

# UFAW Online Animal Welfare Conference 2023

## List of posters

- 1. Effects of early group housing on behavior, hematology, and growth performance of calves during transition to large group pens**  
Essam Abdelfattah and Martin Breen (*University of California, Davis, USA*)
- 2. Pioneering efforts for the human animal bond in Nigeria and Africa**  
Sunday Agbonika (*Nile University of Nigeria, Nigeria*)
- 3. Relationship of tissue dimensions and three captive bolt placements on cadaver heads from mature swine (*Sus scrofa domestica*) < 200 kg body weight**  
Karly Anderson, Jennifer Berger, Arquimides Reyes, Ruth Woiwode, Perle Zhitnitskiy and Kurt Vogel (*University of Wisconsin - River Falls, University of Nebraska - Lincoln, University of Minnesota, USA*)
- 4. Current approaches to assessing captive chimpanzee (*Pan troglodytes*) welfare**  
Laura Angley, Gillian Vale and Katherine Cronin (*Lincoln Park Zoo, Chicago, USA*)
- 5. Evidence-based welfare assessment of pets during transport – Are we there yet?**  
Yael Arbel, Liran Plitman and Dganit Ben-Dov (*Veterinary Services and Animal Health, Ben-Gurion Airport, Israel*)
- 6. Space usage as an indicator of animal welfare in snakes at a Latin American zoo**  
Alvaro Arroyave, Daniela Cruz and Jefferson Muñoz (*University of Guelph, Canada; Zoologico de Cali, Colombia*)
- 7. Exploring self-recognition in pigs (*Sus scrofa*)**  
Rachel Baker and Catherine Douglas (*Newcastle University, UK*)
- 8. Assessing animal welfare indicators**  
Louise Bell, Frankie Kerridge, Amy Brennan, Bethan Davies and Dalila Palenzuela Abreu (*University Centre Myerscough, UK*)
- 9. The impact of human interactions on dog welfare: A rapid systematic review**  
Kelsey Bezaire, Leanne Blake and Lucy Asher (*Newcastle University, UK*)
- 10. Ecotourist perceptions of animal welfare**  
Emma Blundell and Kelly Howarth (*Myerscough College, UK*)
- 11. Attitude toward brachycephalic dogs**  
Zsófia Bognár and Enikő Kubinyi (*Eötvös Loránd University, Hungary*)
- 12. EFSA's risk assessments on animal welfare in support of the European farm to fork strategy revision**  
Denise Candiani, Sean Ashe, Chiara Fabris, Eliana Lima, Michaela Hempen, Cristina Rojo Gimeno, Yves Van Der Stede and Marika Vitali (*European Food Safety Authority (EFSA), Italy*)
- 13. Welfare of Icelandic horses during elite competition**  
Janne Winther Christensen and Dehlija Jensen (*Aarhus University, Denmark*)
- 14. Environmental noise in competitive Western horse events**  
Roger Clarke, Maria Hötzel and Denise Leme (*Universidade Federal de Santa Catarina, Brazil*)
- 15. A case study on flamingo behavioural responses to an avian influenza imposed housing order**  
Thomas Collard and Paul Rose (*Banham Zoological Gardens and University of Exeter, UK*)

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16. **Tie stall housing in dairy cow: Does the use of nylon collars reduce neck skin alterations?**  
Marta Comin, Maria Giorgia Riva, Sara Barbieri, Elisabetta Canali, Lydia Lanzoni, Giorgio Vignola, Marzia Borciani, Alessandro Gastaldo, Ambra Motta and Emanuela Dalla Costa (*Università degli Studi di Milano and Centro Ricerche Produzioni Animali, Reggio Emilia, Italy*)
17. **Animal welfare considerations in rewilding initiatives**  
Oscar Courchaine (*Canisius College, USA*)
18. **Examining the motivation of repetitive barrier interaction in reptiles**  
Melanie Denommé (*Brock University, Canada*)
19. **Do welfare assessment findings in extensive goat farming reflect the adverse environmental conditions?**  
Ena Dobrikj and Miroslav Kjosevski (*University of Cyril and Methodius, North Macedonia*)
