

The Colonel K.L. Campbell  
**CENTRE for the STUDY of  
ANIMAL WELFARE**

Newsletter #7 Fall 1995

# We Have a New Name!

In 1991, a Chair in Animal Welfare was established at the University of Guelph largely through the efforts of Dean Ole Nielsen of the Ontario Veterinary College (OVC) with the help of generous donations from Mrs. Mona Campbell, The Eden Conservation Trust and the Ontario Ministry of Agriculture, Food and Rural Affairs. Dr. Ron Downey, the Assistant Dean at OVC, was the first holder of this partially-endowed Chair. Dr. Downey was also one of the founding Members of the Centre for the Study of Animal Welfare and served as a Member of the Steering Committee.

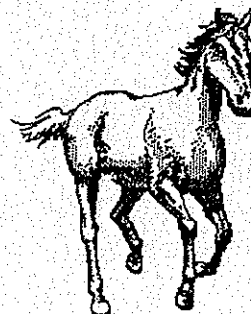
When Dr. Downey retired earlier this year, the new Dean of OVC, Dr. Alan Meek, set about trying to get the Chair fully endowed and struck a small fund-raising committee. Early in their discussions, this committee decided that it was essential that the Chair should be

an integral part of the Centre (there had been some confusion about the roles of the Chair and the Centre). The committee considered leaving the Chair vacant until it was fully endowed but, after listening to the views of the major donors, decided that it would give the Chair more profile if it was filled immediately. It was also decided to associate the Campbell name with the Centre. Two rather momentous events have now taken place; Dean Alan Meek invited the Director of CSAW, Dr. Ian Duncan, to fill the Chair in an interim capacity and the name of the Centre has been changed to The Colonel K.L. Campbell Centre for the Study of Animal Welfare.

These decisions were announced at a special dinner hosted by Mrs. Mona Campbell and Mr. Ken Murray held in Toronto in October to mark the start of a fund-raising campaign. The main after-dinner speaker was Professor Donald Broom, who holds the Colleen Macleod Chair in Animal Welfare at the University of Cambridge. Professor Broom spoke very positively about the activities of his group in Cambridge and the influence that they have had in improving the welfare of animals used for food and fibre, in biomedical science, for companions, and in sport. He emphasized that the Cambridge group have now established a reputation for impartial, objective investigation into welfare problems and that they are often asked for advice or to carry out

research into welfare topics. Professor Broom thought that Guelph was the obvious location for a Centre and a Chair in Animal Welfare since the University had a world-wide reputation as a centre of excellence in this area.

A word should be said about Colonel Kenneth L. Campbell. Colonel Campbell was always very interested in animal husbandry and had a passion for horses.



He was a keen horseman and showed horses and through them, he and his wife, Mona, developed a close contact with OVC and the University of Guelph. The Campbells were very loyal to the University, supporting many different causes including the Pet Trust program. After Colonel Campbell's death, a very generous gift from his estate helped found the Colonel K.L. Campbell Chair in Animal Welfare in the Ontario Veterinary College.

The Chair in Animal Welfare has now become a University Chair although it will, of course, continue to have close ties with OVC. The aims and aspirations of the new Chair-holder will be covered in future issues of this Newsletter.

#### **In this issue:**

#### **Meet the Associated Faculty**

Beginning in this issue is a series of articles featuring Associate Faculty. These individuals have contributed significant time and expertise in the development of the Centre and in working toward our goal of improving animal welfare.

**UNIVERSITY  
of GUELPH**

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# Public Lectures

One of the most important objectives of the Centre is to teach students and the public about animal welfare matters. Since publication of our last newsletter, the Centre has hosted a livestock handling expert, a government regulatory agent and a political scientist as our evening lecture series speakers. The audiences have included meat packers, specialists in autism, farmers, animal rights advocates, anthropologists, teachers, scientists and students, to name a few.

## OVERCOMING ALL OBSTACLES

*A visiting professor offers inspirational advice on personal challenges and improving life for animals by Ken Smith*

The life story of Dr. Temple Grandin, who lectured last Wednesday [May 31, 1995] at the OVC, is inspirational to say the least. She is a PhD, an expert on animal welfare, and owns a very successful ranch and feedlot designing business. She is also autistic.

