

# **Animal welfare surveillance**

A discussion paper

December 2010

The Liaison Group of UK Animal Welfare  
Advisory Bodies

The Liaison Group of UK Animal Welfare Advisory Bodies is a forum for discussion and coordination amongst the chairs and secretariats and others the Liaison Group wishes to co-opt, of the independent animal welfare advisory bodies: the Animal Procedures Committee (APC), the Companion Animal Welfare Council (CAWC), the Farm Animal Welfare Council (FAWC) and the Zoos Forum.

The remit of the Liaison Group covers animals on farms, in laboratories or zoos, and those kept as companions. The remit of each constituent advisory body is decided by the appropriate Minister(s).

The terms of reference of the Liaison Group are:

- To consider any matters relating to animal welfare and, in particular, to discuss and share information on all matters relevant to all sectors and, where appropriate, to organise meetings on these subjects and/or to provide reviews, opinion and/or advice on them.
- To address questions from Government and others, as appropriate, on matters relating to animal welfare across the sectors and to provide advice to Government, other bodies and the public as appropriate on matters relating to animal welfare.

These terms of reference have been approved by Ministers in Defra and the Home Office.

This is the first discussion paper approved by the individual constituent members of the Liaison Group.

## **1. Introduction**

Large numbers of animals of many species are kept in the UK for food production, for companionship, for use in scientific procedures, in wildlife rehabilitation centres, in zoos and for various other reasons. In most, if not all, cases there are welfare challenges at times - in some cases minor and, in some cases, not so minor. Resources for tackling these problems (e.g. for diagnosis, prevention or amelioration) will always be limited and it is most important that they are used carefully and to best effect.

How, then, should society decide its priorities about animal welfare? How should it decide about what are the most pressing problems in order to guide the deployment of efforts for the greatest animal welfare benefit? Economic, ethical, political and technical considerations are all relevant. There is no clear platform from which to do this, as there is no system for the surveillance and overview of animal welfare across the field of all kept animals and of those in the wild that are adversely affected by human activities. This being the case, it is easy to lose track of proportions. Our aim must be to try to tackle all animal welfare problems for which we humans have responsibility, but it is a fact that resources limit what can be achieved. If we are to use our money and time wisely, it is very important that priorities are carefully chosen. This brief paper outlines some of the issues surrounding animal welfare surveillance. The aim is to promote discussion and pursuit of the development of a system to provide an overview of animal welfare across sectors, and thereby assist in identifying priorities and monitoring progress.

## **2. Background**

The subject of animal welfare surveillance was identified in 2007 as a priority for cross-sector review by the Liaison Group of UK Animal Welfare Advisory Bodies (Appendix 1). Our intention was to share thoughts and experiences on this subject in the interests of developing the best surveillance methods that may be widely applicable. To take this review forward, the Liaison Group set up a working group with representatives from each body to consider this matter (Appendix 2).

Animal welfare surveillance is relevant to several major current animal welfare initiatives at national and international level such as the EU Action Plan on the Protection and Welfare of Animals 2006-2010 and the GB Animal Health and Welfare Strategy (2004), though the emphasis of these is more on surveillance of disease rather than welfare. Compiling this paper has indicated the difficulties in finding robust, reliable, accessible and up-to-date sources of welfare surveillance data.

## **3. Aims**

The aims of this review were to:

- i. share information about, and discuss, current welfare surveillance interests and initiatives in each of the sectors (animals on farms, in laboratories or zoos or those kept as companions);
- ii. identify issues and problems common to all sectors and any unique differences between them; and
- iii. identify, where possible, ways of working together to make best use of ideas and experiences across the sectors in the development of sound and practical methods of animal welfare surveillance that may be applicable widely.

The subject is a large and complex one. It was not our objective to undertake an extensive inquiry and comprehensive review, but to identify and capture key ideas and principles.

