

*Science in the Service
of Animal Welfare*

**Universities Federation
for Animal Welfare
Annual Report 2007-2008**

The Universities Federation for Animal Welfare

The Universities Federation for Animal Welfare, founded in 1926, is an internationally recognised, independent, scientific and educational animal welfare charity concerned with promoting high standards of welfare for farm, companion, laboratory and captive wild animals, and for those animals with which we interact in the wild.

It works to improve animals' lives by:

- Promoting and supporting developments in the science and technology that underpin advances in animal welfare
- Promoting education in animal care and welfare
- Providing information, organising meetings, and publishing books, videos, articles, technical reports and the journal *Animal Welfare*
- Providing expert advice to government departments and other bodies and helping to draft and amend laws and guidelines
- Enlisting the energies of animal keepers, scientists, veterinarians, lawyers and others who care about animals

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MRI scan of CKC Spaniel p4 courtesy of Clare Rusbridge.
Pigs p7, sheep p10, swans p11 Bluemoondog Pictures.
Blackbird p9 Jade Spence.
Zoo Outreach p9 courtesy of the Zoo Outreach Organisation.

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Tel: +44 1582 831818 Fax: +44 1582 831414
Website: www.ufaw.org.uk Email: ufaw@ufaw.org.uk

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Letter from the Chairman

It always gives me pleasure to look back at UFAW's achievements at the end of each year, and on this occasion it is particularly satisfying to report recognition in the Queen's Birthday Honours List of James Kirkwood, Chief Executive & Scientific Director, with the OBE for services to animal welfare.

This year we have consulted members on our activities, following which several new initiatives are being introduced, including, for example, the new Companion Animal Welfare Award. Another initiative in companion animal welfare recently underway is work to develop a website to provide pet owners with information about the effects of inherited disorders on the quality of animals' lives. Work continues on many other fronts, including running the well-established student Vacation Scholarship scheme and this year, the Professor William Russell Fellowship which honours his work at UFAW with Rex Burch that culminated in the seminal text *'The Principles of Humane Experimental Technique'* in 1959. Staff have also been busy organising conferences including the inaugural Animal Welfare Conference in Birmingham, promoting the University Link scheme which now embraces several overseas institutions, and a range of publications, notably the journal *'Animal Welfare'* and new editions of the Farm Animal and Laboratory Animal Handbooks.

You will read more about these and other initiatives in this report and, as always, we welcome your comments and suggestions.

A handwritten signature in black ink that reads "B R Howard". The signature is written in a cursive style and is placed on a light-colored background.

Bryan R Howard

Chief Executive's Report



In 1926, Major Charles Hume sowed the seed that became UFAW, to advance his far-sighted idea of applying a scientific approach to tackling welfare problems. No doubt he would be very delighted to see how dramatically animal welfare science, and the practical care of animals and changing attitudes stemming from it, have developed in recent years. He played a very key role in preparing the ground for this. He was a remarkable man and his writing and ideas reflect a wise and kind nature and a very thoughtful and scholarly approach. The influence of his ideas and philosophy, as outlined in the excellent collection of essays entitled 'Man and Beast' (Hume, 1962), continues to grow and bear fruit.

It is part of UFAW's objects in the promotion of humane behaviour towards animals (as set out in the rather old-fashioned wording of its governing document in 1958), to '*enlist the energies of members of universities, professional men and women and all others who work with, are responsible for, or care about animals*'. It is a great strength of the charity in pursuit of its aims that, as is apparent from this Annual Report, there are so many who have become part of the enterprise in this way. On behalf of the charity, we are most grateful to all those who support UFAW and its work in the UK and around the world.

A handwritten signature in black ink, which appears to be 'James K Kirkwood'. The signature is fluid and cursive, with a large initial 'J'.

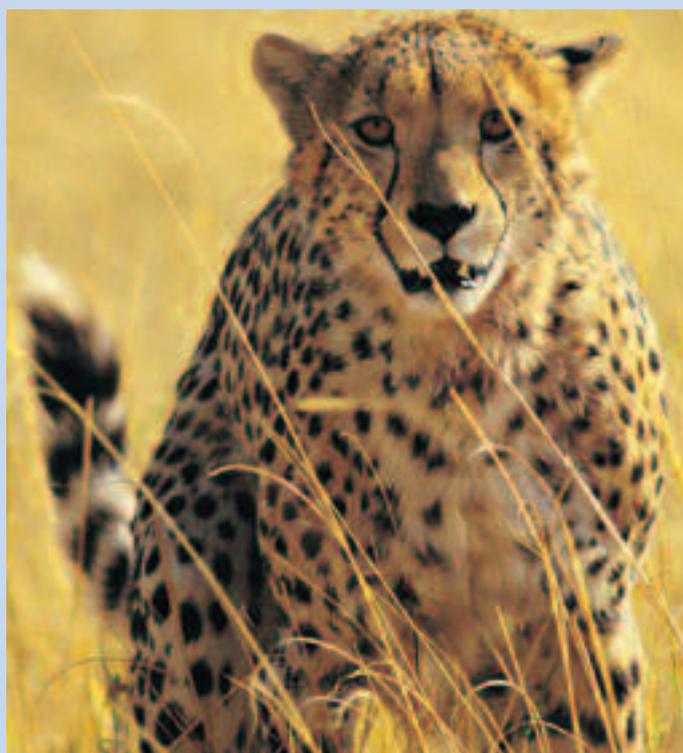
James K Kirkwood

Member Survey

Many thanks to all those members who participated in the recent member survey. The survey was undertaken to help UFAW keep informed of members' views on various aspects of the charity's work and to help us 'spread the word' to potential new members.

Nearly a third of members completed the survey and provided some very useful information to take forward. It is gratifying that members were very happy with what UFAW is doing and how it works, and it is pleasing to note the sense of 'community' in support of the charity's objectives that emerged from responses.

However, some very helpful and constructive suggestions were made also, and we will be looking in detail at these. Some of the suggestions have already been acted upon. For example, we have begun the process of investigating ways to establish a facility for membership subscriptions and other transactions on-line. Another suggestion was to introduce a Companion Animal Welfare Award. As you will see later in this Annual Report, this has now been done and we will be calling for applications later in 2008. Expansion of the University Links and the Vacation Scholarship schemes to overseas institutions, and the inclusion of educational projects in the Vacation Scholarship scheme are also underway following the survey.





