

The UFAW SAWI fund for promotion of animal welfare in Israel

As UFAW members and supporters will know, for many years the UFAW Council has been the board of trustees also for two other charities – the Humane Slaughter Association (HSA), and the Society for Animal Welfare in Israel (SAWI) – which share with UFAW the premises at The Old School, Wheathampstead, and some staff including the Chief Executive.

SAWI was established by veterinary surgeon Miss Marguerite Silverman in 1958 to promote animal welfare in Israel and, in due course, became a registered charity (No. 206494). In 1986, Miss Silverman felt that she could no longer shoulder the burden of the charity's administration and she approached the UFAW Council about UFAW taking SAWI under its wing. This was agreed and the Council became the trustees of SAWI on 1 January 1987.

During a recent review of strategy for SAWI, the SAWI Trustees/UFAW Council decided that it would be advantageous to bring SAWI (which, unlike UFAW, was not a company limited by guarantee) within the umbrella of UFAW's limited liability. Hitherto, SAWI's activities had been administered by UFAW staff, and the new arrangement would open the door to being able to use SAWI funds to employ someone to assist in developing SAWI's activities. As the Chairman explained at the AGM in October 2003, after taking legal advice and following meetings with some of SAWI's founders and consultation with the SAWI membership, the trustees voted unanimously on 7 October 2003 to transfer SAWI's assets to a restricted fund – the UFAW SAWI fund – within UFAW. This fund will be used to promote activities in line with SAWI's original objectives:

- (a) To assist in the protection of animals in Israel, by encouraging and promoting education in the humane treatment of animals, by providing treatment for sick and injured animals, and by providing facilities for humane destruction;
- (b) To collect funds for the purposes of the Society;
- (c) To do such other lawful things as are conducive to the attainment of the Society's objects.

Through this SAWI fund held by UFAW, it will be possible to further develop initiatives for animal welfare in Israel in the coming years. Plans are underway to begin to take this forward during 2004.

Zoo Outreach Organization news

For several years, UFAW has been sponsoring the work of the Zoo Outreach Organization (ZOO), based in India. Over the past year, the organisation has been actively promoting zoo animal welfare in several countries in Southern Asia, India, Bangladesh, Nepal and Sri Lanka. UFAW funds have been put to good use to cover travelling expenses associated with the provision of training in zoo education and animal welfare and in promoting new and/or improved zoo legislation, and to prepare and distribute educational materials to other South Asian welfare, zoo and wildlife organisations. ZOO has also produced welfare-awareness materials for use by zoos, non-governmental organisations and other institutions when conducting welfare programmes in schools for Wildlife Week, Animal Welfare Fortnightly, Earth Day and World Environment Day. In addition, ZOO has developed an archive of current zoo legislation, standards and licensing information. The regular meetings, teaching and dialogue, as well as the provisioning of information through magazines, journals, compendiums and specific training materials, make a valuable contribution to promoting animal welfare and conservation in zoos in this region.

RSPCA/UFAW rodent welfare meeting

A joint RSPCA/UFAW rodent welfare meeting examining ways of refining the procedures carried out on rats and mice was hosted by Cancer Research UK on 6 October 2003. The meeting was well attended by scientists, veterinarians, technicians and representatives from animal welfare organisations. These meetings provide an opportunity to spread good practice and, as they are cheap to attend, provide an excellent opportunity for those on small budgets. Seven papers raising topical issues were given at the 2003 meeting. Dr Georgia Mason, a former UFAW Research Training Scholarship supervisor, presented a paper on the possibility of using the phenomenon of 'red tears' or chromodacryorrhoea as a measure of stress for laboratory rats. Scores using this method were observed to correlate with disturbance caused by building maintenance work, and inter-observer correlation was good. Two reports on which UFAW staff have served as experts were also presented: Dr Laura Playle from the MRC Centre for Best Practice for Animals in Research (CBPAR) described the progress of a working group developing standards for assessing the welfare of genetically modified mice; and Dr Penny Hawkins (RSPCA, and convener of the meeting) presented some of the major points of the new Joint Working group (BVA/FRAME/RSPCA/UFAW) on refinements in telemetry procedures for mice. Infection studies may cause considerable suffering; however, one study presented at the meeting demonstrated how choosing a particular mouse strain could significantly reduce adverse effects. In the same presentation, the use of shelter tubes as enrichment for rats in metabolism cages was described. These cages can be barren environments and it was therefore useful to learn that the tubes were an effective enrichment that did not affect experimental outcomes.

