In this Issue:	
TOPIGS in China	1
TOPIGS Producer PROFILE	2
TOPIGS Team Update	3
TOPIGS Breeding	3
TOPIGS Insider Quiz	4
TOPIGS Canada Inc.	
Summer 2011	



## China hosts the TOPIGS IMC



In April, 2011 thirty-five TOPIGS country managers from around the world met in Shanghai and Beijing for the annual TOPIGS International Management Conference (IMC). The IMC is held annually to review plans and strategies of the TOPIGS business.

China is a major player in the pork industry. With almost 50 million sows, China slaughters approximately 650 million hogs annually. While this is just over 13 pigs slaughtered per sow per year, this is a market not to be taken lightly.

In the 2009 census, China had a population of 1.331 billion people. The demand for food and shelter is staggering, and there are vast differences between rural and urban China. The large cities of over 18 million people are ultra-modern with all the amenities we would expect here at home. In contrast, many of the rural communities do not have methods to store frozen or chilled meat and still rely on a daily supply of fresh meat to be consumed immediately. While this may not appear to be as sanitary as we are accustomed to, it is what they can afford and it works.

The Chinese pig production system barely resembles the North American system. While almost 50% of pig production in North America is linked to integrators or systems with modern production facilities, the opposite is true in China. Of almost 108 million pig farms in China, 99.7% of these farms produce less than 100 hogs annually. These small farms are backyard farms with one to eight sows each. Cost of production is lower with hogs being fed forage, or food scraps. Freight costs are minimal as the market for the finished hog is nearby.

China produces corn, wheat, rice and soybeans on 760,000 square miles of arable and irrigated farm land. Corn production for human and livestock consumption equals 164 million metric tonnes (MMT) annually. In contrast the United States with 724,000 square miles of farm land produces 333 MMT annually. The U.S. only needs to support a population of 333 million people and 116 million hogs. This is more than twice the production of corn in China with only 23% of the population.

continued on page 2...

### Producer Profile – Cardinal Pork



TOPIGS 20 gilts

Just twenty miles south of Columbus, Ohio in a well located area with low pig density, stands a modern swine production unit. Cardinal Pork is a farrow to wean farm of 2,400 sows. Of these sows, 1,200 are TOPIGS Z Line GGPs and 1,200 are TOPIGS 20 F1 females. This well-kept site with neatly manicured grounds is home to a multiplication herd of TOPIGS Z Line females and produces the TOPIGS 20 F1 gilt. Since becoming a TOPIGS multiplier in 2008 the owners and staff of Cardinal Pork have never looked back. Production has improved dramatically from the previous genetic line they were using.

Cardinal Pork is managed by Kalmbach Swine Management. The Kalmbach production system currently has 22,000 sows located throughout the eastern US states. Weaner gilts are grown off site in contract multiplier grower barns. Gilts are then supplied to the Kalmbach sow units and also offered for sale by TOPIGS.

Cardinal Pork has nursery and grower space for their InGene program. Replacement gilts never leave the site. The InGene program links the Cardinal Pork database directly with the TOPIGS PigBase in The Netherlands. This program provides all data and performance evaluations as well as breeding advice for the internal replacement of all GGP Z Line sows.

Ben Zientek, of Kalmbach Feeds oversees the production and states "TOPIGS is good for Kalmbach Feeds and Kalmbach is good for

TOPIGS." Long time unit manager, Paul Burris, along with nine dedicated staff, ensures things are done well at all times and that productivity is maximized. Currently the TOPIGS GGP Z Line females are achieving an average of 12.55 pigs born alive/litter and weaning 11.16 pigs per litter. This equates to 28.45 pigs weaned/mated female/year. The TOPIGS 20 females are achieving 12.78 pigs born alive/litter and 12.12 pigs/weaned/litter with over 30 pigs weaned/mated female/year.

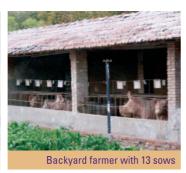




The move to TOPIGS genetics has proven to be a good decision for Cardinal Pork. The ease of management in the TOPIGS sow combined with the high productivity has far exceeded the performance expectations. Sales of the TOPIGS 20 gilts continue to increase as the products prove their worth in barns throughout the swine industry.

...continued from page 1





The road to the modernization of pork production is long but advancing rapidly. Access to capital from the government has led to the construction of large, new production facilities. These production units have access to abundant, cheap labour with as many as 30 people working in a 450 sow unit. Access to modern genetics such as TOPIGS is helping improve the productivity for a growing population. However, having access to good quality grain and feedstuffs is still somewhat of a challenge. The change toward producing more pork and becoming self-sufficient is a future consideration for China — for now, however, it is more economical to import meat than it is to import grain.