Autism is caused by the brain not fully maturing during fetal development. Autistic individuals often suffer from hyper-sensitive hearing and touch, which can result in individuals becoming non-verbal from trying to avoid these sensations. Temple Grandin has not only overcome these challenges,

she has used her experiences to help with her career.

Dr. Grandin believes that much of her success in animal behaviour comes from her autistic background. Autistic people are sensitive to the same kind of things which can frighten animals; such as jerky movements and objects which seem out of place. Dr. Grandin has used her unique insights into these fears to design more humane systems for animals.

When consulting with animal handling facilities, Dr. Grandin suggests small changes that can help get animals to cooperate. For example, a hissing air vent or a light reflecting off a shiny floor can cause cattle to panic. Even an object which seems out of place, such as an empty cigarette package in the middle of a floor, can be stressful for animals.

Dr. Grandin has also worked with the Denver Zoological Gardens to help administer blood tests to easily-frightened animals. For this project she emphasizes introducing animals to new techniques slowly, and to be especially careful in the beginning. Animals have an excellent memory for frightening experiences, and if an animal feels stressed during its first encounter then it will be useless to try and reattempt the technique later.

Another feature of autism which Dr. Grandin has drawn upon is the ability to think visually. According to her, autistic individuals tend to think with pictures rather than words. This visual way of thinking can, in rare cases, lead to a photographic memory; but more commonly it results in better perspective skills. Dr. Grandin has used this ability for engineering slaughter houses. She tries to visualize what the animals will be able to see in each area, and plans the structure to minimize fear.

Temple Grandin's accomplishments are not solely the result of her autistic experience. She is also intelligent and thoughtful. During her lecture, Dr. Grandin voiced her concerns over the welfare of animals. She believes that North Americans are overlooking the problems involved with animal handling, by living in a state of denial that slaughter houses even exist. Her belief is that if we are going to continue using animals for food, then it is our duty to treat them with respect.

In addition to all of Temple Grandin's achievements in animal welfare, she also spends a lot of time lecturing to parents and educators of autistic children.

*This article appeared in the Ontario, the University of Guelph student newspaper, June 6-12, 1995.*

## **POULTRY WELFARE. HEADS OR TAILS? STRAIGHT LINES OR CIRCLES?**

This past summer [August 17, 1995], Dr. Linda Murphy, Animal Welfare Coordinator of the Queensland Department of Primary Industries gave an entertaining and thought provoking presentation about airing skeletons and seeing the other side. Murphy's evening presentation for the Centre was also the keynote address at the First North American Poultry Welfare Symposium that was held the week before. She talked about the different attitudes toward poultry welfare and identified the major interest groups, each described by a term beginning with the letter "C": the Chooks themselves, contented or cranky (Chooks is the Australian term for chickens. The term itself illustrates people's inability to take chickens very seriously.); Chook Carers - the poultry producers; Campaigners for Change - the animal protectionists; Clever but Cautious - the animal welfare scientists, unwilling to "stick their necks out"; Canberra Committees - representing the endless government committees; Commentators - the media, always anxious to present controversy and confrontation; and, of course, the Confused Consumers - never sure what the real story is.

Murphy cleverly, and gently criticized each of the parties involved. Murphy herself is Clever but Cautious and now she works for the government, but not in Canberra. Murphy's most important point of the evening was that lack of

communication and lack of compromise among these groups has resulted in almost no real progress being made over the last 20 years. Now that concerns about poultry welfare are growing in North America, she urged the audience not to make the same mistakes that the Europeans and Australians have made. Judging by the variety of interest groups who were in the audience and by the smiles exchanged among them after her presentation, Murphy has started us out in the right direction.

## **AT ONE WITH NATURE? HUMAN ATTITUDES TO ANIMALS.**

Are the attitudes of industrialized societies toward animals really much worse than those of aboriginal cultures? Dr. Preece, Professor of Political Science at Wilfrid Laurier University and author of the book *Animal Welfare and Human Values* presented his views on this question during his lecture last month [November 1, 1995]. Preece takes the time to read volumes of classical and religious literature in order to examine human attitudes toward animals. During his intriguing presentation, Preece discussed cultural differences in these attitudes. He pointed out that the beliefs presented in a society's writings or oral traditions do not always reflect what a society practices.