20. **Driving animal welfare improvements in New Zealand via certification programmes**  
Kelly Drake and Marie McAninch (*Royal New Zealand Society for the Prevention of Cruelty to Animals Incorporated (SPCA), New Zealand*)
21. **The effect of daily gabapentin on behaviour modification progression and signs of stress in fearful shelter cats rescued from hoarding environments**  
Bailey Eagan, Karen van Haaften and Alexandra Protopopova (*University of British Columbia, Canada; American Society for the Prevention of Cruelty to Animals (ASPCA), USA*)
22. **Pain affects response to reward loss in calves**  
Thomas Ede, Marina von Keyserlingk and Daniel Weary (*University of British Columbia, Canada; University of Pennsylvania, USA*)
23. **Animal welfare in the wild**  
Vittoria Elliott, Janire Bueno-Castellano and Bonnie Flint (*Smithsonian Institution and Wild Animal Initiative, USA; Newcastle University, UK*)
24. **The effect of different housing types on feather score and tonic immobility in layers**  
Mert Erek and Erdal Matur (*Istanbul University-Cerrahpasa, Turkey*)
25. **The effects of furnished cages on the behaviour of laying hens in the post-stress adaptation period**  
Ezgi Ergen, Erdal Matur, Elif Ergul Ekiz, Ibrahim Akyazi, Evren Eraslan, Mert Erek, Bilge Acar Polat and Mukaddes Ozcan (*Istanbul University-Cerrahpasa and University of Istanbul, Turkey*)
26. **Are dog owners in Istanbul conscious about aging process of their dogs?**  
Songul Erhan and Erdal Matur (*Istanbul University-Cerrahpasa, Turkey*)
27. **Refinement of the streptozotocin-induced model of diabetes in rats: Fasting and analgesia**  
Marisa Esteves-Monteiro, Daniela Menezes-Pinto, Mariana Ferreira-Duarte, Manuela Morato and Margarida Duarte-Araújo (*University of Porto, Portugal*)
28. **The effect of environmental design on the welfare of captive Striped skunks (*Mephitis mephitis*)**  
Sophie Evans, Rebecca Sweet and Laura Bamford (*East Durham College, Durham, County Durham, UK*)
29. **Health status characterization of confiscated *Macaca fascicularis* as an indicator of rehabilitation eligibility using animal welfare principles**  
Mariana Kresty Fernandez, Huda Darusman and Entang Iskandar (*Jakarta Animal Aid Network and IPB University, Indonesia*)

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30. **Condensed milk or strawberry jam – which do rats prefer for voluntary oral ingestion?**  
Mariana Ferreira-Duarte, Manuela Morato and Margarida Duarte-Araújo (*University of Porto, Portugal*)
31. **Effects of social interactions on the emotional state of the horse**  
Anna Flamand, Amazone Raskin, Clémence Helleu, Cheyenne Zellenka, Sophie Boyer and Odile Petit (*Centre INRAE Val de Loire and Institut de l'Elevage, Paris, France*)
32. **Using scent to enhance welfare and reproductive behaviour in zoo-housed endangered lemurs**  
Sara Fontani, Gale Glendewar, Stefano Kaburu, Georgia Callagan, Anna Beatrice Costantini, Giovanna Marliani, Pier Attilio Accorsi, Matthew Palframan and Stefano Vaglio (*University of Wolverhampton, Durrell Wildlife Conservation Trust – Jersey Zoo and Durham University, UK; Universities of Milan and Bologna, Italy*)
33. **Social relationship between socialized miniature pigs and their owners: Is there an attachment bond?**  
Anna Gábor, Paula Pérez Fraga, Márta Gácsi, Linda Gerencsér and Attila Andics (*Eötvös Loránd University, Hungary*)
34. **UK public's perceptions on animal welfare in the UK**  
Amelia Garcia-Ara, Lauren Crouch, Marnie Brennan and Rodrigo Nova (*Universities of Nottingham and Glasgow, UK*)
35. **Human-horse interactions, but not housing conditions, influence fearfulness in Lipizzan horses**  