UFAW introduces a Companion Animal Welfare Award

One of UFAW's main priorities is to promote and support high quality science that will lead to substantial advances in animal welfare. In harmony with this, much of UFAW's work involves managing grant and award schemes, either enabling individuals to conduct animal welfare research, or rewarding organisations that have shown significant activity in improving animal welfare.

This year UFAW is launching a new award to recognise significant advances made in the welfare of companion animals. This new Companion Animal Welfare Award will be an annual competition and one which has a wide remit. It will be open to all individuals and organisations working in the field of companion animal welfare science such as research scientists, veterinarians, and others. UFAW will be keen to receive applications on topics such as: tackling genetic welfare problems; detection and alleviation of pain; diagnosis and control of painful diseases. The winner will receive £1,000 together with an award certificate.

For further information about the UFAW Companion Animal Welfare Award, or to download an application form, please visit: <http://www.ufaw.org.uk/CAWA.php>
Email scioff@ufaw.org.uk, fax 01582 831414 or telephone 01582 831818.

Staff Publications

Clausing, P, Baumans, V., Gyger, M., Hubrecht, R., Reber, A., Vitale, A. & Wyffels, E. (2007) Standardisation of Environmental Enrichment. Felasa iclas **Joint Meeting Abstracts**. p 26.

Hawkins, P, Thornhill, A., Grant, G., Burgun, P, Ashley, P, Millum, C., Hubrecht, R., Curtis, K. & Jennings, M. (2008) Report of the 2007 RSPCA/UFAW Rodent Welfare Group meeting. **Lab Animal Europe** 8: 46-53.

Hubrecht, R. (2008) Information Resources on the Care and Welfare of Dogs. Available from the United States Department of Agriculture website <http://www.nal.usda.gov/awic/pubs/Dogs/dogs.shtml>

Kirkwood, J.K. (2008) Salmonellosis in songbirds. In Fowler, M.E. & Miller, R.E. (Eds) **Zoo and Wild Animal Medicine: Current Therapy** 6. Saunders Elsevier. Pp 166-169.

Kirkwood, J.K. (2008) Metabolic bone disease; Twisting and bending deformities of the long bones in growing birds; Slipped tendon, angel wing and rolled toes; and Inanition. In Samour, J. **Avian Medicine** (Second Edition), Mosby Elsevier, London. Pp 255-262.

Kirkwood, J.K. & Cunningham, A.A. (2007) Portrait of prion diseases of zoo animals. In Hörnlimann, B., Riesner, D. & Kretzschmar, H. (Eds) **Prions in Humans and Animals**. De Gruyter, Berlin & New York. Pp 250-256.

Kirkwood, J.K. (2007) Introduction – quality of life: the heart of the matter. **Animal Welfare** 16(s), 3-7.

Lawson, B., Cunningham, A., Chantrey, J., Hughes, L., Kirkwood, J.K., Pennycott, T. & Simpson, V. (2006) Epidemic finch mortality. **Veterinary Record** 159, 367.

Ward, P.A., Blanchard R., Bolivar, V., Brown, M.J., Chang, F., Herman, J.P., Hubrecht, R., Lawson, D.M, Maier, S.F, Morton, D., Niemi S.M., Novak, M.A. & Zawistowski S.L. (2008) Recognition and Alleviation of Distress in **Laboratory Animals**. Institute for Laboratory Animal Research, Washington USA.

The Garden Bird Health Initiative

Since the UFAW Workshop that started the ball rolling in July 2003, the Garden Bird Health Initiative (see details on the UFAW website), has grown into a remarkably successful 'citizen science' project. It is harnessing the public's interests in, and fondness of, wild birds to provide a disease surveillance system and to enable the study of the epidemiology of threats to welfare and to populations. This is thanks to the very generous support received from, among others: CJ WildBird Foods; Gardman Ltd; Cranswick Pet Products; the Birdcare Standards Association; the Institute of Zoology; RSPB; the British Veterinary Association Animal Welfare Foundation; and Defra; and to the collaborative efforts of the many scientists, veterinarians, and others involved. The surveillance and research project being coordinated at the Institute of Zoology has provided opportunities and samples for the investigation of many aspects of garden bird health (for example MSc student projects into the pathology of salmonellosis in House Sparrows and Greenfinches). Papers on various aspects of the project are being prepared for publication and we are very pleased to have been able to raise sufficient funds (just) to enable the project to continue into its fourth year.

Plans are being explored to organise an international conference on the increasing complexity of our interactions with garden birds and how this may inform approaches to human/wildlife interactions in general for the benefit of conservation and welfare.

Welfare improvements in rodent control

This is a tough nut to crack. There is a need for major funding to research and develop better – more humane – chemical rodenticides, but very little public pressure to help drive funds in this direction. Rats and mice have a serious image problem – many people see them as pests and seem not to be very concerned about how they are got rid of as long as got rid of they are. UFAW is continuing to promote the need for research in this area – because in terms of numbers of animals affected, severity and duration of suffering, it is a very major animal welfare problem – and to explore how this might be encouraged and funded.

Even developing advice about the most humane methods to use is far from simple because there is very little information available on the effects of various methods. Traps can be humane if they kill instantly but there is, at present, no requirement for traps to be tested or to meet certain standards prior to sale. There is the risk that they may not always kill swiftly but, instead, catch some animals by their limbs. The UFAW Working Group on rodent control is working on guidance for the public on humane methods and we hope to be able to publish on this in the near future.

