUED ON PAGE 34

This is TOPIGS!
More Meat
 TOPIGS achieves continuous genetic improvement for high carcass and meat quality.

To learn more call 1-888-365-5132 or visit www.topigs.ca

processing industry will face over the next 5 years?

2. What strategies do you intend to follow to overcome those challenges?
3. Against the background of reducing market hog availability, how do you intend to secure the hog numbers you require to fulfil your future throughput targets?
4. Do you currently sell in specialist markets and, if so, which ones?
5. Do you see opportunities in future to add value during the production phase - for example group-housed sows, antibiotic free, "natural" or "free range" products - that could result in higher net income for producers? If so, where will the markets be and how will you fulfil their demands?
6. An increasing share of the domestic market is being taken by US processors. What are the steps that

industry, our main competitor in the world is, for the most part, vertically integrated either through producer ownership of processing facilities or processor ownership of hog production. This creates an assurance of supply that is not seen in Canada and has allowed our US counterparts to weather the global downturn in the hog industry better than most. Structure is a challenge in the industry faces; we believe integration is one of the keys to a successful future for Canadian pork production and processing. To address this challenge the WPIC (Western Pork Investment Corporation) is working on a project which could create an integrated model between Olymel and interested producers. Integrated businesses make decisions based on the net benefit to the partners. They will then focus their production and processing methods to meet consumer demand and the markets that they have chosen to pursue.

Those markets could include antibiotic free, natural, have special production processes, or target other niche or mainstream markets. Any added value the supply chain creates meeting those markets is shared through integration between producer and processor.

Olymel

We received a written submission from Olymel, via Don Brookbank, Vice President, Procurement for Western Canada, which is reproduced verbatim:

"In Canada, we talk about the production sector and the processing sector as two separate entities. The US

invested millions of dollars in the latest technology, automation and processes to ensure the plant is world class and state of the art. We have a dedicated focus on cost reduction, efficiency and yield maximization to ensure we are doing everything we can to offset cost disadvantages that we may have in Canada. These investments have also given us the ability to add maximum value to the products we produce.

Heavier carcasses a benefit

Olymel tackled the competitive disadvantage of processing lighter hogs in Alberta last year with the launch of a new grid that rewards heavier carcasses. The grid is three kilograms heavier than the previous grid; Olymel hopes this small increment will enable a smoother transition in the longer term effort to move weights up. There has been much debate on the increased value of a heavier hog with high feed costs but most industry analysts agree that, overall, heavier hogs are a win/win for producers and processors.

Maintaining a reputation as a supplier of safe quality food is an ongoing challenge. Olymel has placed a strategic priority on Quality and Food Safety to meet the needs of our customers. To that end Olymel is in the process of becoming SQF (Safe Quality Food) certified. The SQF Program is recognized by the Global Food Safety Initiative (GFSI) and is recognized by retailers and foodservice providers around the world who require a rigorous, credible food safety management system. Food Safety is expected by the buyers and consumers of our product.

Competing internationally

The economic downturn and the weak US dollar, which is beyond industry's control, clearly impacts both producers and processors. Finished products are sold based on US prices; therefore being situated in key markets to get maximum return is critical. The weak US dollar has also given US processors price advantages in their export markets which include Canada. To ensure we

generate the maximum return at all times and be in a position to take advantage of opportunities quickly in markets where we compete directly with the US and others, Olymel has strategically placed offices and personnel in key "gold" markets such as Japan, Korea and Australia. Our goal is to maximize return with products that meet or exceed the stringent specifications and demands of those premium markets. Our sales

CONTINUED ON PAGE 36

SigaPig Software

Free Video Demo

- **New !! Free video demo of SigaPig's features.**
- **Get it from our web site or call to receive it on CD.**
- **Visit www.sigapig.com now or call 1-800-567-0915.**

www.sigapig.com

Very happy with SigaPig ... excellent customer service and technical support. M. Loerzel, Ontario ... support is second to none, you always have an immediate response. I. Matheson, Ontario ... Siga is very open to suggestions on how to improve the program ... D. Waldner, Manitoba

Read more testimonials about SigaPig and Siga at www.sigapig.com

Farrowing

Feed formulation

Genetic



From Siga Farm Software
30 years of excellence
bringing Canadian farmers
the best software
and support.



Your partner in animal products



MARKING SPRAY
Long lasting, Quick drying
Available in red, blue
& green, 500 ml cans
\$3.95 each



EARTAGS
Both sides the same size.
Write on both sides for
easy identification.
Various colours available.
\$0.95 each

Free Sample and volume discount available.
Phone: 1-519-349-2502
www.donkersagri.ca
maria@donkersagri.ca

MAX THRUPUT™

THE TOTAL PACKAGE



The Finisher's Genesis
GENESUS
www.genesus.com

Announcing ...



Open to owners, production managers, herdspeople or consultants in the Canadian pork industry.



Honour the memory of Dr. F. X. Aherne by submitting a simple idea that has become an effective, practical on-farm solution
Any innovation... big or small!



January 17-20, 2012
Win one of three prizes valued at \$1800:

- Two free BPS registrations
- Free accommodation for winners and a guest each
- Up to \$600 reimbursement in travel expenses

Visit www.banffpork.ca
Deadline Oct 28, 2011

reputation in the global marketplace. We need to diligently defend current access and pursue open access to markets where restrictions have been put in place that are inconsistent with accepted global trading rules.

"We need to do everything we can to not only maintain but build on our reputation in the global marketplace"

Domestically, we support all efforts to promote "Canadian" to consumers in Canada. At present, programs identifying Canadian pork products in store are voluntary and therefore will have limited success. Our collective challenge is to get the Canadian downstream industry to be as passionate as we are about Canadian pork."

Britco Pork Inc.

I conducted a telephone interview with Tony Martinez, Senior Vice President of Donald's Fine Foods, the owner of Britco

Pork Inc. and Thunder Creek Pork, the two locations where the company processes pigs. Britco slaughters 1350 pigs per day, while Thunder Creek has an initial capacity of 1000 per day. The company sells 59% of its pork in domestic markets, supplying retailers such as Thrifty Foods, Wal-Mart Supercentres, Safeway and Save-On Foods (via their case-ready plant). Donald's has a strong presence in Asia and also sells some product in Russia. Exports make up 40% by volume but 49% by value. With the near demise of the BC industry, hogs for the Richmond plant are mainly sourced from Alberta. Britco has a long-standing supply arrangement with Alberta Pig Company/Sunhaven Farms. The Thunder Creek plant sources pigs from Alberta and Saskatchewan.

I asked Tony Martinez whether my analysis of the challenges facing processors were correct. "The analysis of the situation you provided is pretty accurate, certainly hog supply and the strength of the Canadian dollar are issues," he responded. "Another one is global market access, for example Free Trade Agreements (FTAs) such as one with South Korea. Being an exporter, we need access to all markets, but it's not always what the government is thinking about". High energy costs are another issue, for the plants and for

"As a smaller player we have to add value and have product diversification – this is our company strategy"

freight, Martinez adds. He admits that the supply of hogs could be an issue in future. "Hogs are sourced primarily from Alberta. I don't know whether the environment for producers will be conducive to expansion in the future," he comments.

In order to overcome these challenges, Martinez believes that the company's relationship with suppliers is important. "We have some good relationships with long term suppliers – this has enabled

us to produce specialty products which can earn the producer a bit more, he explains."

With regards to marketing strategy, he says the company sells against big players so has to be competitive. "As a smaller player we have to add value and have product diversification – this is our company strategy," he notes. "We target the higher end markets in every country that we export to."

Value added products

Donald's currently sells a number of specialist, added value products. "We produce a range of ready-to-eat products for retailers in a number of packaging formats such as tray overwrap, individually cryovaced, MAP (Modified Atmosphere Pack) items and skin pack," says Martinez. "We also have an antibiotic-free line and a free-range line and all our pigs are Paylean free (Moose Jaw is still transitioning). We have a specific feeding protocol for the Japanese market."

Donald's continues to grow its specialty product range and there is a clear focus on this, Martinez continues. "However this is sensitive to price point and this has to be close enough to the price of regular pork," he says. "We custom-cut organic beef, which is double the price of regular beef in the store. However, in the store you can see customers picking up organic striploin and then dropping it in the section with regular striploin when they realize the price difference!" he exclaims.

I asked whether he saw opportunities in future to add value during the production phase – for example group-housed sows, antibiotic free, "natural" or "free range" products – that could result in higher net income for producers? If so, where will the markets be and how will you fulfil their demands? "We see that feeding protocols and antibiotic-free are of more importance to the consumer than animal welfare, however, there is a heightened awareness of welfare," he responds. "Overall, I think food safety

and specific product attributes are more of an issue in consumers' minds."

Martinez sees opportunities in future for expanding the company's range of specialty products both in the domestic market and overseas. This is clearly part of the company's strategy as a small player that has to position itself almost as a 'niche' player from a global and even a Canadian perspective. "Anytime we can add value to a primal cut and obtain a better margin it's always opportunistic," he points out.

Competing with the USA

An increasing share of the domestic market is being taken by US processors. I asked Tony Martinez what steps processors and the industry at large can take to regain this market. Do you believe that identification of Canadian product in retail stores is adequate? Is promotion and advertising of Canadian pork currently good enough to combat low-priced US product? If not, what should be done?

CONTINUED ON PAGE 38

BIOvator
The #1 Name for On-Farm Composting



niox.com

SWITCH TO BLUE

Fostera PCV. Backed by a dedicated team of swine specialists.

Switch to Fostera™ PCV and get more with every dose. Our dedicated Canadian swine team – veterinarians and territory managers with more than 300 years of combined experience – are focused on delivering the most effective products, programs and resources to the industry.

With four months of immunity, new Fostera PCV is a single dose PCV vaccine that helps prevent viremia (blood infection resulting from high viral loads). Fostera PCV is an effective vaccine to protect your herd from PCV for a high standard in herd health, the kind of performance and protection you expect from Pfizer Animal Health.

New Fostera PCV. Making it easy to switch to blue.



switchtoblue.ca

 **Pfizer** Animal Health

™Trademark of Pfizer Products Inc.; Pfizer Canada Inc., licensee 06/11-15374-1-D

SWITCH TO BLUE

Fostera PCV. Backed by a unique loyalty program.

Switch to Fostera™ PCV and get more with every dose. Pfizer is the only swine health company in Canada that offers a national loyalty program to return cash to your pocket with purchases of swine products.

With four months of immunity, new Fostera PCV is a single dose PCV vaccine that helps prevent viremia (blood infection resulting from high viral loads). Fostera PCV is an effective vaccine to protect your herd from PCV for a high standard in herd health, the kind of performance and protection you expect from Pfizer Animal Health.

New Fostera PCV. Making it easy to switch to blue.



switchtoblue.ca

 **Animal Health**

™ Trademark of Pfizer Products Inc.; Pfizer Canada Inc., license 06/11-15374-2-D

SWITCH TO BLUE

Fostera PCV. Backed by production-focused training programs.



switchtoblue.ca

Switch to Fostera[®] PCV and get more with every dose. Pfizer is proud to develop and deliver industry-leading training programs – like Walking the Pens and ABC Pig, which are part of our Individual Pig Care approach – to help you improve the productivity and overall health of your swine operation.

With four months of immunity, new Fostera PCV is a single dose PCV vaccine that helps prevent viremia (blood infection resulting from high viral loads). Fostera PCV is an effective vaccine to protect your herd from PCV for a high standard in herd health, the kind of performance and protection you expect from Pfizer Animal Health.

New Fostera PCV. Making it easy to switch to blue.



[™]Trademark of Pfizer Products Inc.; Pfizer Canada Inc., licensee 06/11-15374-3-D

It's all about price competitiveness, believes Martinez. "The US packers come in with low prices for primals and this is attractive to the supermarkets."

"I'm not sure whether improving the identity of Canadian pork will help," he says. "I don't know that the Canadian consumer is that patriotic, look how they flock to some of the bigger Canadian retailers who exclusively carry US pork!"

"If the origin of product is not identified in the store, this is in the retailers' interests"

"If the origin of product is not identified in the store, this is in the retailers' interests. They all bring in US products when it's cheap enough and don't want to identify it as such, he notes." "Having said that, Thrifty Stores sells branded product (Sunhaven Farms) and this is identified as Canadian pork - that's all they carry."

"We certainly need more consumer awareness of Canadian product and promotion is not done well enough. This is something that the industry as a whole must address," Martinez suggests. "Also, in export markets, we need more promotional support for Canadian pork."

"Promotion overseas could be better; maybe they don't have the resources to make it great," he continues. "The US methodology is totally different: the large US packers are working with USDA to negotiate the proposed regulations for market access with that country, not like with us where it is CFIA doing the negotiating."

"We must create more value via the things we discussed earlier," he stresses. "We have to export, so we must be a force in overseas markets such as Korea, China and Japan. Hog production is shrinking in Asia and we should be providing the protein."

A market in the EU?

