



HELPING animals through **welfare** SCIENCE



SCIENCE GROUP REVIEW OF 2013

»» www.rspca.org.uk/sciencegroup

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Foreword

Humans and other animals can have very different needs and interests and, where human requirements are prioritised over those of animals, this can directly or indirectly lead to a great deal of animal suffering.

This conflict can make the RSPCA's mission to end cruelty, promote kindness to animals and alleviate their suffering especially challenging, particularly in the current economic climate where animals often come off worst in the drive to save money and resources. This applies in each of the four areas with which the Society deals – companion animals, farm animals, research animals and wildlife.

Understanding the needs of animals and their welfare and the problems that need to be solved in order to provide for these is critically important to achieving change. A comprehensive understanding of the social, political and economic environment is also essential. The Society has always recognised this and is committed to a sound, evidence-based approach to animal welfare. This is deeply rooted in its values of compassion, integrity and courage, and enables us to provide practical solutions that achieve real benefits for animals.

The combination of ethics and expertise makes the RSPCA a formidable force in driving forward changes that will improve the lives of animals. Throughout this 2013 review, you will find examples of how the Society's science teams have worked with – and been able to influence – a wide range of decision makers and practitioners in government, regulatory bodies, funding bodies and academic institutions, as well as the many industries involved and, of course, the public.

A major theme running throughout this year's report is the work we have done to analyse, collate and interpret emerging scientific information on the welfare needs of animals, regardless of the context in which they are kept or used by humans. We are also increasing our focus on new approaches to the objective assessment of the nature and level of discomfort, pain and distress, and applying this to the development of legislation and far-reaching guidelines designed to better protect animals both in the UK and in the international arena.

I hope you will find the report of our work interesting and useful. As the RSPCA's Chief Scientific Officer I am extremely proud of the work the Science Group does, together with our colleagues across the Society as a whole, to benefit the animals with whom we share our world.

Maggy Jennings OBE, BSc, PhD
Chief Scientific Officer, RSPCA



"...the RSPCA is a formidable force, driving forward changes that will improve the lives of animals"

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Companion animals

Millions of animals in England and Wales are kept as pets, sporting athletes or working animals. Much of the RSPCA's work focuses on protecting and improving their welfare and the companion animals team helps to direct and support this work.



Animals in our care

The RSPCA has 17 regional and 42 branch animal centres and at maximum capacity we can care for 2,942 dogs and 3,847 cats as well as thousands of other animals commonly kept as pets.

As recent years have seen huge advances in the understanding of companion animal behaviour and welfare, it is vital that staff responsible for the care and rehabilitation of animals have access to this information.

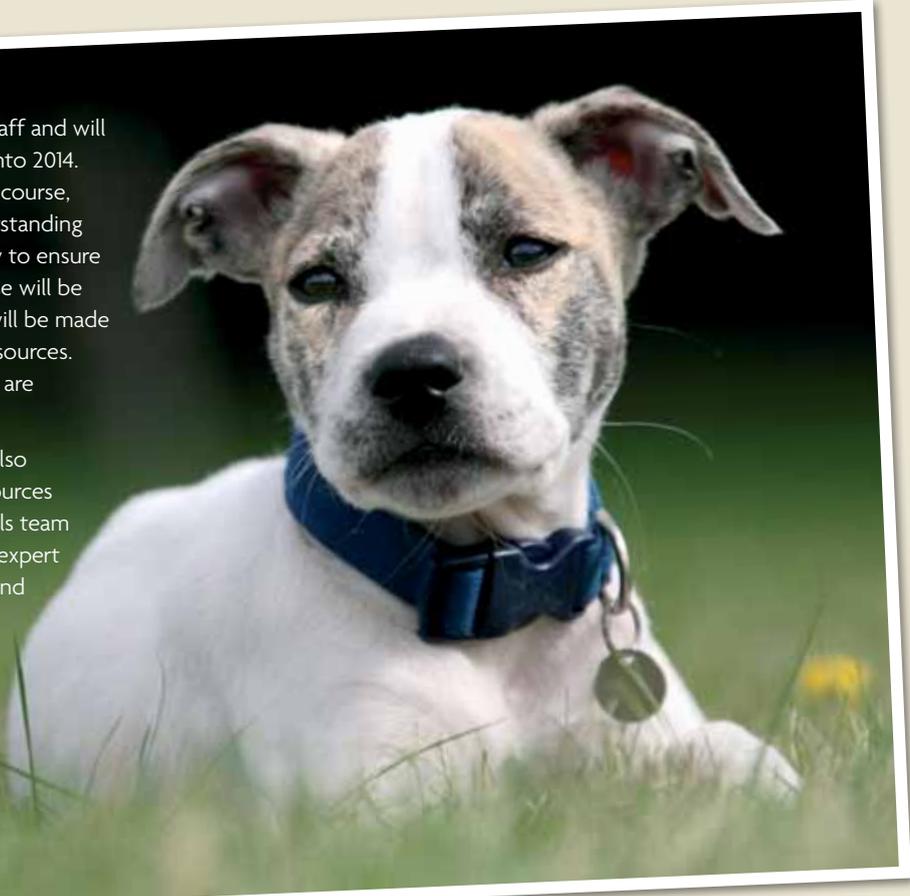


Training materials and reference resources

In 2011, the RSPCA started to update the training materials provided to staff about dog behaviour and welfare to ensure the content was scientifically sound and based on the most current knowledge. The RSPCA worked with Julie Bedford, a Certified Clinical Animal Behaviourist (CCAB), to develop a series of bespoke courses for RSPCA animal centre staff. The first course, launched in 2013, was aimed at understanding and preventing aggression in dogs.

We have now trained over 350 staff and will continue delivering the courses into 2014. We are also developing a further course, which aims to update staff understanding about dog behaviour and biology to ensure welfare needs are met. This course will be rolled out in 2014. Both courses will be made available as electronic learning resources. Further courses for other species are being developed.

The training provided to staff is also underpinned by written care resources and in 2013 the companion animals team used the latest scientific findings, expert input from external consultants and our vastly experienced field staff to produce publications focusing on dogs and cats. This work will continue into 2014 with documents developed for the other species in RSPCA care.



Advising governments

Ensuring dog control legislation protects dog welfare and dog ownership

2013 has seen a lot of political activity around dog control legislation. The Westminster government announced its proposals for dealing with strays and dangerous dogs. This included a provision in the Anti-social Behaviour, Crime and Policing (AsBC&P) Bill to extend the Dangerous Dogs Act (1991) to cover attacks on private property as well as compulsory microchipping of all dogs and changes to the seizure of suspected prohibited breeds.

The RSPCA has provided responses to consultations on: the proposed amendments to the Dangerous Dogs Act (1991); the proposed powers within the AsBC&P Bill; increasing the fee for placing a prohibited dog on the index for exempted dogs; the maximum sentencing for dog attacks causing injury or death; and the guidance manual for practitioners who enforce the AsBC&P Bill.

Our responses highlighted the need for any dog control legislation to be evidence based, concurrent with current knowledge about dog behaviour and welfare, and to safeguard dog welfare and dog ownership. However, the RSPCA remains very concerned about the Westminster government's approach to dog control and does not believe it will fulfil its aims – see www.politicalanimal.org.uk/area/westminster/ido. and www.rspca.org.uk/getinvolved/campaigns/companion/dogwelfare/dogownership.

Sadly in May, the Welsh Government Control of Dogs Bill was suspended in favour of allowing the AsBC&P Bill to also apply in Wales, although Wales still plans to implement mandatory microchipping regulations by March 2015.

"...any dog control legislation needs to be evidence based"



Model licence conditions for local authorities

The RSPCA companion animals team have worked with other welfare and veterinary organisations, local authorities and relevant industry bodies to review the Chartered Institute of Environmental Health (CIEH) model licence conditions and guidance for dog breeding establishments, and cat boarding establishments.

The conditions were reviewed to ensure that they are in line with the Animal Welfare Act 2006 and contain all of the information needed to ensure the welfare of the animals at these establishments.

The revised documents are available on the CIEH website: www.cieh.org/policy/publications_A_Z.html

Dog breeding

Existing dog breeding legislation is not sufficient to ensure that the welfare needs of all dogs at breeding establishments are met to the extent required by the Animal Welfare Act 2006.