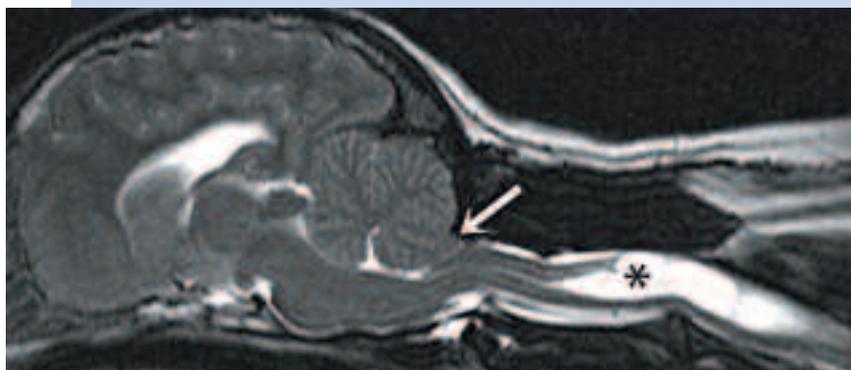


Information resource on genetic welfare problems in companion animals

It has become clear that selective breeding for specific traits – aspects of morphology or behaviour – in companion animals has led to many welfare problems. Some of these problems are very serious in so much as they can cause severe chronic pain or discomfort and can affect large numbers of animals, generation after generation. One example is syringomyelia in the Cavalier King Charles (CKC) Spaniel, which can cause severe chronic head and neck pain in affected animals (the consequences of, in short, the brain being too large for the skull). Such welfare problems are certainly,

however, not just limited to dogs but occur in a very wide range of companion animals from fish to mammals. The pet buying public has a very important role to play in helping to eradicate genetic diseases and poor welfare traits. If no-one bought animals of breeds or breed lines affected by such problems, the disease-prone lines would be replaced by their healthier cousins.

MRI scan of CKC spaniel showing where the back part of the brain is pushed into the spinal canal (arrow) resulting in syringomyelia – fluid filled cavities in the spinal chord (asterix). The dog had a three-month history of yelping and scratching at the right shoulder.



UFAW thinks that making available clear information on the welfare consequences of hereditary diseases and poor welfare traits is key to tackling this problem. The charity is investigating the possibility of developing a website that will include information not just about the physical effects of various genetic conditions but also on their impact, for example through causing pain or discomfort, on the animal's quality of life. This will give pet owners the information they need to inform their choice of breed and of responsible breeders that they can obtain them from.

We hope to start work on this project shortly and will be seeking funds to support this large and important project.

The welfare of animals under human care depends upon:

- Belief in the sentience of the animals
- Understanding that this is morally important
- Having proper knowledge of the animals' needs
- Having the ability and resources to meet these needs
- Applying these beliefs, abilities and resources conscientiously

UFAW's efforts are focused largely at the third of these points – improving knowledge of animals' needs. It is now accepted widely, although it was not always so, that a broad range of species of animals are sentient – that is, that they have the capacity to experience unpleasant and pleasant feelings.

For many species, including some companion and farm animals, knowledge of environmental and psychological needs and how these needs can be recognised and met – minimising unpleasant and maximising pleasant feelings – remains less complete than is often assumed, and a great deal of both fundamental and applied research remains to be done in these areas.

UFAW's varied grant schemes to fund animal welfare science allow us to support projects ranging from small pilot studies through to high quality post-doctoral research. It has often been difficult for scientists to obtain funding in animal welfare science, but our efforts, with your generous support, have helped to educate and support a growing number of highly respected animal welfare scientists who not only carry out the necessary research but are a source of expert advice to individuals, institutions and Government.

A few UFAW-funded projects are outlined here to demonstrate the Federation's current research interests.

The Hume Animal Welfare Fellowship

The current holder of this award, Dr Johanneke van der Harst, has continued her research into the value of anticipatory behaviour as a measure of welfare. The underlying hypothesis is that animals may behave similarly to humans in that depressed people respond less positively to positive events. If animals respond similarly then measuring their response to such events might prove to be a valuable new welfare measure. Dr van der Harst's work has indicated that different rat strains respond similarly which is an encouraging result as it indicates that the measure may have broad applicability, and may even be suitable for other species. A more surprising result has been that previous housing conditions did not have an effect on the reward sensitivity of female rats (whereas it did in males). As she suggests this could indicate that the housing conditions are meeting the needs of the females, or perhaps females are responding in a fundamentally different way to males.

Improving our understanding of fish welfare

The issue of fish welfare has been an area of increased interest and activity in recent years and UFAW has been at the forefront of supporting this work. Evidence that fish are consciously aware of the feeling of pain and can suffer is giving impetus to re-examination of current practices relating to fish and efforts to minimise or alleviate sources of pain.

At the UFAW conference held in July 2008 in Birmingham we were pleased to hear a presentation from UFAW Research Training Scholar Jessica Mettam of Liverpool University describing the progress she is making in her studies of pain perception in fish. Lois Oulton, also from Liverpool University, was a UFAW Vacation Scholar in 2007 and her study 'Welfare issues in fish: the interplay of pain, fear and stress?' investigated whether stress induced analgesia could be detected in fish.

Dr Robert Hubrecht, UFAW's Deputy Director, is a member of the Animal Procedures Committee (APC), serves on several sub-committees and chairs the Housing and Husbandry Sub-Committee. This sub-committee has been enquiring into the welfare of fish used in research. As a first stage the committee has sent questionnaires to users regarding fish husbandry and humane endpoints, and is now examining Schedule 1 methods of humane killing of laboratory fish.



UFAW Research Training Scholarship – Broiler Breeder Welfare.

The UFAW Research Training Scholarship Scheme provides PhD level training for promising young veterinary or science graduates keen to pursue a research career in the field of animal welfare. This year, UFAW awarded the scholarship to Louise Buckley at the Scottish Agricultural College (SAC). Louise will be researching into an issue that affects the parent stock of broilers (chickens produced for meat). The parents of these birds are given restricted amounts of feed as they grow to sexual maturity because broilers are selected for rapid growth, and with unrestricted feeding the parent birds grow too large, become obese and have various reproductive and health problems leading to higher mortality. Once their small daily meal is finished, they show stereotypic pecking at empty feeders and other substrates, indicating hunger and/or frustrated foraging responses. Growth restriction could also be achieved by feeding food of lower nutrient density and Louise's project will examine whether the animals express a preference for higher quantity/lower nutrient density food or the traditional reduced food ration.

The Professor William Russell Fellowship

In honour of Professor William Russell (who died in 2006) and his work with Rex Burch at UFAW that led to the publication of the 'The Principles of Humane Experimental Technique' in 1959, UFAW called, during the year, for applications for this special fellowship. The three-year post-doctoral fellowship will provide the successful candidate with the opportunity to undertake research aimed at making a substantial contribution to the welfare of animals used in scientific procedures.