Preece argued that Western anthropologists often mislead us by misrepresenting Eastern and aboriginal atti-

tudes toward animals. Many people feel that since animals are often considered sacred by some cultures that these cultures are somehow "in harmony with nature", and treat animals 'better' than Westerners. Preece points out that sacred animals are often animals that are feared or put to death to appease some god that is feared. The worship of these animals, therefore, is reverence and awe based on fear rather than on love, honor or respect. In one way human societies may not be so different from one another after all. When it comes to our "oneness with nature", maybe we all need to change our attitude.

### **BOOKS**

Temple Grandin's new book *Thinking in Pictures and Other Reports of My Life with Autism* (Doubleday) is now available in book stores (ISBN 0-385-47792-9, \$22.95/\$31.95 in Canada).

*Animal Welfare & Human Values* by Rod Preece and Lorna Chamberlain (Wilfrid Laurier University Press, 1993) is now available in paperback.

The next edition of *Research*, produced by the Office of Research at the University of Guelph, will focus on animal welfare projects. Members of the Centre will receive a copy sometime in February.

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# Student Chapter

## How Do Chickens Vote?

With their feet, of course! The student chapter demonstrated the concept of using animal behaviour experiments to answer questions about animal housing at the Royal Agricultural Winter Fair at Exhibition Place in Toronto. The Centre featured animal housing as part of the Animal Care Education Centre that was new to the Royal this year. Other displays in this Education Centre included the Ontario Veterinary Medical Association demonstrating health care for pets, OVC's Wild Bird Clinic teaching about the importance of maintaining a healthy lead-free environment for wildlife, the Equine Research Centre providing information about proper care of horses and Ontario Farm Animal Council along with the Ontario Veal Association featuring care and nutrition of calves.

Members of our student chapter spent twelve full days at the Royal asking thousands of school children, teachers and parents how they thought the chicks in our preference tests felt about certain aspects of their environment, like warmth or perches. People were amazed that little chicks were "smart enough" to go where they are most comfortable and that scientists can use this type of experiment to ask animals questions about their care. Many grown-ups as well as

kids learned that when the questions are presented just the right way, animals can vote with their feet or their snouts or their beaks.

Many thanks to the students who made our part of the Animal Care Education Centre a success: Jacqui Adamek, Kathryn Atkinson, Sophie Bart, Kathy Belbin-Chaltas, Lyn Benedet, Kristin Bingeman, Dave Burnett, Mark Cochran, Jennifer Gardner, Dave Hoffman, Andrea Jackman, Anne Malleau, Deborah McWilliams, Suzanne Millman, Cara Mumford, Andrea Murphy, Lynn Philp, Siham and Eric Rahaman-Noronha, Melissa Schefter, Greg Simpson, Andrea Staines, Donna Thomas, Lisa Wallis, Erin Worobec.



## Let's Meet...

...Suzanne Millman, a Ph.D. student in the Department of Animal & Poultry Science, is studying sexual aggression in broiler breeder roosters (see the 1994 CSAW Research Competition Award, Newsletter #6). Her birds will attack humans but they do not attack her. Suzanne has one research hen, for example, who seeks her out to perch on her arm, makes cooing noises and follows her around as she works.

Before her current research with advisor, Dr. Ian Duncan, Suzanne studied pig behaviour with Dr. Frank Hurnik (Animal and Poultry Science). She has had considerable experience with horses, dogs, cats, milking goats, sheep and dairy cows. Suzanne worked in Scotland for two years as a shepherd and in Greece for nearly another two years as a show-jumping horse groom. She began postgraduate studies after returning to Canada with a broken pelvis after a horse fell on her. She jokes that Dr. Duncan "picked me up and dusted me off". She also does not look nearly old enough to have accomplished all of this (but she is)!

Animal welfare issues became important to Suzanne as a teenager. Eventually, Suzanne would like to study veterinary medicine, and she is especially interested in behaviour problems of companion animals. She values

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being part of the community and feels that the veterinarian is the person in the community with an opportunity to teach others about animal welfare.

