

*Science in the Service
of Animal Welfare*



**Universities Federation
for Animal Welfare
Annual Report
2006–2007**



The Universities Federation for Animal Welfare
The Old School, Brewhouse Hill, Wheathampstead, Herts. AL4 8AN, United Kingdom
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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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Letter from the Chairman



It is always a challenge to use limited resources to best effect, particularly when there is so much to do.

Meeting this challenge, one of the major events of the year was the 'Quality of Life' Symposium which UFAW organised jointly with the British Veterinary Association Ethics Committee. This was very well attended and, as an initiative to increase awareness and understanding of animal welfare issues, it was a huge success. Additionally, while expensive to run, the Symposium also generated income to match. The staff must be commended for the effectiveness and efficiency with which they undertook this and with which they pursue all objectives of the Charity.

Other, particularly noteworthy activities this year include the Garden Bird Health Initiative, the award of a range of grants to encourage original research aimed at improving animal welfare, and regular publication of the high calibre journal *Animal Welfare*.

The Staff has again made much progress this year in UFAW's objective of enhancing our knowledge and understanding of animals' needs and how we can best meet them – thanks to a very great extent to your interest and assistance. Staff and Council are always pleased to talk to members about projects in hand and to receive offers of help. Your continued support is greatly appreciated.

B R Howard

Bryan R Howard



Universities Federation for Animal Welfare

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

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* Member of the Grant Panel
^λMember of the Finance Panel

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Deputy Scientific Director: Robert C Hubrecht BSc PhD CBiol FIBiol
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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,
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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, WC2 6NJ
RadcliffesLeBrasseur, 5 Great College Street,
London, SW1P 3SJ

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

Finance and Accounts

Summary of Financial Activity year ended 31st March 2007

	2006/2007 £	2005/2006 £
Incoming resources:		
Voluntary income		
Subscriptions & donations	35,014	36,736
Appeals	2,838	2,142
Legacies	316,071	324,429
Garden bird project	81,040	72,903
	<u>434,963</u>	<u>436,210</u>
Charitable activities		
Publications	69,365	66,069
Royalties & lecture fees	10,064	17,318
Symposium	71,464	-
	<u>150,893</u>	<u>83,387</u>
Investment income		
Income bearing deposits	62,621	63,544
Securities	119,422	107,564
	<u>182,043</u>	<u>171,108</u>
Total incoming resources	<u>767,899</u>	<u>690,705</u>
Resources expended:		
Costs of generating funds	35,472	23,157
Charitable activities	388,351	571,249
Governance costs	4,352	4,101
Other resources expended	144,247	147,474
	<u>572,422</u>	<u>745,981</u>
Total resources expended	<u>572,422</u>	<u>745,981</u>
Net incoming/(outgoing) resources for the year	<u>195,477</u>	<u>(55,276)</u>
Other recognised gains & losses:		
Net realised gain/(loss) on investments	119,209	(71,979)
(Loss)/gain on disposal of assets	(586)	131
	<u>118,623</u>	<u>(71,848)</u>
Net income/expenditure for the year	<u>118,623</u>	<u>(71,848)</u>
Net unrealised (loss)/gain on investments	(22,382)	625,970
Net movement in funds	291,718	498,846
Balance brought forward	5,098,797	4,599,951
Balance carried forward	<u>5,390,515</u>	<u>5,098,797</u>

BALANCE SHEET as at 31st March 2007

	2006/2007 £	2005/2006 £
Fixed assets		
Tangible fixed assets	376,470	388,024
Investments	4,484,851	4,271,990
	<u>4,861,321</u>	<u>4,660,014</u>
Current assets		
Debtors	52,229	46,823
Deposits at bank	719,246	713,404
Cash at bank and in hand	36,500	28,524
	<u>807,975</u>	<u>788,751</u>
Current liabilities		
Creditors: Amounts falling due within one year	(127,671)	(139,179)
	<u>680,304</u>	<u>649,572</u>
Total current assets	<u>5,541,625</u>	<u>5,309,586</u>
Total assets less current liabilities		
Creditors: amounts falling due after more than one year	(151,110)	(210,789)
	<u>5,390,515</u>	<u>5,098,797</u>
Net assets		
Funds		
Unrestricted	4,685,585	4,390,079
Designated	110,400	148,055
Restricted	594,530	560,663
	<u>5,390,515</u>	<u>5,098,797</u>

The summarised accounts were approved by Council and signed on its behalf on 12th July 2007.

Bryan R Howard BVMS PhD MRCVS
Chairman UFAW Council

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 which 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 12th July 2007.

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 2007.

