

Western Hog JOURNAL

Canadian Publication Mail No. 40062769



**FMD scare –
close shave or
communications
nightmare?**

**Stress and its
effects on the pig**



The First Power In Genetics

GENESUS

THE TRUE ALTERNATIVE

Swine Management Services (SMS) of Fremont, Nebraska is the world's largest swine benchmarking service. Genesis has participated in SMS Benchmarking since 2006 as the Service has grown from 380 farms with 722,417 females to its present 2009 level of 683 farms with 1,215,511 females. Genesis has grown along with SMS but one thing remains consistent, our domination of the results with, 8 of top 10 farms for all four years and 9 to 15 of the top 20 over the same period.

SMS Genesis Performance Data

(January 1st 2006 – December 31st 2009)

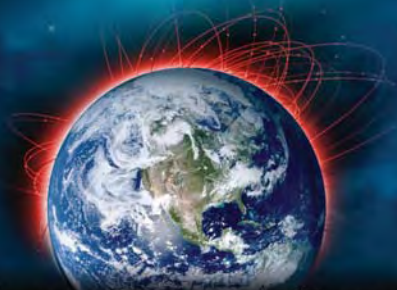
YEAR	2006	2007	2008	2009
No. of SMS Farms	380	467	585	683
No. of SMS Females	683,570	839,998	1,106,344	1,215,511
Genesis Top 10%	29.45	29.97	29.71	30.06
SMS Average All	22.58	22.94	23.30	23.80
Genesis Average All	26.41	26.55	26.78	26.82
SMS Bottom 25%	18.98	18.82	19.72	20.16
Genesis Bottom 25%	24.89	25.17	25.19	25.26
Genesis Herds in SMS Top 10	8	8	8	8
Genesis Herds in SMS Top 20	9	14	15	13

All major genetic companies are represented in the SMS database. The facts are indisputable; Genesis is the number one female, with consistent, significant, dominant performance four years running. Isn't it time you moved up to the Genesis Advantage?

GENESUS IS SECOND TO NONE - ANYTHING LESS IS A COMPROMISE.

www.genesus.com

Read Jim Long's Commentary at www.genesus.com



Over One Million Gilts Placed Globally.

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: whj@albertapork.com

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

Alan Irving, of Irvings Farm Fresh, with two of his free-range Berkshire pigs



London Swine Conference

Page 27

Editor's Notes.....	4
News and Views.....	6
Industry Viewpoint.....	14
Farm Focus	
Consistency the key to Colony's success.....	20
London Swine Conference	
New horizons in sow nutrition.....	27
Between the gate and plate: A grocer's perspective on the influence of consumer demands on the value chain.....	31
The impact of castration on growth performance – physical versus vaccination.....	37
Precision management – What top producers are doing to be profitable.....	42
Special Features	
FMD scare – close shave or communications nightmare?.....	45
Increasing the genetic impact of AI boars.....	47
Expeller-extracted canola meal is an excellent source of energy and amino acids.....	52
Bringing home the (British) bacon.....	54
Pre-weaning mortality – A key driver in weaned pig cost of production.....	58
International Round-up.....	61
View from Europe	
Stress and its effects on the pig.....	65
One Spanish producer is looking ahead.....	67
Ad Index.....	70

Welcome to the new look Western Hog Journal! We hope that you like the more modern look and especially the way the information is presented. The aim is to make it easier to read and to provide data in a clearer way. Our intention is to continue to evolve the new format, so your feedback is welcomed. Please let me have any comments or suggestions you may have about either the content or the 'look and feel' of the magazine.

The Canadian pork industry also looks a lot different today than it did just 5 years ago. A smaller and more efficient industry needs good technical information in order to be competitive in future and we intend to focus on topics that will provide critical information to producers. We are also going to address issues which impact producers' livelihoods, providing informed comment and a clear point of view.



BIOvator™

The #1 name for IN-VESSEL COMPOSTING

- Cost-effective and environmentally friendly solution
- Exceeds all provincial regulations and requirements
- Out-of-sight on-site process
- Reduces risk of disease-causing organisms and odour
- Processes mortalities into compost in 4 to 14 days

For more information on this innovative new alternative to traditional mortality management visit us at nioex.com

Nioex Systems Inc
ENVIRONMENTALLY AND SOCIALLY ACCEPTABLE SOLUTIONS

Canada **1.701.370.0782**
USA **1.507.381.1556**

For nearly three years, the Industry Crisis column has provided news of the difficulties producers around the world have faced and given some perspective on Canadian industry events. Now that producers are back in the black, this feature is being replaced by Industry Viewpoint, which will address similar issues and not be afraid to give an opinion on industry events and trends.

In this issue we investigate an event that potentially could have wiped out our industry; the suspected case of Foot and Mouth Disease at the Olymel plant in Red Deer. Fortunately, tests showed that it was a false alarm, but the response by most of the parties involved, notably CFIA, was a catalogue of errors, with poor communication between industry stakeholders and with other livestock sectors. Had this been a positive case, the repercussions would be unthinkable and producers, through their representative organizations, need to ensure that a coherent emergency plan is in place for any similar event in future.

On a lighter note, we have a heart warming story about a British couple who have successfully carved out a new market in Alberta for their dry cured British style bacon and fresh pork sausages. Initiatives such as this, although on a relatively small scale, help to increase consumption of Canadian pork products against a background of rising pork imports.

We hope that you enjoy the new look WHJ! ■

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

¹ Patience, J. et al. 2006. "Effect of Ractopamine 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

ELANCO

Paylean®

Get the Paylean Advantage

Biosecurity program aimed at reducing animal health risks

Alberta livestock producers are being invited to apply for a new biosecurity program aimed at increasing general awareness and adoption of biosecurity measures.

The three-year grant program, run by Growing Forward, offers financial support to producers, not-for-profit organizations and farm service providers to adopt and promote biosecurity measures in line with industry-developed national standards and benchmarks.

Projects supported by the program are on a cost-shared basis. Grants will cover 50 per cent of eligible expenses for approved activities. Applicants

will be expected to cover the remaining 50 per cent. The maximum amount available under Growing Forward is \$20,000 for producer projects and \$80,000 for not-for-profit and farm service provider projects. Eligible producers - those generating at least \$10,000 worth of farm commodities annually - may submit projects exceeding \$2,000. Applications must be received by September 30, 2012.

Eligible activities include the implementation of biosecurity measures, including feasibility and risk assessments, and the purchase of equipment, software and other technologies approved for use in the implementation of biosecurity measures. Activities such as the delivery, implementation and promotion of biosecurity programs and the development of training materials that increase awareness and assist with on-farm implementation are also eligible.

The adoption of biosecurity practices will provide greater emphasis on overall disease prevention, minimize the economic impact of disease

and reduce the risk of zoonotic disease on animal and human health, says a Growing Forward news release.

For more information on Growing Forward and the Biosecurity Program, including program terms and conditions and work plan applications, visit www.growingforward.alberta.ca or call 310-FARM (3276) to connect with an Agriculture and Rural Development biosecurity specialist.

Maple Leaf launches premium pork brand

Maple Leaf Consumer Foods launched a premium range of pork products - Maple Leaf Prime Pork - in July, which it hopes will stimulate domestic sales, reports Farmscape.ca. The premium line of moisture enhanced pork products comes from cuts of fresh pork selected for colour and marbling at the company's Brandon processing plant. Moisture enhancement and packaging takes place at a Maple Leaf facility in Alberta.

Maple Leaf vice-president of procurement John Carney says the company has had success with its line of Prime Poultry and from that response realized there's a market for a high quality pork product. The company is using Prime Pork as a vehicle to increase market share and stimulate sales of Canadian pork.

"Consumers generally tend to overcook pork"

"We're targeting consumers that are looking for a product that will deliver great taste every time," says Carney. "The moisture enhancement ensures that pork tastes good no matter how you prepare it because what we know from consumer studies is that consumers generally tend to overcook pork and the moisture enhancement serves to ensure that it's tender and tasty every time."

The product has been extensively tested in 80 stores in western Canada over 20 months and the results show that consumers are looking for a product that delivers high quality, better taste and freshness, according to

CONTINUED ON PAGE 8

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 Pine Haven Colony for choosing Paneltim for their grower/finisher rooms renovation.



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

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

WATSON® 2.0, an **EFFICIENT** * decision-making tool!



With **WATSON® 2.0**,
you improve your **profitability**,
without taking risks!

To take advantage of this exclusive innovation,
contact your Landmark Feeds swine nutrition advisor:

- **Winnipeg: 1 888 332-9992 (MB/SK)**
- **Strathmore: 1 800 661-9082 (AB)**



THE POWER OF RESEARCH WITHIN YOUR REACH

Landmark Feeds

Carney. "We have had strong acceptance of the product in our testing and we are very confident that consumers are going to want to purchase this pork," he notes. "It's available in Sobey's West, Federated Co-op, Calgary Co-op and Overwaitea Food Group."

New delivery process for farm EFPs in Alberta

Program delivery for the Alberta Environmental Farm Plan (EFP) is now coordinated through Alberta Agriculture and Rural Development (ARD). There are no changes being made to the program and the resource materials used together with the technical assistance available to producers are the same.

"The EFP process is designed to be simple and straightforward," says program spokesperson, Perry Phillips, who serves in EFP training and support and has worked with the EFP

program over the past several years. The EFP is a voluntary self-assessment process for producers to determine strengths and weaknesses of their farming operation from an environmental perspective

To begin their EFP process, producers contact the ARD toll-free helpline at 310-FARM (3276). They will be referred to a Technical Assistant. A paper version of the EFP workbook and a new CD version are available free of charge. Producers can complete an EFP on an individual basis or by participating in workshops where available.

More information is available on the Alberta EFP website at www.albertaEFP.com, which includes a feature article on this topic.

Alberta immigration rules won't affect hog producers

Alberta producers, who have struggled with a labour shortage for years and have come to rely heavily on foreign workers, received a

shock in August when the province announced changes to immigration policy. At first glance it appeared from some reports that the Alberta Immigrant Nominee Program (AINP) was being suspended, which would have impacted many people working in the industry on a work visa but hoping to obtain residency through AINP. But closer inspection revealed that the government intended to stop applications under two categories only, the "family stream" and US visa holder categories. "This won't impact producers and their foreign workers who wish to apply under AINP," comments Marvin Salomons, who advises producers on foreign labour issues. "I believe that the government wants to focus on the workers who are here and have jobs," he adds, noting that the processing time for AINP has become considerably longer over the last couple of years.

Liberal critic Hugh MacDonald questioned the government's priorities, arguing the temporary foreign worker

program should have been axed first, according to the Edmonton Sun. "If the government is sincere in their view that we need to have jobs for Albertans and Canadians first, as Mr. Lukaszuk has put it, then the temporary foreign worker program should be ended first, not these two

"Producers still cannot find suitably skilled labour locally"

immigration programs," he said. But Alberta livestock producers would suffer seriously if this happened, says Bernie Peet of Pork Chain Consulting. "Producers still cannot find suitably skilled labour locally, despite advertising extensively," he explains. "Fortunately, provided the correct process is followed and a producer can demonstrate that a suitable candidate is not available, HRSDC is issuing positive Labour Market Opinions, enabling foreign workers to be hired."

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



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

FLEX



One mix fix.

Ingelvac CircoFLEX-MycoFLEX® the first approved combination vaccine for use in pigs 3 weeks of age and older as an aid in the prevention of **both** porcine circovirus type 2 (PCV2) and *Mycoplasma hyopneumoniae* infections.

Ingelvac CircoFLEX® and Ingelvac MycoFLEX® are two highly effective, single-dose vaccines. For optimum FLEXibility, they can now also be mixed and administered as a single-dose, 2mL injection. It's a winning combination that saves time, labour and stress on pigs.



FLEX

©2008 Boehringer Ingelheim Vetmedica, Inc.

Ingelvac CircoFLEX-MycoFLEX is a registered trademark of Boehringer Ingelheim Vetmedica, GmbH, Ingelheim, Germany. Always read, understand and follow the label directions. BI S130911-AG1 9/06

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



Boehringer
Ingelheim

Increased alley width recommended for market hogs

From Farmscape.ca files

Research at the Prairie Swine Centre in Saskatoon suggests that increasing the alley width in modern swine barns reduces stress and makes the loading of market hogs faster and easier.

The study examined the impact of various alley widths when moving different sized groups of pigs on stress and on the amount of time required to move the animals.

Dr. Harold Gonyou, a research scientist in animal behaviour, says the standard

60 centimetre alley width - the width of two pigs 10 to 15 years ago when producers were marketing slightly smaller pigs - is no longer sufficient.

"Now 60 centimetres isn't wide enough for two pigs to walk down side by side," Gonyou explains. "They tend to have difficulty doing that so it becomes difficult to handle them in that narrow of a space so we looked at some wider alleys to see if they would move better."

The researchers found that 90 centimetres was a good alley width. "We also went as high as 2.4 metres which is quite a wide alley but we were also looking at moving groups of up to 20 pigs in a group," Gonyou continues. "It's recommended that, if you're moving pigs to load onto a truck, that you should move them in groups of four to six."

The study looked at groups of 4, 8, 12 and 20 pigs. It found that up to 20 pigs could move quite well along a 90 centimetre alley, although there was some blocking with the larger groups.

"If you went to large groups such as 20 pigs moving at once we would probably recommend that you build for 1.2 metres wide in your alleyway so that they would continue to move well," advises Gonyou.

answers a pork production challenge or is creative use of a known technology. The innovation may apply to any aspect of production such as feeding, breeding, disease control, manure management, ventilation and pork quality or food safety.

Up to three prizes may be awarded, each with a value of \$1,800. The prize is free registration to the Banff Pork Seminar for the winners and their guests, together with 3 nights' accommodation and travel expenses.

Entries must be received by October 30, 2010 and can be submitted to Banff Pork Seminar at 4-10 Agriculture/Forestry Centre, University of Alberta, Edmonton, Alberta T6G 2P5 or by email info@banffpork.ca.

FX Aherne prize for innovative pork production

The Banff Pork Seminar is seeking applications for the 2011 Dr FX Aherne Prize for Innovative Pork Production. Any innovation, big or small, will be considered as long as it is an original solution that



Red Deer Swine Technology Workshop

November 3rd, 2010

Capri Centre Exhibition Hall, Red Deer, Alberta

Join us for an interactive technical workshop aimed at improving your performance and profitability, with practical, hands-on speakers with proven management expertise

Topics include:

Getting the Best from AI • Feeding Sows Ad-Lib in Lactation • Ten Things You Should Know About Decreasing Heating and Ventilation Costs • How to be a Great Team Member • What Does Your Production Manager Look For? • Setting up an Effective Farm Trial • Your Pigs Past the Farm gate – What Happens in the Plant and How You Can Influence Pork Quality •

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

Coccidiosis still a significant concern for swine producers

Bayer HealthCare, Animal Health is on track to launch Baycox® 5% into the Canadian market this fall. Baycox® 5% is the first Health Canada approved product for the treatment of coccidiosis in swine herds and will be available to veterinarians and pork producers (via their veterinarians).

“Baycox® 5% has helped producers in other countries to raise healthier, more uniform piglets and we are excited that Canadian pork producers will soon be able to access this product from their veterinarian,” said Dr. Bruce Kilmer, director of Veterinary Services and Regulatory Affairs for Bayer HealthCare, Animal Health.

“One of the significant issues facing all swine producers is coccidiosis”

Data presented at the recent International Pig Veterinary Society Congress in Vancouver, Canada confirmed that one of the significant issues facing all swine producers is coccidiosis. This common disease is believed to be present in the majority of swine herds, causes significant financial losses and remains a truly global issue.



Suckling pigs – Coccidiosis in suckling pigs is an increasing problem

A key paper at the IPVS congress was presented by Dr. Steven McOrist, whose team studied the impact of treatment with Baycox® 5% in an on-farm study of a herd of more than 5,000 pigs in a grower-finisher facility in Romania.

According to Dr. McOrist “Our study demonstrated the protective effects of Baycox on gut health in treated pigs, with a significant drop in oocyst count in piglets around weaning in the treated group ($p < 0.01$). There was also a marked improvement in feed conversion in treated weaner-finisher pigs (2.41 vs. 2.63), with weight gains consistently and significantly better through

to day 150 and evidence of a protective effect against a late, moderate Lawsonia exposure during the study.”

Dr. Kilmer reinforced the importance of the study stating “Coccidiosis prevention is a critical piglet health practice. This new information further demonstrates the added value that improving gut health can have throughout the swine production system.”

CONTINUED ON PAGE 12



Boar Unit

www.carlogenetics.com
204 355 4012

Quality

*is still
the
Answer*






New Director for Pfizer Animal Health Canada



Pfizer Canada has announced the appointment of Jair Garcia, DVM to Division Director, Animal Health Canada, following the recent worldwide integration of Wyeth with Pfizer Inc.

With more than 15 years of experience in the animal health industry, Dr. Garcia was most recently the Regional Director Latin America for Wyeth – Fort Dodge Animal Health. Over the course of his career with Wyeth he has held several positions of increasing responsibility both in Brazil

and in the US as Business Manager Latin America and then Regional Director Latin America responsible for Argentina, Colombia and Venezuela Profit Centers.

He holds a degree in Veterinary Medicine (DVM) from Sao Paulo State University in Brazil.

Changes to temporary foreign worker program

Changes to the Temporary Foreign Worker Program have been announced, which come into effect on April 1, 2011. Aimed at protecting workers from potential abuse and exploitation, the measures include:

- a more rigorous assessment of the genuineness of the job offer;
- a two-year prohibition from hiring temporary foreign workers for employers who fail to meet their commitments to workers with respect to wages, working conditions and occupation; and
- a limit on the length of time a temporary foreign worker may work in Canada before returning home.

Employers seeking to hire temporary foreign workers, including live-in caregivers, will now be assessed against past compliance with program requirements before authorization can be granted. Employers found to have violated worker rights may be refused authorization to hire a foreign worker.

Canada's Temporary Foreign Worker Program helps address temporary labour shortages by allowing employers to hire foreign workers when sufficient numbers of Canadian workers are not readily available. Without access to temporary foreign labour, many small businesses would not be able to function and would be forced into insolvency, says a government news release.

Red Deer workshop set for success

This year's Red Deer Swine Technology Workshop is shaping up to be a great success and the response from the industry has been excellent, according to workshop manager Bernie Peet. The event is being held at the Capri Hotel

and Convention Centre on November 3rd.

"This year, we have had outstanding support from the industry, with all the booth space taken and generous sponsorship, which is very encouraging," he says. "We had a very successful event last year and are hoping it will be even better this year."

Once again, the workshop will focus on practical management related topics aimed at increasing productivity and profitability. Topics include "Getting the best from AI", "Feeding sows ad-lib in lactation", "How to be a great team member" and "What your production manager looks for".

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

The full program, together with an application form, is available on the Alberta Pork website, www.albertapork.com. ■



ALBERTA SWINE GENETICS CORPORATION
1.800.691.3060
AI... for the simplicity of it

THE AI PLACE

Announcing the birth of a new gold standard



Introducing FarrowSure[®] GOLD B, the new choice for a healthier litter.

New Formulation:

- 2-mL dose volume – a smaller dose both you and your sows will appreciate
- Safe – no serious systemic or allergic reactions in field trials with over 1,000 animals

Full Protection:

- Immunity against porcine parvovirus and 6 serovars of *Leptospira*, including the most common: *L. bratislava* and *L. pomona*
- 18 weeks of immunity against erysipelas

Dependable:

- Supply
- Service that includes a dedicated swine team and veterinary services



FarrowSure[®] **GOLD B**

The new standard is Gold



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. Now that the economic situation has improved, 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.

Hog numbers still declining

The latest Statistics Canada data, for July 1st 2010, suggests that while hog numbers are still falling, the rate of decline is slowing. Over the 12 months to July 1st, total hog inventory fell by 2.4%, to 11.8 million, down from 12.1 million a year earlier. While Atlantic Canada lost 12% of its total pig numbers over the year and BC nearly 20%, both Quebec (+1.4%) and Manitoba (+3%) showed gains in inventory. The Canadian breeding herd reduced by another 4.8% over the year as the Hog Transition Program continued to remove sows, resulting in an inventory of 1.3 million sows and gilts on July

1st. Total hog numbers have now fallen by 22% compared to their 2005/6 peak and sow and gilt numbers by 20%.

In the east, the Quebec industry has seen the least attrition over the last five years, with an 8.3% drop in total hog numbers since 2005, while sow numbers have reduced by 11%. Over the same period, neighbouring Ontario has seen total hog numbers fall by 29% and sow numbers by 22.7%, the highest fallout in terms of pig numbers of all provinces. In the west, Manitoba has lost 12.6% of its total hogs and 14.6% of its sows and gilts since numbers peaked in 2007. Saskatchewan lost another 8.1% of its sows and gilts in the year to July 1st,



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
- Veterinary Consultation
- Prompt payment terms
- 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



while total hog numbers fell by 9.1%. Sow numbers in the province are down by 34.8% since their peak in 2005. Over the same period, Alberta's sow herd fell by nearly 29%, losing 5% in the last year alone. The huge exodus from pork production in BC continued as several large operations quit production, resulting in a loss of over 5,000 sows, or 34% of the industry in just one year. BC appears to be heading towards becoming a pig-free zone, just like the Maritimes, which has seen its industry virtually wiped out.

"BC appears to be heading towards becoming a pig-free zone"

Despite the significant drop in total production, the net result is that Canada is still slaughtering as many pigs as ever, with 21.9 million hogs in 2009, only 1 million less than the peak in 2004. Exports of live pigs to the USA has declined from a peak of around 10 million in 2007 to a figure of 1.4 million for the second quarter of 2010, equivalent to an annual figure of 5.6 million.

