

Universities Federation for Animal Welfare



Science in the service of animal welfare

Spring 2022

How can we tackle rat or mice infestations humanely?

Every year it is estimated that millions of rats and mice are killed as 'pests' in the UK alone. Rats and mice can cause severe damage when they gain access to houses or business premises, as well as posing a threat to public health. Therefore, we often have little choice but to take drastic measures to remove them, which can be deeply upsetting to those of us who care about animal welfare. Sadly, there is often little alternative other than to use lethal control methods. At UFAW we are often asked for advice on how to control rodents most humanely. Until recently the welfare impacts of rodent control methods have not been objectively ranked so it was difficult to offer evidence-based advice.

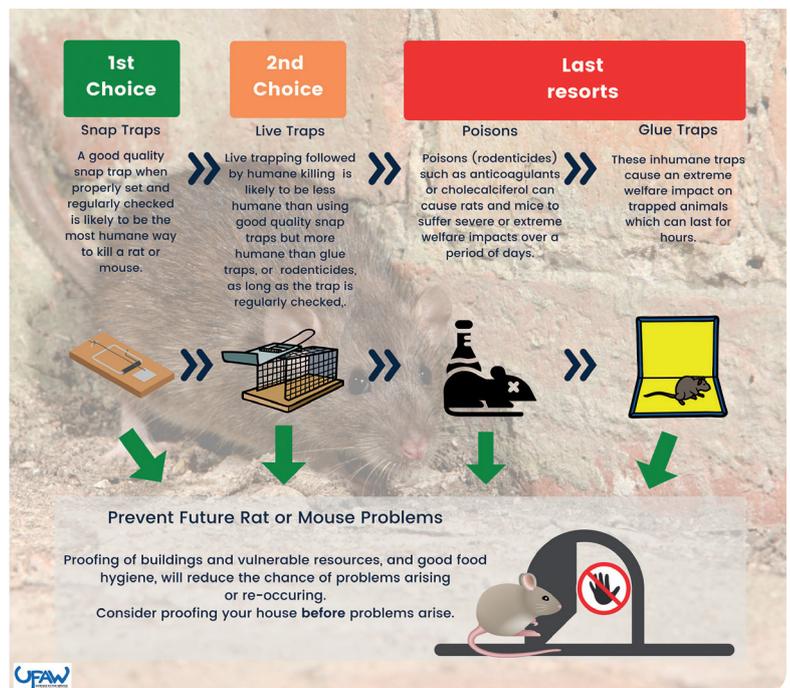
Recently UFAW co-funded a research project led by Dr Sandra Baker of Oxford University's Wildlife Conservation Research Unit to rate the welfare impacts of commonly used methods to control rats. The study brought together animal welfare experts (including UFAW CEO Huw Golledge and former Chair Alick Simmons), ecologists, veterinarians and, importantly, pest-controllers. There was a remarkable degree of consensus on the impacts of the various methods, despite the disparate backgrounds of the experts, with the study concluding that glue traps and chemical rodenticides, such as anti-coagulants, were least humane whereas good quality snap-traps (which when used correctly can kill rodents almost instantly) and live trapping followed by rapid humane dispatch, caused the smallest animal welfare impact. The research was published in UFAW's journal *Animal Welfare* at an opportune moment as the English, Scottish and Welsh governments all separately consider a ban or significant restriction on the use of glue traps, something UFAW strongly supports. We have engaged with policymakers including meeting with Jane Stevenson, MP the proposer of the bill to restrict glue traps to ensure that the evidence we have developed contributes to the momentum towards a glue trap ban.

Providing simple evidence-based advice on humane rodent control

Working with Dr Baker, we have comprehensively updated the information and advice on rodent control which is available on our website. This allows anyone to make informed choices about how to deal with a rodent problem in the most humane way possible. We have also produced an infographic which summarises our recommended approach (see picture). Crucially, alongside identifying the most humane control methods, we emphasise that you should also take all possible steps to stop rats and mice getting into your home, ideally before a problem arises, and most definitely after you have controlled an ongoing problem. This really is a case where prevention really is better than the cure.