### TOPIGS USA Inc. Announces New Business Development Manager



Key appointment enhances TOPIGS USA Sales & Service team

TOPIGS USA is pleased to announce that as of June, 2011, Brent Eyler has joined its staff as Business Development Manager. In his new role, Brent will develop sales in Eastern USA with

emphasis on Ohio and Indiana He will also be responsible for technical support to customers in this region.

Brent Eyler was born and raised on a grain and livestock farm near Eaton, Ohio. With a keen interest in farming he became very involved with the FFA, becoming a chapter president and a state officer.

Brent attended the Ohio State University majoring in Animal Science and Ag Business. He obtained his Bachelor of Science degree and graduated in 1993. Working with Kalmbach Feeds, Inc. in Upper Sandusky, Ohio from 1993 – 2008 provided great experience and knowledge of the producers he will serve in his TOPIGS territory.

"Brent's extensive knowledge of the swine market in Eastern USA will be invaluable to the TOPIGS team," said Peter van Kemenade, General Manager of TOPIGS USA Inc.

TOPIGS USA is a leading swine genetics supplier in North America. TOPIGS produces and develops sound, profitable pig genetic programs and breeding systems for commercial hog production and is one of the largest genetics companies in the world with business activities in over 50 countries.

Brent looks forward to being involved directly in the swine industry and helping customers meet their needs while maintaining profitability. He may be reached by calling (937) 733-8532 or email at: beyler@topigsusa.com

For more information contact Dr. John Eggert, TOPIGS USA Inc. Phone: (314) 378-2322 jeggert@topigsusa.com www.topigsusa.com

## TOPIGS: Breeding with Global Insight into Quality

#### By Egiel Hanenberg and Arjan Neerhof, TOPIGS Research

TOPIGS main breeding goal is to enable farmers to produce meat of the best possible quality with minimal production costs. However, the definition of carcass and meat quality varies from country to country and evolves with trends in national consumer choice. TOPIGS develops different lines to fulfill the specific needs of a wide variety of markets. To ensure that our lines meet the various quality requirements of different markets across the world, now and in the future, we are developing specific breeding indices for each line - selection tools that incorporate detailed quality parameters.

A widespread method of evaluating meat quality used at the slaughterhouse is pig carcass grading. We closely monitor grading systems and incorporate quality considerations with a genetic background into perfecting our lines. TOPIGS analyses exactly how carcass quality is assessed at each stage of the supply chain in every country, how payments are constructed according to these assessments and keeps a close eye on national trends in consumer preference. Our research has shown that many grading systems are limited with regard to their prediction of future market needs. So when it comes to enhancing quality in our lines, TOPIGS applies the broadest quality considerations in selecting pigs to match market needs.

#### **Defining Quality**

In general, global trends have placed a premium on leaner carcasses, but beyond this, meat quality is a generic term that can include detailed carcass composition and conformation, eating quality of the meat, such as its taste, texture and moisture content, and health - and production issues, such as animal welfare and environmental sustainability. The definition of meat quality varies with country and within the supply chain.

Quality based payments for carcasses in many current markets are also therefore different between countries (Figure 1), but are most often based on specified muscle-/back fat depths - particularly by slaughterhouses and integrators who buy in carcasses from the free-market. Muscle-/back fat

depths are measured by a variety of methods, such as: Hennessey Grading Probe (HGP), Fat-O-Meater and AutoFom.

While these grading methods and the corresponding system of payments enable carcasses to be evaluated as quickly as possible at the time of sale, they are not always accurate indicators of the eventual total meat available from a carcass and its real value in the market. In addition, they do not reflect expected long-term changes in retail and/or consumer trends.

HGP measurements of muscle and back fat depth, are just indicators of the eventual dissected meat. If the eventual carcasses produce more meat than targeted by the packer (through, for example, enhanced genetics), the packer will adjust the payment schedule to match the production supply with the market demands from the retailer/consumer. Worldwide, payment schedules have been and still are adapted towards heavier carcasses.

Different stakeholders in the supply chain have different priorities. For the farmer, optimization between production costs and carcass value in the actual payment schedule is more directly relevant. Choice of genetics is part of this optimization. For the retailer and consumer, quality meat is selected and premiums paid on the basis of far more numerous and complex traits such as taste and even production conditions.

continued on page 4...

