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Bang for Buck: Maximizing Resources to Improve Shelter Dog Welfare

By Kimberly Sheppard

The Ontario Society for the Prevention of Cruelty to Animals (OSPCA) provides care and housing to tens of thousands of animals across the province every year. Of these, a significant proportion are dogs. They come in as strays, or are surrendered or rescued. Their backgrounds vary widely, as do their behavioural and training needs. Although all their basic needs are fulfilled at OSPCA shelters, the welfare of the dogs in the OSPCA's care can be impacted through a variety of environmental, social and behavioural factors.

Contact with humans is one of the easier strategies to implement at shelters, and one which is most beneficial to dog welfare. It can also be the least costly.

Volunteer!

Amanda McKibbon, MSc by coursework graduate, together with advisors Tina Widowski and Stephanie Yue Cottee – hoped to assist the OSPCA by focusing her major research project on studying their programs and services.



OSPCA provides care!

Her project had two main goals:

- 1) to determine the range of programs and services currently in place at OSPCA branches and affiliated shelters; and
- 2) to understand how basic shelter factors, such as availability of funding, number and training of staff/volunteers, and quality and quantity of

space, present challenges and/or contribute to the capability of shelters to engage in the above strategies.

McKibbon asked managers at OSPCA shelters to complete an online survey. The survey revealed that behaviourally-based strategies vary widely across shelters, with 76% and 57% of shelters having performed behaviour assessments and having a training program in place, respectively. Similarly, while all shelters employ various environmental strategies such as walks and access to toys, the degree to which they do this varies widely from shelter to shelter. This variable pattern was repeated again in shelter reports of the quality (auditory, visual, physical) and quantity of social interaction with humans and other dogs.

When asked how challenging various strategies are, it was reported that allowing contact with humans was among the least challenging factors to implement. From a list of basic shelter factors considered to impact shelter dog welfare, nearly half of shelter managers ranked funding as most important.

Overall, shelters vary widely in the quantity and quality of strategies aimed at enhancing shelter dog welfare, and funding is an especially important factor to consider. Given the reported relative ease of providing human interaction, the potentially low cost (i.e., volunteers), and that human interaction is considered by researchers to be an especially potent factor for improving dog welfare, McKibbon recommends that shelters focus on maximizing contact between humans and shelter dogs for the least-cost impact on shelter dog welfare. †

*Amanda McKibbon presented this research at our Annual Campbell Centre Research Symposium and won the prize for Best Student Poster. **Congrats Amanda!***

Research

I'm Not Going There! Assessing the Aversiveness of Restraint and Blood Sampling in Piglets

By Kimberly Sheppard

Swine make for ideal research models. Their similarity to humans with respect to biological systems, structures and functions makes them prime candidates for biomedical research, in which they are used extensively. Swine are also used regularly in agricultural and veterinary research studies. During these studies a seemingly unpleasant procedure is commonly carried out: blood collection.

In swine, the most common site for blood collection is either the jugular vein or the orbital sinus – the inner corner of the eye which has a rich blood supply. Because blood collection is performed frequently, Puja Whai (MSc. by coursework graduate) and advisors

Tina Widowski, Patricia Turner and Stephanie Yue Cottee decided to investigate which type of procedure pigs find least aversive, as a means of minimizing the discomfort experienced by these animals in future studies.



Pairing experiences with a pen that animals are able to recognize (and later choose or avoid) can help to shed light on how animals feel about certain procedures.

The research team used two approaches. The first was a behavioural assessment to determine how the pigs feel about each procedure. The second was pathological assessment, to determine how their bodies react to each type of blood sampling.

For the behavioural component, a “conditioned place preference (CPP)” approach was used, which determines the degree of positive/negative reward associated with specific experiences by pairing experiences with distinct locations – in this case, two distinctly marked and differently coloured pens. The animals’ avoidance of or attraction to those locations is then measured. The first step involved testing whether piglets developed a preference for a location when paired with a knowingly positive stimulus (exploring a novel environment in the company of a pen-mate), vs. a known unpleasant stimulus (being held on their back in a V-restraint for a short period of time). As expected,



Pig being held in a v-restraint while being exposed to visual and textural stimuli

the piglets showed a clear preference for the pen they were allowed to explore with another pig, which suggested the further experiments should work.

A second experiment tested piglets' preferences for pens in which they were restrained or restrained in an identical manner and blood sampled from the suborbital sinus. Here, piglets showed a slight tendency to spend less time in the pen in which piglets were restrained and bled.

Finally, a third experiment was conducted, in which piglets were restrained and blood sampled from either the suborbital sinus or restrained and blood sampled from the jugular vein. Piglets showed no significant preference for either pen in which the procedures were performed.

For the pathology study, eight piglets from a previous study were examined for the pathological consequences of orbital blood collection. Each piglet had been bled from the left eye twice over a period of 13 days, and the right eye was used as a control. No damage was found in any of the eyeballs or optic nerves.