In 2010 the Welsh Government made proposals to change the legislation in Wales, and has undertaken three consultations in relation to the proposed Regulations and Guidance. We have worked with RSPCA Cymru to provide responses to those consultations. The responses can be accessed at: www.politicalanimal.org.uk/area/wales/companion



Promoting companion animal welfare

Rabbit welfare

The RSPCA is continuing to promote rabbit welfare and ensure campaign and educational activities focus on the priority welfare issues, as identified by the RSPCA commissioned study *Assessing the state of rabbit welfare in the UK*¹. Carried out by the University of Bristol (UoB), it investigated the husbandry, housing, behaviour and health of the UK rabbit population. Dr Nicola Rooney from the UoB presented the findings to stakeholders from the pet industry, the veterinary profession and welfare organisations at the Pet Industry Federation Forum in October.

The study has shown that feeding rabbits muesli-style foods is associated with a number of health problems, including dental and digestive disorders and obesity. We recognise that maximal improvements to welfare will be made if key stakeholders work together and we will be engaging and collaborating with them in 2014 to develop a strategic way forward. We supported Rabbit Awareness Week² (RAW) 2013, which focused on the importance of providing a healthy diet.

We have also developed a new rabbit care booklet³ that outlines companion rabbits' basic welfare needs and illustrates a good enclosure, including hiding places and platforms, which the study confirmed as important for rabbit welfare.



FOOTNOTES AND REFERENCES

1. Further details of the scientific research are available here: www.rabbitawarenessweek.co.uk/diet/the-research
2. The RSPCA is an official partner of RAW, which aims to raise awareness of the welfare needs of pet rabbits. Further details can be found at: www.rabbitawarenessweek.co.uk
3. This booklet can be downloaded from www.rspca.org.uk/rabbits.

Pedigree dogs and dog breeding

In 2008 a BBC One documentary – *Pedigree Dogs Exposed (PDE)* – investigated some of the serious health and welfare issues experienced by many pedigree dogs as a result of the way they are bred.

To mark the five year anniversary of PDE, the RSPCA produced a progress report which highlighted some of the actions that have since been taken to improve pedigree dog health and welfare. We also highlighted those recommendations which are sadly still outstanding.

The RSPCA promoted the report in order to raise awareness and educate current and potential dog owners about the issues associated with pedigree dog breeding.

More information is available at: www.rspca.org.uk/bornertosuffer

Puppy contract

The RSPCA/Animal Welfare Foundation puppy contract and information pack were launched in April 2012. The documents empower puppy buyers to make properly informed decisions and help them avoid the problems that can arise from buying a puppy from an irresponsible breeder. For breeders and sellers the contract is a record of the thought and attention they have devoted to their puppies' breeding and care.

The documents are currently being revised in line with stakeholder comments, and are expected to be re-launched by the end of 2014. For further information, go to: www.puppycontract.org.uk



"...empowering puppy buyers to make properly informed decisions."

Funding research to improve greyhound welfare

The RSPCA has funded a four-year research programme at the University of Bristol, which comprises three distinct projects. The first will explore the effect of a variety of initiatives and refinements on career racing length and history, and the knock-on effect on the number of greyhounds needed to meet racing quotas and on the dog population in general. The results will enable us to advise on how best to reduce greyhound numbers and improve the welfare of racing greyhounds. The second project will explore the factors linked to levels of periodontal and dental disease as well as determining a likely effective intervention to reduce disease levels. The third project will investigate the effect of a range of factors on dogs' comfort during short and long journeys with the aim of developing and distributing evidence based, clear transport guidelines.



Clinical data on inherited diseases



In order to address the urgent need for systematic collection of data on inherited diseases, we have been funding a VetCompass PhD research project with the Royal Veterinary College and the University of Sydney. The study aims to estimate the prevalence of inherited and acquired disorders in both dogs and cats. The project finished in October 2013, and it is hoped that the results will enable evidence-based actions to be taken to improve the health and welfare of these species. More information is available at: www.rvc.ac.uk/VetCOMPASS/



Engaging with decision makers

Representation on councils, committees and working groups:

- Animal Behaviour and Training Council.
- Dog breeding stakeholder group.
- Advisory Council on the Welfare Issues of Dog Breeding.
- Dog Breeding Reform Group.
- Welsh Government – Task and finish training group for Dog Control Bill.
- Joint charities cat working group.

Meetings and events in 2013

- Meeting with Channel 4, Sunset & Vine, the British Veterinary Association and the Kennel Club to discuss Crufts coverage.
- Royal Veterinary College (RVC) brachycephalic dog health day.
- CARIAD meeting – campaign to end puppy farming.
- Pet Industry Federation Forum and Awards.
- Rabbit Welfare Association and Fund veterinary conference.
- Seminar exploring neutering and behaviour in dogs and cats.
- Meeting with Nottinghamshire, Kent, Sussex and Essex police forces to discuss working and seized dog welfare.

Responses to consultations in 2013

Welsh Government

- Third consultation on the draft Animal Welfare (Breeding of Dogs) (Wales) Regulations 2012.
- Dog Control Bill.
- Fly grazing and abandonment of horses and ponies: delivering a long term solution.

Defra

- Dangerous Dogs (Fees) (England and Wales) Order.
- Maximum prison sentences for dog attacks causing injury or death.

Home Office

- Community Remedy Consultation.

EFRA

- Select committee inquiry on draft Dangerous Dogs Amendment Bill.

LANTRA

- National Occupational Standards for Animal Care and Welfare.

Dog Advisory Council

- Review of dog breeding legislation and recommendations.

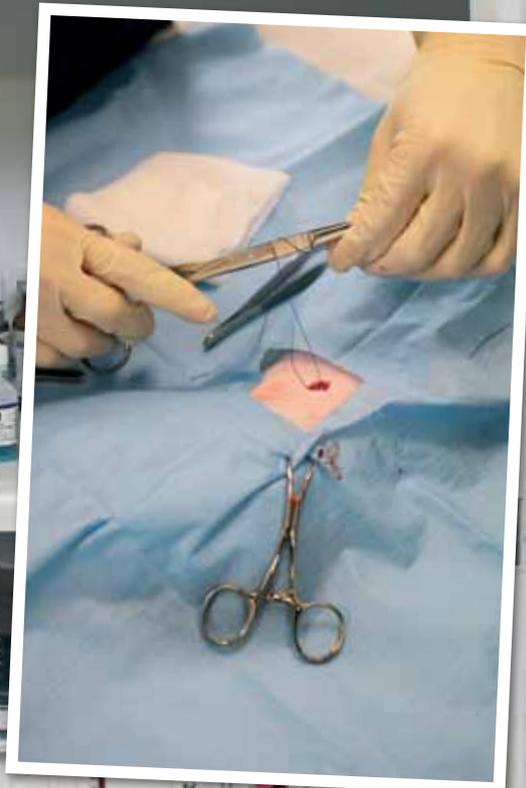
RSPCA animal hospitals

The RSPCA hospitals treat pets belonging to clients unable to afford private veterinary fees. In the current tough financial climate, it is important that the hospitals identify the most efficient use of their resources. For example, if we neuter an animal prior to puberty, she will not breed and she will not suffer from a womb infection (pyometra) later in life. She will also be highly unlikely to suffer from mammary cancer. Therefore, neutering early may reduce the likelihood of emergency treatment and charity expenditure later in a pet's life.

Hospital directors have been working together to identify the best use of charity funds in order to strike a balance between spending large sums on sophisticated individual care or carrying out basic interventions (e.g. neuter, chip, vaccination) which are cheap and have obvious population benefits. This requires continual refinement, but has resulted in a defined policy – a client repeatedly failing to neuter their pet, for example, may be excluded from RSPCA charity care.

The significance of diverting resources to areas of greatest clinical need is highlighted in a paper published in the *Veterinary Record* in 2013¹. Taking this clinical prioritisation a step further, the RSPCA Greater Manchester Animal Hospital has channelled veterinary resources away from some areas of public activity (e.g. minor dental work) to RSPCA animals from the inspectorate in the North region. As a consequence, in 2013 over one-fifth of the hospital outpatient work (and over two-thirds of inpatient work) was carried out on un-owned animals who were passed to neighbouring RSPCA branches for adoption.

