



Equine Guelph Update

Volume 6, Number 1

SAFETY takes Centre Stage in 2009

Equine Industry Partners with Equine Guelph on Youth Safety Initiative

Equine Guelph's new youth safety initiative for 2009, "Play Safe. It's HorseSense!" was announced as a partnership between Farm Safety Association (Country Kids Safety Network), Kubota Canada, System Fencing and Equine Guelph and launched at the 2008 edition of the Royal Agricultural Winter Fair as part of Equine Guelph's *EquiMania!* Education Centre.

This new initiative teaches young horse enthusiasts how to stay safe around horses and farm equipment. "Between kids, horses, fences, stalls and tractors, a horse farm can be a very dangerous place," says Gayle Ecker, senior manager of Equine Guelph. "The support of industry leaders allows us to elevate the message of safety around horses to the next level."

From 1990 to 2005, 63% of animal-related injuries among youth in Ontario occurred in incidents involving horses. 65% of the children injured by horses were young girls – one of the rare categories of agricultural injuries in which more females than males tend to be injured. The majority of the injuries were caused by falling from a horse or being struck by a horse. Machine run-overs were the predominant cause of fatal injuries – at 46% – for children under the age of 16.

The primary goal of this safety initiative is to reduce the number of tractor- and horse-related accidents amongst youth on horse farms in Ontario.

"This is a partnership that makes sense," says Dean Anderson, executive director of the Farm Safety Association. "We are delivering a critical safety message in a fun, interactive way to kids through *EquiMania!*'s high-profile educational initiatives at equine events."

As part of the "Play Safe. It's HorseSense!" initiative, kids compete in a safety trivia contest, test their knowledge of tractor safety at the Kubota Safety School, search for safety issues in the Hazard Hunt in the



At the 2008 Royal Agricultural Winter Fair, the venue was swarming with kids wearing horse hats. "We had over 17,000 walking billboards of our safety message – on kids' heads!" says Anderson.

Horse's House and adorn horse hats sporting the branded safety message.

"Safety on a horse farm requires common sense combined with a knowledge of horses and moving equipment," says John Gilliland, marketing manager of Kubota Canada. "This partnership gives us the opportunity to disseminate this knowledge to our youth. If the initiative prevents one accident or saves one life, it is a wise investment."

Equine Guelph's award winning youth education centre, *EquiMania!* is a fun and

interactive program that promotes horse health and safety on behalf of the equine industry. The travelling road show visits equine events and venues like the Royal Agricultural Winter Fair, Can-Am All Breed Equine Emporium, Ontario Equestrian Federation Annual Conference, Woodbine Entertainment and fairs throughout the countryside. To contribute to Equine Guelph's education programs, visit www.EquineGuelph.ca.

- Henrietta Coole

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UPDATE ON EQUINE GUELPH'S WORK

Research

Dr. Scott Weese, Ontario Veterinary College researcher, and colleagues are evaluating septic arthritis, a bacterial infection of the joint, and a potentially devastating problem in adult horses and foals. Rapid and appropriate therapy is critical. Prompt identification of the bacterium that is causing the infection is crucial. Bacteria culture can be time consuming and produce false negative results. Molecular diagnostic methods may be better alternatives to traditional tests. Researchers will use real time PCR and DNA sequencing to detect bacterial DNA in samples from septic joints. Results could provide accurate and rapid testing for the cause of joint infections, and facilitate timely use of appropriate antibiotic therapy.

To learn more about current and past research projects please visit: www.EquineGuelph.ca.

Education

Equine Guelph and the Office of Open Learning are pleased to announce the first offering of **Equine Event Management**. This new elective is part of the Equine Business Management Certificate and will be included in the May 2009 course offerings, as well as, Functional Anatomy, Equine Behaviour, Health and Disease Prevention and Equine Genetics.

Equine Event Management will allow students to gain skills to organize and oversee a horse show, sale, clinic or other event. Skills include; marketing, due diligence, analyzing facility amenities, health & safety considerations and logistics.

Equine Guelph's online program delivers continuing education world-wide in a flexible and accessible venue. To learn more about these programs please visit www.EquineGuelph.ca.

