



# Science Group

## Review 2008



*Helping animals through welfare science*



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# Editorial

It is a great pleasure to contribute to the review of the work of the RSPCA's Science Group. Having taken over the role of Chief Scientific Officer in January, following the retirement of Dr Arthur Lindley, I have been extremely impressed by the experience, expertise, but above all the commitment of the staff of all of the scientific departments in the Group. Under Arthur's leadership, the Group has continued to develop into a substantial centre of expertise on practical welfare science.

One of the main strengths of the RSPCA is that it strives to base its policies and activities firmly on evidence. This gives the organisation substantial credibility with its supporters, the general public and decision-makers, therefore enabling the Society to advance animal welfare more effectively. The four departments comprising the Science Group have addressed many issues during the year, some ongoing and some new, which are described in the following pages. The constant theme is one of using sound scientific evidence to develop sensible and practical outcomes.

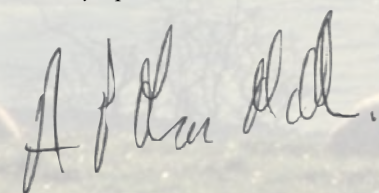
For example, in order to protect the welfare of animals appearing in adverts, TV programmes and other media, the wildlife department has produced guidelines covering the entire production process. Currently, there is very weak regulation and new legislation, government codes or a registration scheme are unlikely to be forthcoming. These guidelines, produced in collaboration with government and the industry, will help producers and trainers protect the welfare of their animals and stay within the law.

The farm animals department's contribution to the campaign to improve the welfare of broilers has resulted in a significant improvement to the lives of millions of birds. This campaign is a shining example of how – using the best welfare science – a higher welfare solution can be developed and shown to be practical and economic to producers. Retailers are encouraged to stock the product and consumers are persuaded to demand it.

The availability of vaccines protects the health and welfare of domestic animals but large numbers of laboratory animals are used each year in mandatory quality control tests. Vaccines, therefore, help to safeguard the welfare of some animals, but only at the expense of others – presenting a difficult ethical dilemma. In 2008, the research animals department published a detailed critical analysis of vaccine testing requirements, identifying areas of particular concern and setting out opportunities for implementing the '3Rs'. The RSPCA will progress the report's recommendations, working with an international audience of regulators, policy-makers and vaccine manufacturers.

The Animal Welfare Act 2006 allows the government to issue codes of practice, the main purpose of which are to give practical advice to people responsible for animals on how they can ensure that their animals' welfare needs are met. The companion animals department has been striving to ensure, using the best welfare science, that the proposed published codes relating to the major companion animal species will be most effective in helping owners and keepers understand their responsibilities and improve the welfare of their animals.

The RSPCA faces many challenges in the years to come. The worsening world economic situation, changes in agriculture introduced to mitigate climate change and the government's cost and responsibility sharing agenda will all potentially affect animal welfare. Over the coming year, the Science Group will continue to position itself at the heart of the RSPCA and ensure that the best science underpins all the Society's policies and activities.



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# Farm animals

The RSPCA farm animals department works to improve the welfare of as many farm animals as possible throughout their lives, by raising awareness of important welfare issues and promoting evidence-based solutions. Farm animals department staff, who have scientific training and practical farming experience, take a variety of approaches in order to secure progress in all areas affecting livestock welfare (diet, environment, management, health, transport and slaughter).

Work includes developing detailed RSPCA welfare standards and encouraging their use, lobbying for stronger laws to protect farm animals, commissioning research projects and encouraging application of the results, and providing key animal welfare information to a wide range of audiences. Staff take every opportunity to work with, and positively influence, stakeholders such as consumers, smallholders, the food and farming industries, veterinarians, scientists, animal organisations and government (UK and EU). In addition to providing technical support on farm animal issues throughout the RSPCA, staff also give external presentations, media interviews, provide input into RSPCA campaigns, and produce consultation responses, scientific reports and a range of information resources.

## Setting standards

The farm animals department is responsible for developing the RSPCA welfare standards for each of the major farmed species. These cover every aspect of the animals' lives, including feed and water, the animals' living conditions, management and health care, and transport and slaughter/killing. The standards are applied through the RSPCA's higher welfare food labelling and farm assurance scheme, Freedom Food, as well as being used by a variety of other bodies and individuals in the UK and beyond.

On-going development of the standards is informed by the latest scientific research on all aspects of livestock welfare – both physical and behavioural – as well as taking account of information gleaned from practical experience. The aim is to set the standards at a level that is practically achievable, but which will deliver good standards of welfare for all animals kept according to the requirements. Department staff consult widely with relevant experts from the scientific research community, veterinary profession and farming industry to try to ensure that all available relevant information is considered during standards development. Feedback gained from

RSPCA field staff (farm livestock officers) who undertake monitoring of the Freedom Food scheme, as well as Freedom Food assessors who audit scheme members and the scheme members themselves, is also very valuable when considering where to focus efforts to improve the standards and their application.

## measuring outcomes

Most of the RSPCA welfare standards for farm animals are essentially 'input' standards, requiring farmers to provide their animals with certain resources. However, clearly, the key issue is the effect of these 'resources' on the welfare of the animals. Assessment of welfare outcomes for animals on Freedom Food-approved finishing pig, laying hen and dairy farms has been underway for the past year. Observations are made relating to certain key indicators of welfare, such as lameness, lesions and prevalence/incidence of positive and negative behaviours (e.g. pigs: rooting/fighting). Collected 'outcome' data will soon be analysed to allow an understanding of the overall welfare state of the animals, as well as enabling appropriate focus to be placed on improving certain aspects of welfare as necessary. The information will help to inform further development of the RSPCA welfare standards, as well as enabling individual farmers to concentrate on certain areas of their animals' welfare highlighted as needing improvement.

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## Promoting higher welfare chicken

The RSPCA launched its meat chicken campaign in January with a letter to all British supermarkets, published in the national press, challenging them to commit to only selling higher welfare chicken by 2010. Press advertising also directed the public to a new RSPCA microsite ([www.supportchickenow.co.uk](http://www.supportchickenow.co.uk)), developed in collaboration with Freedom Food, asking them to sign a petition to support the challenge.

The campaigning was planned to coincide with the excellent and very influential television programmes on chicken production and welfare, hosted by celebrity chefs Jamie Oliver and Hugh Fearnley-Whittingstall – both programmes had advisory input from the farm animals department. The campaigning and consequent media activity resulted in a large increase in the sales of higher welfare chicken. For example, Waitrose reported that its free-range chicken sales increased by 22 per cent and its organic sales by 39 per cent, and Sainsbury's were selling 60 per cent more free-range, organic and higher welfare birds in November, compared with the same time last year. Also, supermarkets Asda, Sainsbury's and Tesco are now offering their customers RSPCA Freedom Food chicken.

## finding practical solutions

### Slower growing breeds of broilers

Selection of broilers for fast growth has been a major contributor to a number of health and welfare problems, such as the development of chronic leg disorders, ascites, and sudden death syndrome. Despite this, selection for increased growth rate has been a primary focus for breeding companies and it is predicted that growth rates will continue to increase.

In 2006, the RSPCA farm animals department introduced a pioneering new requirement into its welfare standards for chickens – to permit only the use of genetically slower growing breeds of broilers. These are the only UK farm assurance scheme standards that specifically only permit the use of genetically slower growing breeds. The standard was developed after discussions with broiler breeders, producers using slower growing breeds of chickens, and reviewing published research that clearly indicated chicken welfare was much improved at slower growth rates.

By the start of 2008, around 44 million genetically slower growing broilers (Hubbard JA57) were being reared under the Freedom Food scheme. In addition, a major advancement was the response of the two largest global broiler breeding companies. Each company launched a genetically slower growing broiler breed for this changing market, one of which was developed specifically to fulfil the RSPCA welfare standard for growth rate (the CobbSasso150).



### Ventilation shutdown judicial review

In April 2006, the government passed regulations enabling the use of 'ventilation shutdown' as a method to kill poultry in the event of a disease outbreak, such as avian influenza.

Ventilation shutdown permits a producer to switch off the ventilation system of a poultry building and leave the birds to die through hypothermia, starvation, dehydration, lack of oxygen and/or of disease. Death would be difficult to control and protracted, unlike other, more humane legally permitted methods. The RSPCA, therefore, strongly opposes to the use of ventilation shutdown on the basis that it would cause substantial suffering and distress to birds.

The farm animals department had previously represented the RSPCA's views to Defra, but this did not alter their position. Therefore the RSPCA legally challenged Defra through a judicial review. The RSPCA was instrumental in providing scientific and technical information to support the case. Disappointingly, the RSPCA's claim did not result in ventilation shutdown being declared unlawful. However, it did prompt Defra to set conditions on its use and produce guidelines on how to carry out ventilation shutdown in a manner that attempts to reduce the length of suffering of birds before death. The RSPCA believes, with proper planning, ventilation shutdown should never need to be used.