Elena Gobbo, Tea Žnidaršič and Manja Zupan Šemrov (*University of Ljubljana, Slovenia*)
36. **Use of standardized operating procedures (SOP's) for perioperative care in cattle and horses used in teaching at the School of Veterinary Medicine and Surgery, Saint Francis of Assisi**  
Andrés Enrique González Alvarado, Catherine Salazar Saborío, Ricardo Chinchilla Chavarría and Andrés Rodríguez González (*School of Veterinary Medicine and Surgery, Saint Francis of Assisi, Costa Rica*)
37. **Evaluation of tissue depths of cadaver heads from physically castrated market barrows and immunocastrated boars**  
Emma Hamilton, Karly Anderson, Ashlynn Kirk, Katherine Bishop and Kurt Vogel (*University of Wisconsin – River Falls, and Smithfield Foods, USA*)
38. **Behavioral responses of sows to two restraint methods and a theoretical frontal penetrating captive bolt placement: A preliminary report**  
Emma Hamilton, Karly Anderson, Barbara Dittrich, Megan Seehusen, Katherine Creutzinger, Perle Zhitnitskiy and Kurt Vogel (*Universities of Wisconsin – River Falls, Nebraska - Lincoln and Minnesota, USA*)
39. **Ruffled minds? Characterising restlessness in bulls kept on fully slatted floors**  
Sara Hintze, Florian Krottenthaler and Christoph Winckler (*University of Natural Resources and Life Sciences Vienna, Austria*)
40. **Animal-based methods of assessing heat stress in farm animals: A case of the 3R's**  
Oluwaseun Iyasere, Samuel Durosaro, Bukola Majekodunmi, Emmanuel Oke, Mariam Logunleko, Victor Oyeniran, Oluwaseun Ojelade, Monsuru Abioja and James Daramola (*Federal University of Agriculture, Abeokuta, Nigeria*)

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41. **Animal welfare awareness among cage-free farmers: Does in-person training help?**  
Lukas Jasiunas, Kikiope Oluwarore, Faisal Qureshi and Isaac Esparza (*Healthier Hens, USA and Kenya*)
42. **Measuring motivations and preferences in dairy cattle: A scoping review**  
Emma Jensen, Margit Jensen, Heather Neave and Melissa Bateson (*Aarhus University, Denmark; Newcastle University, UK*)
43. **Sows as protective mothers; maternal stress does not affect maternal care in the long term**  
Cathinka Celine Jørgensen, Liza Rose Moscovice and Ulrike Gimsa (*Research Institute for Farm Animal Biology (FBN), Dummerstorf, Germany*)
44. **Farm animal welfare governance in Poland**  
Adrianna Kapek-Goodridge (*Huddersfield University, UK*)
45. **Behavioural repertoires in the wild and the zoo - A worry for welfare?**  
Robert Kelly and Paul Rose (*University of Exeter and Wildlife and Wetlands Trust (WWT), Slimbridge Wetland Centre, UK*)
46. **Do housing-induced changes in brain activity cause stereotypic behaviours in mice?**  
Lindsey Kitchenham, Aileen MacLellan, Pietro Paletta, Ashutosh Patel, Elena Choleris and Georgia Mason (*University of Guelph, Canada*)
47. **The everyday work of one welfare in animal sheltering and protection**  
Katherine Koralesky, Janet Rankin and David Fraser (*Universities of British Columbia and Calgary, Canada*)
48. **An evolutionary approach to pet ownership: Exploring the impact of keeping dogs as family members on humans and dogs**  
Eniko Kubinyi (*Eotvos Lorand University, Hungary*)
49. **Application of behavioural observations to evaluate the welfare throughout the introduction and socialisation process of singly housed grey parrots (*Psittacus erithacus*) into a larger group at the Alameda Wildlife Conservation Park (AWCP), Gibraltar**  
Jessica Leaper, Thiago Pereira, Nic Campbel , Anais Arangath and Cara Macleod (*Alameda Wildlife Conservation Park, Gibraltar; German Primate Center, Germany; Colchester Zoo, UK*)
50. **Floating cool activities for spotted seals**  