Notification for Election to Council at the 2004 AGM

In accordance with Article 46 of the Constitution, nominations for election to membership of the Council at the 2004 AGM must reach the UFAW Secretary between 27 July and 17 August 2004. Further information is available from the UFAW Secretary.

2004 Annual General Meeting

This year's AGM will be held on the afternoon of Tuesday 5 October 2004 in Wheathampstead. Full details of the time and business of the meeting will be sent to members in due course.

Council changes at the 2003 Annual General Meeting

We welcome Professor Vincent Molony BVSc MSc PhD MRCVS, Head of Preclinical Veterinary Sciences at the Royal (Dick) School of Veterinary Studies, University of Edinburgh, and Mr Michael Bird FCA, Finance Director of the Zoological Society of London, who were elected to fill two vacancies on Council. Mr John Pratt was re-elected to Council and has succeeded Mr Norman Reed as Honorary Treasurer.

UFAW Spring Appeal: Advances in the welfare of fish

In recent years there have been many developments in fish farming and in the keeping of fish as companion animals. A very wide range of species is kept and the scale of both of these industries has increased around the world. UFAW has been involved in a variety of initiatives for fish welfare in recent years: supporting several vacation scholarship studies into aspects of fish welfare, supporting a workshop in 2003 on tackling spinal disease in farmed fish, and publishing key papers on fish welfare in *Animal Welfare*.

Starting this year, UFAW is supporting, as the industrial partner, a BBSRC CASE PhD research project based at Bristol University and the Silsoe Research Institute, on the humane slaughter of sea fish. Many farmed sea fish (eg sea bass and bream) are killed in Europe each year using methods that have been criticised as inhumane such as immersion in slush ice. This new project aims to extend the electrical stunning/killing technology that has been developed recently for the humane killing of fresh water species, for use in sea fish. UFAW is collaborating with the Humane Slaughter Association in providing support for this project.

We would be most grateful if you would help support the charity's initiatives for fish welfare by responding to the 2004 Spring Appeal or through remembering UFAW in your will.

Donations and legacies

We appeal to every donor, who has not already done so, to complete the new Gift Aid scheme form which enables UFAW to claim tax back on your donation or subscription providing that you are a UK taxpayer. Higher rate taxpayers can personally claim relief on the difference between their higher rate tax and basic rate on the self-assessment form. UFAW relies on such generosity and income from legacies to fund its ongoing charitable work. An advice leaflet on how to leave a gift to UFAW in your Will is available upon request – please tick the reply form to receive a copy.

We hope also that all those who have contributed to SAWI in the past will continue to support our efforts to promote welfare in Israel in the future by making donations to the UFAW SAWI fund.

Response to the Autumn Appeal

We are extremely grateful to everyone who supported our Autumn Appeal, which raised £1495 to support our new award scheme to fund initiatives to improve the welfare of wild animals. We have had a good response to the call for applications for this new award, and judging of these is underway.

Stationery and promotional products

The brochure enclosed with this News-Sheet displays a number of promotional products available from UFAW. To order, please complete and return the enclosed reply form with payment to UFAW.

Universities Federation for Animal Welfare

News-Sheet, March 2004



Science in the service of animal welfare

Letter from the Chairman

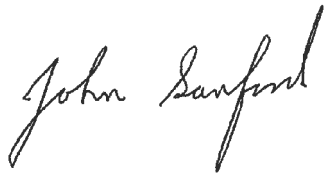
In this issue we sadly report the deaths of three of our more prominent members. Each has made a significant contribution to the work of our charity and we remember them with gratitude.

As announced at the last AGM, the Society for Animal Welfare in Israel has now become part of UFAW as the UFAW SAWI Fund. This change will allow a more progressive approach to animal welfare in that country without detracting from the support traditionally given to the animal shelters.

October was marked by the presentation of the first UFAW 'Tesco' award to Monica Winstanley, recognising the importance of promoting public awareness of animal welfare science. The award was made by Professor Lord Winston at a reception held at The Royal Society.