This study has shown that CPP can be used to determine the relative preference/aversion for different handling experiences; that piglets find restraint during blood collection to be the most aversive part of the procedure, but they do not find blood sampling from the suborbital sinus any more or less aversive than sampling from the jugular vein. However, because piglets do find the entire blood collection experience aversive, use of piglets in research should be reduced or replaced wherever possible when blood collection and/or restraint is necessary. †

Research

Behind the Logo - New Website Illuminates Livestock Production and Animal Welfare Claims in Canadian Marketplace

How It Lived



Pig | Broiler | Laying Hen | Turkey | Beef Cow

How It Lived (HIL) is a new online resource for consumers to help make more informed choices on meat, egg, and dairy products in the Canadian marketplace. Developed by Nancy Roulston as her special project in the MSc by coursework program specializing in animal welfare, and advisor Dr. Ian Duncan, the HIL website provides information on modern livestock production methods,

the meaning behind meat, dairy and egg label claims and certifications found in Canada, and the relation of rearing practices to animal welfare science.

“Food production is quite removed from our daily lives and education, especially meat, eggs, and dairy. The packaging of these products in the supermarket can be quite misleading”, says Roulston, “How It Lived explains common logos, and helps people reconnect with the animal behind their food”.

“Animal welfare science gives us a tool to assess the state of animal well-being - we know that animals are sentient beings capable of pain, pleasure, stress, and suffering. Once we have this knowledge and understand how to prevent and/or reduce negative welfare,

it is essential to apply it to practice.”

Roulston sees the divide between the consumer and the producer as a major hurdle: “One on side, consumers may be unaware or mislead about the reality of animal production, but on the other hand producers are facing challenges of producing meat, milk, and eggs at a low cost. I hope HIL creates discussion to help close that gap.” If producers benefit from new-found consumer support in adding welfare components to their rearing practices, Roulston feels HIL has succeeded. †

How It Lived officially launched August 1, 2011:
www.howitlived.ca

Professor Emeritus Ian Duncan Awarded Medal for Outstanding Contributions to Animal Welfare Science by the Universities Federation for Animal Welfare (UFAW)

By Brian Pemberton, UFAW



Dr. Ian Duncan (left) with Dr. James Kirkwood, Chief Executive and Scientific Director of UFAW, at the Awards Ceremony aboard HMS Warrior in Portsmouth Historic Dockyard, UK

The winner of the inaugural UFAW Medal for Outstanding Contributions to Animal Welfare Science was announced at the Federation's recent International Symposium 'Making animal welfare improvements: Economic and other incentives and constraints' held in Portsmouth UK, 28th and 29th June 2011. A commemorative medal and £3,000 was presented by Professor John Webster of Bristol University, UK, on behalf of UFAW, to Professor Ian Duncan.

The UFAW Medal recognises exceptional achievements of an individual scientist who has made fundamental contributions

to the advancement of animal welfare over a number of years. The award is open to individuals, anywhere in the world, whose research, teaching, service and advocacy has significantly benefited the welfare of animals.

"Ian Duncan is one of the pioneers of the new direction in animal welfare science that began around 40 years ago with investigation of the animal's own perspective of its world," said Dr. James Kirkwood, UFAW's Chief Executive and Scientific Director. "He has had a highly productive career and his work has been very influential. He is well known for promoting the idea that welfare is about animals' feelings, which has come to be widely accepted. Work by Ian revolutionised the study of poultry behaviour and welfare, inspiring scientists and others around the world, and ultimately helped lead to the European Union ban on battery cages. We are delighted to award the first UFAW Medal for Outstanding Contributions to Animal Welfare Science to Professor Duncan." †



Beyond Research: Campbell Centre Awarded KTT Funding for Outreach, Teaching

Animal welfare has become a part of doing business in animal agriculture. Legislative changes in many countries are influencing global trends in food production and trade. Food retailers are requiring assurance about the standards of animal care, and in response, many animal agriculture sectors are developing animal care auditing programs. Regulatory agencies are also under increasing public pressure concerning the treatment of livestock.

In addition, animal welfare is increasingly viewed as being inextricably linked to animal health, food safety and public health; for example, the World Organization for Animal Health (OIE) identifies animal welfare as one of its top priority areas.

For all of these reasons it is becoming clear that in order to maintain Ontario's global competitiveness in animal agriculture, its leaders in animal production, policy and regulation need to have a fundamental understanding about animal welfare generally, about the tools used for assessment of animal welfare, and about science-based animal welfare standards.

The Campbell Centre has been awarded a grant, through the Agri-Food and Rural Link Knowledge Translation and Transfer (KTT) Funding Program, to help ensure that our leaders have the training they require to be effective in ensuring high animal welfare standards in Ontario.

Over the next two years, this grant will support the Campbell Centre in the development of a series of face-to-face training modules for Ontario's animal commodity, regulatory and animal enforcement groups. An on-line training program will also be developed for livestock and poultry producers and staff of the Ontario Ministry of Agriculture, Food and Rural Affairs.