The winner of this Fellowship is Dr Joseph Garner of Purdue University, West Lafayette, USA, for his project entitled: 'Refinement of mouse husbandry: does nesting material allow mice to cope with the chronic cold stress of standard housing conditions, and what are the practical benefits in terms of physiological variability and animal welfare?'. In his project, which Dr Garner aims to start in July 2008, he will be investigating the ambient temperature preferences of mice and bedding needs for their thermal comfort. UFAW congratulates Dr Garner and wishes him well for this important work.

UFAW 3Rs Liaison Group

UFAW established and runs this group in which pharmaceutical companies, contract research organisations, animal breeders, and animal welfare organisations collaborate to fund animal welfare studentships on laboratory animal welfare. Five studentships have been funded since start-up and UFAW, with other members of the group, are currently supporting three of these – two having been completed. The initiative helps to provide young animal welfare scientists with a very good understanding of the practicalities of commercial research. This year saw the start, in January, of a project to develop methods of objectively assessing distress in laboratory rodents undergoing regulated procedures. Claire Richardson will use non-invasive methods, including cognitive bias techniques, to assess animals undergoing licensed procedures for other projects. UFAW is very grateful for the generous support of the 3Rs Liaison Group members.

Members of the UFAW 3Rs Liaison Group

Aptuit	Novartis
AstraZeneca	Pfizer
Charles River UK	RSPCA
Covance	Sanofi-Aventis
GlaxoSmithKline	
Harlan UK	
National Centre for the Three Rs (NC3Rs)	

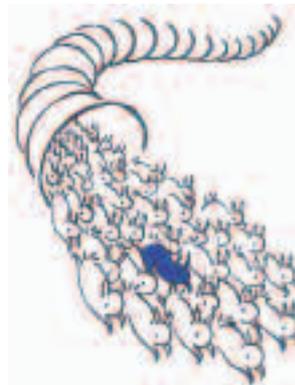


Lack of information about, and poor understanding of animals' needs, and the inability to detect and evaluate both negative and positive aspects of welfare – pain and pleasure – are at the root of many animal welfare problems.

UFAW promotes education in animal welfare science, largely at university and college level, to help address these difficulties – helping to teach those who will become the teachers in the future. Ways that UFAW does this include:

- Publication of the journal *Animal Welfare*
- Publication of key texts on animal welfare (eg The UFAW Handbook on the Care and Management of Laboratory Animals, and the UFAW / Wiley-Blackwell Animal Welfare Series)
- Running workshops and symposia
- Lecturing at universities and colleges
- Running the Vacation Scholarship scheme to enable students to develop their interest in animal welfare science
- Running the Research Training Scholarship scheme to provide training in animal welfare research
- Providing financial support for other educational initiatives

Some examples of the educational work undertaken or supported by UFAW are outlined here.



Darwinian selection, selective breeding and the welfare of animals: UFAW International Symposium 2009
University of Bristol,
22nd -23rd June 2009.

2009 marks the 150th anniversary of the publication of Darwin's 'On The Origin of Species' and in recognition of this anniversary, UFAW is planning a two-day international symposium that will explore the impact that selection pressures, both natural and artificial, have on animals and their welfare.

It seems likely that the states of the brain 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 states of the brain 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, entitled 'Darwinian selection, selective breeding and the welfare of animals', is to consider these and related issues.

The symposium is the latest in UFAW's continuing and successful programme of themed international meetings that bring together leading scientists, veterinarians, policy makers and all those with an interest in animals and their welfare. It will take place on the 22nd-23rd June 2009 at the University of Bristol.

If you wish to contribute to the symposium or for further information, please contact UFAW. Information and updates on the symposium will also be found on the UFAW website.

UFAW Farm Animal Handbook

Work has continued on an updated UFAW Farm Animal Handbook which is being edited by Professor John Webster of Bristol University. This has been, and we hope will continue to be, an important resource for veterinary students. As in previous editions most chapters will deal with farm animal management and welfare on a species basis. However, this new edition will, for the first time, feature four new chapters dealing with general concepts and practice in relation to the promotion of welfare through good husbandry.

The UFAW University 'Link' Scheme

The UFAW 'Link' scheme, which was launched in 2003 with the aim of encouraging interest and engagement in animal welfare science, and with UFAW and its objectives, continues to go from strength to strength. It presently consists of a network of 19 UK and 9 overseas university and college 'Link' contacts to which UFAW offers support, and who distribute literature and information on UFAW's behalf. UFAW plans to expand the scheme further, both in the UK and overseas. If you are interested in becoming such a 'Link' person for your university and assisting UFAW in this way, then please contact us (ufaw@ufaw.org.uk).

Some examples of recent 'Link' activities supported by UFAW:

University of Guelph, Canada held the inaugural Campbell Centre for Animal Welfare 'Research Day'.

Unitec, New Zealand hosted a public lecture on "Animal Welfare: Who cares and what do we do about it?" by Professor Alistair Lawrence of the Scottish Agricultural College (SAC).

Universities of Bristol, Edinburgh and Newcastle held a 'Discussion weekend' for post-grad students from the Universities of Bristol, Edinburgh and Newcastle to present and discuss their work with their peers.

Writtle College hosted the third 'Student Animal Welfare Conference' for students attending Writtle, Hartpury and Moulton Colleges.

Full information on these and other link activities can be seen on the UFAW website.

We would like to thank all of our 'Links' for their efforts on behalf of UFAW.