Industry Development

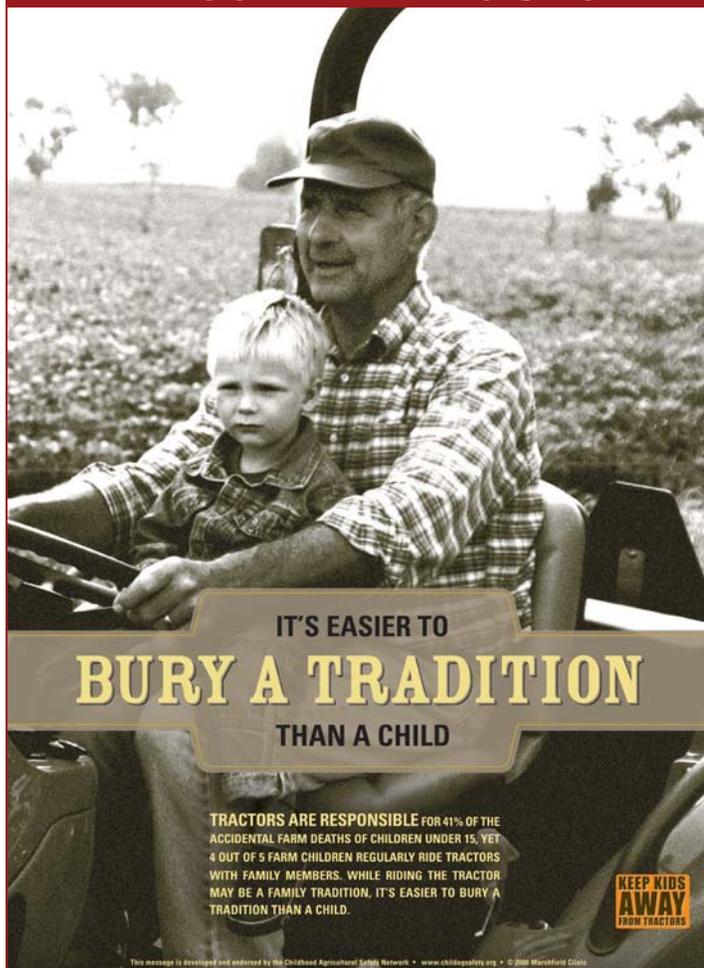
Equine Economic Impact Study Coming Soon!

An important research project is underway to gain a greater understanding of the size, scope, and economic impact of Ontario's thriving equine industry. The project is supported by the Sustainable Rural Communities Research Program as part of the OMAFRA/U of G research partnership with in-kind support from Equine Guelph.

As anyone involved in the equine industry knows, the horse industry is a vibrant component of rural Ontario, however, it is often difficult to gauge the true impact of this unique industry. An online survey is available and anyone currently active in the equine community is encouraged to complete the survey.

To access the online survey please visit www.EquineGuelph.ca.

Youth Safety (continued from page 1)



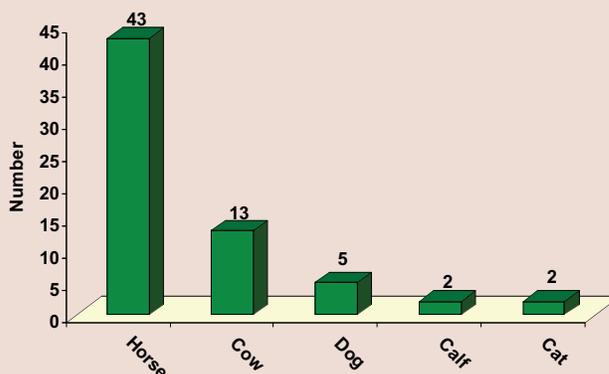
**IT'S EASIER TO
BURY A TRADITION
THAN A CHILD**

TRACTORS ARE RESPONSIBLE FOR 41% OF THE ACCIDENTAL FARM DEATHS OF CHILDREN UNDER 15, YET 4 OUT OF 5 FARM CHILDREN REGULARLY RIDE TRACTORS WITH FAMILY MEMBERS. WHILE RIDING THE TRACTOR MAY BE A FAMILY TRADITION, IT'S EASIER TO BURY A TRADITION THAN A CHILD.

KEEP KIDS AWAY FROM TRACTORS

This message is developed and endorsed by the Childhood Agricultural Safety Network • www.childagsafety.org • © 2008 Merckfeld Clinic

Horses - #1 cause of agricultural animal injuries to youth



Hospitalized agricultural animal injuries in Ontario children and youth under 16, by type of animal

Both horses and tractors are a significant source of injury for youth on farms in Ontario

Source: The Canadian Agricultural Injury Surveillance Program, www.caisp.ca

Frozen in Time

The lack of cryopreservation technology is holding horses back

Embryo transfer – that is, removing a live embryo from one female and transferring it to another to carry the pregnancy– is a common practice in cattle. It allows the most desirable genes to be passed on without always having the same female carry an offspring to term. The process often includes freezing the embryo, to keep it viable for transfer at a later time.

But freezing a horse embryo is more difficult than most species, for many reasons. The sheer size and rapid growth of the early horse embryo makes it difficult to freeze, as does its makeup. As a result, embryo transfer in horses has not progressed to the same extent as in cattle and other species, and is underutilized by horse breeders in Canada.

That’s why Prof. Tracey Chenier, Department of Population Medicine at the University of Guelph, and MSc candidate Sarah Kingma are trying to improve the freezing process.