Hing Lam Leung, Eszter Mátrai, Shaw Ting Kwok and Paolo Martelli (*Ocean Park, Hong Kong; Eötvös Loránd University, Hungary*)
51. **The private keeping of dangerous wild animals in Great Britain**  
Chris Lewis, Chris Draper, Frankie Osuch and Stephanie Jayson (*Born Free Foundation, UK; Performing Animal Welfare Society, USA*)
52. **The influence of deflighting on the welfare of White storks (*Ciconia ciconia*) evaluated by feather corticosterone and behavioral data**  
Frederike Nora Liermann, Katrin Baumgartner, Hermann Will, Lorenzo von Fersen, Ralph Simon, Roswitha Merle and Christa Thöne-Reineke (*Freie Universität Berlin, specialist veterinarian for wildlife, Nuremberg and Nuremberg Zoo, Germany*)
53. **Predictors of successful diversion of cats and dogs away from animal shelter intake: Analysis of data from a self-rehoming website**  
Lexis Ly and Alexandra Protopopova (*University of British Columbia, Canada*)

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54. **Case study of using the Animal Welfare Assessment Grid as evidence in animal cruelty prosecutions**  
Rachel Malkani, Sharmini Paramasivam and Sarah Wolfensohn (*University of Surrey, UK*)
55. **Cognitive enrichments to lift the pod spirit!**  
Eszter Matrai, Rick Sui Ho Lui, Kathy Lee, Tsung Man Kwong, Ákos Pogány and Paolo Martelli (*Ocean Park, Hong Kong; Eötvös Loránd University, Hungary*)
56. **Dog owners pre-acquisition behaviour and preventative care in different breeds based on skull shape**  
Rachel McGreevy, Emma Tipton, James Oxley, Sean Wensley and Lynn Hart (*Solihull College and University Centre and The People's Dispensary for Sick Animals (PDSA), UK*)
57. **Scottish SPCA's pet aid service - keeping people and pets together and protecting that human-animal bond**  
Gilly Mendes Ferreira (*Scottish Society for Prevention of Cruelty to Animals (SPCA), UK*)
58. **Interactive multimedia training program for timely on-farm euthanasia in dairy cattle; implementation and perceived respondent knowledge change**  
Victoria Merenda, Eduardo Oliveira, Magdiel Lopez-Soriano, Andréia Arruda, Ashley Robbins and Monique Pairis-Garcia (*North Carolina State University, UC Davis, The Ohio State University and National Dairy FARM Program, USA*)
59. **Human ability to classify horse affective states depicted in media via an online survey**  
Katrina Merkies and Katelyn Trudel (*University of Guelph, Canada*)
60. **The drowning dogs of Mumbai**  
Tarusha Mishra (*Ambedkar University Delhi, India*)
63. **Humboldt penguins (*Spheniscus humboldti*) living in Santo Inácio zoo: Effects of visitors' activity on penguins' behaviour**  
Ana Nunes and Ana Magalhães (*University of Porto and University Institute of Health Sciences, CESPU, Portugal*)
64. **Characterizing Wisconsin dairy farmers' strategies for training personnel in animal handling**  
Hannah Olsen, Katherine Creutzinger, Kurt Vogel and Jennifer Van Os (*University of Wisconsin – River Falls and Madison, USA*)
65. **Impact of UV and LED light on Chilean rose tarantula (*Grammostola rosea*) behaviour**  
Tegan O'Neill, James Brereton and Alex Theodorou (*University Centre Sparsholt, UK*)
66. **Cognitive tests in rams (*Ovis aries*) reared under an intensive farming system**  
Kallirroï Papadaki, George Laliotis, Panagiota Koutsouli and Iosif Bizelis (*Agricultural University of Athens, Greece*)
67. **A case study of a community-based framework to improve the conservation and welfare of urban non-human primates**  
Sharmini Paramasivam (*University of Surrey, UK*)
68. **Risk assessment of the SARS-COV-2 spreading among livestock and the emergence of animal reservoirs of COVID-19**  
