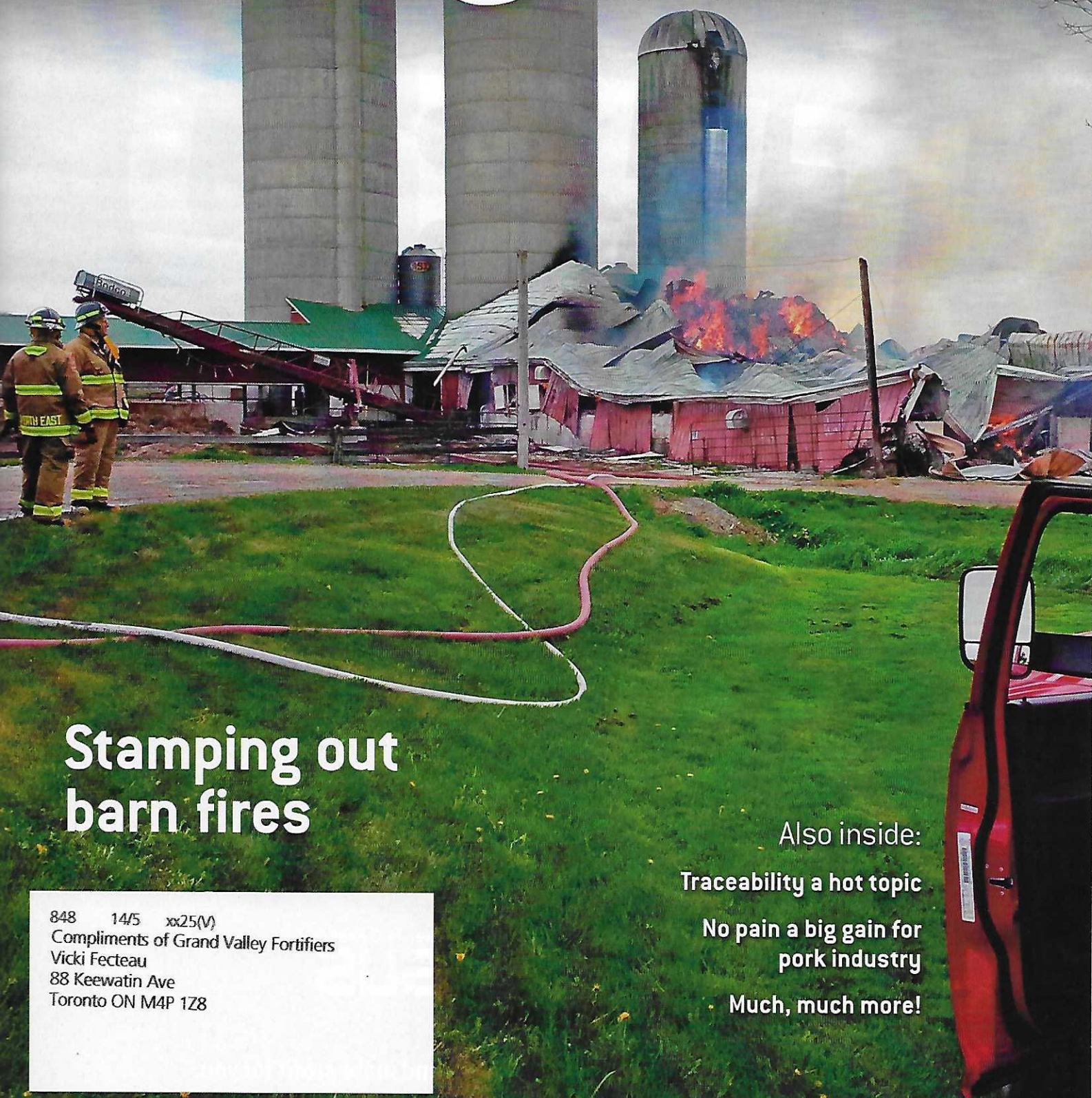


Western Hog JOURNAL

Canada's national
hog magazine



Stamping out barn fires

848 14/5 xx25(V)
Compliments of Grand Valley Fortifiers
Vicki Fecteau
88 Keewatin Ave
Toronto ON M4P 1Z8

Also inside:

Traceability a hot topic

No pain a big gain for
pork industry

Much, much more!

Stamping out the stats on barn fires

Fire prevention begins

By Treena Hein

Of all types of barn fires, those in pig barns are the most difficult to handle. According to a fact sheet produced by non-profit group Farm and Food Care, this is because of the design of pig barns means they are almost impossible to evacuate due to the volume of animals and the difficulty in moving them. As anyone who's been near a barn fire can attest, it takes only minutes for the building to be completely engulfed in flames. That's partly because (as stated in the fact sheet), "the vast majority of barn fires occur late at night or early morning hours, often going undetected until flames are showing. They rarely have smoke detectors or sprinkler systems installed."