#### **4. Scope**

Animal welfare concerns in each sector are addressed by separate advisory bodies in the UK in contrast to the situation in many other countries in which one body is concerned with all sectors. This is not because some animals are more deserving of protection, or more or less at risk, than others. It is simply a reflection of the history of the evolution of concern for welfare in our society and in different UK government departments. Although the welfare needs of animals are species-, and at a finer level, breed- or individual-, specific, the Liaison Group believes that there should be concern for the welfare of all sentient animals. Application of this principle, nevertheless, needs to take account of the various reasons why animals are kept.

All the advisory bodies that comprise the Liaison Group are concerned with kept animals. We believe it is important to draw attention to the fact that there is no comparable body in the UK that advises on matters relating to the welfare of free-living wild animals, where these are adversely impacted by human agency (see Section 6.5). This is unsatisfactory, as there are many cases where consideration needs to be given to preventing or ameliorating adverse welfare impacts on free-living wild animals where their interests are in conflict with those of humans (e.g. in the 'control' of rodents, badgers and other wild animals).

#### **5. Animal Welfare and Animal Welfare Surveillance**

##### **5.1 What is animal welfare?**

As stated by CAWC (2006), *"The term 'welfare' is often used to encompass two different concepts. One relates to the physical health and evolutionary fitness of animals, the other to the quality of their subjective feelings. There is much to be said for distinguishing clearly between these by employing the terms 'health', 'viability' and 'evolutionary fitness' where these meanings are intended, and referring to 'welfare' only where the quality of consciously, subjectively, experienced feelings (e.g. pain, fear, warmth, pleasure) is at issue. This is our approach here. That is most definitely not to*

*say that health is irrelevant to welfare; injuries and illness very often result in very unpleasant feelings and are typically very major threats to good welfare – but not all diseases cause welfare problems. There are some that seriously compromise health and evolutionary fitness (for example, by causing infertility) but which are not associated with pain, fear or other unpleasant feelings. Such diseases are certainly serious from the point of view of health and evolutionary fitness, but they are not welfare problems”.*

The Liaison Group has adopted this approach to the use of the term ‘welfare’, that is, that it relates to the quality of subjectively experienced feelings, i.e. the mental experiences of animals. It is important to be aware that ‘health’ and ‘welfare’ are not synonymous and to recognise the relationship between health and welfare as set out above. It follows from the above that the animals that are the subject of welfare concern are all those that are sentient, that is, all those that have the capacity to subjectively experience feelings.

This is not the place to review the principles and complexities of the subject of animal welfare but two further brief points are pertinent here to help avoid misunderstandings: i) *“good welfare cannot be equated with never having unpleasant feelings, because these are essential ‘sticks’ that help keep us and other animals from harm (thirst makes us drink; pain often prevents us damaging ourselves; and so on)”* (CAWC, 2003); and ii) *“in practice, welfare is dependent upon meeting animals’ needs: for food; water; thermal environment; lighting; space; environmental features (for foraging, resting, sleeping, exercise, etc); social interactions; and for the maintenance of good health”* (CAWC, 2003).

Although the long-standing emphasis of much welfare policy has been the avoidance of cruelty and unnecessary suffering and the provision of needs – important as these are – it is important also to consider an animal’s quality of life, including positive affective states (UFAW, 2006; FAWC, 2009).

## **5.2 What is welfare surveillance?**

Welfare surveillance is the systematic observation and assessment of the welfare of an individual animal or a group of animals. This can be conducted at a local level (e.g. at a zoo, laboratory or farm), where welfare assessments are conducted in a structured manner and acted on locally. It can also be carried out at a national or central level, where local data are collected and analysed by a national body.

It is helpful to be clear about the purpose and benefits of welfare surveillance. An important purpose is to identify welfare problems and their magnitude, to track changes in these problems over time and to prioritise actions. Public surveillance of animal welfare is part of the guardianship duties of the Government, acting on behalf of society. Its purposes are to inform Government policy and to ensure compliance with regulations, particularly minimum standards of welfare. It is the Government’s responsibility and is contracted to various agencies, e.g. Animal Health or the

Food Standards Agency, or is undertaken by local authorities at public expense.