ANDREW FORSYTH/RSPCA PHOTOLIBRARY

## Laying hens

### Improving welfare in free-range systems

The number of birds using the range area in free-range egg production systems can sometimes be low. At the beginning of the year we started funding a three-year project with the University of Bristol looking at ways to encourage and increase hens' use of the range, which can improve bone strength and possibly reduce the incidence of feather pecking. The research will address issues such as access to, and enrichment of, the range. The results will help to further develop the RSPCA welfare standards and provide more practical guidance to producers.

Following a move by the laying hen industry to increase the overall maximum number of hens permitted on the range, the RSPCA began looking into possible welfare implications, particularly quality of the range vegetation and potential risk of disease build up. The industry felt that the move would enable an increase in free-range egg production to meet rising demand – both in the fresh and processing sector. But the RSPCA would only be able to consider making a similar change in the *RSPCA welfare standards for laying hens* if convinced by robust evidence that it would not be to the detriment of the welfare of the hens.

### Updated RSPCA welfare standards

The *RSPCA welfare standards for laying hens* are being updated in light of new scientific evidence, practical experience and discussions with the farming industry, welfare scientists and veterinary surgeons. The new version of the standards, to which all Freedom Food units are inspected, is due to be finalised in 2009. Developments in the slaughter/killing standards are being proposed to help keep the birds as calm as possible during a process which can be potentially stressful. The standards for pullets (young hens before they start laying eggs) are also being reviewed in more detail, including issues such as loading and unloading

during transport and the requirements and potential benefits of early access to range.

### Beak trimming

The RSPCA continues to work hard to reach a point where the need to beak trim to avoid the potential welfare implications of feather pecking and cannibalism is overcome. This includes work on range enhancement and attention to the management of pullets during the rearing phase. In addition, to help evaluate welfare during beak trimming, the RSPCA commissioned some research in partnership with the British Egg Industry Council earlier this year. The research, carried out by the Scottish Agricultural

College, concluded that a new infrared method of beak trimming appears to be preferable in welfare terms when compared to more conventional methods. Advantages included reduced handling, reliability of the infrared treatment and its non-invasive nature. We will continue to review the beak trimming situation, with more evidence on the neurophysiological effects of infrared beak treatment, funded by the government, expected early in 2009.

*commissioning and funding welfare research*

## Cattle

The work of the RSPCA/Compassion in World Farming-convoked Calf Forum continued throughout 2008 to try to increase the uptake of male dairy calves into the UK beef chain. The Forum is aiming to reduce the number of calves being killed on farm or exported live to Continental veal rearing systems. In order to achieve this, the RSPCA is working to encourage the development of viable markets and outlets, and to raise awareness and support for higher-welfare British beef amongst UK consumers.

## Farmed fish

Further work has taken place in 2008 to improve the *RSPCA welfare standards for farmed Atlantic salmon* in a number of key areas that affect fish welfare, such as transport. Farm animals department staff spoke at a seminar organised by Freedom Food in Scotland, which was attended by the majority of the Scottish farmed salmon transport industry, setting out how the RSPCA standards prioritised fish welfare.

Through Eurogroup for Animals, representatives from the farm animals department were also appointed to the Council of Europe expert groups on the European eel, African catfish, Sea bass, Sea bream and Common carp. Our role is to provide technical animal welfare advice on these species in the development of the Council of Europe technical welfare guidelines.

## Stunning/killing of crustacea

The RSPCA has been concerned about the welfare of crustaceans (such as crabs and lobsters) at the time of killing for some time. Traditional methods often pay little attention to the welfare of the animals. Hence, along with other interested parties, the RSPCA has developed a protocol for the humane stun/killing of crustacea, which encompasses the latest technology using electricity, and which also demonstrates the correct way to dispatch both crabs and lobsters mechanically.

## Pigs

The *RSPCA welfare standards for pigs* were revised during 2008, taking account of scientific research and practical feedback to facilitate further improvements to welfare. The updated version now includes detailed standards relating to gas killing, and a requirement for producers of finishing pigs to join the British Pig Executive's Health Monitoring scheme, or equivalent.

As reported in last year's *RSPCA Science Group Review*, the European Directive on Pigs was due to be reviewed at the beginning of 2008. It is likely that this will now take place towards the end of 2009/beginning of 2010. As previously reported, it is hoped that the resulting report, will clarify a number of points, including the requirement concerning the provision of manipulable materials.

### Alternatives to the farrowing crate

In 2008 a collaborative Defra-funded project involving animal welfare scientists from the Scottish Agricultural College and the University of Newcastle was initiated to investigate possible alternatives to the farrowing crate, for indoor sows. Currently, approximately 70 per cent of UK sows farrow (give birth) in crates. Whilst offering some form of protection for the piglets from crushing by the sow, these crates severely restrict the movement and behaviour of the sow which can lead to frustration and stress for the sow. A representative of the RSPCA farm animals department is a member of the steering group of this three-year project, the aim of which is to develop and test alternative farrowing systems. An economic

modelling approach is being used, in order to define systems which will least compromise the welfare of the sow or gilt and her piglets during the farrowing period.

The RSPCA is also part-funding a project being undertaken by the Oxford-based Food Animal Initiative, looking at developing a mutilation and confinement-free, non-land based system for pigs. The ultimate aim is to provide an opportunity for those sows in the UK who currently farrow in crates to be taken out of these crates, as well as removing any need for mutilations (e.g. tail

docking), thus improving welfare. However, not all pig farmers have enough suitable land to adopt alternatives such as outdoor units.

An alternative viable system would have the potential to improve welfare. The project involves the development of a complete design, build, training, management, finance and marketing package. The system would be fully validated and ready for immediate use – an advantage as producers are often nervous to adopt non-validated systems for fear of unforeseen production problems and/or financial failure.



ANGELA HAMPTON/RSPCA PHOTOLIBRARY

## Sheep

### Tail docking and castration

In June the Farm Animal Welfare Council (FAWC) published its report on the *Implications of Castration and Tail Docking for the Welfare of Lambs*. These potentially painful operations are commonly carried out to try to reduce the risk of other welfare problems but, as noted in the FAWC report, may not be as necessary or justifiable as commonly perceived.



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As well as discussing whether the need for tail docking and castration could be avoided on some farms through better flock management, the report considers whether routine pain relief should be provided to lambs, and by what means. We are carefully considering the

recommendations in the report, along with other scientific and practical evidence and expert advice, to ensure that requirements in the *RSPCA welfare standards for sheep* act to minimise sheep suffering as far as possible.

### Sheep welfare in Australia

In Australia, an injurious husbandry procedure known as 'mulesing' is often carried out for similar reasons as for tail-docking in the UK; to try to reduce the risk of fly strike. Fly strike – a significant welfare problem – occurs when flies are attracted to soiled areas of the fleece and lay their eggs, which hatch out as maggots and start eating into the flesh of the sheep. During mulesing, the skin around the backend of the

sheep is cut away, to try to produce a smooth, wool-free area that is less attractive to flies. RSPCA staff have been looking into Australian research on methods of reducing the risk of fly strike in ways that avoid the need for mulesing to be carried out, as well as alternatives that are potentially less painful for the sheep.

The farm animals department are in contact with RSPCA Australia (an entirely separate organisation from the UK charity) with a view to assisting them in any way we can to reduce sheep suffering and encourage effective, welfare-friendly alternatives to mulesing to be adopted by the industry. There is increasing interest in this issue from European clothes retailers who source Australian wool. They are putting pressure on their Australian sheep industry suppliers to move away from the practice of mulesing.



## Influencing decision makers

Below are just some of the committees on which farm animals department staff represented the RSPCA, meetings and events in which they have participated, consultations to which they have responded and presentations given, during 2008.

### Membership of committees and working groups

- **Department for Environment, Food and Rural Affairs (Defra)**
  - Game bird working group.
  - Beak trimming action group.
  - Stakeholder group: transposition of the EU broiler Directive into the UK.
  - Stakeholder group: the welfare of horses, sheep, pigs, cattle and goats during commercial transport.
  - Cattle and poultry farm health planning groups.
- **British Egg Industry Council infra-red beak trimming steering group.**
- **British Pig Executive**
  - Pig Health and Welfare Council.
  - Welfare outcome assessment project steering group.
- **Food Standards Agency Meat Hygiene Policy Forum.**
- **Soil Association technical standards groups.**
- **Responsible Use of Medicines in Agriculture (RUMA) Alliance Committee.**
- **Council of Europe working party and drafting group on protection of animals during international transport.**
- **United States Humane Farm Animal Care Scientific Committee.**
- **Global Long Distance Transport Campaign working group.**
- **Eurogroup for Animals slaughter group.**
- **Farm Animal Welfare Council Stakeholder group: the welfare of white meat animals at slaughter or killing.**
- **Welsh Assembly Animal Health and Welfare Strategy Implementation group.**
- **Assured Dairy Farms technical working group.**
- **Universities/research institutes**
  - University of Liverpool sheep welfare project stakeholder group: development of on-farm welfare indicators for sheep.
  - University of Newcastle and Scottish Agricultural College: project steering group on alternative farrowing environments for pigs.
  - University of Bristol: project steering group on reducing tail biting in pigs.