Together with steps to (i) identify the type of patients with greatest need and (ii) carry out those procedures of greatest benefit, the hospitals have also published work to demonstrate that how and when we do things (e.g. kitten neutering^{2,3}) can have an effect on welfare outcomes and hospital expenditure. For example, an unwanted kitten triaged at an RSPCA hospital can be health checked (including flea and worm treatment), vaccinated, neutered and microchipped before passing on to nearby branches/adoption centres. At the RSPCA branch, this animal is then likely to be adopted in a reduced time frame. This rapid transition from an unwanted animal to a pet receiving a second chance in life is surely a significant development in animal charity care.



FOOTNOTES AND REFERENCES

1. A retrospective study of pyometra at five RSPCA hospitals in the UK: 1728 cases from 2006 to 2011 A Gibson, R Dean, D Yates, J Stavisky *Veterinary Record* 173 (16), 396-396
2. Analgesia after feline ovariohysterectomy under midazolam-medetomidine-ketamine anaesthesia with buprenorphine or butorphanol, and carprofen or meloxicam: a prospective, randomised clinical trial S Polson, PM Taylor, D Yates *Journal of Feline Medicine and Surgery* 14 (8), 553-559
3. Effects of age and reproductive status on postoperative pain after routine ovariohysterectomy in cats S Polson, PM Taylor, D Yates *Journal of feline medicine and surgery*, 1098612X13503651



Farm animals

The RSPCA is working to improve the welfare of as many farm animals as possible, at every stage of their lives. Hundreds of millions of farm animals are farmed in the UK each year, the majority of whom are reared, transported and slaughtered/killed in ways that the RSPCA believes do not meet their behavioural and physical needs, although legally permitted.

The farm animals team works to achieve positive changes in practices and attitude from all sectors of the food chain, including via encouraging application of the RSPCA welfare standards for farm animals.



"...working with the food and farming industries to improve welfare through voluntary changes"

Developing and implementing the RSPCA welfare standards for farm animals

The RSPCA welfare standards for farm animals aim to represent good practice in the care and welfare of farm animals, going above and beyond standard UK legislation in a number of key areas. They cover every aspect of the animals' lives, including food and water provision, their environment, management, health care, handling, transportation and slaughter/killing.

The standards are regularly reviewed in the light of scientific evidence and practical experience and through consultation with key stakeholders. The development of each set of standards is facilitated through consultation with species-specific technical working groups.

Implementation of the standards is primarily through the RSPCA's farm animal welfare assurance and food labelling scheme, Freedom Food. Farms, transporters and abattoirs approved by the scheme must implement all the relevant RSPCA welfare standards.

Freedom Food annually assesses approved members to check compliance with standards. In addition, RSPCA Farm Livestock Officers (FLOs) conduct monitoring visits on a proportion of members each year (see page 13 *Monitoring the Freedom Food*

scheme: the work of the Farm Livestock Officers). The standards have also influenced animal production requirements set by others, including retailers (for their suppliers) and various assurance schemes in the UK and overseas. In some instances, they have also been used to inform legislation and associated guidance and recommendations.



RSPCA welfare standards updates

Laying hens

A revised version of the laying hen standards was published in September 2013, which included significant changes to help minimise the risk of injurious pecking. Changes included giving hens access to litter and range at a younger age, providing enrichment inside the housing, scoring feather loss at least once a month and requiring all range areas to include natural cover by October 2014.

Pullets (laying hens)

For the first time a separate booklet of standards specifically for pullets (laying hens) was launched in September 2013, which included detailed requirements for unloading birds into the pullet house and depopulation.

Meat chickens

Previously the RSPCA welfare standards for chickens only permitted the use of slower growing breeds, i.e. those that had a maximum genetic growth rate of less than 45 grams per day. However, a new version of the standards, published in November 2013 requires the welfare of chicken breeds to be assessed according to the RSPCA Welfare Assessment Protocol. This more sophisticated and informative approach will help ensure only those breeds with an acceptable level of welfare are used under the standards. Other significant amendments include development of an air quality assessment protocol, a new section on biosecurity and the inclusion of a photographic hock burn assessment guide.



New specialist calf rearing standards

In the past, dairy bull calves have not been considered suitable for rearing for beef and instead have been regarded as 'surplus', either being shot on farm or shipped to the continent. The Beyond Calf Export Stakeholders Forum¹, of which the RSPCA was a founder member, brought together all relevant sectors of industry to seek ways of using these calves in the UK food chain.

A major development in the industry has been the advent of higher welfare specialist calf rearing systems, rearing calves in group housed straw based units. The farm animals team has taken this opportunity to develop welfare standards for specialist calf rearers. The standards cover stocking density, diet, colostrum status, reception protocol, the provision of a calf veterinary health plan and welfare outcome measures. They also require the provision of environmental enrichment to satisfy the calves' need for oral stimulation, and to help prevent behaviours such as preputial and navel sucking.

FOOTNOTES AND REFERENCES

1. <http://calfforum.rspca.org.uk/home>



Reviewing and developing strategies to improve farm animal welfare

In June 2013, the final report of an independent external panel reviewing all aspects of the Freedom Food scheme was delivered. The McNair report¹ concluded that the scheme had had a very significant positive impact on farm animal welfare and, with further strengthening in some key areas, could continue to drive and support further progress in years to come. One key recommendation was that a new strategy should be developed, strengthening the coordination of Freedom Food plans and activities with the RSPCA's other farm animal welfare work.

The RSPCA also developed a new long-term term strategy during 2013, to take the Society forward to its 200th anniversary in 2024. Several of the new strategic objectives are relevant to farm animals, including one in particular: 'The majority of farmed animals and all farmed salmon and trout produced in the UK will be reared to RSPCA welfare standards'.

To progress the McNair recommendations on welfare standards and the RSPCA's strategic objectives, the farm animals team issued a consultation in late 2013, inviting comments on issues such as the welfare standards consultation/advisory process, the nature and scope of the evidence base for the standards and communication on other standards-related issues. A large number and wide range of relevant external stakeholders were invited to respond, including all Freedom Food members and those who already advise the RSPCA on standards development.

Comments received, together with the views and experience of internal parties, will help to shape ongoing progression of welfare standards development and communication. The standards have a growing role in helping to shape farm animal welfare policies and practices outside the Freedom Food scheme too, in the UK and in other countries across the world. This underlines the importance of ensuring that they continue both to have a sound evidence base – informed by latest scientific research and practical experience – as well as to represent the 'stretching end of achievable' within the context of commercial farming.

REFERENCE

1. <http://www.rspca.org.uk/ImageLocator/LocateAsset?asset=document&assetid=1232733271863&mode=stg>



Monitoring the Freedom Food scheme: the work of the RSPCA Farm Livestock Officers



The Farm Livestock Officers (FLOs) conduct risked-based monitoring visits (many of which are unannounced) on a proportion of Freedom Food approved members each year. The visits act as an extra check of compliance with the RSPCA welfare standards for farm animals and are unique to the Freedom Food scheme.

Unlike Freedom Food Assessors, the FLOs have the flexibility for two-way dialogue with scheme members enabling them to provide advice and information on making any necessary welfare improvements. FLOs also provide feedback to the scientific staff in the farm animals team to help inform the development of the RSPCA welfare standards.

During the year, FLOs continued to conduct Welfare Outcome Assessments, developed by the AssureWel project (see section below) for laying hen and dairy cattle and were trained in the measures for pigs. FLOs also took part in video shoots with

Freedom Food to help promote the scheme and to give an insight into their work. The film featuring a FLO can be viewed at: www.freedomfood.co.uk/news/2013/10/film-features-rspca-farm-livestock-officer.



AssureWel: developing welfare outcome assessment

The five year AssureWel project, led by the RSPCA, Soil Association and University of Bristol, continued into its fourth year. The project's primary aim is to develop a practical system for assessing farm animal welfare outcome measures for use in farm assurance schemes. Both the RSPCA's Freedom Food and the Soil Association's schemes are implementing welfare assessments for laying hens and dairy cattle developed by the project. The AssureWel team is keen to encourage the use of welfare assessment in other farm assurance schemes.

