

Universities Federation for Animal Welfare News-Sheet, Spring 2008



***Recent Advances in
Animal Welfare Science***
Conference to take place
in July 2008

***Garden Bird Health
Initiative***
Crucial role in
determining pathology
and impact of disease

Donkey Welfare Project
ACIN-Humane helps
Kenya's donkeys with
UFAW support

The Cavalier King Charles Spaniel
An example of how selection for particular traits
can have unforeseen serious side effects on welfare.
See 'Welfare and breeding' inside.

Science in the Service of Animal Welfare





Letter from the Chairman

It gives me great pleasure to report another year of progress by UFAW, reflecting the energy and commitment of the staff and Council. We have been reviewing the way in which the Federation reaches out to inform and engage with public opinion and one consequence of this has been measured expansion of the University Links scheme, including an assessment of how much might be achieved through links overseas.

The humane control of wild rodents is apposite in view of concerns that rats aboard a trawler which recently ran aground at St Kilda could devastate the island's sea bird colonies. Current methods based on poisoning with anticoagulants raise serious welfare issues.

The Garden Bird Health initiative is about to enter its fourth year, and it is important to secure resources to continue this fruitful programme. This year the Spring Appeal is for support of continuing research within this area and any help you can give will be put to very good use.

Finally, I would like to take this opportunity to congratulate Council Member Mike Radford, who was awarded the OBE in the New Year's Honours List for services to animal welfare law.

B R Howard

Darwinian selection, selective breeding and the welfare of animals. UFAW International Symposium 2009

UFAW is planning a major international symposium in 2009. This being the 150th anniversary of the publication of 'The Origin of the Species', it is appropriate that the subject of the Symposium is 'Darwinian selection, selective breeding and the welfare of animals'.

It seems likely that the brain states that embody the intensity and duration of consciously perceived *unpleasant* feelings such as fear and pain are closely regulated through evolutionary scrutiny because, for example, being either too fearful or not fearful enough would be detrimental to evolutionary fitness. Likewise, we would expect that Darwinian (natural) selection would act such that brain states associated with *pleasant* feelings are regulated to appropriately reward – neither too much nor too little – activities and states that promote evolutionary fitness.

What happens to these finely-engineered carrots and sticks – whose effects and interactions are no less than welfare (quality of life) itself – when selection is not for evolutionary fitness but for traits preferred by we humans in pursuit of ideal companion or laboratory animals, or of higher yielding farm animals? The aim of this symposium is to consider these and related issues. Please contact UFAW for further information or if you wish to contribute to the symposium.

2009 is also the 50th anniversary of the publication of 'The Principles of Humane Experimental Technique' by UFAW Fellows, William Russell and Rex Burch, and we plan to hold a reception at the Symposium to mark this.

photo: SXC/Renxx Garmider



Welfare and breeding

The Companion Animal Welfare Council's (CAWC) Report on the welfare consequences of selective breeding of companion animals (available at www.cawc.org.uk), drew attention to some serious welfare problems, for example syringomyelia – the formation of fluid filled cavities in the spinal cord due to a hereditary inadequacy of skull capacity. This disease commonly occurs in the Cavalier King Charles spaniel, and is associated with signs of chronic, and in some cases severe, neck pain in a proportion of affected dogs. CAWC made a variety of recommendations aimed at helping to address such problems and at preventing the emergence of further welfare problems.

It is almost two years since this Report was published and, as Chair of the CAWC working group on this subject, UFAW CEO James Kirkwood is planning a workshop to discuss progress in this field and to identify bottlenecks in the process towards improvements and how ways might be found to tackle these.

ACIN-Humane Donkey Welfare Project

During 2007, UFAW supported a number of projects promoting animal welfare through its Small Project and Travel Awards scheme. One of these was the Donkey Welfare Project organised through ACIN-Humane (Animal Care Initiative Network). ACIN-Humane is a Kenyan based organisation that promotes and facilitates humane care and protection of animals within Northern and Western parts of Kenya.