You may ask why we don't recommend live capture and release of rodents? At present the evidence suggests that this method is less humane than it may appear. If rodents are released nearby, they may re-infest the property they were removed from. If they are released at a distance they may starve or be predated as they may struggle to compete for food and shelter with local rodent populations. More research to confirm this assertion is needed, but we urge caution when considering using this method.

This work was supported in part by the generous donations to our 2021 Spring Appeal and we would like to say a special thank you to those who directly supported this work which is already making a real contribution to protecting the welfare of wild rodents.



ufaw.org.uk/rodentcontrol

CHAIRMAN'S COMMENT

Welcome to UFAW's Spring Newsletter. It is my pleasure to write this introduction as UFAW's new Chair. I am delighted to be taking over the helm at such an important time for animal welfare.

As you will see, as usual, it's been a busy few months at UFAW and I'm delighted to see so much progress being made, despite the continued impacts of the COVID pandemic. We've supported novel research, helped encourage the next generation of animal welfare scientists, and, most-importantly, made sure that vital animal welfare information reaches those who can use it to improve the welfare of animals around the world. I'm particularly pleased to see UFAW's evidence-based approach to animal welfare having an influence at the policy level.

I hope you find this update interesting and informative. Thank you for your continued support of UFAW, without you none of our vital work would be possible.

Mike Radford
Chair of Trustees

Welcome

This is an exciting time for animal welfare as we start to see the prospect of real improvements in animal welfare through legislative changes such as the Sentience bill and other positive changes including a likely restriction on the use of glue traps to kill rodents. What is particularly pleasing for us at UFAW is that these are evidence-based changes, they have come about because the scientific evidence shows that the changes are warranted. As you'll see in this newsletter UFAW has contributed to these developments and we're delighted to see that our scientific approach to animal welfare is having an influence. None of these positive changes or the many other important projects you'll read about in this newsletter would be possible without your ongoing support, so thank you to our members and donors for continuing to support Science in the Service of Animal Welfare.

Dr Huw Golledge
CEO & Scientific Director

Advancing Animal Welfare Science 2022



UFAW International Conference, Edinburgh UK - 28-29th June 2022

For the first time since the start of the COVID crisis, the UFAW conference will be held in person on 28th-29th June 2022, allowing attendees to network with their colleagues face-to-face, and to socialise. Talks will also be streamed on-line, for those who cannot travel.

The conference will include submitted talks and poster presentations, alongside 4 keynote presentations:

- **Professor Melissa Bateson**
(Newcastle University, UK)
Use and misuse of measures of welfare
- **Professor Bas Rodenburg**
(Utrecht University, The Netherlands)
Meeting the demands of a growing human population, while also achieving good welfare

- **Professor Hanno Würbel**
(University of Bern, Switzerland)
How to improve the quality of animal welfare science
- **Professor Cathy Dwyer**
(University of Edinburgh, UK & Chair, Scottish Animal Welfare Commission)
The role of evidence in policy making

The conference will also feature a workshop on "Improving study design in animal welfare research" organised by Professor Melissa Bateson (Newcastle University).

To find out more or register please visit



ufaw.org.uk/rcp22

Animal Welfare – the UFAW scientific journal

Animal Welfare is UFAW's quarterly journal publishing scientific, peer-reviewed articles on all aspects of animal welfare. Throughout 2021, its pages have featured a plethora of scientific



papers, covering topics such as the welfare of brachycephalic dogs, methods to delouse salmon, eye temperature as a welfare indicator in seals, and keel-bone fractures in laying hens. As well as UFAW staff, the journal editorial board consists of renowned researchers from around the world. These editors cover different sections relating to farm animal species, laboratory, zoo and companion animals, as well as sections on social science, and ethics and philosophy. The most recent addition to the team is Dr Jessica Martin from the University of Edinburgh, who is now Section Editor for a newly created section on Humane killing and slaughter. In 2021, *Animal Welfare* published 44 articles, as well as comments on animal welfare reports and several book reviews. The latter are available also on the UFAW website. If your head of research is still relying on impact factors to judge quality, *Animal Welfare's* rose to 2.24 in 2021 making it one of the highest ranked animal welfare journals.



ufaw.org.uk/journal

Animal Welfare Student Scholarship meeting 2021



Student Scholar Giuliano De Barros from Brazil presented his study “Does tail docking prevent myiasis in sheep? A six-year retrospective cohort study”

Presenting your research to an audience of your peers and answering questions on it is a key skill that all animal welfare scientists need. In December 2021, the annual Animal Welfare Student Scholars meeting, which included scholars from Brazil, Nigeria and Uganda amongst others, was held.