"Why can't we sell more into the EU market?" Martinez asks. "Our pork is as good as anyone's. If it had to be 'sow stall free'

then some producers would be willing to meet this requirement for a price premium. We are an exporter and we can't just sell commodity product; adding value to the producer side as well as the packer side is implicit in this. What's our government doing to lobby the EU about market access?"

Donald's Fine Foods' confidence in its ability to add value is reflected in its recent acquisition of the Moose Jaw plant. "Moose Jaw is another small plant that enables us to grow our existing business with more products; it's just an extension of what we are doing today," Martinez explains. He says that hog supply has been an issue, with many potential suppliers locked into existing contracts. "Thunder Creek is a hot skinning plant and 60% of its products are going to the Asian market," he notes.

Suntterra Meats

Suntterra Farms is well known as an example of an integrated pork (and beef) production system, encompassing production, processing and also retail through its Suntterra Market stores. Dave Pire, a director and shareholder in this family company, provided the following response to my questions:

Suntterra Meats, Trochu is a small slaughter and fresh pork production plant located in Trochu Alberta. Our strategy has been to prioritize quality and service with our customers, most of which are international in character. We have worked with our own supply of animals and have worked with producers willing to apply the discipline necessary to match the requirements of our customers while receiving good value over time. We have strong relationships with our customers, including some in Japan that we have been dealing with for close to 20 years.

"There are a plethora of regulations and tariffs and sanctions that distort market prices"

When we consider the question of what are the main challenges the Canadian pork processing industry will face over the next 5 years, we quickly identify; access to markets,

competitive availability of people, competitive availability of inputs, and regulatory burden as the top issues.

When we consider all potential strategies to deal with these challenges, we do so from the fundamental belief that "markets work". While there are a plethora of regulations and tariffs and sanctions that distort market prices, in the end, transactions between buyers and sellers happen taking into account all of these factors of influence at that point in time. If we stop and think about these challenges, they all have one common connection. All are heavily influenced and in some cases completely controlled, by governments (mainly our national Canadian government) and the politicians elected to manage them. If we reflect on the results of the recent federal election, there now is a majority government, which should mean the ability to take strong action, at the same time as people were elected as NDP MPs to represent Quebec ridings with very little if any knowledge or historical presence in those ridings. Our future business, and that of our agriculture and food sector, is heavily dependent on the priorities of these politicians as well as our provincial governments and their ability to manage governments to achieve these priorities. We hope that there is the desire to seek information and to understand better what the impact of government policy is on our sector and, out of that, implement much improved policies which will mean a greater opportunity to compete in the world's market place. The Canadian public has to better understand as well, in order to help establish the critical political priorities necessary to motivate the government leadership.

Access to markets

Canada is a trade dependent nation. It has a number of basic competitive advantages (land, water, enterprising people, rich in natural resources), however we have backed away from being a leader at the table developing freer market rules for trade. Indeed, some of our previous international friends now oppose us being at some of the trade negotiation tables because of our heavily unbalanced "balanced position". Suntterra's business, and every other federally inspected plant in this country, needs to have competitive access to markets, international and domestic (more on domestic competitiveness under Regulatory Burden below). Competitive means on the same basis as other countries that produce and sell pork, just as it means for any other value added products produced in Canada and sold internationally.

For Suntterra, and accordingly the producers we work with, our strategy is to keep working in those markets that we both can compete and succeed in financially, all the while looking for, and hoping that the trend will reverse and the number of opportunities increase as governments re-engage in taking down those barriers that disadvantage us relative to our competitors.

Competitive availability of people

People are a critical resource for the slaughter-processing sector. Labour costs in Canada are not competitive, primarily due to the higher value of the Canadian dollar, being supported by commodity oil prices, and the world's relative perception of Canada's financial affairs. Canadian banks are certainly very strong. Proof keeps coming as billion dollar quarterly profit reports are announced by them. The celebration of their risk averse approach, and the lack of real competition for them, has the flip side of holding Canadian businesses back while international competitors are rapidly re-setting themselves for the new future.

"Canadians, generally, are not interested in physical labour and not that interested in working in pig processing plants"

When the supply of anything is limited, the price tends to go up. Canadians, generally, are not interested in physical labour and not that interested in working in pig processing plants. It is critical that we have the opportunity to have potential new Canadians come and join our industry and bring their strong physical work ethic with them. Political priorities must not be allowed to be swayed by those that want to

CONTINUED ON PAGE 46

Compident ESF



Grouphousing for sows

electronic sow feeding
WORLDWIDE #1

Schauer Agrotech GmbH
4731 Prambachkogel
AUSTRIA
Phone: +43(7277)2326-0
www.schauer-agrotech.com
SCHAUER
PERFECT FARMING SYSTEMS

ALBERTA SWINE GENETICS CORPORATION
1.800.691.3060
All... for the convenience of it
THE AI PLACE

generally "short" the labour market in Canada for their own personal gain. Closing the immigration doors will close doors of Canadian businesses. Today's Canada has been built with "new" Canadians in the past and it needs to continue down that path in the future. Our strategy is to eagerly employ and train anyone that wants to work with us and together build a better future.

Competitive availability of inputs

In addition to the critical need for the supply of people committed to our business, Sunterra needs competitive quality and cost animals. Of course this also applies to energy costs and many other inputs but the major ones are animals, labour and energy. Energy costs also extend beyond that consumed in the plants themselves, but also to that which is used in transportation, another critical component of our business.

At Sunterra, we understand very well (some firsthand experience too) the challenges and costs of producing animals for pork production. We also understand that in the end markets work, after the market itself, balances all influencing factors. We are concerned that some of the factors, outside of normal market forces, have added to the challenge of generating strong enough margins to satisfy investors and their lenders to the extent that serious damage has been done to the short and medium term critical mass of supply of animals and capital for competitive pork production in Canada. From our quite small vantage point, we believe we will continue to find markets where we, and the producers that work with us, can succeed while the next round of adjustments are made in the pig production sector. While the simplest analysis would say that lower supply means higher prices for producers, this only works if the next step in the chain can afford to pay the price in the face of competition it has to face. If strong markets are available to competitors and not to Canadian processors in the same way, then the Canadian purchasing power for pigs is reduced.

Regulatory burden

In its simplest terms, if Canadian pork is going to be competitive with other supplies of pork in any market, it

needs to be subject to regulations that do not cause any link or the sum of all links in the pork chain to be more expensive due to regulations and their enforcement, than any other source or supply.

"Some importing countries apply standards to Canadian export product that they do not apply to other exporters or to their own domestic production"

As a packer-processor, we know that in the domestic pork market we have to compete with products that come here that cannot be produced the same way or with the same treatment regime as the source allows. We also know that some importing countries apply standards to Canadian export product that they do not apply to other exporters or to their own domestic production. While it may suit some Canadians politically to have bragging rights, this comes at a cost to us in the pork sector - a cost which reduces our ability to compete and, by so doing, reduces our ability to earn revenue and that impacts our buying prices. As has been said before, the market takes all influences into account and adjusts accordingly.

Canada's and the world's future

Our experience at Sunterra over the last 10 years has been that while much of the rest of the world has seen walls come down and much greater opportunity through globalization, as Canadians we actually have seen shrinking opportunities. We have seen more competitors in our markets and we have seen new markets that we cannot access, markets where we have customers willing to buy our products at prices we would be quite satisfied with, yet the political doors have not been opened. Now we look forward to new purpose and vigour from both the federal government, and soon under new leadership here in Alberta, which will meet the challenge, making meaningful and substantial improvements in market access for Canadian products. We hope that along with this, the greater goal of leading the


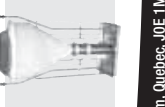

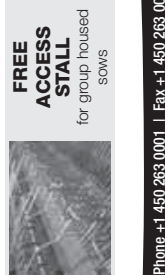


CONTINUED ON PAGE 48



cbs
CANADIAN
BIO-SYSTEMS

MAXI-GEN PLUS
Is a rich source of nucleotides, mannans,
glucans and other bio-active compounds.

This comprehensive blend of yeast products makes Maxi-Gen Plus your One-Stop-Shop for nutritional essentials in all species.
Call 1.800.561.2674 to request an information package or visit maxigenplus.com

 <p>ECHBERG Distribution</p>	<p>FEEDER MAXI+ Strong feeder, ideal for Nursery/WTF/Finisher</p> 
<p>DRINKING CUP for water savings and high hygiene</p> 	<p>FREE ACCESS STALL for group housed sows</p> 
<p>FARROWING CRATE European crate with long floor made of slats for easy access to the udder</p> 	<p>FEED WIRE Fully automated Chain Feeding system</p> 

negotiations toward global reductions in trade barriers of all types will be aggressively pursued in order to provide the much needed opportunity for developing nations to earn their way the best way they can and for world food production to expand cost-effectively faster than the needs of the world's population. We can do that. The world has much unused capacity but the market, after taking into account the cost of all of the protectionism and politics, has been limiting supply. Remove the political cost factors and supply will grow. At Sunterra, we want to be part of that movement and as Canadians we want to see Canada's leaders working hard at this goal as well."

Where now for Canadian processing?

It is clear from these three very diverse viewpoints that there are different philosophies driving the development of these processing businesses. However, the challenges are common: a high Canadian dollar, higher processing costs, fewer economies of scale, poor labour availability, limited market access and the regulatory burden. Competing in both the domestic market, and especially in export markets with US packers is clearly a tough business.

Maybe the solution for both producers and processors is to move away from a low-cost system and create more value. There is still considerable opportunity for more specialist products and greater added value. Just in our own retail market, the retail cutting, packaging and presentation is very poor compared to, say, Europe. This provides lots of scope to make pork more attractive to consumers and charge more for it. The big challenge is to ensure producers receive their share of the pie.

Certainly promotion and recognition of our Canadian pork needs to be improved. This is the responsibility of everyone in the industry including producer organizations and processors. It needs more professionalism, more creativity and more money to be successful, but it is possible.

If the Canadian dollar remains strong, then perhaps the Canadian industry needs to reposition itself away from being a "low cost-low return" model like the USA to a more Danish-like model, creating high added value products for export markets. On average, Canadian imports into countries where we compete with Denmark receive a significantly lower price. For example the average value of pork products imported into Australia in the first half of 2010 was AUD \$2.77 for Danish pork against \$2.82 for US pork and just \$2.79/kg for Canadian product. While such comparisons are fraught with difficulty, especially the type of cuts sold, the Danes sell their products at a 34% premium to Canadian processors. Their average price of product sold into Japan is a massive \$1000/tonne higher than for Canadian pork.

Unfortunately the "industry" does not have the degree of coordination or any clear policy to move in any particular direction. It is down to individual producers and processors to respond to market forces. The decline in the production industry may become a bigger threat for processors in future than it has been in the past. While both parties face their own challenges, the time is now overdue for better cooperation if further decline is to be avoided. ■

Using AFSC's Hog Price Insurance Program

By Stuart McKie, Agriculture Financial Services Corporation

With Agriculture Financial Services Corporation's Hog Price Insurance Program (HPIP) now launched, it's appropriate to have a look at how this new program operates and what potential it has as a business risk management tool for hog producers.

As previously publicized, the program is designed to provide price insurance for hogs marketed 2 to 10 months in the future. The price insurance takes the form of a minimum price guarantee per 100kg unit (dressed), but as it does not lock the producer into that price, the producer is still able to take advantage of whatever cash market is available to them when actually marketing the hogs.

HPIP is marketed as being a made-in-Alberta "one stop shop" risk management tool.

The premiums are calculated using a formula comprising of:

- Basis
- Currency
- Yield (US to Cdn)
- Metric (US to Cdn)
- Average grade (Cdn)

The Settlement Price is calculated using the Iowa/Minnesota price adjusted for:

- Currency
- Yield (US to Cdn)
- Metric conversion (US to Cdn)
- Average grade (Cdn)

The use of these formulas enables what is essentially a US-based price and structure, to be adjusted to one that accurately reflects the market in Alberta.

Whether or not a producer gets a payout from their insurance is determined by taking the average Alberta 100 price for the month that the policy expires. For example, if the policy was for a price of \$150 expiring in November and the average actual Alberta 100 price for hogs in November is \$145, then the policy holder would get \$5 for each unit (100kgs) insured, plus whatever cash the sale of the actual hog generated.

It should be noted that the actual price a producer gets for their hogs does not determine whether or not their insurance pays out, in fact there is no requirement to sell the hogs at

"The actual price a producer gets for their hogs does not determine whether or not their insurance pays out"

At first glance, the HPIP appears to be specifically geared towards being a hedging tool and although it is, there are several strategies that can be adopted in its use as a business risk management tool:

1. Locking in a profit

Because the program allows the producer to purchase insurance guaranteeing a minimum price for their hogs, it naturally follows that a producer can target a specific profit and then purchase insurance accordingly. So long as the actual selling price of their hogs is around the average Alberta 100 price for the month they sell them, then a combination of the actual selling price and the insurance payout (if applicable) should enable them to achieve that target price (see example below). Should they be able to sell their hogs for a price greater than the Alberta 100 average, then they get the cash advantage of that and may still get an insurance payout should their insured amount be greater than the Alberta 100 average. Should the Alberta 100 average be greater than the insured amount, then the producer will not receive an

CONTINUED ON PAGE 50




Swine Production Program

Upgrade your skills and knowledge in the hog industry.

