

# Animal Welfare

ISSN 0962-7286

## Volume 17 2008

# INDEX

Universities Federation for Animal Welfare  
The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN, UK  
Tel: +44 1582 831818 Fax: +44 1582 831414  
Email: [ufaw@ufaw.org.uk](mailto:ufaw@ufaw.org.uk) Web: [www.ufaw.org.uk](http://www.ufaw.org.uk)

## List of articles

## Volume 17 Issue 1

February 2008

<b>Broiler welfare and drinking.</b> <i>E Houldcroft, C Smith, R Mrowicki, L Headland, S Grieveson, TA Jones and MS Dawkins</i>	1
<b>Welfare in zebra finches.</b> <i>SA Collins, JA Archer and CJ Barnard</i>	11
<b>Dairy cow welfare in cold, wet conditions.</b> <i>JR Webster, M Stewart, AR Rogers and GA Verkerk</i>	19
<b>Attitudes of Turkish veterinarians towards welfare.</b> <i>N Sabuncuoglu and O Coban</i>	27
<b>Evaluation of pig welfare between farms.</b> <i>X Goossens, L Sobry, F Ödberg, F Tuytens, D Maes, S De Smet, F Nevens, G Opsomer, F Lommelen and R Geers</i>	35
<b>Economic valuation of animal welfare.</b> <i>D Moran and A McVittie</i>	43
<b>Enrichment structures for fattening rabbits.</b> <i>G Postollec, E Boilletot, R Maurice and V Michel</i>	53
<b>Biting lesions in pigs an epidemiological study.</b> <i>D Smulders, V Hautekiet, G Verbeke and R Geers</i>	61
<b>Body condition score and ewe survival.</b> <i>C Morgan-Davies, A Waterhouse, ML Pollock and JM Milner</i>	71
<b>Gas killing of rats.</b> <i>RD Kirkden, L Niel, SA Stewart and DM Weary</i>	79

## Volume 17 Issue 2

May 2008

<b>Diet change in hens.</b> <i>G Dixon and CJ Nicol</i>	101
<b>Stoat trap welfare performance.</b> <i>B Warburton, N Poutu, D Peters and P Waddington</i>	111
<b>Tourist boats disturb marine tucuxis.</b> <i>ML Carrero, EGP Favaro and A Souto</i>	117
<b>Effect of training on baboons' stress response.</b> <i>JK O'Brien, S Hefferman, PC Thomson and PD McGreevy</i>	125
<b>Operant animal welfare.</b> <i>EC Patterson-Kane, M Pittman and EA Pajor</i>	139
<b>Aggression reduction in zoo chimpanzees.</b> <i>CE Caws, S Wehnelt and F Aureli</i>	149
<b>Olfactory substances and vibration in pigs.</b> <i>B Driessen, E Peeters and R Geers</i>	155
<b>Appropriate measures of mouse welfare.</b> <i>MC Leach, PD Thornton and DCJ Main</i>	161
<b>Assessing laboratory mouse welfare.</b> <i>MC Leach and DCJ Main</i>	171
<b>Effect of driving style on stress in pigs.</b> <i>E Peeters, K Deprez, F Becker, J De Boerdemaeker, AE Aubert and R Geers</i>	189

## Volume 17 Issue 3

August 2008

<b>Post-release survival of hand-reared tawny owls.</b> <i>K Leighton, D Chilvers, A Charles and A Kelly</i>	207
<b>Cat group size and urinary cortisol levels.</b> <i>M Lichtsteiner and DC Turner</i>	215
<b>Effect of substrate availability on fish welfare.</b> <i>L Galhardo, J Correia and RF Oliveira</i>	239
<b>Stereotypic pacing in tigers.</b> <i>LJ Miller, T Bettinger and J Mellen</i>	255
<b>Perioperative stress response in dogs.</b> <i>C Siracusa, X Manteca, J Cerón, S Martinez-Subield, R Cuenca, S Lavin, F Garcia and J Pastor</i>	259
<b>Welfare in lairages.</b> <i>CA Weeks</i>	275
<b>On-farm killing of poultry with CO<sub>2</sub>-enriched foam.</b> <i>MA Gerritzen and J Sparrey</i>	285
<b>RICHPIG model to assess pig welfare.</b> <i>MBM Bracke</i>	289
<b>Salivary cortisol in captive Asian elephants and Indian rhinoceros.</b> <i>A Menargues, V Urias and M Mauri</i>	305
<b>Exploring heifers' perception of positive treatment.</b> <i>CE Bertenshaw and P Rowlinson</i>	313

## Volume 17 Issue 4

November 2008

<b>Auditory enrichment for elephants.</b> <i>DL Wells and RM Irwin</i>	335
<b>Effect of carbon dioxide stunning in pigs.</b> <i>P Rodriguez, A Dalmau, JL Ruiz-de-la-Torre, X Manteca, EW Jensen, B Rodriguez, H Litvan and A Velarde</i>	341
<b>Welfare estimation of stable enrichment in horses.</b> <i>S Ninomiya, R Kusunose, Y Obara and S Sato</i>	351
<b>Assimilating expert opinion in laying hens.</b> <i>TB Rodenburg, FAM Tuytens, K de Reu, L Herman, J Zoons and B Sonck</i>	355
<b>Welfare assessment in laying hens.</b> <i>TB Rodenburg, FAM Tuytens, K de Reu, L Herman, J Zoons and B Sonck</i>	363
<b>Post-release survival of hand-rearing pipistrelle bats.</b> <i>A Kelly, S Goodwin, A Grogan and F Mathews</i>	375
<b>Effect of handling on cortisol levels in calves.</b> <i>G Stilwell, C de Carvalho R, MS Lima and DM Broom</i>	383
<b>Non-invasive detection of fear response in cattle.</b> <i>M Stewart, AI Schaefer, DB Haley, J Colyn, NJ Cook, KJ Stafford and JR Webster</i>	387
<b>Enriching the metabolic cage: effects on rat physiology and behaviour.</b> <i>DB Sørensen, K Mortensen, T Bertelsen and K Vognbjerg</i>	395