This year has been a bad one for barn fires in Canada. In June, a farm near Leroy, Saskatchewan lost approximately 5,000 pigs when two barns burned. In early July, about 4,200 pigs perished in one barn on a Hutterite colony near Bentley, Alberta.

In Ontario, a rash of barn fires in January shocked those across the province and beyond. On January 4, 43 horses died in Puslich. On January 12, a fire destroyed a barn full of chickens near Listowel. Two days later, more horses died in a

barn fire northwest of Guelph in Mount Forest. The next day, a barn fire near Appin near London killed hundreds of pigs. On January 17, another barn fire in nearby Delaware killed 500 milking goats and 30 cattle. Two days later, in nearby Parkhill, 2,100 pigs were lost. Four more fires happened between May and August.

The Office of the Fire Marshal and Emergency Management in Ontario puts the number of barn fires in the province in 2008, 2009 and 2011 all around 185, but in 2012, 2013 and 2014, there were 136, 157 and 150. No numbers are yet available for 2015. The leading causes for preventable, determined barn fires (about 60 per cent) were mechanical/electrical failures, misuse of ignition source/equipment, and deficiencies in design/construction/maintenance. Primary sources of ignition include miscellaneous (chemical reactions, such as spontaneous combustion and lightning), electrical distribution equipment (circuit wiring, distribution equipment, extension cords), heating equipment (central heating, flue pipe, space heaters), and open flame (cutting/welding, blow torches etc.).

The insurance industry and the Electrical Safety Authority of Ontario have investigated why electrical issues are such a common cause of ignition. "The corrosive environment found inside livestock barns has been determined to be the leading cause of degradation or failure of electrical equipment," states the OFMEM. "The degradation is typically corrosion of the exposed metal components (e.g. wires, connections)." The corrosion increases the resistance at these points, which results in more of the electrical energy being

THE ONLY NAME YOU NEED TO KNOW!

Smart Sort *If you don't have it, you'll want it!*
Innovations

Find out why it's got to be Smart Sort the easiest to use, most accurate and reliable scale in the market.

Don't miss out

Scales
starting at **\$8500.00**

Electronic Scale Conversions
starting at **\$2500.00**



GET SMART AND GET SMARTSORTING TODAY
Ph: 1.866.946.0014 • Cell: 516.281.4639
Email: marcus@arlynsscales.com

Knowledge just a click away

prairieswine.ca

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.

PorkInsight
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



Canada

ALMA
Alberta Livestock and Meat Agency Ltd.



converted to heat and ignition temperatures of materials surrounding the equipment can be reached.

Prevention of fires

We asked OFMEM what preventative measures farmers should be taking to prevent fires in their barns. Spokesperson Jude Kelly stresses that prevention is definitely the responsibility of farmers and also of local fire services. He explains that the OFMEM sent a customizable news release in April to Ontario fire services to use through local media, to remind the public of this. "Most farm buildings are

not regulated under the Ontario Fire Code and as such, local fire services have limited responsibilities with respect to inspections and code enforcement on these properties," Kelly notes. He adds "the news release advises owners and operators of farms and agricultural business properties with further concerns about fire safety to contact their local fire department to discuss options to identify and reduce fire risks...It is ultimately up to the local fire service to manage local risks as identified through their community risk assessment," and "there are numerous readily available resources to assist."

CONTINUED ON PAGE 24

The Best in Ventilation and Feeding Equipment



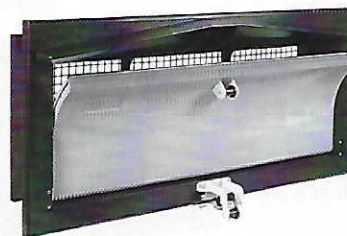
Roxell BluHox Feeders

*Users testify,
all piglets
start perfect
on the
BluHox*



Fancom Fan

*24v
Damper &
Measuring
Wing
Assembly*



Fancom Fantura Air Inlets

*Urethane
insulated
for cold
climates*



Equipment to help farmers feed your family

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

However, John Maaskant, chair of Farm and Food Care Ontario, warned in an open letter early in the year in the Ontario Farmer newspaper that “many first responders are not familiar with barn design or animal handling.” He advises farmers to review their fire prevention plans, hold annual meetings with family members and staff and get to know your local fire department team.

