

animal welfare program

2000/2001 annual report



Faculty of Agricultural Sciences
THE UNIVERSITY OF BRITISH COLUMBIA

in cooperation with

CAE Centre for Applied Ethics
THE UNIVERSITY OF BRITISH COLUMBIA

www.agsci.ubc.ca/animalwelfare



After only three years in existence the Animal Welfare Program at UBC is recognized as one of the best in the world.



If you are among the growing number of people who want to promote the well being of animals used for food, research, entertainment and companionship, you will be encouraged to learn how this unique program is making a real difference and how you can help ensure this important work continues.

"Society is confronted with a bewildering range of compelling issues in the treatment of animals in agriculture, research, sport and companionship," says Moura Quayle, Dean of the Faculty of Agricultural Sciences. "UBC's Animal Welfare Program is researching animal behaviour and other fields to find practical solutions. It is also reaching out to society to stimulate knowledge-based discussion and consensus-building."

A few highlights from the last academic year:

- The program's co-chair Prof. David Fraser is one of three North American scientists advising the international food giant Burger King on how to ensure high animal welfare standards in its supply chain.
- UBC opened its new Dairy Education and Research Centre that features some of the best facilities for dairy cattle welfare research in the world.
- The Humane Society of the United States — North America's largest animal protection agency — selected UBC's undergraduate course in animal welfare for their prestigious "Society and Animals Course" award.

Current research highlights range from stall design for dairy cattle to adoption of shelter animals, plus an important new research program on the welfare of laboratory animals...



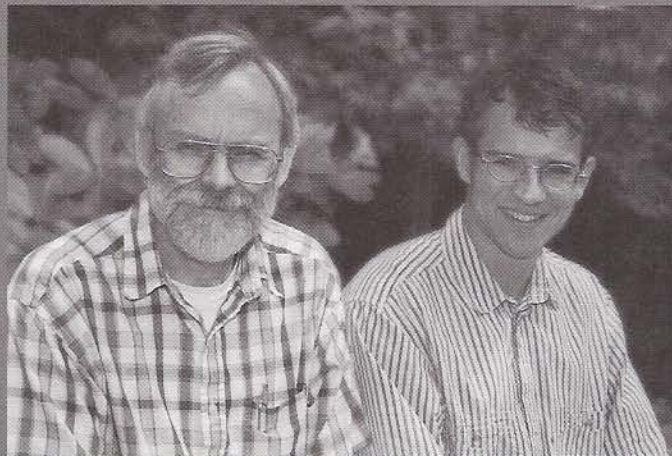


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We've grown. In our third year, UBC's Animal Welfare Program virtually doubled in size. By year's end 11 graduate students and four post-doctoral fellows were conducting diverse and innovative research to identify and solve animal welfare problems.

We are also approaching another turning point — while we have been extremely successful in attracting operating support for students and projects, next year our initial five-year core funding will run out. That means now, more than



Co-Chair David Fraser (left), Dan Weary (right), NSERC Industrial Research Chairs in Animal Welfare.

In 2000/2001 our program increased its capacity to find solutions to animal welfare problems through unique and innovative research.

This year our first Master's student earned a MSc (Agr) degree. Nadine Gourkow completed her Animal Welfare program thesis by showing that enriched environments can help cats adapt more quickly to animal shelters. This in turn facilitates quick adoption. She was promptly hired by the BC SPCA in Vancouver.

Doctoral student Cathy Schuppli and Prof. David Fraser published their literature review and analysis of welfare problems associated with exotic pets, which included policy recommendations for humane and government organizations.

We have placed special emphasis on dairy cattle, given their importance in B.C. and the lack of dairy cattle welfare research, nationally and internationally. We have published extensively, in this area on topics such as cow comfort and

ever, we urgently require your help to enable the program to thrive.

Interest in animal welfare is growing rapidly. Last year my co-chair, Dan Weary, and I sat on a wide range of national and international committees, handled dozens of media enquiries, and together with our students, gave 42 presentations in six different countries and more than 20 venues in Canada and the United States.

Because of this growing interest, we need a third faculty member to share the increasing workload and to deal especially with laboratory animal welfare. This will only be possible after we have firmed up our core funding.

As always, our greatest pride is our students. Approximately 200 enquiries come in from potential graduate students each year, and out of these we accept stellar people whose training at UBC will allow them to make a unique contribution to the animal care professions, and an enormous difference to the animals that we depend on and that depend on us.

Dr. David Fraser

stall design, causes of leg injuries, how to reduce pain during de-horning, and easing the stress of weaning calves. Among our popular producer-oriented articles are those on cow comfort, lameness and improved housing. For a complete list: www.agsci.ubc.ca/animalwelfare.