- Excellent career opportunities
- Advanced skills, practical knowledge
- Offered by distance education

To register call 800.862.6307 ext 6683 or email ag.envirow@assiniboine.net for more information.

ASSINIBOINE COMMUNITY COLLEGE



Super Sorter

2-Way and 3-Way Systems

Easy, efficient sorting with superior control functions

Sorter features and benefits:

- Reduce labor and increase efficiencies
- Pigs line up to go through sorter
- Manage the feeding of pigs
- Get pigs to market uniformly
- Mark pigs at any sort level with different color
- Sorts uniformly
- Patented ES3 (Electronic Sense of Position) troubleshooting gate triggers or electronic eyes
- Open frame design speeds training and reduced stress

HerDStar control system:

- Easy operation
- Monitor daily rates of gain
- IP pigs electronically
- Manage data to more accurately forecast when pigs will be ready for market
- Six armouts: simple, lean, light, sell, feed
- Monitor multiple scales, multiple sites with HerDStar's web-based electronic program
- One-way, Gate and Weighing Sorter Gate Inset also available.

Super Sorter / Baer Mfg.
Box 64, Sidney, MB R0H 1L0 • Ph. 204-466-3005 • Fax 204-466-2766
1-877-544-5658 www.supersorter.com

HARVEST THE BENEFITS with Magnum Force

the A.I. Solutions Company

www.magnumswine.com
1.888.553.4844

CELEBRATING 14 YEARS

insurance payout, but the actual price they sold their hogs for is likely to be in excess of the desired target price.

Example:

Producer K wants to insure his production for May 2012, equal to 500 market hogs.

Using data from the Price Table example:

Total weight to insure: 500hogs x 100kg = 50,000kgs (dressed weight)

Total insured units: 50,000 / 100 = 500 (a unit equals 100kgs)

Insured price: \$152

Premium: \$9.58

Total premium cost: \$9.58 x 500 = **\$4790.00**

On May 31st 2012 the average Alberta 100 price for the month of May is \$135.50.

Indemnity (payout) to the producer is:

\$152 - \$135.50 = \$16.50

Producer K has revenue from the actual sale of the hogs and the indemnity of \$8250 is in addition to that revenue, boosting the sale value of each hog by \$16.50.

2. Covering your cost of production (COP)

The same strategy applies here as it does to 1 above, in that having ascertained their COP, a producer chooses the

"In the event of a market crash the price insured would be a very welcome cushion"

appropriate premium to cover their COP. During seasonal price fluctuations and as part of business strategy, a producer may choose to insure at a target price slightly less or more than production, dependent on the premium costs applicable at that time.

3. Disaster insurance

As the title suggests, the third strategy involves a low price/low premium approach. This is insurance in the true sense of the word, where the likelihood of a producer receiving (or wanting) an insurance payout is minimal at best, with a payout only likely to be triggered in the event of a market crash in the value of hogs. The actual price insured would depend on each producer's own risk threshold. When targeting the prices at the bottom of the Premium Table, there is strong likelihood that there will be no payout and as such the cost of the premium would not be recovered. However, in the event of a market crash the price insured would be a very welcome cushion, during what would be very difficult financial times.

Example:

Producer K wants to cover his production for October 2011 against an unforeseen market collapse. Using data from the Price Table example above:

Total weight to insure: 500hogs x 100kg = 50,000kgs (dressed weight)

Total insured units: 50,000 / 100 = 500 (a unit equals 100kgs)

Insured price: \$116

Premium: \$0.59

Total premium cost: \$0.59 x 500 = **\$295.00**

On October 31st the average Alberta 100 price for that month is \$175 so no indemnity paid.

4. Index reduced premiums

Where a producer sells their hogs against the Alberta Index, there is an approach that can reduce the premium whilst still achieving a target price.

Most producers receive an actual price that is higher than the Alberta 100 index because they receive index payments, with

CONTINUED ON PAGE 52

Example of Premium Table

Hog-Price: 11-Aug-2011

Note: These premiums and coverage levels change on a daily basis.

Insured Price (\$)	Premium (\$/100kg)									
	2 months 11-Oct	3 months 11-Nov	4 months 11-Dec	5 months 12-Jan	6 months 12-Feb	7 months 12-Mar	8 months 12-Apr	9 months 12-May	10 months 12-Jun	12 months 12-Jul
162										14.34
160								13.44		13.27
158								12.38		12.25
156								11.38		11.27
154								10.45		10.33
152								9.58		9.46
150							12.37	8.76		8.85
148					11.14		11.31	8.17		8.26
146	6.42				10.11	11.08	10.32	7.6		7.71
144	5.51			10.12	9.14	10.07	9.38	7.07		7.18
142	4.72			9.11	8.22	9.13	8.5	6.56		6.68
140	4.05		8.5	8.16	7.39	8.25	7.68	6.08		6.21
138	3.47	7.46	7.52	7.27	6.62	7.42	7.1	5.82		5.76
136	2.99	6.52	6.63	6.46	6.06	6.67	6.55	5.2		5.33
134	2.59	5.67	5.83	5.73	5.54	6.12	6.03	4.79		
132	2.24	4.91	5.1	5.2	5.05	5.61	5.55			
130	1.92	4.25	4.45	4.71	4.6	5.14	5.09			
128	1.65	3.67	3.98	4.25	4.18	4.69	4.67			
126	1.4	3.23	3.55	3.83	3.79	4.28	4.27			
124	1.19	2.84	3.15	3.45	3.43	3.89	3.89			
122	1	2.48	2.79	3.09	3.09	3.53				
120	0.84	2.16	2.47	2.76		3.2				
118	0.7	1.88	2.18	2.46						
116	0.59	1.63	1.91							
114		1.4	1.67							
112		1.2	1.46							
110		1.03								

110% being readily achieved by many. As such, the actual cash realized from the sale of hogs is regularly higher than the Alberta 100 index. For example, if the average Alberta 100 price for hogs in September was \$160, then on average an Alberta producer would receive 10% more, i.e. \$176.

A producer's actual cash return is directly proportional to the index they achieve from marketing their hogs. It is therefore possible to incorporate this into a pricing strategy by anticipating your average index and using it to set a target cash figure per hog, using a purchased HPP policy to safeguard the cash price.

Example:

Producer K sells his hogs to Olywest in Red Deer at an average of 110% index. Producer K decides that he wants to insure his October hog production (500

hogs) to cover his cost of production at \$146. From the premium grid he can see that the premium to achieve a minimum price of \$146 in October is \$6.42 and as such the cost to insure would be:

- 500 x 100kgs = 50,000
- 50,000 / 100 = 500 (100kg units)
- 500 x \$6.42 = **\$3210.00**

However as Producer K averages 110% index, if he wants to actually realize \$146 per hog, then he need not insure for \$146, but can insure for less, say \$138, with a reduced premium of \$3.47:

- 500 x 100kgs = 50,000
- 50,000 / 100 = 500 (100kg units)
- 500 x \$3.47 = **\$1735**

When Producer K sells his hogs in October, the Alberta 100 price averages out at \$130, and with his 110% index he receives an actual average price of \$143.

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!

www.tomcochemical.com 1-800-645-32X5 or 403-681-3023

A 7000 bacterial culture has been developed by TOMCO LIVESTOCK Inc.

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

CanadianFarmRealty.com
Stacey Hiebert 204-371-5930
stacey@canadianfarmreality.com

- 2000 Head finishing barn
- 3.6 million gallon cell lagoon
- Could be used as a bio-secure multiplier site
- 18,000 bird layer egg farm
- 160 acres
- 2 layer barns
- Off paved highway near Kneifeld
- 5000 space nursery farm
- 160 acres
- Barns in excellent condition & is currently raising weanlings on a contract

Prudential

Combination of management tools and technology required to help make heavier hogs more profitable

For more than a decade, Canadian pork processors have been revising grading grids to entice producers to deliver heavier hogs. A number of well-documented factors have driven this trend - from the rise in the Canadian dollar and the need to compete with US competitors who have traditionally processed a heavier animal, to the simple economics of running a processing plant. Simply put, there is a significant increase in economic efficiency in processing a heavier hog.

"The capacity of our plants is predicated in number of shackles, however, processors earn their revenue selling kilograms of pork," explains Jason Manness, Maple Leaf Consumer Foods Director of Procurement. "So the more kilograms of pork on a shackle, the more revenue earned from a fixed investment in the plant, equipment and overhead."



While producing a heavier hog is not in and of itself difficult, maintaining a lean carcass that earns top index scores and the highest profit from evolving processor grids is significantly more challenging. But producers have a number of tools to help them adjust. Experts say there is no single answer to the heavier hog challenge. The answer lies in the use of a mix of established and new tools and technologies, together with animal husbandry skills that have not been employed for full effect.

"US hog weights have increased an average of 1.3 pounds per year, and tipped the scales at more than 275 pounds in early 2011"

The question most producers wrestle with is how to maintain lean carcass composition on an animal that, by its very nature, increases backfat as it gets heavier? There's no simple recipe for success, but Verus Animal Nutrition's Andy Humphreys feels producers should be able to hit the sweet spot on heavier processor grids.

Sharpening nutrition programs is a logical first step, says Humphreys, who has worked in animal nutrition for more than 23 years. "We're trying to drive the amino acid nutrition to those pigs. That's the fuel for protein deposition. We have to make sure we always have enough amino acids there to maximize protein deposition rates."

Nutritionist Andy Humphreys says producers need to consider new measures for performance and efficiency in areas such as feed conversion

Over the past 10 years, US hog weights have increased an average of 1.3 pounds per year, and tipped the scales at more than 275 pounds in early 2011 (Figure 1). Growth in Maple Leaf's grid weights has mirrored these increases in recent years. In 2004, target dressed weight for the company's grids were 90 kgs to 92 kgs and they currently sit at 96 kgs, with a future target of 97.5 kgs.

CONTINUED ON PAGE 54

BUILD A BETTER PIG

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

GET MORE BOAR

www.magnumswine.com
1.888.553.4844

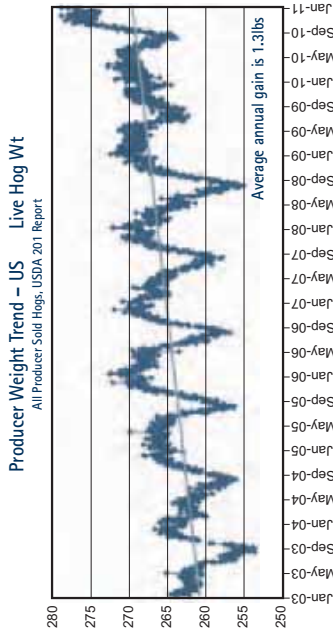
CELEBRATING 14 YEARS

MSK

Humphreys explains that newer feeding technologies can help producers better manage the biology of the pig. He points to the feed additive Paylean, as an example, that shifts the pigs' metabolism away from fat gain, toward lean gain. "That's the foundation of the product's effect." It takes energy from fat growth and redirects it to promote the increase of muscle fibre diameter and the growth of lean muscle protein. "If we have those genotypes that are going to abide by their biology and the tendency to put down fat, Paylean takes that energy and shifts it to lean protein deposition. So we accelerate the lean protein deposition curve in those pigs at the back end of the program where they need it most."

Humphreys adds that it's very important to ensure amino acid ratios are correct to support a product like Paylean's ability to drive lean deposition. "To optimize its benefits, we have to re-balance the diets so that we provide enough amino acids to realize the protein deposition potential while paying attention to the lysine to energy relationship."

Figure 1: In the United States, the long-term trend is a consistent weight increase of 1.3 pounds annually



Phase feeding is another management option Humphreys says producers need to consider.

"Historically we've had two to three phases of feeds, but as the life of the animal is extended, we really need to go to four, five or more. What we're trying to do is refine the stages of growth as we get longer growth time, while keeping feed cost as tight as we can within each stage."

"Split sex feeding is a good example of a very effective management practice that some producers don't utilize"

Even simple animal husbandry practices such as weighing every pig can make a difference in hitting the tighter weight cores seen in new grids. "There are significant penalties when you fall outside of the weight ranges. One solution is to weigh every pig," says Humphreys. "The practice may be seen as bothersome for some, but it can also mean a difference of three to five index points."

Humphreys feels the trend to heavier hogs also means producers have to re-think how they measure performance and efficiency in their operations. "There are some producers that are still focused on some old parameters," he says. "These may not match what the processors are really looking for. In

order to hit the processor goals, we may have to change our metrics."

Humphreys points to feed conversion to illustrate his point. "You can dump fat into the diet so the animals grow faster. But that's exactly opposite of what you need because you're going to get a fat carcass and lose grade."

Producers have to understand if they make these changes and adopt new ideas, their feed conversion numbers are going to be different. What really becomes the benchmark is going to be hitting that index to maximize return."

Managing heavier weights all comes down to making efficient and effective use of a combination of existing and new technologies and tools to hit the core of new grading grids, Humphreys contends.