The main focus in 2013 has been on welfare outcome assessment measures for pigs, with the development of assessments for both dry sows and finishing pigs. Measures include lameness, tail lesions and enrichment use. Implementation through Freedom Food assessments for pigs is planned for early 2014.

Following assessments, feedback is provided to producers. This assists them with identifying any problem areas and helps them make improvements where needed and also shows where things are going well.

A new requirement within the RSPCA welfare standards for laying hens is for all laying hen producers to self assess the level of feather loss within their flock. To help producers get the most out of these self-assessments, AssureWel has developed an online interactive

"...a practical system for assessing farm animal welfare outcome measures..."

'benchmarking tool', which provides guidance on addressing risk factors and improving performance on feather cover. From early 2014 the tool will enable producers to compare feather loss in their own flocks to other cage-free flocks across the industry, providing a useful benchmark of their own performance.

In 2014 the project plans to develop welfare assessment for meat chickens, beef cattle and sheep. Details of the project can be found at www.assurewel.org



RSPCA FLOs, Freedom Food Assessors and Soil Association field staff scoring feather loss.



Raising awareness across the world

Duck and meat chicken presentations in China

A member of the farm animals team gave two presentations at the 11th World Conference on Animal Production in Beijing. One presentation reviewed the published scientific research examining the relationship between commercially farmed ducks and their use of water and highlighted how open water facilities – necessary to satisfy ducks' key water related behaviours – can be provided under commercial conditions.

The second presentation outlined the development and potential applications of the RSPCA Broiler Welfare Assessment Protocol – a methodology which describes how the welfare of a breed can be assessed and what health indicators should be examined. This is believed to be the first protocol of its kind and has widespread applications. These include the potential to provide producers, retailers, governments, NGOs and even consumers with information that can help them make informed decisions concerning breed choice and acceptability with respect to welfare.

"...providing welfare information to help make informed decisions on breed choice..."



Presentation on farmed fish welfare in Brussels

In May, a member of the team was invited as the only animal welfare organisation representative to give a presentation at an international conference on farmed fish welfare, jointly organised by the European Commission, the Irish Presidency of the European Union and the Federation of Veterinarians of Europe (FVE).

As fish farming is the fastest growing producer of animal protein on a worldwide basis, the key message was that the welfare needs of new species must be understood before they are farmed. The needs of different fish species can vary considerably on such things as water quality and stocking density, and these factors must be considered when new legislation is being developed. The RSPCA also called for fish to be given due recognition in animal protection legislation on transport and slaughter.

Pig Health and Welfare Council welfare sub-group

The Pig Health and Welfare Council (PHWC) is a cross-industry alliance which aims to drive forward the delivery and strategic aims of the pig industry with regards health and welfare. The PHWC welfare sub-group is facilitated by the RSPCA farm animals team. The sub-group aims to achieve consensus on the important pig welfare issues, how to progress these, and the ultimate aims in each case.

This year the sub-group established a list of key welfare issues for the pig farming industry to prioritise, including welfare at farrowing

(covering prolificacy, management of outdoor sows, confinement at farrowing etc), tail damage, aggression and sick pig management (including euthanasia). As the group works towards delivering the industry's 2020 strategy with respect to non-health welfare issues, focus will shift to developing a feasible approach for tackling these issues. This will include exploring what is and is not known about each issue in order to develop appropriate and feasible recommendations and timescales for progress.



Engaging with decision makers

Representation on committees and working groups:

- National Pig Health and Welfare Council (England).
- Cattle Health and Welfare Group (England).
- Sheep Health and Welfare Group (England).
- Red Tractor Dairy Technical Advisory Committee.
- Marine Scotland Advisory Group on technical standards for fish transport.
- Dairy Genetics Advisory Forum.
- Dairy Cattle Foot Health Group.
- Responsible Use of Medicines in Agriculture Alliance.
- Soil Association Agriculture and Aquaculture Standards Committee.
- Farm Animal Welfare Forum.
- US Humane Farm Animal Care Expert Scientific Advisory Committee.
- Eurogroup for Animals Farm Assurance Scheme Working Group.
- Labelling Matters project Steering Group.

Department for Environment, Food and Rural Affairs:

- Beak Trimming Action Group.
- National Rules Drafting Group for the Welfare at the Time of Killing Regulation.
- Broiler Core Stakeholder Group.
- Steering Group of the Defra study to evaluate the effectiveness of the EU Broiler Directive in England, NI and Wales.

Welsh Government:

- Welsh Government's Animal Health and Welfare Steering Group.

Meetings and events in 2013:

- Participated in a Humane Slaughter Association workshop on the practical and welfare implications of low atmospheric pressure stunning.
- Participated in a pig industry workshop on assurance protocols.
- Met with global broiler breeding companies to discuss development of broiler breeds for use within the Freedom Food scheme.
- Met with researcher from the University of Sydney Poultry Research Foundation to discuss injurious pecking in laying hens.
- Attended meeting with the Farm Animal Welfare Committee in Cardiff to discuss their future work plans and priority farm animal welfare issues.

- Along with RSPCA public affairs team, met with Defra Minister for Agriculture to discuss the RSPCA's farm animal welfare priorities in England.

Responses to consultations in 2013:

- Genesis QA Assured Pig Production Standard.
- Agri-Food and Biosciences Institute (NI) consultation on practical solutions to reduce tail biting in Northern Irish pig herds.
- British Poultry Council consultation regarding the Code of good practice and regulatory requirements for the welfare of meat chickens and breeding chickens.
- Farm Animal Welfare Committee (FAWC) consultation on the welfare of beef cattle.
- FAWC consultation on the welfare of dairy bred calves.
- Defra consultation on Proposals for new bovine TB control measures: tackling transmission between cattle herds.
- Red Tractor consultation on Dairy Cattle Standards.
- Defra consultation on the Reform of the Farm Animal Welfare Codes.
- FAWC consultation on Review of the 2005 FAWC Report on the Welfare Implications of Farm Assurance Schemes.

Examples of presentations during 2013:

- Presentation at the Centre for Animals and Social Justice conference on assessing and applying the evidence base for farm animal welfare.
- Presentation and panel representation at the annual Pig and Poultry Live industry conference.

Papers published in 2013:

- Cooper, M.D. 2013. *The Provision of Open Water for Farmed Pekin Ducks: A Review of the Evidence and Application in Practice*. Proceedings of 11th World Conference on Animal Production, Beijing, 15-20 October 2013.
- Cooper, M.D. 2013. *The Development of a Protocol to Assess the Welfare of Meat Chicken Breeds*. Proceedings of 11th World Conference on Animal Production, Beijing, 15-20 October 2013.
- Crawley, M.C., Avizienius, J. A., Kennedy, D & Main, D.C.J. 2013. *Inclusion of lameness and other welfare outcomes into UK dairy farm assurance schemes*. 9th International Conference on Lameness in Ruminants. Bristol August 11th-13th, 2013.



Research animals

Animals are used for many different purposes in research and testing and each area of use raises specific ethical, welfare and scientific issues. The RSPCA adopts a constructive, practical approach, aimed at developing more effective processes of ethical review and fuller implementation of the 3Rs*.

Our primary aim is the replacement of animal experiments with humane alternatives. Until this can be achieved, we work to help ensure that the minimum numbers of animals are used and that suffering is reduced or avoided altogether.



* The 3Rs are: **replacement** of animals with humane alternatives, **reduction** of animal use, and **refinement** of husbandry and procedures to reduce suffering and improve welfare throughout the animals' lives.



Ending severe suffering

Any level of suffering is a concern for the RSPCA, but ending severe suffering is a top priority.

Throughout the year we have consulted with the scientific community and reviewed the literature in order to identify those procedures and 'models' that have the potential to cause severe suffering. We have established expert working groups, consisting of researchers, vets and animal technologists from academia and industry to set out how suffering could be reduced and welfare improved within the severe procedures identified. These groups published two papers in 2013, focussing on animal studies of multiple sclerosis¹ and epilepsy². Further working groups were established on rheumatoid arthritis and sepsis. These will report in 2014. We continued our outreach program by visiting research establishments and meeting with the Association of the British Pharmaceutical Industry (ABPI). We subsequently developed a 'road map' towards ending severe suffering that will form the basis of a range of materials on the topic, including outlines for practical approaches to achieve this goal.

