Autism is a complex developmental disability, and recently, service dogs have been helping children with this condition live safer lives - but this work is not without its challenges. This is what Kristen Burrows’ recent graduate research suggests: the placement of a service dog with an autistic child requires special thought for the physical, social and recreational needs of the animal to maintain a functional, working relationship between dog and child.

The placement of a service dog with an autistic child requires special thought for the physical, social and recreational needs of the animal.

Children with autism display alterations in social development, communication abilities, motor skills and sensory integration. As a result, autistic children can behave unpredictably - sometimes running off and putting themselves in danger. Service dogs, usually of the retriever breed, are placed with an autistic child for the purpose of the child’s safety. The dogs are trained to slow a child on command, and to prevent the child from bolting into traffic. This is achieved by securing the child to the dog via a leash and belt system, while the parent walks behind the pair to issue commands. Starting in 1997, National Service Dogs began placing trained dogs into homes with autistic children, and continues to do so at the rate of 10-16 dogs per year. As this is a relatively new practice, there have been only a handful of studies to investigate the impact of this relationship on the welfare of the animals involved.

Burrows, under the supervision of Dr. Cindy Adams, followed the introduction of eleven service dogs into homes for six to twelve months. Using a qualitative ethological approach, she evaluated the role played by service dogs within families, paying special attention to how the well-being of the dog impacts its ability to be a working dog. A number of factors were found to affect the well-being of the service dogs in the study. These included rest and

...continued on page 2
recreation time, predictability of routine, social interactions, avoidance of stressful situations and health. Service dogs, when ‘on duty’ and working, are not allowed to seek food or eliminate (unless given a command), which places physical and psychological stress on the dogs. This is especially relevant for dogs that accompany a child at school for the entire day. The problem can be exacerbated by a lack of sleep in instances where the child is unsettled during the night. It becomes very important, as a result, to allow the dogs time to rest by providing adequate ‘off-hours’, as well as recreational time. Burrows also noted that an unpredictable daily routine was a particularly potent stressor. Service dogs that were stressed showed altered behaviour, such as over-excitement or elimination in the home. These changes, which also have the potential to reduce parent satisfaction, are important cues for understanding the animal’s internal state.

Social interaction, which is important for the psychological well-being of all domestic dogs, may not be adequate for the service dog. Children with autism have difficulty showing affection, and in Burrows’ study, only some of the children showed an active interest in the dogs. Although bonding between child and animal may occur over time, it is crucial that the social needs of the service dog are met during the interim period.

Another consideration involving the use of service dogs for autism is the fact that children with this disorder can exhibit “melt-downs.” In this situation, the child becomes overwhelmed by their surroundings and can direct aggressive behaviour towards the dogs. Some parents involved in the study reported that the dogs seemed able to detect when they should move away from the child, to avoid potential harm. It was also noted that the dogs did not show aggression in return, likely due to the gentle temperament of the retrievers used. This behaviour is of particular interest, as the service dogs are trained only to prevent bolting, and not necessarily to other specific traits of autism – but seem able to develop appropriate responses, nonetheless.

Finally, it is imperative that the health of the service dog is monitored. In one case, overfeeding led to a dog being unable to fit into his service jacket, and to the parent, this dog seemed unwilling to ‘work’. Such potential problems mean that training and information for new animal owners, plus regular veterinary visits are a vital component of service dog well-being.

The service dog can contribute greatly to the safety of children with autism, and to greater peace of mind for their families. However, success can only be achieved by considering the welfare of the dogs involved, especially as it relates to social interaction, leisure time, and health concerns. The emerging use of service dogs requires that research such as this be carried out, so that the industry may better understand the factors influencing quality of life for these dogs.

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In the News...

Will Pit Bull Ban Put Dogs at Risk?