"A five or six point change on index is a significant amount of money, especially on an animal that is five and 10 kilograms heavier. It is huge margin and the real economics are now based on the last 30 days of production and how you manage them."

Reference: Aalhus J.L., Schaefer A.L., Murray A.C. et al. 1992. The effect of ractopamine on myofibre distribution and morphology and their relation to meat quality in swine. Meat Science. 31. 397-409

SwineBooks Pro
Complete Pork Production Records System

- Breeding herd
- Gilt pool
- Growing pigs
- Financial records
- Feed mill data import
- Database Power Tools

Call our toll-free support line:
800-575-7139
www.swinebooks.com

Putting dollars in producers' pockets

Pork Insight brings you the world's knowledge. The Pork 'Swine Genes' is dedicated to supporting a profitable Canadian pork industry with valuable information to reduce costs and increase productivity. Check out the new Pork Insight network, which, powered by practitioners... If you're looking for practical, actionable information, the PAK Single Application version won't let you down. It's comprehensive, easy to search, and will help improve your operations tomorrow.

www.porkinsight.ca

ALMA
Canada

MaxiPlex

Your #1 source of viable microbial swine feed supplement!

Send your hogs to market sooner with MaxiPlex.
The results are in the bag!

STANDARD NUTRITION
COME SEE US AT ANY ONE OF OUR 4 LOCATIONS!

Winnipeg, MB 1-800-273-8763
Brandon, MB 1-888-728-7807
Lethbridge, AB 1-877-329-1414
Red Deer, AB 1-403-352-0006

MaxiPlex is a registered CFIA product, distributed in Canada and the US.
www.standardnutrition.com

Standard
Best People. Best Results.

Feeding increasing canola meal levels to weaned pigs

By Jose L. Landero¹, Eduardo Beltranena^{1,2}, Ruurd T. Zijlstra,
¹University of Alberta ²Alberta Agriculture and Rural Development

Take home message

Feed is the highest cost of pork production. Inclusion of locally-produced protein feedstuffs instead of imported soybean meal into swine diets may reduce feed costs. Solvent-extracted canola meal is the main co-product of the canola seed crushing industry. Canola meal is lower in dietary energy and amino acid content than soybean meal and therefore it is sold at a discount relative to soybean meal. We evaluated feeding increasing levels of canola meal (0, 5, 10, 15 or 20%) to weaned pigs (initially 8.1 kg) for 28 days. Our results showed that growth performance was not affected by increasing canola meal inclusion for the entire trial. Weaned nursery pigs can therefore be fed up to 20% canola meal by replacing soybean meal starting one week post-weaning. Diets should be formulated based on net energy and standardized ileal digestible amino acid content, and should include other highly digestible protein sources.

Why canola meal?

Canola meal is a co-product of the canola seed crushing industry that extracts oil primarily for human consumption from canola seed. This year in Canada, prairie producers have seeded a record number of acres of canola and the production of canola meal is also expected to increase.

Canola meal is a cost-effective feedstuff for swine diets. Compared to soybean meal, canola meal contains less crude protein (44 vs. 34%, respectively) and lower net energy content (2.06 vs. 1.75 Mcal/kg, respectively). Therefore, canola meal is sold at a discount relative to soybean meal based on its lower nutrient content and the perceived risks associated with inclusion of canola co-products in monogastric diets.



Sierens Equipment Ltd.

Standard Features Includes:

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

Optional Features include:

- 3rd level destination
- Safety release system
- EID Capability
- Wheel option
- Double entry gate option
- 2 colour dye marker
- PC Software "Sortrite"
- NEW "Target Sort"
- NEW "Remote Control"

Box 10
Swan Lake, MB
R0G 2S0

Proudly Designed & Manufactured in Canada

Toll Free: 1-877-836-2343
Ph: (204) 836-2343
Fax: (204) 836-2892

www.siensequip.com

The sample contained (as-is basis) 34.0% crude protein, 3.5% crude fat, 9.3% crude fibre, 2.0% lysine, 1.8% available lysine, 1.56% threonine, 0.71% methionine, 0.98% phosphorus, and 3.84 µmol/g glucosinolates. This glucosinolates level is 50% lower than values reported almost 10 years ago for solvent-extracted canola meal.

The weaned pig trial

The trial was conducted to evaluate the effects of feeding increasing levels of canola meal (0, 5, 10, 15 or 20%) on growth performance and diet nutrient digestibility. It was carried out at the Swine Research and Technology Centre in Edmonton at the University of Alberta.

The pelleted diets fed were formulated to provide 2.3 Mcal/kg net energy (NE) and 5 g standardized ileal digestible lysine per Mcal NE with other amino acids formulated as an ideal ratio to lysine. Increasing canola meal level (0, 5, 10, 15 or 20%) progressively replaced the soybean meal in the diets, balancing for energy and amino acids using canola oil and crystalline amino acids. Lactose, soy protein concentrate and herring meal at 5% each, were included in the diets as specialty ingredients. In total, 220 weaned pigs of 8.1 ± 1.8 kg in initial weight were housed in 55 pens of 4 pigs each and had free access to the assigned pelleted diet for 4 weeks.

Trial results

For the entire 28-day trial, increasing canola meal did not affect body weight gain, feed intake and feed efficiency (Figure 1). Final weight of weaned pigs was 21.7, 22.0, 21.5, 22.3 and 21.9 kg for 0 to 20% canola meal, respectively, and was not affected by increasing canola meal inclusion.

"For the 20% inclusion of canola meal diet, feed cost per unit of body weight gain was reduced almost 2 cents/kg"

Increasing the dietary inclusion of canola meal linearly decreased the total tract digestibility of crude protein from 82.4 to 79.1% and diet digestible energy value from 3.97 to 3.91 Mcal/kg of DM. The reduced nutrient digestibility was expected based on gradual increases in dietary fibre. These reductions in nutrient digestibility were of small magnitude and evidently did not affect pig performance.

Cost/Benefit analysis

Assuming wheat at \$207/tonne, canola meal \$255, soybean meal \$420, and L-lysine-HCl \$2,550, increasing dietary canola meal inclusion from 0 to 5, 10, 15, and 20%, reduced feed

CONTINUED ON PAGE 56



Who said getting a perfectly dosed solution for disinfecting had to be complicated?

Virkon®

Simply the best solution for disinfecting.

*The simplified applicator (a minimum retail value of \$100) can also be used for all your washing and disinfection needs using a pressure washer or a garden hose.
This promotion is effective from September 1st to November 30th, 2011 at participating retailers. Details in store.

www.vetoquinol.ca

Vétoquinol
a Sign of Passion

Perfect Solution

For a limited time, get the FREE Virkon Applicator Kit* when you purchase \$550 or more of Virkon products.

With the Applicator Kit, you always get a perfectly dosed disinfectant solution, by simply calculating the ratio once.


Inclusion of canola meal in young pigs has been associated with reduction of growth performance, likely due to relatively high fibre and glucosinolates (bitter taste) content in the meal. However, recent research conducted at the University of Alberta has shown that 15% canola meal inclusion can partially replace soybean meal in the diet, without reducing body weight gain in weaned pigs. However, more research is needed to validate this information and higher inclusion levels would reduce nursery feed cost in young pigs.

Nutrient profile of canola meal

The solvent-extracted canola meal sample used in our trial was sourced from Bunge Canada (Fort Saskatchewan, AB).

4 TON 4 SOW

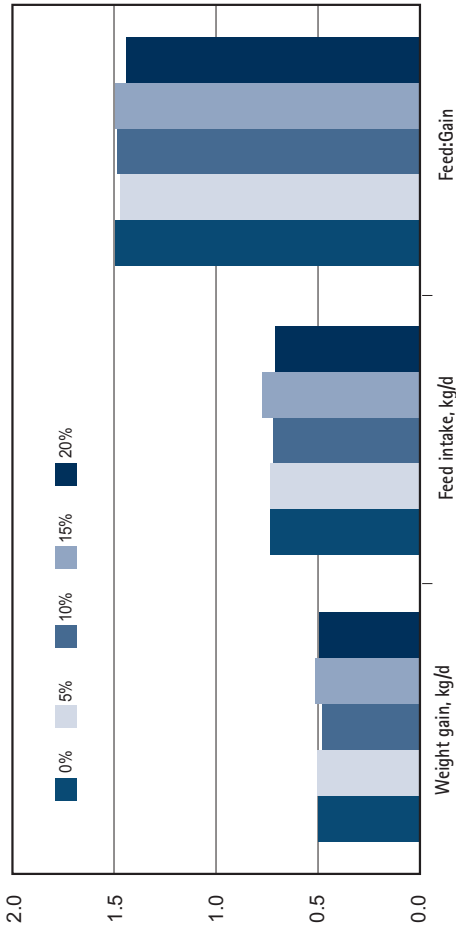
THE TOTAL PACKAGE



GENESUS
The Official Pig Breeder's Choice

www.genesus.com

Figure 1: Overall trial growth performance of weaned pigs fed increasing level of canola meal in the diet for 28 days starting 1 week post-weaning



CONSULTING SERVICES FOR THE PORK INDUSTRY

For producers... For the industry...

- Management advice
- Production troubleshooting
- Staff recruitment and training
- Barn design and remodeling
- Feeding and nutrition
- Customer technical support
- Product marketing & PR
- Technical writing & publications
- Brochures and leaflets
- Special projects & reports

Contact Bernia Feist at Pork Chain Consulting Ltd.
Phone: (403) 782-3776 Fax: (403) 782-4161
Email: bfeist@porkchain.ca

Over 35 years experience from farm to fork

CANADA FARM DISTRIBUTORS LTD.
Animal Cribbage Incinerators

INCINERATORS FOR THE 21ST CENTURY

FEATURING... our new refractory block lined incinerator

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

For All Pricing & Technical Inquiries Contact:

Energy Sustaining Technologies
1100 Hwy 203
Winnipeg, MB R2J 2T3
Phone: (204) 222-5773
Fax: (204) 222-5573
Email: estbzmail@mts.net

UP TO 75% SAVINGS

Potential for weaning 40 pigs per sow

By Brenda Kossowan

Special to Western Hog Journal

Good potential exists for producing 40 pigs per sow a year, if producers are willing to manage the results, say researchers gathered for the 2011 Alltech Symposium, held earlier this year in Lexington, KY.

Gunner Sorensen, program director for the Pig Research Centre operated by The Danish Agriculture and Food Council, described in his presentation how producers might tackle that goal, should they choose to adopt it, qualifying his comments off the start by acknowledging Denmark's unique position in hog production. "Denmark is not quite normal, because we have more pigs in Denmark than we have people and the country is very small and we have a lot of funny letters in the names of the cities."

Denmark has not yet achieved 40 pigs per sow per year, said Sorensen. However, that goal is coming within reach, providing a number of conditions are met, he said. To exceed 30 pigs per year, the producer must achieve 15 pigs per litter from 2.33 litters per sow, with the sow ready to rebreed right after weaning. The breeding barn must achieve a farrowing rate of at least 90 per cent with a maximum of five per cent dead or culled after they have been served. There are a few farms that can do this now, said Sorensen.

Reaching those lofty targets requires focus in a number of areas, including gilts, management of body condition, gastric health, balance of minerals and protein and lactation. Gilts require special care because they are the foundation stock for high-fertility sows, said Sorensen.

He describes a production stream with the focus on gastric health, leg quality and longevity. The gilts are fed in a trough or on the floor with a maximum daily gain of 700 grams from 30 to 130 days.

Body condition will also play a vital role in how well the new gilts perform in the breeding barn, said Sorensen. He likes to see animals that are neither too fat nor too thin. A study in which gilts were broken into three different groups, based on back fat, showed excessive shoulder lesions on the thinner animals. The study showed medium sows with a small amount of back fat producing 16.7 live pigs per litter. That number was higher by three pigs than for heavier sows.

Looking at the number of stillborns per litter, Sorensen said it's normal for younger sows to have fewer stillborns. However, the number of stillborns goes down among larger animals.

Frequent feedings in smaller amounts – five to eight times per day – works best because it encourages the sow to get up and down more often, said Sorensen, adding that the trough must be empty after 30 minutes. Good feeding practices produce fewer lesions on the sows and bigger piglets at weaning time.

"Sows produce less milk during their first week of lactation, so should be limited to 5.5 kilograms of feed per day"

How the sows are fed is most important during the first week after lactation, he said.

Sorensen believes feed should be restricted during this period, with the number of feedings reduced to four or five times because the amounts need to be more precise when feeding more often. Sows produce less milk during their first week of lactation, so should be limited to 5.5 kilograms of feed per day, and then they can be allowed to feed *ad libitum* for the rest of the lactation period.

CONTINUED ON PAGE 60

NEOGEN CORPORATION

Get smart about detectable needles!

HDN – Highly Detectable Needles **DTN** – Detectable Tough Needles **HDDI** – Heavy Duty Detectable Injectors

- Highly detectable needles at the best prices
- Meets requirements of COA and Canada packing plants
- High quality detectable needles with great strength for all your vaccinating preferences

AVAILABLE WHEREVER ANIMAL HEALTH SUPPLIES ARE SOLD

Phone: 800-806-2737 or 204-231-0236
Fax: 204-231-8300
1051 Marion Street, Winnipeg, MB R2J 0L1



Let the power company pay for your Kane Heating System with electrical savings



Our TD-34 controls up to 4 rooms automatically at just 42.25 Watts per Crate!