Donkeys play an important role within these regions as they are the main mode of transport for both people and goods, and are therefore vital to peoples' lives. However, a study by ACIN-Humane showed that misuse and abuse of donkeys by their owners was a result of lack of knowledge and poor design of carts and harnesses. To counter these problems UFAW funded an ACIN-Humane project in which they would educate donkey users, conduct donkey health care clinics and train village artisans to produce more suitable equipment. The project was very successful, with training workshops and donkey clinics being well received by the community, and many donkeys and donkey users benefited from the work and efforts of ACIN-Humane staff.



photo: courtesy ACIN-Humane

Finding ways to tackle a very major animal welfare problem

Around the world, we humans kill very large numbers of rodents in order to protect our food production and supply. As a result of human introduction of rodents to island and other ecosystems, very many other vertebrate species are now at risk of extinction and, increasingly, rodent control measures are essential aspects of species conservation programmes.

In terms of number of animals affected, and the intensity and duration of suffering caused, rodent control measures should come near the top of the list as a very major animal welfare problem. It is curious that whilst there is very great public concern about the humaneness of methods used to kill our food animals or animals used in scientific procedures, very little attention is given to the humaneness of killing rodents. The difference in our attitudes to the killing of whales and mice seems to match the ten thousand-fold weight difference between them but there is nothing about a mouse that gives good reason to think it can suffer any less than a whale.

James Kirkwood, with Katia van Driel and Dave Cowan, who are also members of the UFAW Working Group investigating ways of improving the humaneness of rodent control methods, attended an EC Biocides Technical Meeting in September to discuss possible approaches for the development of more humane control agents. The Group is also working to promote research in this field. Rodent control is likely to be an important aspect of managing human and wildlife interests for very many years to come, so finding more humane methods is a very major welfare priority.

Congratulations to Mike Radford, UFAW Council Member

UFAW Council Member and HSA Trustee Mike Radford was awarded the OBE in the New Year's Honours List for his services to animal welfare law. Mike is a Reader in the University of Aberdeen's faculty of law and in addition to his involvement with UFAW and the HSA is also a member of the Animal Welfare Science, Ethics and Law Board of the Royal College of Veterinary Surgeons and an honorary Vice-President of the Scottish SPCA.

UFAW is seeking funding for work to find ways to improve humaneness of rodent control methods. If you can help please let us know.



photo: SXC/Roman Olmezov

Research News

UFAW 3Rs Liaison Group

On the 5th October, industry and animal welfare members of the group met at the UFAW offices to hear presentations on progress by Anjie Harris (now entering the 3rd year of her PhD), and on forthcoming plans for their project due to start in January 2008 by Claire Richardson and Melissa Bateson. Claire Richardson plans to use a variety of measures to develop ways of objectively assessing distress in laboratory rodents undergoing regulated procedures. To avoid causing extra distress her studies will be carried out on rodents that are already undergoing unrelated procedures, and will use non-invasive techniques so as not to interfere with the primary study. One of these techniques will be the use of cognitive bias studies, a relatively novel technique that assesses the degree of 'optimism' or 'pessimism' of the animal, which may provide an indicator of the affective state of animals. Anjie Harris's work is already providing some useful data. Preliminary indications are that transport of rats at five weeks can impact on spatial cognition tasks, possibly as a result of stress. Future work will focus on the effects of the presence or lack of environmental enrichment on cognitive tasks. Such work will help us to provide better advice to scientists and regulatory bodies on the applicability of enrichment in scientific studies.

Small Project Award

Under UFAW's Small Project Award scheme, Emily Bethell of Roehampton University undertook a project entitled 'Interpretative bias in rhesus macaques, Macaca mulatta' as part of her PhD work. Following the project's successful conclusion, Emily has sent us this report:

Interpretative bias in rhesus macaques

The assumption that animals experience negative emotional states lies at the heart of the study of animal welfare. Work with humans indicates that our emotional states affect the way we view the world. Depressed and anxious people, for example, interpret in a more pessimistic way events that could result in either a positive or negative outcome, than do non-depressed or anxious individuals. The link between emotion and cognition, therefore, has a substantial impact on human welfare. Does the same link exist in other species and, if so, can we use methods adapted from work with humans to test this?

