



*Science in the Service
of Animal Welfare*

Universities Federation
for Animal Welfare
Annual Report 2009-2010

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

Photograph Credits

Cover courtesy of Eleanor Hubrecht.

Donkey p1, cow p11 courtesy of Bluemoondog Pictures.

Vet & cat p3 courtesy of PDSA.

Wood mouse p3 courtesy of FERA

Broiler research p5, cockroaches p6 courtesy of Louise Buckley.

Veterinary workshops p8 courtesy of PASA.

© UFAW 2010. Published by UFAW, The Old School,
Brewhouse Hill, Wheathampstead, Hertfordshire AL4 8AN, UK.
Tel: +44 1582 831818 Fax: +44 1582 831414
Website: www.ufaw.org.uk Email: ufaw@ufaw.org.uk

Printed on NAPM approved recycled paper





Letter from the Chairman

I am very pleased to report another successful year for the Federation, one which has seen much productive activity in all key areas of the charity's work as the following pages attest.

UFAW supported research continues to forge advances in our understanding of animals and how we care for them, whether they be laboratory mice or garden birds. It is also pleasing to see the continued high level of interest and quality work being undertaken in the Animal Welfare Student Scholarship scheme (formerly the Vacation Scholarship scheme), helping to enhance the future of animal welfare science. A further Research Training Scholarship will also be open to application this autumn.

The continuing growth in interest in animal welfare science was again highlighted by the two very successful conferences held this year: a further meeting in the 'Recent advances in animal welfare science' series which was sold out weeks in advance; and a symposium 'Wild bird care in the garden', believed to be the first of its kind, which amongst its topics featured key research of participants in the UFAW Garden Bird Health initiative. Work also began on a major international symposium for 2011 focusing on economic and other incentives and constraints to making improvements in animal welfare, with some highly regarded speakers already committed.

The eighth and expanded edition of the 'UFAW Handbook on the Care and Management of Laboratory and Other Research Animals', edited by Robert Hubrecht and James Kirkwood, was published in March 2010. This major work will soon be joined by the fifth edition of the UFAW Handbook 'Welfare and Management of Farm Animals', edited by Professor John Webster, which is at the publishers.

I thank our members, supporters and staff and many others in the UK and around the world who not only make the work of UFAW possible but also so productive in advancing the welfare of animals.

Sadly, one who contributed much to UFAW and animal welfare for many years, Mary Brancker, passed away in July 2010. Her work and her enthusiasm are an example to us all and will be long remembered.

John H. Pratt

Chief Executive's Report

As economic constraints tighten in many countries, and resources for tackling animal welfare problems become harder to win, the urgency to the old question as to where best to focus efforts for maximum welfare benefit per dollar increases. A logical approach to prioritising, and that advocated by UFAW's Founder, Charles Hume, in his essay 'The Philosophy of UFAW' (1962), is to take into account the number of animals involved, the intensity and duration of suffering, and the feasibility of making progress.

UFAW continues to find this a helpful framework in considering its own priorities but observes that, even among those who agree with it, the conclusions reached can differ widely. One of the difficulties in attempting such prioritisation can stem from variation in the degrees to which problems are either split into narrow categories (tooth-clipping of neonate pigs, poisoning of wildfowl due to spent lead shot) or lumped together in broad ones (genetic welfare problems in companion animals). Although presenting many difficulties, efforts, nationally and internationally, to identify priorities for concerted action are likely to be worth pursuing.

In deciding its own priorities, UFAW also frequently strives to address high level, fundamental, topics such as development of welfare assessment methods because progress in such fields may prove to be relevant across sectors (eg farm, companion, and laboratory) and so benefit many animals. The charity also likes to address topics or aspects (eg human/garden bird interactions and welfare; information resources on companion animal genetic welfare problems) that are not being covered by others (so as to avoid unnecessary duplication of effort) and which may yield valuable new insights of broad significance for the development and promotion of animal welfare.

We are most grateful to all of the individuals and organisations that help the charity financially or in other ways in its work. Our sincere thanks to all those in the UK and internationally who have enabled UFAW to continue to pursue its programmes and to have achieved all it has.

James K. Kirkwood

Animal Welfare Awards



The winner of the 2010 UFAW Companion Animal Welfare Award is People's Dispensary for Sick Animals (PDSA) Pet Health Team (Sean Wensley, Elaine Pendlebury and Timothy Browning). The award is in recognition of a novel website (www.your-right-pet.org.uk) that aims to help people make the correct choice when purchasing a new pet. James Kirkwood, UFAW Chief Executive, said, 'UFAW congratulates the PDSA Pet Health Team on the development of this website. It provides information about the welfare needs of various commonly-kept species, helps prospective pet owners to think through the resources and time needed, and is aimed at preventing welfare problems that can arise through inappropriate pet choice'.