In December the annual vacation scholars meeting provided an opportunity for recipients to present and discuss their projects. These scholarships give students an excellent opportunity to experience the satisfactions and frustrations of animal welfare research at an early stage in their careers.

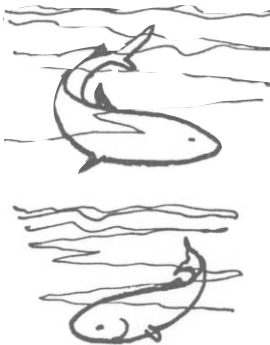
We are particularly proud to congratulate two of our research Training Scholars on gaining PhDs during the year. In these and other ways UFAW fulfils a valuable educational role at undergraduate and postgraduate levels. Our association with universities will be strengthened by the recently introduced 'links' scheme. In the past, membership of a UFAW group was an established part of life in several universities and it is intended that the scheme will revitalise the connection implied by the title of our charity.



BBSRC Case Studentship Research into the humane slaughter of sea fish

UFAW and the Humane Slaughter Association (HSA) are assisting, as industrial partner to Silsoe Research Institute and the University of Bristol, in providing supervision for a BBSRC CASE PhD research project on the humane slaughter of sea fish.

Many farmed sea fish (eg sea bass and bream) are killed in Europe each year using methods that have been criticised as inhumane, such as immersion in slush ice. This new project aims to develop the electrical stunning/killing technology that has been developed (with support from HSA) recently for the humane killing of farmed trout, for use in sea fish. The challenge of this project will be to find ways of achieving a sufficiently powerful electrical field despite the complications posed by the much greater conductivity of salt water.



The PhD Studentship has been awarded to Mr Ambrose Tinarwo and his work has just started this January (2004). Ambrose, who comes from Zimbabwe, graduated from the MSc course in Applied Animal Behaviour and Welfare at Edinburgh University in the Autumn of 2003. During his three-year PhD research, Ambrose will spend several weeks with UFAW and HSA at The Old School. Ambrose received a UFAW vacation scholarship in 2003 for studies on discrimination of

Deer Commission Workshop

James Kirkwood was asked by the Deer Commission for Scotland (DCS) to Chair and facilitate a workshop, held in Stirling on 15 October 2003, on the welfare of free-ranging deer. The DCS is currently producing best practice guidance on various aspects of deer management and one of the aims of the meeting was to discuss welfare matters relevant to this. The other aim was to discuss general principles about the scope and extent of responsibility for the welfare of free-ranging deer in order to inform the DCS response to the Scottish Executive/Defra consultation on their proposed animal health and welfare strategy for Great Britain. This interesting and constructive meeting addressed, among many other matters, the position of managed wild animals such as deer, which fall somewhere along the spectrum at the extremes of which are farmed animals (for whose welfare owners are responsible) and truly wild animals (for whose welfare no one has a legal obligation). UFAW's Scientific Officer Samantha Mills, who had been planning to work with James at the meeting, was unfortunately unable to attend due to illness, and we are grateful to Natalie Simmons of the HSA staff who kindly stepped in to fill the breach.



New UFAW Wild Animal Welfare Award Scheme

With the global human population now exceeding six billion and continuing to grow rapidly, we are unavoidably in competition with wild animals for food, space and other resources. It has become clear that human changes to the environment often compromise the welfare of large numbers of individuals of many species.

In order to encourage improvements in the welfare of wild animals, the new 'UFAW wild animal welfare award scheme' was launched in the latter part of 2003. The aim of the scheme is to recognise innovations which alleviate or prevent unnecessary anthropogenic harm to the welfare of animals in the wild and/or which recognise innovations relevant to improving the welfare of wild animals in captivity.

The competition has been open to those working with captive or free-living wild animals; for example, those working in wildlife management and conservation, those undertaking research on wild animals, those working in zoos, or those working in wildlife rehabilitation. It is easy enough to make changes to animals' circumstances, but it is not always so easy to be sure that these changes are actually to the welfare advantage of the animals themselves. Applicants must present in their applications the evidence for believing that their innovation is a benefit to the animal from the animal's point of view.