The number of hog producers in Canada is dwindling rapidly, although Statistics Canada figures are extremely suspect. Taking them at face value, there are 7,050 producers in total, down 42% over the last five years. Not surprisingly, Quebec has seen the least damage, with a 26% loss, while there are now 42% less producers in Ontario. The figures for Manitoba, Saskatchewan, Alberta and BC are 41%, 66%, 58% and 21% respectively. The figure for BC is highly suspect as it shows a figure of 665 producers, when there are believed to be only about 20 supplying pigs through the provincial marketing board. In Alberta, a recent survey by Alberta Pork indicates that there are 380 producers, while census results show 770. This suggests that Statistics Canada needs to take a close look at the sources of their data and perhaps consult with the provincial producer organizations. It seems likely that there are now less than 5,000 producers in Canada.

Consumption stagnant as imports rise

Pork consumption in Canada, already low by comparison with many other countries, has been falling since a peak of 30kg per capita carcass weight equivalent in 1999. Over the last five years, consumption has been stagnant at around 23kg. At the same time, imports from the USA have taken a massive 25% of the domestic market, increasing dramatically over the last few years due to the strength of the Canadian dollar. The industry has been remarkably slow to respond to this situation, although there was a burst of activity in 2008, when Pork Marketing Canada had some success with introducing a "Canadian Pork" label. Unfortunately, since then, it has become

virtually impossible to distinguish Canadian pork in the store, so it is hardly surprising that most consumers buy on price. Now the Canadian Pork Council is setting up a new, as yet un-named, national pork marketing body, which for some inexplicable reason won't see the light of day until next February, by which time, no doubt imports will form an even bigger part of domestic consumption. CPC says the agency will build on the work started by Pork Marketing Canada and will focus on increasing the value to Canadian hog producers of pork marketed domestically, undertake research to determine where opportunities exist, prioritize those opportunities, and strike alliances with industry players to capture the opportunities.

CONTINUED ON PAGE 16

All the benefits of soy protein.



Now without the negatives.

PepSoyGen®

PepSoyGen® is an innovative, soy-based protein ingredient, manufactured by solid-state fermentation. The process significantly increases the protein content of the final product. Additionally, the patented strains of *Aspergillus oryzae* and *Bacillus subtilis* utilized in the manufacture of PepSoyGen® remain viable in the finished product, providing a valuable source of direct-fed microbials.

www.PepSoyGen.com



Distributed in Canada by:

Pro-Ag Products, Ltd.

1051 Marion Street • Winnipeg, Manitoba, R2J 0L1
www.pro-ag.com • 800.806.2737

Industry Viewpoint *Continued*

Interim chairman of the new pork marketing body Curtiss Littlejohn, an Ontario producer and former chair of Ontario Pork, spoke these singularly uninspiring words in a Farmscape.ca broadcast. "What we're going to focus on is the key things that make Canadian pork different than other places in the world. We're going to focus on our genetics, we're going to look at building

"It has become virtually impossible to distinguish Canadian pork in the store"

things such as grading so that we can and the consumer can understand why one cut of pork may be slightly better than another cut of pork, why our export markets have already in place some form of grading, we're going to build on the Canadian Quality Assurance model which is a HACCP based farm food safety program and we're looking at taking it to the domestic consumers with the goal being to retake a large portion of the Canadian pork market that has gone to exports." Hopefully CPC will hire some marketing professionals, who will explain to Mr. Littlejohn that consumers aren't interested in genetics, grading systems, or indeed what happens in export markets; what they want is tasty, healthy, safe pork at a reasonable price.

CPC and the Canadian Meat Council have also taken up the issue of labelling of imported pork with Agriculture Minister

Gerry Ritz, asking that CFIA provide more specific resources to policing the labelling compliance of imported products sold in retail stores. "The current state of affairs is doing a direct disservice to Canadian consumers at a time when they are more concerned than ever about the origin and safety of the foods that they purchase," says the letter. CPC and CMC believe that Canadian customers are confused by the ongoing labelling non-compliance. "It has been our experience that the Canadian Food Inspection Agency's enforcement at retail appears to be complaints-based and that by reporting evidence of non-compliance, steps are then taken," the letter adds.

This situation with enforcement is similar to many other countries in the world and the industry needs to be much more aggressive in ensuring that consumers can recognize home produced product. Perhaps we should follow the British example of naming and shaming retailers with a poor record of supporting the domestic industry? A regular national "Supermarket Watch", carried out by producers and others in the industry, catalogues the percentage of shelf space taken by British and imported products in the fresh pork, bacon and ham categories. It also identifies incorrect or misleading labelling and then takes the results back to the retailers and asks them to improve. There is no doubt that more imagination, creativity, effort and money need to be directed at the threat of imported pork to our production sector.

CONTINUED ON PAGE 18

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

Gleptosil

Iron that's Good as Gold

Most producers will wean 7 more piglets per 10 bottles than with iron dextran.
In fact that's an investment better than gold.

For more information ask your veterinarian/distributor or call 1.800.456.5758
or Click: service@championalstoe.com



Gleptosil[®] is a registered trademark of Alstoe Ltd., Champion Alstoe Animal Health Inc., authorised user. Copyright 2005



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

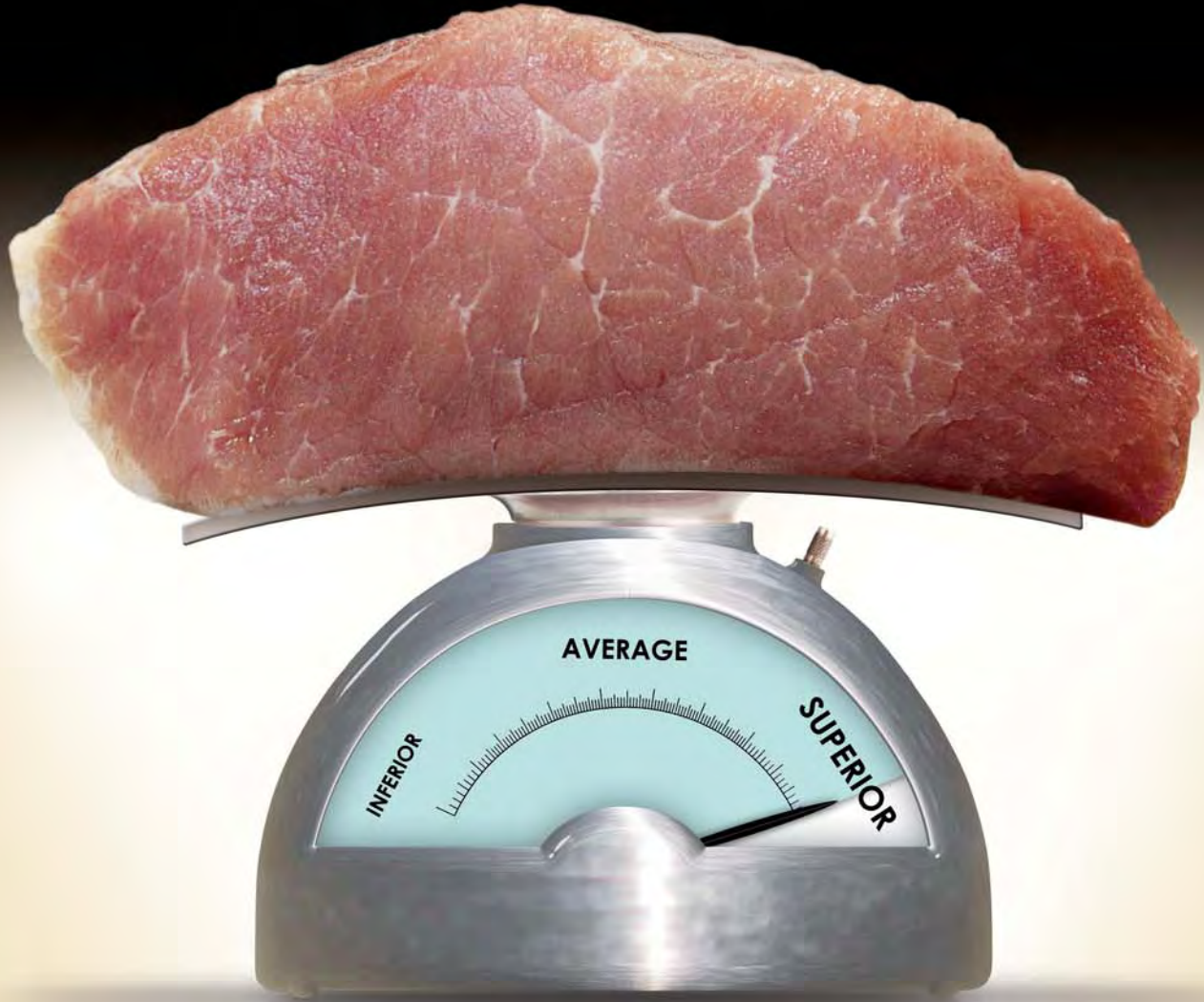
- Elasticized top
- Textured bottom to reduce slipping
- Cost-effective
- XL or Jumbo size
- US and other patents pending

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

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[™]
premium pig genetics from people you can count on



Canadian producers are unable to identify home produced pork in the store

Alberta Pork axes consumer services office

Alberta Pork has closed down its Consumer Services Division located in Calgary, due to the impact of the sharp economic downturn in the pork industry and a dramatic drop in the number of producers. The division has provided high quality food service and retail pork product information through numerous pork promotion and marketing campaigns for more than 20 years. Its Consumer Services Manager, Roy Kruse, was also the manager of Pork Marketing Canada.

“Over the last few years Canada’s pork producers have incurred a sharp economic decline that has reduced the number of producers in Alberta to approximately 380 and has reduced the number of pigs to less than 3 million,” says Alberta Pork’s Executive Director Darcy Fitzgerald. “To compound this situation, a recent government decision to make Alberta Pork levies refundable is anticipated to place tighter fiscal restraints on Alberta Pork. These new realities have forced Alberta Pork to refocus its activities to only those mandated objectives that provide clear direct benefit to the primary pork producer.”

Future efforts and support to the processing, food service, and retail sectors will be directed through a new but reduced national campaign effort for Canadian pork. This significant shift in strategic direction will reduce the budget strains at Alberta Pork as the organization prepares to operate within a new more focused mandate, the organization believes.

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. • P204.433.7178 • F204.433.7540 • www.cshe.com • info@cshe.com • 1 Crystal Spring Dr, Ste Agathe MB R0G 1Y0 Canada

Feed price threatens profitability

Just as pork producers around the world had started to make a profit, a rapid rise in feed ingredient prices, notably wheat but also other grains and protein sources, threatens to eat into margins. Drought in Russia, floods in the Prairie region and abnormal weather in parts of Europe have all contributed to grain price rises, coupled with the usual speculator activity. And, this isn't a one-off situation, says a leading international bank.

Wheat prices will remain high for the next ten years, says Rabobank's Director of Commodities, Dirk Jan Kennes. The current price peak is not only down to the Russian drought, but signals a structural change in the market, he believes. "The US could offer short-term solutions. But long-term the food industry must improve efficiency, or charge consumers more for bread, beer and meat."

"Wheat prices will remain high for the next ten years"

Wheat prices rose by more than 50 per cent between the end of June and the middle of August, topping €200 per tonne, according to Rabobank. The immediate cause of the spike is the continuing drought in Russia, Ukraine and Kazakhstan, which has devastated crops. EU producers France and Germany are also bracing for poor harvests. Prices rose even further when President Putin announced a ban on grain exports from 15 August until the end of the year.

"For the first time since the 2008 food crisis, we are producing less wheat than we consume," Kennes explains. "Growing populations and rising prosperity are causing this growth in demand." Although stock levels are currently high, the world probably does need to deal with lower average stocks, he suggests.

In the last three years, wheat production has increased by 15 per cent, from 600 million tonnes in 2007 to 680 million tonnes in 2008 and 2009. The bulk of the extra wheat came from countries in the former Soviet Union and the EU, picking up the slack left by US farmers as they switched their wheat acreage to corn and soybeans. But as harvests fail in Europe, there may still be relief in sight from the US, Kennes feels.

"Although wheat acreage has shrunk, we are expecting big export volumes in the US. This could meet demand and prevent further reduction of stocks. India currently holds strategic stocks of 14 million tonnes, in contrast to their normal level of eight million tonnes. So if the US harvest does disappoint, the solution may lie in the East." ■



Treating pigs just got simpler.

Aureomycin is now approved for swine at 22 mg/kg body weight.*

* Aureomycin chlortetracycline is now approved as an aid in the prevention of porcine proliferative enteropathy (swine ileitis) when fed at 22 mg/kg body weight for 14 days.

- **FIRST**
In the Canadian Industry
- **PREVENTS**
Approved as an aid in the prevention of porcine proliferative enteropathy (swine ileitis)
- **EXCLUSIVE**
Canadian approval granted to Aureomycin Brand of Chlortetracycline only
- **22 mg / kg body weight for 14 days**

*Saskatchewan
and Manitoba*
Dean Mullin
(204) 333-7011

*Alberta and
British Columbia*
Adam Carlson
(403) 394-4807

Alpharma Canada Corporation
6950 Creditview Road
Unit 1A
Mississauga, ON L5N 0A6

 **ALPHARMA**[®]
Animal Health
Tel: 1-800-265-7167

Alpharma, the Alpharma logo and BMD are registered trademarks of Alpharma Inc. © 2009 Alpharma Inc. All rights reserved.

Farm Focus

Consistency the key to Colony's success

By Bernie Peet

Achieving consistently high breeding herd performance is always a challenge, with many factors conspiring to create variation from week to week and year to year. So, when visiting a farm that has produced in the region of 28 - 30 pigs per sow for eight years straight, it is interesting to examine how this is achieved. Hutterville Colony, located near Welling, south of Lethbridge, Alberta, operates a 500 sow farrow to finish unit that demonstrates how dedicated and consistent management produces outstanding results. Built in 1999, the unit produces both F1 gilts for Peak Swine Genetics and also market hogs, which are shipped to Maple Leaf Foods at Lethbridge.

The Hutterville team is led by Hog Boss Ted Waldner. His father Jake looks after the breeding and gestation department,

CONTINUED ON PAGE 22



The team at Hutterville Colony - (L to R) Summer helper Levi Wipf, Ben Wipf, Sam Waldner, Jake Waldner and Ted Waldner



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

DEVELOPED & MANUFACTURED BY
NUVAC
Saint-Jean-sur-Richelieu, QC, Canada

An Incredible Duo!

Get a **FREE** 18.9 L container of **Biosolve Plus** with every purchase of a 20 kg of **Virkon***



★★★★★
"A remarkable performance!
They work perfectly together!"
-THE critic

Discover the power of **Biosolve Plus** through this spectacular offer!

Cleaning with a detergent optimizes the effectiveness of your disinfectant.

* Valid at participating dealers only, from October 1st till December 31st 2010.

www.vetoquinol.ca

Vétoquinol
a Sign of Passion



Saskatchewan Pork Industry SYMPOSIUM 2010



November 23-24, 2010
Saskatoon Inn
Saskatoon, SK



Sask Pork proudly presents the 33rd annual Pork Industry Symposium
"GETTING FROM GOOD TO GREAT!".

This year's line-up of speakers will deliver insightful, practical advice and concepts that can be applied from the barn to the boardroom: improving herd health and productivity through effective management of endemic diseases in the barn; the impact of animal handling on meat quality; the benefits of regular vaccinations and the trend towards needle-free injection; managing large litters; and developing a swine well-being approach to your production system.

Discover the dynamics of the "new world of work" and the four generations in today's inter-generational and inter-cultural workforces: gen-Y, gen-X, Traditionalists and Boomers.

Our international speakers include Bob Brcka, President of PigCHAMP who will discuss emerging technology in animal traceability and electronic identification systems and Dr. Steve Meyer, President of Paragon Economics who will present his analysis of the North American pork industry. The ever-popular Hot Topics Panel Discussion will round out the conference on Day 2.

Symposium also welcomes for the first time, Jeff Richards, Western Canada's Hottest Mentalist who will provide the entertainment at the evening banquet!

To download the full agenda and registration information go to www.saskpork.com.



Sask Pork 2-502 45th Street West • Saskatoon, SK
Tel: 306.244.7752 • Fax 306.244.1712
email: info@saskpork.com • www.saskpork.com

Farm Focus *continued*

while Ben Wipf runs the farrowing rooms and Sam Waldner takes care of the nursery and finishing sections. It's quite obvious from the discussions about pig management, that this team not only shares the same goals, but implements clearly defined management practices in a consistent way, using the correct technique and at the right time. Nothing is left to chance.

In the breeding barn, Jake Waldner explains the routine. "Sows are weaned at 5am on a Monday morning and we start breeding with the boars on the Friday at 4am. Out of the 23 or 24 sows weaned, 18-20 will be bred for the first time on a Friday morning." Most of the rest are standing by Friday afternoon and bred then. A second mating is carried out 24 hours later. "We only breed sows when they are strongly on heat," Waldner adds. Starting so early in the morning means that sows are very quiet, because the sows and boars are not expecting to be fed, which helps the breeding process go more smoothly and reduces stress.

In the breeding area, there are pens with five stalls with "up and over" rear gates that can be operated from the alley in front of the pen. Each week, one sow is weaned into each pen and remains there until after the first return check when she will be moved to a gestation stall. A boar is housed behind the sows, but removed from the time the sows are weaned early on Monday morning until 11 am on Tuesday morning.

Sows are fed three times per day from weaning to attain an intake of 9-10 lbs per day until breeding if possible. Up to day 35 of gestation, they are fed according to condition, with most sows receiving 5 lbs/day but thinner ones getting up to 8 lbs/day if necessary. The feed level is adjusted according to body condition at 35 days. Three weeks prior to farrowing all sows are stepped up to 7 lbs/day, with gilts receiving 6 lbs.

"There is more focus on quality of pig than sheer numbers"

Each week's breeding group of about 24 sows is housed in a row in the gestation stalls and identified with a week number and a colour mark – red, purple or green – according to the week number. Each group has a record card that shows the vaccinations carried out, any returns or culls and the results of pregnancy testing at 35 days. Sows also have an individual lifetime record, which has breeding information on one side and farrowing data on the other, which follows the sow wherever she goes. The recording and identification system enables sows to be rapidly located and helps to ensure that nothing is missed.

Reviewing the breeding herd results shows that weaning to service interval averages less than 5 days and that there are very few returns to service. Although farrowing rate has been lower than usual over the past year, it has averaged over 90% over the last 8 years.

With such a close spread of mating dates, sows farrow within a very tight range, usually within two days. Any sow that has not farrowed by its due date is induced to farrow the day after. Prior to farrowing, feed is cut back from 4.5 – 5 lbs/day to 2 - 3 lbs for two days before the due date, and then on the day of farrowing they receive nothing. “If we over-feed before farrowing, we have to assist more,” notes Ted Waldner. Litter size averages around 12 born alive, but there is more focus on quality of pig than sheer numbers. Piglets are weighed at birth and average 1.6kg. Such a high birth weight, with very few unviable piglets, means that death loss is extremely low. When asked how this is achieved, Waldner suggests that providing supplementary milk plays a significant role. “The milk system ensures that no piglet is ever short of milk and trials have shown that weaning weight increases by 2 to 2.5 lbs when



CONTINUED ON PAGE 24

A milk system helps to maximize piglet survival and increase weaning weight



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
Les Robinson 250-833-6196
Paul Klingeman 509-989-1347
Toll Free 1-888-235-7325

**Passionately
 Delivering
 Exceptional
 Pig
 Breeding
 Experiences**

For information on our ***Summit Gilts***
 or ***Trailblazer Boars*** contact us today !



Each finishing room has two feed bins, one each for barrows and gilts

we use the system,” he explains. “We believe that pig quality at birth, at weaning and out of the nursery is the key to rapid and efficient growth up to market weight.” Waldner also feels that the large farrowing pen, with an 8ft crate is essential to achieve a high piglet survival rate and that a good ventilation system is important because the correct temperature and freedom from drafts are critical for both sow and piglets.

Sows have their feed increased gradually after farrowing and after 7 days feeding takes place three times per day.

Water is added to the feed in order to make a slurry and help improve appetite and sows are typically eating 22 – 23 lbs by weaning. “We don’t push them too hard, especially in the first week after farrowing, otherwise they go off their feed,” Ted Waldner notes.

A tight farrowing schedule helps with fostering, which Waldner believes is another key factor in the high piglet survival. Almost all fostering is done within 36 hours of birth, although if there are extremely large litters they will be fostered earlier. “We also place all the small piglets on one sow, which must be parity 2 or 3 and very quiet and calm,” Waldner stresses.

At weaning pigs average over 8kg, giving them a good start in the nursery. They are fed a creep diet for a few days then move onto the first of three nursery diets. The secret to smooth and rapid growth in the nursery is to make a gradual change from one diet to the next, believes Ted Waldner. “Diet changes are also delayed by 3 – 4 days for the smaller pigs,” he points out. Also, an additional circular feeder is placed in the pen for the first week to increase feed intake. Room temperature is 85°F (29.5°C) for days 1 to 8 and then reduces gradually down to 74°F (23.3°C) at the time pigs are transferred to the pre-grower. Average growth rate is over 500 g/day, giving a transfer weight of about 56 lbs (25kg).

Pigs are weighed in and out of the pre-grower room in order to monitor growth. From this stage, separate diets are fed to gilts and barrows, with one diet in the pre-grower and four at the finishing stage. Each finishing room has two bins, one for each sex. “We only put a maximum of one tonne of feed in the bin to keep it fresh and so that diet changes can more easily be made at the correct time,” notes Ted Waldner. “When the bin is empty, the mill automatically makes another tonne of feed and delivers it to the bin.” The target slaughter weight is 90 kg and 92.6% of pigs are in the weight range 89 – 92.9 kg range that attracts the highest bonus of \$10/head.

Pig environment is felt to be very important and widespread use is made of misting nozzles, especially in the breeding and gestation areas. All incoming air enters the attic along the

Are high feed costs eating away your profits?