Yianni, Neil & Co Ltd
Registered Auditors
London
12th July 2007

Chief Executive's Report



UFAW's activities are focused on the priorities identified in the strategy review undertaken in 1997, these are:

- Encouragement and support of high-quality research likely to lead to substantial advances in animal welfare;
- Promotion of education about animal welfare, particularly at the tertiary (university and college) level; and
- Promotion of animal welfare by provision of advice, dissemination of information, development of guidelines and legislation, and organisation of meetings and workshops.

Each year, specific objectives are set within these priority areas, and progress with them is monitored as the year progresses to ensure that targets are met. Operating in this way, and by steering the rational, sympathetic but unsentimental course charted by UFAW's Founder the late Charles Hume, the charity has been highly productive and has played a key role in the development of animal welfare in the UK and internationally. It has been able to do this thanks to the generosity and loyalty of its supporters whose help we most gratefully acknowledge on behalf of the charity.

This report illustrates the range and nature of UFAW's work and the activities of the staff. I will expand a little on just one current initiative here. As its name reflects, UFAW has a close association with many universities and colleges. A few years ago, to help strengthen this (and in line with the priorities outlined above), we began a pilot 'link scheme' under which members of university and college staff supportive of UFAW's aims undertake to help act as a bridge for contact between UFAW and their students. The scheme has worked well and we are most grateful to these 'Links'. The plan now is to role this out more widely to universities and colleges with animal welfare interests in the UK and elsewhere around the world to help promote efforts for major and lasting improvements in animal welfare.

James K Kirkwood

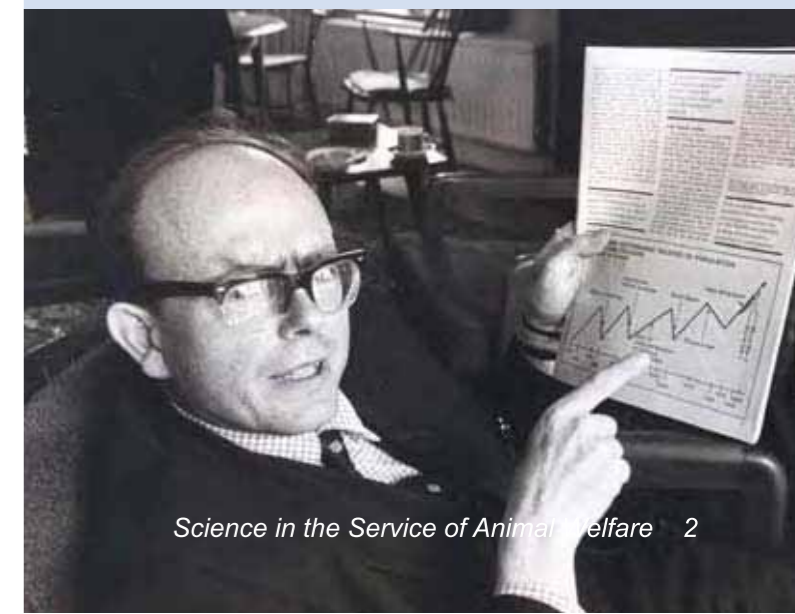
Professor William Russell

Professor William (Bill) Russell died on the 27 July 2006. Bill joined UFAW from Oxford University in October 1954 to undertake a project into humane experimental technique and his assistant, Mr Rex Burch, was appointed a few weeks later. Soon after starting this project Bill gave a presentation at the UFAW AGM on 11 February 1955 in which he said of his study: 'I believe it is also one of immense promise for the welfare of large numbers of animals'. He was quite correct about this. His and Rex Burch's book *The Principles of Humane Experimental Technique*, published in 1959, which founded and set out the concept of the Three Rs (replacement of the use of sentient animals where possible, reduction of the numbers used to the minimum necessary to achieve the objective, and refinement of care and techniques to minimise the risks of harm to welfare) has had a huge impact.

He won a scholarship to Oxford to study classics but, on returning from a break of several years spent in the army, he switched to zoology and was awarded a first class degree. After gaining a DPhil in ethology he worked as a Research Fellow at Oxford until moving to UFAW. With his extraordinarily encyclopaedic knowledge (of both science and the arts), his capacity for rigorous intellectual argument and his skill as a writer, he was the ideal person to take on the task offered to him by UFAW's founder Major Charles Hume. 'The Principles of Humane Experimental Technique' was an outstanding and world-changing piece of work that has led to huge benefits for the welfare of animals and the quality of biomedical research around the world.

In an article (Russell, WMS 2005 The Three Rs Past, Present and Future. *Animal Welfare* 14: 279-286) for a special issue of UFAW's journal *Animal Welfare* published to mark the 50th anniversary of the first year of his study, Bill wrote: 'At 80 years of age, with a feeling that I have rather done my bit in this field, and with Rex no longer with us, it is a great joy to know that hundreds of fine scientists, all over the world, are pursuing research in and promotion of the Three Rs. UFAW began it all and, despite the demands of the many other aspects of animal welfare science to which it is committed, has quietly and steadily continued to pursue and promote humane experimental technique'.