The RSPCA held a workshop at the Institute of Animal Technology (IAT) Congress which gave animal technologists a chance to discuss the role they can play. A report, including action points, has been published in the IAT's journal *Animal Technology and Welfare*³. We were also invited to speak on the animal welfare and ethical benefits of accurately assessing and reporting suffering at the Laboratory Animal Science Association 2013 workshop attended by researchers, animal technologists, vets and Home Office inspectors.

In September, we published an article⁴ which drew parallels between the methodology used by Sir Dave Brailsford (British Cycling Performance Director) to improve cyclists' performances, and a practical approach to reducing suffering for laboratory animals. Brailsford uses the 'aggregation of marginal gains' concept to get the optimum

performance from his athletes. This involves a systematic breakdown of every element that contributes to performance (e.g. bicycle and suit design, physiotherapy, psychology) so that each can be improved. The combined effect of a number of small improvements leads to significant progress overall.

We believe that this approach can be applied to reducing suffering, if an animal procedure cannot be avoided or replaced. Careful consideration of every potential harm, and how these might be prevented or suffering alleviated, allows small changes to be made which, taken together, can make a huge difference to the animal. For example, reviewing pain management, ensuring that animals have the right nesting material, and ending experiments as soon as sufficient data are obtained can all combine to significantly reduce severity.

Delivering international training

Provision of advice internationally on ethics, animal welfare, the 3Rs and legislation, is an increasingly important role for the RSPCA¹.

- We delivered a training workshop in Taiwan for over 100 representatives from research establishments. The event was organised with the National Laboratory Animal Center and focused on the care of genetically altered animals and the refinement of techniques involved in their creation and use.
- We were invited to speak at seminars run by the Korean National Information Center for the 3Rs. We presented on the harm-benefit assessment and ethical review, and research integrity and good scientific conduct.
- We also worked with the UK NC3Rs² and the Chinese Association for Laboratory Animal Sciences to develop a Chinese version³ of the Procedures with Care website⁴ which provides practical examples for refining experimental techniques to reduce animal suffering.

Further training workshops and resource developments are planned for 2014.

FOOTNOTES AND REFERENCES

1. For more information about this aspect of our work, see: www.rspca.org.uk/sciencegroup/researchanimals/whatwedo/workinginternationally
2. The National Centre for the Replacement, Refinement and Reduction of Animals in Research (UK) www.nc3rs.org.uk
3. <http://pwc.cnilas.org>
4. www.procedureswithcare.org.uk

"...a practical approach to reducing suffering for laboratory animals"

FOOTNOTES AND REFERENCES

1. Wolfensohn S, et al (2013). *Reducing suffering in experimental autoimmune encephalomyelitis (EAE)*. *Journal of Pharmacological and Toxicological Methods* 67(3) 169-176.
2. Wolfensohn S, et al (2013). *Reducing suffering in animal models and procedures involving seizures, convulsions and epilepsy*. *Journal of Pharmacological and Toxicological Methods* 67(1) 9-15.
3. Hawkins, P. (2013). Discussion paper: *Reducing severe suffering*. *Animal Technology and Welfare* 12(2) 87-91. Available at: www.rspca.org.uk/sciencegroup/researchanimals/implementing3rs/suffering/ending
4. Lilley, E & Jennings, M. (2013). *Refinement: Lessons from the 2012 Olympics*. *ATLA (PILAS)* 41, 28-29. <http://pilas.org.uk/refinement-lessons-from-the-2012-olympics>

New animal experiments law for UK

On January 1st 2013, amended regulations controlling the use of animals in research and testing came into force in the UK¹.

The new law is not substantially different from the existing Animals (Scientific Procedures) Act 1986, but there are some important changes. For the first time, scientists have to report the actual level of suffering experienced by animals. Judicious assessment and honest reporting of suffering will be important, as the collection of accurate information is vital for enabling resources to be focused on developing and promoting the 3Rs where they are most required. There are also important new requirements for a 'named person' within each licensed establishment to be responsible for ensuring all staff involved in the care and use of animals are appropriately trained and competent, as well as a 'named information officer' to ensure that staff have access to up-to-date information about the species they work with.

Throughout the year, we met with, and responded to consultations from the Home Office on issues such as the draft Code of Practice for the care and accommodation of animals; changes to the *Statistics of scientific procedures on living animals* publication; and – very importantly – the draft *Guidance on the Operation of the Animals (Scientific Procedures) Act 1986*, which will be instrumental in helping people understand how the law will operate.

FOOTNOTES AND REFERENCES:

1. www.gov.uk/research-and-testing-using-animals



Ethical review

During 2013, we continued to put forward a strong case for the UK to retain the roles, responsibilities and membership requirements of the Ethical Review Processes (ERPs) in place at each establishment up until the end of 2012, as the basis for the new Animal Welfare and Ethical Review Bodies (AWERBs) developed during transposition of the European Directive on the Protection of Animals used for Scientific Purposes. We were concerned that the UK could choose to adopt the considerably reduced requirements set out in the Directive. However, the draft official Guidance document from the Home Office broadly agreed with our position (and is already being implemented by many research establishments). The final Guidance document¹ is expected to be published in early 2014.

The 2013 AWERB Lay Members' Forum attracted over 80 participants from almost 50 establishments in academia and industry. Organised by the RSPCA for over a decade, these meetings provide a unique and valuable opportunity for lay (and other) members of AWERBs to come together to share information and experiences.

This year's presentations included an introduction by the chair of the new national Animals in Science Committee² (ASC) who described its planned work. This includes:

- advising AWERBs in the UK 'on matters dealing with the acquisition, breeding, accommodation, care and use of animals in procedures and ensuring the sharing of best practice'

- 'exchanging information on the operation of AWERBs and project evaluation and share best practice' with the national committees in place in other Member States.

At the beginning of 2014 we will be launching our significantly refreshed section on our website dedicated to ethical review³. We also plan to expand the production of our resources and (potentially in conjunction with the Laboratory Animals Science Association) deliver relevant workshops and training opportunities to encompass all members of AWERBs.

FOOTNOTES AND REFERENCES

1. See: www.gov.uk/research-and-testing-using-animals

2. See: www.gov.uk/government/organisations/animals-in-science-committee/about

3. www.rspca.org.uk/ethicalreview



20th RSPCA/UFAW Rodent Welfare Group Meeting

Around 100 delegates, including animal technologists, researchers, regulators and veterinarians attended the 20th anniversary meeting¹.

The day began with a presentation on animal welfare issues in China and the work of RSPCA International to promote good standards of ethical review and the 3Rs.

Other talks addressed welfare issues associated with the use of carbon dioxide to kill rodents, the use of minimally invasive radio-frequency identification (RFID) technology to assess welfare in mouse disease models, and an example of how effective team work between researchers and animal technologists reduced suffering in rheumatoid arthritis studies. Another speaker outlined the animal welfare and scientific reasons for understanding, and catering for, laboratory rodent behaviour. A recent analysis of research papers reporting rat and mouse studies found that many failed to provide sufficient detail about housing and care, which can have major implications for interpreting results.

A special session focused on welfare assessment of genetically altered (GA) rodent lines. Topics covered guidance on, and approaches to, welfare assessment, with examples of successful protocols for GA animals. This provided an opportunity to share information and views on sources and behavioural signs of suffering, as well as good practice with recognising and assessing these.

FOOTNOTE

1. For more information about the RSPCA/UFAW Rodent Welfare Group and for free to download reports from past meetings, see: www.rspca.org.uk/sciencegroup/researchanimals/implementing3rs/rodentwelfaregroup



Welfare of agricultural animals used in research

In June, the RSPCA and AHVLA Scientific¹ convened a meeting on the welfare of agricultural animals in research, including cattle, goats, sheep and pigs. The meeting was attended by over 80 delegates from research establishments within the UK and overseas.