The Ontario pit bull ban, Bill 132, went into effect on August 29, 2005, allowing pit bull owners a 60-day transition period to prepare for the new requirements. The Ontario SPCA is disappointed that the Ontario Legislature has voted in favour of Bill 132, the provincial legislation that calls for banning pit bull dogs in the province. The Ontario SPCA would have preferred a wider-ranging strategy and fears that animal shelters will now see an influx of pit bulls because people are either confused by the legislation or don’t want to deal with the conditions and stigma that have been attached to these dogs through Bill 132.

Mike Draper, OSPCA Chief Inspector, urges pit bull owners to bear in mind that passage of this legislation does not mean they have to give up their dogs. “We strongly encourage current responsible pit bull owners to continue caring for their dogs, but, unfortunately, we expect that there will be an increase in the number of pit bull dogs surrendered to shelters, or just abandoned,” says Draper. “Many of these dogs are sure to be friendly, non-aggressive dogs that may resemble pit bulls, and we are anticipating having a difficult time finding them new homes because of the restrictions and stigma laid upon them through this legislation.” For more information, please visit http://www.ospca.on.ca/
In the News...
Whole Foods Market Blazing the Way for Animal Compassion in the Supermarket

The largest organic retailer in North America has its sights set on new animal welfare requirements for meat suppliers in a move expected to help drive major animal welfare changes for the agriculture and food industry.

“Whole Foods Market was groundbreaking with its involvement in developing organic standards in the U.S., and now it’s hoping to play a part in some animal welfare changes,” says Anne Malleau, Executive Director of the Austin-based company’s new Animal Compassion Foundation. “We plan to have a set of standards for every species that we sell in our stores by the end of 2008.” The company began recruiting experts and stakeholders as advisors for this process in 2003. Though a small company by retail sector standards, Whole Foods Market’s network of 168 stores, three of which are in Toronto, Vancouver, and Oakville, generate twice the industry average in sales per square foot of retail space. This means the Whole Foods philosophy is receiving favourable support. Malleau recognizes that welfare changes are not without challenges. “At the end of this first set of standards, we don’t expect that we’re going to have the answers to everything,” she says, “But we’re committed to continuous improvement and having these standards as a living document.” For more information please visit www.meristem.com

Research...
A Closer Look at Ontario’s Dehorning Practices
by Laura Dixon

Calves are routinely dehorned to reduce the risk of injury to other cattle and to increase worker safety. The majority of calves are dehorned between 4 and 8 weeks of age using a caustic stick or paste, or an electric hot iron. Calves older than 12 weeks are dehorned using a number of techniques, including scooping, shearing, or sawing. The acute and chronic post-operative pain associated with dehorning is an animal welfare concern.

Canadian Codes of Practice for Farm Animals recommend that producers use a nerve block such as lidocaine to minimize pain during the procedure. The acute and chronic post-operative pain associated with dehorning is an animal welfare concern.

So, how do Ontario dairy producers and veterinarians fit in with the various dehorning practices and procedures available? A research team from the University of Guelph, led by Drs. Todd Duffield, Kerry Lissemore, and Suzanne Millman conducted a survey to find out. Laine Misch, Doctor of Veterinary Medicine student, distributed the survey to food-animal veterinary clinics, and on dairy farms throughout Ontario, asking questions regarding age at dehorning, the method used, and anaesthetic/analgesic use.