We are most grateful to Bill for his huge contribution to UFAW's efforts for animal welfare and to his original and cheerful perspectives on many other matters also.



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.



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 budgeted expenditure for the 2007/8 year is £725,000 and whilst Council is satisfied that the Federation's reserves are adequate to enable the costs of the planned activities to be met, 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 2006

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 2005 and resolved to receive the Accounts and Auditor's Report for the year ended 31 March 2006. 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.

Two new members were elected to Council: Dr Lydia Brown, Country Director of Pharmaq Animal Health and Professor Keith Kendrick, Head of the Laboratory of Cognition and Behavioural Neuroscience at the Babraham Institute. Professor Peter M Biggs, Professor Vince Molony and Mr John Pratt were re-elected.

Notice of Annual General Meeting 2007

The Annual General Meeting of the Universities Federation for Animal Welfare will be held at 3.00pm on Tuesday 16 October 2007 at The Women's Institute Hall, Mead Lane, Wheathampstead. 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 below 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 12 July 2007.

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 16 October, 2007.

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 2006/07 was £767,899 which was £77,194 greater than during 2005/06. The relatively higher income in 2006/07 was partly a reflection of there having been no symposium in the 2005/06 year. Corresponding expenditure on the symposium is included in the figure for expenditure on 'charitable activities'.

Overall expenditure during the 2006/07 year was £572,422 compared with £745,981 during 2005/06. The lower expenditure in 2006/07 was largely because the award of two major occasional awards (a Hume Fellowship and a Research Training Scholarship) fell within the 2005/06 year.

Integrating physiology and behaviour

UFAW sponsored a symposium on 'Integrating Animal Physiology and Behaviour: Towards Ecological Relevance and Animal Welfare' that was held at the Society for Experimental Biology in Glasgow on the 3 – 4 March 2007. Bringing together scientists from a wide range of disciplines, who work with animals, from invertebrates to mammals, this meeting sought to raise awareness of animal welfare amongst the broader community of biological scientists.

Symposium organiser Dr Katherine Sloman, University of Plymouth, stated that it had 'achieved its aim of priming discussion and collaboration into how current animal biology research can bridge the gap between traditional ['pure'] research and current concerns in animal welfare.' Speakers included Professor Felicity Huntingford (University of Glasgow) on the different behavioural syndromes documented in fish and their implications for fish welfare and Professor Anthony Farrell (University of British Columbia) and Professor Anne Brown (Aquatronics Ltd) who discussed their work on assessing fish welfare during commercial salmon live-hauling and cod farming respectively.

Quality of life: the heart of the matter The UFAW/BVA Ethics Committee 2006 International Symposium

In September 2006, UFAW and the BVA Ethics Committee held a symposium that discussed the concept of 'quality of life', its relationship with welfare and its implications for the way we keep and care for animals. One of the major themes to emerge from this symposium, which was attended by over 230 leading scientists, veterinarians and others, was the shift in focus encompassed by the term from that which considers the

avoidance of negative states, suffering and harm in animals towards one that emphasises the promotion of positive states and experiences too.

This meeting has proved influential, and since it was held, the techniques and approaches that were outlined at it have begun to be more widely adopted in the assessment and improvement of animal lives and welfare.

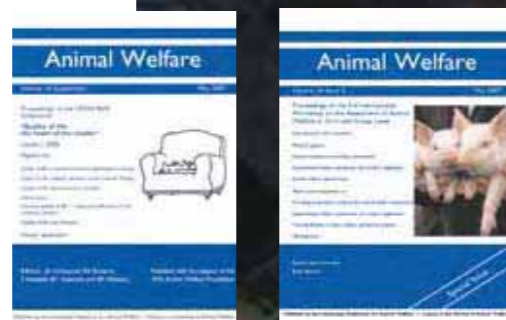


Proceedings published as Animal Welfare journal Special Issues

Those who are interested in finding out more about what was discussed at the Quality of Life symposium will be pleased to discover that the proceedings have now been published, as a special supplement to UFAW's journal *Animal Welfare*.

Also published were the 'Proceedings of the 3rd International Workshop on the Assessment of Animal Welfare at Farm and Group Level' (WAFL) in May 2007 as Volume 16 Issue 2.

Copies of both can be ordered from UFAW and individual papers can be obtained on-line. See the UFAW website (www.ufaw.org.uk) for details.



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/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.

UFAW University Links Scheme 2006-07

The UFAW university links scheme consists of a network of UFAW representatives in UK universities and colleges that seek to encourage interest and engagement in animal welfare science and help to promote UFAW's objectives and activities within these institutions, of which there are 14 to date.