All scholars performed admirably, especially as for most it was the first time they had presented at a virtual meeting. Their talks were clear and to the point and they handled the technical aspects of presenting live and the questions from the sizeable international audience, with aplomb. We can only agree with one of the comments we received about the day ‘...such super impressive young students doing amazing research...’ Congratulations to all.

We hope that this marks the start of an on-going interest in the science of animal welfare and, now they have put together a talk, that they look to present their work at other meetings, or to get their findings published.

We were thus very pleased to hear about scholars who did exactly that; congratulations are due to Eva Mutua (University of Edinburgh, UK), Sean Yamada (Western University of Health Sciences, USA) and Benjamin Cargill (University of Bristol, UK)

Eva published her research on variations in milk yield in a cow-calf contact system in the ‘*Journal of Dairy Science Communications*’⁽¹⁾. The results of her study aimed to help farmers understand how

cow-calf contact systems (which allow calves to remain in contact with their mothers, as opposed to being separated shortly after birth, and which may significantly improve cow and calf welfare) affect milk production. Her key findings showed that:

- Cows with current female calves delivered more milk to the parlour than cows with current male calves.
- Milk delivered to the parlour increased with the number of lactations a cow had experienced.

Her findings may help find ways to increase the use of cow-calf contact systems whilst maintaining acceptable milk yields.

Sean presented his work on veterinarian opinion regarding the acceptability of snake venipuncture at the ExoticsCon conference in August 2021, winning 2nd place in the poster contest. His supervisor Dr Curtis Eng wrote ‘I’m super proud of his work... We truly appreciate your support in his research and scholarship.’

And keeping with the snake theme, Ben has just had his work on looking at the impact of housing and husbandry on pet snake welfare accepted for publication in the May 2022 issue of *Animal Welfare*. Amongst his findings were that smaller enclosures are associated with an increased number of reported clinical symptoms and lower levels of cage enrichment and, that when given the opportunity, over 90% of snakes were reported by their owners to adopt straight-line positions, similar to previous research from zoological collections.⁽²⁾ ■

¹ Mutua, E.K. and Haskell, M.J., 2021. Factors contributing to milk yield variation among cows in a cow-calf contact system in early lactation. *JDS Communications*. <https://doi.org/10.3168/jdsc.2021-0143>

² BM Cargill, L Benato and NJ Rooney 2022 A survey exploring the impact of housing and husbandry on pet snake welfare. *Animal Welfare* 31(2).

For almost 40 years, UFAW Student Scholarships have provided an opportunity for students interested in animal welfare science to carry out a research project. Scholars, drawn from institutions that are part of the UFAW LINK scheme, are awarded up to £2400 to carry out study into an area of animal welfare and submit a report on their findings. To date over 400 students have received scholarships.

Farewell Wendy!

This year Wendy Goodwin retired from UFAW after an amazing 33 years of service to the Charity. Wendy will be greatly missed by all of us at UFAW and doubtless many of you who she has helped with grant applications, memberships and countless other issues over the years. We wish her a thoroughly well-deserved and relaxing retirement. ■



Providing Animal Welfare Advice to Government and Regulators

UFAW is a valued contributor to consultations carried out by government departments on the protection of animals under human care. Such consultations are often issued by the devolved nations of the UK and the European Union. As an international organisation UFAW contributes to EU consultations to the greatest extent possible. We provide considered and referenced answers to questions raised in these consultations, highlighting areas where knowledge is sparse, and hence more research needed. Recently we have responded to consultations on:

- Castration and tail docking in lambs (UK Animal Welfare Committee)
- Labelling products for animal welfare (DEFRA, UK)
- Sentience Bill (EFRA Select Committee, UK)
- Animal welfare legislation (EU)

In terms of animal welfare labelling of products, there are many barriers to overcome. Apart from differences among consumers in their priorities and purchasing power when they shop, there is often a lack of knowledge and absence of information at the point of purchase, lack of transparency or clarity what existing labels stand for, and a lack of clarity how standards are monitored. We provided detailed commentary on these problems and some potential solutions.