The 2010 Wild Animal Welfare Award was won by the Food and Environment Research Agency (Fera) Ethical Review Team for a new wild mammal and bird training course. The course, developed by Dr Julie Lane and her colleagues at FERA and the University of York (Dr Pat Coulson, Vicky Jackson, Anne Hudson and Matt Brash) promotes best practice in wildlife studies, particularly with

respect to improved methods of capture, handling, marking and release. Many thousands of wild mammals and birds are used in research each year and the training course will help ensure that researchers within industry, academia, government bodies and animal welfare charities are appropriately trained.

*Presentation of the UFAW Animal Welfare Awards.
Companion Animal Welfare Award (top): James Kirkwood with Sean Wensley and Nicola Martin of PDSA.
Wild Animal Welfare Award (left): James Kirkwood with Dr Julie Lane of FERA.*

Welfare aspects of rodent control

One of the aims of UFAW's Working Group on welfare aspects of rodent control has been to encourage and promote research into more humane methods. We are very pleased therefore that, towards this end, a Defra LINK funded project has been started at the Royal Veterinary College into novel control products. We wish this project every success (knowing that progress in this field is difficult). James Kirkwood has been invited to serve on the Project Advisory Group.

The Working Group has developed a brief leaflet on welfare aspects of rodent control. We will be trying to find ways to distribute these with the aim of them being widely available at points of sale of rodent control products. The leaflets provide outline information on some key points and encourage readers to go to the UFAW website if they seek further information.

Development of a website to provide information on genetic welfare problems in companion animals

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 chronic severe pain or discomfort and can affect large numbers of animals, generation after generation. The pet buying public has a very important role to play in helping to eradicate these problems. If no one bought animals of affected lines these would be outbred by their healthier cousins.

Making available clear information on the welfare consequences of hereditary diseases and poor welfare traits is a key part of tackling this problem. UFAW is currently commissioning material for a website that will include information on their impact, for example through causing pain or discomfort, on the animal's quality of life, of the physical effects of various genetic conditions, and to include advice about what questions to ask in order to avoid buying affected or carrier animals. This material will be added to the website as the year progresses.

International symposium on wild bird care in the garden

It used to be that animals were either kept, and therefore our responsibility, or wild, and not our responsibility. But now it is not so simple. Because of the size of the human population and the extent to which we use or control the environment, we greatly, and often directly, influence the welfare and fates of very many wild animals. This has brought increasing responsibility for them. Human/garden bird interactions are one of the front lines in the development of this new relationship with wildlife. Having taken over a large proportion of the land for housing, industry and farming, providing food for wild birds is one way of helping to redress the balance. There has been a huge growth of interest in feeding garden birds in many countries but the ecological and welfare effects have received little attention.

On the 4th May 2010, in the meeting rooms of the Zoological Society of London, UFAW held what appears to have been the first major scientific meeting on this subject. Among the speakers were Dr Darryl Jones (Griffith University, Australia) who discussed why we need to know more about this subject; Drs Stuart Bearhop (University of Exeter) and Jim Reynolds (University of Birmingham) who described their findings of the effects of feeding, over winter and in spring respectively, on health and breeding performance; and Dr John Mallord (Royal Society for the Protection of Birds) on effects of supplementary feeding on urban house sparrow populations.

Emerging diseases of garden birds were also discussed. Professor André Dhondt (Cornell University) and Becki Lawson (Institute of Zoology) described, respectively, the epidemiology of Mycoplasmal conjunctivitis in house finches in the USA, and the epidemiology of Trichomonosis in finches in Europe. Liz Coiffait (British Trust for Ornithology) presented findings of a study on factors associated with risk of infectious disease at garden feeding stations.

The symposium brought the need for research in these areas into clear focus. UFAW continues to contribute to work in this area through the Garden Bird Health Initiative (see <http://www.ufaw.org.uk/gbhi.php>).

UFAW SAWI Fund

Discussions and planning for the establishment of a UFAW SAWI funded Animal Welfare Science post at the Koret School of Veterinary Medicine of the Hebrew University of Jerusalem have been progressing during the year. The proposal is to fund a PhD studentship in Animal Welfare Science, for three years in the first instance but hopefully with the possibility of further funding if the project develops well. It is intended that the successful applicant will also undertake some teaching in the subject to undergraduates, and will be able to travel to the UK to visit centres of expertise to discuss animal welfare research and education.

Making animal welfare improvements:

Economic and other incentives and constraints

**UFAW International Animal Welfare Symposium,
Historic Dockyard, Portsmouth, UK
28-29th June 2011**



Work began during 2010 on organising a major international symposium to be held in summer 2011. The aim of this conference is to consider economic aspects of animal welfare – economic incentives and constraints – and the societal attitudes of which these are a reflection. How much an individual, or society as a whole, is prepared to pay for animal welfare improvements appears to vary greatly depending on the species and circumstances of the animal. To what extent is this subject to change? Finding ways to develop economic drivers and incentives has proved to be a successful approach to animal welfare improvements in some cases. What potential is there for widely developing this approach?