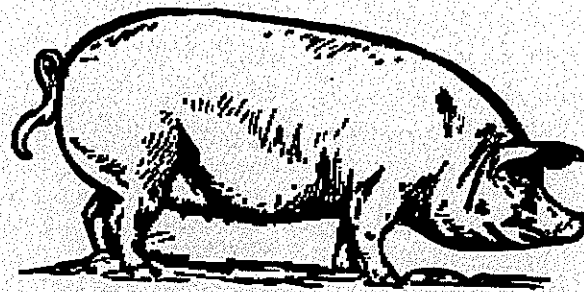
...Anne Malleau...A wide smile and energetic "I can do it" is both a statement and offer of help that is typical of this young woman. Anne Malleau is a graduate of Animal & Poultry Science but is new to the Masters of Science program in the department. She brings to the program extensive small animal clinical experience and three years of volunteer work at the Equine Research Centre. As an undergraduate research assistant, Anne studied dust-bathing and nesting behaviour of hens. Anne's chickens become calm when they hear her voice and they like to perch on her shoulders and hitch a ride on her shoes when she is working.

Anne became concerned about animal welfare issues in the second year of her undergraduate program. She is currently secretary of the Student Chapter as well as Graduate Student representative of the Steering Committee. It is apparent that Anne has a genuine pleasure in relating with people and animals. A PhD. and travel to Edinburgh and Oxford are only two of the things she plans for the future. Anne wants to specialize

in animal welfare, animal behaviour and environmental physiology.

...Lynn Philp is going to take some time off next spring and go to Scotland! This is a trip that will be both pleasure and familial for this

ing as a research technician in dog and cat nutrition studies where she applies her knowledge of animal behaviour to help her determine what the animals need during their daily routines.



fourth year Animal Science major who will graduate in May of 1996.

Lynn doctored her toy animals as a child and worked in a small animal veterinary clinic by the time she was sixteen years old. She learned about animal welfare issues in her first year of university and by the second year she was a member of the Student Chapter. Now, Lynn is the undergraduate representative on the Steering Committee. She is not certain where her career will lead, but she is certain that she will work with animals and that animal welfare issues will be important. Lynn is currently work-

In addition to her companion animal experience, Lynn has worked with dairy cows, chickens, pigs and horses. Her cat, who had to live at Lynn's parents for a while, is no longer depressed now that she can live with Lynn. A Master's degree, a veterinary technician program and the study of the nutritional needs of zoo animals are all possible career futures for Lynn.

*"Let's Meet ... " the Student Chapter was written by Deborah A. McWilliams*

# Building a Better Cow House

A feeder trough for sows should have no protruding bolts or sharp edges so that the sow will not get hurt when eating; it should be the right shape so that the sow can reach, chew and swallow food in comfort; and it should prevent feed wastage so that costly feed does not end up in the manure pit. These seem like rather common-sense features that one might expect almost any sow feeder on the market to have. Unfortunately, these features may be the exception more than the rule. Most architects and interior designers planning for human use have a pretty good idea of the user's needs, but when it comes to the design of animal equipment, the REAL user's needs have rarely been identified or accounted for. Often, the dimensions of a gate, or a feeder, or a pen are determined by the stock dimensions of the piece of plywood or metal that it is made out of, rather than by the size or shape or behavioural requirements of the animal who is using it. Now consider that the complete animal house, from floor to ventilation system, is composed of many individual pieces each with its own set of user (animal) requirements. When all the pieces of the house are fitted together, like a jigsaw puzzle, there are often more misfits than fits. Animal systems are not jigsaw puzzles, the pieces are not cut from a complete picture or guaranteed to fit.

This jigsaw puzzle analogy for animal house design came from a presentation given by Dr. Stanley E. Curtis, Professor of Animal Sciences at Penn State University, at a conference held

in Indianapolis last April. The conference, titled Animal Behavior and the Design of Livestock and Poultry Systems, was the first ever of its kind. It brought together agricultural engineers, animal behaviour specialists, animal environment consultants and animal equipment manufacturers. The presentations ranged from broad theoretical concepts to summaries of some applied specifications for particular housing systems. They were organized into sections on The Design Process, The Behavior of Animals, Behavioral Considerations in Design and Behavior-Based Problem Solving in Practice. This last section included case studies of dairy cows, pigs and poultry. The conference speakers were some of the best in the world and included Ian Duncan, CSAW Director and David Fraser, CSAW Advisory Board. Proceedings are available from NRAES, Cooperative Extension, 152 Riley-Robb Hall, Ithaca, NY 14853-5701, FAX (607) 255-4080. Cost of the proceedings is \$30 US + \$5.67 US postage to anywhere in Canada.