It was found that most calves are dehorned by the producer (76%) but only some use lidocaine (21%). In contrast, veterinarians dehorned 24% of calves and used lidocaine 84% of the time. Only one veterinarian reported using an analgesic, however several used xylazine (a sedative with some analgesic properties). Those who used lidocaine did so for the purpose of pain management. The reasons for not using it were the time and cost involved. However, a significant number of producers were not aware of pain management options such as lidocaine. Veterinarians were clearly influential in dehorning practices, since those producers that used lidocaine were much more likely to have solicited veterinary advice for their dehorning decisions. Electric dehorning was the most common method among producers and veterinarians (41% and 44%, respectively). Age at dehorning varied among both producers and veterinarians, but was most commonly reported to be four to eight weeks (39%). The age of the calf...continued on page 4
and dehorning method used affect the amount of pain felt by the animal. Research is continuing to tease apart these factors and look for ways to improve the welfare of calves that are dehorned. Currently, the researchers are investigating the use of anti-inflammatories for longer-term pain relief, and impacts of dehorning pain on fearfulness later in life. Funding for this study was provided by OMAFRA and Boehringer-Ingelheim. The researchers would like to thank Ontario Dairy Herd Improvement for assisting with the producer mailout, and the veterinarians and producers who took the time to respond to the survey.

Walk the Pens to Calm the Pigs by Tina Widowski

Calm, low-stress handling of market hogs depends on a combination of properly designed handling facilities, the experience and technique of the handlers and the behavioral response of the pigs to handling. Pig behavior during handling is thought to depend in large part on their previous experience with humans. One practical recommendation for getting pigs used to moving around people long before they get to the slaughter plant is to “walk the pens” during the growing and finishing phase. Less than a minute of walking through the pens each day is thought to have a big impact on pig behavior.

Less than a minute of walking through the pens each day is thought to have a big impact on pig behavior. Impact on pig behavior, but multiply those few seconds by hundreds of pens in a barn and it can require hours of a stockmen’s time each week. So how much time spent walking the pens is enough to improve pig handling?

Graduate student Jennifer Brown, along with advisor Dr. Tina Widowski, and Penny Lawlis from the Ontario Ministry of Agriculture Food and Rural Affairs, recently set out to answer that question on two commercial farms. Pens on those farms were walked 0, 1, 2 or 3 times per week during the last 12 weeks before marketing. Behaviour was measured in the pigs’ home pens, during loading onto trucks and in a crowd pen at a commercial meat packing plant.

On both farms, several groups of 15-24 pigs received one of the different walking treatments. On Farm 1, when walking the pens, a researcher simply entered the pen holding a pig board and made one circuit around the pen, spending an average of 40 seconds there. On Farm 2, one of the regular stockmen walked the pens, spending on average 24 seconds per pen.

Once each week, the responses of the pigs to the “walker” entering the pens were determined by scoring the percentage of pigs in the pen that rapidly avoided the walker and tried to escape. At both farms, walking the pens had a significant effect on pigs’ behavior. All of the pigs showed a reduction in escape behavior over time, but pens of pigs that were walked 2 or 3 times per week were less inclined to try to escape from the handler moving through the home pen than pigs whose pens were walked only once each week. By the end of the trials, escape behavior was significantly lower in pens walked 2 or 3 times compared to those walked only 1 time per week.

On Farm 1, the behavior of pigs during loading onto trucks was measured. Three-tiered pot belly trucks were used to ship the pigs to a commercial slaughter plant. Researchers were stationed at each segment of the loading process on the farm to record how much time it took to move small groups of pigs out of their home pen, down a hallway to the pre-loading area, out of the pre-loading area into the loading chute and through the loading chute onto the truck. Pigs were marked with different colors according to treatment so that observers were ‘blind’ to treatment. Although there were no statistical differences between treatments for any of the segments, there was a tendency for pigs walked 2 or 3 times per week to move more quickly out of the preloading area than pigs walked only once per week or not at all. One factor that had a highly significant effect on loading time was the tier of the truck that pigs were moved to. It took almost twice as long to move pigs up the steep ramp...continued on next page
to the top level of the truck compared to the middle and top tiers, regardless of their handling treatment.