### Examples of key meetings and events during 2008

- Met with FAWC to discuss general farm animal welfare issues and potential future activities to improve welfare.
- Met with the Australian Egg Corporation to discuss laying hen welfare and RSPCA standards.
- Met with Egg Marketing Inspectorate to discuss laying hen welfare and legislation.
- Online meeting with Intuitive Media to answer school children's questions about hen welfare.
- Visited enriched cage units for laying hens to discuss welfare and labelling.
- Visited free-range egg farms in France to look at range quality and hen behaviour.
- Met with chicken breeding companies to encourage the development of slower growing breeds of broilers.
- Represented RSPCA on an expert panel at Hugh Fearnley-

Whittingstall's press conference prior to the Tesco AGM to which he had put a resolution requiring that all chickens sourced and sold by Tesco should be from higher welfare systems that meet or exceed the RSPCA's welfare standards.

- Co-sponsored and participated in national cattle mobility workshop standards.
- Participated in European Food Safety Authority farmed fish welfare meeting in Italy.
- Met with the European Commission to advise on EU-funded aquaculture research.
- Met with major food retailers to discuss their farm animal welfare standards and future potential for progress.

### Responses to consultations included the following

- **Defra**
  - Consultation on the national control programme for Salmonella in broiler flocks.
  - Consultation on the draft EU slaughter Regulation. The Mutilations (Permitted Procedures) (England) (Amendment) Regulations.
- **Welsh Assembly**
  - Eggs and Chicks (England) Regulations 2007 – draft Statutory Instrument and partial regulatory impact assessment.
  - Animal Health & Welfare Strategy Wales Action Plan 2008-9.
- **Environment, Food and Rural Affairs Committee**
  - Inquiry – English pig industry.
- **Council of Europe (with Eurogroup for Animals)**
  - Draft recommendations concerning domestic rabbits, European eel, sea bass, African catfish, sea bream and common carp.
- **Farm Animal Welfare Council**
  - Education, communication and knowledge application.
  - Animal welfare surveillance – liaison group of animal welfare advisory bodies.
- **Assured Farm Standards/Assured Chicken Production**
  - Consultation on Scheme Standards 2009-2010.

### Examples of presentations given during 2008

- **Egg industry free-range open day: an introduction to the RSPCA welfare standards for laying hens.**
- **EU-funded fish meeting in Poland: fish standards development and welfare indicators.**
- **Aquaculture Europe 2008 trade show and conference: fish welfare.**
- **Duke of Edinburgh Award students: farm animal welfare issues.**
- **World Poultry Congress in Australia: chicken welfare.**
- **EU workshop in Croatia for European accession countries: presentation on farm animal welfare law.**
- **RSPCA Australia Scientific Seminar in Canberra: keynote presentation on live animal transport issues in the EU.**
- **European Pig Producers' Congress: RSPCA's work/views on pig welfare.**



## Research animals

The RSPCA recognises that there is a spread of opinion on the moral and scientific justification for the use of animals in research and testing. The Society believes that the necessity of, and justification for, animal use must be much more critically assessed on a case by case basis, with a view to replacing animals in experiments with humane alternatives, worldwide.

The Society adopts a constructive and practical approach to the issue, liaising with those involved in animal use in government, industry and academia, to promote initiatives that lead to greater application of the 3Rs – replacing animals with humane alternatives, reducing animal use, and refining husbandry and procedures to reduce suffering and improve welfare throughout the animals' lives.

## 3Rs in veterinary vaccine testing

Vaccinations are routinely administered to pet, farm, zoo and some wild animals' in order to protect them against common, often life-threatening diseases<sup>2</sup>. However, large numbers of laboratory animals are used each year in mandatory quality control tests for these biological products. Vaccines therefore help to safeguard the health and welfare of certain animals, but only at the expense of others – presenting a difficult ethical dilemma. The RSPCA believes more should be done to try to resolve this, for example, through developing methods that avoid or replace the use of animals, and that substantially reduce the suffering involved in current tests.

In February 2008, the RSPCA published a detailed report: *Advancing animal welfare and the 3Rs in the batch testing of veterinary vaccines*<sup>3</sup>. This takes a critical look at vaccine

testing requirements, identifies issues and tests of particular concern, and sets out opportunities for implementing the 3Rs. It is aimed at an international audience of regulators, policy makers and vaccine manufacturers and its recommendations, if implemented, will have a significant impact on reducing the numbers of animals used and the amount of suffering caused.

### resolving the ethical dilemma

The Society is now looking to progress the report's recommendations with the relevant bodies. The first follow-up activity was the formation of an expert working group to develop the general ideas in the report and then focus on refining batch testing for two

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specific vaccines (Clostridium and Leptospira) which had been identified as particular causes of concern because of the nature of the tests required and the suffering caused to the animals involved. The initiative comes under the auspices of the long standing BVA/FRAME/RSPCA/UFVA Joint Working Group on Refinement (JWGR) and participants come from industry, animal welfare and regulatory bodies. The JWGR will publish its report and recommendations in 2009.

#### Footnotes and references

1. For example, attempts were made during 2008 to vaccinate Ethiopian wolves to reduce the incidence of transmission of rabies from domestic dogs, see: <http://news.bbc.co.uk/1/hi/sci/tech/775693.stm>
2. Such as canine distemper, rabies, cattle blackleg and swine pneumonia.
3. Cooper, J. & Jennings, M. (2008) *Advancing animal welfare and the 3Rs in the batch testing of veterinary vaccines* RSPCA, Horsham. Available at: [www.rspca.org.uk/vaccines](http://www.rspca.org.uk/vaccines)



## Working internationally

The use of animals in research and testing needs to be tackled in a global context. Industries that use animals, whether pharmaceutical, chemical or agricultural are now multi-national, and the regulatory testing requirements they work to are international. Scientists in academia also commonly collaborate on an international basis. Given this situation, it is a concern that there is significant variation across different countries with respect to the standards of legislation controlling animal experiments, and the priority given to animal welfare and ethical review within this. To try to deal with this problem, the research animals department maintains a significant presence on the international stage.



### European Union

On November 5th 2008, the European Commission (EC) published proposals<sup>1</sup> for new legislation<sup>2</sup> to regulate the use of animals in experiments and raise standards across the 27 member states of the European Union (EU).

The research animals department has had key input into the development of the new proposals, notably through membership of technical expert working groups set up by the Commission to advise them on what was needed, and through various formal consultations. Working with Eurogroup for Animals<sup>3</sup>, the RSPCA has lobbied hard for many important changes. For example, the scope of a new Directive needs to be extended to cover all uses of animals in science, including fundamental research, and education and training. There is an urgent need for an effective system of licensing and control in all member states with a thorough ethical assessment of all proposed animal use as an integral part of the licensing process. There must be more incentives to develop alternatives to replace animal use; and housing and care standards must be substantially improved.

Fortunately, the proposals include many of these changes. However, there are some serious causes of concern. For example, there is still no absolute ban on the use of great apes, there seems to be no intention for a more radical shift away from primate use more generally, and the proposed date of 2017 for implementation of some of the improved housing and care standards is, in the Society's view, unacceptable.

There is clearly still a long way to go before the wording of the revised Directive is finalised and the many improvements it will bring are actually put into practice. The process of scrutiny and amendment by the Council of Ministers and the European Parliament, and the incorporation of the Directive into national laws, will take several years. Throughout this period the RSPCA and Eurogroup will be arguing strongly to protect the good parts of the proposal, and to amend and improve the unsatisfactory parts.

For further information from the EC on the progress of the revision of the Directive, see: [http://ec.europa.eu/environment/chemicals/lab\\_animals/home\\_en.htm](http://ec.europa.eu/environment/chemicals/lab_animals/home_en.htm)

### recognising the global nature of laboratory animal use

#### Outside the European Union

- In March, a workshop<sup>4</sup> organised by RSPCA International was held in Ohrid, Macedonia. A number of countries in the Western Balkans want to join the EU and need to align their animal welfare laws with EU legislation. Scientific staff from the research animals department attended the workshop to give presentations and talk to the vets, government officials and scientists present about animal welfare and ethics, in the context of current and proposed legislation.
- In September, a member of staff gave presentations on 'the role and responsibilities of ethics committees', and on 'opportunities for implementing the 3Rs', at the 3rd Asian Federation of Laboratory Animal Science conference in Beijing, China. Over 600 people using and caring for animals in research establishments across Asia attended the conference.

This event also saw the launch of a new resource – a collaboration between the RSPCA and the Chinese Association of Laboratory Animal Science (CALAS) – publishing good practice for the housing and care of laboratory animals. Little information of this type is currently available in the Chinese language. More than 500 copies of the resource were taken by delegates during the conference and a further 9000 will be printed and distributed across China by CALAS.