The purpose of private surveillance<sup>1</sup> of animal welfare is to aid management. In the case of farm animals, private welfare surveillance is also part of marketing and helps to provide assurance to the consumer about welfare provenance. It is the animal keeper's responsibility to make suitable arrangements for private surveillance and to pay its costs.

Welfare surveillance is undertaken currently in both private and public schemes. The results, however, are not coordinated and the potential to use the findings of the same observations for different purposes is lost. Similarly, while crude data may be collected and reported, there does not appear to be the same effort expended on data analysis and interpretation, e.g. to identify trends in standards of welfare. The results of private surveillance are rarely published and, while summaries of public surveillance are reported, the format could be simplified (FAWC, 2009).

Welfare surveillance involves repeated welfare assessments; different methods are used in public and private schemes, obscuring comparisons between findings. The assessment of animal welfare is complex and is the subject of much current research. It is appropriate therefore to briefly comment here on welfare assessment, again in the words of CAWC (2006) with some additions in brackets:

*“Making inferences about how animals feel – about the quality of their lives – which is what an assessment of welfare seeks to do, involves two distinct steps. The first involves making objective observations or measurements of the factors that may impact upon the animal’s welfare: its state of biology, health and behaviour. [These are observable and measurable in principle, but this is not to say that in all cases we already have the ideal techniques for making these measurements.] The second stage involves making a judgement about the possible impact of these measurable parameters on how the animal feels. The first step deals with objectively measurable parameters; the second involves making a subjective judgment. The subjectivity cannot be avoided but the problems associated with this can be minimised by making the bases for the judgements as explicit as possible” [and not in conflict with available science].*

Despite this element of unavoidable subjectivity, in practice it is often relatively straightforward to develop and gain a consensus in each of the sectors in support for relatively simple, practical methods for welfare assessment. Simple, practical methods are required for large scale surveillance projects.

---

<sup>1</sup> Private surveillance is non-governmental surveillance undertaken by the private sector in relation to commercial assurance or other initiatives, e.g. farm assurance schemes, milk recording, health recording, etc. Public surveillance is undertaken to comply with legislation.

### **5.3 The scope of welfare surveillance**

Very many species of animals are kept in the UK (e.g. more than 1,000 species are kept as companion animals; CAWC, 2003), and the range of potential welfare problems – due to infections, injuries, environmental problems (social, physical and other), genetic history, etc – to the animals of any one of these species is very great. It would be impossible to monitor all such problems. We recognise that every individual case is important, but since resources for tackling problems are often limited, it is important to focus efforts. In deciding priorities, the Liaison Group recommends that the following should be included:

- the number of animals affected;
- the severity (impact on the animal) of the welfare challenge as deduced from the intensity and frequency of the time for which welfare is affected;
- the frequency of the occurrence; and
- the feasibility of being able to solve or ameliorate the problem.

Disease surveillance systems for the identification and management of notifiable diseases are well established in the UK. These diseases have a direct effect on the UK's ability to trade in animals or animal products. Management of notifiable diseases, which have a variable impact on animal welfare, is necessary for maintaining the national livestock health status. Agencies, such as Animal Health and the Veterinary Laboratories Agency, and individuals, such as animal keepers and veterinary surgeons, have responsibilities for surveillance of these diseases.

In addition, government agencies such as Animal Health, the Home Office Inspectorate or local authorities have responsibilities for visiting farm, laboratory, market, zoo and other facilities to ensure compliance with relevant legislation and to ensure awareness of the relevant codes of husbandry standards. In the farm animal sector, inspectors working on behalf of farm assurance schemes also assess welfare in order to assess compliance with voluntary certification standards. Assessment of resource inputs and environmental conditions are as important in the assessment of animal welfare situations as animal outcome measures.