We were also very pleased to see the publication of a report on the sentience of crustaceans (crabs and lobsters) and cephalopods (octopus and squid) which concluded that these animals are sentient (they have feelings, both positive and negative, which matter to them). UFAW contributed to the call for evidence from the authors of the report and supported the conclusion that both crustaceans and cephalopods are likely to be sentient and deserving of protection. As a result of the report, the government intends to include these species in animal welfare legislation, which we welcome. ■

Student Mentoring Partnership

Following a successful pilot run, the UFAW Student Mentoring Partnership is set to continue for another year. Five new mentor/student pairings have been established between early career scientists experienced in carrying out animal welfare research, and either BSc or MSc students in the preliminary stages of carrying out their own project. Mentors will assist students in the initial planning stage of a project, to ensure a robust experimental design likely to lead to meaningful results.

One mentor pairing that UFAW will be supporting during 2022 is Sarah Robinah Nakabuye, a veterinary student from Makerere University, Uganda, and Neila Ben Sassi, a Research Associate from the University of Guelph, Canada. Neila wanted to be part of the scheme because: *"...I enjoy helping new researchers to thrive in the field of animal welfare research. I was well mentored in the past and I would like to give back to fellow and future animal welfare scientists through this mentoring program"*. Sarah hopes that having a Mentor *"will assist me in improving my knowledge and abilities in animal welfare research and related areas as an aspiring world-class animal welfare professional"*.

The 2022 cohort will also benefit from being part of an on-line group through which they will be able to network and gain support from each other.



If you are interested in participating in the scheme, please visit: ufaw.org.uk/mentor

COUNCIL NEWS

Notification for election to Council at the 2022 AGM

In accordance with Article 46 of the Constitution, members' nominations for election to Council at the AGM must reach the UFAW office between 7th September and 5th October 2022. Further information is available from the UFAW Secretary.

2022 Annual General Meeting

The AGM will be held in the afternoon of Wednesday 16th November 2022, at the UFAW office (The Old School, Brewhouse Hill, Wheathampstead, Herts). Full details will be sent to members in due course.

Council changes at the 2021 Annual General Meeting

Professor Andrea Nolan stood down from her role as a member of council. Dr Siobhan Abeyasinghe and Mr David Pritchard were re-elected to council. ■

Professor Ronald Anderson

During the past year we learned of the sad death of Professor Ronald Anderson who had been a long-time supporter of UFAW and a former Council member and Chair. Ron was a UFAW Vice-President and always supported UFAW and attended the AGMs whenever he could. Our condolences go to his family. ■

UFAW supports important animal welfare research and related activities through grants to researchers around the world. You can find out about the funding available at ufaw.org.uk/grants. Below is an update on some recent UFAW-funded research

Assessing wild penguin welfare



Many wild penguin populations are in decline, and in many cases their welfare is impacted by human activities. With support from UFAW, a team of researchers from Charles Sturt University, the British Antarctic Survey and the Royal Veterinary College (London) led by Professor Raf Freire examined the perception of penguin welfare in response to human impacts.

The researchers first undertook an analysis of the literature to identify the main threats to penguins, and asked participants to rate the impact of the identified threats on their welfare. Participants concurred that factors related to climate change, visitor disturbance, pollution, fisheries and disease all severely impacted penguin welfare.

Participants considered that short-term, high intensity events such as being temporarily trapped in a discarded fishing net had the most severe impact on welfare. Other, less-intense impacts such as mercury accumulation was considered to have a less severe, but longer term, impact on welfare.

The authors conclude that scientific knowledge of penguin biological responses is critical for informing public understanding and therefore accurate assessment of the impact of human activities on penguin welfare.

Freire, R., Massaro, M., McDonald, S., Trathan, P. and C.J. Nicol (2021). A citizen science trial to assess perception of wild penguin welfare. *Frontiers in Veterinary Science*, article number 698685.