#### Footnotes and references

1. Proposal for a Directive of the European Parliament and of the Council on the protection of animals used for scientific purposes (presented by the Commission) Brussels, COM(2008) 543/5 [http://ec.europa.eu/environment/chemicals/lab\\_animals/pdf/com\\_2008\\_543.pdf](http://ec.europa.eu/environment/chemicals/lab_animals/pdf/com_2008_543.pdf)
2. The previous European Directive came into force in 1986, though there has been variation in how member states have interpreted and implemented its text. The intervening years have seen new scientific developments and applications of animal use, along with improved knowledge of animal behaviour and the needs of animals. For these reasons, it was agreed in 2002 that the law needed to be updated.
3. Eurogroup for Animals is the umbrella group of the leading animal welfare organisations from across the European Union: [www.eurogroupforanimals.org](http://www.eurogroupforanimals.org)
4. Hammond-Seaman, A., Ileski, V., Pendovski, L. & Thomas, G. (eds) (2008) *The 3Rs concept: The legal framework on the protection of laboratory animals* Proceedings of the Workshop, 28 March 2008, SS, Cyril & Methodius University Congress Centre, Ohrid, Republic of Macedonia. [Published by RSPCA International, Horsham].

## Rodent welfare

This year, the annual RSPCA and Universities Federation for Animal Welfare (UFAW) Rodent Welfare Group took 'the care and use of wild rodents' as its main topic. The group, which



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provides a forum for scientists, animal technicians and veterinarians seeking to reduce the suffering and improve the welfare of rodents used in research, is organised and chaired by the research animals department. A major aim of the group is to stimulate and promote new approaches to the 3Rs in rodent research, and to disseminate such information to a wider international audience through publication of the meeting reports in an international journal.

At the 2008 meeting, presentations from experts on wild rodents enabled delegates to consider how to use what is known about wild rodent

behaviour to benefit laboratory rodents more generally. It also highlighted some specific concerns for the care and use of wild rodents in research.

Around 100 delegates attended. In the concluding discussion session their collective expertise was brought to bear on the identification of clinical signs in rodents and how these relate to the classification of suffering into mild, moderate and substantial categories.

Reports from previous years' meetings are available in the journal *Animal Technology and Welfare* (1998-2004) and *Lab Animal* (2005-2007). For more information about the Rodent Welfare Group contact: [research\\_animals@rspca.org.uk](mailto:research_animals@rspca.org.uk)

### thinking through the animals' lifetime experience

## Cloning animals for food

In late 2007 the US Food and Drug Administration (FDA) concluded<sup>1</sup> that meat and milk products from cloned cattle, pigs and goats – and their offspring – were safe for human consumption. As a result, it was expected that commercial use of cloned animals and their offspring as food products could be widespread by 2010, and the European Commission requested two of its advisory bodies to review the issue.

The European Food Safety Authority (EFSA) concluded<sup>2</sup> that there were unlikely to be any new and specific food safety issues arising from this development. However, the European Group on Ethics stated<sup>3</sup> that given the current level of animal suffering and health issues involved, it is doubtful whether the cloning of animals for food is ethically justified.

In February, a member of the research animals department attended an EFSA Stakeholder Meeting to highlight the impact that cloning animals for food would have on the health and welfare of livestock animals.

In June, the results of research<sup>4</sup> conducted in the UK by the Food Standards Agency (FSA) into the views of the public, found there was significant reluctance to accept food derived from clones and a desire for clear labelling to enable consumers to make an informed choice. The research animals department subsequently made a comprehensive submission<sup>5</sup> to the FSA in response to a consultation asking for comments on the revised European 'novel foods' legislation. The RSPCA argued that should the EC allow food products from cloned animals and their offspring to enter the market, these products must be subject to a strictly applied authorisation process which addresses the ethical and animal welfare implications and imposes an obligation for appropriate labelling.

In September, European parliamentarians voted overwhelmingly<sup>6</sup> in support of a motion urging the Commission to prohibit the cloning of animals for food.



A. E. JAMES/RSPCA PHOTOLIBRARY

#### Footnotes and references

1. US Food and Drug Administration (2008) *Animal cloning: A Risk Assessment*. [http://www.fda.gov/cvm/Documents/CloningRiskAssessment\\_FINAL.pdf](http://www.fda.gov/cvm/Documents/CloningRiskAssessment_FINAL.pdf)
2. European Food Safety Authority (2007) *DRAFT Scientific Opinion on Food Safety, Animal Health and Welfare and Environmental Impact of Animals derived from Cloning by Somatic Cell Nucleus Transfer (SCNT) and their Offspring and Products Obtained from those Animals*. [http://www.efsa.europa.eu/cs/BlobServer/DocumentSet/sc\\_opinion\\_dclon\\_public\\_consultation.pdf](http://www.efsa.europa.eu/cs/BlobServer/DocumentSet/sc_opinion_dclon_public_consultation.pdf)
3. European Group on Ethics (2008) *Ethical Aspects of Animal Cloning for Food Supply. Opinion No.23*. [http://ec.europa.eu/eurogroup\\_ethics/activities/docs/opinion23\\_en.pdf](http://ec.europa.eu/eurogroup_ethics/activities/docs/opinion23_en.pdf)
4. Creative Research (2008) *Animal Cloning and Implications for the Food Chain: Findings of Research among the General Public* (Conducted on behalf of FSA). <http://www.food.gov.uk/multimedia/pdfs/clonereport.pdf>
5. RSPCA (2008). *Submission to the Food Standards Agency on the Proposed regulations of the European Parliament and the Council on novel foods intended to replace and repeal the current Novel Food regulation (EC) No.258/97*.
6. 630 MEPs voted in favour and only 32 against: European Parliament Procedure: 2008/2598 (RSP).





NOVO NORDISK

## Improving rabbit husbandry

In June, the UFAW/RSPCA Rabbit Behaviour and Welfare Group published a new report: *Refining rabbit care – a resource for those working with rabbits in research*<sup>1</sup>. The report was produced by scientific staff from the RSPCA and UFAW, together with veterinarians and senior animal technologists from industry and academia. It sets out the welfare needs of the rabbit based on the current scientific literature, and explains how these needs can be fulfilled in a laboratory environment. It provides practical guidance on refining housing and care whilst recognising the need to take scientific objectives into account, and aims to minimise the risk of distress or aggression between animals, particularly when changing from individual to social housing.

The report was produced with reference to Appendix A<sup>2</sup> to Council of Europe Convention ETS123, which is likely to form the basis of the housing and care guidelines in the new European Union Directive regulating laboratory animal care and use. *Refining rabbit care* will help facilities to comply with, and improve upon, the guidelines on rabbit housing and care both within the Convention and Directive, and will therefore be widely applicable throughout Europe.

The report is available free of charge (though donations are welcome) by contacting: [rabbits@rspca.org.uk](mailto:rabbits@rspca.org.uk)

### Footnotes and references

1. Hawkins, P., Hubrecht, R., Buckwell, A., Cubitt, S., Howard, B., Jackson, A. & Poirier, G.M. (2008) *Refining rabbit care – a resource for those working with rabbits in research* RSPCA Horsham.
2. Council of Europe (2006) *Appendix A of the European Convention for the Protection of Vertebrate Animals used for Experimental and other Scientific Purposes (ETS No123) – Guidelines for Accommodation and Care of Animals (Article 5 of the Convention)*. Council of Europe. Strasbourg.

*practical guidance on refining housing and care*

## Promoting ethical review

The RSPCA is a long-standing advocate of local Ethical Review Processes (ERPs) as a means of promoting ongoing consideration of the ethical aspects of animal use, wider involvement in decisions regarding the justification for animal use, and advancing fuller implementation of all 3Rs. The research animals department has been involved in the development of ERPs since the early 1990s, and is engaged in numerous activities to facilitate their work in the UK, and that of equivalent bodies worldwide.

This year the research animals department initiated a joint project with the UK Laboratory Animal Science Association (which has also been closely involved with the development of ERPs). The aim is to develop a set of guiding principles on good practice for ERPs which will help with the interpretation of the ERPs' seven core functions<sup>1</sup>, exploring in more detail the purpose of each, and the most efficient way of implementing these in practice. This will feed into the ongoing work of the Home Office on the government's 'efficient regulation' initiative<sup>2</sup>. There are already many examples of good ERP practice within industry and academia, and these are being utilised as a basis for developing the guidelines. The project is being progressed through workshops and consultations involving participants from a range of establishments and who represent the full spectrum of ERP members.

A particular focus of the RSPCA's work is to support and help develop the work of lay members of ERPs. During 2008, the *Resource*

*book for lay members of local ethical review processes* was revised and updated, together with the accompanying guidelines on good practice for animal housing and care. The latter has also been translated into Chinese (see previous section: Working internationally), and other languages are planned. The new version of the *Resource book* will be available in February 2009.