A systematic surveillance of animal welfare that generated data on certain welfare criteria could be used to define national priorities and monitor the impact of large-scale intervention programmes. In addition, the feedback of results to the various facilities and animal keepers would enable identification of relative strengths and weaknesses compared with national profiles.

## **6. Recent APC, CAWC, FAWC and Zoos Forum interests in animal welfare surveillance**

### **6.1 APC**

The APC has a number of ongoing initiatives that are relevant to welfare surveillance. The Housing and Husbandry Sub-committee has conducted and published a survey of fish welfare assessment protocols used in UK establishments. The Considerations for Discharge of Genetically Altered (GA) Animals from the Animals (Scientific Procedures) Act 1986 Working Group has reviewed the criteria for the discharge of GA animals from the controls of the Act, including effective welfare assessment.

The Suffering and Severity Working Group, working with the Laboratory Animal Science Association (LASA), has proposed a system for retrospectively reporting the severity of scientific procedures (<http://www.apc.gov.uk/reference/lasa-report.pdf>). Following a successful preliminary pilot study using the system, a more widely scoped pilot study was commissioned and the final report of this is available ([http://www.apc.gov.uk/reference/lasa\\_apc\\_final\\_report.pdf](http://www.apc.gov.uk/reference/lasa_apc_final_report.pdf)).

The Research and Alternatives Sub-committee has funded a project on the welfare benchmarking of the husbandry of laboratory mice. This involved the generation of an online database in which establishments can view their own results and compare them with a summary of the national results. This study was completed in 2004 and was published in 2008 (Leach et al, 2008; Leach and Main, 2008).

Welfare surveillance is undertaken by NACWO (Named Animal Care and Welfare Officer) with an independent audit by Home Office inspectors.

### **6.2 CAWC**

CAWC has recently completed a scoping study on welfare surveillance in companion animals. Recognising that there appears to be a need for welfare surveillance, CAWC has been considering the strength of the case for this, the challenges it might present, and how it could be undertaken. The findings of this preliminary review have been published (CAWC, 2008).

CAWC has also published a report on 'Companion animal welfare assessment' (CAWC, 2009). Two other CAWC reports have drawn attention to the need for surveillance relevant to the welfare of companion animals: i) 'Welfare aspects of modifications, through selective breeding or biotechnological methods, to the form, function or behaviour of companion animals' (CAWC, 2006); and ii) 'The welfare of non-domesticated animals kept for companionship' (CAWC, 2003). The need for surveillance has also been identified at recent CAWC workshops on approaches to tackling genetic welfare problems in companion animals (these workshop reports are also available on the CAWC website).

### **6.3 FAWC**

FAWC has a long-standing interest in welfare surveillance. For example, in its 2004 report on animal breeding and breeding technologies, a targeted surveillance system was recommended to review the welfare impact of such technologies. Strong support for both public and private welfare surveillance is given in its recent report (2009) on a strategy and policy for farm animal welfare. The report advocates that welfare must be monitored regularly over the animal's life, including the manner of its death, with independent audit; surveillance must be based on valid measures that have been proven to be reliable and feasible; and welfare assessment must measure the positive - as well as the negative - experiences of farm animals.

Comprehensive surveillance systems are available for notifiable diseases that affect farm animals. In addition, Animal Health and local authorities are actively involved in public surveillance of compliance with welfare legislation. The costs are borne by the public purse. Animal Health is now also involved in a surveillance system associated with cross-compliance under the Single Farm Payment Scheme in England. Non-compliance with welfare legislation may result in a reduction in payments made to farmers.

Private industry initiatives such as the British Pig Health Scheme utilise information from abattoirs to inform producers on health and welfare, e.g. the prevalence of pneumonia and tail biting lesions that are identified during the slaughter and dressing process. Milk quality information, which is strongly influenced by mastitis, is also reported regularly to dairy farmers. A network of veterinary practices has collaborated with NADIS (National Animal Disease Information Service, [www.nadis.org.uk](http://www.nadis.org.uk)) to deliver a surveillance system for diseases observed during routine veterinary visits.