**Behaviour was measured in the pigs’ home pens, during loading onto trucks and in a crowd pen at a commercial meat packing plant.**

At the slaughter plant, a video camera was positioned over a crowd pen that led into a single file chute. The pigs were observed as plant workers moved batches of pigs from each of the treatment groups through the crowd pen and into the chute. The frequency of jamming at the entrance to the chute and the time it took to empty the crowd pen were recorded. Less jamming occurred for pigs in all pen-walking treatments compared to pigs whose pens had not been walked. Pigs whose pens had not been walked on the farm took about twice as long to move out of the crowd pen than pen-walked pigs. Regardless of handling treatment, however, the number of pigs put into the crowd pen during handling had a highly significant effect on pig behavior. Overloading the crowd pen resulted in significantly more jamming and longer times to empty the pen for pigs from both of the farms.

The data from this study demonstrate how all three factors, facility/truck design, handling technique and pig experience can significantly affect how pigs respond to humans and to handling at shipping to market. Walking the pens only once per week for the last 12 weeks prior to shipping had some positive effects on handling at the plant, but walking the pens at least two times per week showed the greatest effects on behavior on the farm.

The full version of this article was published in National Hog Farmer, September 15, 2005. Funding for this study was provided by Ontario Pork and OMAFRA. The researchers would like to thank the participating producers, truckers and packing plant.

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**Prof Honoured for Dedication to Welfare of Lab Animals**

Only two people in the world received such an honour – the receipt of a new award recognizing outstanding commitment to improving the care and housing of laboratory animals. University of Guelph professor Dr. Georgia Mason, of the Department of Animal and Poultry Science, recently accepted the Charles River Laboratories Excellence in Refinement Award in Berlin, Germany. The presentation was made during the Fifth World Congress on Alternatives and Animal Use in the Life Sciences. Bert van Zutphen, a professor at Utrecht University in the Netherlands, was also honoured.

Mason’s work on laboratory animals includes understanding their responses to stress (e.g. why mice jump up and down thousands of times a night or chew on the bars of their cages for hours), and using these measures to answer practical questions, such as how often to clean rat cages and what enrichments should be provided to research monkeys. The award is sponsored by Charles River Laboratories, in cooperation with the Johns Hopkins University Centre for Alternatives to Animal Testing (CAAT). For more information about CAAT awards, please visit http://caat.jhsph.edu
A painting tells a thousand tales. Pieter Bruegel’s hunting dogs, for example, look as dejected as their owners in his painting, Hunters in the Snow. But it tells us something really important: that from the Renaissance on, art and literature seem to have been way ahead of science in granting animals – or at any rate, mammals – some acceptance of sentience. The secular intellectual world of Leonardo da Vinci, Michel de Montaigne, Erasmus, Shakespeare and Francis Bacon took animal sentience for granted.

Philosophers were the big naysayers. There is a clear line of argument for non-sentience running from Aristotle to St. Thomas Aquinas and René Descartes to Immanuel Kant. They tended to draw a thick dividing line between non-human animals and humans, allowing the latter to use the former for whatever purpose they liked. Descartes is usually singled out for special blame for introducing the idea of animals as...
Spotlight on Faculty: Dr. Tina Widowski

by Anita Tucker

Often, students find themselves moving into disciplines far different from what they ever anticipated when they began their university career. This couldn’t be truer for Dr. Tina Widowski, Associate Professor in the Department of Animal and Poultry Science.

Dr. Widowski’s research at U of G has focused on developing better housing and management strategies for pigs and poultry to enhance both productivity and welfare.

Born and raised in the suburbs of Chicago, Illinois, Dr. Widowski started a bachelor’s degree at University of Illinois at Urbana-Champaign in ecology, ethology and evolution with the intentions of becoming a veterinarian. In order to gain practical experience with livestock, she took a summer job as Dr. Stan Curtis’ assistant, researching swine housing systems. This experience opened Widowski’s eyes to the housing and welfare issues faced by animals in the food industry. She became passionate about improving conditions for farm animals and decided to do both her MSc and PhD in Animal Science with Curtis. During her PhD work, Widowski was one of the first to demonstrate how nest building behaviour in sows is strictly controlled by the hormones associated with labour and delivery. These findings continue to have significant welfare implications as nearly all behavioural components of nest building are prevented by the confinement of farrowing crates.