The sixth RSPCA Lay Members' Forum was held in December. These one-day meetings are important for enabling lay members to compare experiences and gain information and advice. The main issues considered at the 2008 meeting were:

- humane endpoints and welfare assessments
- implementing the 3Rs during project review
- whether and why different species are valued differently
- a lay member's comparison of the UK and USA systems of ethical review
- a certificate holder's expectations of the ERP and its lay members.



As well as a certificate holder and lay member, presentations were given by a named veterinary surgeon, an animal behaviour and welfare specialist and the Home Office inspectorate.

Information regarding current resources and past/future meetings can be found at: [www.rspca.org.uk/ethicalreview](http://www.rspca.org.uk/ethicalreview) or email: [erp-laymembers@rspca.org.uk](mailto:erp-laymembers@rspca.org.uk)

### Footnotes and references

1. Originally set out by the Home Office in a *Statement on the Ethical Review Process* (1998), available at: <http://scienceandresearch.homeoffice.gov.uk/animal-research/publications-and-reference/publications/guidance/ethical-review-process/ethicalprocess.pdf>
2. For more information on the Home Office Simplification Plan, see: <http://scienceandresearch.homeoffice.gov.uk/animal-research/better-regulation/>

## Influencing decision makers

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

### Membership during 2008 included the following groups

- Home Office/BERR Steering Group on Efficient Regulation (seeking to ensure that any changes to the regulatory system arising from the 'Better Regulation' programme do not compromise animal welfare).
- Animal Procedures Committee (APC) – including member of the sub-committee on housing and husbandry of laboratory animals, and the working groups reviewing: the release of GM animals from under the ASPA; and the revision of European Directive 86/609. Co-opted member of the education and training sub-committee.
- European Centre for the Validation of Alternative Methods (ECVAM) – Expert Scientific Advisory Committee (ESAC).
- Laboratory Animal Science Association – Section on Education, Training and Ethics (as co-convenor).
- BVA(AWF)/FRAME/RSPCA/UFAW Joint Working Group on Refinement (the research animals department also provides the secretariat for this initiative).
- The Boyd Group.
- National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) – member of the Board; member of steering group on regulatory toxicology.
- RSPCA/FRAME/industry dog working group.
- UFAW 3Rs liaison group.
- Focus on Alternatives.
- Various ethical review processes in industry and academia.

### Examples of key meetings/events during 2008

Participation in meetings of all the groups above, as well as the following.

- Participated in stakeholder meeting of the European Food Safety Authority (EFSA) debating the acceptability of cloning animals for food.
- Participated in meeting of the European Federation of Pharmaceutical Industry Associations (EFPIA) discussing proposals for a new European Directive to regulate animal experiments.
- Attended meeting organised by the European Forum for Good Clinical Practice (EFGCP) and the EFPIA to discuss how animal use could be avoided and reduced in drug development
- Invited to address delegates at the annual Certificate Holders Forum training day.
- Attended meetings of the NC3Rs/LASA acute toxicity working group.
- Invited to give presentation at a '3Rs in wildlife research' meeting organised by the Central Science Laboratory.
- Attended the European Commission's Scientific Committee on Health and Environmental Risks (SCHER) Public Hearing on *The need for non-human primates in biomedical research, production and testing of products and devices*.

### Responses to consultations included the following

- Submission\* to the European Food Safety Authority (EFSA) on its *Draft Scientific Opinion on Food Safety, Animal Health and Welfare and Environmental Impact of Animals derived from Cloning by SCNT and their Offspring and Products Obtained from those Animals*.
- Submission to the UK Food Standards Agency on the *Proposed regulations of the European Parliament and of the Council on novel foods intended to replace and repeal the current Novel Food Regulation (EC) No. 258/97*.
- Submission\* to the European Commission's Scientific Committee on Health and Environmental Risks regarding the use of primates.
- Reviewed the Canadian Council on Animal Care draft guidelines on genetically-engineered animals.
- Reviewed the Animal Research Review Panel (of the Animal Welfare Branch, NSW Department of Primary Industries) draft guidelines for the housing of mice in scientific institutions.

\* On behalf of Eurogroup for Animals

### External funding

The RSPCA contributed funding to the following initiatives during 2008.

- **NORINA**  
The NORINA database is a valuable on-line source of information on alternatives to animal experiments in education and training: [www.norinadatabase.org](http://www.norinadatabase.org)
- **Altweb**  
The Alternatives to Animal Testing website serves as a gateway to alternatives news, information, and resources on the Internet and beyond: <http://altweb.jhsph.edu/>
- **UFAW 3Rs liaison group**  
This group represents a collaboration between animal welfare organisations and industry that funds PhD projects intended to advance animal welfare: [www.ufaw.org.uk/phscResearchStudentship.php](http://www.ufaw.org.uk/phscResearchStudentship.php)
- **The Boyd Group**  
The RSPCA is a long-standing member of this important forum for discussion of issues relating to animals in research and testing and contributes to its running costs: [www.boyd-group.demon.co.uk](http://www.boyd-group.demon.co.uk)
- **Alternatives in veterinary education**  
RSPCA International launched a joint project with Konkuk University in Korea to promote the use of alternatives in veterinary education. The project consists of the trialling and evaluation of selected 'alternatives', the setting up of an 'Institute for the 3Rs' and the establishment of a companion animal blood and body donation programme at the university's veterinary hospital.





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# Wildlife

Despite growing public concern, appreciation of the welfare needs of wild animals is often inadequate. The RSPCA wildlife department seeks to improve welfare provisions for captive and free-living wild animals. This is achieved through research, promoting an awareness of the requirements of animals, and an emphasis on a precautionary and humane approach to human interactions with wild animals.

## Campaigning against badger culling

Following publication of the final report and recommendations of the Independent Scientific Group on Cattle TB (ISG) in 2007, the RSPCA continued to make representations in relation to the decision-making processes by both the Welsh Assembly Government and Defra.

In April 2007 the Welsh Rural Affairs Minister announced a programme of action including a range of cattle-based measures and, in principle, to undertake a targeted cull of badgers in an intensive action pilot area. The RSPCA expressed its disappointment at the decision regarding badgers and continued to campaign on the topic. However, a final decision about a badger cull was to be subject to a number of reviews and assessments and, at the time of writing, no further announcement has been made. It is difficult to see what role such a 'pilot' might play since the possible circumstances in which the ISG envisaged badger culling making a positive contribution to disease control were so limited that lessons from a pilot could not be applicable to the wider countryside.

However, the ISG's advice appeared to carry more weight with Hilary Benn, the Secretary of State, who announced in July that, in England, it would be the policy not to issue licences to farmers to cull badgers for TB control. Since effective vaccines could in the future provide a viable way of tackling disease in both badgers and cattle

he had decided to make vaccination a priority and increase spending on the vaccine development programme. The Society welcomed the announcement and, along with other stakeholders, had preliminary meetings with the Department of the Environment, Food and Rural Affairs (Defra) about assistance with the vaccine deployment project using an injectable badger vaccine.



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- Robert Atkinson BSc MSc DPhil (head of department)
- Colin Booty BSc (deputy head)
- Tim Thomas MBE
- Adam Grogan BSc (senior scientific officers)
- Ros Clubb BSc DPhil (scientific officer)
- Sophie Adwick BSc MSc (scientific information officer)
- Sue Gallagher
- Carol Pye (administrative staff)



WARNER BROS/GETTY IMAGES

## Animals in entertainment

Animals appear regularly in films, advertisements, TV programmes, and other media. But while viewers of US productions monitored by the American Humane Association are reassured by the words 'No Animals Were Harmed'® in the end credits, there is no equivalent in the UK.

Many, including those working in the industry, have raised concerns about the lack of regulation of animal use in television, films, theatres and promotional work, as the current Performing Animals (Regulation) Act 1925 is widely regarded as outdated and all but useless with regards animal welfare.<sup>1</sup>

## Primates as pets

At present, while banned in a number of countries world-wide, primate pet keeping is legal in the UK. As a group, primates are recognised as being highly intelligent animals with complex emotional and physical needs and capabilities. As such, they require specialised care and it is unlikely that the welfare of primates can be adequately met in normal households<sup>1</sup>. Sourcing of the animals is an additional area of concern, and the trade itself has negative welfare implications.

In August, members of the wildlife department and Monkey Sanctuary Trust attended the biennial International Primatological Society (IPS) meeting in Edinburgh. The primary aim was to gain the support of internationally renowned primatologists for our joint position that primates are not suitable as pets in private homes. Over 300 signatures were collected, including those of Dame Jane Goodall and Ian Redmond, OBE, and the list continues to grow. The IPS itself and the Primate Society of Great Britain have also endorsed our view.