Mykyta Peka and Viktor Balatsky (*National Academy of Agrarian Sciences of Ukraine and V. N. Karazin Kharkiv National University, Kharkiv, Ukraine*)
69. **Attitudes of Ukrainians towards labeling and willingness to pay for products from cows with a high level of welfare**  
Hanna Petkun and Vitalii Nedosekov (*National University of Life and Environmental Sciences, Ukraine*)

70. **International legal implications on how Russia's invasion of Ukraine affected non-human animals**  
Saba Pipia (*Georgian-American University, Georgia*)
71. **What we (don't) know about parrot welfare: A systematic literature review**  
Andrea Piseddu, Jean-Loup Rault and Yvonne van Zeeland (*University of Veterinary Medicine Vienna, Austria; Utrecht University, The Netherlands*)
72. **Hair and salivary cortisol and dehydroepiandrosterone (DHEA) concentrations as biomarkers of welfare in swine**  
Darian Pollock, Dave Janz and Yolande Seddon (*Western College of Veterinary Medicine, Saskatoon, Canada*)
73. **Behaviour, enclosure utilisation, and optimal environmental design for tree frog species, *Hylidae***  
Emily Potter and Laura Bamford (*East Durham College, UK*)
74. **Effects of loading and transport on the heart rate and behaviour of horses**  
Vytautas Ribikauskas, Ieva Stankeviciute and Jurate Kucinskiene (*Lithuanian University of Health Sciences, Lithuania*)
75. **The influence of environment change on the behaviour of domestic kennelled dogs**  
Elizabeth Robson, Rebecca Sweet and Laura Bamford (*East Durham College, UK*)
76. **Non-aversive handling lessens the impact of laparotomy in mice: Cage-side versus retrospective application of the mouse grimace scale**  
Johnny Roughan and Joshua Grimes (*Newcastle University, UK*)
77. **Animal welfare in scientific research - A review of international regulation and legislation compared to the case of North Macedonia**  
Kristijan Salamovski (*University of "St.Kliment Ohridski", North Macedonia*)
78. **Investigating non-invasive methods of gastric ulcer detection in sows: Oral behaviour and metabolomic analysis of saliva**  
Laura Salazar, Marianne Farish, Emma Baxter, Alistair Lawrence, Tessa Moses, Jill Thomson and Rick D'Eath (*Scotland's Rural College, The Roslin Institute and University of Edinburgh, UK*)
79. **Validation of activity meters for prospective use as welfare assessment tool in horses, *Equus caballus***  
Valle Sánchez-Izquierdo, Tamsin Coombs and Marie Rowland (*University of Edinburgh, UK*)
80. **Beliefs, knowledge and attitudes of equine practitioners and enthusiasts about anticipatory behavior and emotions in horses**  
Letícia Santos Maurício, Denise Pereira Leme and Maria José Hötzel (*Federal University of Santa Catarina, Brazil*)
81. **Assessment of broiler welfare at the slaughterhouse**  
Sónia Saraiva, Cristina Saraiva, Alexandra Esteves and George Stilwell (*Universities of Trás-os-Montes e Alto Douro (UTAD) and Lisbon, Associate Laboratory for Animal and Veterinary Science (AL4Animals), Portugal*)
82. **Gender biases in comparison between live and recorded observation in pain scoring using UPAPS in piglets undergoing surgical castration**  
Jessica Seate, Monique Pairis-Garcia and Magdiel Lopez Soriano (*Animal Science Products Inc., Nacogdoches and North Carolina State University, USA*)

83. **Peribulbar anesthesia decreases corneal and periocular sensation and can improve rat welfare during ophthalmic procedures: a comparison of two injection approaches**  
Yael Shilo-Benjamini, Ady Eliav, Yishai Kushnir and Ron Ofri (*The Hebrew University of Jerusalem, Israel*)
84. **Animal welfare cost for stray companion animals and adopted dog characteristics that are preferred by people of Greece**  