Speakers and topics (subject to confirmation) will include:

- **Dr David Bayvel** (Chair OIE Working group on Animal Welfare & Director Animal Welfare MAF Biosecurity, New Zealand) *Animal welfare: A complex international public policy issue - the economic, policy, societal, cultural and other drivers and constraints. A 20 year international perspective.*
- **Professor Linda Keeling** (Dept. of Animal Environment and Health, Swedish University of Agricultural Sciences) *Designing animal welfare policies and monitoring progress.*
- **Dr David Main** (Division of Farm Animal Science, University of Bristol, UK) *Can assurance schemes improve welfare using welfare outcomes?*
- **Professor Peter Sandoe** (Dept. of Food and Resource Economics, University of Copenhagen, Denmark) *What can economists do for animal welfare?*
- **Professor John Webster** (Emeritus Professor of Animal Husbandry, University of Bristol, UK) *The Virtuous Bicycle: a delivery vehicle for animal welfare.*
- **Mark Williams** (Chief Executive, British Egg Industry Council) *Meeting the challenge of 2012 and the ban on conventional cages across Europe.*

If you wish to contribute to the Symposium, please submit a title and abstract to UFAW for consideration for oral and poster presentations.

Further information, registration form, how to submit an abstract and accommodation details, can be found on the UFAW website. You can also contact Dr Stephen Wickens, UFAW Development Officer. Email wickens@ufaw.org.uk.

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.



Research

Welfare of broiler 'breeders'

Louise Buckley, a current UFAW Research Training Scholar, is in the final research year of her scholarship. Louise's research centres around the premise that if qualitative manipulation of feeds makes chronically hungry broiler breeders feel more satiated then they will prefer this diet over conventional feed restriction.

Last year Louise was unable to identify a dietary preference and unsure whether this was genuine indifference or due to broilers having difficulties learning the Y-maze discrimination task. Louise's research has since confirmed both that commercial levels of feed restriction impairs learning ability and that the Y-maze task was difficult to learn irrespective of hunger state.

These findings have taken Louise down two separate lines of enquiry...

Firstly she has become interested in other factors that might affect any preferences observed. She is particularly interested in the phenomenon of state-dependent learning where the state of the animal at the time of learning may affect its later dietary preferences. Louise is currently testing this with broilers and predicts that the birds will prefer a food reward associated with hunger over one associated with satiety. If this methodology works Louise intends to use this protocol to indirectly identify if a qualitatively adjusted diet is more satiating.

Secondly, she has been looking at different ways of identifying feed restricted broiler breeder preferences. Building on work by colleagues at the Scottish Agricultural College, she is using a technique called Conditioned Place Preference to identify whether broilers prefer to spend their time in a chicken pen associated with qualitative feed restriction or one associated with quantitative feed restriction. She expects the birds will prefer the environment associated with the more satiating diet.

Louise has also become involved in science communication as a way of promoting animal welfare science. Over the last year she has run several voluntary animal behaviour workshops for children and teenagers. These included investigating the preferences of Madagascan Hissing Cockroaches.

Finally, as she nears completion of what have been three hard but interesting years, Louise would like to thank UFAW's supporters for so generously funding her research and for making possible such a fantastic opportunity. Thank you!



Professor William Russell Research Fellowship

UFAW established this Fellowship in memory of Professor William Russell, who with Rex Burch published their UFAW work on 'The Principles of Humane Experimental Technique' in 1959.

Mice are typically housed at 20-24°C, yet these temperatures are physiologically, if not psychologically, cold-stressors for mice. Joe Garner and his co-researchers are examining whether nest-building behavior allows mice to engineer a more comfortable thermal microenvironment, identifying optimal nesting enrichments, and establishing the benefits of nest-building for the mice, and for the scientific data they produce. Having shown that mice build nests in order to compensate for cold temperatures, and that nest building can be used as an indicator of discomfort due to cold, they are now investigating how nest building and nest efficacy differs between strains.

UFAW 3Rs Liaison Group studentships

Stephen Robery has begun a project as a UFAW 3Rs Liaison Group student at Royal Holloway, University of London examining the possibility of using the soil-living amoeba *Dictyostelium discoideum* as a preliminary screen for emetic liability in drug development in order to reduce or replace animal use in this area. The work is progressing well, and initial results suggest that a number of emetic compounds display an acute effect on cell movement. Furthermore, bitter compounds used for taste aversion experiments also elicit a similar block in *Dictyostelium*.

Claire Richardson is now approaching the end of the second year of her PhD studies as a UFAW 3Rs Liaison Group student at Newcastle University. The aim of her project has been to develop methods to improve objective methods of assessing the welfare and emotional state of laboratory mice.

Scientists study emotional states, including anxiety, in rodents using standardised behavioural tests such as the elevated plus maze. Although these tests are widely used, individual testing of animals can be stressful and repeated testing of the same animal can be problematic. Since the tests are also time consuming, it is often not feasible to use them to assess mice undergoing experimental procedures. Claire has been studying mice socially housed in an automated cage called the IntelliCage® and has found that behaviour of individual mice within this cage is often correlated to performance in standardised behavioural tests. This suggests that non-invasive automated technology can be used to inform us about an animal's emotional state in a social environment over long periods of time.