“Many rural fire departments organize barn fire education programs for their team so that they better understand how barns in their coverage area are built and the types of livestock found within,” Maaskant stated. “These programs also offer the opportunity for farmers in their region to highlight potential risks. If you’re comfortable doing so, invite your local department for a tour so that they can get to know you and your operation. If not, plan a visit at their fire hall and provide maps of your facilities. Talk to your insurance company about having them do inspections using thermal cameras or buy or

borrow a camera to do checks on your own. These cameras can help identify faults before they cause a fire. Talk to your electrician about the state of your electrical system to ensure it meets current standards.”

Bruce Kelly, environmental program manager Farm and Food Care Ontario, says his organization has been working with Ontario Pork, fire departments and insurance companies on barn fire safety for several years from several angles.

“We are working on a producer education program that we are presenting this fall, including a display at the Outdoor Farm Show in September,” he explains. “The display will focus on the use of FLIR (infra-red) cameras that help producers see heat as a result of corrosion in electrical receptacles. A fact sheet goes with the farmer when they borrow a camera for a week.”

Farm and Food Care Ontario has also purchased a number of FLIR modules for farmers to borrow. These modules plug into a smart phone, making it into a “pretty good” infra-red camera, Kelly says.

“Evaluations of their facilities will hopefully lead farmers to work with their electricians on upgrades where required,” Kelly notes. “They don’t replace a professional inspection, or rule out all

the possible causes in the fire, but it’s a way to engage farmers in a discussion about fire safety and prevention.”

Farm and Food Care Ontario is also working on two research projects with Harvest Robotics of Hamilton related to early barn fire detection. One is the development of an inexpensive infra-red heat sensor, with an alarm that can be sent by email or text and could automatically turn off equipment or activate fire suppression. The other is the development of a methane alarm system.

Last year, Ontario’s Perth East Fire Department created free, customizable farm fire resources which have been accessed by numerous departments across the province and in the US. When asked his thoughts on barn fire prevention, Perth East Fire Chief Bill Hunter says he would like to see the National Farm Building Code of Canada, which regulates new farm building construction in Ontario, updated to reflect current construction trends.

“We are seeing massive farm buildings that house hundreds of thousands of dollars of livestock and equipment being constructed to a code that is over 20 years old,” he explains.

The office of the Ontario Minister of Agriculture says the National Research Council of Canada (NRC) is working on

Convenient



AgriACID®

The original acid blend.

See page 4

**MAX
THRU PUT™**
THE TOTAL PACKAGE



The First Power In Genetics
GENESUS

www.genesus.com

**Our next
issue is
January
2017**

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

updates to national code requirements for large farm buildings. Staff members from the Ontario Ministry of Agriculture, Food and Rural Affairs and the Ministry of Municipal Affairs and Housing are engaged in this process and will contribute technical information to inform the review, says André Laroche, manager of regulatory code solutions at NRC. The updates will be finished by fall 2018, and are focused on fire and structural safety and the storage of dangerous goods.

However, Laroche adds that the regulation of building construction and fire safety is the domain of the provinces and territories, which often delegate this responsibility to municipalities. "As such, the National Farm Building Code is not adopted by all provinces and territories," he explains.

Hunter makes the point that farmers can choose to go over and above the minimum requirements of the

What other provinces are doing

Alberta

From 2006 to 2015, there were about 16 barn fires per year. "Barn fire safety relies heavily on the behaviours of barn owners," notes Heather Kaszuba with the communications branch of Alberta Municipal Affairs. She adds that the best way to reduce barn fires is to keep barns clean and well-maintained, to avoid overloading electrical circuits. "Many farmers grind, cut and weld inside their barns and this can result in fire," Kaszuba notes, adding "Know the limits of your extinguisher and keep it well maintained." There are no planned building code changes in the works.

Saskatchewan

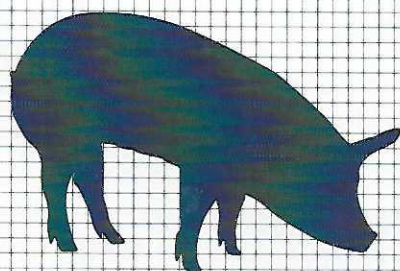
Sask Pork's Harvey Wagner says his organization encourages good housekeeping. He adds, "Regular inspection and maintenance of all mechanical or electrical systems is routine. These inspections go a

long way to prevent system failures, which is a major cause of fires due to overheating. Alarm systems which monitor heat buildup and electrical service anomalies are common."

Manitoba

The number of barn fires has not increased in the last couple of decades in Manitoba. Manitoba Pork has been assisting the provincial government in the introduction of a new barn building code, says spokesperson Sandy Ellis. "Prior to 2011, barns were not subject to the building code, and while the code is not perfect and still needs work, it is at least a step in the right direction. The electrical code was also recently worked on with a Manitoba Pork-initiated change in enforcement and administrative policy just adopted this August. Manitoba Pork has also been actively investigating potential new forms of fire insurance for hog barns."