Use this chart to calculate your savings with Kane Heat Mats vs. Heat Lamps

Lamp Watts/crate	125	175	250
Watts/crate	42.25	61.25	87.50
Watts/100 lbs	132.50	192.50	275.00
Watts/100 lbs	132.50	192.50	275.00
Annual Savings per crate in U.S. Dollars	22.62	52.33	81.90
5	38.24	88.48	139.89
6	43.69	98.71	158.19
6.5	47.12	107.59	172.29
7	50.74	115.40	184.49
7.5	54.57	122.22	194.89
8	58.60	128.05	203.49
8.5	62.83	132.88	210.29
9	67.26	136.71	216.29
9.5	71.89	139.54	221.49
10	76.72	141.37	225.89
10.5	81.75	142.20	229.49
11	86.98	142.03	232.29
11.5	92.41	140.86	234.29
12	98.04	138.69	235.49
12.5	103.87	135.52	235.89
13	109.90	131.35	235.49
13.5	116.13	126.18	234.29
14	122.56	120.01	232.29
14.5	129.19	112.84	229.49
15	136.02	104.67	225.89
15.5	143.05	95.50	221.49
16	150.28	85.33	216.29
16.5	157.71	74.16	210.29
17	165.34	62.00	203.49
17.5	173.17	48.83	195.89
18	181.20	34.66	187.49
18.5	189.43	19.49	178.29
19	197.86	4.32	168.29
19.5	206.49	-7.85	157.49
20	215.32	-21.02	145.89
20.5	224.35	-34.19	134.49
21	233.58	-47.36	122.29
21.5	243.01	-60.53	109.29
22	252.64	-73.70	95.49
22.5	262.47	-86.87	80.89
23	272.50	-100.04	66.49
23.5	282.73	-113.21	52.29
24	293.16	-126.38	38.29
24.5	303.79	-139.55	24.49
25	314.62	-152.72	10.89
25.5	325.65	-165.89	-2.51
26	336.88	-179.06	-15.91
26.5	348.31	-192.23	-29.31
27	360.04	-205.40	-42.71
27.5	372.07	-218.57	-56.11
28	384.40	-231.74	-69.51
28.5	397.03	-244.91	-82.91
29	410.06	-258.08	-96.31
29.5	423.49	-271.25	-109.71
30	437.32	-284.42	-123.11
30.5	451.55	-297.59	-136.51
31	466.18	-310.76	-149.91
31.5	481.21	-323.93	-163.31
32	496.64	-337.10	-176.71
32.5	512.47	-350.27	-190.11
33	528.70	-363.44	-203.51
33.5	545.33	-376.61	-216.91
34	562.36	-389.78	-230.31
34.5	579.79	-402.95	-243.71
35	597.62	-416.12	-257.11
35.5	615.85	-429.29	-270.51
36	634.48	-442.46	-283.91
36.5	653.51	-455.63	-297.31
37	672.94	-468.80	-310.71
37.5	692.77	-481.97	-324.11
38	713.00	-495.14	-337.51
38.5	733.63	-508.31	-350.91
39	754.66	-521.48	-364.31
39.5	776.09	-534.65	-377.71
40	798.02	-547.82	-391.11
40.5	820.45	-560.99	-404.51
41	843.38	-574.16	-417.91
41.5	866.81	-587.33	-431.31
42	890.74	-600.50	-444.71
42.5	915.17	-613.67	-458.11
43	940.10	-626.84	-471.51
43.5	965.53	-640.01	-484.91
44	991.46	-653.18	-498.31
44.5	1017.89	-666.35	-511.71
45	1044.82	-679.52	-525.11
45.5	1072.25	-692.69	-538.51
46	1100.18	-705.86	-551.91
46.5	1128.61	-719.03	-565.31
47	1157.54	-732.20	-578.71
47.5	1187.07	-745.37	-592.11
48	1217.20	-758.54	-605.51
48.5	1247.93	-771.71	-618.91
49	1279.26	-784.88	-632.31
49.5	1311.19	-798.05	-645.71
50	1343.72	-811.22	-659.11
50.5	1376.85	-824.39	-672.51
51	1410.58	-837.56	-685.91
51.5	1444.91	-850.73	-699.31
52	1480.04	-863.90	-712.71
52.5	1515.87	-877.07	-726.11
53	1552.40	-890.24	-739.51
53.5	1589.63	-903.41	-752.91
54	1627.56	-916.58	-766.31
54.5	1666.19	-929.75	-779.71
55	1705.52	-942.92	-793.11
55.5	1745.55	-956.09	-806.51
56	1786.28	-969.26	-819.91
56.5	1827.71	-982.43	-833.31
57	1869.84	-995.60	-846.71
57.5	1912.67	-1008.77	-860.11
58	1956.20	-1021.94	-873.51
58.5	2000.43	-1035.11	-886.91
59	2045.36	-1048.28	-900.31
59.5	2091.09	-1061.45	-913.71
60	2137.62	-1074.62	-927.11
60.5	2184.95	-1087.79	-940.51
61	2233.08	-1100.96	-953.91
61.5	2282.01	-1114.13	-967.31
62	2331.74	-1127.30	-980.71
62.5	2382.27	-1140.47	-994.11
63	2433.60	-1153.64	-1007.51
63.5	2485.73	-1166.81	-1020.91
64	2538.66	-1180.08	-1034.31
64.5	2592.39	-1193.25	-1047.71
65	2646.92	-1206.42	-1061.11
65.5	2702.25	-1219.59	-1074.51
66	2758.38	-1232.76	-1087.91
66.5	2815.31	-1245.93	-1101.31
67	2873.04	-1259.10	-1114.71
67.5	2931.57	-1272.27	-1128.11
68	2990.90	-1285.44	-1141.51
68.5	3051.03	-1298.61	-1154.91
69	3111.96	-1311.78	-1168.31
69.5	3173.69	-1324.95	-1181.71
70	3236.22	-1338.12	-1195.11
70.5	3299.55	-1351.29	-1208.51
71	3363.68	-1364.46	-1221.91
71.5	3428.61	-1377.63	-1235.31
72	3494.34	-1390.80	-1248.71
72.5	3560.87	-1403.97	-1262.11
73	3628.20	-1417.14	-1275.51
73.5	3696.33	-1430.31	-1288.91
74	3765.26	-1443.48	-1302.31
74.5	3835.09	-1456.65	-1315.71
75	3905.82	-1469.82	-1329.11
75.5	3977.45	-1482.99	-1342.51
76	4049.98	-1496.16	-1355.91
76.5	4123.41	-1509.33	-1369.31
77	4197.74	-1522.50	-1382.71
77.5	4272.97	-1535.67	-1396.11
78	4349.10	-1548.84	-1409.51
78.5	4426.13	-1562.01	-1422.91
79	4504.06	-1575.18	-1436.31
79.5	4582.89	-1588.35	-1449.71
80	4662.62	-1601.52	-1463.11
80.5	4743.25	-1614.69	-1476.51
81	4824.78	-1627.86	-1489.91
81.5	4907.21	-1641.03	-1503.31
82	4990.54	-1654.20	-1516.71
82.5	5074.77	-1667.37	-1530.11
83	5159.90	-1680.54	-1543.51
83.5	5245.93	-1693.71	-1556.91
84	5332.86	-1706.88	-1570.31
84.5	5420.69	-1720.05	-1583.71
85	5509.42	-1733.22	-1597.11
85.5	5600.05	-1746.39	-1610.51
86	5691.58	-1759.56	-1623.91
86.5	5784.01	-1772.73	-1637.31
87	5877.34	-1785.90	-1650.71
87.5	5971.57	-1799.07	-1664.11
88	6066.70	-1812.24	-1677.51
88.5	6162.73	-1825.41	-1690.91
89	6259.66	-1838.58	-1704.31
89.5	6357.49	-1851.75	-1717.71
90	6456.22	-1864.92	-1731.11
90.5	6555.85	-1878.09	-1744.51
91	6656.38	-1891.26	-1757.91
91.5	6757.81	-1904.43	-1771.31
92	6860.14	-1917.60	-1784.71
92.5	6963.37	-1930.77	-1798.11
93	7067.50	-1943.94	-1811.51
93.5	7172.53	-1957.11	-1824.91
94	7278.46	-1970.28	-1838.31
94.5	7385.29	-1983.45	-1851.71
95	7493.02	-1996.62	-1865.11
95.5	7601.65	-2009.79	-1878.51
96	7711.18	-2022.96	-1891.91
96.5	7821.61	-2036.13	-1905.31
97	7932.94	-2049.30	-1918.71
97.5	8045.17	-2062.47	-1932.11
98	8158.30	-2075.64	-1945.51
98.5	8272.33	-2088.81	-1958.91
99	8387.26	-2101.98	-1972.31
99.5	8503.09	-2115.15	-1985.71
100	8619.82	-2128.32	-1999.11

For more information visit us on-line at www.kanemfg.com or call 1-815-262-3001 or 800-247-0038 today! email: info@kanem.com

Contact your dealer for more information on the full line of KANE quality equipment.

- SOUTH COUNTRY LIVESTOCK EQUIPMENT LTD. Leithbridge, AB • 409-329-0155
- NORAG LTD. Red Deer, AB • 405-341-3767
- FIRST CHOICE INDUSTRIES Morinville, AB T0G 1P0 • 780-939-5499
- WALBURN AGRI SYSTEMS Linden, AB T0M 1J0 • 403-546-3810
- A. G. PENNER FARM SERVICES LTD. Blumefort, MB R0A 0C0 • 204-326-3781
- WALBURN AGRI SYSTEMS SASK LTD. Saskatoon, SK S7L 6A8 • 306-244-3838
- FRESHEN LIVESTOCK LTD. Medicine Hat, AB • 403-526-0909
- EAST-MAN FEEDS (WINNIPEG) Winnipeg, MB R2J 0K6 • 204-233-1112
- UNITED FARMERS OF ALBERTA Calgary, AB T2V 4J2 • 403-258-4500

Food. "How many of you noticed the difference between total born and total weaned? The gap is actually increasing. We're actually losing more. Are consumers going to tolerate that?"

Weaning 40 pigs per sow per year means increased milk production, higher weaning rates and other challenges, largely because farmers have not been able to feed their sows to their full potential, he said. "Sows, like other mammals, give up their bodies to grow their babies. She only takes what's left over after she's given everything she possibly can to grow the foetus."

Mullan outlined principle of foetal programming and its potential impact on reproductive performance, litter variation, immune response and meat quality.

Ultimately, producers need to manage genetics, feeding and how the sows are housed to ensure that there is space and nutrition available to each embryo as it develops in the womb, which is where the size and muscle quality of each pig is determined, he said. Most variation within the litter is established between days 27 through 35 of the gestation term, said Mullan. A greater number of moderately sized muscle fibres produces the best quality meat, with low birth weight primarily associated with a reduced number of muscle fibres. However, the impact of what has happened in the womb doesn't really show up until the resulting pigs reach the grower-finisher barn, he said.

Ultimately, then, while producers may see economic benefits of weaning 40 pigs per sow per year, they need to be able to mitigate those achievements against the potential impact on production costs, meat quality and consumer acceptance, said Mullan. Most importantly, nutrition must catch up with genetics, he said. "You have to make sure those sows are being fed properly," ■

Coarser feed with more texture would help protect gastric health by managing potential for damage from excess stomach acid, said Sorensen. Staff needs to have a good understanding of the feeding systems, he said. The daily management of sow feed can be quite simple, but must be done correctly. Ninety per cent of problems in the sow herd related to feeding errors, he said.

Citing the theme of the symposium, Sorensen said moving toward 40 pigs weaned per year is a true game changer. "It's possible, but it's hard work. When you do this, the next step is to educate labour," he said.

Australian researcher Bruce Mullan said farmers should question whether they really need or want to increase the number of pigs their sows produce. "Danish and Canadian data show dramatic improvements in production," said Mullan, senior research officer with Australia's Department of Agriculture and

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

The trouble with sharks!

By Dr. Egan Brockhoff, Prairie Sw



Figure 2: At room temperature Rotavirus is stable in manure for 7-9 months.

reducing the ability of the intestine to absorb fluids before they pass from the pig. Rotaviruses can be synergistic with bacterial scour agents such as E. coli leading to mixed infections of greater severity. Like all viral scour, antibiotics have no effect on the virus. If antibiotics are used, they are used only for the treatment or prevention of secondary bacterial invaders or opportunists.

Bacterial agents are the most common primary causes of neonatal diarrhoea with *Escherichia coli* (E. coli) and *Clostridium perfringens* (C. perfringens) being the top two concerns most commonly diagnosed by our veterinary health team. E. coli is a normal inhabitant of the intestinal tract and it is important to note that there is a significant difference between pathogenic E. coli and non-pathogenic E. coli. It is the pathogenic strains with known genetic virulence factors that have the big bite. Through the production of various enterotoxins, E. coli adhesion leads to the secretory diarrhoea you commonly see in these cases.