The aim of my research was to develop a visual operant

UFAW Hume Research Fellowship

Dr Johanneke van der Harst is now in the second year of her project. Johanneke is investigating the value of reward sensitivity as indicated by anticipatory behaviour, as a measure of welfare. Anticipatory behaviour, that is how animals' behaviour is changed prior to receiving an expected reward, is a relatively new field of research that may provide a genuinely new welfare measure. It is based on the hypothesis that animals in a state of poor welfare will show fewer anticipatory behaviour changes. A human example might be the child who has lost a parent might be much less excited than a generally happy child on being told that she is going to be given a treat. Johanneke's work suggests that there may be gender differences in the responses of rats with socially housed females being less sensitive to different housing conditions than males. Further work will be needed to determine whether this is because social housing meets most of their needs or because the measure needs to be more sensitive to detect differences in these animals.

photo: courtesy Lauren Brent



task to measure the effects of stress on captive rhesus macaques' interpretation of ambiguous information. By training monkeys to respond to stimuli presented on a touch sensitive monitor I was able to test monkeys' expectations of future

rewards (measured as a function of response tendency, and speed to respond). By manipulating the ambiguity of the stimuli, and by testing the same monkeys following stress-inducing husbandry procedures, and at other calmer periods, I was able to measure changes in expectation of reward and interpretation of ambiguous social cues in monkeys when in different states of stress.

Results from this research indicate that emotional state affects the way rhesus macaques interpret ambiguous signals, in a comparable manner to humans. Since emotion-regulated changes in cognitive processing have implications for the onset and maintenance of human anxiety disorders, a greater understanding of similar processes in other species may allow us to monitor captive animals better and to avoid the onset and continuation of stress-related pathologies.

10th UFAW Vacation Scholarship Meeting, Moulton College

UFAW's Vacation Scholarship scheme funds short research projects and is designed to encourage and develop students' interest in animal welfare science. The projects are funded for up to eight weeks and the annual meeting provides a platform for the students to gain experience of presenting and to discuss the findings of their studies. Since its launch in 1983, over 230 students have participated in the UFAW Vacation Scholarship scheme.

In December, UFAW University Links representative Dr Hannah Gauci and her team at Moulton College, Northampton, kindly hosted the 10th annual UFAW Vacation Scholarship Meeting. In addition to high quality presentations by the vacation scholarship students, UFAW Research Training Scholar Jessica Mettam (University of Liverpool) talked about her pioneering research into how fish detect pain and whether it is a welfare issue for them – work that has the potential to fundamentally change the way we

view and use fish. UFAW 3Rs Liaison Group student Verity Howell (University of Stirling) also discussed some of her work on reducing the stress of capture in laboratory primates through the use of positive reinforcement training.

The meeting proved very popular, with large groups of animal science students attending from a number of different institutions including Warwickshire and Bishop Burton Colleges, in addition to those from Moulton. One of the enjoyable elements of the day was the tour of the extensive and growing animal facilities at Moulton, including the dairy, equestrian centre and companion and small animal unit, all of which are only a few years old.

UFAW would like to thank everyone involved in making the meeting such a success, especially the scholars and the staff and students at Moulton for their hospitality. We hope to see many of you again at next year's meeting, which will be held at the University of Edinburgh in December.



James Kirkwood (third from left) with some of the year's vacation scholars. Scholars Hannah Schubert (top centre photo) and Lois Oulton (top right photo)

This year's Vacation Scholarship Meeting featured presentations of the work of eight of the year's UFAW Vacation Scholars and two Dorothy Sidley Award winners, a similar scheme run by UFAW's sister charity the Humane Slaughter Association. A diverse range of topics included: factors affecting lameness and milk yields in dairy cattle; the effect of human interaction on feral ponies; the effects of milk supplementation on naturally suckled piglets; and the effect of human contact on the parasite burden of the crested black macaque.



photos: clockwise courtesy Stephen Wickens; Hannah Schubert; Lois Oulton; Andrew Jonas; Lisa Pinno

Continuing success for garden bird project

The Garden Bird Health initiative's (GBHi) surveillance and research project is nearing the end of its first three years. The GBHi was set up by UFAW in 2005 and since then the apparently new disease syndrome of trichomoniasis in free-living finches has emerged in the UK. Through the research project it has been possible to study the clinical and pathological effects of the disease on these birds and to accurately chart its prevalence and spread.