Also funded through the KTT grant is the 5th International Conference on the Assessment of Animal Welfare at Farm and Group Level (WAFL), to be held August 8th-11th, 2011. Hosted by the Campbell Centre and the Ontario Veterinary College, this workshop will bring the world's experts to Ontario to interact with scientists, veterinarians, and specialists in food safety and animal welfare working within agri-food businesses. For more on the WAFL Conference, please see page 16. †

Providing Expertise to Codes of Practice Revision

Improved guidelines seek to enhance livestock knowledge and treatment

By Nicole Yada, SPARK program

Improving farm animal care and management remains a priority at the University of Guelph, 30 years after the country's first industry Codes of Practice were created, with guidance from Dr. Frank Hurnik, a former professor in the Department of Animal and Poultry Science. The University of Guelph continues to serve as a backbone for these prominent industry guidelines through faculty associated with the Campbell Centre for the Study of Animal Welfare (CCSAW).

The Codes serve as our national understanding of farm animal care requirements and recommended best practices. They include recommendations and requirements for

The National Farm Animal Care Council (NFACC) oversees and facilitates the Code development process. The process ensures credibility through scientific rigour, collaboration of all key stakeholders and consistency of approach. Currently the Codes of Practice for beef cattle, mink, ranched fox, pigs, equine, sheep and poultry (chickens, turkeys and breeders) are under revision. Visit www.nfacc.ca for more details on the Codes.

In December, Guelph researcher and CCSAW associated faculty Prof. Derek Haley, Department of Population Medicine, was recruited to serve on the Scientific Experts Committee for updating the Beef Cattle Codes of Practice.

“This is something that the University of Guelph has had a big hand in,” says Haley. “Of any single institution, we’ve surely had and continue to have one of the greatest influences on the development of these Codes.”

Haley’s specific area of expertise is in understanding weaning stress. He studies what happens when calves are weaned artificially, as part of animal production. Two of the most prominent alternative methods for reducing weaning stress for cattle are fence line weaning and two-stage weaning.

Fence line weaning involves the cow and her calf being separated by a fence, which allows them to see, smell and touch each other, but prevents the calf from being able to feed from her. Although nursing is prevented, the process of weaning is less stressful and is less disruptive to their behaviour, because the cow and calf can see each other.

Two-stage weaning involves the calf wearing a clip on its nose which blocks the calf’s access to its mother’s teat. Studies have shown that within 24 hours, the calf will stop trying to feed. Then, within just a few days the pair can be physically separated with virtually no fuss at all.



Dr. Derek Haley, one of the U of G team members working on revising the Recommended Codes of Practice for the Care and Handling of Farm Animals, led by the National Farm Animal Care Council.

housing, care, transportation, processing and other animal husbandry practices. They serve as educational tools, reference materials for regulations, and the foundation for animal care assessment programs.

In Ontario, the Ontario Society for the Prevention of Cruelty to Animals Act states that generally accepted practices in agriculture are exempt from criminal charges. Regulators use the Codes to define the generally accepted practices. Those who act outside of these guidelines put themselves at risk for prosecution.

Haley foresees the updated Code being much more detailed, with specific requirements outlined to achieve the standards, and additional information about best practices, all based on science.

A public comment period for the beef cattle Code is expected to take place in Fall 2012. At that time, the public, those involved in animal production, and those involved in animal protection will be able to review the draft Code and submit suggested changes to the Code Development Committee. Ultimately, the new beef cattle Code will be published in 2013.

“We’re not trying to do things behind closed doors, we want to let consumers and others with vested interests in animal agriculture and food production make their comments on the document,” says Haley.

Agriculture and Agri-Food Canada’s Agricultural Flexibility Fund provide funding for the Codes of Practice. †

**This article was modified from a version published in Ontario Beef.*

A History of Dedication

The creation of the first recommended Code of Practice for the Care and Handling of Farm Animals was led 30 years ago by Dr. Frank Hurnik, former professor in the Department of Animal and Poultry Science at the University of Guelph. The Campbell Centre continues to play an integral role in the development and revision of the Codes of Practice, and nine University of Guelph faculty and staff members have been recruited to serve on Scientific Experts Committees and/or to be Research Writers:

Dr. Bob Friendship, Swine Code of Practice Scientists’ Committee

Dr. Derek Haley, Beef Code of Practice Scientists’ Committee

Dr. Georgia Mason, Mink and Foxes Code of Practice Scientists’ Committee

Dr. Paula Menzies, Sheep Code of Practice Scientists’ Committee

Dr. Katrina Merkies, Equine Code of Practice Scientists’ Committee

Nadine Ringgenberg, Research Writer, Swine Code of Practice

Dr. Henry Staempfli, Equine Code of Practice Scientists’ Committee

Dr. Tina Widowski, Swine Code of Practice Scientists’ Committee

Dr. Stephanie Yue Cottee, Research Writer, Equine Code of Practice

Feature

U of Guelph Names NEW Animal Welfare Chairs

University of Guelph News Service



Photo: Teresa Pitman

The University of Guelph’s commitment to animal welfare has been strengthened by the appointment of three animal welfare scientists to chair positions.

Tina Widowski, a professor in the Department of Animal and Poultry Science for more than 12 years, has been named the Col. K. L. Campbell University Chair in Animal Welfare. Ian Duncan, an animal and poultry science professor for 21 years, has been named Emeritus Chair of Animal Welfare. In addition, Lee Niel has been appointed the Col. K.L. Campbell Chair in Companion Animal Welfare and an assistant professor in the Department of Population Medicine.