Our growing international network is especially exciting. This year we welcomed two exchange students from the UK, four from the Netherlands and one from Denmark, along with post-doctoral fellows from Brazil, Poland, the UK and New Zealand.

Animal welfare issues are global and with your support we will continue to grow as an international centre that brings interested people together to address key problems in animal welfare.

Dr. Dan Weary



Dr. Emily Patterson-Kane with a lab rat.

Researcher improves the lot of the lowly lab rat

sold for hamsters, gerbils and mice are too small and dangerous for rats. They are social animals and it's essential rats be purchased in pairs as pets, not alone. As well, it's very important that the entire family arrive at a consensus before acquiring pet rats. Tragically, too many end up in garages and basements far from what they crave most - social contact."

Her findings have also appeared in journals read by researchers and animal technicians who are directly responsible for animal care. Her review of effective environment enrichments of rats appears in the August 2001 edition of *Animal Technology*.

In a second small room near her lab, 50 rats are involved in her study. Perched on a table is a thumb-worn notebook containing columns of meticulously-written figures. She's been observing how rats choose between alternative cages connected by a plastic T-pipe. The options she presents include space, shelter, toys and bedding. Video cameras record rats' use of these options round the clock. "One of the problems with previous research arises from the failure to recognize that rats are nocturnal, so most of that research is on sleepy rats," she explains.

"Also, simple preference work tends to pick up what rats spend a lot of time doing rather than what is important to them. Much of my own time is taken up with paperwork and commuting, but these aren't my preferred activities. Something that takes only a few minutes, like e-mailing my Mom back home in New Zealand, is more important to me."

Patterson-Kane was educated at the University of Waikato and Victoria University of Wellington as a behavioural psycholo-

gist. Her fascination about the welfare of research animals led to post-graduate research on the visual abilities of hens. While others insisted that chickens were of interest only on a dinner plate, Patterson-Kane discovered that chickens can learn complex tasks and show strong emotional behaviours.

Patterson-Kane isn't alone in working to improve the lives of lab animals. UBC PhD student Cathy Schuppli is studying how animal care committees decide to approve animal-based research, and Master's student Lee Niel is researching rats' ultrasonic vocalizations to determine if they can be used to improve pain relief. Geoffrey Urton has begun a Master's thesis on mice in ventilated cages. And Kymberlee Nelson is conducting undergraduate work on rat responses to vertical and horizontal cages. Two Dutch students recently visited UBC's Animal Welfare Program to conduct a three-month study of nesting materials.

She is also building on work by Dr. Jim Love, director of UBC's Animal Care Centre. "Starting with an obsolete hamster cage, he built a cage with platforms. That option is important to rats," she says. "They live vertically, from burrowing in the ground to perching and looking down from trees. We will modify this design to provide more sheltered areas to rest in."

When Patterson-Kane recently attended a dinner for recipients of the coveted Kilmam Post-Doctoral Fellowship, she was surrounded by cutting-edge researchers from the world's leading universities. "I believe I was selected because the idea of improving the environment of lab animals is appealing. There is widespread recognition that the time has come," she says.

In Canada alone, it's

estimated that half a million laboratory rats are used for research every year. UBC's Dr. Emily Patterson-Kane thinks it's time we took much greater responsibility for their well-being.

A prestigious and highly competitive Kilmam Post-Doctoral Fellowship will help her devote two years to researching how to improve the environment of laboratory animals. But Patterson-Kane isn't only interested in adding to theory.

"Theoretical research alone accomplishes nothing for animals," she says, opening the door to her cramped research quarters in UBC's MacMillan Building that she lovingly refers to as her "labette."

"I want to make real, positive changes by discovering what works best and sharing the results of my research as widely as possible," she says. "UBC's Animal Welfare Program is the best place to do that."

She has already shared some of her research with the Pet Industry Joint Advisory Council. "There are few products on the market for rats, and the toys usually

Award-winning research



Doctoral student Cathy Schuppli earned a three-year fellowship from the International Fund for Ethical Research (Chicago) to support her research on reduction, refinement and replacement of animals in research.



Art Cebalos used computer analysis of dairy cow movement to form a scientific basis for cattle housing design. The work was sponsored by a farm equipment manufacturer.



Doctoral student Cassandra Tucker was awarded a fellowship from the William and Charlotte Parkes Foundation (Maryland) to support her research on improved comfort and health of dairy cattle.

New initiatives

Master's student Amanda Zimmermann is studying the availability and quality of water for beef cattle on semi-arid rangeland, in collaboration with federal scientists in Kamloops, BC.

Students Anna McNeil-Allcock (pictured on cover) and Sarah Murphy (pictured on right with Buster) have begun to study hard-to-adopt dogs at the Vancouver BC SPCA shelter.