<https://doi.org/10.3389/fvets.2021.698685> ■

Assessing and improving the welfare of elephants under human control

Dr Lisa Yon (Associate Professor in Zoo and Wildlife Medicine at the University of Nottingham) and colleagues at the Elephant Welfare Project have developed a tool for assessing the welfare of elephants under human control.

The *Elephant Behavioural Welfare Assessment Tool* allows keepers to quickly and easily monitor the welfare of individual elephants over time, based on their demeanour and behaviour. The tool has been a remarkable success and is now used by every facility which keeps captive elephants in the UK and at many others around the world.

UFAW co-funded the development of the tool into an app which makes it much easier for keepers to complete an assessment than the original paper-based method, allowing it to become even more widely used. The app is freely available to any facility around the world which keeps elephants.

We are delighted to see this innovative use of technology and animal welfare science making a real difference to the welfare of elephants around the world.



Credit: Lisa Yon



You can learn more at: elephantwelfareproject.org

Validating markers of cumulative experience in laboratory rhesus monkeys

In November 2021 Andrea Polanco presented and defended her PhD at the University of Guelph, Canada on *Behavioural Indicators of Cumulative Stress in Rhesus Monkeys*. With financial support from UFAW, she had been investigating whether stereotypic behaviour (abnormal repetitive behaviours such as pacing and head-twirling), self-injurious behaviour (harmful acts like self-biting), and depressive-like inactivity (such as immobile, slumped postures that may reflect depression-like states) are valid indicators of lifetime well-being in laboratory rhesus macaques. No indicators of cumulative stress are perfect, but Andrea did find that animals pulling out their own hair is a credible candidate, as it correlates with premature weaning, spending much time indoors, and with being alone. Congratulations to Dr Polanco on the award of her PhD. She has now gone on to take up a position at the animal advocacy organisation Faunalytics. ■

Identifying drivers of dog welfare in the home environment

Many studies have investigated attitudes of dog owners, but none have simultaneously and directly measured owner behaviour and dog welfare outcomes. Carmen Glanville from the University of Melbourne, Australia, is doing just that with support from UFAW. Carmen will be fitting activity monitors to both the dog and the owner, allowing her to track time spent in close proximity with the dog. These data will provide important information on the links between human and animal behaviour, allowing Carmen to identify the best targets for effective behaviour change.



Effects of sensory enrichment on calf welfare

We also supported Juliana Garcia Alvarez, a PhD student at Harper Adams University, who is investigating whether sensory enrichment in the form of odours can reduce the negative welfare impacts associated with early-life challenges in commercially reared dairy calves. ■

Reaching out to universities- the UFAW LINK scheme

The LINK scheme, our international outreach initiative of 130+ universities and research institutes, is one of the ways we promote animal welfare science. Any university with an active animal welfare research programme can apply to join the network, gaining access to targeted funds to support animal welfare initiatives and awards such as student scholarships. For further details, contact Dr Stephen Wickens - wickens@ufaw.org.uk

Inauguration of Nigerian university student animal welfare group

Federal University of Agriculture Abeokuta (FUNAAB), Nigeria (LINK: Dr Oluwaseun Iyasere)

One particularly active member of the LINK scheme is the Federal University of Agriculture Abeokuta. Co-ordinated by Dr Iyasere, with the assistance of her colleague Dr Samuel Durosaro, LINK scheme funds have been used to run several initiatives, such as a series of webinars on animal welfare and a recent visit to a local zoological park to find out more about the welfare issues zoos face and how they might help.

In November 2021, the FUNAAB Animal Welfare Student Club was formally inaugurated, with Dr Wickens in virtual attendance where he detailed ways in which UFAW can support the group. The enthusiasm and passion for the club, and for animal welfare, was very evident from the students, with poems written specially to celebrate the event.

Also in November, UFAW helped organised a session on zoo animal welfare at the FUNAAB Zoo Park, attended by zoo staff from Nigeria and further afield across Africa. Dr Katie Cronin (UFAW LINK at Lincoln Park Zoo, USA), and Dr Fay Clarke, Section Editor for Zoo Animal Welfare at UFAW's journal Animal Welfare gave talks on General Zoo Animal Welfare, Environmental Enrichment, and Enclosure Design. The sessions were chaired by Dr Iyasere and UFAW CEO Huw Golledge, who also introduced attendees to UFAW's work and the possibility of getting UFAW support for research into zoo animal welfare in Africa.