“These three chairs will enhance our reputation for excellence in teaching and research dedicated to improving the lives of animals,” said Maureen Mancuso, provost and vice-president (academic). “They will provide new training and learning experiences, and have a positive effect on animal welfare now and in the future.”

Dr. Lee Niel, our Newest Campbell Associated Faculty member, has been appointed Col. K.L. Campbell Chair in Companion Animal Welfare



Ian Duncan, Emeritus Chair of Animal Welfare

Guelph was also the first institution in Canada to establish an animal-care policy for animals used in research and teaching.

Widowski said she always knew she wanted to specialize in the behaviour and welfare of farm animals. As an undergraduate, she was fascinated by the applied aspects of animal behaviour in food production, and the challenges of managing food animals while protecting their welfare. Her



Tina Widowski, Campbell Centre Director and Col. K. L. Campbell University Chair in Animal Welfare

U of G's Colonel K.L. Campbell Centre for the Study of Animal Welfare was the first Canadian centre dedicated to conducting research on providing a better quality of life for animals. It offers a regular series of public lectures, seminars and educational opportunities.

current research focuses on how housing and management practices affect the physiology, behaviour and welfare of pigs, poultry and cattle.

"I am honoured with this appointment," she said. "This provides the opportunity to enrich undergraduate and graduate teaching

programs and will support the growth of research projects focused on animal welfare."

In addition to the chair position, Widowski has been reappointed to another five-year term as director of the Campbell Centre for Animal Welfare.

"Tina has done a remarkable job in her initial appointment as director by increasing awareness of the mission and objectives of the centre," said OVC dean Elizabeth Stone. "Her expertise and commitment to animal welfare are inspirational."

Duncan, a former centre director, was one of the first people to bring a scientific approach to solving animal welfare problems. He has published more than 150 scientific papers on animal welfare. In 2000, he received the inaugural Animals and Society Course Award from the Humane Society of the United States, North America's largest animal protection organization.

Niel is a graduate of Simon Fraser University and the University of British Columbia. The Vancouver native comes to U of G following post-doctoral work in behavioural neuroscience at the University of Toronto's Mississauga campus.

Her work in Guelph will be focused on assessing and mitigating pain and distress in companion animals in veterinary and shelter settings. She will also be looking at problems associated with aggressive dogs, how the problems develop and how to prevent them.

"This is the ideal job for me," she said. "I'll be doing research that I love and I get to work with cats and dogs and other animals, plus I'll be collaborating with others who are as passionate about animal welfare as I am."

Funding for the endowed companion animal welfare chair comes from a \$4.25-million gift last year to the OVC animal welfare fund from the estate of Mona Campbell, a longtime supporter of U of G. The endowment funds for the University chair in animal welfare have come from her estate and from earlier contributions she made, as well as contributions from the Eden Conservation Trust and the Ontario Ministry of Agriculture, Food and Rural Affairs in the 1990s. ✂

Campbell Centre Director Named Egg Farmers of Canada Chair in Poultry Welfare



Dr. Tina Widowski

Congratulations go out to Dr. Tina Widowski, Director of the Campbell Centre and professor in U of Guelph's Department of Animal and Poultry Science, who has been named as the new Egg Farmers of Canada Chair in Poultry Welfare.

The Chair comes with a gift of \$110,000 a year for the next seven years. This funding will allow Widowski to focus her research on laying hen welfare, especially with respect to assessing welfare in the emerging housing systems designed to enhance welfare by providing behavioural and physical enrichments.

A variety of alternative housing systems for laying hens have been developed and include enriched colonies, single and multi-tiered aviaries and free-range systems. Each system has its own set of welfare benefits and challenges. There are still many questions about how to optimize management in those systems

and how they impact the bottom line: What is the best rearing environment for pullets going into those systems? How do different management options such as density or group size affect health, welfare and productivity of the hens in those systems? How will cost of production compare? What are the attitudes of consumers about the different types of systems?

To help answer some of these questions, a team has been assembled with expertise in animal welfare science, poultry science, poultry epidemiology and economics of food production.

“Over the course of this 3-year project, we will conduct a series of laboratory experiments and field trials that address the behaviour and health of hens in alternative housing systems. We will examine how rearing environment affects the welfare of hens in enriched systems with different group sizes with a goal of optimizing the welfare of

hens in those systems” says Widowski. “We will also conduct consumer research to understand the socio-demographic factors associated with acceptance of eggs from hens housed in different systems and determine consumers’ valuation of eggs produced in those systems. This project will generate knowledge to inform Ontario egg producers about alternative production systems that meet consumer expectations and enhance the welfare of hens.”

Further support for this program on the welfare of laying hens comes from a generous grant jointly funded by OMAFRA, Clark AgSystems, Egg Farmers of Canada and the Poultry Industry Council. Team members include Dr. John Cranfield, Department of Food, Agricultural and Resource Economics, Dr. Michelle Guerin, Department of Population Medicine, Dr. Steve Leeson, Department of Animal and Poultry Science, Dr. Stephanie Torrey, Department of Animal and Poultry Science and Leanne Cooley, L.H. Gray & Son/Gray Ridge Egg Farms. †



The project support from Clark AgSystems entails renovations and upgrades at the Arkell Poultry Research Station. Clark AgSystems has contributed enriched colony cages, a pullet aviary rearing system, and a multi-tier aviary for laying hens.

