



# Animal Welfare Science Centre

[www.animalwelfare.net.au](http://www.animalwelfare.net.au)

## Newsletter

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### Vale John Barnett



**The tragic loss of Associate Professor John Barnett and his wife Jenny in the Victorian bush fires has deeply affected all those who knew them.**

John's main area of expertise was stress physiology and its application to the study of domestic animal welfare. This research over 30 years provided a timely balance on discussions within science and the livestock industries on welfare methodology and interpretations and this impact will continue to improve animal welfare methodology in the future.

John's research on pigs and poultry have also made a critical contribution to our understanding of the welfare risks associated with confinement housing, highlighting the major risks of confinement that arise from spatial and social restriction.

He worked extensively with the

livestock industries in developing welfare components of livestock industry QA programs and in assisting to achieve improvements in awareness and practices to safeguard animal welfare standards.

His outstanding scientific efforts have been highly acclaimed nationally and internationally by both science and the livestock industries and animal welfare science will greatly miss his important contributions.

John was also a major contributor to the Animal Welfare Science Centre's research and teaching programs at the University of Melbourne, Monash University and the Victorian Department of Primary Industries.

His wise counsel on matters of science as well as life will be sadly and irreplaceably missed.

A packed Melba Hall was the venue for a fitting tribute to John and Jenny when friends

and colleagues shared their memories of this very special couple.

The University of Melbourne invites donations to a fund established in memory of John & Jenny.

The purpose of the fund is to support teaching and research in animal welfare at the University. All projects and endeavours financed by the fund will be clearly identified as being in memory of John & Jenny Barnett.

If sufficient donations are received, the University proposes to use all donations to establish a trust for the same purpose.

For further details, please see back page.

To view or contribute a dedication to John, please visit this site:

<http://www.landfood.unimelb.edu.au/john.html>

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### ProHand Pigs Trainers trained



**The Centre has recently completed a revision of ProHand Pigs. This project, funded by Australian Pork Limited (APL), was led by Grahame Coleman of Monash University.**

**ProHand Pigs** is an innovative computer-based training program which targets stockperson behaviour by focussing on their beliefs and attitudes towards pigs.

An update of the program, (first developed over 10 years ago), was required to more accurately reflect current practices such as the greater use of artificial in-

semination and semi-intensive production systems.

A steering committee, including Barry Ray from Longernong College, Pat Mitchell from APL and Centre members from the University of Melbourne and the Department of Primary Industries provided advice and input throughout the process.

Existing **ProHand** trainers from throughout Australia gathered at Attwood in March to get their first look at the new package.

The trainers were impressed with the new content and layout and were keen to use the new program with their clients.



L-R, Emalyn Loudon, Paul Hemsworth, Grahame Coleman, John Riley, Barry Ray, Amanda Colli, Jeremy Skuse, Graeme Pope, Ross Brown, Barb Frey, Tony Fahy

For further information regarding **ProHand Pigs**, Pork Abattoir, Dairy and international developments, please contact Jeremy Skuse by email:

[jskuse@unimelb.edu.au](mailto:jskuse@unimelb.edu.au)



Lauren Edwards

Previous research in the pork and dairy industries has demonstrated that the human-animal relationship is an important determinant of farm animal welfare.

Lauren Edwards has recently completed her PhD, funded by the Australian Poultry CRC which looked at human—animal interactions in the laying hen.

The behaviour of stockpeople toward their stock is determined largely by the attitudes that they have toward the animals and their work. If the majority of the interactions that occur between stockpeople and their animals are negative then the animals will be fearful of humans. Fear is an aversive emotional state, and its presence indicates a reduction in welfare. Fear also elicits a stress response, which can have negative effects on health and productivity. Thus, stockperson

attitudes and behaviour can have important consequences for the animals in their care. This PhD project examined the human-animal relationship in the caged egg industry. This industry is one of the largest intensive farming industries in the world, and the human-animal relationship has the potential to impact a great many animals.

Twenty-nine laying sheds were studied in Australia and the USA, and in each shed the following four facets of the human-animal relationship were examined: stockperson attitudes, using a questionnaire; stockperson behaviour, using two days of direct observations; fear of humans in the hens, using two human-approach tests; and the impact of fear on stress and productivity, using an egg sample to assess stress hormone concentrations and farm records to assess egg production. These data were then examined for relationships. Stockperson attitudes and empathy

were indeed related to stockperson behaviour, and this behaviour was in turn related to the fear of humans that the birds experienced. Interestingly, high fear of humans was associated with low concentrations of stress hormones and increased egg production. This result cannot be explained, however in more controlled experimental situations, human behaviours that decreased fear of humans was associated with improved egg production and reduced stress hormone response.

From these results it can be concluded that the human-animal relationship has important consequences for laying hens in the egg industry, in terms of their welfare and productivity. The development of training packages that target the key attitudes and behaviour of stockpeople could result in improvements to the welfare of laying hens by reducing their fear of humans.



The 43rd Congress of the International Society for Applied Ethology (ISAE) will be hosted by Australia in 2009.