Thanks to the data collected from the almost 1000 British Trust for Ornithology members who participated in this project, it appears likely that it will be possible to determine the impact of this disease on the UK greenfinch population (which has shown signs of decline since the disease began in mid 2006). Vets Andrew Cunningham and Becki Lawson who have been coordinating the project at the Institute of



photos: SXC/Michel Somsen

Zoology, and British Trust for Ornithology collaborators Mike Toms and Rob Robertson have started analysis of the data and hope to publish the first of the results during 2008.

The first years of the project have been a great success and efforts are being made to secure funding so that the project can continue. The ecological niches of garden birds overlap with ours, as do those of so many wild animals now, and this project harnesses the interests of many bird enthusiasts in researching how to best manage this situation for the birds' benefit.

Expanding the UFAW University Links scheme

Following a recent review of the UFAW University Links scheme, we have begun to expand the scheme to more universities, both within the UK and, as a trial, overseas. The intention is to try to ensure UFAW representation at as many as possible of those institutions which offer students the opportunity to learn about animal welfare.

The University Links scheme was launched in 2003 to encourage interest and engagement in animal welfare science, and in UFAW and its objectives. It currently consists of a network of 21 UK and 6 overseas university and college representatives to which UFAW offers support, and who distribute literature and information on UFAW's behalf.

UFAW welcomes the new representatives, including Professor Georgia Mason (University of Guelph, Canada), Professor David Fraser (University of British Columbia, Canada), Dr Jennie Litten (University of Reading) and Dr Debbie Wells (Queens University Belfast) and looks forward to supporting their activities.

In addition, as part of the overseas development of the scheme, we are offering students at these Link institutions the opportunity to apply for vacation scholarships.

Recent Link activities:

UFAW representatives at Bristol, Newcastle and Glasgow universities have joined forces this year to organise a weekend event for their post-graduate students. During this weekend students will present their animal welfare work to their peers and discuss issues arising from it. UFAW was happy to support this event following a trial last year, organised by the University of Bristol, which proved to be very successful and resulted in a fruitful exchange of ideas and techniques.

Primates and the Three Rs

Dr Robert Hubrecht has recently been asked to chair an Animal Welfare Advisory Committee for a European funded project (EUPRIM). EUPRIM aims to advance the Three Rs by networking European primate breeders, so that they can share training courses, examine opportunities for minimising primate use and develop good husbandry standards.

photo: Robert Hubrecht courtesy MRC



Recognition and Alleviation of Distress in Laboratory Animals

For the last two years Dr Robert Hubrecht, UFAW's Deputy Scientific Director, has been serving on a committee convened by the US Institute for Laboratory Animal Research (ILAR) that has updated guidance on the Recognition and Alleviation of Distress in Laboratory Animals. As ILAR notes: "This book aims to educate laboratory animal veterinarians; students; researchers, and investigators; animal care staff, as well as animal welfare officers on the current scientific and ethical issues associated with stress and distress in laboratory animals." It evaluates pertinent scientific literature to generate practical and pragmatic guidelines. Recognition and Alleviation of Distress in Laboratory Animals focuses specifically on the scientific understanding of the causes and the functions of stress and distress, the transformation of stress to distress, and the identification of principles for the recognition and alleviation of distress. Copies may be obtained from the National Academies Press: <http://www.nap.edu/> (Biology and Life Sciences) \$50.50.

Notification for election to Council at the 2008 AGM

In accordance with Article 46 of the Constitution, members' nominations for election to Council at the 2008 AGM must reach the UFAW office between 6th August and 3rd September 2008. Further information is available from the UFAW Secretary.

2008 Annual General Meeting

This year's AGM will be held in the afternoon of Wednesday 15th October 2008 at the UFAW office (The Old School, Brewhouse Hill, Wheathampstead, Herts). Full details of the time and business of the meeting will be sent to members in due course.