A Picture Speaks a Thousand Words...

In Issue 21 of CCSAW News, our cover story “Comfort at a Cost?” describes the work of Dr. Jason Coe, Assistant Professor in OVC’s Department of Population Medicine, who is studying the relationships and welfare of homeless youth and their pets. The article features an incredibly touching photo of a man resting with his German Shepherd, generously provided by Pets of the Homeless, which is mislabeled as being taken by Ana Muller. The photo was actually taken by Kirsten Starcher who, in her own words, explains how this poignant photograph came to be.



I play bass in a Vancouver-based rock band called ARCTIC. In 2006, we were performing in Toronto, and my bandmate, Marcus Martin and I had some time to wander the city. As we walked down Queen Street near Spadina, we noticed a homeless man sleeping on the sidewalk, cross-legged and leaning against a building, a German Shepherd nestled into his arms as exactly as a puzzle piece.

We paused and looked, and Marcus said quietly, “I wish I had a camera.” I had mine along, but I’ve always been uncomfortable taking photos of strangers – most of my photos are landscapes, close-ups, interesting shapes – and this man with his dog seemed so vulnerable.

Marcus urged me to take a shot, but, shy about it, I shook my head and we started walking again. Still, the scene tugged at me, and after a moment won me over; I turned back and crouched quickly to take their picture. I still felt strange about it – I wanted to give him change, but they seemed so perfectly balanced and he looked so exhausted, I couldn’t bring myself to disturb them. The day continued, I posted the photo on Flickr along with my other pictures from the tour, and filed it all away in the back of my mind as another interesting passing moment in life.

Years later, it still amazes me how this one tiny action, which almost didn’t happen, has had a ripple effect I never would have predicted. Pets of the Homeless found the photo and asked to use it in a newsletter in 2007, and that set a wave in motion.

People started writing to tell me how much the photo affected them. More charities have asked to use it in their writings; artists have asked to paint their own versions of it; a musician wrote a song about it. I received email from a woman in South Africa who found it on a flyer on the beach and was deeply moved. One of the artists planned to give a percentage of his gallery’s earnings – for a month! – to a local homelessness charity, by way of appreciation.

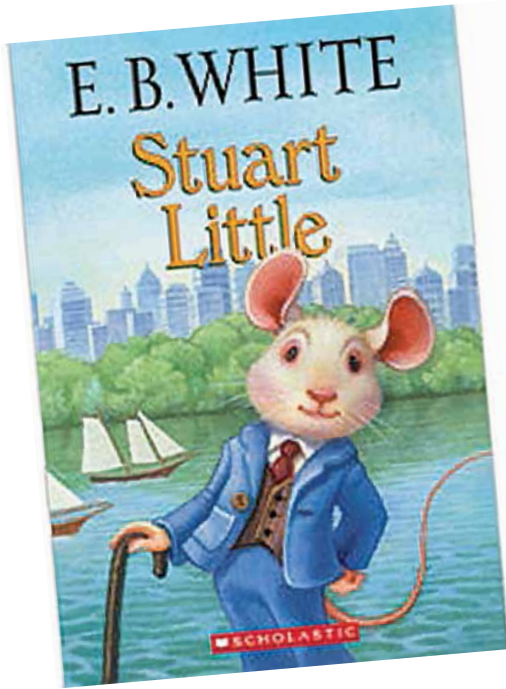
I am in awe of you all. Reluctantly clicking that shutter, I never expected to make these kinds of connections with people all over the world.

I don’t know the rest of the story. I don’t know what happened to the man or to his dog. I’ve seen people arguing online about whether I should have taken the picture, whether maybe he didn’t want to be found, whether I’ve been profiting from it (only once did I receive a small honorarium, and gave half to a Vancouver charity). I don’t know the answers, I don’t think there’s an absolute right or wrong, and I have no desire to debate it.

The overwhelming response from people has been gratitude for giving them a moment to think, to appreciate what they have, and to love the people and the pets they have in their lives. I was fortunate enough to make a fleeting observation that happens to have resonated deeply with others, and it’s given me a different perspective on how minor things we do in our lives can have a wide impact. Thanks to all of you for your own warmth and appreciation; thanks to Pets of the Homeless for making all this possible. †

Stuart Little is Drowning!

By Kimberly Sheppard



Who didn't grow up loving and being entertained by mice? Mickey and Minnie, Tom and Jerry and Mighty Mouse lit up many a TV screen on Saturday mornings. The children's classic Stuart Little has graced thousands of classrooms and nightstands. Mice are a big part of childhood.

But as we transition from the magical animated world of childhood to the realities of adulthood, mice transition from friend to foe. They make their way, uninvited, onto our property and into our homes. They get into our food, soil belongings and leave behind unpleasant evidence that they have visited.

So, what is a property owner to do?