Recent link activities:

Professor Peter Sandøe, Professor in Bioethics at The Royal Veterinary and Agricultural University in Copenhagen, was invited by UFAW link universities Edinburgh and Glasgow to give a seminar at the University of Glasgow on 25th April 2007. Professor Sandøe presented an animated and interesting talk on: 'Veterinary treatment of companion animals – What are the ethical limits?' This informative presentation prompted a period of lively debate amongst students, lecturers and other interested parties who attended.

A number of the UFAW link universities use their link funds to award prizes to undergraduates in recognition of their achievements in the field of animal welfare science. Congratulations to the following students: Andre Kortu, Eleanor Haskey and Peter Hiscox (University of Bristol); Abigail Simms (University of Northampton), James Kidd (University of Plymouth) and Tricia Cunningham (University of Stirling).

In addition, the universities of Stirling (Professor Hannah Buchanan Smith, Psychology) and Lincoln (Professor Daniel Mills, Biological Sciences) both held a series of regular animal welfare science seminars.

New SAWI Scholarship introduced

As part of its programme of promoting animal welfare and animal welfare science in Israel, the UFAW SAWI Fund has introduced a new scholarship to enable veterinary, agriculture or other biological science graduates in Israel to undertake postgraduate courses in the UK relevant to animal welfare science. The UFAW SAWI Fund will consider meeting the costs of travel, accommodation, living expenses and tuition fees for up to one year.

The UFAW SAWI Fund promotes animal welfare in Israel through support of research, educational initiatives and other projects aimed at improving understanding of animals' needs and how best these can be met. Formerly the Society for Animal Welfare in Israel, SAWI was brought within UFAW in 2003 to become the UFAW SAWI Fund.

Laboratory and Farm Animal Handbooks

During the year plans were made for the preparation and production of the Eighth Edition of the UFAW 'Lab Animal Handbook' and of the Fourth Edition of the UFAW 'Farm Animal Handbook'. As reflected in the full title of the former – *The UFAW Handbook on the Care and Management of Laboratory and Other Research Animals* – this edition will also update information on animals used in research outside of laboratories, for example on farm and in the field. It will also include substantial new material on the Three Rs. Work is now underway and we are most grateful to the fifty authors that have agreed to contribute chapters. The book is to be published by Blackwell Publishing, estimated for 2009.

The new edition of *The Management and Welfare of Farm Animals – the UFAW Farm Handbook* is being prepared and edited by Professor John Webster. It will cover a wider range of farmed species and, whereas previous editions have focused on farming in the UK, will address issues for the major farmed species worldwide. This book will be published as one of the UFAW/Blackwell Publishing animal welfare series.



25 Years of Vacation Scholarships

It is 25 years since the UFAW Vacation Scholarship awards were first introduced. Launched in 1983, the awards have been very successful in developing interest in animal welfare and its science and have acted as a springboard for many to pursue further research in this area. To date over 250 students have been awarded vacation scholarships. Examples of studies undertaken by 2006 scholars are outlined below.

This year also marks the 10th UFAW Vacation Scholarship Meeting, which will be held at the University of Northampton (Moulton College) on the 12th December 2007. These free meetings, which are open to all, provide a platform from which scholars can gain valuable experience in the presentation of their scientific findings. Always popular, anyone wishing to attend or seeking further details about these enjoyable meetings should contact the Development Officer Dr Stephen Wickens (email:wickens@ufaw.org.uk).

UFAW would like to take this opportunity to thank all the scholars and their supervisors that have supported the vacation scholarships over the 25 years and looks forward to continuing to support the scheme and report on their findings for many more.

Congratulations to the 2007 Vacation Scholars

Janelle Braithwaite, St Andrews University, 'The visitor effect on Lar gibbons (*Hylobates lar*)' supervised by Dr Jeff Graves.
John Fennell, Bristol University, 'A novel approach to assessment of affected states in animals using successive negative contrast' supervised by Dr E Paul, Professor Mike Mendl & Dr Oliver Burman.
Andrew Jonas, Plymouth University, 'Does the degree of human contact, or proximity, affect parasite burden in *Macaca nigra*?' supervised by Dr Vicki Melfi.

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

As anyone working in the field of animal welfare will be aware, this cross-disciplinary area of study is attracting increasing interest and funding and being used to guide and inform legislation and practice.

Nonetheless, the study of animal welfare is still a relatively young field of inquiry and it is one in which much still remains to be understood. As part of its on-going commitment to improving the way we understand and care for animals, the Universities Federation for Animal Welfare will hold a one day conference on 'Recent advances in animal welfare science' on 3 July 2008 at the Council House, Birmingham. This meeting, which we intend will become a regular event, 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, discuss advances and exchange views.