Over the next year Claire will be using the techniques that she has developed on mice used in other studies in order to continue her validation of the technique.

Current members/sponsors of the UFAW 3Rs Liaison Group are: Aptuit Ltd; AstraZeneca; Covance; GlaxoSmithKline; Harlan UK; National Centre for the Three Rs (NC3Rs); Novartis; Pfizer; RSPCA; Sanofi-Aventis.

Research Training Scholarship to be opened for applications in Autumn 2010

UFAW intends to advertise for applications for an Animal Welfare Research Training Scholarship in Autumn 2010. These scholarships are prestigious awards and the scheme was established to encourage high quality science likely to lead to substantial advances in animal welfare. They enable promising veterinary or science graduates to undertake three-year programmes of research leading to degrees at the doctorate level. UFAW would particularly like to encourage applications in the following fields:

- development of methodologies aimed at elucidation of the neurological basis of sentience in animals;
- developments in approaches to alleviating welfare problems in farmed, companion and/or laboratory animals through breeding;
- developments in detection and alleviation of pain;
- development of methods of welfare / quality of life assessment;
- development of more humane methods of 'pest' species control.

UFAW does not wish to exclude potentially valuable projects in other aspects of animal welfare science and applications for work in other areas will also be welcomed.

If you wish to receive further information on these awards when they are opened for application, please contact the UFAW Scientific Officer, email: scioff@ufaw.org.uk.

Mary Brancker CBE DUniv FRCVS

It was very hard to remember (JK writes), even when she was well into her 90s, that Mary Brancker (who died on 18th July 2010) was not as young as she once was. Her sprightliness, enthusiasm and preparedness to take on challenges seemed not to be curbed by time at all. Finding myself – whilst on some errand within the last 10 years with which she kindly agreed to help – standing beside her, high on a flat roof under the sky, I was aghast to realise that it hadn't crossed my mind to enquire if she minded having to climb up the two-story external maintenance ladder to get there.

Such was her open amiability and sense of fun, that she may not, herself, have noticed that she was also as undaunted and indomitable as Hadrian. She was unostentatiously committed to animal welfare and, in the same way, she quietly, bravely and kindly stood up for humans in their difficulties. Graduating from the Royal Veterinary College in 1937, she was one of the first women vets. During her very active career she held many positions of responsibility including the Presidency of the British Veterinary Association. In addition to her work in mixed veterinary practice, she played a major role in the development of zoological medicine and fish medicine. In recognition of the latter she received an Honorary Doctorate at Stirling University. She was a strong supporter of UFAW (a member since 1962) and served on the Council from 1993 to 1999 and as a Vice-President thereafter. We are fortunate to have met Mary and very grateful to her for her wisdom, the twinkle in her eye, and for her support, inspiration and shining example.

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 and Other Research Animals, and the UFAW/Wiley-Blackwell Animal Welfare Series)
- Running workshops and symposia
- Lecturing at universities and colleges
- Running the Animal Welfare Student 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.



Education

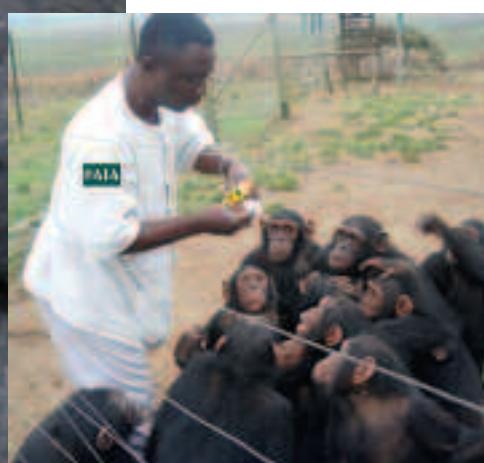
Small Project and Travel Award Projects

One of the Small Projects UFAW supported during the year was the publishing of the 'PASA Operations Manual'. PASA (the Pan African Sanctuary Alliance) is a non-profit organisation dedicated to strengthening, supporting and advancing the work of accredited primate sanctuaries across Africa. The alliance was formed as a direct response to increasing numbers of orphaned primates (from pet to bushmeat trades) and sanctuaries, coupled with an urgent need to unify standards and goals across an eclectic range of sanctuary programmes.

The Operations Manual has been developed to:

- outline the role of African primate sanctuaries in the welfare and conservation of species;
- update and formalise PASA's Codes of Conduct, Policies, Operational Philosophy and Principles;
- define the Minimum Standards and Best Practice Guidelines for sanctuary management and operations; veterinary and human health and welfare; re-introduction; and conservation education, environmental communication and advocacy;
- describe the membership and accreditation procedures by which PASA assesses performance against these standards.

Another successful primate project funded by the Small Projects scheme, was carried out by Ms Claire Watson of the Scottish Primate Research Group, University of Stirling. She investigated the effects of neighbour vocalisations on the behaviour of captive marmosets. UFAW supported equipment costs for Claire's initial studies which she carried out as part of her PhD researching social learning and social behaviour in common marmosets. Claire has presented her work in the American Journal of Primatology.