Anna Stefani Sietto, Eleni Theodoropoulou, Vilielmini Karagianni and Evangelia Sossidou (*Harokopio University of Athens, University of West Attica, and Greek Agricultural Organization, Greece*)
85. **Tie-stall methane testing behaviour and enteric methane measurements in dairy cattle**  
Olivia Smith, Nienke van Staaveren and Christine Baes (*University of Guelph, Canada; University of Bern, Switzerland*)
86. **Optimal environmental design to promote captive welfare for Crocodile newts (*Tylototriton verrucosus*)**  
Naia Stephenson and Laura Bamford (*East Durham College, UK*)
87. **Acupuncture for chronic pain to improve Red panda welfare**  
Iris Ziyang Tan, Eszter Matrai, Sarah Churgin and Paolo Martelli (*Ocean Park Hong Kong, Hong Kong*)
88. **Does plastic entanglement pose a welfare risk to UK European hedgehogs?**  
Emily Thrift and Fiona Mathews (*University of Sussex, UK*)
89. **A fear of fireworks in dogs, cats and rabbits, and owners' views towards their control and noise reduction**  
Emma Tipton, James Oxley, Lynne James, Rachel Malkani, Rebecca Ashman, Steve Howard and Sean Wensley (*The People's Dispensary for Sick Animals (PDSA), UK*)
90. **What is the current state of welfare in pet dogs, cats and rabbits? Key findings from a nationally representative pet owner survey in 2022**  
Emma Tipton, James Oxley, Lynne James, Rachel Malkani, Rebecca Ashman, Steve Howard and Sean Wensley (*The People's Dispensary for Sick Animals (PDSA), UK*)
91. **Acupuncture to activate the Arctic fox**  
Ming Hin Tse, Eszter Matrai, Sarah Churgin and Paolo Martelli (*Ocean Park Hong Kong, Hong Kong; Eötvös Loránd University, Hungary; Arizona State University, USA*)
92. **Understanding the gaps between the concept of animal welfare, professional training and technical performance in fish farming**  
Isabela Vallim, Alessandra Akemi Hashimoto Fragoso, Ana Silvia Pedrazzani, Murilo Quintiliano and Carla Forte Maiolino Molento (*Federal University of Paraná and FAI Farms, Jaboticabal, Brazil*)
93. **Female breeding rabbits housed part-time in group: Effects of enrichment and group size on skin injuries and agonistic behaviour**  
Liesbeth Van Damme, Bart Ampe, Evelyne Delezie and Frank Tuytens (*Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Melle and Ghent University, Belgium*)
94. **Caregivers engaging in monkey business: Evaluating the use of caregivers as social enrichment for captive Rhesus and *Cynomolgus* macaques**  
Rachel Van Vliet, Nadège Aigueperse and Elsa Vasseur (*McGill University, Canada; University of Clermont Auvergne, France*)

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95. **Ferrets display differing degrees of increased behavioral diversity and tolerance of an open area with provision of novel enrichment items**  
Rachel Vistein, Sydney Swedick, Kristina Nielsen and Lydia Hopper (*Johns Hopkins University, USA*)
96. **Effects of some putative environmental enrichments on lorikeets (*Trichoglossus haematodus*) in a controlled environment**  
Elizabeth Walsh, Lieve Meers, Lucia Bono, Ilaria Marian and Simona Normando (*Cork Pet Behaviour Centre, Ireland; BIAAT Foundation, Genk, Belgium; Parco Faunistico Cappeller, and University of Padua, Italy*)
97. **Are dogs as protected as we think? A comparative study of legal protections afforded to dogs across the United Kingdom**  
Sarah Weir, Lynsey McDevitt, Sharon Kessler and Clare Andrews (*University of Stirling, UK*)
98. **Using chronic unpredictable stress to investigate 'inactive-but-awake' behaviour as a welfare indicator in laboratory rats**  
Lauren Young, Ryan McCallum, Melissa Perreault and Georgia Mason (*University of Guelph, Canada*)