



**Recent advances in animal welfare science**  
**UFAW Animal Welfare Conference**  
**York Merchant Adventurers' Hall, 30<sup>th</sup> June 2010**

**Posters:**

**GS Al-Abry, IY Mahmood, SN Al-Bahry and GE Mann** (University of Nottingham, UK and Sultan Qaboos University, Oman)

The effect of age and season on cortisol levels during transport of Omani goats

**M Bestman and JP Wagenaar** (Louis Bolk Institute, The Netherlands)

Health and welfare in organic laying hens

**SJ Bridgewater and JE Lock** (Hartpury College, UK)

Animals in art: A comparative study on perception of animal welfare in art galleries

**E Briefer and AG McElligott** (Queen Mary University of London, UK)

Mother-young acoustic recognition in goats: A unidirectional or mutual process?

**S Buijs, LJ Keeling, S Rettenbacher and FAM Tuytens** (Institute for Agricultural and Fisheries Research, Belgium, Swedish University of Agricultural Sciences, Sweden and University of Veterinary Medicine, Vienna, Austria)

Glucocorticoid excretion in rabbits before and after transport – influence of environmental enrichment and cage size

**A Catlett, F Lacey and K Danielli** (Covance Laboratories Ltd., UK)

Using safety nets to refine routine health screening for *Cynomolgus* macaques after ketamine sedation

**C Clark, M Mendl, J Jamieson, A Arnone and J Murrell** (University of Bristol, UK)

Do painful and stressful experiences in neonatal lambs lead to prolonged alterations in pain sensitivity?

**P Coluccio, A Giammanco, M Russo and A Passantino** (University of Messina, Italy)

Pet welfare: What Italy does

**P Coluccio, A Giammanco, M Russo and A Passantino** (University of Messina, Italy)

Pet protection during euthanasia: Recent advances in Italy

**APM Crespo, JD Ferreira, L Tibério, APS Pereira and N Carolino** (Escola Superior Agrária/Instituto Politécnico de Santarém, Jardim Zoológico de Lisboa and Estação Zootécnica Nacional, Portugal)

Environmental enrichment for cougars (*Puma concolor*) in Lisbon Zoo

**LM Dixon and JJ Cooper** (University of Lincoln, UK)

Assessing the motivation of pet rabbits using consumer demand techniques: Are commercially available hutches too small?

**RD Donald, KMD Rutherford and AB Lawrence** (Scottish Agricultural College, UK.)

Effect of Azaperone on the behaviour of pigs in an elevated-plus-maze

**E Downing** (Waltham Centre For Pet Nutrition, UK)

Training the research animal to non-invasive solutions to research problems

**JL Edgar, CCA Clark, ES Paul and CJ Nicol** (University of Bristol, UK)

Are ewes affected by castration and tail docking of their lambs?

**S Evans and A Twigg-Flesner** (Hartpury College, UK)

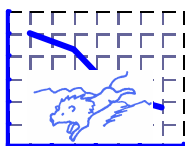
An investigation into the perception of herbal supplement use and safety amongst horse owners

**V Fajks** (Hadlow College, UK)

Aetiology, extinction and prevention of an acquired operant stereotypy in a California sea lion (*Zalophus californianus*)

**A Swart and M Farrell** (Hartpury College, UK)

The effect of straw quantity and frequency of provision on grower pig behaviour



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**G Feenders and M Bateson** (Newcastle University, UK)

How much does hand-raised change the behaviour of captive starlings?

**L Forster<sup>1</sup>, S Corr<sup>1</sup>, CM Wathes<sup>1</sup> and C Bessant**

(Royal Veterinary College and Feline Advisory Bureau, UK)

Demographical features, rehabilitation and behavioural changes in client-owned domestic cats after limb and/or tail amputation

**CA Hosie, TE Smith, R Coleman, LU Sneddon and A O'Bryan** (University of Chester, UK)

Development of non-invasive techniques for assessment of stress in captive amphibians

**RE Hutley** (Rochester, UK)

A study into the utilisation of space and dominance hierarchy of a bachelor group of Western lowland gorillas (*Gorilla gorilla gorilla*) in captivity

**JL Ireland, S McCall, P Clegg, S McKane and GL Pinchbeck** (University of Liverpool, UK)

Owners perceptions of quality of life in geriatric horses

**J Jamieson, SM Abeyesinghe, M Reiss, D Allen and CM Wathes** (Royal Veterinary College, Institute of Education, London and RSPCA, UK)

Evaluating the efficacy of a one-off animal welfare education event; do attitudes and knowledge of school children alter and persist?