There has been a good response to the new award scheme with many applications coming in from various fields of wild animal work. The applications are currently under review and if the judges believe they are of sufficient merit, UFAW will give two awards, each of £1000: one for the best innovation for the welfare of captive wild animals in the UK, and the other for the best innovation for the welfare of free-living wild animals in the UK.

Recent UFAW-supported PhD theses in animal welfare science: Ros Clubb (2001, University of Oxford, 'The role of foraging niche, rearing conditions and current husbandry on the development of stereotypies in carnivores'); Emma Harding (2002, University of Bristol, 'Novel methods for assessing mental states and animal welfare'); Kenneth Rutherford (2003, University of Edinburgh, 'Investigating fractal analysis of animal behaviour as an indicator of stress'); Emma Smith (2003

Winner of the UFAW 'Tesco' award for promotion of the public understanding of animal welfare science announced

The winner of the first UFAW 'Tesco' Award for promotion of the public understanding of animal welfare science was announced on Wednesday 22 October 2003. Professor Lord Winston presented the prize to Dr Monica Winstanley of the Biotechnology and Biological Sciences Research Council (BBSRC) at an evening reception organised by UFAW at The Royal Society, for her booklet entitled 'Science and Animal Welfare'.

The welfare of animals has become a matter of great public concern and, not infrequently, public controversy. Society expects high standards, and to provide these requires a proper understanding of animals' physical and psychological needs and of how these needs can be met. A scientific approach is essential and there have been many advances in the science of animal welfare in the last 20 years. UFAW, with

support from Tesco, launched this prize to encourage the publication or broadcast of work which best communicates to a wide audience the importance and value of the scientific approach, the ingenuity of the scientific methods, and the relevance of the findings.

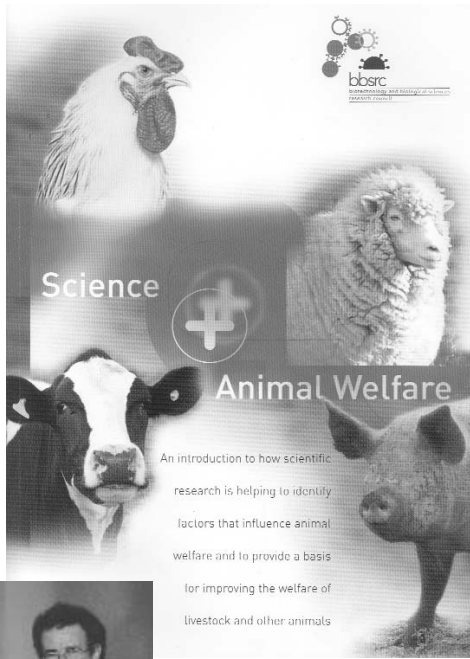
Lord Winston said: "Although a small organisation, UFAW, by championing the scientific approach, has had an enormous influence in the development of animal welfare standards around the world. I congratulate UFAW and Tesco for this excellent initiative, and it gives me great pleasure to present the 2003 award to Dr Monica Winstanley for her review of recent advances in this fascinating branch of science."

In 'Science and Animal Welfare', Dr Winstanley outlines a variety of recent research approaches in the UK aimed at advancing our understanding of what is important to animals for their welfare and at developing methods to tackle welfare problems.

Standards for keeping animals, which set minimum limits for parameters such as cage/enclosure sizes, tend these days to be established by committees in Brussels. Since no hens, pigs, cattle or mice sit on these committees, one of the great challenges of animal welfare science is to find ways to gain insight into the views and preferences of these animals themselves, so that their interests can be properly represented. Dr

Winstanley's booklet reviews some of the ingenious methods being used to explore animals' minds for this reason.