C. perfringens is of increasing concern as a major cause of piglet scour. The bacteria itself is a normal inhabitant of the intestine of the sow and is transmitted to the piglet by fecal-oral transmission from environmental contamination. Both C. perfringens A and C are common findings by our veterinary health team with their Alpha and Beta toxins being the drivers of clinical disease. Its ability to persist in the environment and form spores makes this little shark one of the toughest to remove from your barn once established. Control programs will often require strategies to reduce environmental shedding as well as increasing piglet immunity.

Parasitic agents such as coccidiosis (*Isospora suis*) are common in rooms with poor hygiene such as continuous flow farrowing rooms that are difficult to clean properly. Suckling piglets are particularly susceptible to coccidiosis. This parasite is acquired by fecal-oral transmission from the environment and once in the suckling piglet destroys small intestinal cells from within leading to villous atrophy and thus a malabsorptive diarrhoea. Once properly diagnosed, control programs are simple and effective.

Making the sharks feel at home (Risk factors)

It can be so easy to let the sharks feel at home in your barn. The risk factors associated with piglet scour are many and diverse. Surface sanitation is a paramount concern associated with all neonatal disease. Washing without a detergent and disinfectant will only remove visible organic matter and in most cases increase disease spread through aerosol production. To minimize cost and maximize effect all disinfectant and detergent dosages should be calculated and your surface sanitation protocol should be reviewed annually. Remember, applying a disinfectant to a wet surface can severely dilute its

Sun-North SYSTEMS LTD.

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

P.O. Box 668, 92 Railway St.
Saginaw, On N0K 1B0
sunnorth@sunnorth.com

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



Figure 3: Drying agent used on scouring litters

concentration and thus greatly retard its efficacy. Understanding biofilms and their role in the spread of disease in your barn is a discussion you should have with your veterinary health team.

"What the piglet needs and what the sow wants are two very different environments"

Environmental temperature is so very important to the suckling piglet. What the piglet needs and what the sow wants are two very different environments. Remember the last time you went swimming on a breezy day. When you emerge from the water into a wind you immediately feel much cooler than if the air was still. This is because the combination of evaporative cooling along with air moving over your skin's surface (conduction cooling) is much more effective than either one or the other. Now imagine a piglet being born wet into a cool environment with a draft. Not only does chilling lead to minor hypothermia it can also lead to slowing of the intestinal bowel transit time thus providing pathogenic agents more time to swim around and cause trouble.

Colostrum intake is critical in those early hours and colostrum from mom and mom alone is critical. Colostrum provides necessary immune stimulating agents, energy, vitamins

and minerals for a healthy start. When we vaccinate a sow for scour causing agents such as E. coli it is important to remember that it takes that sow 2-3 weeks to respond to the vaccine in such a way that we change her colostrum with those important immune agents. Timing is everything in these cases and delivering the vaccine too late will do little to help that newborn suckling piglet. Not all vaccines have the same immune stimulating agents and without diagnostics it is very difficult to tailor a proper vaccine protocol for your herd's maximum benefit. Have you had diagnostics completed on the scours affecting your herd?



Committed to producing pigs superior in the industry!

PEAK SWINE GENETICS
#217, 5906 - 50 Street
Leduc, Alberta Canada T9E 0R6
Phone: 780.986.4647
Fax: 780.986.4694
email: peak@peakswine.com
website: www.peakswine.com

Art Goelema 403-963-0171
Paul Klingeman 509-989-1347
Toll Free 1-888-235-7325

Challenger Boar
73.0 mm loin depth
We're *Challenging* carcass quality with our *Challenger* boar.



8KJ9111W

Building a better shark cage

Prevention is the key to controlling the challenges we face with a scours outbreak. Aside from controlling the risk factors listed above, vaccination of your gilts and sows is one of your first and best defence mechanisms. All gilts should receive TWO doses of a scours vaccine 3-5 weeks apart at least 2-3 weeks pre-farrowing. Why the TWO doses to naive animals? Well, gilts have a much more inexperienced immune system and to provide sufficient immune stimulation at least two doses are required. In some cases up to three doses may be required if the disease challenge is very high. All sows should receive a single dose unless you are concerned about a new disease causing agent, a very high disease challenge or if they were not properly vaccinated as gilts. Remember, there are a lot of different agents causing scours and there are a lot of different vaccines with many and varied immune stimulating agents. Diagnostics are the only straight forward way to determine which vaccine will best suit your needs.

"It is not the pathogen that kills the suckling piglets, in most cases it is the dehydration and metabolic acidosis"

Treatment is always our last resort if preventive measures have failed. There are three areas I like to focus on when dealing with a scours outbreak:

1. Fluids and adjunct therapy
2. Environmental management
3. Antibiotics

Fluids are the most important intervention and often the most overlooked. It is not the pathogen that kills the suckling piglets, in most cases it is the dehydration and metabolic acidosis that is the real shark bite. Electrolytes should be provided immediately, they should be replaced often

and if necessary they should be provided directly to the piglet if they are not drinking from a dish. Other interventions such as kaolin pectin orally or injectable NSAIDS can significantly improve your outcomes.

Environmental management is also overlooked in many cases. Scrapping the pens and applying a drying agent can significantly reduce the environmental load that piglets are exposed to. Bacteria are particularly sensitive to drying as they are little fluid filled organisms. Remember, fecal-oral transmission is how most of these pathogens are spread, so managing the environment is an obvious control measure to take. What is the temperature of the piglet micro-environment? Are your heat lamps and heat pads working?

Antibiotics should be your third level of intervention, but what do you choose? Always collect fresh samples and place them in your freezer before you start treating with antibiotics. Even if you don't use the sample you can always toss it later if treatment is working. If piglets are not responding then those samples should be shipped immediately and piglets should be examined by a veterinarian for post-mortem. Remember you could be dealing with a virus and in that case no amount of antibiotic will help, or consider this, you are just using the wrong product. Without diagnostics you are shooting in the dark. Remember, overuse of antibiotics can lead to a whole new concern such as *Clostridium difficile* overgrowth. Always consult your veterinarian before embarking on an antibiotic treatment protocol.

Living with sharks

We all have sharks on our farms and in our barns, and for the most part they tend not to cause us a lot of trouble. However, every once in a while they decide it is time to test the waters and take a bite out of whatever they can sink their teeth into. Talk to your veterinary health team. Manage your risks with the appropriate vaccination and management protocols and consider having protocols in place for outbreak situations. Outline a rapid response plan to help minimize your losses and disease spread to the rest of the herd. It's easier to build the shark cage before you go into the water! ■

Mortality insurance for swine reaches milestone

The Canadian Swine Health Board (CSHB) has successfully completed the development of a viable insurance product for the swine industry. Started by the Ontario Livestock and Poultry Council on behalf of the Manitoba Pork Council, Ontario Pork and the Fédération des producteurs de porcs du Québec, this significant milestone demonstrates production insurance can work for the swine sector.

"This is a significant innovation for the pork industry," says Florian Possberg, chair of the CSHB. "The collaborating partners in this project came to the CSHB in early 2010 saying they had identified strong interest by both producers and insurance companies in such a product, but risk assessment and actuarial work was required. We funded those critical components, the actuarial work is now in the hands of insurance companies, first premium estimates are affordable and now we collectively need to figure out how to deliver the program."

Manitoba Pork is now spearheading the initiative and has received direction to explore a delivery mechanism and product offering, cost-shared with federal and provincial agreements modelled after crop insurance. The long term objective is a program available nationally. Manitoba is the natural location to take it to the next step as their provincial government announced in their throne speech last November that they wanted to develop insurance programs for their livestock industry.

"Confidentiality agreements have been signed by the Manitoba Agricultural Services Corporation and work is proceeding on a number of fronts to be more definitive about what type of coverage can be offered," says Andrew Dickson, General Manager with the Manitoba Pork Council. "Once we have the details around that, we will proceed with developing a plan to make it available to producers."

For more information, contact Robert Harding, Executive Director, Canadian Swine Health Board at 613-230-4445 Ext. 267, or email harding@swinehealth.ca ■

The Next Western Hog Journal

is January 1, 2012

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



**Improve
Your Profit**
with industry leading
nutrition technologies



The most advanced swine nutrition.



A feed flavor for enhanced performance.



For more uniform full-value pigs.

TO FIND A RALCO DISTRIBUTOR
IN YOUR AREA CONTACT:

Dale McBurney
cell: 204-729-7305

e-mail: dale.mcburney@ralconutrition.com




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

HELPS ABSORB MOISTURE & CONTROL ODOURS

drySTART™
Tel 1-866-810-1286 • Fax 519-228-6560
info@drySTART.com • www.drySTART.com

™ Trademark of Fempal Farm-Products Inc.



THE TOTAL PACKAGE



The Fast Return to Growth
GENESUS
www.genesus.com

International Round-up

Using glycerol in lactation diets

The increasing availability of glycerol, a by-product of bio-diesel production, has increased considerably in recent years. There is now a large surplus available after its traditional use in the food, pharmaceutical and cosmetic industries. Research has shown that glycerol can be used in nursery and finisher diets without affecting pig performance. Now recent work at the University of Minnesota suggests that it can also be used in lactation diets at up to 9%.

waste food which would roughly equal the pork production – a “green circle” with next-to-nil resource consumption or environmental emissions.

The digester, and a system for recovering body heat from the pigs, would supply enough heating for both the farm and the prison next door – and generate enough electricity to power the farm’s feed mill and supply a surplus to the National Grid. The digester would be built to an American design, not yet used widely in the UK, and would be fed with manure and straw washed into it while still warm, for maximum efficiency.

“Up to 9 per cent crude glycerol in the diet had no effect on sow body weight and backfat loss”

The researchers compared diets with 3, 6 and 9% glycerol with a control (corn/soybean) diet during hot weather conditions when farrowing room temperature exceeded 25°C. Up to 9 per cent crude glycerol in the diet had no effect on sow body weight and backfat loss, weaning-to-oestrus interval, pre-weaning mortality of piglets and ADG of piglets. Daily water consumption was not affected by dietary treatment. Crude glycerol did not affect respiration rates or rectal body temperatures, indicating no efficacy in reducing heat stress of sows.

“It is believed to be the first system in the world that has the ability to house pigs without the need to tail dock”

Midland Pig Producers says: “This environment is radically different to conventional systems as it is believed to be the first system in the world that has the ability to house pigs without the need to tail dock – the holy grail of animal rights groups.”

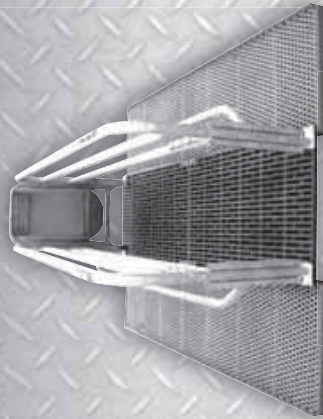
Despite its welfare and environmental objectives, the project is being opposed by animal rights groups and also objections have been raised by the government’s Environment Agency.

Green pig production system will cut costs by 50 percent

An innovative British pig production company is awaiting a decision on whether its proposed environmentally-friendly farm will be given planning approval. Midland Pig Producers is currently seeking approval to develop a pig unit with an integral biogas plant to generate environmentally friendly energy. It will be located adjacent to Foston Prison in Derbyshire. When complete, it is planned that the site will house 2500 sows and progeny in a state of the art unit, producing 1000 pigs a week for sale. The company says its aim is to reduce pig production costs by 50%.

Most pig farms depend on imported soya products. This one would get all its own feed grown locally and would supply the growers with all the nitrogen-based fertilizer they need using odourless by-product from an anaerobic digester. The digester would be fed with manure and gases from the pigs, with a top-up from

LOOKING TO RENOVATE OR UPGRADE YOUR BARN?



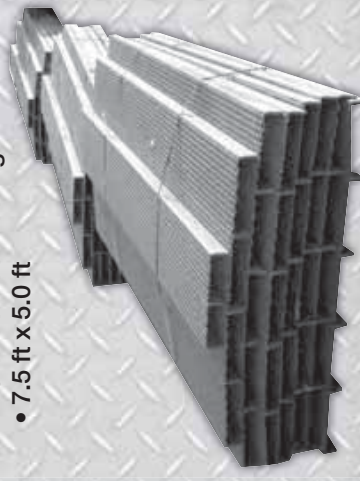
32 K.G. JOHNSON FARROW CRATES

- w/front feeder
- w/cast-iron slats
- w/tender-foot flooring
- 7.5 ft x 5.0 ft



590 K.G. JOHNSON STALLS

- A.I. rear swing stalls
- Flip-up front gate
- Feed Tube
- Some stalls w/rear plywood slider



TENDERFOOT FLOORING

- All self-supporting
- 5' x 8'
- 5' x 10'



300 LIQUID FEED VALVES

- Completely rebuilt
- New Diaphragm
- New rear housing (black)
- New PVC rear fitting

Contact Rob @ 604-854-4664 or Email: roblepp@shaw.ca



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



CONTINUED ON PAGE 68

US egg producers' deal 'sets dangerous precedent'

An agreement between the United Egg Producers and the Humane Society of the United States to work together to enact federal legislation that would double space allowances for hens has been condemned as "setting a dangerous precedent" by the National Pork Producers Council.

