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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

opposition based on solid science, not sentiment

Science group review 2008

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.





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.¹

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.

Defra (2004) (Launch of the Draft Animal Welfare Bill: Regulatory Impact Assessment Annex A) www.archive2.official-documents.co.uk/documentcm62/6252/6252.pdf

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 households¹. 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



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

- ¹ Soulsbury, C.D. et al. (2009) The welfare and suitability of primates as pets. J. Appl. Anim. Welf. Sci. 12(): 11-20.
- ² 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
- ³ The Specialist Keepers Association website http://www.tskaexotics.co.uk/ pagel8.php Accessed 2511.08.

estimates of pet primates kept in the UK range from 3,000² to 20,000²

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 cent¹. 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.



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

Although some work has been done on the Eurasian turtle dove *(Streptopelia turtur)* using tail-mounted radiotransmitters (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.

2007		
		489.8

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://btoorg



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.

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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. NDREW FORSYTH/RSPCA PHOTOLIBRARY

Buzzards are the most abundant diurnal raptor in Britain¹; 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.

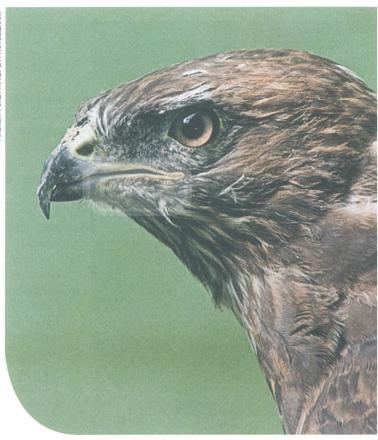
Over the years we have had feedback on a total of 25 buzzards through ringing returns. Survival periods range from 1 to 8607 days (median=266); 76 per cent survived more than 42 days. However the data has suggested a 47 per cent survival rate of more than one year, which is less than the figure of 66-73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

 Kenwood et al (2000) The prevalence of non-breeders in raptor populations: evidence from rings, radio-tags and transect surveys. Oikos. 9I(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.



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 Diaries¹, 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.

 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 device



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 bats¹ is a good example of the appliance 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.

¹ Kelly A, Goodwin S, Grogan A, and Mathews F. (2008) Post-release survival of hand-reared pipistrelle bats (<u>Pipistrellus</u> 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

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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(3), 207-214(8).
- Kelly A., Goodwin S., Grogan A. and Mathews F. (2008) Postrelease survival of hand-reared pipistrelle bats (<u>Pipistrellus</u> 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'.