The various implementation groups of the GB Animal Health and Welfare Strategy have defined their own priorities for intervention and have instigated monitoring schemes to measure progress in each area. In England, Defra has perceived that this strategy is relatively weak in aspects of animal welfare compared with disease and has published a delivery strategy for welfare.

### **6.4 Zoos Forum**

The Zoos Forum has recently published a Chapter in the Zoos Forum Handbook on 'Animal Welfare and its Assessment in Zoos' in which various aspects of welfare surveillance in zoos are addressed. The purpose of this document is to provide guidance to zoo personnel and zoo inspectors on these matters.

## **6.5 Free-living wildlife**

There is an England Wildlife Health Strategy, produced by the Wildlife Health Strategy Board in June 2009<sup>2</sup>. However, there is no body comparable to the APC, CAWC, FAWC or Zoos Forum that is responsible for keeping under review, and advising on, welfare problems in free-living wildlife caused by human agency. In view of the scale and severity of some of these problems and the potential dilemmas that may arise (see Section 2), we suggest that there should be some such body.

The scope of the Animal Welfare Delivery Strategy (2007; England) covers “animals of a kind that are commonly domesticated that are living in the wild” and “wild animals, when under the control of humans”. It goes on to say “The Strategy does not cover wild animals, when not under the control of humans; animals involved in the normal course of fishing; animals used in research. The welfare of wild animals affected by direct human activity, e.g. cage trapping will be considered further in the Wildlife Management Strategy which is currently being developed.”

## **6.6 Benefits across the sectors**

The subjects of animal welfare assessment and surveillance are of current interest in all of the sectors and the principles apply equally to all. The Liaison Group sees great advantages in working together on these subjects for several reasons:

- i. to share knowledge and experiences;
- ii. to avoid the inefficiency of reinventing wheels;
- iii. to coordinate surveillance of welfare problems that are common to all the sectors;
- iv. to identify priorities within and across all sectors for the information of society and all interested parties, and so that resources for animal welfare can be focused where needs are greatest;
- v. to determine trends in animal welfare levels;
- vi. in pursuit of the ‘levelling upwards’ of animal welfare standards, to challenge cases where serious issues appear to have been overlooked; and
- vii. where appropriate, to work towards consistent evaluation of, and responses to, welfare problems across animal contexts.

## **7. Towards ideal animal welfare surveillance systems**

In considering the features of ideal animal welfare surveillance systems for both public and private purposes that could be broadly applicable across a range of sectors and that would need to be considered in developing a national system, the Liaison Group identified the following elements:

---

<sup>2</sup> [www.defra.gov.uk/foodfarm/farmanimal/diseases/vetsurveillance/species/wildlife/strategy/pdf/whs-090615.pdf](http://www.defra.gov.uk/foodfarm/farmanimal/diseases/vetsurveillance/species/wildlife/strategy/pdf/whs-090615.pdf)

- simplicity of operation while allowing comparisons between and within sectors;
- welfare assessment systems and welfare indices supported by consensus and science;
- identification of most pressing problems in terms of numbers of animals affected, frequency, severity (intensity and duration) of welfare impact and tractability of the problem;
- robust inspection systems, including safeguards to ensure consistency of approach and quality control between inspectors and inspection bodies, and inspectors of sufficient expertise and independence;
- appropriate frequency of inspections;
- effective systems for collection, collation, archiving and analysis of data and of publication of findings, including feedback to animal keepers as appropriate;
- clear guidance on who should be involved, who should be responsible for what, including the costs of data collection, analysis and publication;
- defined organisational structure and hierarchy;
- defined governance structure;
- public accountability; and
- adequate resources, including funding, for reviewing levels of welfare, monitoring trends and identifying areas where action is needed.

In some sectors, elements of welfare inspection or audit systems are already in place (e.g. the Home Office Inspectorate regarding animals used in scientific procedures, Animal Health regarding farm animals, and Zoo Inspectors' advice to local authorities regarding zoo animals). However, at present, there has been no attempt to use a common method in welfare surveillance or to work together to permit any kind of cross-sector overview.