MICRO-AID® in all feed, all the time.

You CAN reduce costs and boost profits! Get more information at MICRO-AID.com

MICRO-AID® is environmentally safe and reduces odor and sludge. With over forty 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.
- **for your employees** for improved air quality and a better working environment.
- **for your neighbors** for healthier relationships.

But most of all...

- **for yourself** because MICRO-AID® returns a higher value than any other feed additive.

- Increase your farm income and peace of mind.

MICRO-AID®
Canadian Bio-Systems, Inc.
(403) 279-3339
Premier AG Resources, Ltd.
(519) 657-1177

dpi GLOBAL
17656 Ave. 168
Porterville, CA
93257
www.dpiglobal.com

Expect even more from Pfizer

More products, more value all backed by the expertise
you've come to expect from Pfizer Animal Health.

 *Animal Health*





Dr. Chris Mateo (left), of Standard Nutrition, discusses ration formulations with Hog Boss Ted Waldner

north end of the barn, where sprinklers are also used to cool the air through evaporative cooling in hot weather.

Hygiene routines are also implemented to a high standard. After each batch of pigs, all pens in the barn are washed and disinfected, so that not only is the unit clean and tidy, but pig health is excellent.

All feed is home produced and rations are formulated by Standard Nutrition, who supply the premixes. Richard Hodgkinson visits the unit regularly and provides management advice, providing an outside pair of eyes, which is always helpful.

"It is vital to tackle any problems or deviations from target"

The team at Hutterville are clearly enthusiastic about what they do and dedicated to the success of the unit, but is this alone enough to achieve such consistent performance? Ted Waldner believes that their success is due to carrying out tasks in the right way and at the right time. "Everything has its place in the week, whether it's cleaning the mill, breeding or piglet tasks," he explains. "If we haven't finished all the work by supper time, we go back later and do whatever it takes to get the job done" All the staff have their own routines but they also work in all sections of the barn and know what needs to be done. Good communication is also important, which includes having accurate records. A good example can be seen in the farrowing pens where a plastic band around the feeding tube indicates how much feed should be released into the trough so that anyone can see the correct amount.

Also, Waldner points out, it is vital to tackle any problems or deviations from target immediately they are identified, not wait to see if they resolve themselves. Good data is essential and he also feels that the extensive trial work they carry out helps them to improve by making change on the basis of good data. "If a person sits back and is happy with what he's doing, he gets complacent," he says. "You have to keep pushing forward and trials tell us what works and what doesn't work." ■

Credit for Farmers and Agricultural Co-operatives

Supporting the renewal of the agricultural sector and enabling co-operatives to better seize market opportunities



The *Canadian Agricultural Loans Act (CALA)* program is a financial loan guarantee program that gives farmers easier access to credit. Farmers, including beginning farmers, can use these loans to establish, improve, and develop farms. Agricultural co-operatives may also access loans to process, distribute, or market the products of farming.

CALA features:

- Up to \$500,000 in loans for land and buildings
- Up to \$350,000 for all other loan purposes

Eligible applicants include:

- Established farmers
- Beginning/start-up farmers (i.e. less than 6 years of farming)
- Farmers taking over the family farm
- Agricultural co-operatives with a majority (50% + 1) farmer membership

For more information:

- Contact** your financial institution
- Call** 1-888-346-2511
- Visit** www.agr.gc.ca/cala



London Swine Conference

The London Swine Conference is aimed at providing a platform to accelerate the implementation of new technologies in commercial pork production in Ontario and facilitating the exchange of ideas within the swine industry. The event is coordinated by the Ontario Ministry of Agriculture, Food and Rural Affairs, Ontario Pork, Ontario Pork Industry Council and University of Guelph. It has established a reputation as an excellent communication medium within the industry and features speakers from Europe as well as North America.

Next year's conference will be held on March 30th and 31st, 2011 and further details can be found at www.londonswineconference.ca

New horizons in sow nutrition

With litter size continuing to improve and lactation length of herds in the USA increasing to around 21 days, the sow's milk production must continue to increase to meet the growing demand of heavier pigs, says Casey Neill, nutritionist with PIC North America. Modern sows can produce 10 to 12 kg milk/day with day 21 of lactation being the peak of production, he notes. In fact, sows can produce more milk per kg of body weight than cows. If a 182 kg sow produces 11 kg of milk/day that would be 0.06 kg of milk per kg of body weight, Neill points out. A 909 kg cow can produce 45.5 kg of milk/day that is equivalent to 0.05 kg of milk per kg of body weight. He discusses some of the ways that milk production and piglet growth can be maximized and the impact of lactation feeding on sow and piglet performance.

Introduction

To maximize milk production in sows, it takes many factors besides genetics and nutrition. Other factors include feed intake (frequency of feeding), environment (farrowing house temperature), length of lactation, body condition and water intake.

With the correct selection of genetics, the right environment and management there can be an increase in milk production and therefore heavier weaning weights. In the USA, there are examples of units where sows are weaning total litter weights of over 76 kg with a 20-day lactation. With increased potential for milk production, management and nutritional factors must be changed to meet these demands for lactation.

Nutritional requirements for optimum milk production

Sows can achieve and maintain high levels of milk production throughout their productive life if given adequate levels of energy and nutrients. The most critical nutrients for maintaining optimum lifetime milk productivity are energy and amino acids. The predicted lysine needs of prolific first litter sows based on current estimated milk production potential is 1.22% total lysine, assuming an average daily feed intake of 5kg.

Estimates for lysine needs have been validated in a series of studies in commercial research conditions. In these studies, PIC C-22 sows in parities 1 through 4 were fed isocaloric (3.46



Sierens Equipment Ltd.



Model # SSGEN2-3

Standard Features Include:

- "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
- Fail 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:

- 2 or 3 pen 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"

Products Available in:
• Powder Coated
• Galvanized
• Stainless Steel

Box 10
Swan Lake, MB
R0G 2S0

Proudly Designed & Manufactured in Canada

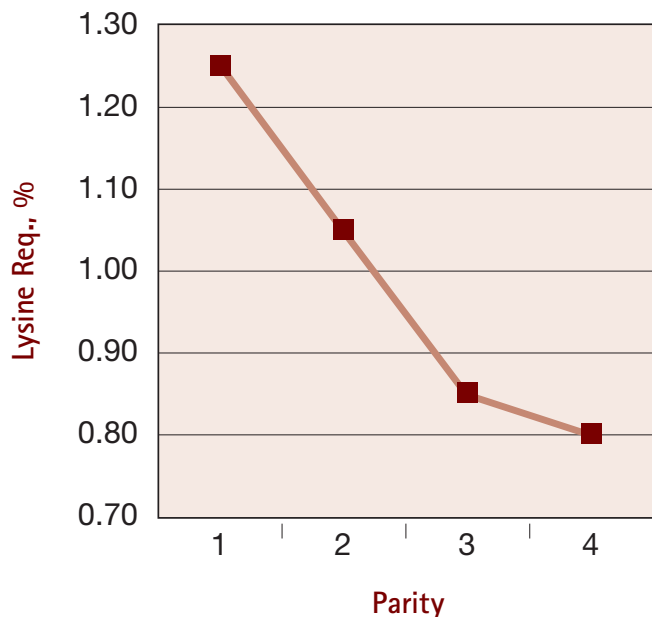
www.sierensequip.com

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



CONTINUED ON PAGE 28

Figure 1. Lysine Requirements of PIC Sows



Mcal ME/kg) corn/soybean meal lactation diets ranging from 0.95 % to 1.35 % total lysine. Diets were given to sows from day 112 of pregnancy throughout the 19 day lactation period. Feed intake was recorded with a computerized feeding system that ensured ad-libitum feed intake. Figure 1 demonstrates the estimated lysine requirement (% and g/day) and milk production (kg/day) for PIC C-22 sows in parities 1 through 4. In summary, total lysine intakes of 70 g/day or 62 grams of SID lysine/day optimize reproductive and milk production performance in PIC sows.

Because gilts eat 10 to 15% less than sows, the percent SID lysine in the lactation must increase compared to a mature sow herd. Because we target 62 grams of SID lysine/day we must formulate based on feed intake and not only percent SID lysine. To prevent a parity 2 dip, we must feed the gilt

properly and allow full feed after farrowing. If the gilt loses more than 10% of her body weight, then performance in the subsequent parity will suffer. The results in Table 1 show that as weight loss increases, weaning to oestrus interval, the percentage of sows bred by 7 days after weaning and total born in the subsequent litter are impacted significantly.

In addition to lysine requirements, the maximum amount of synthetic lysine in lactation diets and the ideal ratios of other amino acids have recently been validated. Use of synthetic amino acids will not only improve performance but also lower diet cost. These studies indicate that up to 0.30 % synthetic lysine can be added to gilt diets without deleteriously affecting reproductive or milk production performance. This response has also been validated in older parity sows.

Feeding management for optimum milk production

In addition to amino acid intake, proper energy intake is essential for maximizing milk production in sows. Both the amount and type of energy can influence milk production.

Table 1: Impact of body weight loss in first lactation on subsequent performance

	Body weight loss (kg)		
	Less than 10%	0 – 10%	Gained weight
Number of sows	31	191	66
Wean-oestrus (d)	7.04	6.58	5.32
Sows bred by day 7 (%)	67.4 ^a	79.5 ^b	86.3 ^b
Total born/litter	11.17 ^a	12.57 ^b	13.04 ^b

^{abc} Means within a row without a common superscript differ (P < 0.5)

CONTINUED ON PAGE 30

WHO SAYS YOU CAN'T TEACH AN OLD HOG NEW TRICKS



PIC
337RG

Market changes demand product improvements. The PIC337RG is no exception. With a market weight increase of 14 lbs., our newest boar meets today's packer demands for heavier weights and faster barn turnover without sacrificing meat quality. Increased durability and excellent feed conversion rates make PIC337RG the one, plus a whole lot more.

NORTH AMERICA'S BEST SELLING BOAR

© 2010 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



Feeding sows ad-lib from day 4 of lactation results in increased feed intake and reduced body weight loss, says Casey Neill, nutritionist with PIC North America

LOOKING TO RENOVATE OR UPGRADE YOUR BARNs ?

Like New Hog Equipment For Sale

Farrowing

56 KG Johnson farrowing crates c/w raised cast iron for sows
tenderfoot flooring for piglets
includes PVC partitions

Nursery Room

Tenderfoot flooring (self supporting)
sizes (in feet)
5 x 10
4 x 10
1 x 10
5 x 8
4 x 7
3.5 x 5

Green plastic flooring panels

1 x 8 inches
self supporting
stainless steel support bars
make lengths to fit need

PVC penning panels

110 feet x 30 inches
no wear, easy to wash (looks good)
variety of lengths available

36 Bryant radiant heaters

25" , 35"

Breeding - Gestation

590 KG Johnson gestation stalls (galvanized)
flip front gates
rear AI gates
feed drop tubes

Galvanized penning (variety of lengths)

Grower - Finisher

NEW Big Dutchman computerized feeding system
NT 99 version
computer and control panel
3000 litre mix tank with agitator
NX 300 feed pump
200 (+) feed valves (4 hole style)
PVC feed line (63 mm)
some special troughing available
more details will be provided by owner

Concrete slats

200 older style slats - 4 slot opening
8'2" x 22" x 3.75"
460 new design slats - 5 slot opening
8' x 20" x 3.75"

Ventilation

Fans - Better Air wall mount
24" 18" 12"

Controls

Varifan control units
Varifan inlet controls
Actuators

Prairie Pride inlets

single sided

KG Johnson inlets

single & double sided
(counter-weighted)

Enquires contact Rob @ L & B Ranch
Office 604.859.6259 Cell 604.854.4664
Email: roblepp@shaw.ca

Recently in the United States, various forms of self feeders have been evaluated in order to maximize feed intake. PIC has collaborated on various trials to determine the efficacy of newly designed self feeders in commercial systems. Although there exists various options within the industry, we have most extensively evaluated the INTaK Ad-Lib Lactation Feeding System (<http://www.automatedproduction.com/english/swine/swine.htm>). Commercial field research has demonstrated an improvement of 7 percent in feed intake compared with hand feeding systems, along with less labour required for feeding.

"Use of synthetic amino acids will not only improve performance but also lower diet cost"

In addition to evaluation of self feeders, we have evaluated optimum feeding pattern for maximizing lactation intake in commercial systems. The results demonstrate that mild restriction for 3 days followed by full feeding from day 4 through the end of lactation resulted in increased feed intake and reduced body weight loss. Based on these data, the recommendation for feeding PIC sows is to scale feed at 1.8, 1.8, and 2.7 kg for days 0,1, and 2, respectively of lactation followed by ad-libitum access to feed.

Feeding in late gestation

There is limited research data on increasing feed in late gestation. However it is common practice to increase feed by 0.5 to 1.0 kg the last 2 to 3 weeks of gestation to support the increased litter growth. With increased feed costs, many producers are questioning the importance of bump feeding because not doing it could save \$3.00 to \$5.00 per sow in feed costs.

A recent trial used 108 PIC Camborough gilt and sows for a bump feeding trial. The researchers increased feed by 0.90 kg at day 90 of gestation or did not increase feed. The birth weight of pigs from gilt litters that were bump fed was higher. However there were no differences in birth weight from sows that were fed increased

levels. The researchers concluded that there was little response to bump feeding.

One area to point out is the amount of feed that was fed from day 35 to 90 of gestation in this trial. Sows were fed 2.60 kg per day of a corn-soybean meal diet whereas in most production systems sows are fed 2.0 kg from day 35 to 90 of a lower energy diet with wheat midds, soy hulls or DDGS. This higher feed level may have caused some over conditioning.

If sows and gilts are being fed 1.8 to 2.0 kg per day in gestation, then the recommendation is to bump feed at day 90. If gilts and sows are over conditioned then do not bump feed. However, more research is needed to better obtain a conclusion.

Added fat in lactation

This is another area with limited research. A trial was carried out in Oklahoma during the months of July to September with added fat levels of 0, 2, 4, and 6%. The fat source was an animal-vegetable blend. The researchers reported that when caloric intake was increased there were no beneficial effects on any measured criteria, except for improved litter gain in parity 3+ sows.

Another internal research trial was conducted with 1,020 PIC gilts and sows with two treatment levels of 0 and 5% added fat. The weaning weight of pigs that nursed from gilts and sows fed 5% added fat was 0.18 kg heavier. However the difference in weight was not maintained at 22 weeks after weaning. There were no differences in sow performance reported.

Conclusions

The modern sow has a tremendous capacity for milk production given proper nutrition and feeding management. Milk production levels of over 11 kg/day can be achieved in commercial situations. To achieve these levels, specific requirements for lysine and energy intake must be achieved.

Between the gate and plate: A grocer's perspective on the influence of consumer demands on the value chain

There are numerous factors that affect the Canadian consumer's consumption of pork products, including health, environmental and economic concerns, says Stacie Sopinka, of Loblaw Brands Ltd. Globalization has heightened awareness of such issues as greenhouse gas emissions and carbon footprint, she notes. Canadians are becoming increasingly aware of prevalent health risks and the role that diet plays in regards to chronic disease and obesity. In order to meet the consumer's demands, the pork industry must address their concerns through meat quality, innovative marketing tools and educational information, Sopinka believes. In the past decade, social, economic and work related changes have altered the nature of what consumers demand from their fresh meat products. Sopinka examines the factors that affect pork consumption and the opportunities that exist for the pork industry to address these dynamic requirements.

Health concerns

Canadians are facing a variety of health concerns, some of which are related to or influenced by food, Sopinka points out. "In 2005, the World Health Organization predicted that, over the next 10 years, 2 million Canadians will die from a chronic disease," she says. "Within 10 years, deaths from chronic

CONTINUED ON PAGE 32

SYNERGIZE DISINFECTANT

Because Biosecurity Doesn't Cost...It Pays!

Synergize is the **#1 veterinarian recommended disinfectant** in the North American pork production industry. And for good reason. From independent testing to university projects, from laboratory analysis to field trials, from **PRRSV to PCV2 to Ileitis, to E. coli F18, to H3N2 Influenza A virus**, Synergize meets and exceeds all expectations.



Most importantly, Synergize provides today's pork producer with the best of all possible worlds; a powerful, non-irritating, non-corrosive disinfectant at a competitive price. ***That's a tough combination to beat.***

Field Tested, Vet Recommended
SYNERGIZE DISINFECTANT



Pro-Ag Products, Ltd.
Winnipeg, Manitoba R2J 0L1
800.806.2737
www.pro-ag.com

diseases are likely to increase by 15% and deaths from diabetes by 44%.”

The number of obese and overweight Canadians continues to increase. These are both contributing factors to chronic disease. “In 2005, The World Health Organization predicted that by 2015, 73% of Canadian men and 68% of Canadian women will be overweight,” Sopinka notes. “Over one-quarter of Canadians aged 31 to 50 get more than 35% of their total calories from fat. This is a threshold beyond which health risks increase.”

Data from the Canadian Health Measure Survey (CHMS) indicate that nearly one-fifth (19%) of Canadians aged 20 to 79, roughly 4.6 million people, had hypertension. Another 20% had readings in the pre-hypertension range, and 61% had normal blood pressure. “Not surprisingly, 85% of consumers stated that they would like to reduce sodium in their diet,” comments Sopinka.

Canadians are focusing more attention on what they eat, specifically:

1. Decreasing their overall caloric intake, with special attention to calories from fat
2. Reducing their overall sodium intake
3. Eating a well balanced diet

“When asked, 76 per cent of consumers identified that nutrition is the most important factor when planning meals,” Sopinka explains. “Only 13 per cent of Canadians ranked taste as more essential than nutrition.”

Reducing calories from fat

There are many ways that consumers can incorporate pork into a healthy diet. In order to encourage pork as a protein that promotes health and wellness, more focus should be placed on the low fat content of many pork cuts, Sopinka believes. “Focused consumer exposure is best achieved when nutritional information is marketed directly on the package,” she says. “Consumers are increasingly looking for on-package nutritional information, even for non value - added cuts.”

“More focus should be placed on the low fat content of many pork cuts”

“Trim specification is very important in the consumer decision making process. By reducing visible fat, pork cuts will be more attractive to consumers who are monitoring their fat intake.”

Consumers are looking for methods of stretching their shopping budget, Sopinka notes. “By promoting the use of pork as an ingredient as opposed to centre of the plate, consumers would see that they can both save money and reduce their caloric intake,” she explains. “Also, educating the customer as to the correct portion size will assist them in choosing pork as part of their diet.”

Reducing sodium intake

Processors of pork can assist Canadians in reducing their sodium intake by maintaining a responsible level of sodium in enhanced pork and ready-to-cook pork products, Sopinka stresses. “By offering a variety of recipes that promote the use of sodium alternatives such as dry rubs and marinades, pork can be marketed as a flavourful protein option that contributes minimally to a consumer’s overall sodium intake.”

CONTINUED ON PAGE 34



We know your Profits are being squeezed!
Time for the worlds #1 Sorter with full color touch screen, Smart Sort!

Call us today for all your scale needs we service and repair all makes and models of sorting scales!

Ph:1-866-946-0014 www.arlynscales.com
www.pigsorters.com
Ph: 403-681-3023
Ph: 516-281-4639



READY-TO-USE DRYING POWDER FOR LIVESTOCK PRODUCTION
HELPS ABSORB MOISTURE & CONTROL ODOURS

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

A HEALTHY START FOR A STRONG FINISH

Giving pigs a strong, healthy start is the key to a successful finish at market. For producers this means understanding the impact of nursery exit weights, the significance of respiratory diseases and working with their veterinarian to set an excellent foundation for pig health.



Nursery Exit Weight Linked to Finishing Weight

In recent years, a number of studies have demonstrated the importance of nursery exit weight as a clear predictor of whether a pig ends up lightweight at market.¹ “We know that pigs that leave the nursery phase lighter than we would like are at increased risk of also going to market at a lighter weight,” explains Dr. Peter Provis, a partner in Swine Health Professionals, a swine-exclusive veterinary practice based in Manitoba, and consultant to ELANCO Canada. “And, ultimately it is the producer who pays a financial penalty for this.” Don Down, a pork value chain specialist with ELANCO, has crunched the numbers with his customers. “Experience has shown that increased nursery exit weight reduces days to market and your market hogs will be at the plant sooner,” Down says. In addition to freeing up space in the finishing barn, healthier, heavier pigs also contribute to reduced input costs and maximized revenue potential. The message to producers – be vigilant about anything that threatens nursery weight.

“Respiratory disease in pigs is by far the biggest health threat and has the most significant impact on nursery health and performance, relative to other concerns in the nursery,” says Dr. Provis.

“It affects the vast majority of nursery pigs and is the main concern facing veterinarians and producers.” In fact, most herds test positive for bacterial infection in the early stages (i.e. weeks one to three). Respiratory disease negatively affects average daily gain (ADG) by as much as 35%, feed conversion by up to 30% and growth rate by as much as 10 to 20%² – all important predictors of health, performance and profitability.

“We used to just look at the impact of clinical diseases in the nursery. Now we examine for earlier signs of nursery respiratory problems too,” says Provis. “Once we recognize the problem and treat it with a medicated feed like Pulmotil[®] Premix we get a very clear picture of the cost that these conditions have on ADG, feed conversion and growth rates.”