Topics addressed included cognition and emotions in farm animal species, the use of clicker training to avoid restraint for pigs, and overcoming practical issues in containment systems to achieve good welfare standards for animals. Assessing and alleviating suffering was given a special focus, with presentations on understanding behaviours that indicate pain in farmed animals and recent research on the Lamb Grimace Scale which is currently being evaluated as a new technique for assessing suffering. The final session introduced by a Home Office inspector, discussed how

to consider the lifetime experiences of agricultural animals and make a judgment on the actual severity of procedures.

A meeting report has been submitted to the journal *Animal Technology and Welfare* for publication in 2014.

FOOTNOTES AND REFERENCES

1. Animal Health and Veterinary Laboratories Agency Scientific, which works on behalf of the Department for the Environment, Food and Rural Affairs



Genetically altered animals

The creation and use of genetically altered (GA) animals continues to increase worldwide so implementation of the 3Rs in this field is critically important.

In March, we ran a workshop for laboratory managers and animal technicians, to promote the animal welfare benefits of using GA animal passports¹ as a tool to communicate animal care information, reduce duplication and share 3Rs developments. Participants discussed how best to adapt such passports for use with other GA species including fish, and how this initiative has helped to reduce and refine GA animal use as well as raising standards of housing, husbandry and care.

For the fourth consecutive year, we co-organised a training event attended by senior animal technicians, animal unit managers, scientists and vets from across Europe. The three-day course on *Managing*

Mouse Colonies: Best Practice in Genetics, Breeding and Welfare reinforces the principle that implementing the 3Rs is all part of good scientific practice, and should not be considered an optional extra.

In September, we were involved in a meeting hosted by The Wellcome Trust to discuss how the requirement within the new legislation for assessing and reporting the actual severity experienced by animals in research should specifically be applied for GA animals.

FOOTNOTES AND REFERENCES

1. RSPCA (2010). GA passports – the key to consistent animal care. www.rspca.org.uk/sciencegroup/researchanimals/implementing3rs/gapassport





Openness and transparency in animal research

The RSPCA has consistently called for those involved in animal experiments to be more open and honest about their use of animals. Opinion polls repeatedly show that this is an issue that the public is concerned about – and it is public money that often funds experiments via grants from funding bodies supported by the taxpayer, or through donations to medical research charities.

We believe that those involved in the use and regulation of animals in experiments should acknowledge the serious ethical issues involved, be open and honest with the public about how much and in what ways animals suffer, the limitations of animal ‘models’, and the standards and controls in place to regulate animal experiments in the UK.

In 2013 organisations funding, supporting or undertaking animal research announced plans¹ for how they would be more open. Whilst we cautiously welcomed this initiative, we also had concerns² regarding the motives³ behind it and how honest the organisations involved would actually be. Despite this, we accepted an invitation to be a member of a working group developing and overseeing workshops run

through Ipsos Mori designed to find out what ‘openness’ about animal experiments means to the public. We provided information for the public discussions and attended as expert information providers. The resulting report⁴ demonstrated the public’s desire for greater openness on this issue and for more meaningful information to be available.

We have also been involved in the Home Office review of the ‘confidentiality clause’ of the Animals (Scientific Procedures) Act 1986. The government has acknowledged that this is ‘out of step’ with their policy on openness and transparency⁵. We participated in a workshop facilitated by The Design Council for all stakeholders, and a meeting in November between animal protection organisations and the Home Office.

More generally, we were invited to set out our views and expectations on openness at the Federation of European Laboratory Animal Science Associations (FELASA) congress in Barcelona.

FOOTNOTES AND REFERENCES

1. <http://www.understandinganimalresearch.org.uk/policy/concordat-on-openness-on-animal-research/>
2. See Reed, B. (2013). *Are standards for lab animals really ‘the highest possible’?* Huffington Post [25/09/2013]: http://www.huffingtonpost.co.uk/barney-reed/lab-animal-standards_b_3960989.html
3. There was much concern amongst those using animals in research when a poll released in 2012 highlighted a drop in public approval for this use of animals – Ipsos Mori (2012) *Views on the use of animals in scientific research* <http://www.ipsos-mori.com/researchpublications/publications/1512/Views-on-the-use-of-animals-in-scientific-research.aspx>
4. <http://www.ipsos-mori.com/researchpublications/publications/1619/The-publics-view-on-openness-and-transparency-in-animal-research.aspx>
5. <http://www.theyworkforyou.com/wrans/?id=2013-11-11a.174196.h§ion+24#g174196.q0>

Humane killing

Most animals used in research and testing are killed following procedures, either because their tissues are needed as part of the study, or because they would otherwise experience suffering. It is critically important to ensure that this is done in the most humane manner.

There are serious welfare issues associated with some commonly used methods for killing animals. For example, a rising concentration of carbon dioxide (CO²) is often used to kill rodents, but exposure to CO² can be painful and distressing. We raised awareness of this at our annual Animal Welfare and Ethical Review Bodies (AWERBs) Lay Members’ Forum and RSPCA/ UFAW Rodent Welfare Meetings, and have produced a brief guide for members of AWERBs which summarises the main issues¹.

In August, we participated in a Consensus Meeting on Laboratory Animal Euthanasia organised by Newcastle University and funded by the National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) where recent

research findings relating to the humane killing of mice, rats and zebrafish, and the implications of these for routine practice in laboratories worldwide was discussed². We co-chaired the meeting, gave a presentation setting out a welfare organisation’s perspective on how ‘humane killing’ should be defined, and are co-authoring the meeting report.

Other speakers reported that exposure to a gradual fill of CO² may not be painful for rats and mice if they lose consciousness before it reaches sufficiently high levels, but lower levels can cause very distressing sensations of breathlessness and anxiety. Anaesthetising animals with a gaseous anaesthetic before switching to CO² has been suggested as a solution – but it now appears that rats (and

possibly mice) who have been anaesthetised previously, remember the experience and find subsequent exposure as distressing as CO². The search for a completely ‘humane’ inhaled agent for rodents is ongoing.

In the case of zebrafish, studies have found that anaesthetics such as metomidate or etomidate appear to be less distressing for fish than another commonly used anaesthetic agent, MS-222 (also known as TMS or tricaine)³.

FOOTNOTES AND REFERENCES

1. Available at: www.rspca.org.uk/sciencegroup/researchanimals/ethicalreview/housingandcare
2. <http://blog.nc3rs.org.uk/searching-for-consensus-on-the-most-humane-ways-to-kill-laboratory-animals/>
3. Readman, G.D., Owen, S.F., Murrell, J.C. & Knowles, T.G. (2013). Do fish perceive anaesthesia as aversive? *PLOS One* 8(9).

Engaging with decision makers

Scientific staff promote the RSPCA's policies, aims and objectives through advocacy to governments, industry, academia and other organisations. They are members of many national and international committees and working groups, and also have expert input into a range of consultations, both to government and non-governmental bodies, on a wide range of laboratory animal issues. Staff also produced papers on a variety of topics that have been published in scientific journals.

Representation on committees and working groups:

- European Commission – Expert working groups (representing Eurogroup for Animals) on: education and training; project evaluation and retrospective assessment; information on alternative methods and 3Rs strategies; inspections and enforcement.
- Animals in Science Committee (in a personal capacity).
- Laboratory Animal Science Association – Council member and co-convenor of section on Education, Training and Ethics.
- British Pharmacological Society – Animal Welfare and Integrative Pharmacology Committee and member of editorial board.
- The Boyd Group.
- UFAW 3Rs Liaison Group.
- Animal Welfare and Ethical Review Bodies of various establishments using animals in industry and academia.
- Advisory group for the Association of Medical Research Charities (AMRC) Animal Research Working Group.
- Taking Ethical Considerations into Account? Methods to Carry Out the Harm-Benefit Analysis According to the EU Directive 2010/63/EU – Messerli Research Institute, Austria.
- 3rd World Congress on Research Integrity.
- FGB International Workshop – Zebrafish.
- Newcastle Consensus Meeting 2013 – humane killing techniques.
- Laboratory Animal Science Association (UK) – winter meeting.
- Society of Biology/Animals in Science Regulation Unit – Animal Science Meeting 2013.
- Global Research Education and Training (GR8tt) – webinar on environmental enrichment.
- Pharmacology 2013.