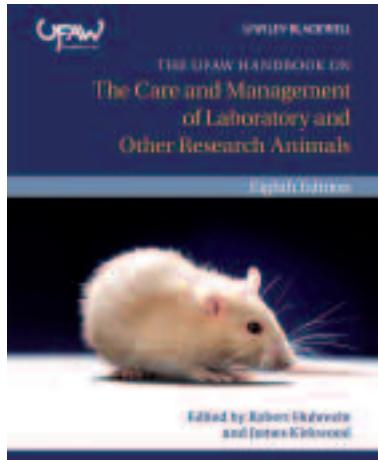
Veterinary Workshops in the Cameroon organised by the Pan African Sanctuary Alliance (PASA).

New UFAW publications on animals used in research and in the food industry

The eighth edition of the 'UFAW Handbook on the Care and Management of Laboratory and Other Research Animals' edited by Robert Hubrecht and James Kirkwood was published on the 24th March 2010.

The publishers, Wiley-Blackwell, describe the volume as:

'The seminal reference on the care of laboratory and captive animals ... a must-have for anyone working in this field. The UFAW Handbook has been the definitive text since 1947. Written for an international audience, it contains contributions from experts from around the world. The book focuses on best practice principles throughout, providing comprehensive coverage, with all chapters being peer reviewed by anonymous referees. As well as addressing the husbandry of laboratory animals, the content is also of great value to zoos and aquaria.'



The volume contains 50 chapters, including a number of new chapters on issues such as phenotyping, the three Rs and the conduct of field studies. The book is the product of a lot of work, by many people, not least the authors of the chapters and the anonymous reviewers. UFAW is enormously grateful to these people for their time and help in maintaining a high standard. The book is available from Wiley at a discount for UFAW members. Please contact the UFAW office for further details.

The fifth edition of the UFAW Handbook 'Management and Welfare of Farm Animals', edited by Professor John Webster, is now completed and with the publishers. This edition maintains the primary aim of its predecessors, namely to provide a comprehensive introductory textbook for young people requiring professional, technical or vocational education in the management and welfare of farm animals. Much of the book deals, as before, with the large scale commercial rearing of animals for food, ie the majority of the animals used in the industry, however, authors have also been asked to give special attention to alternative farming systems.

UFAW is very grateful to John Webster and all who contributed to this book.

UFAW University 'LINK' scheme

One of UFAW's founding objectives was to enlist 'the influence of university men and women on behalf of animals, wild and domestic'. The UFAW University 'LINK' scheme is a reflection of this sentiment. Through this scheme, launched in 2003, UFAW seeks to support diverse activities that promote and engage staff and students at 'LINK' institutions with the science of animal welfare. 'LINKS' also provide a network to disseminate information about UFAW activities, awards and meetings. We currently have 'LINKS' at 34 UK and overseas universities.

Activities that UFAW has supported at 'LINK' institutions in the past year include:

- Unitec Institute of Technology, New Zealand (Mark Farnworth): an undergraduate research project by Ellen Schubert on 'The provision of care received by rabbits adopted from animal welfare centres'. A synopsis of her study can be found on the UFAW 'LINK' webpage. Megan Young, who undertook a supported project last year, has just had her study on 'Seabird feeding associations and plastic pollution in the Haurauki Gulf' accepted for publication in the peer-reviewed New Zealand Journal of Marine and Freshwater Research.

- University of Reading (Dr Jennie Litten-Brown): a visit by Mr Jamieson Copsey (Head of the International Training Centre at the Durrell Wildlife Conservation Trust, Jersey) to speak to students about animal welfare in zoos.

- University of Stirling (Professor Hannah Buchanan-Smith): the annual Behaviour and Evolution Research Group seminar series. These seminars attract a significant number of attendees from Edinburgh Zoo, Blair Drummond Safari Park and Edinburgh University, in addition to staff, undergraduate and postgraduate students from Stirling's Biology and Psychology Departments.

- Estonian University of Life Sciences, Estonia (Dr David Arney): an initiative of Dr Arney in which selected students return to their previous schools to give a talk on animal welfare to the next generation of students. In addition to increasing awareness and discussion in the visited schools, and allowing the teachers to use it as a platform for further study, it will also benefit his students.

- University of Newcastle (Dr Melissa Bateson): organisation of their 2009 student Animal Health Conference.

- University of Guelph, Canada (Professor Georgia Mason): the visit of Dr Camie Heleskie from Michigan State University who talked about horse welfare in the developed and developing world as part of Guelph's third annual 'Welfare research day' in April.

- Massey University, New Zealand (Dr Ngaio Beausoleil): an initiative of Massey's student-led animal welfare group, AWAG, to develop an enrichment and training programme for dogs used in teaching the veterinary science, vet nurse and technician programmes at the university; specifically the purchase of equipment necessary for the programme to go ahead.