Pulmotil Premix: Leading Respiratory Disease Treatment

For this reason, Dr. Provis suggests Pulmotil as a good early intervention strategy. “Pulmotil is effective against the most common diseases³ that cause respiratory problems in the nursery. Increasingly, it is being used within the first three weeks post-weaning to address those diseases before they have a chance to cause problems.” Respiratory disease is difficult and costly to treat. A proactive approach with Pulmotil helps to prevent it and sets the foundation for nursery-to-finish health management. The easy-to-use premix formulation is appropriate at all stages of production and approved at a treatment rate of 200 or 400 parts per million (1-2 kg/t) for 21 days, beginning approximately seven days before an anticipated disease outbreak, followed by a withdrawal of 14 days. According to Dr. Provis, Pulmotil is unique because of its mode of action, which allows it to concentrate 10 times higher in lungs than in serum, ensuring high levels of activity where bacteria accumulate⁴. In other words, Pulmotil goes to work where pigs need it most. Doing so prepares the pigs’ immune system to combat secondary bacterial infections such as *APP*, *P. multocida* and *H. parasuis*, that are often seen in pigs with Porcine Reproductive Respiratory Syndrome (PRRS).⁵

Setting the Foundation for Full Value Pigs

“Pulmotil really helps to increase the number of Full Value Pigs[™],” says Down, referring to healthy, high-quality pigs that reach their

optimum weight in a desired time period to achieve maximum market price and income. In his role, Down works closely with producers and helps them understand that addressing health and management issues in the nursery can improve animal profitability at the end of the line. “We get inside and work with the producer. We help them weigh pigs and record and analyze data right through to the plant. Even though Pulmotil is fed starting in the nursery, the data clearly demonstrates that the money is made when the hog is marketed,” he says⁵. “It is becoming increasingly important for producers to optimize the way they use feed ingredients and, in turn, the growth of pigs in the nursery,” says Dr. Provis. “Pulmotil Premix provides them with that opportunity.”

PULMOTIL PREMIX PRICE REDUCED

Pulmotil Premix is now available at a lower price, offering producers even more economical control of swine respiratory diseases. A price reduction of 20% was announced in Fall 2009 as a result of advancements in product manufacturing. The price reduction applies to 10 kilogram bags of Pulmotil Premix and is based on a treatment rate of 200 or 400 parts per million (ppm) for 21 days, followed by a withdrawal of 14 days.

¹Wolff, T., Lehe, K. et al. 2006. Producer Tool: Measuring Attrition in Wean-to-Finish Swine Operations. Proceedings of the 11th International Symposium on Veterinary Epidemiology and Economics.
²Tubbs, R. and Deen, J. 1997. Economics of respiratory and enteric diseases. Proc. AASP: 361-364.
³Zeman D.H. 1996. Concurrent respiratory infections in 221 cases of PRRS virus pneumonia: 1992-1994. J Swine Health and Production. Vol.4 No.3. 143-145.
⁴Scorneaux, B. and Shryock, T. 1998. Intracellular accumulation, subcellular distribution and efflux of tilimicosin in swine phagocytes. J. Vet. Pharm. Ther. 21:257-268.
⁵Harker J.W., Keffaber K. 2006. The impact of Pulmotil feeding in the nursery on finishing performance of at-risk pigs. Proc. AASV 127-130.

Elanco



Pulmotil[®] is a trademark for Elanco's brand of tilimicosin. Elanco[®], Pulmotil[®], Full Value Pigs[™] and the diagonal colour bar are trademarks or registered trademarks of Eli Lilly and Company.

11-17-0274-02032010

Well balanced diet

One of the best methods of encouraging a well balanced diet is to promote the consumption of meals in the home as opposed to those eaten in restaurants, Sopinka feels. "Through the promotion of pork-based recipes such as stir fries, soups and salads, consumers can include pork as a healthful part of their diet and not exceed the daily recommended amount of protein as per Canada's Food Guide."

"Consumers can be encouraged to cook at home through the marketing of on-pack recipes and supporting dietary information," Sopinka adds. "For younger generations, this information is of growing interest and is increasingly being sourced from social network sites such as Facebook and Twitter."

Finally, she says, by cross merchandising pork with other healthy ingredients such as vegetables consumers will be assisted in finding meal solutions and eating a well balanced meal.

Meal preparation and lifestyle

Canadians are increasingly changing their eating habits to fit around their work and leisure activities. Over 62% of women with children participate in the workforce. "Families

are challenged to create family mealtimes in an era where individual family member's schedules are juggled," explains Sopinka. "As a result of this fast paced environment, 75% of meals made in 2009 were made in 15 minutes or less."

Most meals consumed in the typical Canadian home are prepared quickly and are not complex in nature. However, as a result of consumers eating fewer meals outside of the home, they are, on occasion, looking to create "restaurant quality" meals within their homes, Sopinka notes.

Convenience foods and pork

There are several opportunities to make pork more attractive to the time starved consumer, Sopinka feels. Providing fresh meat that is value added by cut, as opposed to seasoning, is one simple method of providing the consumer with a quick method of cooking a healthy meal. "This notion of component cooking is extremely popular in England where retailers such as Tesco and Sainsbury market a wide variety of fresh washed and chopped produce in conjunction with sliced fresh meat and sauces," she points out. "Similarly, Loblaw Brands Ltd. continues to grow its fresh washed and chopped vegetable category and promotes fresh meat in conjunction with our signature 'PC Memories of' sauces."



Feed costs too high?



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



Porzyme feed enzymes improve the digestibility of many of the ingredients used in pig feed. Reformulate your feeds with Porzyme to reduce costs while maintaining pig growth and feed conversion. Alternatively add Porzyme to your standard diet formulation for better feed conversion. Either way feed costs are reduced with Porzyme.



porzyme® - 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

DANISCO
First you add knowledge...

Providing straightforward cooking instructions on the package with links to recipes and simple meal solutions will assist those looking for information. Consumers express an interest in multiple on-pack recipes for frequently purchased items.

“On those occasions when consumers want to recreate a restaurant experience at home they are looking for slightly different assistance,” Sopinka comments. “For a premium in-home dining experience, consumers are looking for more unique cuts, in store support from staff and more complex recipes.”

Foods of conscience

This category includes a broad scope of products that are defined by their enhanced attributes and benefits. They sometimes have attributes that make them more environmentally responsible and often have more stringent quality assurance attributes.

“Consumers are attracted to foods of conscience for a variety of different reasons,” Sopinka explains. “Consumers sometimes choose these foods because they reflect both their individual and community values. They are more likely to form an emotional attachment to products of this nature. Consumers have a greater sense of trust with ethical products and project a sense of higher level of quality in their expectations.”

Consumers purchase foods of conscience for a variety of reasons - 46% of consumers feel that they provide a positive long term health benefit, 43% feel they offer better nutritional value, and 38% are drawn to these products because they commit to better treatment and health of the animals.



'Foods of conscience' are defined by their enhanced attributes and benefits

Traceability and transparency

A recent study conducted by the University of Michigan examined consumer awareness of food safety concerns. “Initial results found that over a third of consumers are willing to pay a premium for third party food safety certification,” Sopinka notes. “Although higher price and brand recognition were sometimes interpreted by consumers to provide higher safety standards, it was third party or government certification that provided the highest level of confidence.”

“Over a third of consumers are willing to pay a premium for third party food safety certification”

“A variety of different approaches have been used in marketing quality assurance attributes. Tasmanian company Field Fresh is using QR (Quick Response) Codes to link Japanese consumers with their farmers,” Sopinka continues. “These codes, which are applied to each package of fresh meat, are readable

CONTINUED ON PAGE 36

TOPIGS fact of the month

30.2 pigs/sow/year on all our farms!

SINCE CHANGING OUR GENETICS TO THE TOPIGS 20 OUR WEANING AVERAGE HAS INCREASED BY OVER 4 PIGS WEANED/SOW/YEAR. WE ARE CONSISTENTLY WEANING OVER 12 PIGS PER LITTER OVER THE PAST TWO YEARS ON BOTH OUR FARMS. THESE SOWS ARE VERY EASY TO MANAGE AND THEY VIRTUALLY RAISE THEIR PIGS ON THEIR OWN!

JEROEN & SHEILA VAN BOEKEL
MANITOBA





TOPIGS: 1 866 355-5132

by cell phones. The consumer can immediately access information about BSE certification, the grower and details regarding the exact animal from which the meat was cut.”

In France, supermarkets such as Monoprix market various meat products with Quality Assurance Certification validating both origin and species.

“Premium independent butcher’s shops, such as Cumbrae’s in Toronto, are educating consumers through use of online videos which discuss breed specific attributes amongst many other topics,” Sopinka notes. “All of these systems create transparency in the supply chain, ultimately building a connection and sense of trust between the brand and the consumer.”

Environmental impact

Consumers are gaining heightened awareness of the impact of animal rearing on the environment. “Concerns include the effect of animal-generated methane gas on the ozone layer, the carbon footprint of the production of animals, and the impact of non-recyclable fresh meat packaging,” Sopinka explains. “In 2006, worldwide animal agriculture has been reported by United Nations to be responsible for 18% of green house gas emissions.”

Despite a limited growing season, Canadians are attempting to eat more locally grown produce where possible. Newsletters such as *The Locavore*, written by Elbert van Donkersgoed, connect consumers with opportunities to meet and purchase from local suppliers. In Loblaw stores, consumers now have the opportunity to purchase even more regional fruit and vegetables. “*Grown Close To Home* is a three week national store event that runs from mid-August to the beginning of September,” Sopinka says. “Canadians believe the freshest produce comes from local farmers. They also believe buying local produce is good for the economy.”

There are several initiatives within the meat industry that are examples of how consumer concerns regarding environmental impact can be addressed. “In the UK, Tesco has added a carbon footprint logo to a variety of its fresh meat products. This assists consumers in making informed decisions as to which cut of meat is best suited to their needs,” Sopinka points out. “The city of Seattle, Oregon has recently banned polystyrene trays. This affects all tray overwrapped fresh meat product which must now be packaged on plant based trays in order to comply.”



Compident

electronic sow feeding
WORLDWIDE # 1

SCHAUER

ALWAYS ONE IDEA AHEAD

Schauer Agrotronic GmbH
4731 Prambachkirchen, AUSTRIA

Phone: +43/7277/2326-0*, www.schauer.co.at

The impact of castration on growth performance – physical versus vaccination

In most parts of the world, males are physically castrated very soon after birth in order to reduce the risk of boar taint in pork. However, entire male pigs are more efficient and deposit less fat than barrows, particularly at high slaughter weights. Also, animal welfare activists are lobbying for a cessation of physical castration in many parts of the world, particularly the EU. Vaccination against gonadotrophin releasing factor (GnRF) is a welfare-friendly alternative that allows producers to capitalize on the superior natural growth and carcass characteristics of intact boars without the risk of boar taint, says Frank Dunshea from the University of Melbourne, Australia. Vaccination results in superior feed efficiency and carcass lean yield compared with physical castration, while maintaining pork eating quality, he notes. In this review, Dunshea looks at the benefits of rearing boars and how vaccination can provide most of the efficiencies of boar production.

Introduction

The castration of male domestic animals of most species, with the exception of breeding stock, has been practiced for centuries. “Traditionally, the major reasons for castration were to take advantage of the propensity for castrate animals to fatten - fat is/was highly valued in some cultures - and to reduce the incidence of rutting and aggressive behaviours,” explains Dunshea. “Also, non-castrated male pigs (boars) may exhibit flavours and odours, collectively called boar taint, that are offensive to many consumers.”

Physical castration results in significant reductions in growth performance and excess deposition of fat. In many markets there is a penalty for having over-fat pigs as consumers and processors alike are demanding leaner and generally heavier pigs. “The upward pressure on slaughter weights due to production economics has placed a conflicting pressure on carcass fatness,” Dunshea points out. “This is particularly so for physically castrated male pigs (barrows) that have a declining rate of lean tissue deposition during the late finishing phase.”

Incentives for utilizing boars

The potential lean tissue growth and efficiency of weight and lean tissue gain are greater in boars than in barrows, prompting the cessation of castration 30 years ago in some markets, such as the UK, Australia, South Africa and Ireland. “Recent trials found that under group-housed conditions there was very little difference between boars and barrows in daily gain and lean tissue content until 122 days of age or 77 kg,” Dunshea comments. “Beyond 17 weeks of age, the barrows

CONTINUED ON PAGE 38

Knowledge just a click away



prairieswine.ca

Pork Insight

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

PRAIRIE SWINE CENTRE


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

Pork Insight brings you the world's knowledge

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


Pork Insight www.prairieswine.ca





Build your hog farm on solid footing.

quality concrete flooring and penning



Product brochure available. Call 1 800 461 2278 or visit barkmanag.com

Table 1: Average fixed effects of physical castration (barrows – boars) from meta-analyses of data from studies with group-housed pigs^a

	Effect	P-value	# studies
ADG (g/d)	-31	0.011	8
ADFI (g/d)	-467	<0.001	7
FCR	-0.48	<0.001	7
Carcass weight (kg)	-2.14	<0.001	10
Back fat (mm)	-4.9	<0.001	10

^a Analyses only included data from studies where data were collected over a nominal finisher phase.

grew faster than the boars but deposited less lean tissue and more fat. Thus, at 154 days of age the boars weighed 5 kg less than the barrows (103 vs. 108 kg) but contained 3 kg more lean tissue (69.1 vs 66.2 kg), almost 6 kg less fat

(18.2 vs 23.8 kg) and 2 mm less P2 back fat (15.1 vs 17.1 mm).” Also, over the finisher phase the feed conversion ratio (FCR) was 13% higher in barrows than in boars (3.50 vs. 3.10), he adds. Analyses of up to 10 studies conducted with group-housed pigs shows that physical castration increases feed intake by an average of 467 g/d, FCR by 0.48 and back fat by 4.9 mm with modest increases in growth rate (+31 g/d) and carcass weight (+2.1 kg) over the finisher phase compared to entire boars (Table 1). “Boars are actually more feed efficient and leaner than barrows throughout the entire post-weaning growth phase,” notes Dunshea.

Based on slaughter weights of 108 and 130 kg for boars and barrows respectively, a British study estimated that the cost of production of boars was € 0.05 greater per kg carcass weight but € 0.17 less per kg of lean tissue. “If the carcasses could be guaranteed to be free of boar taint, using a technology such

as vaccination, allowing boars to be slaughtered at 130 kg, then the cost of production of boars would be less than barrows on both a carcass weight and lean tissue basis,” Dunshea points out.

“Although slaughtering boars at lower weights may reduce the incidence of boar taint, it will not guarantee meat free from boar taint”

Constraints to utilizing boars

The major reason why male pigs are still castrated in much of the world is because of the issue of boar taint. The principal compounds contributing to taint in boars are androstenone and skatole, which are found at much higher levels in the carcasses from boars than from either gilts or barrows. “In the UK it is stipulated that weight of carcasses utilized for fresh pork production must be less than 85 kg. In the EU, carcasses

Book your space NOW for



HOG & POULTRY DAYS 2010

This is your chance to meet Manitoba's PORK & POULTRY producers

December 8 & 9 – WINNIPEG CONVENTION CENTRE

- ▼ More than 50,000 square feet of display space
- ▼ Canada's largest pork quality competition
- ▼ New & Evolving Technologies: exhibitor-presented sessions on new products/services for today's producers

Exhibitors registering by November 8 qualify for the EARLYBIRD DRAW!

For exhibitor information see the website at:

www.hogandpoultrydays.ca

or contact:
 Murray Smith, Manitoba Agriculture, Food and Rural Initiatives
 Tel: (204) 945-0500 Email: Murray.Smith@gov.mb.ca



Reserve your space TODAY!

from boars that are over 80 kg may only be allowed to be used for human consumption provided they are tested for taint,” Dunshea explains. “However, a survey of Australian and New Zealand boars revealed high concentrations of both androstenone and skatole in boars as light as 85 kg live-weight. Therefore, although slaughtering boars at lower weights may reduce the incidence of boar taint, it will not guarantee meat free from boar taint.” Thus, boar taint remains the major impediment to the utilization of boars in a pork production system, he concludes.

“During the late finishing phase, group-housed entire males often grow at a similar or slower rate than barrows, possibly because of increased sexual and aggressive activities between entire males,” Dunshea continues. “From the period from puberty onwards boars exhibit negative aggressive and sexual behaviours that can detract from feeding, which is why boars do not perform as close to their potential as barrows do when housed under commercial conditions.” Also, the negative behaviours that occur with mixing of boars around slaughter causes carcass damage and reduced meat quality, he adds.

Vaccination against GNRF

An alternative method of inhibiting sexual development and aggressive behaviours and reducing the accumulation of boar taint compounds in carcass fat is immunization against GnRF. Recently, a vaccine containing a modified form of GnRF has been developed to reduce the production and accumulation of both androstenone and skatole in pig carcasses.

“The vaccine formulation and dosage regimen allows pigs to be immunized relatively close to slaughter,” Dunshea points out. “Any taint substances already present are progressively metabolized, allowing the entire boar to be slaughtered at a higher live-weight without taint, having earlier benefited from the effects of its own testicular steroids on growth and

Table 2: Average fixed effects of vaccination against GnRF (vaccinates – barrows) from meta-analyses of data from studies with group-housed pigs^a

	Effect	P-value	# studies
ADG (g/d)	173	<0.001	8
ADFI (g/d)	115	0.004	5
FCR	-0.33	<0.001	8
Carcass weight (kg)	-1.16	0.015	11
Back fat (mm)	-4.9	<0.001	10

^a Analyses only included data from studies where animals were slaughtered between 4 and 5 weeks after the secondary vaccination

^b Determined over the period between the secondary vaccination and slaughter

carcass composition.” Trials show that vaccinated boars grow faster than non-vaccinated boars and at a similar rate to the barrows but with a similar FCR as the boars. Back fat depth was intermediate between the boars and the barrows.

The reduction in testosterone as a result of vaccination against GnRF

has a profound effect upon behaviour. “Vaccinated pigs increased the amount of time they spent eating and their feed intake was higher,” comments Dunshea. “Another indicator of reduced negative activities was the reduction in lesion scores in vaccinated pigs observed upon mixing in lairage.”

CONTINUED ON PAGE 40

Masters of solving the puzzle of balanced genetic traits



Find out how balanced traits can help you:

Call toll-free **1 800 667 5960**

or visit us online at www.hypor.com

Analyses of up to 16 studies show that vaccination against GnRF increases feed intake by an average of 512 g/d, ADG by 149 g/d and carcass weight by 1.5 kg over that of boars, with only small increases in FCR (+0.07) and back fat (+1.2 mm).

“The increased growth rate and carcass weight of boars vaccinated against GnRF, combined with assurances of high quality pork free of boar taint, provide real incentives in markets where physical castration is not normally practiced,” Dunshea believes. “This becomes even more appealing in countries where metabolic modifiers such as porcine somatotropin (pST) or ractopamine are approved to ensure that additional feed consumed in the late finishing period is converted into lean meat.”

“The incentives for vaccinating against GnRF in markets where physical castration is practiced are even more compelling”

The incentives for vaccinating against GnRF in markets where physical castration is practiced are even more compelling, Dunshea stresses. “There are now a number of studies comparing the finishing performance and carcass quality of vaccinated boars and barrows,” he points out. “These analyses of up to 11 studies show that vaccination against GnRF increased

ADG by an average of 173 g/d, reduced FCR by 0.33 and back fat by 3.4 mm, with a small increase in ADFI (+115 g/d) and a small decrease in carcass weight of 1.16 kg.” (See Table 2). The large decrease in back fat combined with only a small decrease in carcass weight indicate a substantial increase in lean meat yield in the vaccinated pigs, Dunshea adds.

With regard to the boar taint compounds, studies show that vaccination against GnRF decreases boar taint compounds and improves carcass weight for between 4 and at least 8 weeks after the secondary vaccination, Dunshea notes.

Managing vaccinated boars

Despite the rapid antibody, endocrinal and metabolic responses to vaccination against GnRF, the effects on feed intake, growth and body composition do not become apparent until beyond 2 weeks after the secondary vaccination. “As adipose tissue androstenone is decreased by 2 weeks after the secondary vaccination, it should be possible to slaughter vaccinated boars at 2 weeks post secondary vaccination without any increase in back fat over that of the non-vaccinated boars and with the surety that the boar’s taint compounds have been cleared from the carcass fat,” explains Dunshea. “However, in practice most producers slaughter at 4 to 6 weeks after the secondary vaccination to be certain that all boar taint compounds

have been cleared although this may be associated with some small increases in carcass fatness.”

Recent studies were conducted to investigate the interactions between vaccination against GnRF and ractopamine. “Dietary ractopamine increased lean tissue and decreased fat mass, particularly in vaccinated boars,” Dunshea notes. “Therefore, dietary ractopamine may be a means of ensuring that the increased feed intake observed in vaccinated boars is directed towards lean tissue rather than fat over the last few weeks before slaughter.”

Nutrition of boars and vaccinated boars

“There are no published studies conducted to investigate the effect of vaccination on lysine requirements although it is realistic to assume that up until at least 2 weeks after the secondary vaccination their nutrient requirements should be similar to that of the boar since both lean tissue gain and feed intake are similar until 2 weeks after vaccination,” Dunshea suggests. “Indeed, the rate of lean tissue deposition of vaccinated boars appears to be maintained or decreased only slightly compared to that of entire boars until approximately 4 weeks after the secondary vaccinations. This would suggest a similar requirement for total available lysine intake, although it should be noted that feed intake is universally increased beyond 2 weeks after secondary vaccination and therefore the lysine content of the diet could likely be reduced beyond this point.” Research indicates that lean tissue deposition is reduced relative to boars at this time. “While there are no tissue deposition rate data beyond 4 weeks after secondary vaccination, it is likely that lean tissue would decrease and fat deposition increase relative to boars,” he adds.

Recent studies suggest that, although the protein deposition and growth potential of boars is greater than that of gilts, there is little difference in the lysine requirements of grower and finisher

CANADA FARM DISTRIBUTORS LTD.
Exclusive Canadian Distributor

BURN-EASY Animal Carcass Incinerators

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

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

For All Pricing & Technical Inquiries Contact:

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

UP TO 75% ENERGY SAVINGS

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



Pyramid Pigs

Top of the genetic pool

- The ultimate pig package.
- It doesn't get better than pyramid pigs for selection, quality and value.
- A genetic company unlike any other.
- Built on giving a variety of genetics with the service you expect and deserve.