Hank Davis, Professor Emeritus in the Department of Psychology at U of G, contemplated

this problem at the Campbell Centre Animal Welfare Research Symposium this spring. In his keynote talk "Stuart Little is Drowning!" he used the example of a letter to the editor from a local newspaper, where the author proudly outlined her clever device for eliminating mice – a food lure onto a slide and into a bucket of water where they meet their "demise".

How, asked Davis, did we become so callous about the elimination of this little mammal, the mouse? Although Davis doesn't recommend coexisting with mice or other rodents, he urges us to think about how we deal with getting rid of them. Drowning an animal deliberately is obviously inhumane, resulting in panic, exhaustion, then death by asphyxiation.

But some of the commercial rodent extermination devices we have at hand for everyday use are also inhumane, and these potentially affect the welfare of millions of animals every year.

Warfarin-based or other anticoagulant rat and mouse poisons are the most commonly used rodent control, and are readily available at local hardware stores. Mason and Littin (2003) outline the mode of action for this "rodenticide" as internal bleeding, which kills the animal slowly over the course of several days, causing distress, disability and/or pain. Sub-lethally affected animals likely still experience hemorrhage. Furthermore, predators and scavengers feeding on affected rodents can be secondarily poisoned and these might include wild birds and mammals, and pet dogs and cats.

Glue traps, also a mainstream control device, literally glue the animal to the surface of the trap. As the animal struggles to free itself, it tears hair and skin and breaks bones. If the trap is not checked frequently the rodent eventually dies from exhaustion and/or suffocation, starvation and dehydration. Some rodents also bite through their own limbs to try to escape. If the trap is checked frequently, distress time can be lowered but the animal must then be killed, and any number of methods are reported to be used (striking, drowning, incineration, CO₂, etc.), and humaneness of these methods varies.


A number of other rodent-control options exist, all with varying degrees of humaneness and a range of welfare implications. Of those easily accessed by the general public, the old fashioned snap-trap is one of the better choices. A well designed snap-trap that is baited properly crushes the skull, causing instantaneous loss of consciousness and death within minutes. Poorly designed snap traps can cause injury, however, so traps should be checked frequently – at least daily.



Photo: Lucinda McQueen

The most humane method of rodent control is physical exclusion. Prevent access to your property to reduce its attractiveness. Block off or fill any entry points with materials rodents cannot

climb or gnaw, and seal all foodstuffs in inaccessible containers. “Rodent infestation is a real problem” says Davis, “but solve the problem in a more humane way...let’s use our ingenuity.”

*For more information on rodent control options and their impact on rodent welfare, please read the Mason and Littin (2003) paper “The Humaneness of Rodent Control” available on the Campbell Centre website: www.uoguelph.ca/ccsaw 

Me up at does
Me up at does
out of the floor
quietly Stare
a poisoned mouse
still who alive
is asking What
have i done that
You wouldn't have
 -E.E. Cummings



Photo: i Nengah danuarta

Mouse caught in a readily-available glue trap.

Public Lecture


OVC Symposium a Hit with Pet Owners

By Catherine Bianco



Dr. Marty Becker, “America’s Veterinarian”, gave the keynote talk at “Come. Sit. Learn.”

The questions from pet owners for Dr. Marty Becker came fast and furious after his keynote presentation at Come. Sit. Learn., a symposium for pet owners that was part of the Ontario Veterinary College’s 150th anniversary celebrations. The symposium on which was held on the University of Guelph campus also featured talks by Campbell Centre Associated Faculty Members – Dr. Jason Coe and Dr. Lee Niel. Drs. Coe and Haley were co-chairs of the event.

About 150 avid pet lovers attended the symposium to hear about veterinary care, puppy training and behavioural issues for both cats and dogs. Dr. Becker – often referred to as “America’s Veterinarian” – stressed the human and animal bond and how animals make life better for people. Interactive sessions also included a social worker who talked about the grieving process, nutrition and an OPP officer with his canine partner. 

Improving Dairy Calf and Heifer Welfare: Development of an Advisory Tool

By Kimberly Sheppard

A million dairy calves are born in Canada every year. Of these calves, around 10% die, which is a far cry from the 3% mortality seen in beef calves. But it is not always easy to pinpoint the exact contributing factors to calf mortality, especially on individual farms or by the farmers themselves – even if the cause of death is known.

Clearly, there is a need for assessment and advice on the farm, so that dairy producers know exactly how to optimize management and improve not only the welfare of their calves, but also the bottom line.

In her keynote talk at the CCSAW Animal Welfare Research Symposium, Dr. Elsa Vasseur, Agriculture and Agri-Food Canada, gave us an overview of an Advisory Tool that does just this. Welfare assessment schemes have been available for adult dairy cows for some time, but no such tool has ever been developed for calves and heifers. Toward developing one, Vasseur and her research team surveyed 115 Quebec dairies to gain a sound understanding of typical calf management and risk factors for calf welfare in producer's attitudes.

Although many good practices were identified, there was room for improvement in several key areas. Calf mortality was underestimated by producers by about 40% – and even when mortality was estimated to be in the 10–20% range, producers felt that it was not a problem on their farms. Related to this, very few producers kept health records, likely because they perceive calf health as quite good in general. Cost of raising a calf was also underestimated, meaning that producers do not perceive that losing a calf costs a lot of money, which it does.