Upon completion of her PhD in 1988, Widowski did post-doctoral research at the University of Wisconsin-Madison on the behaviour and reproductive biology of Cotton Top Tamarins, an endangered species of monkey. However, when Widowski’s husband, Dr. Nathan Perkins was offered a faculty position in the School of Landscape Architecture at the University of Guelph in 1990, she saw a great opportunity to continue working on farm animal welfare. So, just 3 months after the birth of their first son Colin, the family headed for U of G, where Widowski took the part-time position of Research Associate and sessional lecturer with Dr. Ian Duncan, studying the behaviour and welfare of poultry. In 1994, after her second son Evan was born, Widowski accepted the position of Associate Director of the Colonel K.L. Campbell Centre for the Study of Animal Welfare. She was appointed a faculty position in the Department of Animal and Poultry Science in 1998.

Dr. Widowski’s research at U of G has focused on developing better housing and management strategies for pigs and poultry to enhance both productivity and welfare. Dr. Widowski believes these goals can best be achieved by understanding the relationship between an animal’s environment, physiology, and behaviour.

Dr. Widowski currently has two PhD students (Anita Tucker and Jennifer Brown), one MSc Candidate...continued on next page
Perplexing and frustrating: That is how many owners and caretakers of stabled horses would describe the common problem of stereotypic behaviour, often referred to in the horse world as "stable vices". Stereotypies are abnormal repetitive behaviour patterns that can occur in horses as a result of stables being designed without consideration for natural horse behaviour.

Modern stables are built so that horses are housed alone, with only limited visual access to their companions.

Modern stables are built so that horses are housed alone, with only limited visual access to their companions. This type of stable design, and the consequent limited access to other horses, has been shown to be a risk factor for abnormal locomotory behaviour, such as weaving (a lateral swaying of the head) and stall-walking (repetitive circling of the stall).

Dr. Daniel Mills, veterinary behavioural researcher at the University of Lincoln, has been investigating methods of minimizing abnormal behaviour. His lab group has shown that placing a mirror in the stall is an effective means of decreasing weaving.

Recently, they also found that a life-sized poster of a horse's upper body has similar success in decreasing weaving behaviour. However, Dr. Mills cautions, the posture of the horse in the image may be very important. On the poster used in the study, the horse had its ears pricked forward, which may be responsible for the heightened alertness observed in the subjects.

Placing a mirror in the stall is an effective means of decreasing weaving.

Dr. Mills is continuing his research in this area, investigating the effect of both living and artificial companions. Anecdotal evidence suggests that alternative companions, such as goats, may also aid in decreasing abnormal behaviour.

Dr. Daniel Mills was a special guest speaker, jointly hosted by the OVC Summer Leadership Program, Equine Guelph and CSAW. His visit was partially funded by the profits from Dr. Karol Mathews CD "PAIN H.U.R.T.S.", of which excerpts can be viewed at www.jonkar.com
The 4th F.W. Presant Memorial Lecture, “Were the Old ways the Best Ways for Animal Welfare?” was given by Dr. Joe Stookey on Wednesday, November 2nd. Dr. Stookey is Professor of Applied Animal Behaviour in the Department of Large Animal Clinical Sciences at the Western College of Veterinary Medicine, University of Saskatchewan.

Animal welfare is not just about the animal and how it responds, but about how people respond.

Stookey began his talk by stating that he is bit anxious when talking about animal welfare, compared to animal behaviour, because of the political element. As Stookey sees it, animal welfare is not just about the animal and how it responds, but about how people respond, by determining our responsibility and role as dictated by science.

Over the past 10 years, Stookey has made a move towards greater animal welfare. This is because of the science that has been done, combined with the tough questions his students put forth, forcing him to examine our ways closely.