## Author and subject index

<b>A</b>	
Acceleration	
- effect of driving style on stress in pigs .....	189
Adaptation	
- dairy cow welfare in cold, wet conditions .....	19
Aggression	
- aggression reduction in zoo chimpanzees .....	149
<b>An assessment of laboratory mouse welfare in UK animal units</b> .....	171
Animal-based outcome measures	
- appropriate measures of mouse welfare .....	161
- assessing laboratory mouse welfare .....	171
Animal-based parameters	
- evaluation of pig welfare between farms .....	35
Animal behaviour	
- <i>Observing Animal Behaviour: Design and Analysis of Quantitative Data</i> (B) .....	411
Animal cognition	
- <i>Guilty Robots, Happy Dogs: The Question of Alien Minds</i> (B) .....	409
Animal health and conservation	
- <i>International Zoo Yearbook, Volume 41</i> (B) .....	420
Animal management	
- stereotypic pacing in tigers .....	255
Anthrozoology	
- exploring heifers' perceptions of positive treatment .....	313
<b>A pilot study to assess whether high expansion CO<sub>2</sub>-enriched foam is acceptable for on-farm emergency killing of poultry</b> .....	285
<b>A population-based on-farm evaluation protocol for comparing the welfare of pigs between farms</b> .....	35
<b>Archer JA</b> , see Collins SA	
<b>A review of welfare in cattle, sheep and pig lairages, with emphasis on stock rates, ventilation and noise</b> .....	275
Asian elephant	
- salivary cortisol in captive Asian elephants and Indian rhinoceros .....	305
Assessment	
- assessing laboratory mouse welfare .....	171
<b>Assessment of unconsciousness during carbon dioxide stunning in pigs</b> .....	341
<b>Assessment of welfare from physiological and behavioural responses of New Zealand dairy cows exposed to cold and wet conditions</b> .....	19
Attitude	
- attitudes of Turkish veterinarians towards welfare .....	27
<b>Attitudes of Turkish veterinarians towards animal welfare</b> .....	27
<b>Aubert AE</b> , see Peeters E	
Auditory evoke potential	
- effect of carbon dioxide stunning in pigs .....	341
Auditory stimulation	
- auditory enrichment for elephants .....	335
<b>Auditory stimulation as enrichment for zoo-housed Asian elephants (<i>Elephas maximus</i>)</b> .....	335
<b>Aureli F</b> , see Caws CE	
Avian guidelines	
- <i>Raptors in Captivity: Guidelines for Care and Management</i> (B) .....	417
Aversion	
- effect of carbon dioxide stunning in pigs .....	341
- gas killing of rats .....	79
<b>B</b>	
<b>Barnard CJ</b> , see Collins SA	
Basal urinary cortisol levels	
- cat group size and urinary cortisol levels .....	215
Battery cages	
- <i>Communication from the Commission to the European Parliament and the Council on the Various Systems of Rearing Laying Hens in Particular Those Covered by Directive 1999/74/EC</i> (R) .....	197
Beak trimming	
- <i>FAWC Opinion on Beak Trimming of Laying Hens</i> (R) .....	197

- FAWC Opinion on Enriched Cages for Laying Hens (R) .....	197
<b>Beckers F</b> , see Peeters E	
Bedding investigation	
- welfare estimation of stable enrichment in horses .....	351
Behaviour	
- auditory enrichment for elephants .....	335
- biting lesions in pigs: an epidemiological study .....	61
- dairy cow welfare in cold, wet conditions .....	19
- effect of training on baboons' stress response .....	125
- enriching the metabolic cage .....	395
- RICHPIG model to assess pig welfare .....	289
- welfare assessment in laying hens .....	363
Behaviour modification of dogs	
- <i>Regulating Services in Relation to Training and Behaviour Modification in Dogs in the UK: the Challenge Ahead</i> (R) .....	405
Behavioural needs	
- effect of substrate availability on fish welfare .....	239
Behavioural response	
- perioperative stress response in dogs .....	259
<b>Bertenshaw CE and Rowlinson P</b> Exploring heifers' perception of 'positive' treatment through their motivation to pursue a retreated human .....	313
<b>Bertelsen T</b> , see Sørensen DB	
<b>Bettinger T</b> , see Mellen J	
Blood gas	
- effect of carbon dioxide stunning in pigs .....	341
Body condition score as an indicator of ewe survival under extensive conditions .....	71
Body condition scoring	
- body condition score and ewe survival .....	71
<b>Boilletot E</b> , see Postollec G	
<b>Bracke MBM</b> RICHPIG: a semantic model to assess enrichment materials for pigs .....	289
Broiler chickens	
- broiler welfare and drinking .....	1
Broiler welfare	
- economic valuation of animal welfare .....	43
<b>Broom DM</b> , see Stilwell G	
<b>C</b>	
<b>Coban O</b> , see Sabuncuoglu N	
Cage birds	
- welfare in zebra finches .....	11
Calves	
- effect of handling on cortisol levels in calves .....	383
Cannibalism	
- diet change in hens .....	101
Carbon dioxide	
- gas killing of rats .....	79
- on-farm killing of poultry with CO <sub>2</sub> -enriched foam .....	285
Carbon dioxide stunning	
- effect of carbon dioxide stunning in pigs .....	341
<b>Carrera ML, Favaro EGP and Souto A</b> The response of marine tucuxis ( <i>Sotalia fluviatilis</i> ) towards tourist boats involves avoidance behaviour and a reduction in foraging .....	117
Castration in lambs	
- <i>The Implications of Castration and Tail Docking for the Welfare of Lambs</i> (R) .....	407
Cat fur regulations	
- <i>European Union Regulation (EC) No. 1523/2007 Covering Use of Cat and Dog Fur in the EU</i> (R) .....	198
Cattle	
- <i>Lameness in Cattle</i> (B) .....	97
- non-invasive detection of fear responses in cattle .....	387
- welfare in lairages .....	275
Cattle welfare	
- <i>The Welfare of Cattle</i> (B) .....	419
CAWC study	
- <i>Scoping Report on Companion Animal Welfare Surveillance</i> (R) .....	321