Following its dissolution earlier this year, the Defra primate working group has been reconvened and a member of the wildlife department will attend as the animal welfare representative. The aim of this group is to



MONKEY SANCTUARY TRUST

Joey, an ex-pet capuchin monkey, was rescued by the Monkey Sanctuary Trust. Kept in an indoor cage for 10 years, a lack of natural light and a proper diet led to nutritional bone disease. As a result, he cannot climb or eat easily, and is permanently disabled.

develop a code of practice for the keeping of primates, however we believe that without some form of restriction and licensing/registration, this code will have minimal positive impact on the welfare of these animals. We feel that the only justification for keeping primates is to improve welfare, either of an individual (i.e. sanctuaries) or a species (i.e. conservation).

### Footnotes and references

- <sup>1</sup> Soulsbury, C.D. et al. (2009) *The welfare and suitability of primates as pets*. J. Appl. Anim. Welf. Sci. 12(1): 11-20.
- <sup>2</sup> *Born to be wild: Primates are not pets*. International Fund for Animal Welfare (IFAW) 2005 Accessed Aug 2008 [http://www.ifaw.org/Publications/Program\\_Publications/Wildlife\\_Trade/Campaign\\_Scientific\\_Publications/asset\\_upload\\_file812\\_49478.pdf](http://www.ifaw.org/Publications/Program_Publications/Wildlife_Trade/Campaign_Scientific_Publications/asset_upload_file812_49478.pdf)
- <sup>3</sup> The Specialist Keepers Association website <http://www.tskaxotics.co.uk/page18.php> Accessed 25.11.08.

## animal welfare guidelines

Calls to introduce stricter measures have been made, including from those working in the industry, but government regulation (e.g. a licensing or registration scheme) has currently been dismissed as an option.

As a first step to improving standards, the RSPCA is therefore producing guidelines for the use of animals in entertainment – covering everything from films to still photography – which will be launched in 2009.

The guidelines cover the entire production process, starting from whether producers really need, or want, to use live animals right through to the care of animals once production has ended. Given that those responsible for animals now have a duty of care to meet their needs under the Animal Welfare Act 2006, the guidelines should also help producers stay within the law.

<sup>1</sup> Defra (2004) (Launch of the Draft Animal Welfare Bill: Regulatory Impact Assessment Annex A) [www.archive2.official-documents.co.uk/document/cm62/6252/6252.pdf](http://www.archive2.official-documents.co.uk/document/cm62/6252/6252.pdf)

estimates of pet primates kept in the UK range from 3,000<sup>2</sup> to 20,000<sup>3</sup>



# RSPCA wildlife centres review

The RSPCA wildlife centres continue to strive for a better understanding of the casualties in their care. Research projects have been undertaken this year to investigate post-release survival in several species, using techniques such as radio-tracking and ringing.



## Post-release monitoring of collared doves

The four RSPCA wildlife centres have released a total of 1212 collared doves

(*Streptopelia decaocto*) fitted with British Trust for Ornithology (BTO) rings since 2000.

The combined total of recoveries from these birds is just 10 (0.8 per cent), where as the average recovery rate for all species combined is approximately two per cent<sup>1</sup>. Of the doves recovered, eight were found dead or in poor condition (range = five to 142 days) and two were recaptured using mistnets, during routine ringing sessions at 24 and 284 days.

In order to collect sufficient data to establish post-release survival rates for this species, it was necessary for another tagging method to be used, in conjunction with ringing. This was radio tracking, one of the most effective ways of monitoring animals post release. Since juveniles represent the

1. BTO website <http://bto.org>



KEVIN LEIGHTON

majority (79 per cent) of collared doves released, the study concentrated on this age group, with a preference for hand-reared individuals.

Although some work has been done on the Eurasian turtle dove (*Streptopelia turtur*) using tail-mounted radio-transmitters (our preferred attachment method), we could find no previous instances where collared doves had been tagged. In 2007, dummy tail-mounted tags were fitted to five birds; these were then monitored in aviaries for two weeks. This was to ensure that the chosen attachment method would be suitable.

The tags apparently caused no problems and the first nine radio-tagged birds were released in 2008. Results from this first year have been encouraging, with the highlight being a successful breeding attempt by one of the birds in which two young fledged. The tagged parent bird was approximately 16 weeks old when the eggs were laid. At least 20 more doves will be tracked over the next two years.

Thanks to the Cheshire Swan Ringing Group, we now have nearly 10 years of re-sighting data for these birds (Table 1). Of 290 cygnets ringed and released between 1999 and 2007, 70 per cent were re-sighted with 75 per cent of these recorded as being alive and well. For those found dead, the average number of days since release was 536.5 (N = 51) and for those seen alive, the average minimum survival was 489.8 days (N = 153). This survival data is currently being analysed using specialised software, which predicts the average survival for all birds based on the average survival for birds from previous years.

The preliminary data provides evidence that these birds can survive independently in the wild following release. This work will be extended in future to measure the post-release survival of adult swans admitted for different reasons, such as fishing tackle injuries.

**Table 1** The number of birds ringed between 1999 and 2007. Numbers seen alive are given along with the average number of days these birds had survived following release, prior to being sighted.

Year	Ringed	Sighted Alive	Average days
1999	34	16	659.8
2000	37	13	700.3
2001	14	10	535.4
2002	22	14	408.1
2003	23	12	529.8
2004	24	13	585.9
2005	55	24	690.5
2006	39	21	329.4
2007	42	30	224.7
<b>Total</b>	<b>290</b>	<b>153</b>	<b>489.8</b>



## Post-release survival of cygnets

The RSPCA Stapeley Grange Wildlife Centre receives an average of 450 mute swans (*Cygnus olor*) each year, about 10 per cent of which are orphaned cygnets. Many of these orphans are subsequently released

back into the wild after a few months, when their flight feathers are fully developed.

Until recently, very little was known about the survival of these birds following release. However, a ringing programme at Stapeley Grange has established that the post-release survival of these young birds is good. Prior to release, some of the birds were fitted with Darvic leg rings. Each of these coloured rings carries an individual number, which allows the bird to be identified. The advantage of the Darvic rings is that they can be read from a distance using a pair of binoculars.



Group of orphaned cygnets at Stapeley Grange. A yellow Darvic ring can be seen on the left leg of the cygnet on the front right.



## Post-release survival of buzzards

The potential of wildlife rehabilitation at the RSPCA West Hatch Wildlife Centre was highlighted this year with the re-admission of a buzzard (*Buteo buteo*) released from West Hatch in 1984, confirming a survival of almost 24 years.

Buzzards are the most abundant diurnal raptor in Britain<sup>1</sup>; the Southwest remains the species' stronghold. Consequently large numbers are admitted to West Hatch, with 1149 admitted and 368 (32 per cent) released between 1991 and 2007.

Over the years we have had feedback on a total of 25 buzzards through ringing returns. Survival periods range from 1 to 8607 days (median=266); 76 per cent survived more than 42 days. However the data has suggested a 47 per cent survival rate of more than one year, which is less than the figure of 66-73 per cent suggested by Kenward *et al*<sup>2</sup> for wild buzzards.

To obtain a more complete understanding of post-release survival, we have supplemented ringing with radio-tracking work since 2006. For practical reasons, only those birds released within a 40km radius of the centre can be tracked. Two buzzards were followed in 2006 and a further three in 2008, bringing our total to five birds so far. We have had mixed results: 2008 birds have fared better. Further tracking over the next few years will hopefully provide more conclusive findings.

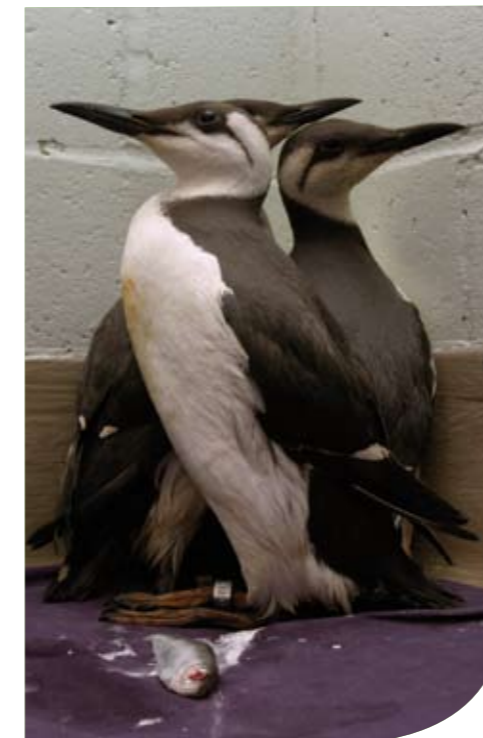
### Footnotes and references

1. Clements, R. (2002) *The Common Buzzard in Britain: a new population estimate*. British Birds 95: 377-383
2. Kenwood *et al* (2000) *The prevalence of non-breeders in raptor populations: evidence from rings, radio-tags and transect surveys*. Oikos 91(2): 271-279



## Assessing the effects of satellite tags on guillemots

Last year, RSPCA Mallydams Wood Wildlife Centre reported on the rehabilitation of large numbers of guillemots following the grounding of the MSC Napoli. The rehabilitation of these birds is a stressful process for all concerned, made worse by the lack of robust evidence of the birds' survival following rehabilitation and release.