- Pontificia Universidad Católica de Chile (Professor Cristian Bonacic): a workshop on animal welfare challenges in Chile. In addition, Professor Bonacic has kindly decided to translate parts of the UFAW website into Spanish to allow his colleagues better access to the information it contains.

A list of 'LINK' institutions and further information about the scheme can be seen on the UFAW website.

If you do not have a 'LINK' at your university or college and would like to volunteer please let us know. Contact ufaw@ufaw.org.uk.



Final year undergraduates at the 5th Student Animal Welfare Conference held at Hartpury College with support from UFAW.

UFAW Animal Welfare Student Scholarships

This year, the scope of the UFAW vacation scholarship awards, first launched in 1983, has been widened a little and the name amended to reflect this. The awards are now also open to MSc students, can be undertaken any time (not just during vacations) and can be used to support projects undertaken within university or college courses.

Forthcoming 13th Annual Animal Welfare Student Scholars Meeting University of Glasgow, 8th December 2010

This year the annual student scholars meeting (at which those awarded an animal welfare student scholarship present their findings) will take place at the University of Glasgow's Faculty of Veterinary Medicine. These popular, free meetings always make for an engaging and informative day and we invite UFAW members and supporters and others interested to come along and find out what the student scholars have been up to. Lunch and refreshments are provided. We would like to thank Dr Dorothy McKeegan, Glasgow's UFAW 'LINK' who has been very helpful in making arrangements for this meeting.

Anyone wishing to attend or seeking further details should contact Stephen Wickens, Development Officer (wickens@ufaw.org.uk).

Congratulations to the successful 2010 UFAW Animal Welfare Student Scholars

Miss Georgia Felicity Collins, University of Edinburgh, 'Does hunger induce a depressive-like state in broiler breeders?' supervised by Dr Tom Smulders.

Miss Susan Fowler, University of Bristol, 'Understanding causes of mortality in layer hens', supervised by Dr Chris Sherwin and Professor Christine Nicol.

Ms Kristel Klaus, Newcastle University, 'Examining the 'pain face' of the dog', supervised by Dr Lucy Asher.

Ms Rebecca Pocock, Royal Veterinary College, University of London, 'Alternative broiler systems and the coccidiosis question: an epidemiological survey of pasture-reared batch-raised broilers in Shenandoah, Virginia', supervised by Dr Damer Blake.

Miss Kotono Shikano, University of Exeter, 'Effect of ocean acidification on Cephalopods' life cycle', supervised by Dr Tetsuhiro Kudoh.

Miss Carly Short, University of Leicester, 'Developing optimal aquarium conditions for laboratory-housed three spined sticklebacks *Gasterosteus aculeatus*', supervised by Dr Iain Barber.

Mr Josep Subirana, University of Edinburgh, 'Veterinary practices and anaesthesia protocols: assessing stress and pain in dogs in neutering programmes in developing countries', supervised by Professor R. Eddie Clutton.

Miss Roshni Tamhane, University of Liverpool, 'Analysis of the effectiveness of an animal birth control program for stray dogs in India', supervised by Dr Peter J Cripps.

Miss Nika Vorster, Nottingham Trent University, 'The impact of traditional initial training on the subsequent behaviour and welfare of racehorses', supervised by Dr Carol Hall.

Miss Alison Wise, University of Nottingham, 'Heartworm and parvovirus incidence in Indian community dogs', supervised by Dr Rachael Tarlinton.

Mr Daniel Woodward, University of Chester, 'Impact of environmental enrichment on boldness in a captive reared fish', supervised by Dr Lynne Sneddon.

Mr Callum Wright, University of Glasgow, 'A study to compare faecal flotation, a commercial immunoassay and PCR for the detection of Giardia spp in kennelled dogs', supervised by Dr Elizabeth Graham.

Mr Jamie Dallaire, University of Guelph, Canada, 'Rehabilitation and environmental enrichment use in physically disabled and visually impaired bile-farmed Asiatic black bears', supervised by Dr Georgia Mason.

Ms Saara Maria Hiippala, Estonian University of Life Sciences, 'Assessment of diagnostic methods for canine monocytic ehrlichiosis among the stray dogs of Sri Lanka', supervised by Dr David Arney.