<b>Caws CE, Wehnelt S and Aureli F</b> The effect of a new vertical structure in mitigating aggressive behaviour in a large group of chimpanzees ( <i>Pan troglodytes</i> ) .....	147
<b>Cerón J</b> , see Siracusa C	
<b>Charles A</b> , see Leighton K	
Chicken	
- diet change in hens .....	101
<b>Chilvers D</b> , see Leighton K	
Chimpanzee	
- aggression reduction in zoo chimpanzees .....	149
Circuses	
- <i>Wild Animals in Travelling Circuses: The Report of the Chairman of the Circus Working Group</i> (R) .....	89
Clinical research	
- <i>Handbook of Veterinary Clinical Research</i> (B) .....	416
Code of practice	
- <i>Report of the Animal Procedures Committee for 2006</i> (R) .....	90
Cold	
- dairy cow welfare in cold, wet conditions .....	19
<b>Collins SA, Archer JA and Barnard CJ</b> Welfare and mate choice in zebra finches: effect of handling regime and presence of cover .....	11
<b>Colyn J</b> , see Stewart M	
Companion animals	
- <i>Scoping Report on Companion Animal Welfare Surveillance</i> (R) .....	321
Conservation	
- <i>Zoos in the 21st Century: Catalysts for Conservation?</i> (B) .....	326
Conspecifics	
- stereotypic pacing in tigers .....	255
Contingent valuation	
- economic valuation of animal welfare .....	43
<b>Cook NJ</b> , see Stewart M	
Coping strategies	
- <i>Stereotypic Animal behaviour: Fundamentals and Applications to Welfare, Second Edition</i> (B) .....	95
<b>Correia J</b> , see Galhardo L	
Corticosteroid	
- effect of training on baboons' stress response .....	125
Cortisol	
- effect of handling on cortisol levels in calves .....	383
- effect of substrate availability on fish welfare .....	239
Council of Europe	
- <i>Ethical Eye: Animal Welfare</i> (B) .....	93
<b>Cuenca R</b> , see Siracusa C	
<b>D</b>	
Dairy cows	
- dairy cow welfare in cold, wet conditions .....	19
Dairy farms	
- <i>Applying HACCP-based Quality Risk Management on Dairy Farms</i> (B) .....	329
<b>Dalmau A</b> , see Rodríguez P	
<b>Dawkins MS</b> , see Houldcroft E	
<b>De Baerdemaeker J</b> , see Peeters E	
<b>De Carvalho C</b> , see Stilwell G	
Decision support system	
- RICHPIG model to assess pig welfare .....	289
Defra	
- <i>Animal Welfare Delivery Strategy</i> (R) .....	90
Delphi technique	
- appropriate measures of mouse welfare .....	161
<b>Deprez K</b> , see Peeters E	
<b>De Reu K</b> , see Rodenburg TB	
<b>De Smet S</b> , see Goossens X	
Diet	
- diet change in hens .....	101
Diseases of elephants	
- <i>Elephants: Diseases and Treatments</i> (B) .....	202

<b>Dixon G and Nicol CJ</b> The effect of diet change on the behaviour of layer pullets .....	101
Dog	
- perioperative stress response in dogs .....	259
Dog behaviour	
- <i>Dog Behaviour, Evolution and Cognition</i> (B) .....	327
- <i>The Behavioural Biology of Dogs</i> (B) .....	325
Dog fur regulations	
- <i>European Union Regulation (EC) No. 1523/2007 Covering Use of Cat and Dog Fur in the EU</i> (R) .....	198
Dog populations	
- <i>Humane Dog Population Management Guidance</i> (R) .....	321
Dolphins	
- <i>In Defense of Dolphins: The New Moral Frontier</i> (B) .....	199
Domestic cat	
- cat group size and urinary cortisol levels .....	215
Domestication	
- <i>Dog Behaviour, Evolution and Cognition</i> (B) .....	327
- <i>The Behavioural Biology of Dogs</i> (B) .....	325
- <i>Where the Wild Things are Now: Domestication Reconsidered</i> (B) .....	328
Dominance status	
- cat group size and urinary cortisol levels .....	215
<b>Driessen B, Peeters E and Geers R</b> Influence of olfactory substances on the heart rate and lying behaviour of pigs during transport simulation .....	155
Drinking behaviour	
- broiler welfare and drinking .....	1
Driver	
- effect of driving style on stress in pigs .....	189
Driving style	
- effect of driving style on stress in pigs .....	189
<b>E</b>	
Ear-biting	
- biting lesions in pigs: an epidemiological study .....	61
Economic demand	
- operant animal welfare .....	139
Economic valuation	
- economic valuation of animal welfare .....	43
Ecotourism	
- tourist boats disturb marine tucuxis .....	117
<b>Effect of an open window and conspecifics within view on the welfare of stabled horses, estimated on the basis of positive and negative behavioural indicators</b> .....	351
<b>Effect of driver and driving style on the stress responses of pigs during a short journey by trailer</b> .....	189
<b>Effect of positive reinforcement training on physiological and behavioural stress responses in the hamadryas baboon (<i>Papio hamadryas</i>)</b> .....	125
Elephant	
- auditory enrichment for elephants .....	335
Elephant medicine	
- <i>Elephants: Diseases and Treatments</i> (B) .....	202
Emergency killing	
- on-farm killing of poultry with CO <sub>2</sub> -enriched foam .....	285
Enriched cages	
- <i>FAWC Opinion on Beak Trimming of Laying Hens</i> (R) .....	197
- <i>FAWC Opinion on Enriched Cages for Laying Hens</i> (R) .....	197
<b>Enriching the metabolic cage: effects on rat physiology and behaviour</b> .....	395
Enrichment	
- auditory enrichment for elephants .....	335
- enriching the metabolic cage .....	395
Environment	
- evaluation of pig welfare between farms .....	35
Environmental enrichment	
- aggression reduction in zoo chimpanzees .....	149
- operant animal welfare .....	139
- RICHPIG model to assess pig welfare .....	289
- welfare estimation of stable enrichment in horses .....	351

Epidemiology	
- biting lesions in pigs: an epidemiological study .....	61
Equine welfare	
- <i>Horse Behaviour and Welfare: EAAP Publication No 112 (B)</i> .....	199
<b>Estimation of the value of the public places on regulations to improve broiler welfare</b> .....	43
Ethics	
- <i>Ethical Eye: Animal Welfare (B)</i> .....	93
European directive	
- <i>Advancing Animal Welfare and the 3Rs in the Batch Testing of Veterinary Medicines (R)</i> .....	321
European Union	
- attitudes of Turkish veterinarians towards welfare .....	27
Euthanasia	
- gas killing of rats .....	79
- on-farm killing of poultry with CO <sub>2</sub> -enriched foam .....	285
Exhibit design	
- stereotypic pacing in tigers .....	255
Expert opinion	
- assimilating expert opinion in laying hens .....	355
Expert opinion and refinement	
- appropriate measures of mouse welfare .....	161
<b>Exploring heifers' perception of 'positive' treatment through their motivation to pursue a retreated human</b> .....	313
Extensive conditions	
- body condition score and ewe survival .....	71
Eye temperature	
- non-invasive detection of fear responses in cattle .....	387
<b>F</b>	
Farming	
- <i>The Welfare of Cattle (B)</i> .....	419
Fattening rabbits	
- enrichment structures for fattening rabbits .....	53
<b>Favaro EGP</b> , see Carrera ML	
Fear	
- non-invasive detection of fear responses in cattle .....	387
Feather pecking	
- diet change in hens .....	101
Fenn traps	
- stoat trap welfare performance .....	111
Fish welfare	
- effect of substrate availability on fish welfare .....	239
Foam	
- on-farm killing of poultry with CO <sub>2</sub> -enriched foam .....	285
Food ethics	
- <i>Sustainable Food Production (B)</i> .....	412
Forensic medicine	
- <i>Introduction to Veterinary and Comparative Forensic Medicine (B)</i> .....	200
- <i>Veterinary Forensics: Animal Cruelty Investigations (B)</i> .....	331
Frustration	
- welfare estimation of stable enrichment in horses .....	351
Furnished cages	
- assimilating expert opinion in laying hens .....	355
<b>G</b>	
<b>Galhardo L, Correia J and Oliveira RF</b> The effect of substrate availability on behavioural and physiological indicators of welfare in the African cichlid ( <i>Oreochromis mossambicus</i> ) .....	239
<b>Garcia F</b> , see Siracusa C	
<b>Gas killing of rats: the effect of supplemental oxygen on aversion to carbon dioxide</b> .....	79
<b>Geers R</b> , see Driessen B, see also Peeters E, see also Smulders D	
<b>Gerritzen MA and Sparrey J</b> A pilot study to assess whether high expansion CO <sub>2</sub> -enriched foam is acceptable for on-farm emergency killing of poultry .....	285