Michelle Waterman, Tesco Agriculture Manager, said "Animal welfare is very important to Tesco and our customers, and we believe that awards such as this, which recognise research in this field, are important to improve standards through-



Obituaries

Harry V Thompson BSc CBiol FIBiol

Harry Thompson studied at Oxford under Sir Charles Elton. After leaving Oxford, he took up a post at the Ministry of Agriculture (which later became MAFF) and rose to become Head of the Land Pests and Birds Research Laboratory at Worplesdon. During his career he worked on humane methods of control of rabbits, badgers and other species and gained wide respect for his very extensive knowledge of the biology of British mammals. Among his publications were *The Rabbit* (Collins, 1956) which was co-authored by Alastair Worden, and *The European Rabbit: the History and Biology of a Successful Colonizer* (Oxford Science, 1994) which he edited with Carolyn King. He was a great supporter of UFAW throughout his career, first serving on the Scientific

Advisory Council in 1947, then on the Council from 1962 to 1973 and again during the early 1980s. He was elected President in 1985 and maintained a close interest in the Federation's activities throughout his life. He died on 24 November 2003. Harry will be remembered very fondly by all at UFAW for his generous encouragement and loyal support over the years.

Marguerite R Silverman MRCVS ACIS

Marguerite Silverman graduated from the Royal Veterinary College in 1935 and spent some time in companion animal practice before the Second World War. She then changed career and developed a successful business in verbatim recording (before the invention of the tape recorder). In 1958, following a holiday visit to Israel during which she had been distressed by the scale of the animal suffering she had seen, she founded the Society for Animal Welfare in Israel (SAWI). As described elsewhere in this News-Sheet, in 1986 she approached UFAW about the possibility of SAWI being taken under its wing so as to ensure that the donations and general support provided by the Society's members would continue to be properly handled. Miss Silverman generously supported SAWI and followed the activities of both SAWI and UFAW with interest. She was pleased with the new arrangements made during 2003 for SAWI to be brought within UFAW as the UFAW SAWI fund. She died peacefully at a nursing home, near her home in Catcott in Somerset, on Friday 5 December 2003, aged 89. Through her efforts in founding and developing SAWI and in her generous support for its activities, Marguerite Silverman had a tremendous impact on improving the welfare of animals in Israel.

Thomas Field-Fisher TD QC

Thomas Field-Fisher was educated at Peterhouse College, Cambridge, and joined the Queen Victoria's Rifles in 1939. He was called to the Bar in his absence in 1942 whilst a prisoner for the duration of the war, following his capture, as a member of the British Expeditionary Force, in Calais in 1940. In addition to pursuing a very distinguished legal career, being appointed QC in 1969, he worked also for animal welfare. These interests came together in his book *Animals and the Law* which was published in 1964 and when, between 1980 and 1989, he served on the Home Secretary's Advisory Committee on Animal Experiments. He joined the UFAW Council in 1950 and served right through to 1965, during one of UFAW's most highly productive eras. After further periods on Council during the late 1970s and mid 80s, he was appoint-



Vacation school
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Research Training Scholars' update

We were delighted that UFAW's Research Training Scholar, Emma Smith, successfully completed her PhD during 2003. As a result of this, Emma has published several papers in the scientific press on her work on avian vision. Furthermore, as a direct result of her work, some practical changes will be made to the way that animal husbandry is conducted in zoos in the USA. Several US zoos have agreed to change the artificial light environments and make them more natural: non-flickering lighting, natural photoperiods and ultraviolet-containing lights will be provided. Emma says that 'whilst we might not have solid evidence that this change will promote a significant increase in welfare, it certainly will do no harm, and the provision of UV will form an environmental enrichment in terms of providing a greater range of visible colours to the birds'.

We were also delighted to hear that another of our Research Training Scholars, Kenneth Rutherford, was awarded his PhD during 2003. His thesis was entitled 'Investigating fractal analysis of animal behaviour as an indicator of stress', and his first paper resulting from this work has now been published in the scientific press¹.

Vacation Scholars' meeting

The sixth annual UFAW Vacation Scholars' meeting was held in the Great Hall of the Royal Veterinary College, Camden, on 10 December 2003. The switch to a pre-Christmas meeting proved popular, with a record number of people expressing interest in attending. The meeting started with Professor Mac Johnston, Chair of Veterinary Public Health and HSA's Vice President and Chief Veterinary Adviser, welcoming UFAW and the scholars to the RVC. Appropriately, the first talk was given by Lucy Percival, recipient of the 2003 HSA Dorothy Sidley award, which is similar in nature to the UFAW vacation scholarships. Lucy presented her work on developing an objective method of assessing the welfare of horses at auction markets.