Another first for the program is the recent acceptance of Dr. Carol Morgan, DVM, as a graduate student researching ethical problems involving animal welfare that arise in veterinary practice. Her research project will be supervised cooperatively with the UBC Centre for Applied Ethics.

Frances Flower (pictured on right with cow) arrived from the United Kingdom to begin a PhD on the welfare of dairy cattle. Frances' work will enable us to use the posture and movements of cows to detect lameness in its early stages, thus allowing improved treatment and changes to barn design that minimize the development of lameness.



Global links

Drs. Jose Fregonesi from Brazil (pictured on top right) and Marek Gaworski from Poland (pictured below right) are the latest international scholars attracted to the program. They are conducting post-doctoral research on dairy cattle welfare.



Animal welfare at UBC



The impact of outstanding and innovative research, education and community outreach is being felt from diary farms to animal shelters.

The Animal Welfare Program is also contributing to solving the complex issue of how we affect wildlife.

Responding to a request from BC Parks, Master's student Anton Pitts has completed a study of how grizzly bears in the Khutzeymateen Grizzly Bear Sanctuary react to the presence of human observers. The results will help Parks officials determine whether eco-tourism needs to be regulated.

Sara Dubois is researching how to reduce adverse affects of humans on wildlife. Her MSc research will study wildlife rehabilitation in BC, to determine how to deal most effectively with animals injured by contact with human activity, from automobiles to power lines.

Reducing the harmful effects of people on wildlife is just part of the ambitious research being undertaken by UBC's Animal Welfare Program.

By improving the quality of life for animals the Animal Welfare Program has earned international recognition and major research grants and awards.

Working actively with sponsoring organizations, other academic units and a rapidly expanding global network, the program is providing workable solutions for some of the most compelling animal welfare issues of today.



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You can make a difference

Your support is urgently required for the Animal Welfare Program at UBC to continue to improve the quality of life of animals.

Established in 1997 through a five-year Natural Sciences and Engineering Research Council grant and the generous support of provincial and national partners, the program has earned an international reputation as a world leader in research, education and community outreach.

In the year 2000 our students earned \$200,000 in scholarships and research grants. This is a remarkable achievement for a small, young program and tangible recognition of the value and efficiency of our research.

Your contribution to our core funding will enable us to provide additional support that would otherwise not exist for improving animal welfare.

As someone who works with or cares for animals, please help us continue this

important work. You can help secure the future of the program by assisting us in reaching the goal of \$5 million for the Animal Welfare Endowment Fund. This will generate sufficient income to maintain the program in perpetuity. It is an achievable goal.

Your tax-deductible donation will make a difference. It is also a wise investment. The University has created many new options for planned gifts through which donors can create substantial gifts while reducing the tax they pay and increasing retirement income above what GIC and other investments currently provide. For details on how to support the Animal Welfare Program through your will, life insurance policies or charitable remainder trusts please contact:

David Love, Development Officer
Faculty of Agricultural Sciences
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The Animal Welfare Program

relies heavily on others to provide expert advice and cooperation on our research projects. This year the program benefited greatly from the active involvement of John Bradshaw (University of Southampton, UK), Wayne Campbell (Wild Bird Trust, Victoria), Anne Marie de Passille and Jeff Rushen (Agriculture and Agri-Food Canada, Quebec), Douglas Viera (Agriculture and Agri-Food Canada, Kamloops), James Lawson (BC SPCA), Michael McDonald and Fern Brunger (UBC Centre for Applied Ethics), Jim Love (UBC Animal Care Centre), Art More (UBC Dept. of Educational Psychology), David Sanderson (UBC Dept. of Human Kinetics), Jim Shelford and David Shackleton (UBC Faculty of Agricultural Sciences) as well as other colleagues and friends.



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Yes, I would like to support the welfare of animals through UBC's Animal Welfare Program

Confidential once completed

Alumni: Yes No

This is a new address: Yes No

Name: _____

Phone: _____

Address: _____

City: _____

Prov: _____

Postal Code: _____

I would like to be contacted about donating through my will (planned giving), life insurance policies or gifts of shares.

AND/OR

I am enclosing a cheque or money order made payable to the **University of British Columbia**

Debit my credit card _____ Exp. (M/Y): _____ or bank account (void cheque attached) for \$ _____ one time OR every month for _____ months.

I authorize UBC to debit my credit card or bank account as indicated above:

Signature: _____ Date: _____

Please return this form and your donation:

David Love, Development Officer, Faculty of Agricultural Sciences
The University of British Columbia, Suite 248, 2357 Main Mall, Vancouver, BC, V6T 1Z4