The Reasons To Choose Pyramid Durocs



More reasons to choose Pyramid performance Durocs.

- Registered closed Purebred herd.
- A source of High Health Stock
- Celebrating 15 years of Genetic success.

To find out more on how Pyramid performance pigs fit into your genetics.

Contact

PYRAMID GENETICS WILL

Increase

- Piglet Birth Weight
- Piglet Wean Weight
- Average daily Gain
- Average Loin Depth
- Predictability

Decrease

- Days to market
- Feed conversion
- Inconsistency
- Variation
- Fat Depth

Pyramid Pig Breeders

a division of Wellwood Colony Farms Ltd.

Box 200 Ninette Manitoba R0K 1R0

1.204.776.2205 Barn

pyramidpigs@hotmail.ca

Peter 1.204.215.1220 cell

Jerry 1.204.215.1221 cell

Large White, Landrace, Duroc Boars and Gilt's,
Trained AI and Natural Boars available.
Steady supply LW x LAN cross bred gilt's available.

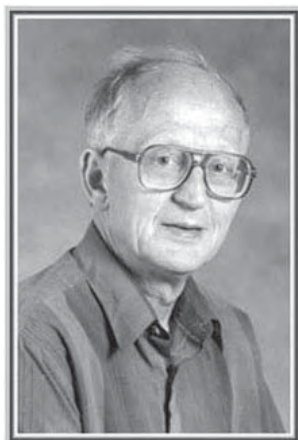
Boars coming soon to
Magnum Swine Genetics Inc. (AB)

PYRAMID PIGS WITH THE QUALITY AND CONSISTENCY, THAT PACKERS DEMAND!

Announcing ...



Open to owners, production managers, herdspeople or consultants in the North American 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 !



**BANFF PORK
seminar**

January 18 - 21, 2011

**Win one of three prizes
valued at \$1600:**

- Two free BPS registrations
- Free accommodation for winners and a guest each
- Up to \$800 reimbursement in travel expenses

**Visit www.banffpork.ca
Deadline Oct 29, 2010**

boars and gilts, Dunshea notes. "However, in the most recent study conducted with high-performing grower pigs, it was found that the lysine requirement of boars was higher than that of gilts," he says. "It appears that despite large differences in protein deposition rates between the sexes, boars have similar, or slightly higher, dietary lysine requirements, suggesting that boars use dietary lysine more efficiently than do gilts and barrows." Recent French studies suggest that the digestible lysine requirement was on average 0.1 g/MJ net energy higher for boars than for gilts and barrows.

Conclusions

Boars are more efficient and deposit less fat than barrows, particularly at high slaughter weights, however, there is a risk of unacceptable boar taint in pork where male pigs are not castrated. With animal welfare activists in some countries lobbying for a cessation of castration, vaccination against GnRF may offer an alternative and allow producers to capitalise on the superior natural growth and carcass characteristics of intact male pigs without the risk of boar taint.

Precision management - What top producers are doing to be profitable

The most economically stable swine producers today have implemented management practices that directly impact the profitability of their enterprise, believes Hans Rotto, a production and veterinary consultant based in Ames, Iowa. They commit to clear expectations and protocols which allow people to meet their goals and use objective measurements to monitor progress, he says. Management through employees is part of a continual evaluation of the system and is connected to improvement and changes, Rotto says. He looks at how these management principles are implemented in practice.

Introduction

The lower profit margins in today's pork industry put tremendous pressure on producers' profitability. Costs and inputs are being scrutinized more closely than ever before. Currently, there are some common points that stand out in big and small production systems that make them better than others. No individual company is doing everything perfectly, but many have implemented a number of management practices that provide a way to continually improve.

Clear expectations

Successful swine farms and production systems can clearly state goals and the processes to attain those goals. They are recorded in concise protocols. Written protocols address **how** to do things and **when** to do things. The best protocols and expectations also clearly and concisely state **why** these expectations are important. An example could be the washing of farrowing crates and farrowing rooms post weaning. There is a logical step-wise process from breaking down the room, pre-soaking etc. The **how** and **when** are sequential logical methods to achieve the expected levels of cleanliness. If you have never done this task before, it is not

so logical and may not make sense. Protocols with an explanation on why washing the crate from ceiling to floor to prevent re-washing and re-contamination helps people learn the logic and reasons in the written protocols. This leads to the achievement of the expectation and an inspected clean farrowing crate and room.

Objective measurements

If expectations are clear and people understand why they are performing a task, it enables the process of measurement. Clear expectations should detail an outcome or goal that is understood, can be objectively measured and is in the control of the people responsible for the work. There is alignment of measurements and accountability. The best objective measures are either 'yes' or 'no' or could be viewed as 'pass' or 'fail'. A farrowing crate is clean or needs to be re-cleaned.

"The best operations view unmet expectations as opportunities to improve"

The best operations view unmet expectations as opportunities to improve and provide ongoing training and clarification of the expectations. They are constantly trying to fill the gaps in a positive pro-active manner. They do not waver. They consistently re-visit and reference the written protocols and invest in the time and resources necessary for training. Ultimately, they understand more quickly when an individual is either incapable of performing the expectations or is making a choice not to meet expectations. At the same time the best companies are always evaluating the expectations outlined. Can they be improved? Streamlined? Are they realistic? Are they practical and achievable?

Inclusive

As these companies are asking themselves these questions, they are engaging the people at all levels of the organization in the "self" evaluation. Generally, there is a semi-formal process where the on-farm and management input comes together. This

input is reviewed and either changes are made or there is a re-commitment to what is currently expected. The best companies review the expectations and written protocols annually. They do not wait for failures or problems to occur in an area to review it. They look for opportunities to improve.

Evolving, changing and adapting

Highly successful and productive swine businesses are undergoing continuous improvement. Even though clear expectations are an absolute, these companies are challenging the **how, when and what** at all times. They have the ability to focus on measureable outcomes and do not get lost in the cloud of natural variation in a biological system. They re-set the expectations, re-train the processes and continuously evolve. People in these systems expect to change, they do not fear it. They are engaged in it and feel ownership in it at all levels of the organization. They are willingly and openly trying new technologies. They carefully measure these advances with a formal process of evaluation and are quick to adapt positive innovations. They are equally quick to dump things that do not work. It is important to realize that most of these organizations do not get caught up in the "flavor of the month" mentality. Nor do they get caught up in the paralysis of analysis of everything measurable. Too often, so many things are measured and analyzed that people within the organization lose sight of what is important. The risk is that eventually nothing seems important and prioritization becomes confusing.

Key measurements

Successful swine production organizations share and review key indicators in real-time throughout the organization. Few days pass before a missed expectation is reviewed, investigated and plans put into place to correct it. These key indicators in the production system are very sensitive to the bottom line. If breed target is a key indicator and it is missed, the what, why and how are known, discussed and communicated openly. This

CONTINUED ON PAGE 44

Harvest the benefits.

the A.I. Solutions Company

with

Magnum Force



www.magnumswine.com
1 888 553 4844

assessment leads the conversation to other components of the key measurement. Did the farm breed the expected number of gilts? Did they miss target on wean sows, opportunity sows, etc...? This type of analysis requires open communication at the owner/management level to the farm level. For example, the breeding crews cannot control the fact that the gilts showed up 70 lbs lighter than expected. They can identify the missed expectation when it happens. They are responsible to plan accordingly to meet breed targets in any given week. If breeding target is missed two months later because the gilts were light, an opportunity was missed. It was a known "missed expectation" by the gilt supplier when the gilts arrived. The best organizations immediately put plans in place to make breed target when these gilts are expected to be available to breed. They are also working on correcting the gilt weight issue. Lastly, they are considering and working on plans to avoid over-breeding when the slug of gilts comes through the breeding herd.

"Key measurements and clear expectations drive the prioritization of work"

Management at all levels is in lock-step to anticipate the consequence of a missed expectation and minimize its impact on profitability. They are also sensitive and realistic about what people can control and do to minimize risks to profitability.

These same companies use these issues to continuously improve their processes and protocols to meet expectations.

Execution

Every day of the week, the execution of processes and protocols to meet the expectations on the farm are done with diligence, patience and care. There is no rushing through work on week-ends. Clock-watchers are not filling their day to match their task list. Work is not disrupted by a feed line motor not working or someone not able to work due to illness. Execution of the most important processes is done well daily. This means that some days, some tasks such as washing a hallway or organizing the medicine shelves are postponed to a later date. The key measurements and clear expectations drive the prioritization of work at the farm level and both managers and employees habitually focus on what is most important to the results.

Conclusions

The best companies use clear expectations, communicate change effectively and inclusively, and measure in real-time the key indicators to profitability. This re-enforces the importance of daily execution which can be tangible change to the bottom line and future of an organization. ■



HUSKY

Committed To Quality You Can Depend On

For More Information Contact ... husky@huskyfarm.ca

15000 GALVANIZED

- Round Profile
- Domed Heads
- All Sizes Available
- Hot Dipped Inside and Out

H5000 LIQUID MANURE PUMP

- Up To 6000 GPM
- 8-14 ft Pit Depth
- 85, 120 or 150 HP
- 8" & 10" Discharge

Husky Farm Equipment Limited
Alma, ON. NOB 1A0
(519) 846-5329 1-800-349-1122
www.huskyfarm.ca



An outbreak of Foot and Mouth Disease would lead to the horrific spectacle of wholesale slaughter of livestock as on this farm in the UK during the 2001 outbreak.

FMD scare - close shave or communications nightmare?

By Bernie Peet

On the morning of Monday, June 21st, the news broke that CFIA had closed Olymel's Red Deer plant due to "an animal health situation". Rumours suggested that there were signs that could have been Foot and Mouth Disease (FMD) or a disease with similar symptoms such as Swine Vesicular Disease (SVD). But CFIA officials were tight lipped, choosing to provide minimal information to the public and the industry it is supposed to be serving. Olymel said that the situation was "nothing to do with the company or with our operations itself", a rather strange response when FMD could potentially result in the demise of the Alberta pork industry and the Red Deer plant. In fact, not until Wednesday 23rd, when the

plant was allowed to resume operation did Olymel issue a news release, announcing that normal operations were being resumed. As things got back to normal, questions started to be asked as to whether the incident was handled properly; questions that seem to have opened up a large can of worms.

First, communications between the various sectors of the industry was poor or none existent. The specialist pig veterinarians, who are in the front line of protecting their clients' herds from disease, were not contacted by CFIA. "The first thing I knew about it was when a client called to ask about what security measures to take," one veterinarian

CONTINUED ON PAGE 46

Breakaway performance.

the A.I. Solutions Company

with

Magnum Force



www.magnumswine.com
1 888 553 4844

told WHJ. News of the event spread through the Hutterite community like wildfire, which is how most veterinarians, to their embarrassment, found out. Communication with other provincial livestock organizations and those outside the province was not coordinated, so many were not warned.

“The first thing I knew about it was when a client called to ask about what security measures to take”

Second, CFIA’s response to a suspected reportable disease was questionable. If it really was FMD, why did they let trucks loaded with pigs travel around the province, potentially spreading disease? CFIA should have ordered a complete ban on livestock movements until the tests had proved negative and all tracings from the farm of origin been made. At the very least, they should have followed their own policy for dealing with an FMD outbreak and halted animal movements within a 10 km radius of the plant. Bearing in mind that FMD has no human health implications, pigs in transit should have continued on to the plant and been slaughtered rather than been moved to collection facilities. Some trucks that arrived at the plant after the stoppage were turned away, although technically they could have been in indirect contact with potentially infected pigs. Also, trucks were sent away to as far away as Manitoba, thereby widening the distance from the source to which the disease could have been spread.

Fortunately it was summer and the Western Hog Exchange did a good job of looking after the pigs that were turned back from the plant and protecting their welfare. If a similar situation arose in winter, holding 3000 pigs outside for three days would have serious welfare implications.

Third, why did it take so long to analyze the samples taken from the plant, delaying the re-opening of the plant and creating additional costs for producers? Samples were sent to the provincial veterinary laboratory in Edmonton on the Monday and the results were available at midnight. They carried out a PCR test, which was negative. Wasn’t that good enough to declare a false alarm and re-open the

plant? Also, why weren’t industry players made aware of this immediately? Is it necessary for samples to be analyzed at the CFIA lab in Winnipeg? In a real FMD outbreak, rapid testing would be essential.

The plant was closed at 7.30am and samples were taken by public transport to Winnipeg and didn’t arrive until the evening. Shouldn’t CFIA have hired a private jet and been there within two hours given the cost of the shut-down and the potential impact if it proved to be FMD? Red Deer has an airport within minutes of the plant.

Fourth, why did CFIA not visit the source farm immediately? When CFIA staff did eventually visit they found that there were no clinical signs of any vesicular type disease, which should have immediately rung warning bells. What appears to have happened is that a strong disinfectant used in the truck caused the blisters. It was not something that happened on the farm. While one can understand CFIA being ultra cautious, bearing in mind the outbreaks of FMD in the Far East at the time, the way they went about following up the suspected case was questionable, to say the least.

“Communication with the general public was totally inadequate”

Finally, communication with the general public was totally inadequate. Olymel is Red Deer’s biggest employer but no spokesperson was available at the plant to deal with the local and regional press. Residents speculated about what might be going on behind the barricaded entrance as they saw the flashing lights of RCMP cruisers outside the plant. Speculation and suspicion were rife. The first rule of crisis management is to make an early and detailed statement and to be entirely honest about the situation. The second rule is to make regular statements and keep the media informed at every stage. Clearly, neither of these things were done, either by CFIA or Olymel. Being seen to handle the situation effectively and react decisively to a potential issue creates positive perceptions; however it is dependent on total transparency and honesty

about what is happening and about any implications for the general public. In this case, the lack of information appeared to have the opposite effect and an opportunity was lost. The public needs to be credited with more intelligence and treated with a great deal more respect. After all, they are the final purchasers of the products coming out of the plant and are therefore important stakeholders in the process.

What transpired that week in June demonstrated the complete lack of preparedness by the industry as a whole and the various sectors and organizations that make up the industry. How many



Stop-On Aerosol Spray Markers

Lowest Cost / Highest Performance

Reliable / Long Lasting

Sprays at Any Angle

Fast, Easy and affordable

Made in Canada

Order Direct \$3.85 Each +S/H

Marabo Products Canada Ltd, #10222 Clayburn Plaza,
Abbotsford, British Columbia V2S 8K5 Phone: **(604) 308-6955**

producers would guess that there is no provincial or national emergency plan to deal with an outbreak of foreign animal disease? Bearing in mind the mistakes that were made and the lack of an effective livestock traceability system, had it been FMD, a large part of western Canada's livestock industry could have been wiped out.

Canada seems not to have taken heed of the lessons learned in the 2001 FMD outbreak in the UK, in which millions of animals were slaughtered and which cost the country C\$15 billion. Canadian veterinarians even helped during the crisis so that they would know how to deal with a disease situation at home. The Chief Veterinary Officer for Scotland at the time, Prof. Charles Milne, gave a blow by blow account of how the outbreak was handled and the mistakes that were made at Alberta Pork's AGM in 2008. Clearly no-one was taking notes.

So, close shave it was indeed, and one that should be a wake-up call to all those involved. But it was also a communications nightmare, and good communications could make the difference between an effective response and the disease getting out of control. Next time it may be for real and producers should be asking whether the lessons learned will result in a better system and a proper emergency plan.



Better assessment of AI boars and a move to single inseminations would benefit the industry, says Dr. George Foxcroft

Increasing the genetic impact of AI boars

Better differentiation of relative fertility amongst commercial AI boars and a move to single-boar AI programs would have significant economic benefit for the swine industry, says Dr. George Foxcroft of the Swine Research and Technology Centre at the University of Alberta. The characterization of AI boars that maintain high productivity using lower numbers of sperm per AI dose will also allow the industry to capitalize on established and emerging AI technologies like post-cervical insemination and single, fixed-time insemination, he suggests. Furthermore, Dr. Foxcroft believes, using the higher genetic merit of these boars across a greater number of gilts and sows bred would provide substantial benefits to the producer in terms of the performance of terminal line progeny.

CONTINUED ON PAGE 48

Magnum Swine Genetics Inc.

the A.I. Solutions Company

with

Magnum Force



www.magnumswine.com
1 888 553 4844

CELEBRATING 13 YEARS

Strategic advantages resulting from improved evaluation of boar fertility

The ultimate measures of boar performance in standard production records are farrowing rate and litter size born. However, these are retrospective measures of boar fertility and can be highly influenced by breeding management and the quality of the gilts and sows bred. A thorough physical examination of the boar and conventional semen evaluation (concentration, morphology, motility) can provide an alternative to actual fertility data. While these evaluations can establish that an animal is either sub-fertile or infertile, they cannot identify the relative fertility of boars that meet accepted industry standards semen quality. However, the “predictors of useable semen” currently applied in most commercial AI centres provide a very conservative estimate of the relative fertility of individual boars. The relatively high sperm numbers

used in commercial AI practice (usually more than 3 billion total sperm per dose of extended semen), and the pooling of semen from boars that may have inherently different fertility, masks the reduced fertility that can be demonstrated in some of these boars when lower numbers of sperm are used for AI, or if boars are used on an individual basis.

If the full economic impact of the highest genetically indexed boars is to be realized in the pork industry, the number of gilts and sows bred per boar must be maximized. A number of innovations in insemination technology, including post-cervical and deep-uterine insemination are conducive to the use of lower sperm numbers per insemination. The further possibility of using controlled ovulation techniques to achieve single fixed-time insemination protocols would also substantially increase the utilization of genetically superior boars.

Effective predictors of relative boar

fertility are essential and will allow removal of less fertile boars from commercial studs. This in turn will optimize the use of proven, high fertility, and genetically high indexed boars at lower sperm numbers per AI dose. At the nucleus level this will allow for increased selection pressure by increasing the number of offspring bred per collection from high ranking boars. For terminal line production, this would allow considerable improvements in production efficiency to be realized, by capitalizing on boars with a high index for traits such as growth rate, feed conversion efficiency and the carcass characteristics of their progeny. Even if the same costs were paid in genetic royalties, by purchasing fewer total doses of semen from genetically superior boars, the cost benefits realized by producers in grow-finish performance of the progeny and the value of the carcass sold would nevertheless be very positive.

“It is critical to identify boars of relatively low fertility when used in the more challenging situation of reduced sperm numbers per AI dose”

However, if these changes in production strategy are to be realized, it is critical to identify boars of relatively low fertility when used in the more challenging situation of reduced sperm numbers per AI dose or per insemination. The very definition of “useable semen” changes in this more demanding context.

Approaches to boar semen evaluation

There is a long history behind the search to find a single or combination of tests that can accurately predict male fertility from a semen sample and it is a complex topic. However, there are two different types of sperm traits that affect fertility.

- *Compensable* traits are those that can be overcome by introducing large numbers of sperm during insemination. Problems with



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

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

Tel: 519-527-2470
Fax: 519-527-2560

www.sunnorth.com

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

sunnorth@sunnorth.com

motility and morphology will reduce the number of sperm that are able to reach the oocyte, but by introducing large numbers of sperm the reduction in fertility can be minimized.

- *Uncompensable* traits are those that cannot be overcome by introducing larger numbers of sperm. These defects affect fertilization and embryo development.

Therefore, to effectively predict fertility, it is essential to discriminate between compensable and uncompensable traits in an ejaculate. Conversely, evaluation of relative boar fertility in vivo using high sperm numbers per dose (e.g. 3 billion sperm) will mask compensable traits and will not allow the industry to identify boars that can be used in more demanding applications of AI.

Research suggests that existing analyses are inadequate for predicting relative fertility in healthy boars with ejaculate quality that meets normal industry standards. Differences in relative fertility also become increasingly evident when low sperm doses (<2.5 billion sperm) are used for AI.

Although various other potential markers of semen quality and boar fertility have been investigated and might eventually simplify the evaluation process, sufficient information already exists on which to make dramatic improvements in AI technology in the pork industry. In future genetic markers may offer the ability to measure fertility, but in the meantime carrying out perhaps 50 single-sire matings and measuring the results would enable the worst 15% of boars to be identified and culled.

Evidence for differences in relative boar fertility in commercial studs

The almost universal use of pooled semen doses in commercial boar studs severely limits the collection of data on relative boar fertility at production level. However, the limited data available

continues to suggest a substantial range of fertility exists. Indeed, in the absence of routine procedures for identifying relative boar fertility, a normal distribution of fertility traits should be expected. Limitations in AI technology may lead the industry to continually underestimate the existing productivity of contemporary commercial dam-lines.

All these points are evident in recent data obtained from single-sire matings at the multiplication level (Figure 1).

These results indicate that the productivity of the top two thirds of these boars is very high, with an average of over 13 pigs total born. However, when the productivity of the lower one

CONTINUED ON PAGE 50

ENZYMES. HIGHER GAINS. LESS FEED. CHA, CHA, CHA.



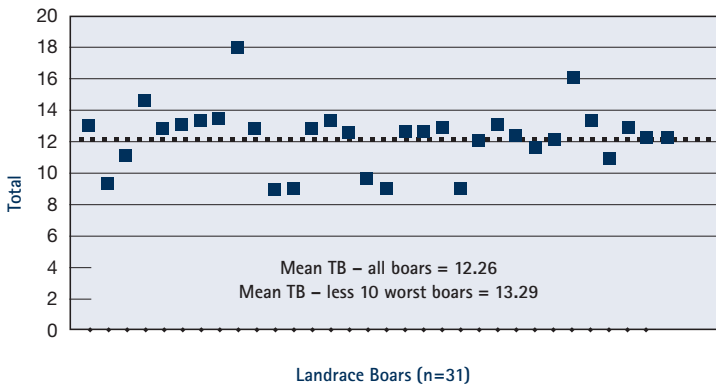
THERE'S A NATURAL WAY TO PROFITABILITY: CBS enzymes are researched, custom formulated and proven to boost the effectiveness of your feed. From aquaculture to animals – the result is higher gains with less feed. Ask about our natural enzyme combinations for productivity and profit: call 1-800-561-2474, email cbsinc@canadianbio.com or visit canadianbio.com.