We would like to hear from anyone interested in making a contribution to the conference on the open subject of recent advances in applied ethology, veterinary and physiological science and the other disciplines that inform our understanding of animals and their welfare. Amongst those areas that we would be interested in this conference addressing are innovations in:

- * Welfare assessment in individuals and/or groups
- * Humane killing

A hidden cost to welfare – does ringing of birds impact on their welfare?

For her vacation scholarship project, Emma Rosenfeld (University of Cardiff, supervised by Dr Rob Thomas) investigated the effects of capture and handling for ringing purposes on the welfare of the European Storm petrel, *Hydrobates pelagicus*.

When released after being rung, Storm petrels do not seem eager to fly away – it can take 10 minutes before they do so. Emma's hypothesis was that this delayed take-off, rather than being a supposed indifference to the process of capture and handling, may in fact be a stress response.

Emma discovered that handling time had a significant effect on time to take-off. She also discovered that the body temperature of the Storm petrels significantly increased during the procedure which she hypothesized was due to increased metabolic rate linked to stress and the insulating effect of the bird bag the animal had been kept in during the process. Such increased energetic costs are of concern because migration is already a demanding activity and any extra energy expenditure has the potential to increase mortality rates. Emma recommended that the process of capture and handling be conducted as swiftly and carefully as possible and that an alternative material be considered for use when constructing bird bags.

Stacey Mayer, Keele University, 'The welfare implications of different feeding regimes for the species of iguana *Cyclura cornuta* and *Iguana delicatissima* at Chester Zoo' supervised by Dr Janet Cameron Hoole.
Grainne Moore, Harper Adams University College, 'An investigation into the effects of milk supplementation on behaviour and growth rate in naturally suckled piglets' supervised by Dr Margaret Parry.
Lois Oulton, Liverpool University, 'Welfare issues in fish: the interplay of pain, fear and stress?' supervised by Dr Lynne Sneddon.

- * Determining animal needs
- * Diagnosis and alleviation of pain
- * Assessment of animal management and husbandry practice

This meeting will feature talks from both established animal welfare scientists and those beginning their career in the field. Early submission of a provisional title and abstract would be appreciated, as would expressions of interest in attending. Submissions should feature the title of the proposed presentation, the name and full contact details of all contributors and any abstract, which must be in English, should be no longer than 400 words. The deadline for submission of abstracts is 25 January 2008.

As part of our commitment to providing a forum for the exchange of ideas to the widest range of those working in the field of animal welfare, the registration fee to attend this conference will be minimal and will not be more than £10.

To ensure that you receive updates regarding this meeting and a registration form as soon as they are ready for circulation, please contact us to register a preliminary interest in attending. Early information about numbers of contributors and other delegates will also be very helpful to us in preparing for the event.

Contact Details: Stephen Wickens, Development Officer, UFAW, 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: wickens@ufaw.org.uk.

Improving survival of captive birds in reintroduction programmes

Survival of individuals released as part of captive breeding programmes can be poor. Environmental enrichments which encourage the performance of behaviours commonly observed in the wild have been highlighted as potentially important in successful reintroductions and are being increasingly used, but their effects have never been systematically studied.

For her vacation scholarship project, Sarah Ingram (Anglia Ruskin University, supervised by Dr Charlotte Nevison) investigated the effects of environmental enrichment on foraging and exploratory behaviour in captive reared Blue tits (*Parus caeruleus*). She compared these behaviours in Blue tits that had been reared in enriched environments, in which they were presented with a range of novel food types and feeders, with a control group which were not, and with captive wild reared birds. The results of the study showed that unlike wild reared birds, both groups of hand reared birds were slow or unwilling to approach food types that they had not previously encountered. Sarah suggests that captive reared birds, reared in enriched environments, should be exposed to a wide range of relevant items prior to their release into the wild if they are to stand the best chance of successfully adapting and surviving.

Lisa Pinno, Lincoln University, 'Feral ponies' perception of, and response to, human interaction and handling' supervised by Professor Daniel Mills.
Eleanor Preece, Liverpool University, 'Assessing the environmental factors which cause lameness in dairy cattle, and the role of increased activity in raising milk yields' supervised by Dr Clare Cunningham.
Hannah Schubert, Cambridge University, 'Effects on cow and calf welfare of analgesic use post-calving' supervised by Professor Donald Broom.

Avian Veterinary Training Workshops

In the past 12 years there has been a catastrophic decline in the population of three species of Gyps vulture in India, Nepal and Pakistan. It has been estimated that up to 99% of these vultures, once found in millions across the region, have been lost. In 2004 the cause for this decline was found to be the result of vultures eating the carcasses of cattle that had been treated with veterinary diclofenac; only 1% of carcasses need to have diclofenac present to account for the decline seen.

The South Asia Vulture recovery programme, developed in 2004, identified two major actions to ensure the survival of these vulture species: the removal of diclofenac from the system and the establishment of a long term captive breeding programme. The Bombay Natural History Society (BNHS), supported by the Zoological Society of London amongst others, developed the first of several planned captive vulture centres for research.