Glucose	
- effect of substrate availability on fish welfare .....	239
Goatkeeping	
- <i>The Goatkeeper's Veterinary Handbook, Fourth Edition (B)</i> .....	98
Goat diseases	
- <i>The Goatkeeper's Veterinary Handbook, Fourth Edition (B)</i> .....	98
<b>Goodwin S</b> , see Kelly A	
<b>Goossens X, Sabry L, Ödberg F, Tuytens F, Maes D, De Smet S, Nevens F, Opsomer G, Lammelen F and Geers R A</b> population-based on-farm evaluation protocol for comparing the welfare of pigs between farms.....	35
<b>Grieverson S</b> , see Houldcroft E	
<b>Grogan A</b> , see Kelly A	
Group composition	
- cat group size and urinary cortisol levels .....	215
Group size	
- enrichment structures for fattening rabbits .....	53
<b>H</b>	
<b>Haley DB</b> , see Stewart M	
Handling	
- effect of handling on cortisol levels in calves .....	383
- non-invasive detection of fear responses in cattle .....	387
Handling reward	
- welfare in zebra finches .....	11
Handling welfare	
- <i>Livestock Handling and Transport, Third Edition (B)</i> .....	330
<b>Hautekiet V</b> , see Smulders D	
<b>Headland L</b> , see Houldcroft E	
Health	
- welfare assessment in laying hens .....	363
Heart rate	
- olfactory substances and vibration in pigs .....	155
<b>Hefferman S</b> , see O'Brien JK	
Heifers	
- exploring heifers' perceptions of positive treatment .....	313
<b>Herman L</b> , see Rodenburg TB	
Horse behaviour	
- <i>Horse Behaviour and Welfare: EAAP Publication No 112 (B)</i> .....	199
<b>Houldcroft E, Smith C, Mrowicki R, Headland L, Grieverson S, Jones TA and Dawkins MS</b> Welfare implications of nipple drinkers for broiler chickens .....	1
Housing	
- evaluation of pig welfare between farms .....	35
- welfare assessment in laying hens .....	363
Housing system	
- enrichment structures for fattening rabbits .....	53
Human-animal relationship	
- exploring heifers' perceptions of positive treatment .....	313
Humane disturbance	
- tourist boats disturb marine tucuxis .....	117
Husbandry	
- welfare in zebra finches .....	11
<b>I</b>	
Infrared thermography	
- non-invasive detection of fear responses in cattle .....	387
<b>Infrared thermography as a non-invasive method for detecting fear-related responses of cattle to handling procedures</b> .....	387
<b>Identification of appropriate measures for the assessment of laboratory mouse welfare</b> .....	161
Immune response	
- perioperative stress response in dogs .....	259
Indian rhinoceros	
- salivary cortisol in captive Asian elephants and Indian rhinoceros .....	305
<b>Influence of indoor-cat group size and dominance work on urinary cortisol levels</b> .....	215



<b>Influence of olfactory substances on the heart rate and lying behaviour of pigs during transport simulation</b> .....	155
<b>Infrared thermography as a non-invasive method for detecting fear-related responses of cattle to handling procedures</b> .....	387
Injuries	
- aggression reduction in zoo chimpanzees .....	149
<b>Irwin RM</b> , see Wells DL	
<b>J</b>	
<b>Jensen EW</b> , see Rodríguez P	
<b>Jones TA</b> , see Houldcroft E	
<b>K</b>	
<b>Kelly A, Goodwin S, Grogan A and Mathews F</b> Post-release survival of hand-reared pipistrelle bats ( <i>Pipistrellus spp</i> ) .....	375
<b>Kelly A</b> , see Leighton K	
Kill traps	
- stoat trap welfare performance .....	111
<b>Kirkden RD, Niel L, Stewart SA and Weary DM</b> Gas killing of rats: the effect of supplemental oxygen on aversion to carbon dioxide .....	79
<b>Kusunose R</b> , see Ninomiya S	
<b>L</b>	
Laboratory animal enrichment	
- <i>Making Lives Easier for Animals in Research Labs: Discussions by the Laboratory Animal Refinement and Enrichment Forum</i> (B) .....	326
Laboratory animals	
- <i>Manual of Animal Technology</i> (B) .....	201
Laboratory animal welfare	
- <i>The Welfare of Laboratory Animals</i> (B) .....	414
Laboratory mice	
- appropriate measures of mouse welfare .....	161
- assessing laboratory mouse welfare .....	171
Lairage	
- welfare in lairages .....	275
Lameness	
- <i>Lameness in Cattle</i> (B) .....	97
<b>Lavin S</b> , see Siracusa C	
Laying hen	
- assimilating expert opinion in laying hens .....	355
- diet change in hens .....	101
- welfare assessment in laying hens .....	363
Laying hen legislation	
- <i>Communication from the Commission to the European Parliament and the Council on the Various Systems of Rearing Laying Hens in Particular Those Covered by Directive 1999/74/EC</i> (R) .....	197
<b>Leach MC and Main DCJ</b> An assessment of laboratory mouse welfare in UK animal units .....	171
<b>Leach MC, Thornton PD and Main DCJ</b> Identification of appropriate measures for the assessment of laboratory mouse welfare .....	161
Leg-hold traps	
- <i>Animal Welfare (Leg-hold) Traps Order 2007 in New Zealand</i> (R) .....	198
<b>Leighton K, Chilvers D, Charles A and Kelly A</b> Post-release survival of hand-reared tawny owls ( <i>Strix aluco</i> ) based on radio-tracking and leg-band return data .....	207
Legislation	
- attitudes of Turkish veterinarians towards welfare .....	27
- <i>Wild Animals in Travelling Circuses: The Report of the Chairman of the Circus Working Group</i> (R) .....	89
<b>Lichtsteiner M and Turner DC</b> Influence of indoor-cat group size and dominance work on urinary cortisol levels .....	215
<b>Lima MS</b> , see Stilwell G	
Litter quality	
- broiler welfare and drinking .....	1
<b>Litvan H</b> , see Rodríguez P	
Livestock transport	
- <i>Livestock Handling and Transport, Third Edition</i> (B) .....	330