The response came after UEP and HSUS agreed to a range of welfare-related changes, the most significant of which is the replacement of conventional cages with new, enriched housing systems that provide each hen nearly double the amount of space currently allotted. Egg producers will invest an additional \$4 billion over the next 15 years to achieve this. The increased bird space will be implemented in a tiered, phase-in schedule over the next 15 to 18 years. The changes also require that all egg-laying hens be provided environments that will allow them to express natural behaviours, such as perches, nesting boxes and scratching areas.

In response to the HSUS UEP proposal, Doug Wolf, NPPC president and Wisconsin pork

producer said: "First, the US pork industry is committed to animal well-being and continuous improvement in all aspects of pork production. But legislation pre-empting state laws on egg production systems would set a dangerous precedent to allow the federal government to dictate how livestock and poultry producers raise and care for their animals. It would inject the federal government into the marketplace with no measurable benefit to public or animal health and welfare."

If Congress passes the legislation, it would supersede state animal welfare laws, including those that have been passed in Arizona, California, Michigan and Ohio.

ThePigSite.com launches online training modules

ThePigSite.com has launched two online practical training courses for the worldwide pork industry in conjunction with UK-based Pig Production Training Ltd. The modules are based on PPT's Pig Skills Manuals on-farm training program which has been adapted into an interactive web-based system

and includes a series of exercises illustrated with photos and videos. The *Reducing Stillbirths* course covers 8 skills that are needed to minimize the number of stillborn pigs at farrowing, while the *Farrowing Management* course includes 12 topics which deal with the key skills involved in maximizing piglet survival to weaning.

"The advantage of online training is that it is instantly available at any time and trainees can carry it out at their own pace," says Jim Muirhead, of 5M Publishing, owner of ThePigSite. "The modules offer a simple but practical training format and a consistent global training standard." Trainees completing the modules and successfully answering a series of questions are able to print out a course certificate. The site also allows companies to register their employees and track their progress online.

Further modules will be added in future and the intention is to make courses available in other languages, adds Jim Muirhead. The *Reducing Stillbirths* module costs US\$48 and the *Farrowing Management* course \$72. They can be found at <http://learn.thepigsite.com>.



HOG PRICE INSURANCE PROGRAM



The Hog Price Insurance Program (HPIP) is market driven price insurance for hog producers in Alberta. Offered continuously throughout the year, HPIP is an easy to use risk management tool that provides protection against a decline in Alberta hog prices over a defined period of time.

HPIP - NOW AVAILABLE

For more information, call AFSC at 1-877-889-AFSC (2372), visit www.AFSC.ca or stop in at any AFSC District Office.



Therapeutic antibiotic use has increased sharply, especially in the nursery, since growth promoters were banned in Denmark.

Danish antibiotic use increases since growth promoter ban

Antimicrobial usage increased significantly between 2002 and 2008 in all classes of Danish pigs, and most were administered to treat gastrointestinal infections, especially in weaners, according to a recently published study. The use of antimicrobial growth promoters was banned in 2001 in the Danish pork industry and an increase in therapeutic usage has resulted.

The study is the first description of a complete prescription pattern for one animal species in an entire country. This was made possible by the requirement for all medication use to be reported to the national monitoring agency VetStat. Antimicrobial use was measured in defined animal daily doses (ADD) for the specific age-group and in ADD/kg (weight of product) as a measure of amounts used.

According to the results of the ADD/kg data, 26 per cent of all antimicrobials were prescribed for sows, 38 per cent for weaner pigs, and 33 per cent for finisher pigs.

In weaner and finisher pigs, gastrointestinal infections accounted for 74 to 83 per cent and 56 to 65 per cent of the use in each age class, respectively, while respiratory infections accounted for nine to 17 per cent and 18 to 24 per cent, respectively. From 2002 to 2008, prescriptions for respiratory disease increased by 145 per cent for sows/piglets, by 141 per cent for weaner pigs, and by 81 per cent for finisher pig.

The authors noted that there were changes in the amounts of various antibiotics used, but suggested that this was primarily related to changes in the price of the drugs. ■

Knowledge Is Power

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 its profitable Canadian pork industry with reliable information to reduce costs and improve productivity. Check out the new Pork Insight reports website, powered by prairieswine.ca. If you're looking for practical, science-based information, fit Pork Insight database contacts over 5,500 articles. It's comprehensive, easy to search, and will help improve your operation's bottom line.

PorkInsight

Agriculture and Agri-Food Canada, Agriculture and Agri-Food Canada, AgriInnovative Canada

www.prairieswine.ca

View from Europe

Doing a farm trial: Are statisticians too expensive?

By John Gadd

As a politician would say "It all depends..."

By "statistician" I mean someone who:

- Has been trained in trial design and operation
- Is equally knowledgeable in the interpretation of trial results
- And (in my opinion and equally important) is involved in agriculture, preferably animal production. Pigs too? Not necessarily – just animals.

Why the last remark? I've used professional, urbanite, statisticians, but soon abandoned them in view of the considerable explanations needed on what is involved in pig production and what day-to-day routine is like on a pig unit. They were also more expensive than someone at an (agricultural) university or college. So it depends on the individual, his/her degree of knowledge, and the cost.

Farm trials need to be fitted into the daily round, including how the animals are housed and managed as well as the staffing needs on the client's farm. Each farm is different, as you well know.

A quick re-cap

In the last issue I suggested a simple route-map towards setting up a farm trial which will mean something, maybe a positive result, maybe negative, sometimes (not often) inconclusive. As a reminder, a statistician is needed to set up your trial, agree with you what your "make me change" target will be, and then once the trial is completed, tell you what the results mean. He will explain what you can say about the results and what you can't say.

In my opinion, rather too many optimistic claims are being made for the avalanche of alternative products now being promoted as replacement growth enhancers for the increasingly frowned-on or banned antibiotics previously used in this way.

Dodgy trials?

Not all of the trials I've studied can be described as "dodgy", but I end up with too many questions in my mind on what we are not told, which could have had an influence on the (usually positive) results. Several statisticians I've talked to recently pointed these influencing factors out to me. I share their concern.

CONTINUED ON PAGE 72

Red Deer Swine Technology Workshop

Wednesday November 2nd, 2011

Capri Centre, Red Deer, Alberta

Join us for an interactive technical workshop aimed at improving your swine herd performance and profitability. Speakers will be presenting a range of practical, hands-on topics of interest to everyone involved in pork production.

Topics include:

- Experience with Post-Cervical AI
- Mission Critical: Piglet Care in the First 48 Hours
- Driving down Feed Costs with Alternative Ingredients
- Managing Nursery Pigs in the First Week After Weaning
- Your Influence on Cost Savings in the Barn
- Cutting Down on Carcass Demerits
- Loading and Transporting Pigs – Reducing Stress on Pigs and People

For further information, or to register, please contact Bernie Peet on (403) 782-3776 or (403) 392-3104 or Email: bpeet@telusplanet.net

Manage STRESS and CONFLICTS



The Ultimate Sedative for Pigs

We have added another proven and reliable product to our extensive product line for swine. From everyday essentials such as injectable iron or cleaners and disinfectants, to quality pharmaceutical products such as feed additives or soluble powders, we strive to bring solutions to our customers.

www.vetoquinol.ca

Vétoquinol
a Sign of Passion



Saskatchewan Pork Industry Symposium 2011

November 15-16, 2011
Saskatoon Inn, Saskatoon, SK

Join us in Saskatoon for the 34th annual Saskatchewan Pork Industry Symposium. Our exciting line-up of speakers will offer practical information and concepts that can help improve your bottom line and insight on options available for managing financial risk in the future.

Symposium kicks off with motivational speaker Penney Murphy, of Penney Murphy & Associates, and her presentation

"Teamwork... Without the Trials, Tantrums and Tribulations!"

Dealing with unexpected disasters or emergencies can be distressing – you'll hear one company's experiences with coping in a crisis.

Breakout sessions will focus on attaining a farrowing rate and the role of piglet care in achieving optimum growth.

General session topics include setting gilt development targets and sow productivity – find out how to find the optimum balance or "sweet spot."

A leading Canadian genetics company will also provide valuable information on how to select for specific genetic traits in your herd!

Demonstrating expert animal care and welfare of livestock is important to our customers. We'll examine advancing animal welfare standards and what it can mean for pork producers.

The future of feed supply and the short and long term implications of a growing world demand for food and fuel will be explored. What does the future hold for alternative fuel sources?

On the economics side we'll look at the world pork outlook; how global disease and export market volatility factors into managing risk; and the top 5 traits you should track in your herd and key drivers to farm profitability!

The full agenda, brochure and registration information is available online at www.saskpork.com

For further information contact Kim Browne, Symposium Coordinator, Sask Pork
Tel: (306) 244-7752
(306) 244-1712

email: info@saskpork.com



I would love to see some bold publisher – with a reliable legal aide covering his back – putting aside a corner of his journal to analyze such examples. Not to ask what is wrong

"A negative result at the end of the nursery period could become a positive economic advantage at slaughter weight"

with them but to ask what has not been told. For example, temperature and in your case, climate, ventilation, stocking density, disease level, prior history of the farm and number of replicates. In the case of baby pig, weaner, and early grower trials the final outcome at slaughter should be considered - this last point has long been a bee in my bonnet, because a negative result at the end of the nursery period could become a positive economic advantage at slaughter weight. So many young-pig trials do not follow this up. But I digress.

Lucky you: so well-placed in Western Canada

You have plenty of trained scientists in your part of the world familiar with the dark arts of statistics who are very capable of guiding you towards a worthwhile trial design and what the outcome may mean. They are not too distant either, although much can be accomplished at long range. I used one in Germany whom I never met but he knew me and my clients, and I trusted his advice. So go seek them out!

How much does a statistician cost?

From 10 years ago I have recorded the actual cost of statistical supervision on 17 farm trials I was involved with, the last six being as late as 2009-2010. I don't think the earlier costs have changed that much proportionately, but as I have never seen figures like this before or since, I include them in Table 1 for you to consider.

The result of a farm trial is either positive, negative, or inconclusive. Here are 17 trials where eight were positive and a change made, nine were negative or inconclusive and no change was made. All were feed or feed supplement trials.

While 17 results from properly mounted and statistically-analyzed farm trials is a relatively small sample, these results put into perspective the perceived high cost of employing a statistician, which is the main objection of most producers - apart from that of the producer considering their assistance unnecessary anyway!

Note that if the result is considered statistically favourable, his cost could be still under 10% of the first year's benefit obtained. In other words a 10 to 1 payback, or REO 10:1 (Return on Extra Outlay) to use the modern measurement term. Good value! And even if negative or inconclusive, only under 2% of the current margin over feed cost has been "wasted" by using a statistician.

Table 1. How much did a statistician cost?

Positive result: Cost of a statistician's input in relation to 12 months subsequent increased gross margin(s) (cases) or improved income (6 cases).		Negative result: Cost of statistician in relation to current annual margin over feed costs per pig, (9 cases).	
Farm	%	Farm	%
1	36%*	1	1.31%
2	1.6%	2	0.81%
3	10.2%	3	0.56%
4	0.7%	4	0.89%
5	4.1%	5	0.5%
6	3.0%	6	1.7%
7	5.2%	7	2.1%
8	4.3%	8	0.9%
9		9	3.1%
Average	8.14%	Average	1.99%

*A very small farm, which has influenced the final average, but I include it anyway to show that (as in all cases of cost input) the more pigs the extra cost can be spread over, the better.

Conclusion

I submit that using a statistician is a good bet financially as well as having the peace of mind from not having wasted your time, and securing results on which you can take important decisions.

My advice therefore is blunt:

1. Do not do a farm trial without a statistician to design it to your "make me change" threshold and then to interpret what results appear.
2. Do not be too ambitious in fixing the threshold figure. Even if a positive result is tiny, it will have been statistically viable with a reasonable confidence limit built-in, to which you can apply a financial figure. In tough times even a cent more per kg is worth it!
3. Start getting quotes locally. University departments are finding times are hard along with the rest of us, and could be looking for extra-mural income. Some European feed firms will provide this for free or at a discount.
4. Insist that firms appearing on your doorstep with new, innovative products can back them up with properly mounted trial evidence based on statistical verification.

Ask which statistician they used!