0606-2401

third of these boars is included, overall productivity falls by over one pig born. This relatively inferior performance of 20 to 30% of boars evaluated is consistent with other, more extensive, data. Moreover, if the genetic merit of the three boars in Figure 1 that averaged over 14 total born was high, the application of more efficient AI technologies would allow the merits of these “elite” boars to spread across a larger proportion of sows bred. However, in current AI practice, these substantial differences in boar productivity and the link to known progeny produced by individual boars are confounded by 1) the use of pooled semen and 2) high sperm numbers per AI dose.

Figure 1. Data on litter size born in sows bred to commercial Landrace boars using single-sire matings with 3 billion sperm per AI dose. (Tony Charanduk – Personal communication)



The problem of pooling semen when trying to optimize production efficiency

In one recent preliminary study, we evaluated the performance of two boars which routinely met our normal criteria for acceptable semen quality (better than 80% motility and <15% abnormal sperm). Both boars had a history of good fertility when used in experiments requiring adequate numbers of pooled semen doses to normalize any confounding “boar effect” on the fertility of gilts and sows allocated to different experimental treatments. Before going on to use these boars for single sire inseminations in later studies, we evaluated the performance of two of these boars (Blue and Red) using both pooled and single sire AI protocols. In all cases, a total of 2 billion sperm per AI dose were used. As shown in Table 1, both boars were very productive in single-sire inseminations and in pooled semen also performed well. There was, nevertheless, a 2.5 pig difference in total embryos at day 30 of gestation between these boars, due to 10% difference in either fertilization rate and/or embryonic survival to this stage of pregnancy, and the outstanding performance of the most fertile (Blue) boar was masked by using pooled semen.

“Progress can be made by adopting single-sire mating strategies and evaluating boars on the basis of routine production criteria”

Overall, adoption of a single sire AI strategy would improve the total numbers of pigs born, by allowing the Blue boar to express his true potential. It seems reasonable to assume that a similar “averaging effect” would result from the pooling of semen from the best boars shown in Figure 1 with less productive boars in this population.

Simply from the perspective of optimizing breeding herd productivity, a move to single-sire AI programs seems to be justified. The very best boars will express their real potential, and overall herd productivity appears to increase. Furthermore, the small percentage of very inferior boars will quickly be identified and can be removed from commercial production. In time, it is realistic to suggest that both phenotypic and genomic markers will be developed that can be used prospectively to remove inferior boars before they are extensively used for commercial AI. However, the data presented above suggest that progress can be made by adopting single-sire mating strategies and evaluating boars on the basis of routine production criteria.

Application of fixed-time AI programs to optimize genetic transfer

Putting all the above information together, the logical conclusion about future developments in AI technology would be a move to single-sire inseminations with the

FARM

SOFTWARE

Desktop or Internet-based

You choose!

Complete Farrow-to-Finish with:

- Sow Cards
- Action Lists
- Standard Reports
- Custom Reports

Interfaces with specific:

- Sow Feed Equipment
- Ear Tags (RFID)
- Genetic Evaluation Services

Please call for more information.
Toll-free: 1-877-474-4946

Table 1: Results from two fertile boars when used in single-sire or pooled AI protocols with 2 billion sperm per AI dose. (SRTC – unpublished data, 2009)

Variable	Pooled doses	Blue boar Single-sire AI	Red boar Single-sire AI
Number of breedings	32	11	14
Ovulation rate of sows bred	20.3	20.7	20.3
Live embryos at day 30	15.2	17.7	15.0
Embryo survival at day 30 (%)	75	85	75

lowest possible doses of semen using ejaculates from boars with high genetic value and proven fertility in a “low semen dose” environment. As in other domestic species, the logical way to achieve this outcome is with the introduction of single fixed-time AI programs. Research suggests that contemporary commercial sows in well managed breeding herds show increasingly less variation in the weaning-to-estrus interval and may not even show a clear response to eCG treatment at weaning. As a result, there are already reports of acceptable outcomes when implementing a single intervention strategy with either pLH or GnRH to induce ovulation in sows at a fixed time after weaning (Table 2).

In situations in which the synchrony of estrus after weaning may not allow the effective application of either pLH or GnRH at a fixed time after weaning, the alternative strategy of using ovulation-induction after an initial treatment at weaning with eCG continues to be explored with acceptable results. However, the responses to single GnRH/pLH treatment protocols are promising, as shown in Table 2. These and other results suggest that the implantation of single fixed-time AI programs in well managed sow herd can be a reality. Linked to the use of proven superior sires, post-cervical insemination catheters and lower doses of semen, this new technology will allow the pork production industry to apply the genetic value of elite boars to breeding programs that are competitive with other livestock species.

Table 2: Fertility of sows bred by 10 days post-weaning (21-d lactation and average 10.7 pigs weaned) as Controls (no treatment) or after synchronization of ovulation with a GnRH agonist per vaginum in a gel-based vehicle (Ovugel). (From Johnson et al., 2009)

	Control	OvuGel	Signif.
Initial No. Sows	150	150	*
No. Sows Bred	123	150	*
In Estrus at AI, %	100	83.3	< 0.001
No. of Services/Sow	2.3	1.0	< 0.001
Wean to Estrus, d	4.7	4.4	0.06
Sows Farrowed/Weaned, %	72.7	76.7	0.43
Total Born/Litter	12.2	12.6	0.41
Total Born/Semen Dose	5.3	9.6	< 0.001

CONTINUED ON PAGE 52

Signature Genes

Purebred Durocs
www.signaturegenes.com

Boars that can walk.
Boars that can breed.
Guaranteed.

Tom 204 371 6558
Lorne 204 371 7777
Ste. Anne, Manitoba

What we have achieved in our 29 years of breeding Durocs -

- Optimal Loin Depth and Backfat
- Selected for F.C., Marbling & Growth
- High Health PRRS & Myco. Neg.
- Total Air Filtration system installed

Semen available at Carlo Genetics and Magnum Swine.

Expeller-extracted canola meal is an excellent source of energy and amino acids

With rising feed costs it is now all the more important for pig producers to look for alternative feed ingredients in order to reduce costs. As new raw materials become available from the processing of grains, oilseeds and pulses, it is also essential to know their nutritional value to the pig in order to ensure diets are formulated to optimize performance and minimize costs. Recent research at the University of Manitoba has been looking at the nutritional value of expeller-extracted canola meal. In this article, Tofuko Woyengo, Elijah Kiarie and Martin Nyachoti, from the Department of Animal Science compare the value of this product with solvent extracted canola meal.

Canola meal is widely used as a protein source in swine diets. Solvent extraction methods are commonly used to obtain canola oil, resulting in a meal that has low residual oil content. Expeller extraction methods can also be used to obtain canola oil but are less efficient, resulting in a meal with higher residual oil content. Another important difference between solvent-extracted and expeller-extracted canola meal is that the former is subjected to higher moisture and moderate temperature during the extraction, whereas the latter is subjected to lower moisture, but its temperature can be higher due to the high pressure that is applied to maximize oil recovery. High processing temperature and moisture are known to affect the nutritive value of a feedstuff, especially with regard to the availability of some amino acids. Thus, it is critical to determine the nutritive value of canola meals produced by different methods to optimize their utilization in formulating swine diets.

Standardized ileal digestibility (SID) of amino acids is a better estimate of amino acids availability than apparent ileal digestibility (AID) of the same because the former is a closer representative of true ileal digestibility values and its values

Table 1: Chemical composition (as is) of solvent-extracted and expeller-extracted canola meals used in the study

Item	Solvent-extracted canola meal	Expeller-extracted canola meal
Dry matter, %	89.52	92.32
Crude protein (6.25 x N), %	37.39	38.20
Fat (hexane extract), %	4.96	11.11
Fibre (neutral detergent fiber), %	26.77	22.01
Indispensable amino acids, %		
Arginine	1.99	2.24
Histidine	0.99	1.05
Isoleucine	1.38	1.54
Leucine	2.34	2.61
Lysine	1.95	2.13
Methionine	0.62	0.63
Phenylalanine	1.35	1.47
Threonine	1.36	1.44
Valine	1.82	2.01

The Best in Ventilation and Feeding Equipment

Serving Hog and Poultry Producers of Canada



WEDA Sow-Comp-Feeder

The sow-comp-feeder is a "demand feeding system" especially designed for sows in group management, ear transponders enable perfect preprogrammed feeding of individual sows.



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

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

are more additive in a mixture of feed ingredients. Thus, when determining the nutritive value of a feedstuff with respect to amino acids availability, SID as opposed to AID should be measured. The nutritive value of solvent extracted canola meal has well been characterized. However, there is limited information on the nutritive value of expeller-extracted canola meal for pigs.

In a recent a study at the University of Manitoba, the nutritive value of expeller-extracted canola meal obtained from Associated Proteins, Ste. Agathe, Manitoba was determined for pigs. The study determined the chemical composition (i.e, dry matter, crude protein, fat, fibre and amino acids), the contents of digestible energy and metabolizable energy, and SID of amino acids in both expeller-extracted and solvent-extracted canola meals.

"Expeller-extracted canola meal has higher levels of amino acids and energy than solvent-extracted canola meal"

As shown in Table 1, expeller-extracted canola meal and solvent-extracted canola meal had similar crude protein content. However, the values of fat and all essential amino acids were greater for expeller-extracted canola meal than for solvent-extracted canola meal. The fibre content was lower for expeller-extracted canola meal than for solvent-extracted canola meal. The expeller-extracted canola meal had a higher SID of all the essential amino acids than the solvent-extracted canola meal by an average of 7.5% (Table 2). The expeller-extracted canola meal compared with solvent-extracted canola meal had higher digestible energy and metabolizable energy values by 12 and 15%, respectively (Table 2). Thus, the results show that the expeller-extracted canola meal used in the current study has higher SID of amino acids, and digestible energy and metabolizable energy contents than the solvent-extracted canola meal. Because energy and protein are the first and the second most expensive nutrients, respectively, in practical swine diets, the results of this study will be useful in guiding the use of expeller-extracted canola meal to formulate nutritionally adequate and cost-effective swine diets.

Table 2: The digestible energy and metabolizable energy contents (as is) and standardized ileal digestibility (SID) of essential amino acids for solvent-extracted and expeller-extracted canola meals fed to growing pigs

Item	Solvent-extracted canola meal	Expeller-extracted canola meal
Digestible energy, kcal/kg	3,393	3,792
Metabolizable energy, kcal/kg	3,190	3,672
Indispensable amino acids, %		
Arginine	86.2	91.7
Histidine	78.1	84.7
Isoleucine	78.1	85.4
Leucine	79.0	87.2
Lysine	66.6	70.7
Methionine	84.1	87.4
Phenylalanine	90.4	94.3
Threonine	72.1	79.5
Valine	76.7	83.8

CONTINUED ON PAGE 54



Pigs don't always tell you the truth about ileitis—and it could cost you big. This pig may look healthy, but it's lying. It has ileitis. No obvious signs, no subtle hints. In fact, 94% of herds in a recent study¹ had pigs with ileitis and no clinical signs. Do yours? Truth be told, the only way you'll probably find out is at market, when ileitis losses hurt the most. Subclinical ileitis reduces average daily gain by as much as 38% and worsens feed efficiency by up to 27%²—costing you \$2.83³ per head. Use Elanco Tylan, and make honest pigs out of the liars.

For ileitis prevention:

Feed Elanco Tylan at 110 ppm for 21 days

Recommendation:


Begin feeding Elanco Tylan 3 weeks prior to seroconversion or 1 week prior to anticipated outbreak⁴

The label contains complete use information including cautions and warnings. Always read, understand, and follow the label and use directions.

¹ Armbruster, G. et al. Review of *Lawsonia intracellularis* seroprevalence screening in the United States, June 2003 to July 2006. *Proc. AASV*, 2007.
² Paradis, M. et al. Subclinical ileitis produced by sequential dilutions of *Lawsonia intracellularis* in a mucosal homogenate challenge model. *Proc. AASV*, 2005.
³ Data based on ADG and F:G differences over 21 days from treatment A, B, and F² base price of market hog of \$130/100 kg, carcass yield of 79.9%, index of 108, and nursery feed cost of \$250/tonne.
⁴ Guedes, R. Update on epidemiology and diagnosis of porcine proliferative enteropathy. *J. Swine Health Prod.* 12(3), 2004.

Tylan® is a trademark for Elanco's brand of tylosin.
 ELANCO®, Tylan® and the diagonal colour bar are trademarks or registered trademarks of Eli Lilly and Company.
 Used under license by ELANCO/Division Eli Lilly Canada Inc.
 11-12-0132-06012007

Elanco Animal Health
Division Eli Lilly Canada Inc.



Accept Nothing Less

web site: elanco.ca

Bringing home the (British) bacon

By Bernie Peet

Ask any ex-pat Brit what foods they miss most and the list is sure to include fish and chips, curry, bacon and sausages. But, while they dream of the tantalizing smell of British bacon frying in the pan, for most it remains just a dream, except on trips back to the home country. Now, thanks to the efforts of Alan and Nicola Irving, recent immigrants from the UK, they are able to realize their food fantasies and recreate the Great British Breakfast. Not only that, but a growing number of Canadians are coming to appreciate the lean fresh sausages and unsmoked back bacon that Alan and Nicola produce, so their business is sizzling.

Alan and Nicola moved from the UK to Alberta five years ago with their two children Cameron and Sarah. They purchased an acreage near Vimy, just north-west of Edmonton and Alan took a job driving a truck, something he had done in Britain for 16 years. Nicola has a degree in agriculture and spent 11 years working in the animal feed industry. Their goal was to start their own business, but they had no idea what it might be. But their own longing for fresh British style sausage and bacon resulted in the start of a highly successful enterprise producing a wide range of pork products, which has expanded rapidly over the last few years.

“When we arrived in Canada, we quickly discovered that the fresh, lean British sausages we had been used to were not readily available here, and with the help of a knowledgeable neighbour we began to make our own,” Nicola explains. “The sausages were instantly

popular, and we were pleased that so many customers, many of whom may not have previously tasted quality sausage, readily came back for more.” Having turned their basement into an inspected food processing facility, they began producing the first sausages in June 2006.

Business grew so rapidly that two years later they had outgrown their production capacity, resulting in a move to a small farm at Round Hill, just north of Camrose. The big attraction of this property was an almost new workshop building that eventually became a new 1500 square foot production facility, opened in January 2009. Over the last 18 months, the Irvings have spent \$80,000 on new equipment, including a vacuum packer, cold storage, walk-in freezer, a labelling scale, a smoker and a refrigerated truck. In addition, they invested in a new website and corporate design,

something they say has made a huge difference to their business. Funding from the Alberta Livestock and Meat Agency (ALMA) was obtained to help with the costs.

Since they started out, the Irving’s range of fresh pork sausage has grown to around a dozen varieties, ranging from old favourites like English Breakfast and Cumberland sausages to Sundried Tomato and Basil, Habanero Chilli and the latest offering, Indian Masala Mild Curry. They also sell bacon chops (a very thick-cut version of the back bacon), gammon steaks, which are made from pork leg cured similarly to bacon, sausage patties, sausage meat and



Nicola and Alan Irving (pictured right) with Jay Church (left) and Sharla Banack, show two types of their fresh pork sausages

=NUHN=

Redefining Manure Handling



Visit our website... www.nuhn.ca

ROESKE & ASSOCIATES

Practical Genetic Consultant
to the commercial swine industry

Contact: Murray Roeske
Phone/Fax: **(780) 939-4938**
E-mail: mroeske@moderndigital.net

old fashioned boiling ham. New products are constantly being developed.

All the sausages are gluten free, which has been a good selling point, Nicola points out. "About one third of our customers have celiac disease so gluten-free is a big market," she says.

Once the Irvings started to sell the sausages, their ex-pat customers asked them when they were going to make British bacon. This style of bacon is made from the loin and is unsmoked. "We went over to see a friend who is a partner in a big farm shop in the north of England and she showed us how to dry cure the bacon," Nicola explains. "With a dry cure, the bacon loses weight, unlike with conventional brine injection, where it gains weight, so it's more expensive to produce."

The dry cured back bacon now has a big following among health-conscious Albertans, once they discover how great it tastes. "Getting people to try it is the challenge, but when they do, they say it's like candy and the best bacon they have ever eaten," Nicola says. "We are providing an alternative to side bacon, which has a lot more fat, although having said that we now produce a dry cured smoked side bacon, which is very good!" Irvings dry-cured back bacon recently won first prize in a comparison of 20 different products by the grandly named World Bacon Council (based in Edmonton!), a group of chefs and other people in the local food industry.



Alan Irving with three Berkshire pigs that are close to market weight

CONTINUED ON PAGE 56

Masterfeeds
Swine Nutrition Solutions

MasterTECH

VIGOR BLUE

We would like to announce the arrival of MasterTech and Vigor Blue to our MasterWean family. To learn more about the latest arrivals to our pig starter line up please call 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

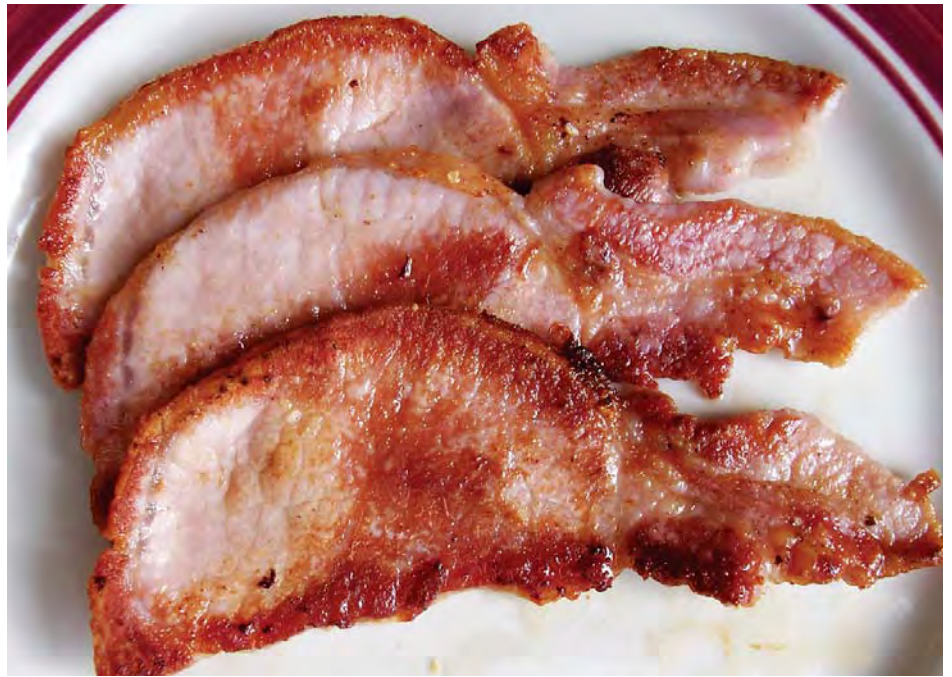
www.masterfeeds.com

In addition to sausage and bacon, the Irvings sell Berkshire pork to both high-end restaurants and to retail customers. Although they originally bred and reared a few pigs for sale, high demand for the meat led them to pool their sows with those of Ron and Karen Sobey at Belle Valley Berkshires, near Morinville. The Sobey's do the breeding and weaners are transferred to Round Hill at 100lbs for finishing by the Irvings. The pigs are all reared outdoors and slaughtered at 200lbs.

"Customers come to us and want to know that the pigs are raised properly," Nicola comments. "We want to be able to tell customers exactly how the pork is produced, so it's essential to have the confidence that a third party producer is doing things in the right way."

"They say it's like candy and the best bacon they have ever eaten"

Demand for Berkshire pork is so high that more production is now needed. About 40% of sales are to restaurants and the other 60% to retail, with all products sold with the skin on. "Restaurants are limited as to what they will take; they want tenderloins, chops, belly and bacon," Nicola notes. "Fortunately, our farmers' markets and retail customers want leg and shoulder roasts and we are training them to take shoulder steaks rather than chops!" Anything that is not sold as fresh pork goes into sausage production, because it's essential to utilize the whole pig otherwise it is not economic, she stresses.



Dry cured, unsmoked British-style bacon

For the production of sausage and bacon, pork cuts are purchased from Pine Haven Colony, near Wetaskiwin. The 200-sow herd was downsized last year to 80 sows in the same barn space, providing a lot more area per pig, which Nicola believes reduces stress and produces better flavoured pork. Pigs are killed at the colony, which then retails wieners, ham, sausage and salami in a farm shop. "This arrangement gives us full traceability because it is a single source, with pigs killed on site," Nicola points out.

The Irvings' range of products is sold in a variety of outlets including delis, farmers' markets, hotels and sales via their website. This allows direct

contact with the customers, which is invaluable in understanding what they want and making sure they get it. "We want to be able to explain what we do and why we do it," says Nicola. "We get a lot of questions about how the pork is produced and can tell people exactly how the pigs are reared." But, she admits, there is a lot of confusion about production methods. "People ask whether it is organic, but is this better than being 'naturally raised', especially bearing in mind the extremely high cost of organic feed?" she asks. "They assume welfare is better for our pigs, but terms such as pasture raised and outdoor reared need to more clearly defined for the consumer."