“The ability to freeze a stallion’s semen has allowed breeders access to top quality genetics from around the world”, says Chenier. “Freezing a mare’s embryo would further increase the ability to produce high quality genes, and most importantly, would allow this reproductive technology a stronger place in the horse breeding industry by lowering the cost considerably. Embryos can be stored for future transfer, or transferred once a recipient (surrogate) mare is readily available. The potential for international transport of horse embryos then becomes a reality as well.”

Unlike other farm animal species, equine embryos are coated with a capsule that thickens throughout the development process. Chenier and Kingma set out to find out if this capsule prevents the cryoprotectant – a substance used to prevent cells from damage during freezing – from fully permeating the embryo, impairing its ability to survive the freezing process. The results of their study, presented last summer at the 7th Annual Equine Embryo Transfer Symposium in Cambridge, England, showed that indeed appears to be the case.



Photo by David Briggs

Dr. Tracey Chenier is unraveling the mysteries surrounding the difficulties associated with successful embryo transfer in the horse.

Their lab is now setting out to find out if the same is true of earlier embryos when the capsule is first developing. The research group believes that alternative cryoprotectants that will cross the capsule may need to be found for horse embryos to be successfully frozen.

This research is funded by Equine Guelph, E.P. Taylor and the Ontario Horse Racing Industry Association.

- Arpana Chakravarty

Reproduction Tips – Improve your chances

1. Conduct a breeding soundness evaluation before the mare is bred, including:
 - a. reproductive tract examination to ensure that she is healthy enough to be pregnant
 - b. physical and lameness examination to make sure she is in good health
2. The mare should not be under or over-weight – Feed the same to her as non-pregnant mares, except in the last 2 months, give her 1.4 times her normal balanced ration
3. Make sure that your mare is fit – Athletic horses have better changes of getting in foal, plus, foaling requires fitness
4. Keep your pregnant mare hydrated
5. Deworming is an important part of managing your pregnant mare
6. 30 days before foaling, vaccinate your mare against the diseases you wish to protect your foal from
7. Competition or pleasure riding during the first half of pregnancy (if she is used to those activities) is healthy

About Equine Guelph

Equine Guelph is the horse owner's and caregiver's Centre at the University of Guelph. We are dedicated to improving the health and well-being of horses through the provision and promotion of research, performance and education.

We welcome your views and encourage you to contact us with your comments or suggestions. Anyone wishing to excerpt *Equine Guelph Update* should contact:

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Equine Guelph also publishes a bi-monthly e-newsletter, *Horses@Guelph*. To subscribe to the e-newsletter, please visit www.equineguelph.ca

Calculating the Biosecurity Risk on Your Farm



Equine Guelph's new Equine Biosecurity Risk Calculator, sponsored by Vétuquinol Canada, allows horse owners to calculate the associated risk with their current management practices. Biosecurity involves management practices that reduce the chances that infectious disease will be carried onto the farm by animals or people, and reduces the spread of infectious disease on farms. The Equine Biosecurity Risk Calculator considers factors that increase the risk of spreading infectious disease against factors that decrease that risk on an individual farm.

"Implementation of a biosecurity protocol is important to reduce the risk of spreading infectious disease on any horse farm", says Caroline Desforges, Biosecurity & Equine Product Manager, Vétuquinol Canada. "An ounce of disease prevention is worth a pound of managing an infectious outbreak!"

The online resource gives horse owners a great starting point by showing the potential risks currently present on their farm and the most practical ways to decrease that risk. The Equine Biosecurity Risk Calculator will assist horse owners and caregivers to assess and possibly improve conditions on their farm for health and well-being of both their horses and them.

Equine Guelph thanks Vétuquinol Canada for supporting the education program.



To access the online calculator please visit www.EquineGuelph.ca

We Need Your Help

We value your support.

For donations by phone, please contact: **1 888 266-3108**. To donate online please visit: www.EquineGuelph.ca and click on "Supporters". You will find an online form.

Donations to Equine Guelph can also be made by credit card (Visa or Mastercard) or by cheque. Please make cheques payable to University of Guelph/Equine Guelph. An official receipt will be sent for donations. Our charitable registration number is 10816 1829 RR 0001.

Please return to:
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EVENTS

Mark your calendar!

March 20 - 22, 2009

EquiMania! at Can-Am Equine All Breeds Emporium

April 18 & 19, 2009

Equine Anatomy Workshops

May 11 – August 9, 2009

Equine Science & Business Management Certificates & Diploma Online Courses (Summer Offerings)

June 1 – 7, 2009

Horse Week in Canada

July – August (Weekends), 2009

EquiMania! at Woodbine's Family Area

September 14 – December 6, 2009

Equine Science & Business Management Certificates & Diploma Online Courses (Fall Offerings)



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