The congress will take place in Cairns between July 6th and 10th. For further information, please visit the congress website at:

<http://www.isae2009.com/>

## Dog owner relationship study

Dr. Jacqui Ley from Monash University is conducting a dog owner relationship study, known as 'What makes a good dog good?'

The goal is to survey Australian dog owners to identify what factors are important to a strong and stable bond between humans and dogs.

When this bond is strong dogs tend to stay in homes where they are important sources of support and unconditional love.

She anticipates that by understanding these factors it will be possible to work with organisations such as local councils, animals shelters, dog breeders and veterinarians to help maximise the formation of a strong bond.

If you or your family and friends have a dog that is at least 12 months old, please visit <http://coldfusion.its.monash.edu.au/med/spppm/questionnaires/jley/> and complete the survey.

Aussie dogs will love you for it!



## AWSC Honours students

The Animal Welfare Science Centre relies heavily on the efforts of its honours students by integrating their projects into larger research programs.

Current students at the University of Melbourne include:

- Rachel Clair Bloomfield: studying visitor effects on non-human primates at zoos.
- Zhengzhou Lee: investigating the relationships between aggression and stress physiology and injury in sows housed in groups during gestation.
- Alan Gatt: investigating the time budgets and behaviour in shedded sheep.
- Jaipal Gill: studying the development of responses to humans and ease of handling in calves less than 10 days old.
- Lauren Roberts: investigating responses to environmental stimuli, particularly novelty and startling, in calves less than 10 days of age.
- Lara Thompson-Hollingsworth: 3rd year industry project - Validating the use of Ice-Tag movement technology in calves less than 10 days of age.

# Seminar Series 2009

The Campbell Centre for the Study of Animal Welfare, The University of Guelph.  
Visit by clicking [here](#)



Around 40 people came to the University of Melbourne to attend a seminar presented by Prof. Tina Widowski in March.

Tina gave an interesting insight into work being undertaken at the University of Guelph in the area of transport and handling of pigs:

- using the thermicron iButton to measure core body temp in pigs during transport
- effects of routine handling interventions (walking the pens) and temperament (bold and shy) pigs on handling at the plant, stress response and meat quality.



Tina Widowski and friends

For a copy of Tina's presentation and other presentations from our seminars, please visit our website by clicking [here](#)

## Scientific Seminar - "Assessing Animal Welfare"

Friday 26th June 1.45pm – 4.00pm

(inc afternoon tea)

DPI Lecture Theatre, 475 Mickleham Road, Attwood, (Melways Map5 K2)

### "What cognitive abilities are indispensable for experiencing welfare?"

**Prof Berry Spruijt**, *University of Utrecht, Netherlands*

Prof. Berry Spruijt has studied brain plasticity, social behaviour and opioids since 1981 at Utrecht University. In 1996 he became Professor of Ethology and Animal Welfare at the Veterinary Faculty. His attention focused on reward systems as a candidate system for the perception of pleasure. The rationale is that emotions have a biological function and can be addressed by science. He also has an interest in the automation of behavioural registration and analysis resulting in the foundation of a contract research organization in 2008: Delta Phenomics B.V. of which he is Scientific Director. In 2008 he moved to the Faculty of BetaSciences, Department of Biology to lead a group studying social cognition in primates.



### "Using physiology and behaviour to assess welfare in farm animals: research of the United States Department of Agriculture"

**Dr Don Lay**, *Research Leader, Livestock Behavioural Research Unit, USDA, USA*

Dr. Lay is the Research Leader of the USDA-ARS Livestock Behavior Research Unit in West Lafayette, IN and the Location Coordinator for the ARS West Lafayette location which includes research units on soil erosion and crop and pest management. The majority of his time is spent conducting research in applied ethology. His interests are in optimizing the well-being of swine, examining the mechanisms of maternal behaviour in swine, investigating alternative housing and management systems for swine production, and elucidating the effects of prenatal stress.



**PLEASE RSVP before 12th June**, [jskuse@unimelb.edu.au](mailto:jskuse@unimelb.edu.au)

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If you have any comments, questions or suggestions, please contact our Executive Officer, Jeremy Skuse at our Parkville Offices.

***Please feel free to pass this newsletter on to those who may be interested.***

If you wish to be removed from our mailing list, please send an email to:

[awsc-info@unimelb.edu.au](mailto:awsc-info@unimelb.edu.au)

Quoting "remove" in the subject line.

## John & Jenny Barnett Memorial Fund

**Local and international donations** may be made on-line using this site:

<https://alumni.unimelb.edu.au/awc/MakeaGift.aspx>

Non-alumni of Melbourne University may also use this site.

Donors should stipulate **John & Jenny Barnett Memorial Fund** in the Special Instructions box.

**Cheque donations** may be made by making the cheque out to the: **University of Melbourne** and sending to:

**John & Jenny Barnett Memorial Fund**

Melbourne School of Land & Environment  
The University of Melbourne  
Parkville  
Victoria 3010

**Charitable donations in the US or UK** may be made by following the instructions on this site:

<http://www.unimelb.edu.au/alumni/giving/ukusa.html>