However, due mainly to economic constraints, said Stookey, some producers are not able to move as quickly toward animal welfare as some of us would like - and we have to appreciate this. In 1910, 40 cents of every dollar went back to the farmer, and in 1997, only about 7 cents. This shows how difficult it is to survive in the market; farmers can either try to develop a niche market, or try to sell more units. Farms are becoming fewer, and larger. Therefore, we are moving from smaller farms with fewer animals (the “old way”) to larger operations with greater numbers of animals (the “new way”), which carries with it some animal welfare advantages and disadvantages.

There are many advantages to larger operations. They allow for uniform groupings of animals with similar needs and a higher likelihood of having standard operating procedures in place for practices such as handling or health care. These operations are also more likely to have inspections and follow codes, to meet quality assurance and animal welfare standards, and to seek and use advice from specialists such as nutritionists, veterinarians, or engineers. Necessary chores are generally completed in a more timely manner, and facilities and equipment are more likely to be designed properly.

Standards for transportation and slaughter have never been better from an animal welfare perspective.

Stookey also stated that standards for transportation and slaughter have never been better from an animal welfare perspective. Advances have been made in restraint and slaughter plant audits, and the use of non-ambulatory animals in the food chain has been banned. No longer does the potential salvage value of an animal “trump” unnecessary suffering.

However, there are some areas that must be addressed. We often hear that welfare must be good in intensive farming because production is high. Stookey’s talk focused on several examples that discount this theory. Stookey pointed out that it is possible to crowd swine or egg laying hens to the point where their welfare is compromised, and still maintain high productivity. It is also possible to sacrifice individual health, but maintain productivity. Segregation of the cow/calf industry (the production of calves) from the feedlot industry (who buy the calves and raise them to market weight) leads to an increase in animal health related issues. Stookey used the example of one 1997 USDA survey which found that 64% of cow/calf operations did not vaccinate calves for respiratory disease. The reason, he said, is that they are not paid to do so. The calves sell for less, and health issues at the feedlot result, even though productivity is high.

All animal production industries perform routine procedures (castration, beak trimming, tail docking, dehorning etc.) and most of these procedures are performed without an attempt to mitigate pain.
This pain and suffering is ignored without compromising productivity. A number of constraints and considerations associated with invasive routine procedures include economics, ergonomics, scientific knowledge of animal well-being, and societal concerns. However, Stookey feels that we have an obligation to society and to our animals to find and adopt the most humane method of performing necessary procedures.

It is possible to identify, out of the various techniques and tools used to perform routine procedures, the best option for the animal. For instance, the degree to which an animal struggles during a procedure can be quantified by measuring the exertion force placed against a restraint device, by an animal attempting to escape.

We have an obligation to society and to our animals to find and adopt the most humane method of performing necessary procedures.

Also, vocalizations are honest signals that change with the treatment imposed. These, and other methods, lead to a greater understanding of the best option for the animal.

Genetics can also come into play in the improvement of animal well-being. Humans have been dehorning cattle since the beginning of domestication, and Stookey strongly believes that this practice is unnecessary in the beef industry. The logical and welfare friendly alternative to dehorning is using polled bulls. Polled bulls do not have horns, nor do their offspring have horns, and there has been no scientific data to prove that polled beef cattle are inferior to their horned counterparts.

The ways in which we must address the welfare issues that face today’s livestock and poultry industries are not unlike the ways in which we have addressed other issues such as biosecurity, food safety, quality assurance, or environmental impact. Stookey insists that “none of these issues will be solved by accident!” All of them require high intention, sincere effort, intelligent direction, and skilful execution.

So, are the old ways better than the new ways? As Stookey sees it, we’re not going back to the old ways. We’re stuck with the new ways, and we have some serious issues to deal with. But, we have also made great strides in some areas.

For more information on the F.W. Presant Memorial Lectures, please visit: http://www.aps.uoguelph.ca/~csaw/PresentLectures.htm

Students...