For the rest of the morning, the talks focussed on the assessment of the welfare of captive wild animals, including cheetahs, rhinos and chimpanzees. After lunch, Dr Chris Sherwin presented an update of his work for the UFAW Hume Research Fellowship. This work, which has focussed on improving the design of laboratory mouse housing, has been very productive over the past three years. Some of his most recent studies into self-administration of anxiolytics as a means of assessing anxiety levels in laboratory mice have shown that mice living in small, barren standard cages self-administer more frequently than mice living in larger enriched cages, suggesting that mice may find the former environment more aversive. The results also show that standard laboratory accommodation for mice can result in high levels of anxiety, which is likely to influence the results of any laboratory tests being carried out on them.

In other talks, the scholars looked at the assessment of stress in cattery-housed cats, the possible welfare benefits of farmer-mediated artificial insemination in dairy cows over more commercial systems, and the

effectiveness and validity of commercially used temperament tests for dogs. We would like to thank the staff and students of the RVC for their welcome and for their help in organising the meeting, and all those who supported the meeting. Applications for the 2004 vacation scholarships have now been received and are currently under consideration.

News of two of the 2003 UFAW Vacation Scholarships: novel methods of monitoring stress in cats

Finding and validating new, objective ways of monitoring and measuring stress is an important step in assessing the welfare of any species. During their projects, UFAW vacation scholars Emily Ward (Harper Adams University College) and Louise Buckley (University of Lincoln) separately sought to validate a non-invasive physiological measure of stress in cats that could be used in place of, or in conjunction with, existing behavioural measures such as the Kessler-Turner scoring system^{2,3}.

In her study, Emily assessed whether measurement of salivary immunoglobulin A (IgA), a method successfully used in assessing the response of the human immune system to stress, could be similarly used for cats newly arrived at a rescue shelter. Emily found that the cats differed significantly from one another in both their Kessler-Turner (KT) behaviour score and their salivary IgA scores, indicating that some cats seemed more able to cope with the new shelter environment than others. No significant change in these scores occurred during the week-long observation period. She also found a very significant positive correlation between salivary IgA concentration and KT behaviour score. That this correlation between IgA and stress was not negative – as is the case in humans, where long-term stress compromises the immune system and leads to a reduction in the amount of salivary IgA produced – was surprising; further investigation of the link between salivary IgA levels, other physiological parameters and stress in cats is required before this result can be more fully explained.



Louise's study took a slightly different approach. Starting from the premise that chronic stress causes physiologically damaging changes to an animal, she investigated whether it was possible to detect such changes in the urine of cats, using the well-known biomarkers of free-radical oxidative damage known as thiobarbituric acid reactive substances (TBARS). She compared urinary TBARS and cortisol (another physiological marker of stress) concentrations and KT behaviour scores in recent arrivals at a boarding cattery with those of a control group over a seven-day period. Perhaps as a tribute to the level of care in the boarding cattery, no significant difference could be detected in the mean level of urinary TBARS between the two groups of cats, although the cattery group exhibited significantly more variability in daily TBARS levels than did the control group. This variability did not, however, correlate with variability in cortisol or KT behaviour scores, although cortisol levels did differ significantly between the two groups. Further work needs to be carried out to determine whether this observed variability in daily TBARS levels is a useful additional measure of stress in cats.

University links scheme

The UFAW university links scheme, which aims to strengthen links between UFAW and the staff and students of UK universities and colleges, is now up and running. During the initial piloting of the scheme, four universities have been co-opted. Dr Hannah Buchanan-Smith (Department of Psychology, University of Sterling), Dr Toby Carter (Department of Life Sciences, Anglia Polytechnic University), Dr Daniel Mills (Department of Biological Sciences, University of Lincoln) and Dr Natalie Waran (Royal [Dick] School of Veterinary Studies, University of Edinburgh) have all kindly agreed to help promote UFAW's objectives at their establishments and to further raise the charity's profile. To this end, the UFAW (and HSA) annual reports and other literature have been distributed among the students. Further developments and activities in these



vacation scholars' meeting, December 2003. From left to right: Chris Sherwin, Daisy Berthoud, Emily Ward, Elizabeth Tinsley, Helen Ashby, Helen Broadbent, Ambrose Tinarwa, Lucy Percival, Lucy Percival, Sheila McKay, Josephine Archer