## Long-distance transport

- *Welfare Aspects of the Long-Distance Transportation of Animals: Veterinaria Italiana, Volume 44(1), January-March 2008 (B)* .....411

**M****Maes D**, see Goossens X**Main DCJ**, see Leach MC

## Management

- evaluation of pig welfare between farms .....35
- salivary cortisol in captive Asian elephants and Indian rhinoceros .....305

**Manteca X**, , see Rodríguez P, see also Siracusa C

## Manual

- *Manual of Animal Technology (B)* .....201

## Marine tucuxi

- tourist boats disturb marine tucuxis .....117

**Martinez-Subiela S**, see Siracusa C**Mathews F**, see Kelly A**Mauri M**, see Menargues A**Maurice R**, see Postollec G

## Mate choice

- welfare in zebra finches .....11

**McGreevy PD**, see O'Brien JK**McVittie A**, see Moran D

## Meat production

- *Animal Welfare and Meat Production, Second Edition (B)* .....332

**Mellen J**, see Miller LJ**Menargues A, Urios V and Mauri M** Welfare assessment of captive Asian elephants (*Elephas maximus*) and Indian rhinoceros (*Thinoceros unicornis*) using salivary cortisol measurement .....305

## Metabolic cage

- enriching the metabolic cage .....395

## Methods of control

- *Wild Neighbors: The Humane Approach to Living with Wildlife, Second Edition (B)* .....419

**Michel V**, see Postollec G

## Migratory birds

- *Migratory Birds in Research: Animal User Training (R)* .....406

**Miller LJ, Bettinger T and Mellen J** The reduction of stereotypic pacing in tigers (*Panthera tigris*) by obstructing the view of neighbouring individuals.....255**Milner JM**, see Morgan-Davies C**Moran D and McVittie A** Estimation of the value of the public places on regulations to improve broiler welfare.....43**Morgan-Davies C, Waterhouse A, Pollock ML and Milner JM** Body condition score as an indicator of ewe survival under extensive conditions .....71

## Mortality

- body condition score and ewe survival .....71

**Mortensen K**, see Sørensen DB**Mrowicki R**, see Houldcroft E

## Music

- auditory enrichment for elephants .....335

**N**

## Neuroendocrine response

- perioperative stress response in dogs .....259

**Nevens F**, see Goossens X

## New Zealand legislation

- *Animal Welfare (Leg-hold) Traps Order 2007 in New Zealand (R)* .....198

**Nicol CJ**, see Dixon G**Niel L**, see Kirkden RD**Ninomiya S, Kusunose R, Obara Y and Sato S** Effect of an open window and conspecifics within view on the welfare of stabled horses, estimated on the basis of positive and negative behavioural indicators .....351

## Nipple drinkers

- broiler welfare and drinking .....1

## Noise

- welfare in lairages .....275

Non-cage systems	
- assimilating expert opinion in laying hens .....	355
Non-market valuation	
- economic valuation of animal welfare .....	43
Non-target species	
- stoat trap welfare performance .....	111
<b>O</b>	
<b>Obara Y</b> , see Ninomiya S	
<b>O'Brien JK, Hefferman S, Thomson PC and McGreevy PD</b> Effect of positive reinforcement training on physiological and behavioural stress responses in the hamadryas baboon ( <i>Papio hamadryas</i> ) .....	125
Observational studies	
- <i>Observing Animal Behaviour: Design and Analysis of Quantitative Data</i> (B) .....	411
<b>Ödberg F</b> , see Goossens X	
Olfactory substances	
- olfactory substances and vibration in pigs .....	155
<b>Oliveira RF</b> , see Galhardo L	
<b>Operant animal welfare: productive approaches and persistent difficulties</b> .....	139
Operant conditioning	
- effect of training on baboons' stress response .....	125
- operant animal welfare .....	139
<b>Opsomer G</b> , see Goossens X	
Oxygen	
- gas killing of rats .....	79
<b>P</b>	
<b>Pajor EA</b> , see Patterson-Kane EG	
<b>Pastor J</b> , see Siracusa C	
<b>Patterson-Kane EG, Pittman M and Pajor EA</b> Operant animal welfare: productive approaches and persistent difficulties .....	139
<b>Peeters E</b> , see Driessen B	
<b>Peeters E, Deprez K, Beckers F, De Baerdemaeker J, Aubert AE and Geers R</b> Effect of driver and driving style on the stress responses of pigs during a short journey by trailer .....	189
Pen housing	
- enrichment structures for fattening rabbits .....	53
Perioperative stress	
- perioperative stress response in dogs .....	259
<b>Perioperative stress response in dogs undergoing elective surgery: variations in behavioural, neuroendocrine, immune and acute phase responses</b> .....	259
<b>Peters D</b> , see Warburton B	
Philosophy	
- <i>In Defense of Dolphins: The New Moral Frontier</i> (B) .....	199
Pig	
- biting lesions in pigs: an epidemiological study .....	61
- effect of carbon dioxide stunning in pigs .....	341
- olfactory substances and vibration in pigs .....	155
- RICHPIG model to assess pig welfare .....	289
- welfare in lairages .....	275
Pig husbandry	
- evaluation of pig welfare between farms .....	35
Pig welfare	
- <i>On-farm Monitoring of Pig Welfare</i> (B) .....	93
- <i>Welfare of Pigs: From Birth to Slaughter</i> (B) .....	409
Pipistrelle bat	
- post-release survival of hand-reared pipistrelle bats .....	375
<b>Pittman M</b> , see Patterson-Kane EG	
Platform	
- enrichment structures for fattening rabbits .....	53
<b>Pollock ML</b> , see Morgan-Davies C	
Population management	
- <i>Humane Dog Population Management Guidance</i> (R) .....	321
Positive treatment	
- exploring heifers' perceptions of positive treatment .....	313