6th Annual Animal Welfare Forum a Success

The student-run Ontario Veterinary College Animal Welfare Club (AWC) held its 6th Annual Animal Welfare Forum on October 1st. Each year, members of the club organize this prominent day-long event, inviting international researchers and leaders in animal welfare science to give lectures and workshops on a variety of current issues. This year’s line-up drew in a crowd of 130, including 2 students from the Western College of Veterinary Medicine. Lizette Valdmanis, co-president of the AWC, says that the forum organizers were pleased by this, and adds “We are hoping to continue building an interface between the Animal Welfare Clubs at the four veterinary colleges in Canada, as we strive towards a common goal of increasing awareness in animal welfare issues within the veterinary community and the public.” The Forum also raised over $1000 in donations. The funds raised are used to award an annual scholarship to a U of G post-graduate student studying animal welfare. To view the list of speakers and topics, or to learn more about the AWC, please visit: http://www.ovc.uoguelph.ca/Associations/AWC/2005/index.html.
Animal Welfare Courses at U of G

A new graduate level animal welfare course, “Special Topics in Population Medicine: Applied Animal Welfare” (POPM*6950) was offered this fall at OVC. Applied Ethologist Dr. Suzanne Millman developed the course to give students a basic understanding of the ethical and scientific foundations of animal welfare, and knowledge about a variety of contemporary animal welfare issues. Students are required to critique scientific writings, stimulate class discussion, and complete a written review and oral presentation on a contemporary animal welfare issue of their choice.

The undergraduate level course “Principles of Farm Animal Care and Welfare” (ANSC*3150), taught by Dr. Ian Duncan, will be offered again this winter. The course introduces students to the main theoretical concepts of bioethics as related to contemporary animal agriculture. Students are familiarized with the history of the animal welfare movement, including its effect on producers and consumers of animal products. The course also emphasizes the techniques of assessment of animal well-being and reviews legal requirements and voluntarily accepted codes for sound animal care and safe animal handling. This course, which won the inaugural Animals and Society Course Award from the Humane Society of the United States in 1999, continues to be a popular choice among students. Enrollment has steadily increased from 40 to 180 since the course was first offered in 1995.

For more information on animal-welfare related courses offered at U of G, please visit http://www.aps.uoguelph.ca/~csaw/Courses.htm

The Basil Capes Memorial Lecture is Fast Approaching

Dr. Bernard Rollin, Philosophy Professor at Colorado State University, will give the next Basil Capes Memorial Lecture on the evening of Tuesday 14th February 2006. Rollin is one of the leading scholars in animal ethics, has published many books, and has lectured on this topic more than 1000 times internationally. Mark your calendars! Be sure not to miss Dr. Bernard Rollin!

Congratulations!

Congratulations to Stephanie Torrey, who successfully defended her PhD thesis: “Conflicting motivation: causation of abnormal oral behaviour patterns in young pigs”. Torrey has accepted a position in Lennoxville, Quebec, as a Research Scientist with Agriculture and Agri-food Canada’s Dairy and Swine Research and Development Centre. Good luck in your new job, Stephanie!

Dr. Stephanie Torrey

CSAW NEWS

The CARC (Canadian Agri-Food Research Council) Expert Committee on Farm Animal Welfare held its annual two-day meeting this past summer. In attendance were representatives from each of the provinces and the Atlantic Region. Committee member Dr. Suzanne Millman presented CSAW’s activities in a report on animal welfare research highlights in Ontario. Ms. Penny Lawlis, Animal Care Specialist for the Ministry of Agriculture, Food and Rural Affairs, and former part-time graduate student of Dr. Ian Duncan, is secretary for the Expert Committee. The Expert Committee meets each year to review research priorities and establish future goals.

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MISSION STATEMENT

As a group of individuals with diverse interests and views, our primary goal is to promote the welfare of animals through research and education.