## Upcoming Events On Campus

### Public Lectures

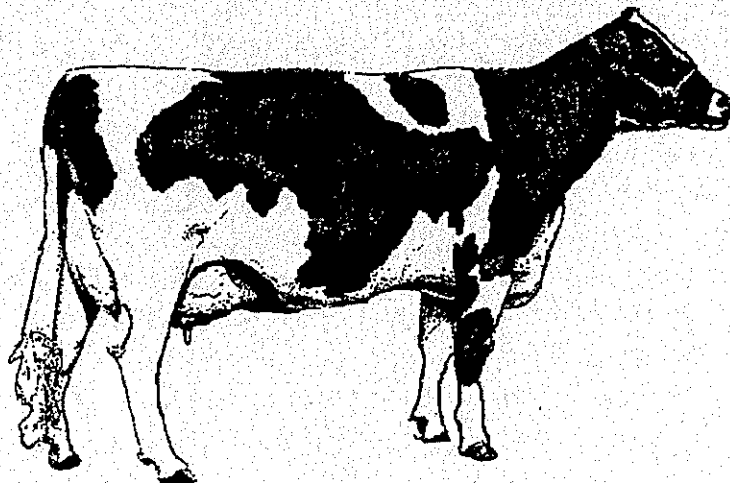
In early March, Dr. Stanley E. Curtis, Professor of Animal Science at Penn State University, will present a lecture on the Design of Housing and Equipment for Animals. Dr. Curtis is a leading authority on environmental management for agricultural animals. Anyone interested in animal-centered design should find this interesting and informative.

In late April, Dr. David Fraser, from the Centre for Food Animal Research in Ottawa will present "A Celebration of Pigs". Dr. Fraser, an expert on the behaviour of pigs, is also known as a frequent radio broadcaster of humour and pig lore.

*Please watch for upcoming announcements.*

### Conference

The 30th International Congress of the International Society for Applied Ethology will be held in Guelph August 14-17, 1996. Please contact the Centre office for registration information.





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## **FACULTY AWARDS**

Dr. Clayton MacKay, director of the Ontario Veterinary College Teaching Hospital was named the 1995 Veterinarian of the Year by the Massachusetts Society for the Prevention of Cruelty to Animals/American Humane Education Society (SPCA/AHES). The award is given annually to a veterinarian who has done "exemplary work toward improving the quality of life for animals". Dr. MacKay, a graduate of OVC (1970), is actively involved in a number of professional and animal welfare organizations. He is currently president of the American Animal Hospital Association. Committed to public education, Dr. MacKay makes regular guest radio and television appearances and has written newspaper columns about pet care for over 20 years.

In June 1995, Dr. Denna Benn, Director of Animal Care Services at the University of Guelph, was awarded the Charles River Canada Award from the Canadian Association of Laboratory Animal Science for outstanding contributions to animal welfare in Canada.

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## **LABORATORY ANIMALS**

The University of Guelph has a long-standing reputation for demonstrating exemplary standards in animal care. Much of this good work is due to the efforts of Dr. Denna Benn, Director of Animal Care Services. Animals outside of our research facilities also benefit from Dr. Benn's expertise. Recently, Dr. Benn was invited to give a presentation, "Environmental Enrichment

Strategies for Laboratory Animals" at the American Association of Laboratory Animal Scientists Indianapolis branch meeting held at Eli-Lilly headquarters. The meeting was attended by clinical veterinarians in charge of laboratory animal facilities. Dr. Benn was also hosted by the Animal Science Department at Purdue University to tour their facilities and give a presentation.

The use of cold-blooded species as experimental animals is increasing as is concern for their well-being. A conference on "The Care and Use of Fish, Amphibians and Reptiles in Research" sponsored by the Scientists Center for Animal Welfare was held at the Royal York Hotel in Toronto in September. Conference papers focused on how to best maintain and provide for the needs of these species and appropriate techniques for anaesthesia, analgesia and euthanasia. Dr. Ian Duncan (CSAW Director) chaired one of the sessions and Dr. David Noakes (Zoology) gave a presentation on tagging techniques for use in fish capture/recapture field studies.

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## **POULTRY WELFARE IN NORTH AMERICA**

North America is finally catching up. Every four years, since 1977, the European Federation of the World's Poultry Science Association has organized a symposium to increase awareness of poultry welfare issues and to disseminate knowledge gained from poultry welfare research. Thanks to the efforts of Drs. Ian Duncan and Joy Mench (Professor of Poultry Science, University of Maryland) the First North

American Symposium on Poultry Welfare was held in Edmonton, Alberta this past August.