<b>Postollec G, Boilletot E, Maurice R and Michel V</b> The effect of pen size and an enrichment structure (elevated platform) on the performance and behaviour of fattening rabbits .....	53
<b>Post-release survival of hand-reared pipistrelle bats (<i>Pipistrellus</i> spp)</b> .....	375
<b>Post-release survival of hand-reared tawny owls (<i>Strix aluco</i>) based on radio-tracking and leg-band return data</b> .....	207
Poultry	
- on-farm killing of poultry with CO <sub>2</sub> -enriched foam .....	285
<b>Poutu N</b> , see Warburton B	
Preference	
- broiler welfare and drinking .....	1
- enriching the metabolic cage .....	395
Primates	
- effect of training on baboons' stress response .....	125
Private households	
- cat group size and urinary cortisol levels .....	215
<b>R</b>	
Radio-tracking	
- post-release survival of hand-reared pipistrelle bats .....	375
- post-release survival of hand-reared tawny owls .....	207
Raptors	
- <i>Raptors in Captivity: Guidelines for Care and Management</i> (B) .....	417
Rat	
- enriching the metabolic cage .....	395
- gas killing of rats .....	79
Re-approach test	
- exploring heifers' perceptions of positive treatment .....	313
Regulatory standards	
- economic valuation of animal welfare .....	43
Rehabilitation	
- post-release survival of hand-reared pipistrelle bats .....	375
- post-release survival of hand-reared tawny owls .....	207
Reinforcement	
- operant animal welfare .....	139
Regulation for training	
- <i>Regulating Services in Relation to Training and Behaviour Modification in Dogs in the UK: the Challenge Ahead</i> (R) .	405
Research considerations	
- <i>The Welfare of Laboratory Animals</i> (B) .....	414
Research project	
- <i>Welfare Quality</i> <sup>®</sup> : Project Update (R) .....	322
- <i>Welfare Quality</i> <sup>®</sup> : Project Update 7 (R) .....	89
Resource-input measures	
- appropriate measures of mouse welfare .....	161
- assessing laboratory mouse welfare .....	171
Restraint	
- effect of handling on cortisol levels in calves .....	383
Review	
- operant animal welfare .....	139
<b>RICHPIG: a semantic model to assess enrichment materials for pigs</b> .....	289
Risk management	
- <i>Applying HACCP-based Quality Risk Management on Dairy Farms</i> (B) .....	329
Robotics	
- <i>Guilty Robots, Happy Dogs: The Question of Alien Minds</i> (B) .....	409
<b>Rodenburg TB, Tuytens FAM, De Reu K, Herman L, Zoons J and Sonck B</b> Welfare assessment of laying hens in furnished cages and non-cage systems: an on-farm comparison .....	363
<b>Rodenburg TB, Tuytens FAM, De Reu K, Herman L, Zoons J and Sonck B</b> Welfare assessment of laying hens in furnished cages and non-cage systems: assimilating expert opinion .....	355
<b>Rodgers AR</b> , see Webster JR	
<b>Rodríguez B</b> , see Rodríguez P	
<b>Rodríguez P, Dalmau A, Ruiz-de-la-Torre JL, Manteca X, Jensen EW, Rodríguez B, Litvan H and Velarde A</b> Assessment of unconsciousness during carbon dioxide stunning in pigs .....	341
<b>Rowlinson P</b> , see Bertenshaw CE	

RSPCA	
- <i>The Welfare State: Measuring Animal Welfare in the UK 2006</i> (R)	90
<b>Ruiz-de-la-Torre JL</b> , see Rodríguez P	
<b>S</b>	
<b>Sabry L</b> , see Goossens X	
<b>Sabuncuoglu N and Coban O</b> Attitudes of Turkish veterinarians towards animal welfare	27
Salivary cortisol	
- effect of training on baboons' stress response	125
- salivary cortisol in captive Asian elephants and Indian rhinoceros	305
<b>Sato S</b> , see Ninomiya S	
Science of forensics	
- <i>Introduction to Veterinary and Comparative Forensic Medicine</i> (B)	200
- <i>Veterinary Forensics: Animal Cruelty Investigations</i> (B)	331
Scientific procedures	
- <i>Report of the Animal Procedures Committee for 2006</i> (R)	90
<b>Schaefer AL</b> , see Stewart M	
Scientific research	
- <i>Australian National Health and Medical Research Council's Guidelines on Care of Animals Used in Scientific Research and Teaching</i> (R)	407
Selection	
- <i>Where the Wild Things are Now: Domestication Reconsidered</i> (B)	328
Semantic modelling	
- RICHPIG model to assess pig welfare	289
Sheep	
- body condition score and ewe survival	71
- welfare in lairages	275
<b>Siracusa C, Manteca X, Cerón J, Martínez-Subiela S, Cuenca R, Lavin S, García F and Pastor J</b> Perioperative stress response in dogs undergoing elective surgery: variations in behavioural, neuroendocrine, immune and acute phase responses	259
Sleep	
- welfare estimation of stable enrichment in horses	351
<b>Smith C</b> , see Houldcroft E	
<b>Smulders D, Hautekiet V, Verbeke G and Geers R</b> Tail and ear biting lesions in pigs: an epidemiological study	61
<b>Sonck B</b> , see Rodenburg TB	
<b>Sørensen DB, Mortensen K, Bertelsen T and Vognbjerg K</b> Enriching the metabolic cage: effects on rat physiology and behaviour	395
<i>Sotalia fluviatilis</i>	
- tourist boats disturb marine tucuxis	117
<b>Souto A</b> , see Carrera ML	
<b>Sparrey J</b> , see Gerritzen MA	
Stabled horses	
- welfare estimation of stable enrichment in horses	351
<b>Stafford KJ</b> , see Stewart M	
Statistics	
- <i>Best Practices for Teaching Statistics and Research Methods in the Behavioural Sciences</i> (B)	415
Stereotypic behaviour	
- stereotypic pacing in tigers	255
Stereotypy	
- <i>Stereotypic Animal Behaviour: Fundamentals and Applications to Welfare, Second Edition</i> (B)	95
<b>Stewart M, Schaefer AL, Haley DB, Colyn J, Cook NJ, Stafford KJ and Webster JR</b> Infrared thermography as a non-invasive method for detecting fear-related responses of cattle to handling procedures	387
<b>Stewart M</b> , see Webster JR	
<b>Stewart SA</b> , see Kirkden RD	
<b>Stilwell G, de Carvalho C, Lima MS and Broom DM</b> The effect of duration of manual restraint during blood sampling on plasma cortisol levels in calves	383
Stoats	
- stoat trap welfare performance	111
Stress	
- dairy cow welfare in cold, wet conditions	19
- effect of driving style on stress in pigs	189
- effect of handling on cortisol levels in calves	383