ANDREW FORSYTH/RSPCA PHOTO LIBRARY

Conventional radio tracking has shown us that such birds disperse from the release site rapidly, so we are now considering using satellite technology to track their movements. Unfortunately, the devices that are commercially available are probably too large and heavy for auks, creating drag when the birds dive and increasing wing loading when they fly.

We have therefore teamed up with Professor Rory Wilson of Swansea University to investigate the effects of such tags. We used three treatments; birds without tags; birds with devices but no antenna and birds with devices and antenna. The devices used were either loggers with tri-axial accelerometers or Daily Diaries<sup>1</sup>, modified to resemble

satellite tags. These devices allow us to collect much more data on the movement of the birds through and on the water. A grid was painted in the pool at Mallydams and a number of CCTV cameras, including one underwater, were installed to record the birds' behaviour. This would allow us to measure the birds' speed underwater and so calculate the drag effect of the different treatments. We also looked at other behaviours to see if the attached devices caused the birds to spend more time performing grooming activities.

The data are currently being analysed but we have already identified problems with the antennae and this information has been passed back to the manufacturer to undertake appropriate modifications.

1. Wilson, R. P., Shepard, E. L. C. and Liebsch, N. (2008) *Prying into intimate details of animal lives: why we need a good flight recorder before anything crashes*. Endangered Species Research 3, 1-15.

*developing effective tracking devices*





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## Science and wildlife rehabilitation

The RSPCA wildlife department and the wildlife centres have been working together to write a series of species husbandry protocols based on our experience and with the assistance of acknowledged experts. Any gaps in our knowledge signal the need for further research in those areas. Such studies are undertaken by our own staff, often in collaboration with university scientists. Many such projects have been reported in previous issues of the *Science Group Review*.

The publication of a paper on the post-release survival of bats<sup>1</sup> is a good example of the application of science to practice. The study proved that bat rehabilitation protocols must include the need to develop critical skills in a flight cage before release. This demonstrates the RSPCA's commitment to keep science at the centre of wildlife rehabilitation.

The protocols are currently for internal use only, although we would ultimately wish to make them available to a wider audience. So far 11 protocols have been completed, covering 28 species of bird and 24 species of mammal and we will be developing more over the next few years.

<sup>1</sup> Kelly A, Goodwin S, Grogan A, and Mathews F. (2008) *Post-release survival of hand-reared pipistrelle bats (Pipistrellus spp)*. *Animal Welfare* 17, 375-382.

*preparing animals for life back in the wild*

## Influencing decision makers

Scientific staff from the RSPCA's wildlife department promote the Society's agreed policies, aims and objectives through advocacy to government, statutory bodies and other organisations at the highest level. They are members of many national and international committees and working groups and also have key input into a range of consultations, both to government and non-governmental bodies, on a wide range of wildlife issues. Below are just a selection of the committees of which staff are members, meetings and events they have participated in and consultations to which they have responded during 2008.

### Representation on external committees

- The Deer Initiative.
- Ashdown Area Deer Group.
- Defra – Animal Welfare Act secondary legislation working groups: Primate as pets. Wild animals in circuses.
- British Wildlife Rehabilitation Council Steering Committee.
- Species Survival Network (SSN) Board.
- World Conservation Union's Otter Specialist Group.
- Wildlife and Countryside Link (trustee).
- Whalewatch coalition.
- The Mammal Society.
- Marine Animal Rescue Coalition.

### Responses to consultations included the following

- Defra  
A review of Schedule 9 of the Wildlife and Countryside Act 1981 and a ban on the sale of certain non-native species.  
Wildlife Management Strategy for England.  
Dangerous Wild Animals Act 1976.

### Selection of external funding projects

- An assessment of the effects of transmitters on guillemots for satellite tracking.
- Post-release monitoring of polecats, roe deer, buzzards, collared doves, badgers, bats and little owls.
- Research by the Wildlife Conservation Research Unit, Oxford University, into the welfare effects on animals of re-wilding.
- Publication of the proceedings of a conference on captive elephants. The goal of this conference was to identify whether and how elephants' needs can be met in captivity, and whether science can be used to create effective and humane management.

### Selection of scientific publications

- Leighton K, Chilvers D., Charles A. and Kelly A. (2008) *Post-release survival of hand-reared tawny owls (Strix aluco)* based on radio-tracking and leg-band return data. *Animal Welfare* 17(5), 207-214(8).
- Kelly A, Goodwin S., Grogan A. and Mathews F. (2008) *Post-release survival of hand-reared pipistrelle bats (Pipistrellus spp)*. *Animal Welfare* 17, 375-382.

- Kelly A, Thompson R. and Newton J. (2008) *Stable hydrogen isotope analysis as a method to identify illegally trapped songbirds*. *Science and Justice* 48(2), 67-70.

### Selection of key meetings and events

- The first International Conference on Wildlife Reintroduction, Chicago, to keep up to date with scientific research relevant to the RSPCA's rehabilitation work.
- Defra convened stakeholder meeting to discuss potential use of cattle and badger vaccines to control bTB.
- Bat care workshop, Bristol.
- 23rd meeting of the Animals Committee of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), April 19-23, 2008 in Geneva, Switzerland.
- European workshop in Portugal to develop an action plan for future research and development to reduce the impact of oil spills on marine animals.
- Presentation at the British and Irish Association of Zoos and Aquariums' conference on the educational value of zoos.
- International Primatological Society conference, Edinburgh. Joint presence with Monkey Sanctuary Trust aimed at drawing attention to pet primate issue and gaining sign-up support from experts to stop private ownership in the UK.
- CITES enforcement seminar, London. Meeting between Defra, the National Wildlife Crime Unit, and a number of conservation/welfare NGOs aimed to improve communication between these participating organisations as well as look at CITES enforcement priorities and problems.
- 30th Meeting of the Board of the Species Survival Network, Cancun, Mexico.
- British Deer Society seminar 'The rise of urban deer'.
- Napoli hearing, Exeter. Public enquiry into the activities and response surrounding the MSC Napoli beaching near Branscombe in 2007. Evidence on RSPCA response in terms of both beach activity and liaison as well as bird cleaning.
- Meeting of MARC regarding the post mortem results of large beaked whales (e.g. the Thames whale) and to agree course of action in future incidents.
- Meeting with Central Science Laboratory to discuss badger rehabilitation.
- The Mammal Society's Autumn Symposium on mammals in urban areas.
- British Ornithological Union conference on 'The impacts of non-native species'.



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# Companion animals

The companion animals department is dedicated to improving the welfare of the millions of species kept as pets, working animals and athletes in the UK. Companion animals include dogs, cats, rabbits, horses and over a thousand further species.

The department provides technical input for RSPCA policies, campaigns and communications relating to companion animals, ensuring they are evidence-based where possible, up to date, relevant and rational. The department also represents the Society, with respect to companion animal welfare, on external bodies, including government, industry and media, as well as in communications with the public.

During 2008, the newly formed team developed its vision, mission and approach.

**VISION:** Everything the RSPCA says and does to help companion animals is based on science, experience and common sense.

**MISSION:** To empower people with knowledge about companion animal welfare.

**APPROACH:** On behalf of the RSPCA, the companion animals department generates, collates, reviews and communicates science and good practice to encourage and enable people to protect and improve the welfare of companion animals.



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Mark Evans, B.Vet.Med MRCVS  
(head of department)

Claire Calder, BSc, MSc  
Rachel Woodhouse, BSc  
(scientific officers)

Abbi Moon, BSc  
(administrator) (from April 08)

Catharine Miller, BSc MSc,  
(administrator) (until March 08)

## Pedigree dog breeding in the UK

There is a wealth of scientific and other evidence to show that the welfare and quality of life of many pedigree dogs is seriously compromised. Hundreds of thousands of pedigree dogs are vulnerable to unnecessary disability and disease, because of the way they are bred.

The welfare problem and its underlying causes are complex and longstanding. However, the RSPCA believes that serious welfare issues persist today largely as a result of established pedigree dog breeding practices that are driven primarily by the rules and regulations of both formal dog showing and pedigree dog registration.

The RSPCA believes there are two main welfare issues:

### 1. Dogs that are bred to be deformed and disabled

A major underlying cause for this problem are inappropriate pedigree dog breed standards. Such breed standards promote and celebrate serious physical deformities as desirable traits and are used as the main criteria by which dogs are judged at formal dog shows.

### 2. Dogs that suffer from inherited disease as a result of their breeding

Current UK Kennel Club rules and regulations:

- allow the in-breeding of closely related dogs<sup>1</sup>
- only allow breeding from dogs already registered and of the same breed – meaning that currently no new bloodline can be incorporated to improve genetic diversity
- allow unlimited breeding from popular dogs which could at a later age turn out to be carrying a disease.

The issues above increase the degree to which dogs within a breed are likely to be related. It is well recognised that breeding closely related individuals increases the likelihood of their offspring suffering from inherited disease.