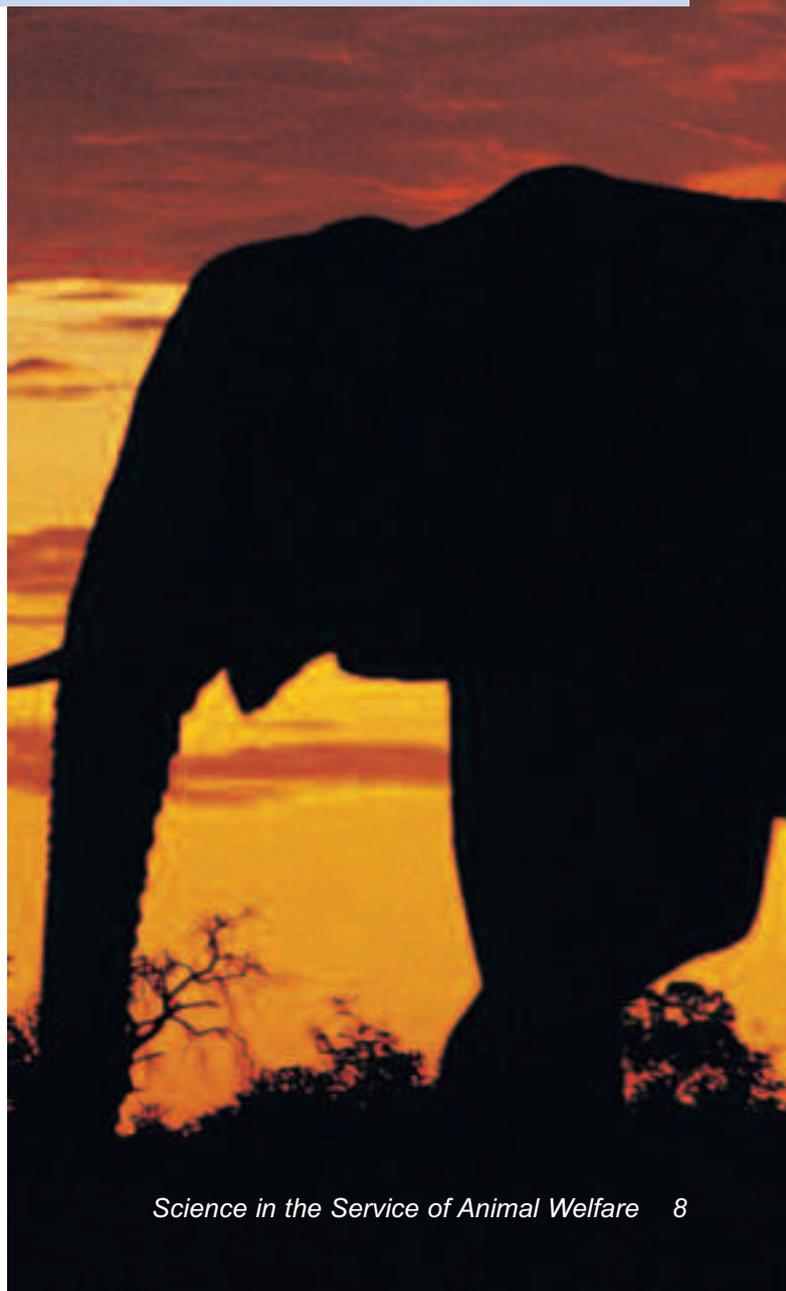
Professor David Butcher, Principal of Writtle College introducing the 'Student Animal Welfare Conference'.

Recent advances in animal welfare science: UFAW Animal Welfare Conference

The inaugural UFAW Animal Welfare Conference was held at the Council House, Birmingham on 3rd July 2008. One hundred and eighty delegates from 12 countries attending this sold-out meeting listened to talks on a diversity of subjects, from cognitive bias as a welfare indicator in starlings and dogs, detection and alleviation of pain in fish, to the welfare of elephants in UK zoos. Abstracts of all the conference presentations can be seen on the UFAW website.

The most important aim of the conference was to provide a forum for the broad community of scientists, veterinarians and others concerned with animal welfare to share knowledge and practice, exchange views and improve the way we understand and care for animals. The low cost of this conference seemed to be one of the contributing factors to achieving this, allowing as it did students and others beginning their career in welfare to attend. It is our intention that this conference, which complements the larger themed symposia that UFAW organises and the annual vacation scholarship meetings and acts as a bridge between them, becomes a feature of the 'animal welfare calendar'.

UFAW would like to thank the Science Group of the Royal Society for the Prevention of Cruelty to Animals and Charles River UK Limited for their kind support of the meeting, those who assisted with the organisation of the conference, including the staff of Birmingham Council House, and who acted as referees or chaired a session. These include Dr Charlotte Nevison (Anglia Ruskin University), Professors Mike Mendl and Innes Cuthill (University of Bristol), Dr Lesley Wiseman (University of Glasgow), Dr Jonathan Cooper (University of Lincoln), Dr Lynne Sneddon (University of Liverpool) and Dr Melissa Bateson (University of Newcastle).





UFAW Laboratory Animal Handbook 8th Edition

Since its first edition in 1947 The UFAW Laboratory Animal Handbook has provided up-to-date advice on the care, husbandry and humane handling of the wide range of animal species used in research. It has been used as a source document by policy makers when new Codes of Practice have been developed and, when first published, it catalysed the formation of a professional body for animal care staff. It is now nine years since the publication of the last edition. Since then there have been dramatic changes in animal use including the rapid growth in the use of genetically modified animals. There have also been continuing advances in animal welfare science. Therefore, over the last year, work has continued on the production of the 8th edition of this market leading publication. The aim is for this edition to be published in 2009.

UFAW SAWI Fund

UFAW's SAWI Fund is for the promotion of animal welfare in Israel. For many years this fund (originally as the the Society for Animal Welfare in Israel and in recent years as the UFAW SAWI fund) has supported animal welfare training and other activities at animal welfare centres in Israel. The Fund has also supported animal welfare research projects including a vacation scholarship project for an Israeli veterinary student. The development of animal welfare science (investigating animals' needs and how these needs can be met) has been a major factor in advancing animal welfare around the world and we have been exploring ways to help further promote this science in Israel, including considering the possibility of providing some funding to part support an animal welfare science post at a suitable university department in Israel. We plan to pursue this idea in the coming year.

ZOO Outreach

For a number of years UFAW has supported various research and educational programmes instigated by the Zoo Outreach Organisation (ZOO). ZOO is an active animal welfare and conservation organisation based in India, although the work that they do spreads across much of South Asia.

The last year has proved to be another industrious time for ZOO. Activities supported by UFAW included a five-day conference on zoo legislation, policy and inspection: the Eighth Annual South Asian Zoo Association for Regional Cooperation (SAZARC). Participants included government, veterinary and zoo personnel from Bangladesh, India, Nepal, Pakistan, South Africa, Sri Lanka and the United Kingdom. The event proved valuable to all who attended and it is hoped that the network connections made and the knowledge gained will assist with progressing zoo animal welfare in all of these countries.