"We get a lot of questions about how the pork is produced and can tell people exactly how the pigs are reared"

Focusing on the bigger farmers' markets has helped to increase sales, with the biggest at Old Strathcona in Edmonton currently delivering double the weekly sales of 2009 now that a regular customer base has been established. "We also go to Calgary once a month and deliver to online customers, stopping in Lacombe, Red Deer and Olds along



Top Genetics

**Hermitage
Roseland Pork**

Ken Carlson

Western Canadian sales & production

Cell# 780.312.6929 Fax# 780.352.3508

ken.carlson@hermitagengt.com (coming soon www.hermitagecan.ca)

www.hermitagengt.com

www.hermitage.ie

**Our Best Numbers,
Will be in Your Barn**

- F.C.E 2.27
- 28.9 weaned/purebred sow/yr
- Terminal semen now available with a 1 month Trial price of \$6.00/dose
- GPs & F1s preordering for next winter @ \$20.00/gilt discounts

Agriculture is life



Wherever you find Canadian agriculture, you'll find FCC

Canadian producers rely on people who understand agriculture. FCC financing is designed for them.

1-888-823-9599 www.fcc.ca/advancing



Farm Credit Canada
Advancing the business of agriculture

Canada

0910-13963

the way," Nicola explains. Food service outlets range from 'Brits Fish and Chips', where sausages are deep fried in batter, to the prestigious Hotel Fairmont Macdonald. "Last year, we supplied the hotel with the 'Fairmont Patio Sausage', which was featured exclusively on the Patio BBQ menu throughout the summer and this year we developed a Fairmont Bratwurst which is featured on the lunch menu," Nicola says proudly.

Having worked flat out for four years, Nicola and Alan have now taken on staff to help with production. Jay Church, a trained retail meat cutter and keen meat smoker, now looks after sausage and bacon production, while also working with Nicola on the development of new smoked products. He is assisted by neighbour Sharla Banack and other part time workers. "Having good staff has made such a difference; we sometimes finish work at 5.00pm now!" exclaims Nicola. She and Alan are even planning a family trip to California as a reward for their non-stop efforts.

Sales growth has been exponential, with a near doubling of sales from 2008 to 2009 and the 2010 sales budget already reached by the middle of the year. While it's probably time for a little consolidation because the production facility is just about running at capacity, increasing demand is pushing the Irvings towards further expansion. "We can see that the market out there for our bacon is huge and so far we have only sold in Alberta," Nicola points out. "We want to get into BC, where there is a lot of potential demand, but to do that we will need to source federally inspected pork, which will mean a change of supplier." There will also be an opportunity to sell to larger retailers in the future, she believes. "We'd like to be able to give people the choice in supermarkets, but we can't do it with our current facilities. We will need to do a lot of research before we head down that route and also would need to invest a lot of money in high speed slicing equipment and retail packaging."

In just four years, the Irvings have come a long way and it's clear they have tapped into a growing demand for lean, high quality pork products. Adding value is not only helping their producer suppliers become more successful, but helping them 'bring home the bacon' for their family. Their full range of products can be seen at www.irvingsfarmfresh.com.

Pre-weaning mortality - A key driver in weaned pig cost of production



Dr. Tom Riek, Health Assurance and Multiplication Manager, PIC Canada

By Dr. Tom Riek

Recent benchmarking information from a North American database demonstrated that pre-weaning mortality ranked third in terms of production parameters impacting profitability, behind only nursery/finishing mortality and percent market culls in separating the top 25% of producers from the average. In fact, pre-weaning mortality ranked well ahead of other typical reproduction measures such as number born alive (9th) and pigs weaned per sow per year (12th). The difference between the top 25% of producers and the average in this data set was about \$5 in weaned pig cost of production. A wide range in pre-weaning mortality currently exists in our industry, ranging from well below 10% to upwards of 15%. The variation is huge and in many cases there are just too many pigs lost prior to weaning. Litter size has increased dramatically in recent years, but are we getting the survival we need to optimize weaned pig cost?

What is the financial opportunity?

Let's take an example of a 1,000 sow herd with a current pre-weaning mortality rate of 12% and assume 12 born alive and 2.45 litters/sow/year. This herd would currently be producing 565 pigs born alive each week and 68 piglets would die each week. If we can reduce the pre-weaning mortality to 9%, piglet losses would be 51 per week, or 17 fewer lost each week. Assuming a weaned pig value of \$35, the reduction in pre-weaning mortality would generate an additional \$595 in value per week, or \$30,940 a year! Expressed another way using this example, each percentage point decline in pre-weaning mortality is worth about \$1,000 per 100 sows in the herd.

What can you do to improve pre-weaning mortality?

There are many steps we can take to improve pre-weaning mortality without adding a lot of cost or changing equipment. I'll just outline a few. Start

Iso-wean and Feeder Pig Sales Contract Finishing - General Management Grow/Finish Spaces Needed

Contact: Precision Management

Division of 582935 Alberta Ltd

Jim Haggins - 403-796-7675

Jim.haggins@shaw.ca

COULD UNSEEN CIRCOVIRUS BE SABOTAGING YOUR HERD'S AVERAGE DAILY GAIN?

Fighting off disease challenge uses up valuable nutrients intended for growth.

While other circovirus vaccines may allow circovirus to circulate in your pigs' bloodstream (what is known as viremia), Circumvent™ PCV, administered in two 2-cc injections, has been shown to be effective as an aid in the prevention of viremia and virus shedding.

Ask your veterinarian how the **Circumvent™ PCV 2 + 2 two-dose vaccination program** can help prevent viremia in your herd... **so your pigs can use their energy to grow.**



NO COMPROMISE. NO SHORTCUTS.
THAT'S THE 2 + 2 ADVANTAGE!



All trademarks are the property of Intervet International B.V. and are protected by copyrights, trademark, and other intellectual property laws.



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 Wattage	125	175	250
SAVINGS AT 42.25 WATTS PER CRATE			
With TD-34	82.75	132.75	207.75
Cents per KWH			
ANNUAL SAVINGS PER CRATE IN U.S. DOLLARS			
4.5	32.62	52.33	81.90
5	36.24	68.14	90.99
5.5	39.87	63.96	100.09
6	43.49	69.77	109.19
6.5	47.12	75.59	118.29
7	50.74	81.40	127.39
7.5	54.37	87.22	136.49
Cents per KWH			
RETURN ON INVESTMENT IN MONTHS/YEARS			
4.5	1.7	1.1	0.7
5	1.5	1.0	0.6
5.5	1.4	0.9	0.6
6	1.3	0.8	0.5
6.5	1.2	0.7	0.4
7	1.1	0.7	0.4
7.5	1.0	0.6	0.4

For more information visit us on-line at www.kanemfg.com or call 515-262-3001 or 800-247-0038 today! email: info@kane.com

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

SOUTH COUNTRY LIVESTOCK EQUIPMENT LTD.
Lethbridge, AB • 403-329-0155

NOR-AG LTD.
Red Deer, AB • 403-341-3767

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

FRIESEN 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

with good day 1 piglet care. Consider staggering the work day to attend as many farrowings as possible. Use hot boxes or other strategies to keep the piglets warm and dry. Try split suckling to ensure good colostrum intake for all piglets. Cross foster within the first 24 hours only with minimal pig movements and avoid any further litter disruption. After day 1, fostering should be limited to the creation of fall-behind litters.

Quality colostrum is a must for piglet survival by controlling diarrhea and other health challenges. Work with your herd veterinarian to design an appropriate pre-farrowing and feedback program to get the right immunity into that first milk, and then ensure all piglets get a good feeding. Also ensure good exposure of incoming gilts to the herd bacteria and viruses to achieve a stable population. When gilts are not acclimatized properly, their piglets are often overrepresented as a portion of the total mortality.

Birth weight is one of the most important drivers of survival and pre-weaning growth, which in turn influences nursery and finishing performance. Birth weight is impacted by genetics, health, parity structure, body condition and feeding, early induction of farrowing and litter size. Limit farrowing induction to only problem sows with a history of stillbirths. Average gestation length has increased over time (as high as 117 days in some pure lines), so if you do practice induction, make sure it's not too early so that piglets have the maturity needed to survive and perform.

"Early induction decreases birth weight by 0.07 kg per day"

Early induction decreases birth weight by 0.07 kg per day, reduces robustness and viability, reduces colostrum volume and may result in dystocia (slow or difficult birth) and retained piglets. It's a tool that should only be used with extreme care. Mid parity sows produce the largest and most uniform piglets, so it's important to manage parity structure of the herd and ensure the bulk of the females are between the second and fifth parities.

Finally, practice good farrowing house biosecurity with effective sanitation



Quality colostrum is a must for piglet survival

between batches (wash, disinfect and dry), and good biosecurity between litters (change needles, gloves, blades) to reduce the infective dose of pathogens.

What can genetics companies do?

The goal is to achieve large litters of heavy, healthy pigs. Balanced selection objectives are vital to increasing performance without sacrificing survivability. If we focus too much on litter size for example, we might produce a lot of pigs born alive, but with smaller birth weights and lower survival, may not be any further ahead. A balanced selection objective could include traits like total born, stillborn, lactation survival and litter weaning weight as maternal traits, lactation mortality as a piglet trait, number of teats and liability to defects like scrotal hernia. Measuring these traits on the pure lines as well as on the crossbred animals in commercial production, then adding the information from genetic marker technology can greatly increase the accuracy of breeding value estimation, and thus increase the rate of genetic progress. That progress is being made today and is being realized at the commercial level.

Review with your genetic supplier to find out how they are addressing survival and robustness traits to ensure you are getting the most out of your genetics. See what has been achieved and understand how you can implement management strategies to take advantage of the genetic potential. ■

Dr. Tom Riek is the Health Assurance and Multiplication Manager for PIC Canada.

International Round-up



Research in the Netherlands shows that sows housed in groups produce heavier piglets

Sows kept in groups produce heavier litters

Recent research by Netherlands-based pig breeding company Topigs shows that sows in groups produce heavier piglets.

Reproductive data from more than 40,000 Topigs sows on 59 Dutch farms in the period 2008-2009 show that group-housed sows produce piglets with an average birthweight 61 grams more than those of individually housed sows. These results are confirmed by various scientific papers.

Welfare regulations mean that from 2013 onwards, sows in Europe must be housed in groups during gestation. These group housing systems allow sows to interact socially and perform behavioural patterns that might benefit their welfare, decrease stress levels and thus positively influence birthweight, says the company.

Another possible explanation for the higher birthweights is that group-housed sows exercise more than individually housed sows. Researchers found that sows that exercised a lot during gestation had higher birthweights than sows that exercised little. This could be related to better blood circulation in the uterus.

A third explanation might be that group-housed sows lose less body energy through radiation in cold seasons as they can huddle together and sometimes straw is used as an insulating material on the floors.

Piglets copy sow's choice of food

Recent Dutch research suggests that piglets eat more solid food and will eat a more varied diet, when their mother is around.

Researcher Marije Oostindjer of Wageningen University looked for strategies for stimulating the appetites of piglets, many of which do not eat solid food before they are weaned. After weaning they often do not start eating solid food straight away, which causes health and welfare problems.

Ms Oostindjer offered the piglets a range of different snacks such as chocolate peanuts and cheese cubes - both popular delicacies with pigs. She found that they would more readily try out these snacks in the presence of their mothers. She also noticed that piglets that grew up in a stimulating environment - with turf or wood shavings in the pen for example - ate more of the snacks.

But the most significant factor was the presence of the mother. Piglets that were in with the sow took an average of 15 seconds to start tucking in to the food, while those with no sow in the pen took twenty minutes. What is more, 90 per cent of the piglets in with the sow ate both chocolate peanuts and cheese cubes, as opposed to 75 per cent of those without their mother. The piglets with their mothers also ate slightly more chocolate peanuts.

The researchers would now like to establish how the sow passes on information about food to her piglets. In modern production systems, piglets often cannot imitate their mothers because the sow has a high feeding trough that the piglets cannot reach. Ms Oostindjer's research may lead to a pig pen design that makes it easier for the piglets to learn from their mothers.

Putting dollars in producers pockets

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

PRAIRIE SWINE CENTRE

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

prairieswine.ca

Pork Insight

Pork Insight brings you the world's knowledge

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

www.prairieswine.ca

AGRICULTURE AND AGRI-FOOD CANADA / AGRICULTURE ET AGROALIMENTAIRE CANADA

Canada

ALMA

Pig unit of the future close to reality

A British project to build the 'best pig unit in the world' is now close to reality. The brainchild of Martin Barker, Managing Director of Midland Pig Producers, the 2500-sow system will not only produce pork, but also green energy and fertilizer. It will also be neighbour-friendly, with sophisticated water and charcoal scrubbers to eliminate the smells normally associated with pig farms, according to Pig World magazine.

The unit has been designed to provide enhanced welfare standards and will incorporate the recently launched 360-Degree Farrowers, developed by the company, which give sows the freedom to move around, while protecting piglets and the stockman. Because of this and other welfare measures - including automatic dispensing of chopped straw, and underfloor heating and cooling - Midland Pig Producers hopes to be able

to operate a no tail-docking regime.

The unit will include a below-ground biodigester which will produce odourless solid and liquid fertilizer for local farms to use to grow grain, which will then be milled on-site to produce feed for the pigs. In addition to processing manure from the pigs and turning it into green electricity and odourless fertiliser, the biodigester will be able to process waste from kitchens at a nearby prison, which would otherwise go into landfill. The process creates a large amount of heat, which can be used for heating the pig unit and could also be piped to the prison.

Irish producers get help for sow housing transition

Irish pig producers are to get government assistance to make the transition from sow stalls to group housing systems by 2013, as required under EU legislation.

Two new on-farm investment schemes are designed to improve the standards of animal welfare in sow housing and for poultry production. The schemes - worth up to €29 million - are part of a €113 million targeted scheme for on-farm investment to support a series of specific categories of farmers and focused on supporting productive investment. Poultry farmers will also get assistance for conversion of cage laying systems to enriched cages, free

range or barn systems. Grant aid will be given at a rate of 40%.

Chairman of the Irish Farmers Association Tim Cullinan said that the introduction of the scheme, while welcome, is not enough to help pig producers comply with the regulations. "Farmers in this sector already have to meet very high animal welfare standards imposed by EU Regulations but the fact remains that these costs are not reflected in market prices."



Antibiotic injection - Denmark's agriculture ministry is cracking down on over-use of antibiotics in pigs

Danish pig vets warned on over-use of antibiotics

The Danish food and agriculture ministry is about to issue new guidelines for acceptable levels of antibiotic use on Denmark's pig units, according to the UK's Pig World magazine. Health experts are concerned that over-use of antibiotics will lead to increased resistance in pigs, as well as in humans who eat pork containing antibiotic residues.

The agriculture ministry will introduce a yellow card warning system for vets and farmers who are giving too many antibiotics to pigs. Farmers and vets given the warning will have nine months to take corrective measures.

Introducing SHAC Environmental Products!

Producers count on SHAC Feed Additive and Manure Digester to improve their livestock production operations.



SHAC products significantly REDUCE ammonia gases, odors and the volume of manure solids in pits and lagoons.



Contact
Miles Bell 780-913-4953
Doug Stebbings
306-370-4400
or call
Toll free 1-888-533-4446
www.shac.ca

Get the Oat Groat advantage!



*Easy for piglets to digest
for a quick start to market.*



To take advantage of "the next best thing to Sows milk."

CONTACT:

Sterling Oats

Box 252, Raymond, Alberta T0K 2S0

Richard Hofer - rhofer@shockware.com - 403-330-6158 cell

If the measures taken are inadequate, the violators will be fined, investigators will conduct a thorough control check at the pig units involved and the government's own correctional plan will be put in place for the violators to follow.

Henrik Høegh, food and agriculture minister, has a list of vets who prescribed the most antibiotics per pig from June 2008 to June 2009. The names at the top of the list had already been summoned by the Veterinary and Food Administration back in 2005 for prescribing excessive amounts of antibiotics, which totalled 33 percent of all those prescribed nationwide.

However, the goal of the agency at that time was to reduce the use of one specific type of antibiotic as opposed to cutting down on the total amount.

Diabetic test will help producers feed pigs more efficiently

A simple glucose meter, or glucometer, commonly used by diabetics to measure blood glucose levels, is set to help Australian pork producers feed their pigs more efficiently.

Supported by Australia's Pork Cooperative Research Centre (CRC), Dr Peter Sopade of the University of Queensland has developed a simple, robust, efficient technique, using a glucometer that measures the amount of glucose - and therefore digested starch - produced by digestive enzymes.



A glucose meter, like those used in humans, can help to improve efficiency of feed use in pigs

Principal investigator, Professor Mike Gidley, says that developing a rapid in-vitro starch digestion technique for animal feed involved examining pig digestion of cereal grains based on the need to maximize available energy for pig growth from grain-based feeds.

The new method, based on glucometry, could speed up analysis of starch digestion and help processors, nutritionists, pork producers and ingredient suppliers maximize energy delivery and therefore feed conversion ratios.

"To investigate the suitability of the glucometer, we looked at changes in processing, raw material, formulation, grain particle size and digestion time", Gidley says. "We assessed the variability of detection speed, accuracy, sensitivity, and analyte volume, as well as developing an equation to calculate digested starch."

International Round-up

Dr Sopade says the new method is easy-to-use, making it an invaluable tool for anyone involved in feed formulation and manufacture.


"Existing techniques for in-vitro starch digestion, particularly in measuring glucose released, are expensive, cumbersome and slow," he explains. "Our team at the University of Queensland, along with the Pork CRC, identified a need for a simpler, more robust, faster method and what we developed is ten times faster."

Semen sexing getting close to reality

A Welsh company is now close to having an effective method of producing semen that will result in primarily male or female offspring according to need. And, with pressure within the EU to eliminate castration, it could provide a way of ensuring that commercial litters are composed mainly of gilts.


Ovasort Limited, which is based in Cardiff, has discovered sex-linked proteins on the surface of sperm cells of both pigs and cattle. The company has developed a prototype product to identify and separate the male and female cells for each sex in both species. It is the first time that semen sexing has been commercially possible in pigs.

The semen is currently being evaluated by the company's worldwide licensee for the pig sector, Danish Pig Production. Dr Cumming says that these preliminary field trials will enable them to optimize the product for commercial use. ■



Get smart about detectable needles!

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



HDN


HIGHLY DETECTABLE NEEDLES

Aluminum Hub • 16 GA x 1.5" • 1,6 mm x 38 mm

100

DETECTABLE

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



Phone: 800-806-2737 or 204-231-0236

Fax: 204-231-8300

1051 Marion Street, Winnipeg, MB R2J 0L1

AVAILABLE WHEREVER ANIMAL HEALTH SUPPLIES ARE SOLD



BANFF PORK
s e m i n a r



Banff Pork Seminar

January 18-21, 2011

Banff, AB, Canada

*Over 35 Internationally Recognized Experts
14 Hot Topic Issues
All sectors of the Pork Industry
Meet Canada's Pork Industry Leaders
475,000 Sows Represented*

Sessions include:

- *Advocating to Shape our Future*
- *Building the Future on Past Success*
- *Getting Pork on to the Consumer's Plate*
- *Building our Future in Exports*
- *Using Records to Plan the Future*
- *Get'er Done for High Level Return*
- *Challenging Future of Feed Costs*
- *Marketing to the Future Consumer*
- *Transportation with Care and Profit*
- *Future of Swine Health Practice*
- *Competing for Exports in the Future*
- *New Media - The Future of Communications*

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

Stress and its effects on the pig

By John Gadd

What exactly is stress?

I have long been a keen observer of pig behaviour, mostly from out-of-hours experience when I was looking after pigs and also during visits to many hundreds of pig farms subsequently as a management adviser. Over the years this has convinced me that stress is an important drag on pig performance in many different ways. Pig producers seem to find it difficult to recognize the signs of stress, even in the sophisticated conditions of today. Their stockpeople - from discussions I have had with them out of the owner's earshot - are often more alert to the sign of strain in the pigs they look after daily.

'Strain' - a new word. What's that? Here are three important definitions:

Stress: This is the condition (stressors) affecting the wellbeing, mental and physiological, of the pig. We all know that, of course, but there are two other factors closely associated with stress which are less well appreciated.

Strain: This is not the same as stress. Strain is the effect on the pig of the various stressors. The scientist calls it 'the critical manifestation of stress'. Stress creates strain in the pig and some pigs are better in coping with strain than others. Stress is the factors outside the pig which creates strain inside it. We are not good at picking up the signs of strain and it is strain which does the damage.

"Stress is the factors outside the pig which creates strain inside it"

Why define the difference? Because first, we need to keep in our minds the factors which could cause stress in pigs and thus lower the likelihood of resultant strain affecting productivity. And second, we must recognize the signs of strain in the pig and alleviate them should they appear.

Stimulation: Stimulation? That's a beneficial word - what has that got to do with the other two which are just the opposite? Because farmers confuse stimulation with strain. Stimulation - of appetite, sex, rooting and exploring, nesting, boar presence and suckling - all these and more are natural and essential processes towards better performance. For example, that awful racket kicked up by gilts approaching puberty - is that anticipatory excitement, or (I find, all too often) their protest at overcrowded conditions encouraging bullying? Growing pigs - that painful peak-decibel clamour before feeding - is it joyful anticipation of things to arrive or a protest at a recurring hunger which has been present for too long? The sound is different. Again, away from feeding time, the vocalization of the hunger 'grizzle' - lower register and more muted - is different from the higher, more urgent register

of thirst. Quite a few times, when walking through a barn with the attendant, they have remarked "They are a bit hungry - we haven't fed them yet". "No", I replied, "that's the thirst sound, go in and check the drinker(s)."