- salivary cortisol in captive Asian elephants and Indian rhinoceros .....	305
<i>Strix aluco</i>	
- olfactory substances and vibration in pigs .....	155
- post-release survival of hand-reared tawny owls .....	207
Stunning and slaughter	
- <i>Animal Welfare and Meat Production, Second Edition (B)</i> .....	332
- <i>Survey of Slaughter Plants from an Animal Welfare Standpoint in Eastern Turkey (L)</i> .....	205
Substrate	
- effect of substrate availability on fish welfare .....	239
Survey	
- attitudes of Turkish veterinarians towards welfare .....	27
Survival	
- body condition score and ewe survival .....	71
- post-release survival of hand-reared pipistrelle bats .....	375
- post-release survival of hand-reared tawny owls .....	207
Sustainable food	
- <i>Sustainable Food Production (B)</i> .....	412
Swine	
- <i>Welfare of Pigs: From Birth to Slaughter (B)</i> .....	409
<b>T</b>	
<b>Tail and ear biting lesions in pigs: an epidemiological study</b> .....	61
Tail biting	
- biting lesions in pigs: an epidemiological study .....	61
Tail docking in lambs	
- <i>The Implications of Castration and Tail Docking for the Welfare of Lambs (R)</i> .....	407
Tawny owl	
- post-release survival of hand-reared tawny owls .....	207
Teaching methods	
- <i>Best Practices for Teaching Statistics and Research Methods in the Behavioural Sciences (B)</i> .....	415
<b>The effect of a new vertical structure in mitigating aggressive behaviour in a large group of chimpanzees (<i>Pan troglodytes</i>)</b> .....	147
<b>The effect of diet change on the behaviour of layer pullets</b> .....	101
<b>The effect of duration of manual restraint during blood sampling on plasma cortisol levels in calves</b> ....	383
<b>The effect of pen size and an enrichment structure (elevated platform) on the performance and behaviour of fattening rabbits</b> .....	53
<b>The effect of substrate availability on behavioural and physiological indicators of welfare in the African cichlid (<i>Oreochromis mossambicus</i>)</b> .....	239
<b>The reduction of stereotypic pacing in tigers (<i>Panthera tigris</i>) by obstructing the view of neighbouring individuals</b> .....	255
<b>The response of marine tucuxis (<i>Sotalia fluviatilis</i>) towards tourist boats involves avoidance behaviour and a reduction in foraging</b> .....	117
<b>Thomson PC</b> , see O'Brien JK	
<b>Thornton PD</b> , see Leach MC	
Three-dimensional structures	
- aggression reduction in zoo chimpanzees .....	149
Tiger	
- stereotypic pacing in tigers .....	255
Tourist boats	
- tourist boats disturb marine tucuxis .....	117
Transport policy	
- <i>Welfare Aspects of the Long-Distance Transportation of Animals: Veterinaria Italiana, Volume 44(1), January-March 2008 (B)</i> .....	411
<b>Traps for killing stoats (<i>Mustela erminea</i>): improving welfare performance</b> .....	111
Trap standards	
- stoat trap welfare performance .....	111
Turkish slaughter plants	
- <i>Survey of Slaughter Plants from an Animal Welfare Standpoint in Eastern Turkey (L)</i> .....	205
Turkish veterinarians	
- attitudes of Turkish veterinarians towards welfare .....	27
<b>Turner DC</b> , see Lichtsteiner M	
<b>Tuytens F</b> , see Goossens X, see also Rodenburg TB	

<b>U</b>	
UK animal units	
- assessing laboratory mouse welfare .....	171
Urban wildlife	
- <i>Wild Neighbors: The Humane Approach to Living with Wildlife, Second Edition</i> (B) .....	419
<b>Urios V</b> , see Menargues A	
<b>V</b>	
Vaccine testing	
- <i>Advancing Animal Welfare and the 3Rs in the Batch Testing of Veterinary Medicines</i> (R) .....	321
<b>Velarde A</b> , see Rodríguez P	
<b>Verbeke G</b> , see Smulders D	
<b>Verkerk GA</b> , see Webster JR	
Veterinary study	
- <i>Handbook of Veterinary Clinical Research</i> (B) .....	416
Vibration	
- olfactory substances and vibration in pigs .....	155
<b>Vognbjerg K</b> , see Sørensen DB	
<b>W</b>	
<b>Waddington P</b> , see Warburton B	
<b>Warburton B, Poutu N, Peters D and Waddington P</b> Traps for killing stoats ( <i>Mustela erminea</i> ): improving welfare performance .....	111
<b>Waterhouse A</b> , see Morgan-Davies C	
<b>Weary DM</b> , see Kirkden RD	
<b>Webster JR</b> , see Stewart M	
<b>Webster JR, Stewart M, Rodgers AR and Verkerk GA</b> Assessment of welfare from physiological and behavioural responses of New Zealand dairy cows exposed to cold and wet conditions .....	19
<b>Weeks CA</b> A review of welfare in cattle, sheep and pig lairages, with emphasis on stock rates, ventilation and noise.....	275
<b>Wehnelt S</b> , see Caws CE	
<b>Welfare and mate choice in zebra finches: effect of handling regime and presence of cover</b> .....	11
Welfare assessment	
- assimilating expert opinion in laying hens .....	355
- welfare assessment in laying hens .....	363
<b>Welfare assessment of captive Asian elephants (<i>Elephas maximus</i>) and Indian rhinoceros (<i>Thinoceros unicornis</i>) using salivary cortisol measurement</b> .....	305
<b>Welfare assessment of laying hens in furnished cages and non-cage systems: an on-farm comparison</b> ..	363
<b>Welfare assessment of laying hens in furnished cages and non-cage systems: assimilating expert opinion</b> .....	355
Welfare forum	
- <i>Making Lives Easier for Animals in Research Labs: Discussions by the Laboratory Animal Refinement and Enrichment Forum</i> (B) .....	326
Welfare guidelines	
- <i>Australian National Health and Medical Research Council's Guidelines on Care of Animals Used in Scientific Research and Teaching</i> (R) .....	407
<b>Welfare implications of nipple drinkers for broiler chickens</b> .....	1
Welfare matters	
- <i>On-farm Monitoring of Pig Welfare</i> (B) .....	93
Welfare measures	
- <i>The Welfare State: Measuring Animal Welfare in the UK 2006</i> (R) .....	90
Welfare quality	
- <i>Welfare Quality®: Project Update 7</i> (R) .....	89
Welfare strategy	
- <i>Animal Welfare Delivery Strategy</i> (R) .....	90
<b>Wells DL and Irwin RM</b> Auditory stimulation as enrichment for zoo-housed Asian elephants ( <i>Elephas maximus</i> )....	335
Wild birds in research	
- <i>Migratory Birds in Research: Animal User Training</i> (R) .....	406
Wildlife rehabilitation	
- post-release survival of hand-reared pipistrelle bats .....	375

**Y**

**Z**  
Zebra finch  
- welfare in zebra finches ..... 11  
**Zoons J**, see Rodenburg TB  
Zoos  
- *International Zoo Yearbook, Volume 41 (B)* ..... 420  
- *Zoos in the 21st Century: Catalysts for Conservation? (B)* ..... 326