Another successful project undertaken by ZOO was Animal Welfare Fortnight (AWF). AWF is an annual event in the ZOO calendar and the focus this year was on raising the profile of amphibians. Twenty-five institutions and educators took part and distributed almost 2500 sets of educational material to teachers, zoos, forest divisions, other animal welfare organisations and universities throughout India.



UFAW Vacation Scholarships

This year has seen a very exciting development with the UFAW Vacation Scholarships being opened up, for the first time, to overseas students. Initially, these scholarships are being offered to students attending universities where UFAW has an overseas 'Link' liaison/contact person.

We would therefore like to congratulate Mona Wendelin of the Estonian University of Life Sciences, and we hope that her scholarship will further her interests and opportunities in animal welfare science.

Congratulations to the 2008 Vacation Scholars:

Ashleigh Brown, University of Edinburgh, 'Effect of environmental enrichment in the form of a foraging device ('Edinburgh Foodball') on expression of abnormal repetitive behaviour (ARB) in the captive sloth bear (*Melursus ursinus*)' supervised by Dr Christine Moinard.

Jessica Hardiman, University of Lincoln, 'Space requirements needed to perform a specific behaviour in the domestic rabbit (*Oryctolagus cuniculus*)' supervised by Dr Jonathan Cooper.

Kirsty Inglis, University of Glasgow, 'Validating the use of DNA from non-invasive samples for Major Histocompatibility Complex (MHC) analyses in conservation animals; supervised by Dr Barbara Mable.

Jennifer Jamieson, University of Edinburgh, 'The impact of early life stress on responses to castration and tail-docking in young lambs' supervised by Dr Joanna Murrell and Dr Corinna Clark of the University of Bristol.

Janina Mukanowa, Royal Holloway and Bedford New College, University of London, 'A pilot study to investigate the possibility of using the social amoeba *Dictyostelium discoideum* to identify emetic liability of new chemical entities' supervised by Dr Robin Williams.

Rowena Packer, University of Bristol, 'Quantifying the benefits of ranging behaviour in individual laying hens' supervised by Professor Christine Nicol.

Michael Petri, Anglia Ruskin University, 'What is enriching about enrichment? Investigating properties of materials used in enrichment for pigs' supervised by Dr Charlotte Nevison.

Laura Pratola, University of Glasgow, 'Detection of hearing impairment and assessment of cochlear status in the dog using transient evoked and distortion product otoacoustic emissions' supervised by Dr Jacques Penderis.

Victoria Ratcliffe, University of Nottingham, 'Mother-offspring vocal recognition in cattle' supervised by Dr Alan McElligott.

Cyril Rayappan, University of Edinburgh, 'Assessing the efficacy of a behavioural pain assessment protocol in working donkeys suffering from chronic injuries before and after provision of NSAID's' supervised by Dr Fritha Langford.

Lydia Tong, University of Cambridge, 'Using fracture classification to distinguish between accidental injury and non-accidental injury in dogs and cats' supervised by Dr David Williams.

Mona Wendelin, Estonian University of Life Sciences, 'The pain markers in horses recovering from laminitis' supervised by Dr David Arney.

Lorna Wilson, University of Oxford, 'Statistical examination of latency to choose as a measure of laying hen welfare' supervised by Professor William Browne of the University of Bristol.

11th Annual Vacation Scholarship meeting

UFAW is currently exploring venues for the 11th Annual Vacation Scholarship Meeting to be held in December 2008. As usual the meeting will be free to all to attend, and lunch and refreshments will be provided. Details will be posted on the UFAW website as soon as they are available.

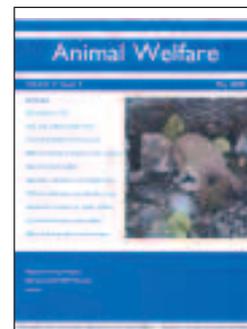
Animal Welfare, the Journal

Animal Welfare, now in its 17th year, has become a well-established journal. We believe it is a significant force in promoting a rational, science-based approach to animal welfare around the world. It is a major component of UFAW's educational programme. The journal is taken up by institutional (mainly university and college libraries) and individuals in 38 countries. During the year, we have welcomed three new Section Editors to the Editorial Board: Professor David Mellor of Massey University for the General Animal Welfare section; Professor Christine Nicol of Bristol University for the Farmed Mammals and Fish section; and Dr Christoph Schwitzer of the Research Department at Bristol Zoo Gardens for the Zoo Animals section.

We are most grateful to Professor David Fraser (University of British Columbia) and Dr Berry Spruijt (University of Utrecht) who stood down from the Board after many years of service and to all our current Section Editors:

Jann Hau, Denmark - Laboratory animals
Kate Littin, New Zealand - Wildlife
David Mellor, New Zealand - General animal welfare science
Joy Mench, USA - Poultry
Daniel Mills, UK - Companion animals (other than dogs and cats)
Christine Nicol, UK - Farmed mammals and fish
Peter Sandoe, Denmark - Ethics, philosophy and social science
Christoph Schwitzer, UK - Zoo animals
Dennis Turner, Switzerland - Companion animals (dogs and cats)

We also thank the many supporters of the journal that peer review submitted manuscripts.



UFAW provides information and advice on aspects of the biology, management, health, welfare and ethics of use of domestic and wild animals to government departments, non-governmental organisations, universities and others.

The Federation is consulted on draft legislation, guidelines and codes of conduct relating to animal welfare, and staff serve on several national and international advisory committees and working groups including the Animal Procedures Committee, the Zoos Forum, the Bovine TB Advisory Group, the European Primate Centres Animal Welfare Committee, the Companion Animal Welfare Council and the Boyd Group.

Staff also make visits to animal facilities to advise on best practice in animal care and welfare.

Some examples of these aspects of UFAW's work are outlined here.

Welfare of laboratory animals and...

Robert Hubrecht continues to be actively involved in promotion of the welfare of laboratory animals through involvement of various national and international committees. As a Member of the Institute for Laboratory Animal Research's Committee convened for the purpose, he contributed to the production of a new report on 'Recognition and Alleviation of Distress in Laboratory Animals' that was published during the year (details are at: http://dels.nas.edu/ilar_n/ilarhome/reports.shtml). This book provides information on scientific and ethical aspects of this subject for research scientists, veterinarians, animal care staff and others with interests in this field. As Chair of the Animal Welfare Committee of the European Primate Centres network (EUPRIM-NET), he is involved in promoting measures for reduction and refinement in research using primates.