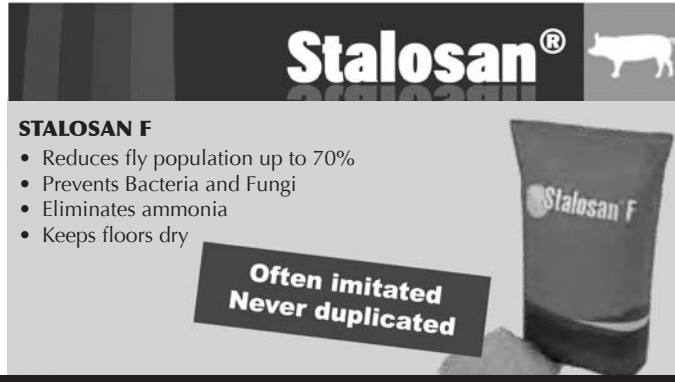
Stimulation or strain? Sometimes it is impossible to tell. Those stalled dry sows chewing the bars - frustration (strain) or stimulation? Just something to pass the time, as we do in the evening watching television? Blood corticosteroid levels (one approximate test of strain) of a bar-chewer are often no higher than one not doing it.

Now for a bit of science

This is somewhat simplified, nevertheless, it will help you and your pigs if you get your head round at least some of what happens. So please read on! Different types of stressors cause different types of physiological (within the body) reactions, but they all show similar biological measures separated into two main categories, as shown in Figure 1.

Information about a stressor reaches the brain, which then tells the body how to respond within a millisecond - one of the

CONTINUED ON PAGE 66

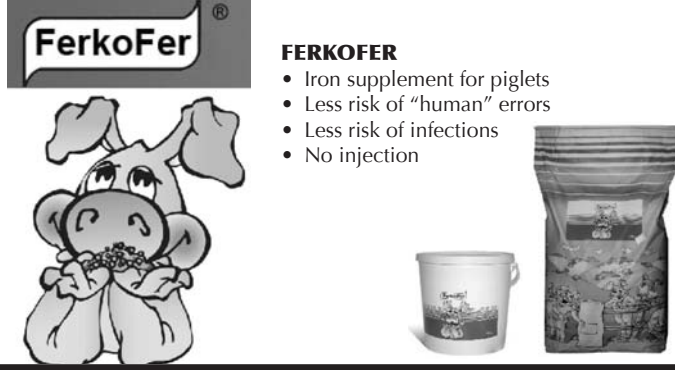


Stalosan® 


STALOSAN F

- Reduces fly population up to 70%
- Prevents Bacteria and Fungi
- Eliminates ammonia
- Keeps floors dry

**Often imitated
Never duplicated**




FerkoFer®



FERKOFER

- Iron supplement for piglets
- Less risk of "human" errors
- Less risk of infections
- No injection



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

Figure 1: Stress and its effects

STRESS	
Central nervous system	
Main divisions	
ANS - Autonomic nervous system Induced by Acute stress (Fight/flight)	NES - Neuroendocrine system Induced by Chronic stress (Depression/anxiety/worry)
Hormonal response	Hormonal response
Testosterone - up Corticosteroids - varied Aldosterone - up	Testosterone - down Corticosteroids - up B-endorphins - up
Active response: Very rapid/ short term	Active response: Gradual/long term aggression
Increases: Sex drive Decreases: Digestion Worsens: Water/mineral loss	Decreases: Digestion Decreases: Immunity Decreases: Protein synthesis

Extrapolated from Airey(1991)

BARN MANAGER

Russell, Manitoba

Dynaporc Farms Inc. a division of Verus Animal Health Alliance which manages 15,000 sows in Alberta, is looking for a Hog barn manager in the Russell area of Manitoba. The farm is an all in, all out multiplier-grow out operation. This site has four modern, fully slatted, 2600 head barns and the farm is part of a 2500 sow loop producing and selecting gilts for Genetiporc.

Candidates for the position should have 2 years in management or supervision and at least five years experience in the hog industry. Progressive management training will be provided throughout your tenure with the company. Compensation includes excellent salary, production bonus, health care and pension scheme plus relocation costs if necessary.

Candidates who want a career move that will challenge them and give them an opportunity to grow within a progressive company, should apply by email to hr@verusalliance.com or in writing to **Verus Animal health Alliance, #200, 239 Midpark Way SE, Calgary, Alta. T2X 1M2.**

wonders of nature, especially as there are hundreds of sources of stress for pigs and the number of different responses which they evoke are probably just as many.

The two main categories waiting in the brain's computer are 'flight/fear' and 'depression/anxiety/worry'; two very different areas of strain to which the brain has to respond. It does this either by sending signals down the autonomic (autonomic means not subject to the body's control) nervous system, called ANS. Alternatively it releases hormones from the neuro-endocrine system or NES.

What does the ANS do?

When the stressor presents a sudden threat, the brain quickly activates the ANS. The immediate effect is to increase the availability of energy, increase heart and respiratory rate and put digestion on hold - all by hormonal activity. The pig can then either fight or flee. Once the threat is deemed over, the activating hormones quite quickly reduce and disappear, so the effect can be of short duration - unless the fear reflex is re-activated, of course.

What does the NES do?

If the pig thinks that it cannot respond positively to the situation, such as an uncomfortable floor or too many companions squashed in the pen with it, the brain activates the NES. This affects the release of other hormones involved with more long-term (what the scientist calls 'chronic') resistance to stress.

The serious aspect of NES activation is that it affects the organs in the body which deal with growth, especially protein formation; the body's immune system which defends it against disease and those metabolic pathways which control reproduction. These are the most important strain effects caused by stress and why the two terms, stress and strain, need to be different.

NES activation is by far the main problem

Growth

Protein synthesis (formation) is damaged and water mobilization interrupted. Because meat is mainly protein and water, feed conversion quickly gets worse. This goes up and stays up until the stressors are removed. Those responsible are primarily - and all too commonly - temperature, discomfort, overcrowding, disease challenge and a host of others right down to uncaring and overworked stockpeople.

Immunity

I am sure from long experience of comparing the level of stressors and disease incidence on farms, that stress does lower the immune shield and is also the one effect of NES activation least recognized by farmers. One important pathway is that the corticosteroid and endorphin hormones released by NES (see Figure 1) reduce the number of white

blood cells which do the vital job of engulfing pathogens – it is as simple as that, I feel. There is no need for involved scientific explanations.

Reproduction

This is also vulnerable to a wide variety of stressors. The phases which are controlled by NES activation, such as ovulation, and then implantation of the embryo are particularly vulnerable to the strains caused by stress of incorrect nutrition (the ‘right’ food at the wrong time), lack of rest and quiet after service, and unfavourable conditions at farrowing. Indeed, the main activation of NES seems to occur when females are getting pregnant and when giving birth. The gestation period gives far less trouble and could be a reason why the bar-chewing in stalled sows which

worries people so much is not all that important a stressor. Potentially far more serious is aggression around ESF stations as grouped dry sows wait to enter them, which can activate the ANS as well as providing a permanent worry for the less-dominant sow, thus activating their NESs as well. It is also why grouped dry sows on solid floors with no/minimal bedding need a quite different layout to those bedded on deep straw. And so on – it never ends. Isn’t stress interesting!

In my next article I am going to list the damage the various forms of stress does, suggest how you can understand the pig’s language when he is trying to tell you about his stressors, how to do a stress audit and when to act on it.

One Spanish producer is looking ahead

By Stuart Lumb

Spain is one of Europe’s major players in pork production, ranking second behind Germany, with 2 million sows. Big in not always beautiful and Spain has suffered from the recession as much as any other European nation. I visited a farm with 750 sows near the town of Huesca, which is 200km north-west of Barcelona. Huesca is also a province, part of the Aragon region which is very arid and can experience -18°C in winter and +40°C in the summer. The region, which is very sparsely populated, grows a lot of barley. Traditionally the pig centres in Spain have been in Catalonia (around Barcelona) and Llerida, also in Catalonia. However, because of increasing pig density and the problems that go with it, pigs have been moving to Aragon,

CONTINUED ON PAGE 68



Chopped paper is used as bedding at farrowing and Mistral powder is sprinkled in the pen

Territory Manager – Swine



Status: Full Time Regular

Role Purpose: Promotes PAH products, manages resources and fosters relationships to achieve both operational and financial objectives.

Core Responsibilities:

- Business Planning: Develops and implements plans to achieve sales and operational objectives.
- Product Promotion: Creates brand awareness to achieve PAH’s business objectives.
- Relationship Management: Establishes and maintains business partnerships to achieve sales objectives.
- Teamwork Activities: Communicates effectively with other team members to facilitate strong team environment.
- General Administration: Completes business tasks to keep up-to-date to optimize operational efficiency.

General Qualifications:

- Relevant University degree preferably in Animal Health Technology or Animal Sciences, or equivalent experience in the pet food or veterinary pharmaceutical business
- Previous experience as a sales representative in Animal Health industry is an asset
- Previous work experience in a veterinary clinic is an asset
- Demonstrated success in working in a team environment
- Excellent communication, planning and organization skills
- Strong computer skills (Automated Sales Program, MS Office)
- Bilingualism (French, English) is a requirement for some locations

Interested candidates must apply online at www.pfizer.ca, job requisition # 944424, no later than October 22, 2010.

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) 667-6624
Phone: (780) 672-4757 Fax: (780) 672-6797
Camrose, AB
e-mail: info@nursette.com



As growing pigs get bigger, the central alley space is utilized

with its wide open spaces, such that Aragon now has as many pigs as Catalonia. Arable farmers are delighted to take the slurry, which naturally is a big bonus, but on the other hand Aragon has a dearth of packing plants and so pigs have to be hauled 200-250 km into Catalonia for slaughter.

The unit sits right alongside a large irrigation channel which carries water thousands of kilometres from the Pyrenees. The location is not a coincidence as a large lagoon fed by this canal provides drinking water for the pigs. Hydrogen peroxide is added,

acting as a bacteriostat. The site is very isolated, so biosecurity is not a problem. The unit is staffed by part-owner Jose, along with staff from Bulgaria and Romania - even rural Spain has trouble finding local pig technicians. Breeding stock is vaccinated against PRRS, parvo, PCV2, Mycoplasma and E.Coli.

Current output stands at 12.02 born alive and 11.03 weaned (3 week weaning). At farrowing, heat lamps and heat pads (winter only) are used, with chopped newspaper being used as bedding, but just at farrowing. Sows are induced 24 hours pre-farrowing using Planate. Jose uses a veterinary adviser employed by Agropal, a locally-based supply company which has 3000 customers and a turnover of 8.2 million Euros. Incidentally, all Jose's feed is bought from Agropal. In addition to Planate, sows that are farrowing slowly are given 20ml of Calmag® a calcium/magnesium solution which speeds things up. Extensive use is made of Mistral powder to keep the farrowing pens dry and

also to dry the piglets at birth thereby reducing chilling and helping them to suckle sooner. The feeding equipment fitted throughout the farm is made by Rotecna, a Spanish company. The lactating sows are fed a 0.9% lysine ration twice daily, up to a maximum of 7kg/sow/day. A 20% protein creep ration is fed, containing 1.57% lysine.

Weaning takes place every Thursday and sows are mixed to stimulate oestrus. There are 3 teaser boars for the sows and one for the gilts. Jose uses his big teaser boars for the morning stimulation and his smaller ones in the afternoon. Sows get 2-3 inseminations at 9am and 6pm. Generally traditional catheters are used, although if short of semen Jose will give a half dose using post-cervical insemination. Sows are inseminated with PIC Pietrain semen, sourced from CIA, a private AI stud housing 200 boars and located 50km from the farm. The PIC Pietrains are imported from Germany.

Weaners are given Anticol for 2-3 days through the drinkers as a precaution against E.Coli. The unit has no finishing accommodation, so the pigs are just kept for 6 weeks post weaning and then shipped out 50km for finishing. The grower barns have an ingenious penning system, as all the panels are the same size and can be swung in either direction. This allows the alley to be removed as the pigs get bigger and larger groups can be formed thereby reducing stress at shipping time. Incidentally, the males are not castrated - finishing entire is quite common in Spain. "Improvac is used to some

CANADIANFARMREALTY.com



6,600 total finishing spaces on 2 parcels. Site #1 has 2-2500 head finishing spaces and approx 110 acres workable. Site #2 has 1-1600 head finishing spaces on approx 137 acres workable. Sites can be purchased separately



2 - 2000 head feeder barns built in 1998, 4 room barns with their own earthen lagoons, 80 acres. \$599,000



35,512 sq. ft. of hog finishing space. Barn & equipment in great condition! Capacity for 8,000 Isoweans. \$499,000

Contact: Stacey Hiebert
Phone: 204.326.4567
Email: info@canadianfarmrealty.com



ARE YOU SHORT OF STAFF?

Why not consider employing a skilled worker from overseas. I can guide you through the process of advertising, work permit applications, staff selection and settlement of new staff.



Get professional assistance at reasonable cost

Contact Bernie Peet at Pork Chain Consulting Ltd.

Phone: (403) 782-3776 Fax: (403) 782-4161
E-mail: bjpeet@telusplanet.net



degree in Spain,” commented Jose’s vet, but in his opinion it is expensive.

Gestating sows are fed a 0.7% lysine diet as follows:

1st 40 days 3.0kg/day

Days 41-90..... 2.5kg/day

Days 91-115..... 3.0kg/day

“The partial stall ban comes into effect on January 1 2013”

Currently the gestating sows are all housed in stalls, with slatted flooring – standard practice in Spain. The EU has legislated against sow stalls and the partial stall ban comes into effect on January 1 2013. Much to UK producers’ annoyance, stalls will still be legal for the first 4 weeks post service, so enabling implantation to take place undisturbed. This partial ban does reduce the cost of providing group housing relative to what UK producers had to pay, but even so the Spaniards are squealing, along with the rest of the continental EU, about this ban and want a derogation because producers claim recent low profitability means that they can’t afford to put up new sow housing. Thankfully the EU has stuck to its guns and 2013 is still the date when the ban kicks in. Maria Angeles Rodriguez is national manager for Olmix (Spain) and in her opinion many older and smaller Spanish

producers will simply retire and go out of pigs. Other smaller and less efficient producers with finishing accommodation will simply stop breeding and buy in weaners for finishing. “The net effect will be a reduction in the national breeding herd, which is no bad thing as those that stay in will at least be able to make a decent living” commented Rodriguez.

Jose has 2013 in his sights. Agropal is a very forward looking business and their pig unit design specialist Jose Antonio Vitales Zamora has a remit to help Agropal customers plan for 2013. Zamora has been in discussion with Jose, the outcome of which is that Jose plans to use a trickle feed system, housing his sows in groups of 30. He will cut his stalls down to half the current length plus he will have to change some slats because currently the slat panel at the rear of the sow has a large slot to take her manure. Because the sows will be loose housed after 2012, the panels with large slots must be changed to ones with smaller gaps.

Interestingly, all pig producers must undergo 20 hours training in pig welfare before 2013. Most producers will have to pay for this; however Agropal has a training franchise and as such can obtain government funding, making the training free to their customers. It will be interesting to visit Jose again in a few years time and see how he enjoys managing loose housed gestating sows – plus what effect it has had on his herd output. As is well known, managing sows in loose systems requires far more skill and stockmanship than managing them in stalls. ■

Knowledge Is Power

prairieswine.ca

Pork Insight
The Knowledge Network

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

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

www.prairieswine.ca

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada

AGRICULTURE COUNCIL OF SASKATCHEWAN INC.

Canada

ALMA
Alberta Livestock and Meat Agency Ltd.

Ad Index

Agriculture and Agri-Food Canada.....	26	Magnum Swine Genetics	43/45/47
Agrovision	50	Manitoba Hog & Poultry Days.....	38
Alberta Swine Genetics	12	Marabo Products Canada.....	46
Alpharma Animal Health.....	19	Masterfeeds.....	55
Banff Pork Seminar	42/64	Maximum Swine Marketing.....	14
Barkman Manufacturing.....	37	Nuhn Industries.....	54
Biovator/Nioex Systems Inc.	4	Parks Livestock.....	8
Boehringer Ingelheim.....	9	Peak Swine Genetics.....	23
Canada Farm Distributors.....	40	Pfizer Animal Health.....	13/25/67
Canadian Bio-Systems	49	PIC.....	29
Canadianfarmrealty.com.....	68	Pork Chain Consulting	68
Canadian Nurs-ette Distributors	67	Prairie Swine Centre.....	37/61/69
Carlo Genetics	11	Precision Management.....	58
Champion Alstoe.....	16	Pro-Ag Products.....	15/31/63
Crystal Spring Hog Equipment.....	18	Protekta Inc.	65
Danisco.....	34	Pyramid Pig Breeders	41
DPI Global/MICRO-AID.....	24	Red Deer Swine Technology Workshop	10
Elanco.....	5/33/53	Roeske & Associates	54
Farm Credit Canada.....	57	Sand Ridge Farm Ltd.....	70
Fast Genetics.....	17	Saskatchewan Pork Symposium	22
Genesis	2/72	Schauer Agrotroic GmbH	36
Glass-Pac.....	6/52	Shac Environmental Products Inc.	62
Hermitage NGT.....	56	Sierens Equipment Ltd.	27
Husky Farm Equipment.....	44	Signature Genes	51
Hypor Swine Group	39	Smart Sort Innovations.....	32
Intervet Canada Corp.....	59	Standard Nutrition.....	20
ITSI.....	16	Sterling Oats	62/70
Kane Manufacturing.....	60	Sun-North Systems.....	48
Kenpal Farm Products/dry START.....	32	SwineBooks.....	16
L & B Ranch.....	30	Topigs	35
Landmark Feeds	7	Verus Animal Health Alliance.....	66
Longarm.....	28	Vétoquinol	21/71

**Piglets make the transition
from milk to feed easier with Oat Groats!**



*An easily digested
key source of nutrition.*



To take advantage of “the next best thing to Sows milk.”

CONTACT:

Sterling Oats

Box 252, Raymond, Alberta T0K 2S0

Richard Hofer – rhofer@shockware.com – 403-330-6158 cell

SAND RIDGE FARM LTD.

Proven Methods. Superior Results.

**Get the Advantage of
In-House Gilt Development:**

- increase biosecurity
- lower costs
- stabilize disease challenges

Terminal Sires that WORK

**Bigger Loins. Faster Growth.
Stronger Structure.**



Health status is our priority.

Contact Ken Hamoen for information.

Phone (780) 674-5135

Fax: (780) 674-5151

Cell: (780) 674-7498 www.sandridgegenetics.com

Email: sandridgegenetics@hotmail.com

CONTEST

SIMPLY ANSWER 7 QUESTIONS AND YOU COULD*

WIN AN iPad

DOUBLE YOUR CHANCES
FOR DETAILS PLEASE LOOK FOR
PARTICIPATING MERCHANTS



TO PARTICIPATE, GO TO
WWW.SURVEY.VETOQUINOL.CA
AND ANSWER ALL THE QUESTIONS.

* Complete contest rules and regulations are posted on the contest website. Winners will be contacted by telephone. Permit validity will be verified before the winners are confirmed. The prize is valued at \$890 and may differ from product shown.

Vétoquinol
a Sign of Passion





2009 GENESUS 25+ AWARD WINNERS

 CAMROSE 31.60	 FAIR HAVEN 30.27	 EVERGREEN 30.09	 RIVERVIEW 30.00	 WOODLAND 29.92	 MILLTOWN 29.29	 HURON 29.29	 CLARK WIKNER 29.20	 SUNCREST 29.05	 BLUEGRASS 28.73
 SHADY LANE 28.61	 ROSEDALE 28.50	 SUNDALE 28.40	 HARTLAND 28.40	 BRENTWOOD EAST 28.10	 TWIN HILLS 28.10	 NEW HAVEN NORTH 28.14	 GRAND 28.00	 GRASS RIVER 27.98	 DECKER NORTH ACRES 27.80
 NEW HAVEN SOUTH 27.64	 BRENTWOOD WEST 27.50	 MILLERDALE WEST 27.50	 CLEARFIELD 27.50	 LITTLE BOW 27.50	 SEVILLE 27.46	 SAGE CREEK 27.40	 MILLERDALE EAST 27.30	 PARKVIEW 27.20	 HILLSIDE 27.14
 SPRINGFIELD MB 27.10	 ELMSPRING 26.98	 FAIRHOLME 26.97	 SPRINGFIELD SK 26.87	 RUSTIC ACRES 26.80	 CLEARWATER 26.75	 LAKEVIEW 26.70	 BRANTWOOD 26.63	 CYPRESS 26.60	 GADSBY NORTH 26.60
 RAINBOW FARMS 26.50	 VALLEY CENTER 26.39	 BERESFORD 26.27	 CLEARVIEW AB 26.20	 TOBACCO CREEK FARMS 26.10	 DAKOTA 10 26.00	 POPLAR POINT 26.00	 FAIRVIEW 25.92	 SUNNYSITE 25.90	 SUNSET 25.80
 GOOD HOPE 25.80	 SOUTH BEND 25.80	 BORDER GENETICS 25.70	 OK 25.70	 GADSBY SOUTH 25.70	 WILLOW CREEK EAST 25.66	 OAKRIDGE 25.64	 GLENDALE 25.60	 MARTIN FARMS 25.40	 SIMMIE SASKATCHEWAN 25.40
 HANSEN HOG WEST 25.20	 CASCADE 25.05	Top 5 herds: 30.38 Top 10 Herds: 29.74				27.25 AVERAGE TOP 25+ HERD		 25+ COULD THIS BE YOU?	

GENESUS IS PLEASED TO CONGRATULATE THE 62 GENESUS CUSTOMER HERDS THAT ACHIEVED OVER 25 PIGS WEANED PER YEAR IN 2009. IT TAKES EXTRAORDINARY EFFORT AND MANAGEMENT TO REACH SUCH LOFTY PRODUCTION ACCOMPLISHMENTS.

At Genesis we are proud these award winning producers have made the decision to choose Genesis as their genetic source.

Genesis continues to invest intensively in genetic improvement and testing. Genesis has the world's largest registered Purebred Swine Herd and is the largest producer of Yorkshire-Landrace F1's derived from registered purebreds.

The combination of purebred genetic enhancement which maximizes heterosis and the Genesis customer's superior management leads to production results that are creating new industry benchmarks.

www.genesus.com 1-888-572-4647