As part of this programme, a series of training workshops for local veterinary surgeons were organized, including one held in 2006 during the kite festival in Ahmedabad where the skills were put to the test on live birds injured during this festival. UFAW helped support these workshops, providing funds to ensure that vets from the BNHS and Nepal could attend.

Ensuring welfare standards for animals obtained from overseas for use in research

The APC Housing and Husbandry sub-committee has also produced a document entitled "Consideration Of Policy Concerning Standards Of Animal Housing And Husbandry For Animals From Overseas Non-Designated Sources". Whilst most animals used in the UK are also bred within the UK, it is sometimes necessary for researchers to import animals from overseas. The Home Office ensures standards for animals bred within the UK, but it is clearly just as important to ensure that animals from overseas are bred and raised in conditions that meet their needs. The sub-committee enquired into the procedures by which the Home Office inspectorate assess applications to import animals for research and also into current best practice adopted by researchers and institutions to satisfy themselves regarding the standards of overseas suppliers. Amongst other recommendations the sub-committee suggested that the local Ethical Review Process should establish a process to allow the institution to monitor and record health and previous housing or husbandry issues that could affect the welfare of imported animals and the quality of science derived from them, and that the aggregated information obtained from this should be reviewed at a national level within two years. The paper is available at the APC website, <http://www.apc.gov.uk>

Zoos Forum

Among his duties as Chairman of the UK Zoos Forum, James Kirkwood and his Forum colleagues and the Defra Secretariat ran a Training Seminar at Lincoln University in September 2006 for those involved in zoo inspections. Topics discussed included local authority responsibilities and those of zoos regarding conservation work and education.

Raising standards in the treatment of behavioural disorders in animals

As part of his ongoing role as Secretary to the ASAB Accreditation Committee, UFAW's Development Officer Stephen Wickens invited providers of university and other higher education courses on applied animal behaviour from across the UK to attend a workshop in April. The workshop sought to reach agreement about the value of validating courses against the academic requirements of the ASAB certification scheme, which seeks to raise standards amongst those working as professional clinical animal behaviourists. The course providers broadly supported the idea of validation as it would assist those seeking to train in this area to better identify and differentiate

between the many courses that claim to meet their needs, and made helpful suggestions as to how the system might best operate. It is hoped that the first course may be validated for the 2008-09 academic year.

Better welfare in rodent control methods

In the protection of human and domestic animal interests, very large numbers of rodents are killed each year in the UK and around the world in ways that fall far short of the humane ideal of rapid, painless death. We believe that there is room for very significant welfare improvements in this field. In 2006, UFAW established a working group to look into how this could be achieved. During the year, this Group has been exploring ways to: (i) promote research into more humane methods, (ii) provide guidance to the public on welfare aspects, and (iii) establish a national system for keeping vertebrate 'pest' control methods under review and for providing independent advice on this subject.

There are significant economic disincentives to trying to develop more humane rodenticide agents. The costs of exploring, testing and getting approval for the use and sale of new agents are very large. Because of this, the world is stuck with agents (or their second-, third- or later-generation derivatives) that were first developed at a time when animal welfare was not given the consideration it is today. During the year, the Working Group has sought the advice of the Health and Safety Executive (which is the responsible authority in the UK), and through them, of the EC Biocides Technical Meeting, about how it might be possible to get over the bureaucratic hurdles that appear to block the development of improved methods.

FELASA Working group on enrichment of housing of animals used in research

Wearing his Laboratory Animal Science Association (LASA) hat, Robert Hubrecht was a member of a Federation of European Laboratory Science Associations Working Group on standardization of enrichment. Its report covers the principles of environmental enrichment, how to evaluate its effectiveness, the possible effects of enrichment on experimental bias and variation, and how to develop environmental enrichment programmes. It recommends that a database of successful enrichment programmes should be established and that a systematic scientific evaluation should be carried out of important enrichment components already in use or intended for implementation.

Primate Welfare Seminar

Robert Hubrecht co-organised with Sarah Wolfensohn of Oxford University a seminar on human/primate interactions and the assessment of behaviour modification to refine primate welfare that was attended by about 60 professionals at the International Primate Society Congress in Uganda. Dr Hubrecht gave a presentation on the numbers of primates used in biomedical research and the advances in welfare that have been achieved in recent years in such areas as housing and supply. He went on to explain how further welfare benefits could be achieved with the use of positive reinforcement training, the development of welfare monitoring schemes, and better education resources for staff.

Institute for Laboratory Animal Research (ILAR) Distress Committee

Dr Hubrecht is a member of this US committee which is updating its recommendations on the identification and alleviation of distress in animals used in research. The committee's work is undergoing peer review and should be published in August 2007.