The symposium, held in conjunction with this year's annual Poultry Science Association meeting, included an introductory overview of welfare considerations followed by individual sessions that were chosen to be relevant to North American poultry issues. The sessions covered 1) Health and Husbandry Considerations, 2) Catching, Transport and Slaughter, and 3) Improved Cage and Equipment Design. After each session, participants broke into discussion groups to develop recommendations. The goals of the symposium were to exchange scientific information and identify research priorities, to provide poultry extension personnel and producers with information that could be used to improve poultry welfare and to encourage dialogue among people interested in poultry production and/or welfare. All of those goals seemed to be achieved. The meeting was filled to capacity; more than 160 people attended. The participants represented a broad spectrum of government, academe, industry and animal protection organizations. Their input into the discussion groups resulted in many innovative suggestions for implementation and research in the area of poultry welfare. The spoken papers, posters and a summary of the discussion group recommendations will appear in a special volume published by the Poultry Science Association. Publication is expected early in 1996.

## MEET THE ASSOCIATED FACULTY

### Dr. W.D. Morrison.

A conversation with W.D.(Doug) Morrison reveals a man who is more than a distinguished animal scientist. It reveals a man who is a farmer, a theologian, a colleague, a mentor and a friend. Dr. Morrison is Professor Emeritus in the Department of Animal and Poultry Science and served as chair of that department from 1971 to 1983. Dr. Morrison has been a member of the Centre's Steering Committee since its inception and has chaired the committee for over three years. Throughout his career as an animal scientist, Dr. Morrison has continued to see animals, as well as humans, as individuals worthy of respect for their species needs. He has shared this perspective with others through his teaching and publications.

With two graduate degrees in poultry nutrition, over ten years of experience as Director of Research for Maple Leaf Mills, and another ten years as faculty in the Ontario Agricultural College, Morrison is an acknowledged expert in the area of animal nutrition. But as Dr. Morrison approached an age when most people consider the possibility of retirement, he became interested in environmental physiology and the application of operant conditioning principles for testing animal preferences. Morrison began teaching chicks and piglets how to control their own thermal environments by pushing buttons with their beaks or snouts. He even offered animals a choice of

microwaves as a heat source, and this research is still ongoing. Operant techniques allowed his animal subjects to communicate their environmental preferences to him. These interactions with his animal subjects stimulated an interest in animal behaviour beyond those behaviours used to meet physiological needs. This interest involved Dr. Morrison more deeply in animal welfare issues and enhanced his lifelong commitment to animal health and nutrition.

His rigorous training in scientific methods and statistics did not prevent Dr. Morrison from continuing to see his animal subjects as both members of a species and as individuals. He especially remembers an individual piglet who was involved in a trial for operant heat demand. These piglets had learned that they could ask for supplemental heat by pushing a button. Pigs, as a species, usually do not ask for supplemental heat during the night. In this trial, however, the heat was being turned on periodically at night and the videos were scrutinized for an indication of why night-time supplemental heat was being used by this group. Morrison and his research associates found that one piglet, when pushed down to the bottom of the sleeping pile of piglets and pushed to the outside, did not just climb back onto the pile of piglets. He always first went over and pushed the switch for supplemental heat and then climbed on top of the pile. Dr. Morrison chuckles at the individuality of this piglet who liked the heat of his group mates underneath him as well as the heat lamp above.

As a faculty member, Dr. Morrison has enjoyed one of his most rewarding roles. He continues, despite retirement, to communicate his excitement and passion for scientific discovery to students and colleagues. Former students, sometimes young enough to be his grandchildren, remain his close personal friends and colleagues. It is this lasting commitment, to people and to animals, that makes Dr. Morrison such a valuable member of the Centre. He accredits CSAW with uniting polarized theories to study animal welfare issues and inform people. On reflection, he says that the lack of funding did not prevent the Steering Committee from planning for the future of CSAW and animal welfare. The fruition of that planning can be seen in the current organization and activities.

*This article was based on an interview conducted by Deborah A. McWilliams, a fourth year Honours Psychology student and active member of the Student Chapter. The author would like to thank Rob Acorn for his assistance in the research for this article.*

Never hesitate to contact us with questions or concerns.

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