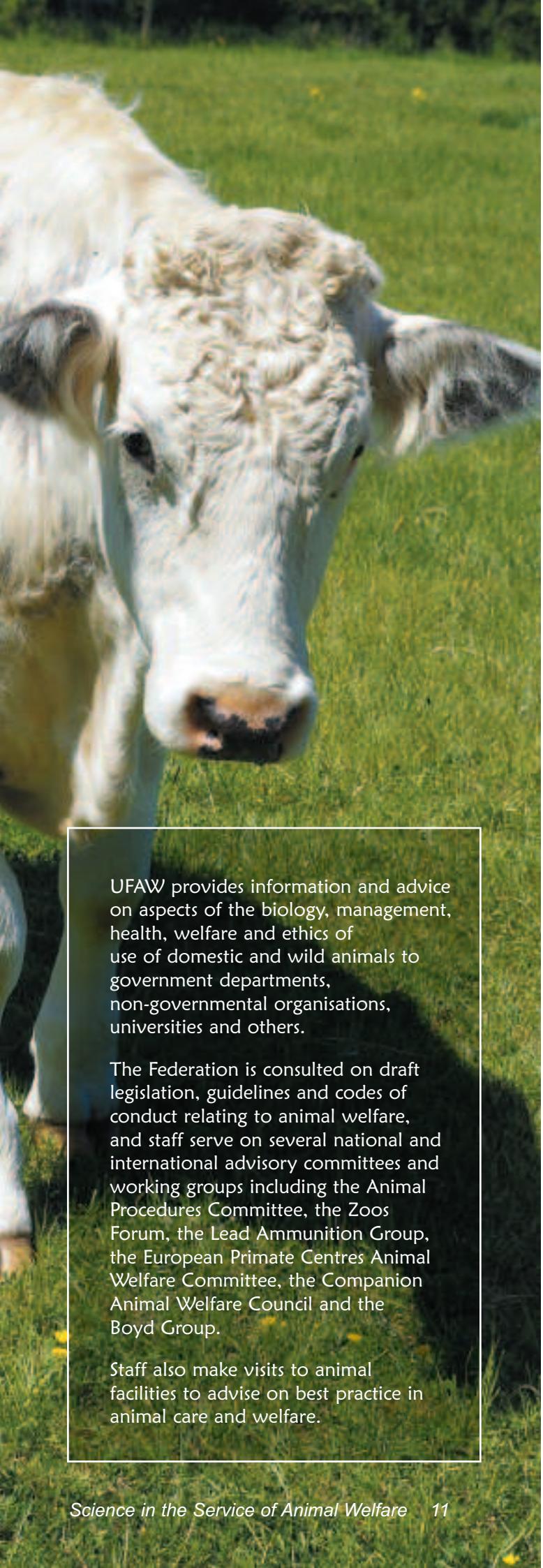
The UFAW 2010 Conference, York. Recent advances in animal welfare science

At the end of June 2010, animal welfare scientists, veterinary surgeons and others with an interest in the way we keep and care for animals gathered at the medieval Merchant Adventurer's Hall in York to share the findings of their latest research. During the day, one hundred and seventy-five delegates from 15 other countries as far afield as Australia heard talks on a range of issues, including new methods aimed at better assessing welfare and continuing widespread concerns about the welfare of layer and broiler chickens. The poster session allowed many graduate students engaged in doctoral and post-doctoral research a platform from which they could present their findings. Over 40 posters covered a diverse range of topics including amongst others the transportation of ornamental fish, assessment of the quality of life in kennelled dogs and whether stressful experiences in neonatal lambs has a prolonged impact on their pain sensitivity.

From UFAW's perspective, the popularity of these meetings – which sold out weeks in advance – and the quality of the work being presented is very pleasing as it demonstrates the increasingly large number of people who are now devoting their energies to the science of animal welfare and improving our knowledge of the best way to look after the animals in our care. One subject of considerable interest at present is the use of cognitive bias to assess welfare, an approach pioneered by Emma Harding and colleagues at the University of Bristol funded by a UFAW Research Training Scholarship.

Abstracts of all talks and posters can be found on the UFAW website (<http://www.ufaw.org.uk/animal-welfare-conference.php>).





Advice, Information & Consultancies

New Legislation to protect animals used in research

The new European Directive regulating the use of animals in research is nearing completion. The expectation is that the final text will go to the European Parliament in September so that it can be agreed by October 2010. If the text goes through in the form expected, then the 3Rs, Replacement, Reduction and Refinement, of the UFAW scholars Professor William Russell and Rex Burch will, for the first time, be a part of European legislation. UFAW was consulted by the Home Office departments responsible for formulating the UK position on the various issues raised by the new Directive, and how these might be implemented into the UK legislation. During the revision of the Council of Europe Convention guidelines on animal housing and husbandry, which subsequently influenced the revised Directive, UFAW helped to ensure that European housing standards were generally raised. We have continued to advise on issues to do with licensing and other regulatory matters in this field.

One of the proposed provisions in the Directive is that primates used in research should be purpose bred and from captive bred parents. At present, the parents of some primates used in studies may have come from wild caught stock. The advantages of captive breeding include that the animals are more likely to be healthy and that the breeding stock are likely to be less stressed by captivity. The Commission has indicated that this change in primate sourcing would be phased in over a period, but there are a number of issues to be addressed in its implementation. The Commission has, therefore, suggested that it should, in consultation with Member States and stakeholders conduct a feasibility study that would include animal health and welfare assessment. UFAW has been taking part in workshops organised by European stakeholders the European Federation of Pharmaceutical Industries and Associations (EFPIA) and the Federation of European Laboratory Animal Science Associations (FELASA), on how such a feasibility study could be carried out, what issues are particularly important from an animal welfare point of view, and how these might be prioritised.