It may be that approaches to welfare surveillance in each sector will continue to differ as, in practice, each will use methods that best suit their specific purposes. Among the factors that underlie the differences between the sectors that have to be taken into account in developing welfare surveillance systems are: the biology of the animal; whether animals are kept by private individuals or by institutions subject to inspection; whether keepers are amateurs or professionals; the economic and/or social value of the animals; the relevant legislative/regulatory framework; and the nature of any existing inspection/auditing/surveillance arrangements.

However, it seems sensible in pursuit of the widespread benefits outlined above that approaches should, if possible, be sufficiently similar, so that cross-sector comparisons can be undertaken. Furthermore, data from existing welfare surveillance systems should be utilised where possible to avoid unnecessary duplication. Ideally, there should be a central body to set an appropriate framework and to give advice and guidance about surveillance methods that would be applicable to all sectors.

## **8. Conclusions**

There should be effective within-sector and cross-sector animal welfare surveillance systems: i) to identify priorities within and across all sectors for the information of society and all interested parties, and so that resources for animal welfare can be focused where needs are greatest; ii) to identify trends in levels of animal welfare; and iii) in pursuit of the 'levelling upwards' of animal welfare standards across the sectors and to promote work where serious issues appear to have been overlooked.

These systems should therefore be designed so that data can be provided to a central body to help inform priority actions and with the authority to provide sound and independent advice to those specifically involved and to society in general.

## 9. References

Companion Animal Welfare Council (2003) *The welfare of non-domesticated animals kept for companionship.*

Companion Animal Welfare Council (2006) *Welfare aspects of modifications, through selective breeding or biotechnological methods, to the form, function, or behaviour of companion animals.*

Companion Animal Welfare Council (2008) *Companion animal welfare surveillance: scoping report.*

Farm Animal Welfare Council (2009) *Farm animal welfare in Great Britain: past, present and future.*

Leach, M.C., Thornton, P.D. & Main, D.C.J. (2008) *Identification of appropriate measures for the assessment of laboratory mouse welfare.* Animal Welfare 17, 161-170.

Leach, M.C. and Main, D.C.J. (2008) *An assessment of laboratory mouse welfare in UK animal units.* Animal Welfare 17, 171-187.

Universities Federation for Animal Welfare (UFAW) (2006) *Quality of Life: the heart of the matter.* Proceedings of the UFAW/BVA Symposium, London. 165 pages.

## **Appendix 1**

### **Members of the Liaison Group of UK Animal Welfare Advisory Bodies**

*Animal Procedures Committee*, <http://apc.homeoffice.gov.uk/>

Sara Nathan  
Philip Brenner

*Companion Animal Welfare Council*, <http://www.cawc.org.uk/>

Lord Soulsby of Swaffham Prior  
James Kirkwood  
Sir Colin Spedding (advisor)  
Alan Waldron

*Farm Animal Welfare Council*, [www.fawc.org.uk](http://www.fawc.org.uk)

Christopher Wathes  
David Morton  
Richard Aram  
Louise Mulcahy

*Zoos Forum*, <http://www.defra.gov.uk/wildlife-pets/zoos/zoos-forum.htm>

James Kirkwood

## **Appendix 2**

### **Members of the Working Group**

James Kirkwood, CAWC, Zoos Forum  
Penny Hawkins, APC  
David Main, FAWC  
Sir Colin Spedding, CAWC and Advisor to the Liaison Group  
Phil Banks, APC Secretariat  
Richard Aram, FAWC Secretariat

The Liaison Group of UK Animal Welfare Advisory Bodies  
c/o FAWC Secretariat,  
Area 8B  
9 Millbank  
c/o Nobel House  
17 Smith Square  
London  
SW1P 3JR

email: [fawcsecretariat@defra.gsi.gov.uk](mailto:fawcsecretariat@defra.gsi.gov.uk)