**K Jayne** (University of Plymouth, UK)

Environmental factors and patterns of behaviour in zoo-housed Sumatran tigers, *Panthera tigris sumatrae*

**ML Jensvold, G Stadtner and J Buckner** (Central Washington University, USA)

Measuring the quality of interactions between chimpanzees and caregivers

**R Kay, C Hall, and G Starbuck** (Nottingham Trent University, UK)

The use of heart rate variability as an indicator of positive emotion in horses

**A Kerr and DCJ Main** (University of Bristol, UK)

Development and evaluation of a new educational resource for farm health and welfare planning

**J Kiddie, D Pfeiffer, D Mills, W Hayes, R Neville, D Morton and L Collins** (Royal Veterinary College, University of Lincoln, University of Birmingham, UK)

Assessing quality of life in kennelled dogs

**MC Leach, CA Coulter, CA Richardson and PA Flecknell** (Newcastle University and Agenda Group, UK)

Looking in the wrong place – implications for assessing pain and distress in animals

**I Madec, JF Gabarrou, C Lecuelle, L Bougrat, F Seurin and P Pageat** (Pherosynthese Research Institute and EI Purpan, France)

Poultry in standard housing conditions: is a better life possible?

**J McNicholl** (University of Adelaide, Australia)

Heat stress in canine athletes

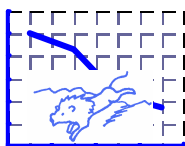
**AL Miller, J Roughan and P Flecknell** (Newcastle University, UK)

A comparison of abdominal and scrotal approach methods of vasectomy in laboratory mice

**GC Miranda-de la Lama, W Sepúlveda, M Villarroel and GA María**

(University of Zaragoza, Polytechnic University of Madrid, Spain and Santo Tomas University, Colombia)

Livestock vehicle accidents in Spain: causes, consequences and animal welfare



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**MA Mitchell, PJ Kettlewell, M Villarroel-Robinson, M Farish, P Barreiro and E Harper** (Scottish Agricultural College, ADAS, Boxworth, UK and Escuela Técnica Superior de Ingenieros Agronomos, Spain)

Long distance transportation of breeder pigs - assessing stress and welfare: an integrated approach

**EH Ormandy, DM Weary, CA Schuppli and G Griffin** (University of British Columbia and Canadian Council on Animal Care, Canada)

Applying social science to animal welfare issues: The use of animals in science

S Paudel, H Baral and K Kaphle

Wild birds under threat from farming activities of Chitwan Valley in Nepal

**CJ Phythian, MJ Clarkson, AC Winter, D Grove-White, P Jones, PJ Cripps, E Michalopoulou and JS Duncan** (University of Liverpool, UK)

Repeatability of indicators for the assessment of sheep welfare

**J Questier and M Beeching** (Hadlow College, UK)

A comparison of the general public's and professionals' perceptions of aggression in the domestic dog

**CA Richardson, PA Flecknell and M Bateson** (Newcastle University, UK)

Assessing anxiety in mice using an automated home cage behavioural analysis system, the Intellicage®

**S Rizvi and J Novak** (Department for Environment, Food and Rural Affairs, UK)

Welfare assessment of broilers through post-mortem examination

**EV Salt and AD Ellis** (Nottingham Trent University, UK)

Preliminary investigation into management and condition of *Equidae* at livestock markets during a period of economic downturn

**E Sayer and G White**

An investigation into the effects housing has on the behavioural repertoire of the domesticated rabbit (*Oryctolagus cuniculus*)

**J Tind Sørensen, H Houe, P Sandøe and M Vaarst** (University of Aarhus. University of Copenhagen and Danish Centre for Bioethics and Risk Assessment Denmark)

Animal based welfare assessment - should it replace or supplement production system regulation?

**DL Teixeira, G Miranda-de la Lama, M Villarroel, J Escos, S Alierta and GA María** (University of Zaragoza, Polytechnic University of Madrid and E.T.S.I.A. Spain)

The effect of the straw bedding on the stereotypes and social interactions of light lambs

**E Van Poucke, S Buijs and F Tuytens** (Institute for Agricultural and Fisheries Research Belgium)

Effect of space availability and environmental enrichment on rabbit bone strength

**CFI Watson, CA Caldwell and HM Buchanan-Smith** (University of Stirling, UK)

Does the audio playback of conspecific chirp calls improve the welfare of captive marmosets (*Callithrix jacchus*)?

**CA Weeks, SN Brown, A Butterworth, TG Knowles, G Richards and LJ Wilkins** (University of Bristol, UK)

Development of a protocol for the assessment of hens for fitness to travel

**ML Wiseman-Orr, EM Scott and AM Nolan** (University of Glasgow, UK)

The development and testing of a novel instrument for the on-farm measurement of health-related quality of life of grower-finisher pigs

**D Wolfenden, C Hosie and LU Sneddon** (Reaseheath College and University of Chester, UK)

Does transport of ornamental fish cause stress?