Dog Housing and Husbandry

UFAW, in collaboration with LASA, held a meeting on the 18th May 2010 on 'Dog housing, husbandry and enrichment – towards new standards'. The meeting was attended by veterinarians, technicians, researchers and breeders and was an excellent opportunity for CPD in this area. The programme included lectures by experts in the field of dog behaviour, training and husbandry, including Professors John Bradshaw (University of Bristol) and Danny Mills (University of Lincoln). There was also a workshop on the proposed provisions of the new EU Directive and how it might affect the care and use of dogs in research. While not a scientific poll, there was an opinion amongst those present at the meeting that, where standards in the UK were higher than the proposed new EU standards, the presumption should be that the existing UK standards should be maintained.



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 Lead Ammunition 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.



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?

Administration & Finance

Annual General Meeting 2009

The AGM was held at the Old School, Brewhouse Hill, 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 2008 and resolved to receive the Accounts and Auditor's Report for the year ended 31st March 2009. 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 Anthony Joseph & Co, Registered Auditors, be appointed as auditors to UFAW and its associated Trusts and their remuneration should be fixed by Council.

There were three new candidates for election and in accordance with the Articles of Association Ms B Cooper, Dr J Bradshaw and Professor N Gregory were elected to Council.

Notice of Annual General Meeting 2010

The Annual General Meeting of the Universities Federation for Animal Welfare will be held at 2.00pm on Wednesday 13th October 2010 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.

Finance and Accounts

The summarised accounts set out overleaf have been extracted from the full accounts and have been prepared in accordance with the Companies Act 2006, which were approved by the Directors/Council and signed on its behalf on 8th July 2010.

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 13th October 2010.

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

HSA Centenary International Symposium

UFAW's sister charity, the Humane Slaughter Association (HSA), will be holding its Centenary International Symposium at the Historic Dockyards, Portsmouth on the 30th June and 1st July 2011. These are the two days following UFAW's 2011 International Symposium at the same location.

The HSA Symposium, 'Recent advances in the welfare of livestock at slaughter', is one of the charity's activities marking its 100th anniversary in 2011. Major speakers already committed include Dr Temple Grandin of Colorado State University, Dr Andrea Gavinielli of the European Commission and Jia Zili, Director of the Beijing Chaoyang Anhua Animal Product Safety Research Institute.

Finance and Accounts

	Summary of Financial Activity year ended 31st March 2010		BALANCE SHEET as at 31st March 2010		
	2009/10 £	2008/09 £		2009/10 £	2008/09 £
Incoming resources:			Fixed assets:		
Voluntary income			Tangible fixed assets	596,940	607,878
Subscriptions & donations	26,531	50,094	Investments	5,481,897	4,315,269
Appeals	3,353	3,775		<u>6,078,837</u>	<u>4,923,147</u>
Legacies	685,320	693,110	Current assets:		
Garden bird project	23,433	48,312	Debtors	56,242	55,011
	<u>738,637</u>	<u>795,291</u>	Deposits at bank	620,792	522,477
Charitable activities			Cash at bank & in hand	22,468	31,463
Publications	61,018	66,301		<u>699,502</u>	<u>608,951</u>
Royalties & lecture fees	6,201	4,998	Creditors:		
Symposium	33,417	4,280	Amounts falling due within 1 year	(171,023)	(174,600)
	<u>100,636</u>	<u>75,579</u>	Net current assets	<u>528,479</u>	<u>434,351</u>
Investment income			Total assets less current liabilities	6,607,316	5,357,498
Interest bearing deposits	1,738	54,520	Creditors:		
Securities	<u>139,299</u>	<u>112,778</u>	Amounts falling due after more than 1 year	(138,459)	(145,141)
	<u>141,037</u>	<u>167,298</u>	Net assets	<u>6,468,857</u>	<u>5,212,357</u>
Total incoming resources	980,310	1,038,168	Funds:		
Resources expended:			Unrestricted	5,837,393	4,647,129
Costs of generating funds	48,656	38,077	Designated	31,433	6,565
Charitable activities	388,935	452,054	Restricted	600,031	558,663
Governance costs	2,946	2,946		<u>6,468,857</u>	<u>5,212,357</u>
Other resources expended	<u>173,731</u>	<u>166,532</u>			
Total resources expended	613,368	659,609			
Net (outgoing)/incoming resources for the year	366,942	378,559			
Other recognised gains and losses:					
Net realised (loss)/gain on investments	(80,722)	(117,540)			
Gain/(loss) on disposal of assets	-	1,285			
Net income/expenditure for the year	286,220	262,304			
Net unrealised gains/(losses) on investments	<u>970,280</u>	<u>(502,262)</u>			
Net movement in funds	1,256,500	(239,958)			
Balance brought forward	<u>5,212,337</u>	<u>5,452,315</u>			
Balance carried forward	6,468,857	5,212,357			

The summarised accounts were approved by Council and signed on their behalf on 8th July 2010

John H Pratt BVM&S DVSM FRCVS
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 8th July 2010.

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 2010.

S Francis-Joseph FCCA, Senior Statutory Auditor, Anthony Joseph & Co, Registered Auditors, London, 8th July 2010

UFAW