We look forward to continuing to support them and their activities. ■



Dr. Iyasere Oluwaseun Serah (fifth from right) and colleagues Dr. Durosaro Samuel Olutunde, Dr Ojelade Oluwaseun Christianah, Dr. Oduntan Oladapo Olukoya, Oyeniran Victor, Ismaila Emmanuel, Babalola Barnabas, Bomodeoku Gbolahan, Mudathir Sherif, Inakoju Abimbola

21st Annual Intercollegiate Animal Welfare Judging and Assessment Contest, USA

Long Island University College of Veterinary Medicine, USA (LINK: Dr Elena Contreras) and Atlantic Veterinary College, University of Prince Edward Island, Canada (LINK: Professor Mike Cockram)

This year marked the most successful participation by LINK universities in this international intercollegiate contest, run by the American Veterinary Medical Association.

Entering the competition for the first time, Long Island University (LIU) had instant success. LIU students, Tannaz Zafarnia and Magnus Yoshimura took 1st and 2nd place respectively in the individual veterinary student competition and LIU 1st place in the overall team contest.

Tannaz writes: *'The weekend-long activities kicked off ... with a virtual networking event that allowed us to learn from and engage with animal welfare experts from around the globe. We learned about intersectional "wicked animal welfare issues," coupled with their mitigation factors and possible, yet complicated, solutions... On Saturday, our group had to assess the welfare of boar studs at a production facility... Using science-based solutions, we presented our evaluation with suggestions for improving the humane treatment of the animals... On Sunday, we competed individually and separately compared the nuanced scenarios of research cats and psittacines as pets by defending our selection of the preferred scenario to judges with suggestions for improvement.*

Tannaz concludes *'Participating in this contest was the most formative experience of my academic veterinary career thus far!'*

Atlantic Veterinary College also enjoyed success, with their best placing of 4th in the overall team competition and 1st in the interactive team assessment.

Well done to all involved. ■

SPRING APPEAL – Helping grow animal welfare science around the world

We work hard to ensure that people worldwide have an opportunity to learn about and develop careers in animal welfare science. Expertise in animal welfare is often most needed in places where there is little opportunity to become an animal welfare scientist. Our LINKS scheme, mentoring partnership and many other activities are designed to enable animal welfare scientists around the world to grow their expertise and put it to work where it is most needed.

By contributing to this year's Spring Appeal you will enable us to offer more opportunities to people who would not otherwise be able to increase their animal welfare knowledge. We will use the money to support deserving international projects and to allow researchers from overseas to attend our meeting in Edinburgh. Having the opportunity to network with colleagues from around the world and benefit from their expertise is a much needed, but unaffordable opportunity for many animal welfare scientists in the developing world.

Thank you for your generous support.



Donate to the Spring Appeal at ufaw.org.uk/springappeal



How you can help

By supporting our work, you will help us to continue to use science to better understand animals and their needs. Because our work changes attitudes and legislation regarding how animals are cared for and treated, your support can help make real, practical and lasting advances to animal welfare throughout the world – a truly wonderful legacy. You can help by:

Becoming a member - membership is just £30 per year for individuals (excluding the journal *Animal Welfare*) and £10 per year for students.

Making a donation - large or small, your donation means a great deal to the lives of many animals, and is vital in helping us continue our work. You can pledge a monthly amount of your choice, or make a one-off donation.

Leaving a gift in your will - UFAW's work to reduce animal suffering and to improve animal welfare is only possible because of the generous support of those who leave a legacy. Gifts left in wills make up over 50% of our income, so every gift is extremely valuable to us.

Purchasing gifts from our gift selection - every purchase helps support and promote the work of UFAW.

If you'd like to become a member, renew your membership or make a donation now you can do so securely online – ufaw.org.uk/support

Other ways you can help:

Recruit a member - if you are already a member you could recruit a friend or colleague.

Support the University LINKs Scheme

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