#### ... continued from page 3

Parts of the industry have adopted different practices to address this. Integrators make their genetic choices based on tests evaluating the quantity of dissected meat and not on muscle/back fat depth data. There is even a trend developing in some markets towards using MRI- and CT-scanning to more accurately estimate the amount of meat in a carcass. Slaughter line grading techniques will become more advanced. Prediction of meat quantity will improve and more detailed assessment of meat quality (e.g. near infrared techniques, NIR) will more than likely become integrated into the payment schedule.

Within the supply chain, it could be beneficial for all players to match these different quality valuation systems more closely, particularly to synchronize the medium- to long-term production objectives more closely with consumer trends.

#### **Breeding with Insight**

TOPIGS has developed two indices that evaluate individual animals for different breeding objectives, including quality characteristics of their meat. The two selection tools have been developed for pigs playing different roles in the breeding program and ensure that detailed quality factors are incorporated in the short-, medium- and longer term.

The **TOPIGS Selection Index (TSI)** provides an assessment of breeding value of each animal based on a wide range of criteria, combining fertility, fattening and quality characteristics, as well as a standardized economic value of these characteristics. This index gives a platform to measure added-value in the middle-term, since significant genetic improvements in these qualities usually take several years to manifest.

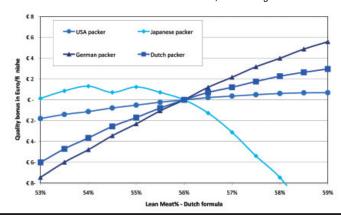
Our TSI assesses quality on the basis of dissected meat and not solely on live muscle and back fat depth or carcass grading information. These

parameters were chosen as the most accurate indicators of the total carcass value.

We have also developed a second index that is relevant for the current- or short-term market. The TOPIGS Production Index (TPI) is specifically for the selection of artificial insemination (A.I.) boars for each market. It measures the potential of these animals in terms of the market-specific production circumstances (e.g. climate, health and feeding system), production costs (e.g. feed, labor and housing) and carcass value (payment schedule). The TPI is calculated following detailed consultation with the customer (Integrator, A.I.-station).

We believe that using both indices appropriately across the breeding program can contribute towards breeding better pigs that meet short- and longer-term market requirements.

Figure 1: Example of quality bonuses for carcass leanness for packers in different countries. The base is 56% lean meat, according to Dutch formula.





Please answer the questions in our Insider Quiz. All the answers are in this newsletter. Then fax, mail or email your answers along with your name, address and phone number. Entries to be received by July 31, 2011; winners will receive a TOPIGS 1GB memory stick. If you win, the TOPIGS rep in your area will deliver the prize.

Employees of TOPIGS and their subsidiaries are not eligible.

Please contact us for more information:

John Sawatzky, Sales Manager (204) 981-0243

Gord Edwards, Ontario Business Development (519) 440-8128

Cassie Monden, Ontario Business Development (519) 317-7403

Ron Musick, Manitoba Business Development (204) 223-3193

Sergio Sosa, Manitoba & Saskatchewan Business Development (204) 792-0776

Kyle Klimpke, Alberta, Saskatchewan & Montana Business Development (403) 763-0835

Craig Jarolimek, USA Business Development (701) 866-4444

Brent Eyler, Eastern USA Business Development (937) 733-8532

# How to TOPIGS INSIDER Quiz

How many pig farms are in China?

How many indices has TOPIGS developed that evaluate individual animals for different breeding objectives?

What are the pigs weaned/mated female for the Z Lines at Cardinal Pork?

How many pigs are slaughtered annually in China?

\_\_\_\_

Name:\_\_\_\_\_

Farm Name: \_\_\_\_\_\_Address:

Phone #:\_\_\_\_\_

#### Top Ten Quiz Entries

The winners of the TOPIGS Insider Quiz from the last issue are as follows: Walter Entz, Pennant Colony, SK, Nelson F. Gamponia, Edulia Farms Ltd., Tees, AB, Sam D. Wipf, Pleasant Valley Colony, MT, Paul Stahl, Newport Colony, SD, Jacob Entz, Brant Colony, AB, Eli C. Hofer, Plain Lake Colony, AB, Bart Nagel, Tenth Line Swine, ON, Peter David Waldner, Plainview Colony, MB, Leanne Dieleman, Riverdale Farms Inc., ON, Kayla Waldner, Interlake Colony, MB

Each winner will receive a TOPIGS cap and t-shirt. The TOPIGS rep in your area will deliver the prizes - congratulations.

#### **TOPIGS Canada Inc.**

201-1465 Buffalo Place, Winnipeg, MB Canada R3T 1L8 Toll-free: 1-866-355-5132, Fax: 204-489-3152, Email: topigscanada@topigs.ca www.topigs.ca