Examples of meetings/events participated in during 2013:

- Home Office/Animal Welfare and Alternatives Stakeholder Group meetings.
- NC3Rs – Annual Science Review Meeting, and Research Review Launch Event.
- Institute of Animal Technology Congress 2013.
- 2nd International Symposium on Systematic Reviews in Laboratory Animal Science.
- 12th FELASA SECAL Congress.
- Consultations on draft guidance on the operation of the Animals (Scientific Procedures) Act 1986.
- ASPA draft Code of Practice for all licensed establishments for the care and accommodation of animals.
- Consultation on BBSRC Strategic Plan.
- Statistics of scientific procedures on living animals: Changes following transposition of European Directive 2010/63/EU.
- Revision of World Medical Association Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subjects.





Wildlife

The appreciation of the welfare needs of wild animals is often inadequate. The RSPCA wildlife team, together with the RSPCA wildlife centres, seek to improve the welfare of captive and free-living wild animals through research, promoting an awareness of the requirements of animals, and an emphasis on a precautionary and humane approach to human interactions.

Ringling of Canada geese in Cumbria

Early in 2012 the Windermere goose management group proposed a cull of Canada geese to reduce the population on Lake Windermere. The RSPCA supported local campaigns to stop the cull, which was postponed so that further research could be undertaken into the population to inform any future management plans.

The RSPCA is therefore undertaking a five-year study in collaboration with Cumbria University. The aim is to collect information on the Canada goose population by ringing as many geese as possible so that they can be easily identified and reported to us.

In July, we rounded up 216 Canada geese. All – except for two that had already been ringed – were ringed with red rings bearing a unique four letter code and aluminium rings from the British Trust for Ornithology (BTO).

We expect to repeat this process again over the next four years to ring as many Canada geese as possible during the

moulting season (July) and the breeding season (April).

If anybody sees a Canada goose with one of these rings, please report the sighting via the BTO website: www.bto.org/volunteer-surveys/ringing/ringingscheme.



Captive Animals' Protection Society, Rachel Barrat



Wild birds and netting

Each year around 2,000 reports are made to the RSPCA about wild birds trapped in or behind netting. Pigeons and gulls are the most commonly affected species – in 2012 we received 924 reports of pigeons trapped by netting and 628 about gulls¹.

A major cause is bird-deterrent netting. This can be effective in keeping birds off structures without resorting to lethal measures, but it must be fit for purpose, correctly installed and regularly checked and maintained. Problems arise when netting is put up incorrectly or becomes damaged, leaving gaps where birds can enter and become trapped. These birds can suffer a long and painful death from injury or starvation.

Unfortunately bird-deterrent netting is often fixed in high or hard-to-reach areas, making rescue of trapped animals difficult

and dangerous. If the issue is unresolved, then RSPCA officers are called repeatedly to the same address, resulting in further animal suffering and depleting charitable resources. In response to recurring reports, the RSPCA's wildlife team has been writing to property owners urging them to take more responsibility, asking them to remove or repair netting that is causing an issue and to put in place a system of checking remaining netting for trapped birds. Seventy percent of property owners contacted via letter have agreed to take measures to resolve the problem.

The RSPCA leaflet *Wild birds and netting* is available to order from www.rspca.org.uk.

REFERENCE

1. Figures from RSPCA data 2008-2012. Data includes all types of netting (bird-deterrent netting, garden netting, pond netting), excluding sports nets or litter.

Circus ban in sight

The RSPCA is hopeful that the use of wild animals in travelling circuses will be a thing of the past from the end of 2015. Some 28 wild animals, including lions and tigers, continue to travel and perform in the UK with Peter Jolly's Circus and Circus Mondao.

The Westminster government released draft circus regulations in April that would bring an end to this in England – a result the RSPCA has long campaigned for, along with the Born Free Foundation, the British Veterinary Association and the Captive Animals' Protection Society. Wales has indicated willingness to come under the Westminster legislation (crucial to ensure the problem does not simply move across borders), but Scotland and Northern Ireland wish to consult further.

The RSPCA responded to the Environment, Food and Rural Affairs (EFRA) select committee's inquiry on the draft Bill, supporting the ban but drawing attention to some shortcomings; such as failing to define a 'travelling circus' and permitting wild animals to tour with a circus, albeit not to perform or be exhibited.

The select committee produced a report and recommendations on the draft Bill in July, proposing to restrict the ban to certain species including elephants and big cats, the remainder to be licensed by a scheme the RSPCA has no faith in whatsoever. Thankfully, this was rejected by the Westminster government.

It is imperative that an amended ban is fully implemented at the earliest opportunity so that England can join the dozen other countries that have stopped circuses using wild animals.



Marmoset rehoming project

This year has seen a further five pet primate cruelty cases, with three successful prosecutions.

Four of these primates – three marmosets and one squirrel monkey – are now living happily in the new Monkey World Ape Rescue Centre complex, which we managed to fill in just seven months. We are now planning to help Monkey World build another enclosure to help even more animals in need.

Primates are highly intelligent social animals with complex behavioural needs that are difficult to satisfy in captivity and they are not suitable as pets. The RSPCA wants to see an end to primates kept as pets and we are calling for this in our submission to the Environment, Food and Rural Affairs select committee of MPs.



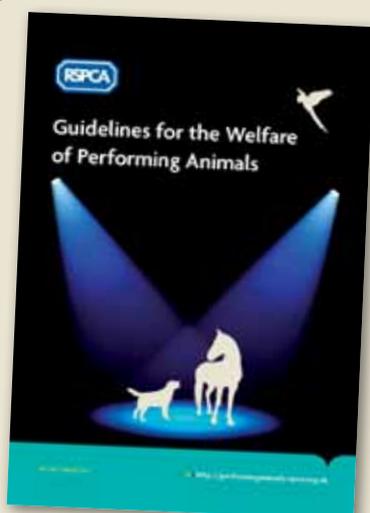
Animals used in the media

The RSPCA has long been concerned about animals used in performance, including films, TV programmes, advertising and theatre.

Following the Westminster government's refusal to better regulate the use of performing animals, the RSPCA developed a set of voluntary guidelines. These *Guidelines for the Welfare of Performing Animals* firstly question the necessity of using live animals and, when animals are used, provide advice about what steps to take to prevent suffering and ensure the animals' needs are met.

To date, the guidelines have been used on productions such as CBBC's *Pet School*, ITV's *Top Dog Model* and Channel 4's *Jamie and Jimmy's Food Fight Club* and have been downloaded almost 2,500 times from www.performinganimals.rspca.org.uk.

The wildlife scientific team helped train five specialist performing animal inspectors who are now in the field, delivering the advice contained in the guidelines to production companies, as well as investigating complaints involving performing animals.



Joe Murphy/RSPCA Photolibrary

RSPCA wildlife centres review

The RSPCA's four wildlife centres continue to strive for a better understanding of the casualties in their care.

Research is undertaken to investigate the treatment and post-release survival of rehabilitated casualties using techniques such as radio tracking and ringing of birds and bats. A summary of this research can be found in the *Veterinary Record* doi:10.1136/vr.101139²

This year, the RSPCA wildlife centres, in conjunction with the wildlife team, have completed and published 16 protocols on wildlife rehabilitation and care, covering a wide variety of species commonly admitted.

These protocols are now available to RSPCA branch and animal centres who also admit wildlife.





RSPCA EAST WINCH WILDLIFE CENTRE

Veterinary care of wild owl casualties

Injured wild owls are commonly presented for attention. Vets at RSPCA East Winch and RSPCA West Hatch wildlife centres co-authored an article published in the journal *In Practice* to assist veterinary surgeons in dealing with them. Most owls rescued by the public have traumatic injuries from man-made hazards, in particular vehicle collisions. Other common incidents include entanglement in garden netting and barbed wire fencing, and birds trapped down chimneys. Recent studies have identified a potential new threat to barn owls by exposure to anticoagulant rodenticides.

Thorough clinical examination is essential to assess their injuries and guide decisions about the chances of recovery. Owls must

be fully fit in order to survive back in the wild. Many have severe injuries and have to be euthanased immediately. Pre-release assessment, including aviary exercise, is necessary and only birds with a survival chance similar to their wild counterparts should be released.