...enrichment of their environments

In addition, Dr Hubrecht organised a session on 'Alternatives' at the annual meeting of the Laboratory Animal Science Association and gave a plenary presentation on 'Enrichment, behaviour and experimental outcomes' at a meeting of the Laboratory Animal Veterinary Association.

Welfare surveillance

Wearing his Companion Animal Welfare Council hat, James Kirkwood, chaired a working group that undertook a scoping study on welfare surveillance. This study, published in July 2008, addressed the case for surveillance, the challenges it would present, and how these might be tackled (the Report is available at the CAWC website (www.cawc.org.uk)).

STOP PRESS!

UFAW is delighted to announce the publication of the latest book in the UFAW/Wiley-Blackwell Animal Welfare Series.

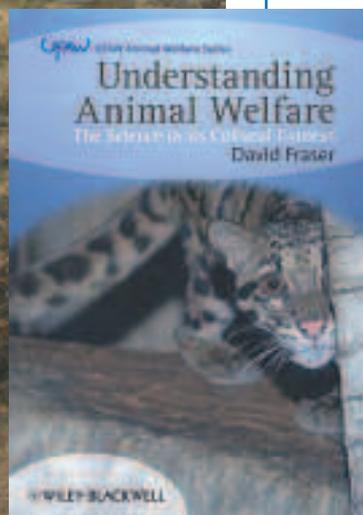
'Understanding Animal Welfare The Science in its Cultural Context'

by David Fraser
Animal Welfare Program, University of
British Columbia, Canada.

"This is a delightful book, full of interesting aspects of animal welfare. An excellent guide to the academic study of animal welfare science."

Marian Stamp Dawkins, Department of Zoology, University of Oxford.

We are most grateful to Professor David Fraser for this excellent insight into the development of animal welfare science, its methods and its application to ethical and policy issues, and we are proud to include it in the UFAW/Wiley-Blackwell series. For ordering details please see www.blackwellpublishing.com



UFAW's activities, highlighted in this annual report, are dependent on the generosity and kindness of the charity's members and supporters – to whom we are most grateful. The charity spends very little on advertising and promotion and depends considerably on its members and supporters to assist with this by recommending the charity to others likely to share UFAW's commitment and philosophy. If you would like copies of this report to hand on to friends and relatives please let us know.

The annual membership subscription remains a modest sum at £10, or £5 for students. The value of donations made to the charity is maximised when given through the Gift Aid Scheme. Details of this and advice on how to make provision for the charity in a Will can be obtained from the Secretary and are also available on the website (www.ufaw.org.uk).

The charity is seeking to be able to support a more extensive programme of animal welfare research and education in the future.

Can you help?



Annual General Meeting 2007

The AGM was held at the Women's Institute Hall, Wheathampstead. As in previous years this was held in conjunction with the General Meeting of the Humane Slaughter Association and Council of Justice to Animals (HSA & CJA). The members of UFAW Council also act as Trustees for the HSA. Joint meetings are held to save time and money.

The notice convening the meeting had been sent to all subscribers and was taken as read. The meeting agreed the Minutes of the AGM of 2006 and resolved to receive the Accounts and Auditor's Report for the year ended 31st March 2007. There were no questions on the Report of the year's work and the meeting resolved that the Report and Accounts be received.

It was resolved that Yianni, Neil & Co Ltd, Registered Auditors, be appointed as auditors to UFAW and its associated Trusts and their remuneration should be fixed by Council.

There were no new candidates for election and in accordance with Clause 45 of the Articles of Association Professor A Nolan, Dr J C Anderson and Mr A G Sains were re-elected.

Notice of Annual General Meeting 2008

The Annual General Meeting of the Universities Federation for Animal Welfare will be held at 3.00pm on Wednesday 15th October 2008 at The Old School, Brewhouse Hill, Wheathampstead, Hertfordshire (UFAW's office premises). The formal notice and agenda have been sent to all members and are available from the Secretary at the registered office.

Summarised Accounts

The summarised accounts set out overleaf have been extracted from the full accounts and have been prepared in accordance with the 2005 Statement of Recommended Practice - Accounting by Charities (SORP) and applicable UK Accounting Standards, which were approved by the Directors/Council and signed on its behalf on 9th July 2008.

The full accounts have been audited and the auditors' opinion was without qualification. The accounts will be filed with the Companies Registry and the Charity Commission after the annual general meeting on 9th October 2008.

Full accounts, and the audit report can be obtained from the Company Secretary, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN.

Finance and Accounts.

The Federation's income during 2007/08 was £527,293 which was £240,606 less than during 2006/07. The relatively lower income this year was partly a reflection of lower legacy income (legacy income varies unpredictably from year to year), lower income for the garden bird project, and the fact that no conference was held in these twelve months.

Overall expenditure during the 2007/08 year was £621,167 compared with £572,422 during 2006/07 and this was partly a reflection of higher expenditure on research awards during 2007/08.

Congratulations

Congratulations to Steve Weddell, UFAW's Editorial Assistant, on his marriage to Jane in June 2008. We wish them the very best for their future together.

Finance and Accounts

Summary of Financial Activity year ended 31st March 2008

	2007/08 £	2006/07 £
Incoming resources:		
Voluntary income		
Subscriptions & donations	46,026	35,014
Appeals	3,270	2,838
Legacies	192,496	316,071
Garden bird project	<u>33,065</u>	<u>81,040</u>
	<u>274,857</u>	<u>434,963</u>
Charitable activities		
Publications	63,143	69,365
Royalties & lecture fees	8,387	10,064
Symposium	<u>-</u>	<u>71,464</u>
	<u>71,530</u>	<u>150,893</u>
Investment income		
Interest bearing deposits	59,131	62,621
Securities	<u>121,775</u>	<u>119,422</u>
	<u>180,906</u>	<u>182,043</u>
Total incoming resources	<u>527,293</u>	<u>767,899</u>
Resources expended:		
Costs of generating funds	39,603	35,472
Charitable activities	426,201	388,351
Governance costs	3,388	4,352
Other resources expended	<u>151,975</u>	<u>144,247</u>
Total resources expended	<u>621,167</u>	<u>572,422</u>
Net (outgoing)/incoming resources for the year	<u>(93,874)</u>	<u>195,477</u>
Other recognised gains and losses:		
Net realised gain on investments	207,459	119,209
(Loss) on disposal of assets	<u>(54)</u>	<u>(586)</u>
Net income/expenditure for the year	<u>113,531</u>	<u>118,623</u>
Net unrealised (loss) on investments	(291,731)	(22,382)
Gain on revaluation of tangible fixed assets	<u>240,000</u>	<u>-</u>
Net movement in funds	<u>61,800</u>	<u>291,718</u>
Balance brought forward	<u>5,390,515</u>	<u>5,098,797</u>
Balance carried forward	<u>5,452,315</u>	<u>5,390,515</u>