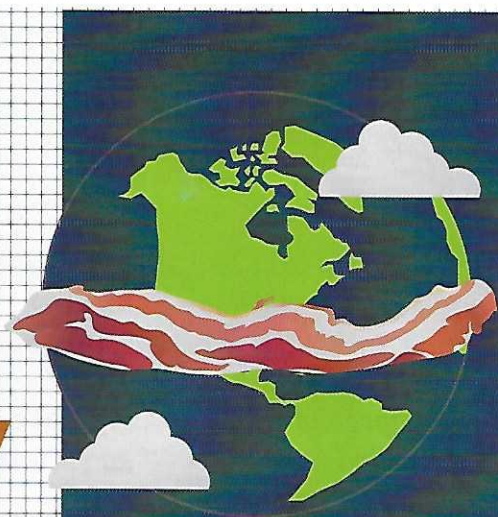
CONTINUED ON PAGE 26



Pigs fed on our
**WET/DRY
FEEDERS**
produce enough

BACON

to circle
the earth **65** TIMES



We're proud to partner
with you to feed Canada
and the world.
www.cshe.com

 **CRYSTAL SPRING**
hog equipment

Barn fire prevention resources

Reducing the Risk of Fire on Your Farm - Assessing Your Risk
<http://www.omafr.gov.on.ca/english/engineer/barnfire/section5.htm>

Booklet (56 pages) 'Reducing the risk of fire on your farm'
<http://www.omafr.gov.on.ca/english/engineer/barnfire/toc.pdf>

OMAFRA resources:

<https://news.ontario.ca/omafr/en/2016/01/ontario-encouraging-fire-safety-for-barn-owners.html>

<http://www.omafr.gov.on.ca/english/engineer/facts/reduceriskfire.htm>

Perth East County, southern ON – farm fire prevention resources

<http://www.pertheast.ca/en/municipalservices/ffsc.asp>

<http://www.pertheast.ca/en/municipalservices/FFSCresource.asp>

<https://www.youtube.com/channel/UCuCuLeB7nhI5MD2en5XUMRQ>

<http://www.livestockwelfare.com/wp-content/uploads/Barn-fires-involving-farm-animals.pdf>

Code. "Monitoring and alarm systems can be installed, fire separations in addition to the minimum requirements can be installed, sprinklers or other extinguishing systems are available, the list goes on and on. Farmers have the choice."

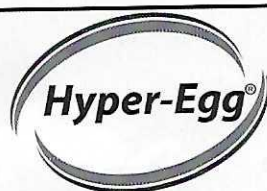
Hunter notes, however, that as a quick fire suppression tool, barn sprinklers are hobbled by serious issues such as freezing pipes, inadequate water pressure/volume and false alarms. He says there are many different systems out there, including 'dry' systems designed for unheated buildings, mechanical rooms and offices, including one made by Haven (<http://www.havenfiresafety.com>) which Hunter doesn't endorse, but thinks is "a neat idea, and not huge dollars."

Overall, the biggest stumbling block to preventing barn fires in Hunter's view may be the belief of some farmers that a fire simply won't happen to them. He's heard them say things like 'we have never had a problem' and 'we are just trying to make a living and cannot afford any fancy upgrades.'

"We have heard it all," he concludes. "The point of our entire program is that you can spend as little or as much as you want. In my opinion, farmers should be protecting their investments, however, many think that their insurance is there for the protection. If we are going to see any substantial improvements in codes and regulations, we will have to have some open and frank discussions with the farming community, and quite honestly the insurance industry probably needs to step up and say enough is enough."

Hunter believes there is a lot that can be done on a typical farm to prevent fires.

"Simple housekeeping is the easiest and cheapest starting point," he says. "Request an electrical inspection, make rules about smoking, install some extinguishers and learn how to use them, control rodents... the list goes on." ■



The world's first and only registered Veterinary Biologic using Antibodies from eggs to prevent E. Coli diarrhea in young pigs.
For improved performance, make sure it's Hyper-Egg in your creep and starter feeds.
www.hyper-egg.com

For personal health
IMMUNADE
GOOD GUT, GOOD HEALTH
www.immunade.com



J. H. Hare & Associates Ltd
 Winnipeg, Canada
 1-800-661-4273
john@hareman.com

USE HYPER-EGG ANTIBODIES INSTEAD OF ANTIBIOTICS

Putting dollars in producers pockets

prairieswine.ca



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

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
 The Knowledge Network

www.prairieswine.ca



Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada

Canada

ALMA
 Alberta Livestock and Meat Agency Ltd.