Recent advances in animal welfare science UFAW Animal Welfare Conference, 3rd July 2008

To support the increasing interest in the study of animal welfare and its science, UFAW is holding a one day conference on '*Recent advances in animal welfare science*' on 3rd July 2008 at the Council House, Birmingham. This meeting, which has already generated a lot of interest, will provide a forum at which the broad community of scientists, veterinarians and others concerned with animal welfare can come together to share knowledge and practice, exchange views and improve the way we understand and care for animals. Furthermore, to ensure that the meeting is accessible to the widest range of those working in the field of animal welfare, the registration fee to attend this conference is just £10.

The programme for this meeting has now been finalised. Amongst the subjects that will be covered by the meeting are the following:

- Humane killing
- Welfare assessment in individuals and/or groups
- Determining animal needs
- Diagnosis and alleviation of pain
- Assessment of animal management and husbandry practice

Further details, including a registration form and full programme, can be found on the UFAW website (www.ufaw.org.uk) and places are still available for those interested in attending.

UFAW would also like to thank Professors Mike Mendl and Innes Cuthill (University of Bristol), Dr Lesley Wiseman (University of Glasgow), Dr Melissa Bateson (University of Newcastle) and Dr Lynne Sneddon (University of Liverpool) for the assistance they have given so far with the organisation of this meeting.

If you have any questions about the 2008 conference then please contact: Stephen Wickens, Development Officer, UFAW, The Old School, Brewhouse Hill, Wheathampstead, Hertfordshire, AL4 8AN, UK.
Tel: +44 (0) 1582 831818; Email: wickens@ufaw.org.uk

Spring Appeal

*Help ensure the continuing success of the **Garden Bird Health initiative***

Established by UFAW in 2005, the Garden Bird Health initiative is approaching the end of its first three years. They have been very successful years. A popular booklet describing best practice in feeding garden birds has been published. A particularly important activity has been the study of the clinical and pathological effects of a major new disease outbreak in finches (trichomoniasis) and the accurate charting of its prevalence and spread. Over 1,000 members of the British Trust for Ornithology have participated in surveillance work, the results of which it is hoped to publish this year.

We now need to secure future funding so that this important initiative can continue its work in harnessing the energies and expertise of enthusiasts and researchers for the long term benefit of both the birds and our relationship with them.

If you would like to contribute please send a donation to the Spring 2008 Appeal at the UFAW office address. Many thanks!

Thanks to all those who contributed to the Autumn 2007 Appeal in support of the UFAW 'Farm Animal Handbook'.

Other ways you can support the work of UFAW

UFAW's work relies on the support and generosity of members and donors, and this support is greatly appreciated. In addition to our Spring and Autumn Appeals, here are some other ways you can help promote animal welfare and animal welfare science:

Become a member

Individual membership is just £10 a year (£5 for students). Corporate membership from £20 a year.

Recruit a member

If you are already a member, why not recruit a colleague or friend?

Support the University Links

There are currently 27 academic institutions worldwide represented. You can participate in their activities and help promote UFAW's objectives.

Subscribe to 'Animal Welfare'

The quarterly scientific and educational journal now has full online access and back issue search facility for subscribers.

Join our Regular Giving programme

Regular monthly donations greatly help us to plan UFAW activities.

Pledge a legacy

Over the years legacies have been extremely important to UFAW's work. An information leaflet on leaving a legacy is available free from UFAW.

Sponsor an activity

There are frequent opportunities to sponsor particular activities, events or projects of interest to institutional or corporate organizations.

Shop at UFAW

Choose from our exclusive range of clothing, stationery, gifts and cards that also help promote UFAW. Ask for a brochure or visit www.ufaw.org.uk

For more information on any of these contact the UFAW office:



The Universities Federation for Animal Welfare
The Old School, Brewhouse Hill, Wheathampstead, Herts. AL4 8AN, United Kingdom
Tel: +44(0)1582 831818, Fax: +44(0)1582 831414
Email: ufaw@ufaw.org.uk www.ufaw.org.uk
Registered in England, Charity No. 207996, Company Limited by Guarantee No. 579991