The Hume Animal Welfare Research Fellowship

One of UFAW's most prestigious awards, this Fellowship was founded to provide a post-doctoral position for gifted animal welfare scientists near the start of their research careers. The award is an international one, and the current holder of the fellowship, Dr Johanneke van der Harst, (University of Utrecht) is researching the effectiveness of anticipatory behaviour displayed by animals as an indicator of their welfare. She gave a presentation at the UFAW/BVA 'Quality of Life' symposium at which in a review of the current literature she suggested that welfare may be determined as a balance between positive and negative experiences and that reward sensitivity can be used as a tool to assess the current state of this balance and thus the welfare of the animal.

UFAW 3Rs Liaison Group

UFAW runs a highly successful scheme in collaboration with pharmaceutical companies and animal welfare organisations. This started as an initiative to fund a PhD student to carry out research into housing and husbandry refinement of animals used in biomedical research, but this year we have broadened the scope of the initiative to include all of the 3Rs – Replacement, Reduction, and Refinement. Thanks to the very generous support of the members of the group we were able to advertise the fifth of these awards this year. From a very high quality pool of applications, the winner was Claire Richardson who will be working on a project entitled 'Refining research procedures by assessing distress in laboratory rodents' under the supervision of Professor Paul Flecknell, at Newcastle University.

Kerry Westwood (Bristol University) defended her thesis on 'Effects of cage size, space allowance, environmental enrichment and their interactions on behaviour, stress, immune function and welfare of laboratory mice' and graduated on 18 July. We congratulate her on her achievement. A short report of her work is available on the UFAW website.

Anjanette Harris (Edinburgh University), the 2005 award winner of the studentship, is researching the effects of stress, cognition and gender effects and won first prize for a poster that she presented at the 'Scottish Conference for Animal Behaviour' held at St Andrews on the 17 March 2007. The UFAW logo was proudly displayed on the poster!

Members of the UFAW 3Rs Liaison Group

AstraZeneca	Novartis
Covance	Pfizer
Charles River UK	RSPCA
GlaxoSmithKline	Sanofi-Aventis
Harlan UK	Syngenta
Merck Sharp & Dohme	UFAW
National Centre for the Three Rs (NC3Rs)	

The Professor William Russell Fellowship

This year is the 50th anniversary of a meeting at Birkbeck College, London, at which William Russell first described the principles of the Three Rs – Replacement, Reduction and Refinement. He and his assistant, Rex Burch, were working on a project at UFAW which culminated in the 1959 publication of *The Principles of Humane Experimental Technique*, establishing the concept of the Three Rs which has had, and continues to have, a profound impact on the welfare of animals in research throughout the world.

To commemorate the life and work of Professor William Russell who died in July 2006, UFAW has established a new international Professor William Russell Fund which will be used to support a Research Fellowship for high quality research, in the UK or elsewhere, leading to advances in the international development and application of the Three Rs. It is anticipated that invitation for applications for the Professor William Russell Fellowship will take place towards the end of 2007.

Also later in 2007, UFAW is hoping to publish a special edition of *The Principles of Humane Experimental Technique* with a new foreword written by Russell himself shortly before he died.

UFAW Animal Welfare Research Training Scholarship

The UFAW Animal Welfare Research Training Scholarship is a high value award founded to provide PhD training for promising young veterinarian or science graduates keen to pursue a research career in the field of animal welfare. Since 1998 UFAW has funded six of these awards into areas of research as diverse as the detection and alleviation of pain in fish to research into novel methods of assessing the mental state of animals. This year, thanks to the generous support of its members, UFAW was able to advertise the seventh of these awards for which there was vigorous competition. We are delighted to announce that the winner was Louise Buckley for her project on 'Choices for hungry broiler breeders: do they prefer qualitative food restriction to quantitative food restriction?' under the supervision of Dr Rick D'Eath at the Scottish Agricultural College (SAC).

Rabies control in Ukrainian foxes

Whilst in many European countries oral vaccination is commonly used to control rabies in wild foxes, in the Ukraine control revolves around their total eradication. In 2006, UFAW supported work by scientists at the Biological Research Institute of the Kharkov National University aimed at learning from European practice and encouraging the adoption of the oral vaccination programme in the Ukraine. A series of seminars were held at which issues concerned with the organization and implementation of an oral vaccination programme, as laid out in a supporting pamphlet, were discussed. These initiatives attracted widespread participation and interest from the relevant local and national bodies.