BALANCE SHEET as at 31st March 2008

	2007/08 £	2006/07 £
Fixed assets:		
Tangible fixed assets	620,382	376,470
Investments	<u>4,410,869</u>	<u>4,484,851</u>
	<u>5,031,251</u>	<u>4,861,321</u>
Current assets:		
Debtors	84,381	52,229
Deposits at bank	633,343	719,246
Cash at bank & in hand	<u>34,388</u>	<u>36,500</u>
	<u>752,112</u>	<u>807,975</u>
Creditors:		
Amounts falling due within 1 year	<u>(195,607)</u>	<u>(127,671)</u>
Net current assets	<u>556,505</u>	<u>680,304</u>
Total assets less current liabilities	5,587,756	5,541,625
Creditors:		
Amounts falling due after more than 1 year	<u>(135,441)</u>	<u>(151,110)</u>
Net assets	<u>5,452,315</u>	<u>5,390,515</u>
Funds:		
Unrestricted	4,749,933	4,685,585
Designated	122,952	110,400
Restricted	<u>579,430</u>	<u>594,530</u>
	<u>5,452,315</u>	<u>5,390,515</u>

The summarised accounts were approved by Council and signed on their behalf on 9th July 2008



Bryan R Howard BVMS PhD MRCVS
Chairman



Michael T Bird FCA
Hon Treasurer

Independent Auditors' Statement to the Council of the Universities Federation for Animal Welfare

We have examined the summarised financial statements that comprise the summary statement of financial activities and summary balance sheet.

Respective Responsibilities of the Council and Auditors

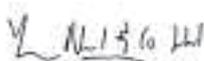
You are responsible as the Council for the preparation of the summarised financial statements. We have agreed to report to you our opinion on the summarised financial statements' consistency with the financial statements, on which we reported to you on 9th July 2008.

Basis of Opinion

We have carried out the procedures we consider necessary to ascertain whether the summarised financial statements are consistent with the full financial statements from which they have been prepared.

Opinion

In our opinion the summarised financial statements are consistent with the full financial statements for the year ended 31st March 2008.



Yianni, Neil & Co Ltd, Registered Auditors, London, 9th July 2008

Universities Federation for Animal Welfare

The Old School, Brewhouse Hill, Wheathampstead,
Hertfordshire AL4 8AN, UK

Tel: +44 (0)1582 831818; Fax: +44 (0)1582 831414;
website: www.ufaw.org.uk; Email: ufaw@ufaw.org.uk
Company Limited by Guarantee No. 579991
Registered in England Charity No. 207996

Vice-Presidents: Professor P H Holmes BVMS PhD MRCVS OBE
W M Brancker CBE DUniv FRCVS
I J Lean BSc PhD CBiol MIBiol
G D Sales BSc PhD AKC MIBiol DipTCDHE
Professor R S Anderson BVMS PhD MRCVS
J Sanford BVSc PhD FRCVS

Council (who are the Directors of the Limited Company)

Chairman: B R Howard BVMS PhD MRCVS*[^]
Vice-Chairman: J H Pratt BVM&S DVSM FRCVS[^]
Honorary Treasurer: M T Bird FCA*[^]
Members J C Anderson BVMS PhD DVM FRCPath FIBiol MRCVS
Professor R M Bennett BSc MSc PhD
Professor P M Biggs CBE DSc DVM FRCPath CBiol
FIBiol FRS FRCVS[^]
L A Brown BVSc BA PhD MBA FRCVS
Professor K Kendrick BA PhD FIBiol
Professor V Molony BVSc MSc PhD MRCVS*
Professor A Nolan MVB DipECVA DipECVPT DVA
MRCVS*
M Radford OBE LLB
A G Sains NDA CDA

*Member of the Grant Panel

[^]Member of the Finance Panel

Staff

Chief Executive
& **Scientific Director:** James K Kirkwood BVSc PhD CBiol FIBiol MRCVS
Deputy Scientific
Director: Robert C Hubrecht BSc PhD CBiol FIBiol
Scientific Officer: Elizabeth Carter BSc MSc
Development Officer: Stephen M Wickens BSc PhD
Editorial Assistant: Steven Weddell BSc BVSc MRCVS HND
Public Relations
& **Fundraising Officer:** Brian D Pemberton BA MA
Secretary: Donald C Davidson
Office Staff: Samantha Griffin
Wendy L Goodwin

Registered Auditors: Yianni, Neil & Co Ltd, Everlast House, 1 Cranbrook Lane, New Southgate, London N11 1PF, UK

Bankers: HSBC Bank plc, 171 Darkes Lane, Potters Bar, Herts EN6 1BU, UK
Barclays Bank plc, 33 Darkes Lane, Potters Bar, Herts EN6 1BA, UK
Alliance & Leicester Girobank, Bridle Road, Bootle G1R 0AA, UK
Bank of America, Westwood Village Branch, PO Box 37176, San Francisco, CA 94137-0001, USA

Solicitors: Bignalls Balderston Warren & Co, 11 Whitehorse Street, Baldock, Herts SG7 6PZ, UK
Hempsons, Hempson House, 40 Villiers Street, London WC2N 6NJ, UK
RadcliffesLeBrosseur, 5 Great College Street, Westminster, London SW1P 3SJ, UK

Investment Advisers: Smith & Williamson Investment Managers, 25 Moorgate, London EC2V 5NS, UK





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
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ISSN 0566-8700 © UFAW 2008