## Reports and comments index

<i>Advancing Animal Welfare and the 3Rs in the Batch Testing of Veterinary Vaccines</i> (RSPCA publication) .....	321
<i>Animal Welfare Delivery Strategy</i> (Defra publication) .....	90
<i>Animal Welfare (Leg-hold Traps) Order 2007 in New Zealand</i> (MAF New Zealand publication).....	198
<i>Communication from the Commission to the European Parliament and the Council on the Various Systems of Rearing Laying Hens in Particular Those Covered by Directive 1999/74/EC</i> (EC publication) .....	197
<i>European Union Regulation (EC) No. 1523/2007 Covering Use of Cat and Dog Fur in the EU</i> (EC publication).....	198
<i>FAWC Opinion on Beak Trimming of Laying Hens</i> (FAWC publication).....	197
<i>FAWC Opinion on Enriched Cages for Laying Hens</i> (FAWC publication) .....	197
<i>FAWC Report on the Implications of Castration and Tail Docking for the Welfare of Lambs</i> (FAWC publication) .....	407
<i>Guidelines to Promote the Well-being of Animals Used for Scientific Purposes: The Assessment and Alleviation of Pain and Distress in Research Animals</i> (National Health and Medical Research Council publication) .....	407
<i>Humane Dog Population Management Guidance</i> (International Companion Animal Management Coalition publication) ..	321
<i>Migratory Birds in Research: Animal User Training, Companion Notes</i> (CCAC publication) .....	406
<i>Report of the Animal Procedures Committee for 2006</i> (Stationery Office publication).....	91
<i>Responsibility in the Use of Animals in Bioscience Research: Expectations of the Major Research Council and Charitable Funding Bodies</i> (NC3Rs, BBSRC, NERC, MRC and The Wellcome Trust publication) .....	322
<i>Scoping Report on Companion Animal Welfare Surveillance</i> (CAWC publication) .....	321
<i>The Regulation of Companion Animal Services in Relation to Training and Behaviour Modification of Dogs</i> (CAWC publication) .....	405
<i>The Welfare State: Measuring Animal Welfare in the UK</i> (RSPCA publication) .....	90
<i>Welfare Quality®: Project Update 7</i> (Welfare Quality publication) .....	89
<i>Welfare Quality®: Project Update</i> (Welfare Quality publication) .....	322
<i>Wild Animals in Travelling Circuses: The Report of the Chairman of the Circus Working Group</i> (Defra publication) .....	89

## Book and CD-ROM reviews index

<b>Adams DB, Thornber PM and Murray G</b> 2008 <i>Welfare Aspects of the Long-Distance Transportation of Animals: Veterinaria Italiana, Volume 44(1), January- March 2008</i> .....	411
<b>Arent L</b> 2007 <i>Raptors in Captivity: Guidelines for Care and Management</i> .....	417
<b>Barnett S</b> 2007 <i>Manual of Animal Technology</i> .....	201
<b>Baumans V, Coke C, Green J, Moreau E, Morton D, Patterson-Kane E, Reinhardt V and van Loo P</b> 2007 <i>Making Lives Easier for Animals in Research Labs: Discussion by the Laboratory Animal Refinement and Enrichment Forum</i> .....	326
<b>Cassidy R and Mullin M</b> 2007 <i>Where the Wild Things are Now: Domestication Reconsidered</i> .....	328
<b>Cooper JE and Cooper ME</b> 2007 <i>Introduction to Veterinary and Comparative Forensic Medicine</i> .....	200
<b>Council of Europe Publishing</b> 2006 <i>Ethical Eye: Animal Welfare</i> .....	93
<b>Dawkins M S</b> 2007 <i>Observing Animal Behaviour: Design and Analysis of Quantitative Data</i> .....	411
<b>Dunn DS, Smith RA and Beins BC</b> 2007 <i>Best Practices for Teaching Statistics and Research Methods in the Behavioural Sciences</i> .....	415
<b>Dunn P</b> 2007 <i>The Goatkeeper's Veterinary Handbook, Fourth Edition</i> .....	99
<b>Faucitano L and Schaefer AL</b> 2008 <i>Welfare of Pigs: From Birth to Slaughter</i> .....	409
<b>Fisken FA</b> 2007 <i>International Zoo Yearbook, Volume 41</i> .....	420
<b>Grandin T</b> 2007 <i>Livestock Handling and Transport: Third Edition</i> .....	330
<b>Gregory NG</b> 2007 <i>Animal Welfare and Meat Production: Second Edition</i> .....	332
<b>Hadidian J, Baird M, Brasted M, Nolfo-Clemets L, Pauli D and Simon L</b> 2007 <i>Wild Neighbors: The Humane-Approach to Living with Wildlife, Second Edition</i> .....	419
<b>Hausberger M, Sondergaard E and Martin-Rosset W</b> 2007 <i>Horse Behaviour and Welfare: EAAP Publication No 112</i> .....	199
<b>Holmes M and Cockcroft P</b> 2008 <i>Handbook of Veterinary Clinical Research</i> .....	416
<b>Jenen P</b> 2007 <i>The Behavioural Biology of Dogs</i> .....	325
<b>Kaliste E</b> 2007 <i>The Welfare of Laboratory Animals</i> .....	414
<b>Mason G and Rushden J</b> 2006 <i>Stereotypic Animal Behaviour: Fundamentals and Applications to Welfare, Second Edition</i> .....	95
<b>McFarland D</b> 2008 <i>Guilty Robots, Happy Dogs: The Question of Alien Minds</i> .....	409
<b>Merck MD</b> 2007 <i>Veterinary Forensics: Animal Cruelty Investigations</i> .....	331
<b>Miklósi Á</b> 2007 <i>Dog Behaviour, Evolution and Cognition</i> .....	327
<b>Noordhuizen J, Cannas da Silva J, Boersema S-J and Vieira A</b> 2008 <i>Applying HACCP-based Quality Risk Management on Dairy Farms</i> .....	329
<b>Rushen J, de Passillé A-M, von Keyserlingk MAG and Weary DM</b> 2008 <i>The Welfare of Cattle</i> .....	419
<b>Velarde A and Geers R</b> 2007 <i>On-farm Monitoring of Pig Welfare</i> .....	93

<b>Watson C</b> 2007 <i>Lameness in Cattle</i> .....	97
<b>White TI</b> 2007 <i>In Defense of Dolphins: The New Moral Frontier</i> .....	199
<b>Villa-Garcia G and Bourne D</b> 2007 <i>Elephants: Diseases and Treatments</i> .....	202
<b>Zimmerman A, Hatchwell M, Dickie L and West C</b> 2007 <i>Zoos in the 21st Century: Catalysts for Conservation?</i> ...	326
<b>Zollitsch W, Winckler C, Waiblinger S and Haslberger A</b> 2007 <i>Sustainable Food Production</i> .....	412

**Letters index**

<b>Sabuncuoglu N, Coban O, Bayraktar M, Elmali M, Ekici K and Ceylan ZG</b> Survey of slaughter plants from an animal welfare standpont in Eastern Turkey .....	205
--	-----