If you need to see what statistics is all about, a book on the subject which didn't lose me completely by page 10, is Derek Rowntree's *Statistics without Tears* (Penguin). Simply put for simple souls like me! ■



BANFF PORK
S E M I N A R



Banff Pork Seminar

January 17-20, 2012

Banff, AB, Canada

Over 34 Internationally Recognized Experts

14 Hot Topic Issues

All sectors of the Pork Industry

Meet Canada's Pork Industry Leaders

450,000 Sows Represented

Sessions include:

- We Can Feed the World
- Local & Global Economics
- The Future of the World Depends on Agriculture
- Reducing Feed Costs
- Farrowing & Weaning Management: Towards 40 p/s/y
- Curing our Labour Pains
- Breakthroughs in Canadian Swine Nutrition Research
- Hedging your Bets - Financial Risk Management
- New Code of Practice for Animal Welfare
- Improving our Public Communications
- Reducing the Cost of Herd Health Management
- Genomics – The Future is Now
- Increasing Productivity of the Breeding Herd

For information and to register, contact:

Website: www.banffpork.ca **E-mail:** info@banffpork.ca

Phone: (780) 492-3651 **Fax:** (780) 492-5771

View from Europe

Yorkshire producer brings home the bacon

By Stuart Lumb

The Hirst family farm 900 acres (375ha) in West Yorkshire, quite close to Leeds and Wakefield, in a relatively urban area. This means effluent management of the 1000 sow unit has to be top notch. On the other hand, being close to built up areas means people are always driving past the farm and so a very successful pick-your-own strawberry business has also been built up over the years. Pigs have always been part of the farming business with 41-year old Robert running the pigs in a very much "hands on" style of management. Elder brother Charles runs the arable operation "sitting on a tractor seat all day long" as Robert jokingly remarks. Because farming is a family business, many farmers hang on far too long, reluctant to let go of the reins, which is very frustrating for the next generation. Father Fred still lives on the farm but is content to let Robert and Charles "get on with it".

The first thing that's apparent when walking into Brecks farm is that it's immaculate, with the yard surrounded by several containers of colourful red geraniums. The breeding pigs are kept on straw and so keeping things tidy takes time and effort. Often farms have a big tidy-up for visitors, but in this instance that's not the case and attention to detail runs through the whole farm. Unlike a lot of UK units, Robert has updated his buildings over the years and is currently putting up extra finishing accommodation.

Herd performance is very good and Robert modestly admits that he hit the BPEX 2 tonnes/sow target quite a few years ago. The profitability of the unit is undoubtedly also due to the fact that all the pigs are wet fed co-products, directly from weaning, with Robert feeding some quite unusual feedstuffs. Wet feeding co-products is not everyone's cup of tea, not least the headache of maintaining a regular supply of ingredients, some of which

"Co-products can be notoriously hard to feed due to their viscosity and general physical properties"

Robert was loathe to disclose, but he did admit to using whey, potato waste from a french fries factory and brewer's yeast,



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!

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

along with soya, plus homegrown wheat and barley. Robert uses the services of local nutritionist Dorothy Turner, who has been in the business for many years and who has specialist knowledge of formulating feeds based on co-products.

Co-products can be notoriously hard to feed due to their viscosity and general physical properties and so Robert is as much an engineer as he is a pig expert. As you approach the farm you can't help but notice a cluster of 6 huge silos, which each have a capacity of 160 tons.

Robert runs a closed herd on the female side and uses a criss-cross system to produce his replacement gilts, using top quality dam line semen from JSR Genetics. Landrace semen is used on prick-eared females and Large White semen used on lop-eared females so that the commercial females that are produced are two-thirds one-breed and one-third the other. The breeding companies argue that a criss-cross policy loses out on hybrid vigour and top quality genetics. Robert would argue that at 12.7 born alive his litter size is fine, plus using top quality semen compensates in terms of genetic lag, along with the considerable savings he can make compared to buying in around 350 gilts each year at £200 per head.

CONTINUED ON PAGE 68

MICRO-AID® Value To Bank On!

With over 45 years of experience and hundreds of research trials, why wouldn't you use

MICRO-AID® in all feed, all the time

Feed MICRO-AID®, enjoy the benefits for your...

- Livestock for a better environment inside and out and more efficient production.
- Employees for improved air quality and a better working environment.
- Neighbors for healthier relationships.

But most of all for...

- Yourself because MICRO-AID® returns a higher value than any other feed ingredient.

You CAN reduce costs and boost profits with MICRO-AID .com!

Cambridge Bio-Systems, Inc. (403) 274-3339
Premier AG Resources, Ltd. (519) 857-1177
17555 Ave. 168 Porterville, CA 93257
www.dpiglobal.com

MICRO-AID® is environmentally safe and reduces odor and sludge.

View from Europe Continued

Robert would also argue that the health benefits of having a closed herd make up for any perceived loss in genetic improvement. The herd was hit badly by PMWS some years ago but using Hampshire semen from PIC got things back to normal. Robert still uses Hampshire semen along with Circoflex PCV2 vaccine, which is doubled up with Mycoflex because the herd is EP positive.

Replacement gilts are kept in straw bedded yards and served at 230/240 days of age with heat being synchronized using Regumate. Robert targets 40 farrowings a week. Sows and gilts farrow in fully slatted pens, which have heat pads.

Whilst on a recent holiday Robert was shown how the swimming pool was heated, which incorporated a heat pump



Contented sows in a straw bedded yard with electronic sow feeding

to cut heating costs. He applied the same technology by installing equipment which currently heats 40 pads, with plans to fit more heat pumps.

The standard litter management tasks are carried out, with pigs receiving creep feed (reject breakfast cereals) from 12 days and lactating sows fed a 0.96% lysine ration. Weaning averages out at 26 days and takes place each Thursday. The weaned sows are all kept in one batch and a vasectomized boar is run with them for 3 days to prevent fighting. Sows come on heat on Monday are inseminated twice with a 24 hour interval.

Dry sows are all kept on solid floors and a Mustang skid steer machine is invaluable for cleaning out. Sows are fed a 0.65% lysine ration through Microware ESF feed stations. The dry sows are kept mainly in groups of 400. Being a thrifty guy, Robert has never bought a PD scanner or even a Doppler machine but simply relies on a V-boar, walked daily through the yards, to pick up returns which are subsequently re-inseminated. With a farrowing index of 2.4 this system obviously works extremely well.

"To get the piglets drinking, turkey drinkers are suspended at pig level for the first 2 weeks"

Traditionally most UK units had a 3-stage housing system, with a nursery taking pigs from 4-8 weeks, then a grower stage from 8-13 and finally a finisher phase. Like many others, Robert has gradually moved to a 2 stage system which simplifies management and saves on pig movement and loss of liveweight gain. Weaners are housed in groups of 360 for 8 weeks after weaning with the feed gradually being changed from creep to the 1.43% lysine weaner diet. To get the piglets drinking, turkey drinkers are suspended at pig level for the first 2 weeks after which water is provided by swinging "T" nipple drinkers. Flooring is fully slatted plastic although rubber mats are provided for comfort during the first 3 weeks post weaning.

In the finishing stage (40-110kg) pigs are also kept on fully slatted floors in groups of 360 and receive a 1.13% lysine diet, fed ad lib.

FOR SALE

Located in central Saskatchewan near the Moose Jaw pork plant, this 600 sow farrow to finish hog barn built in the mid 90s with permits in place. Great potential for an efficient hog operation. Located on 160 acres with good water supply. Vacant since Sept 2008 resulting in some deferred maintenance and some of the equipment has been removed. Mineral rights included.

Contact Roy for more info 306-761-1499



View from Europe



One of the nursery/grower pens with a liquid feeding system

Manually weighing slaughter pigs has always been a soul destroying job and "eyeballing" pigs to assess weights is harder than it looks. Five years ago Robert saw an Osborne Supersorter system whilst in the USA, could see the benefits, bought it and had it shipped over to Yorkshire. The benefits of this concept were not lost on Robert and in conjunction with a local pig building company installed the first Gromaster sorter in the UK. This worked extremely well such that Robert now has 13 Gromasters installed on the farm. Maximizing deadweights is vital in terms of profit and

thanks to the sorters the average deadweight is 88kg, with a P2 probe of 12mm. (The top grade is up to 14mm P2).

Slurry is stored in large lagoons and the surface is covered with granules which prevent smells evaporating. The slurry is injected after harvest and also applied to growing crops in the spring through a low level boom.

Robert takes vet students on placement and no doubt he has a queue a mile long given the way the farm performs. Robert steadfastly refuses to be entered for "Pig Farm of the Year" – as he says he doesn't want the hassle and just wants to carry on doing what he loves best – producing pigmeat as cheaply as possible. ■

Husky Farm
5070-100

Committed To Quality You Can Depend On

Maximizing Litter Mortality

Husky Has Your Complete Liquid Manure Handling Solution

21,500L Cap
30.5 x 32 R Tires

Vacuum Tanks, Lagoon Pumps, Poppler Agitators, Truck Mounted Tanks, Slim Line Tanks

Husky Farm Equipment Limited Alma, ON. NOB 1A0 1-800-349-1122
For More Information Contact ... husky@huskyfarm.ca www.huskyfarm.ca

Ad Index

AFSC.....	68	Magnum Swine Genetics	49/51/53
Agrovision	32	Masterfeeds.....	23
Alberta Swine Genetics	44	Maximum Swine Marketing.....	67
Assiniboine Community College.....	48	Merck Canada Inc.....	17
Bauff Pork Seminar.....	36/74	Merck Animal Health.....	79
Biovator/Nioex Systems Inc.....	37	Nordevco Associates Ltd.....	50
Boehringer Ingelheim.....	13/27	Nuhn Industries.....	6
Canada Farm Distributors.....	58	Parks Livestock.....	8
Canadian Bio-Systems.....	47	Parkview Pre-cast	18
Canadian Centre for Swine Improvement.....	30	Peak Swine Genetics.....	63
Canadian Farm Realty.....	52	Pfizer Animal Health.....	38/39/40/41/42/43
Canadian Nurs-ette Distributors	78	PIC.....	21
Canarm BSM.....	12	PigWIN.....	60
Carlo Genetics.....	25	Pork Chain Consulting	58
Champion Alstoc.....	14	Pro-Chain Products.....	19/29/59
Crystal Spring Hog Equipment.....	24	Protekta Inc.....	10
Danisco.....	16	Ralco Nutrition.....	65
Donkers Agri.....	34	Red Deer Swine Technology Workshop	70
DPI Global/MICRO-AID.....	75	Sand Ridge Farm Ltd.....	18
EastGen.....	78	Saskatchewan Pork Symposium	72
Echberg Distribution.....	46	Schauer Agrotecnic GmbH.....	45
Elanco.....	5	Shac Environmental Products Inc.	36
Fast Genetics.....	7	Sierens Equipment Ltd.	56
Genesis.....	2/26/34/56/64/80	SIGA Farm Software.....	35
Glass-Pac.....	20	Signature Genes.....	73
Grand Valley Fortifiers.....	61	Smart Sort Innovations.....	26
Halchemix Canada Inc.....	4	Standard Nutrition.....	55
Husky Farm Equipment.....	77	Sun-North Systems.....	62
Hypor Swine Group.....	15	Super Sorter / Baer Mfg.....	48
ITSL.....	75	SwineBooks.....	54
John Gulker.....	76	Tomco Livestock.....	52
Kane Manufacturing.....	60	Topigs.....	33
Kenpal Farm Products/dry START.....	64	Vetquinol	9/31/57/71
Landmark Feeds.....	11	Western Hog Journal.....	12/65
Robb Lepp.....	66		
Longarm.....	28		

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

MILK-BITS



PIG STARTER PELLETS
 Professionally Designed Complex Formula
 • Cold Processed • Milk Based Pellet

CANADIAN NURS-ETTE DISTRIBUTORS LTD.

FOR PRODUCT INFORMATION:
 Toll Free: (800) 667-6824
 Phone: (780) 872-4757 Fax: (780) 872-6797
 Camrose, AB
 e-mail: info@nursette.com



FEED SHOULD BE USED TO FUEL GROWTH – NOT TO FIGHT OFF CIRCOVIRUS AND MYCOPLASMA

NEW
 CONVENIENT,
"NO-MIX"
 FORMULATION



Circumvent[®] PCV M

MERCK
 Animal Health

Help reduce the nutrient-robbing impact of circovirus and mycoplasma, and prevent their negative effect on average daily gain,^{1,2} with **NEW Circumvent[®] PCV M**.

- The only **ready-to-use** vaccine against BOTH diseases
- Unique, **no-mixing-required** formulation for greater convenience

Greater convenience. No compromise.

1. Coutz G. Effects of immune system on metabolism: implications for production and disease resistance in livestock. *Leef Prod Sci*. 2002; 7(9): 227-238.
 2. Porter AM, Byrd J, Harg P. Effect of enzootic pneumonia of pigs on growth performance. *Aust. Vet. J.* January 1985; 62(1): 13-18.
 © Registered trademark of Intervet International B.V. Used under license.
 Merck & Animal Health (referred to as MSD) are trademarks of Merck & Co., Inc. outside the US and Canada, operating in Canada as Intervet Canada Corp, a subsidiary of Merck & Co., Inc. All rights reserved.
 MERCK and MSD are trademarks of Merck Sharp & Dohme Corp, a subsidiary of Merck & Co., Inc., Whitehouse Station, NJ, USA.
 Copyright © 2011 Intervet International B.V., a subsidiary of Merck & Co., Inc., Whitehouse Station, NJ, USA. All rights reserved.
 C80011-1E-40

4 TON 4 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

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

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