This issue is very serious because the welfare problems in question can affect very large

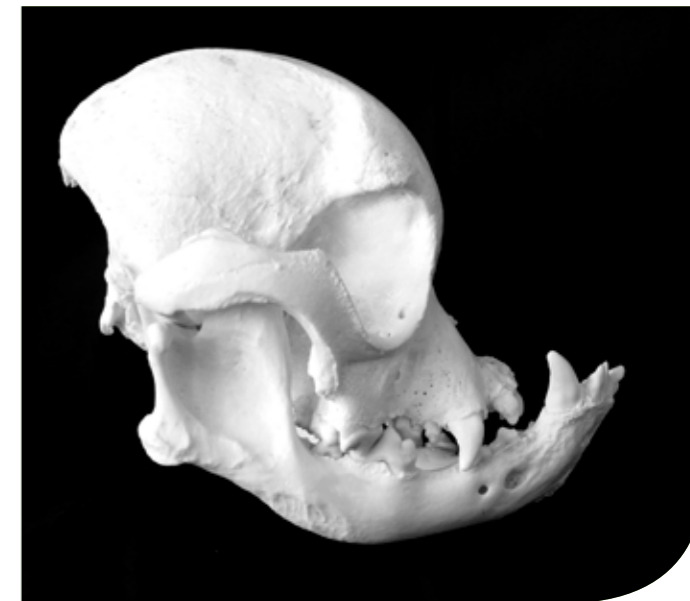
numbers of animals generation after generation, can cause severe pain, discomfort, anxiety or other unpleasant feelings and can affect animals for prolonged periods and significant proportions of their lives.

### The way forward

An RSPCA project, initiated earlier this year, has been one of the companion animals department's key priorities during 2008. The department commissioned an independent review and the final report will consist of a review of the available science, followed by recommendations concerning possible ways forward, that have been prioritised through consultations with a group of highly respected and internationally recognised experts.

The recommendations cover four main themes:

- a complete review and overhaul of current rules and regulations regarding formal dog showing and pedigree dog registration, where health, welfare and temperament are prioritised
- the development and implementation of effective breeding strategies that prioritise health and welfare and include pro-active steps to increase the genetic diversity of dog breeds
- improved data collection and analysis – particularly regarding disease prevalence and causes of death in dogs.



- Education, especially of would-be owners. A change in public attitude is needed so that the most desirable dogs are those which are fit, healthy and have a high quality of life.

The final report is available to download at [www.rspca.org.uk/pedigreedogs](http://www.rspca.org.uk/pedigreedogs)

### From an RSPCA point of view

The RSPCA believes that no animal should be bred primarily for how it looks, but with health, welfare, quality of life and temperament in mind. The Society hopes its report will make a constructive contribution to moving this issue forward towards effective solutions.

The RSPCA believes that all those who benefit from pedigree dogs have a collective responsibility to protect and improve their welfare.

The RSPCA wishes to support pedigree breeders, clubs and societies that recognise welfare problems faced by their breeds and that implement pro-active strategies to address them that are based on good science as well as experience and common sense.

<sup>1</sup> As this Review was going to press, the UK Kennel Club announced that it will not register puppies that are from any mother/son, father/daughter or brother/sister mating, taking place on or after 1st March 2009.



## Codes of practice for pets

The Animal Welfare Act 2006<sup>1</sup> imposes a legal 'duty of care' upon all animal owners. As part of the secondary legislation of the Act, codes of practice are being published by the Welsh Assembly<sup>2</sup> and Defra<sup>3</sup> for cats, dogs, rabbits and horses to provide practical guidance to owners to ensure their animals' welfare needs are met. During 2008, the companion animals department was involved in providing scientific guidance and expertise to the devolved governmental bodies in relation to their proposed codes of practice. The RSPCA believes that any codes should be clear, concise documents that detail prioritised generic welfare needs and are applicable to any husbandry situation. The RSPCA believes the codes should be supported by, but legally separate from, an FAQ-style guidelines document providing more detailed 'How to' information in relation to providing for an animal's needs in different husbandry situations.



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## Pet Obesity Task Force

The Pet Obesity Task Force was launched at the European Pet Obesity Conference in February 2008 in the face of a very worrying obesity epidemic in many species of companion animals.

Task force members include leading specialists in both human and animal obesity. Mark Evans, head of the companion animals department, has been asked to chair the task force and will lead its development during 2009. Similar groups are being formed in countries throughout Europe to gauge the extent of the epidemic and put in place innovative strategies to tackle what is now one of the most serious welfare problems facing companion animals.



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## Equine issues

The department's equine consultants, David McDowell and David Muir continue to work to improve equine welfare. David Muir, the RSPCA's racing consultant, has continued to monitor race courses, which has involved assessing the use of whips, working to improve the safety of jumps and investigating racehorse fatalities.

The shock-absorbing whip, designed to minimise pain for racehorses, is now mandatory in both jump and flat racing, and the British Horseracing Authority regulates its use. The construction of a new ramp into the River Eden, has been an important step in reducing stress and injury for horses at the annual Appleby Horse Fair.



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## Commissioned research:

### The welfare of dogs in Great Britain

The companion animals department has commissioned an innovative two-year study on *The welfare of dogs in Great Britain: identification of priority issues*. This study will involve a literature review, public opinion poll and stakeholder survey. The study will also include the development of a unique method to prioritise welfare issues, a first for pet dogs in the UK.

Prioritising the issues will be critical in determining the direction the RSPCA (and other welfare organisations) should take when working to improve the welfare of pet dogs in the future.

### Animal welfare education

The department has helped to fund a four-year PhD that will explore both the development of attitudes to animal welfare and the acquisition of knowledge on animal welfare. The research aims to attain a greater understanding of information sources, demographic, educational and developmental factors that determine attitudes towards animals and welfare knowledge in children and adults.



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The research will also involve the development of guidelines for preparing objective educational material that both engages children and facilitates their ability to debate and reason issues in animal welfare. Current research includes an assessment of attitude changes as a result of 'one-off' educational day events, and further assessment of the impact of the RSPCA's education materials.

### Rabbits' spatial needs

Despite their popularity as pets, the needs of pet rabbits are currently poorly understood, resulting in many experiencing a poor quality of life. To increase understanding, the department has funded a year-long study at the University of Lincoln, which is focussing on the spatial needs of pet rabbits. The study will seek to determine pet rabbits' motivation for access to additional space. The study will also consider how much space rabbits require to perform certain behaviour patterns and will use both physiological and behavioural measures to assess welfare. This research will be used by the RSPCA to inform its advice on the spatial needs of pet rabbits.



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### Separation anxiety in dogs

Canine separation-related behaviour (SRB) problems are defined as unwanted behaviours that only occur when a dog is separated from its owner and include excessive vocalisation, inappropriate toileting and destructiveness. The occurrence of SRB is a serious welfare issue for pet dogs and is a common reason for dogs to be relinquished into rescue shelters.

The department has been funding a two-year study investigating SRB in dogs at the University of Bristol, due for completion in January 2009. The development of a practical test for SRB, and a staff guide to assist matching 'at risk' dogs with suitable new owners should enhance the development of a bond between re-homed dogs and new owners and therefore improve rehoming success rates. In addition, advice to owners of dogs 'at risk of SRB', aimed at helping to reduce such dogs' anxiety when left alone, will enhance dogs' welfare in the long term.

## Influencing decision makers

### Membership of committees and working groups

- British Equine Veterinary Association – Equine Industry Group.
- Animal Health Trust – Equine Industry Committee National Equine Welfare Council.
- Pet Obesity Task Force.

### Selection of key meetings/events

- Pet products workshop – to produce initial guidelines for pet products.
- British Horseracing Welfare meeting – to discuss racehorse welfare.
- Pet Obesity Task Force inaugural meeting.
- Pet Food Manufacturers' Association – annual meeting.
- Welfare Tour with Verderers of the New Forest.
- Companion Animal Welfare Council – meeting to discuss selective breeding in companion animals.
- Kennel Club – to discuss welfare issues in pedigree dogs.
- British Veterinary Association meeting – to discuss welfare issues in pedigree dogs.
- Visit to Plumpton racecourse.
- Visit to Albourne greyhound kennels and Brighton and Hove greyhound stadium.

#### Footnotes and references

<sup>1</sup> See Defra's website for further information on the Animal Welfare Act and related secondary legislation: [www.defra.gov.uk/animalh/welfare/act/index.htm](http://www.defra.gov.uk/animalh/welfare/act/index.htm)

<sup>2</sup> See the Welsh Assembly government's website for further information on secondary legislation to the Animal Welfare Act: <http://wales.gov.uk/topics/environmentcountryside/ahw/animalwelfare/Companiondomesticanimalwelfare/?lang=en>

<sup>3</sup> A list of Defra's current animal-related consultations can be found at: [www.defra.gov.uk/corporate/consult/foodfarming.htm](http://www.defra.gov.uk/corporate/consult/foodfarming.htm)