It was also found that calving checks were not done frequently enough to consistently supply calves with early colostrum. Early feeding of good-quality colostrum is one of the most critical elements for good calf health, as it contains the antibodies the calf needs to fight off any infections that could ultimately contribute to the calf's death – and optimum absorption of antibodies occurs within the first four hours of birth. Colostrum quality was not reported to be checked at all on the farm – a practice that is easily implemented. Simply helping producers understand the importance of



Photo: Ruby Wong, AAFC 2011

New advisory tool is helping dairy producers improve the welfare of their calves

early colostrum has the potential to dramatically improve calf livability.

Dehorning is routinely performed on calves and has been shown to be painful, both during and after the procedure. Analgesics are readily available and extremely effective in mitigating dehorning pain. However, less than 50% of producers reported using analgesics during dehorning, although this number is higher than ever before. Further improvements in this area could be made with producer education.

The challenge, said Vasseur, is in finding tools to ensure better knowledge


transfer to producers. Enter the Advisory Tool. Backed with information gained from their survey, Vasseur and her team focussed their Advisory Tool on assessing and improving key practices identified as having the greatest impact on calf welfare. They developed targets (such as timing of first colostrum feeding, calving pen cleanliness, weaning procedures etc.), a scoring system for the targets, and recommended practices.

The team then solicited participation of producers, who took an active part in the on-farm intervention. In all, the tool stayed on target with a 3-hour visit, covering data collection on management and environment, scoring, practical demonstration, and debriefing. As the researchers hoped, the tool helped to detect and discuss problems with producers, some of which scored below 50% for some targets.

But the real test of the Advisory Tool's effectiveness came six months after the initial farm visit, when the researchers were pleased to see recommended practices being implemented in many critical areas they had identified and discussed.

Overall, the development of this tool has shown that voluntary improvements in animal welfare can be facilitated by using appropriate tools to educate producers and help them change their attitudes towards calf management and welfare. Such tools are invaluable, as they ultimately empower producers to positively and measurably impact the welfare of their animals.

To see the online tool yourself, please visit:

www.agrireseau.qc.ca/bovinslaitiers/documents/Evaluate_your_Rearing_Strategies.pdf 

Animal Behaviour and Welfare Seminar Series

Reaching community, teaching students

By Kimberly Sheppard

The Animal Behaviour and Welfare Seminar series has now been going strong for three full years. Instituted by Dr. Georgia Mason, Canada Research Chair in Animal Welfare, and now led by Dr. Stephanie Yue Cottee, Coursework MSc. Program Coordinator, the seminar series reaches U of Guelph and the broader community, while providing a foundation for students to critically evaluate research and theories surrounding animal welfare issues.

Students in the course UNIV 6030 (Seminars and Analysis in Animal Behaviour and Welfare) attend the seminars monthly and then move on to the classroom, where they discuss the issues from an interdisciplinary perspective. Students analyze topics presented by visiting guest lecturers using perspectives from various disciplines such as animal science, philosophy, history, psychology, ethics, and biology.

“This class focuses heavily on discussion and analysis of an array of topics. Students typically start off shy and unsure of engaging in scientific discourse with guest speakers” says Yue Cottee. “But by the end of the course, they become more confident - enthusiastically asking questions, asserting their own ideas and challenging their peers in an intelligent and respectful manner.” †

The following seminars were given in the 2010/2011 school year:

Consumer willingness to pay for animal welfare-friendly products

Dr. John Cranfield, University of Guelph

Gas euthanasia methods for rodents: Is there a humane option?

Dr. Lee Niel, University of Guelph

A star is born to buck: The codes, commerce and controversies of rodeo's bovine athletes

Dr. Susan Nance, University of Guelph

Fur chewing and welfare of chinchillas

Dr. Marina Ponzio, Universidad Nacional de Cordoba, Argentina

Feeding the broiler breeder: a welfare dilemma

Dr. Vicky Sandilands, Scottish Agricultural College.

Stress responses and social status in rainbow trout

Dr. Katie Gilmour, University of Ottawa



F.W. Presant Memorial Lecture: More Than Just a Lecture

By Kimberly Sheppard



Dr. Vicky Sandilands, Research Scientist with the Avian Science Research Centre, Scottish Agricultural College

The Campbell Centre was honoured to host Dr. Vicky Sandilands, Research Scientist at the Avian Science Research Centre at the Scottish Agricultural College, who gave the most recent F.W. Presant Memorial Lecture “You’ve come a long way, baby: the success of the chicken and some subsequent dilemmas.”

Sandilands delivered a lively talk to crowd representing academia, government and the farming community, discussing the various welfare challenges faced by poultry that are bred and housed to meet an ever-increasing demand.

But the F.W. Presant Memorial Lecture is more than just one lecture. The visiting scientist typically spends a minimum of five days in Guelph, participating in a number of academic and outreach activities. Dr. Sandilands actually spent two weeks at the University of Guelph, and had a packed schedule.