Garden bird welfare

Although garden birds are wild animals and their relationship with us is not the same as between kept animals and their owners, nevertheless, in many cases we greatly influence their fates and the quality of their lives. In view of this, four years ago, in July 2003, UFAW held a workshop meeting to discuss garden bird welfare, approaches to studying the epidemiology of garden bird diseases and ways to minimise the risk of these diseases. This led to the establishment of the Garden Bird Health Initiative – supported by a range of garden bird care industry representatives, wildlife vets and scientists – and, in 2005, to the publication of 'Feeding Garden Birds: Best Practice Guidelines' and to the funding and start of a garden bird disease surveillance and research project coordinated by the Institute of Zoology.

This project has now been running for two years and, thanks to the collaboration of the British Trust for Ornithology and the extraordinary commitment of many of its members, disease incidence in garden birds is being closely monitored in almost 1,000 gardens across the UK. This will provide, for the first time, detailed information about the national prevalence of the more common diseases of garden birds and, hopefully, information on factors that influence the risk of these diseases occurring. The initial project has another year to run but we are very keen to continue and expand this work. In addition to its value in guiding aspects of how we should 'manage' our garden birds, it may inform us in much wider ways about good conduct in human/wildlife interactions.

UFAW's top priorities are promoting high quality science that will lead to substantial advances in animal welfare, and promoting education in animal welfare. In addition to those schemes described earlier, awards are given, funds permitting, to support a wide range of project types. UFAW also makes an annual Wild Animal Welfare Award. For further details please contact the UFAW office or visit www.ufaw.org.uk

Wild Animal Welfare Award

For over 20 years UFAW has been rewarding organisations that improve the welfare of wild animals. We are delighted to announce that the winners of this year's Wild Animal Welfare Award (WAWA) were Bristol Zoo Gardens and Chester Zoo.

Bristol Zoo was successful in the 'welfare of free-living wild animals' category for the development and extensive testing of a silicon flipper band for African penguins. This award, presented in June 2007, recognises innovations that alleviate or prevent anthropogenic harm to animals in the wild. Traditional metal flipper bands may compromise breeding success and cause feather wear. However, it was found that the new silicon bands successfully addressed these welfare concerns.

The 'welfare of captive wild animals' award was won by Chester Zoo for improving the welfare of their housed mandrills. To prevent abnormal behaviours in the presence of zoo visitors, a visual planter barrier was introduced. The natural foliage increased the distance of visitors from the enclosure and partially obscured visitors from the mandrills; a scientific study showed that a fall in stress-related behaviours followed. Chester Zoo were presented with their award during a ceremony in July 2007 which included TV veterinarian and wildlife presenter Steve Leonard. The event was a great success and publicised how sound science may be used to improve the welfare of animals.



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 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 surveillance

Wearing his Deputy Chair of the Companion Animal Welfare Council hat, during the year James Kirkwood chaired a CAWC Working Group tasked with considering issues surrounding companion animal welfare surveillance. This CAWC Group is aiming to produce a scoping report addressing the case for surveillance, the challenges it would present, existing initiatives, and if or how more extensive surveillance could be done. The Liaison Group of Animal Welfare Advisory Bodies (for discussion between the Chairs of FAWC, CAWC, APC and Zoos Forum) is planning to undertake a review of approaches to welfare surveillance across the sectors which James has been asked to take forward.

Wildlife Health Strategy

During the year, James Kirkwood served on Defra's Wildlife Disease Strategy Board helping to develop national strategy regarding approaches to identifying, assessing and managing wildlife disease risks. This is a very important new initiative: diseases of wildlife present threats to species conservation, and to the health of humans and farmed and companion animals.

Bovine tuberculosis

James Kirkwood also served on the bovine TB Advisory Group (TBAG - affectionately known as 'teabag'), which is an independent body set up by Defra in 2006 to help tackle bovine tuberculosis. One of the Group's roles is to advise on development and implementation of control policies in England and to work with interested organisations to take account of wider views and to help promote a shared understanding.

Humane slaughter and killing for disease control

James Kirkwood is also Chief Executive and Scientific Director of UFAW's sister charity the Humane Slaughter Association and, with his HSA staff, organised and ran an EC funded international workshop on 'Welfare Standards Concerning the Stunning and Killing of Animals in Slaughterhouses or Disease Control Situations'. This 3-day workshop, held in Bristol in September 2006, was attended by 85 participants from 28 EU and 24 non-EU countries, and presentations were given by 21 tutors from 7 countries.

Helping to ensure the rapid uptake of new recommendations for laboratory animals

Robert Hubrecht is a member of the APC, serves on the Primates sub-committee, the Applications sub-committee and is chair of the Housing and Husbandry sub-committee. Over the last year, as chair of the Housing and Husbandry sub-committee he has overseen the production of a document aimed at bringing to the attention of laboratory managers differences between the current codes of practice for the housing of laboratory animals and the revised recommendations set out in Appendix A to the European Convention ETS 123, where by adopting the new recommendations significant improvements in animal welfare could be made. The paper is available at the APC website, <http://www.apc.gov.uk>.