Routine examination of the eyes should be undertaken since they are vulnerable to injury. Radiography of traumatic injuries is also useful. Obtaining a detailed history of the owl from the finder is important to assist with clinical investigations and decisions about release.

Young owls (owlets) are often found and taken into care. However it is important to identify the species before taking such



action, since different species have different fledging strategies and they may be best left alone. For example, juvenile tawny owls found on the ground should generally be left alone because they can climb branches and are probably still being cared for by parents. Conversely, young barn owls found out of the nest are usually in need of assistance.



RSPCA WEST HATCH WILDLIFE CENTRE

Rehabilitation of seabirds contaminated by Polyisobutene

Two incidents occurred in the English Channel that resulted in the mass contamination of seabirds with an unidentified sticky, glue-like substance. The species most affected was the common guillemot *Uria aalge*.

A total of 551 birds were rescued; 308 in January between Charlestown, Cornwall and Swanage, Dorset and 243 in April between Veyan, Cornwall and Seaton, Devon.

Our treatment regime was based on previous oils spills, with variations to remove the stubborn contaminant as it persisted after detergent washing. A hydrogenated vegetable spread was used as a solvent, followed by a two-stage detergent wash.

The contaminant involved in both incidents was identified by Plymouth University's Petroleum and Environmental Geochemistry Group as Polyisobutene (PIB), an industrial oil-based copolymer that is transported by sea. Uses range from an engine oil additive to chewing gum ingredient. Ships were legally allowed to discharge a maximum of 100-litres of PIB when flushing their tanks into the sea.

Different effects were observed throughout the veterinary treatment and rehabilitation process; from Packed Cell Volume (PCV) tests we found no anaemia from the haemolysis caused by the breakdown in blood cells and no haemorrhagic enteritis, normally associated with oil spills.

In total, 127 birds (41 percent) were released from the first incident and 51 (21 percent) from the second. In October 2013, after a

joint campaign by the RSPCA, the RSPB and wildlife trusts, the International Maritime Organisation (IMO) reclassified higher viscosity PIBs prohibiting their discharge.





RSPCA MALLYDAMS WOOD WILDLIFE CENTRE

Factors influencing the admission of casualty herring gulls (*Larus argentatus*) into a rehabilitation centre and post-release survival

Herring gull admissions to RSPCA Mallydams Wood wildlife centre were reviewed to determine factors affecting likelihood of release and post-release survival. It was found that orphans, inexperienced juveniles, fishing litter casualties and birds found caught or entangled were most likely to regain fitness and be suitable for release, whereas birds admitted as a result of disease, weakness, collisions or having been shot, were least likely to be released.

Between 1999 and 2010, 2,796 herring gulls (84 percent of those admitted, excluding birds euthanased within 48 hours) were ringed with colour rings and released. Reports of colour ring sightings of these birds include 44 gulls found dead; 46 found sick and 2,179 birds seen alive and well by over 200 observers in the British Isles and Continental Europe.

There was no significant difference in the survival of adult birds (848.7 days) compared with juveniles (718.6 days). Adult and juvenile birds travelled approximately the same distance following release (adults 58.6 km and juveniles 69.5 km). Post-release survival was better than expected for adult birds who had been shot (47 percent) and for inexperienced juveniles (40 percent).

The survival of rehabilitated juvenile birds was also compared with survival data from wild herring gull chicks ringed on the nest in urban areas of Southern England. No significant differences in survival was found between these two groups for birds that were subsequently categorised as 'Found dead'.

The results of this study demonstrate that the rehabilitation protocol used by RSPCA Mallydams Wood for this species is appropriate for helping to reduce the suffering of these casualties and improve the likelihood of release with only minor improvements needed to the release criteria. This study can also help us better manage the issues that arise between urban gull populations and people and the national decline in the sub-species of herring gull (*Larus argentatus argenteus*) could be supplemented through rehabilitated birds.



The data collected suggests that the rehabilitation of herring gulls is important from both an animal welfare and population perspective and is therefore cost effective for the RSPCA.



RSPCA STAPELEY GRANGE WILDLIFE CENTRE

Rehabilitation of house martins

In 2013 the team put in place a number of changes that affect the way we care for house martins (*Delichon urbicum*), one of the more demanding species that we admit into the centre. Over recent years we have encountered a number of issues, most notably eye problems, that we believe may be a result of our having to force feed nestlings. Changes included: those who cared for the house martins; provision of different hospital accommodation; improvements in barrier nursing and instigation of a new protocol of mixing individuals into groups.

Although the number of days in care increased for both those martins released and those that died or were euthanased after 48 hours, the number of animals that were finally released dramatically increased, rising from 26.3 percent in 2012 to 61.1 percent.

Three individuals were euthanased because of expected eye problems – far fewer than in previous years; post mortem tests taken

for microbiology, parasitology and PCR for *Mycoplasma* spp. were inconclusive.

The improved release rate could have been influenced by the fact that fewer animals were admitted than in previous years, which meant staff had more time to care for the house martins and enabled the team to use larger outdoor aviaries. The team will continue to review the way we rehabilitate house martins over the coming years.



Engaging with decision makers

Scientific staff from the wildlife team promote the RSPCA's agreed policies, aims and objectives through advocacy to government, statutory bodies and other organisations at the highest level. They are members of national and international committees and working groups and have key input into a range of consultations, both to government and non-governmental bodies, on a wide range of wildlife issues.

Below is a small selection of the committees, meetings, events and consultations in which wildlife staff have participated during 2013:

Representation on committees and working groups:

- Animal Welfare Network (Wales).
- British Wildlife Rehabilitation Council (BWRC) Steering Committee.
- International Wildlife Rehabilitation Council (IWRC).
- Marine Animal Rescue Coalition (MARC).
- The Deer Initiative.
- The Mammal Society.
- Sea Alarm.
- Wildlife and Countryside Link: Wildlife Trade working group.
- World Conservation Union's Otter Specialist Group.
- Zoo Expert Committee.
- BIAZA Elephant Welfare Group.

Responses to consultations in 2013:

- Draft Wild Animals in Circuses Bill (EFRA Select Committee).
- Consultation on proposals to ban the shooting of white-fronted geese in Wales.
- Web-based wildlife legislation tool.
- 25 year strategy to eradicate bovine TB.
- Evidence submission to Defra regarding bTB vaccination.
- Meeting at Swansea University to discuss badger project.
- CITES Joint Liaison Group meeting re wildlife trade.
- Meetings about Canada goose management and ringing project on Lake Windermere.

- Meeting to discuss red deer conservation grazing project in Surrey.
- British Veterinary Zoological Society (BVZS) meeting.
- Meetings with government and NGOs to discuss impacts and lessons learnt from the PIB spill in the English Channel.
- Meeting to discuss International Tanker Owners Pollution Fund (ITOPF) grant.
- Meeting with highways agents Enterprise Mouchel to discuss deer vehicle collisions mitigation work.
- World Society for the Protection of Animals (WSPA) wildlife crime reception and exhibition.
- Meeting with Natural Resources Wales.
- Defra TB Science workshop.
- Presentations at Carnivore Welfare Symposium at Copenhagen Zoo.
- TB vaccination event at the Zoological Society of London (ZSL).
- Tortoise welfare conference at Colchester Zoo.
- London Vet Show and British Veterinary Association (BVA) Congress.
- Elephant Focus Group meeting of elephant keepers at Dublin Zoo.
- Meeting to discuss Garden Wildlife Health Initiative.

External funding

- Ongoing research into the effect of tags on rehabilitated and released seabirds (at Swansea University).
- Contribution to construction of primate enclosure at Monkey World Ape Rescue Centre.
- Survival of hedgehogs during hibernation (with Brighton and Reading University).
- Research into badger behaviour and movements during and post rehabilitation with Swansea University.

Scientific publications

- Grogan A. and Kelly A. (2013) *A review of RSPCA research into wildlife rehabilitation*. *Veterinary Record*, published online doi: 10.1136/vr.101139.

For a full list of papers produced by or in conjunction with the RSPCA wildlife centres, please go to:
www.rspca.org.uk/sciencegroup/wildlife/currentresearch

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