In addition to the memorial lecture, Sandilands also gave a poultry welfare talk in the Animal Behaviour and Welfare Seminar Series, and met with students to discuss her work for the course associated with the Seminar Series, and in our weekly “behaviour group” meeting. She assisted in coaching students for the Animal Welfare Judging Competition at Michigan State University, offering her expertise in broiler welfare issues. Sandilands also travelled throughout Ontario, visiting poultry genetics companies and poultry production facilities and meeting with producers. †

The F.W. Presant Memorial Lecture was stabled in recognition of the contributions of the late Fred W. Presant, and is funded by the OAC Alumni Foundation.

Students

Graduate Theses Successfully Defended!



Bianca Kitts, MSc.

The effect of limit feeding on the feeding behaviour and growth of dairy heifers.



Jamie Dallaire, MSc.

The effects of environmental enrichment on abnormal repetitive behaviour in American mink



Amy Stanton, PhD.

An evaluation of the impact of management practices on the health and welfare of dairy heifer calves.



Nadine Ringenberg, MSc.

Effects of stress during gestation and enrichment during lactation on maternal behaviour of sows.

Growing by Leaps and Bounds!

A message from the editor

By Kimberly Sheppard



So much has been happening at the Campbell Centre – so much that I couldn't fit all of our news and updates into a single issue! And, for all that has been happening in our daily activities, we have been working away just as much behind the scenes.

The past year has been one of tremendous growth and change for the Campbell Centre – we have four new Chairs in Animal Welfare (see pages 6-8), we have been busily organizing an international conference (WAFL) and we have completed an exercise never before undertaken at the Campbell Centre: Strategic Planning.

With an expanding core faculty in animal behaviour and welfare and increasing requests for support in various industry, government and retailer education efforts, we felt the need for a strategy that would allow us to pool our resources and expertise in a coordinated manner to excel in meeting these requests. We called upon consultant Mary Ferguson with Eko Nomos consulting to facilitate the process, and worked intensively on developing a plan that would effectively take the Campbell Centre forward.

We now have a plan that will facilitate us as we work within the university and reach out to the community and those working with and caring for the animals that we all use for various purposes. In addition to our CCSAW Steering Committee which has always been responsible for the direction of our activities, we now have three new sub-committees:

Education Committee: This committee is responsible for University of Guelph animal welfare education and training, which includes undergraduate, graduate, and DVM programs. The main overarching goals of this committee are to increase the quality and number of academics and professionals in the field of animal welfare, and to improve undergraduate and veterinary student involvement in this area. Committee members include Susan Nance (Chair), Tina Widowski, Cate Dewey, Janet Higginson.

Research Committee: The main goal of this committee is to generate more knowledge in animal welfare through increased research activity. Activities will be focussed on increasing funding for CCSAW Associated Faculty, increasing intra- and interdisciplinary collaborations, and increasing the number of staff scientist and faculty positions. Committee members include Stephanie Torrey (Chair), Pat Turner, and Lee Niel.

Outreach Committee: The Outreach Committee will transfer knowledge and increase awareness of animal welfare issues and practices to key groups, and provide expertise to inform public and corporate policy related to animal welfare. This includes development of non-degree training opportunities and certificate programs and increasing research dissemination. The committee will also work toward enhancing faculty involvement on provincial, national, and international advisory committees that influence animal welfare and facilitate placement of CCSAW grads to work in key provincial, national, and international animal organizations that influence animal welfare. Committee members include Kimberly Sheppard (Chair), Ian Duncan, Derek Haley and Tina Widowski. †

Dairy Cattle Welfare Symposium

Dairy Cattle Welfare Symposium, October 24–26, 2012, Guelph, Ontario. The primary objective of this symposium is to promote the translation and transfer of recent dairy welfare research findings to Ontario dairy producers, to extension educators, and to other dairy industry professionals. This symposium will also serve as a platform for the establishment of critical collaborative efforts between dairy producers and welfare researchers. Topics will focus on the leading health, housing and management factors that are currently impacting dairy cattle welfare in Canada. Please check the CCSAW website for more information as it becomes available: www.uoguelph.ca/ccsaw

5th International Conference on the Assessment of Animal Welfare at Farm and Group Level

The Campbell Centre is pleased to have the opportunity to host the 5th International Conference on the Assessment of Animal Welfare at Farm and Group Level (WAFL) from August 8th- 11th, 2011. The first WAFL – at that time a Workshop – took place when the science of animal welfare assessment was in its infancy. Now, twelve years later, on-farm animal welfare assessment and audits have evolved to become part of every day life for many of those involved in animal agriculture. With well over a decade of experience we can now begin reflecting on lessons learned from existing animal welfare schemes, we can examine the broader aspects of animal welfare assessments – environmental and social aspects – and we can consider the impacts and benefits of animal welfare assessments on both the end-users and the animals.

In keeping with the spirit of the first WAFL, we will also explore new and emerging methods for animal welfare assessment, focusing on the validity, repeatability and feasibility of different animal welfare measures.

We would like to thank all of the people, including our students, who have made this conference possible. We would also like to acknowledge the tremendous interest and financial support that we have received from food animal industries, government and professional associations.

Tina Widowski, Cate Dewey, Penny Lawlis and Kim Sheppard

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