

**RSPCA response to: Transposition  
of Annex III of Directive  
2010/63/EU**

**Draft code of practice on Care and  
Accommodation and Transposition  
of Annex III**

RSPCA submission to the Home Office  
January 2012





## ANNEX III: OPTIONS FOR TRANSPOSITION

### General comments

**The RSPCA welcomes the opportunity to comment further on the options for transposition of the housing and care standards in Annex III. The Society firmly believes that UK standards must be retained where these are higher than those in the Annex. The existing UK Codes of Practice already represent the absolute minimum and it would be unacceptable to make any reductions.**

The Society recognises the difficulty of providing *definitive* evidence of the precise effect of cage/pen size on animal welfare. However, the RSPCA believes there is sufficient information in the scientific literature on animal behaviour and welfare to support the retention of higher UK standards. The underlying principle that animals benefit from being able to perform a range of species-specific behaviours, including social behaviour and exercise, and that they benefit from environmental enrichment, is well documented and accepted. The Directive requires Member States to ensure that “*any restrictions on the extent to which an animal can satisfy its physiological and ethological needs are kept to a minimum*” (Article 33.1b). This requires provision of adequate space - logically, more can be done to satisfy animals’ behavioural and social needs in the larger enclosures that are under discussion.

As stated in the RSPCA’s response to the initial consultation, throughout the lengthy deliberations during the revision of Appendix A to ETS123 on which the standards in the Annex are based, it was made absolutely clear that the cage/pen sizes proposed were the minimum that the expert groups considered necessary to provide the levels of enrichment and social interactions *essential* for performance of species-specific behaviours. The standards adopted were based on expert knowledge at the time and good, not best, practice. In some cases, such as pen sizes for dogs, compromises were made in order to encourage pair housing in those countries where single housing was the norm. The proposals were widely circulated to UK stakeholders prior to their adoption, and at no time was it suggested that the UK might seek to reduce its own standards in the future.

Although much is said about the need for harmonisation across Europe, it is somewhat fanciful to expect that this will ever be the case. We recognise that there is a concern about the competitiveness of the British research and science base, and a desire for a ‘level playing field’ throughout the EU. However, the playing field is unlikely ever to be level. Large disparities in the regulation of animal experiments have existed between Member States for many years, notwithstanding the existence of Directive 86/609 and we have seen no clear evidence, other than anecdotal comments, that this has affected UK competitiveness. Indeed, we note that there has still been no firm evidence offered on the economic impact of retaining UK standards. Neither have we seen any attempt to set this in the context of – or in proportion to – other cost differentials affecting UK plc. The research community in the UK states that it recognises the importance of good animal welfare to good science and the significance of good housing to achieve good welfare. It seems proud of the standards to which it operates and often claims that these are ‘the highest possible’. Whilst we would disagree with the latter statement – ‘least minimal’ might be more appropriate - it would be a backward step to reduce UK standards below what they currently are. The public would understandably be quite astonished

and would ask serious questions about the past and future commitment to laboratory animal welfare.

The Society was therefore pleased to see Lord Henley<sup>1</sup> state in October 2011 that he could give "*an absolute and categorical assurance that we will not be dropping our standards in any way whatever*"<sup>2</sup> and that "*the Government are strongly committed to ensuring the best possible standards of animal welfare and protection for animals used in scientific procedures*"<sup>3</sup>. This commitment was repeated by the Home Office Minister Lynne Featherstone MP in an adjournment debate the following month<sup>4</sup>, presumably in order to recognize public concerns and reassure the public that the UK is committed to good laboratory animal welfare. It would therefore seem disingenuous if the higher standards are not now upheld.

## Comments on species-specific questions

### Rats

The RSPCA agrees with the proposal to retain current standards for the reasons given in the consultation document.

Rats of all ages frequently rear upright (e.g. Waki et al. 2009, Büttner 1993), so keeping them in cages that do not permit this behaviour would restrict a physiological and ethological need and contravene article 33b of the Directive (see above). Clearly, large, adult rats will not be able to stand in either 18 or 20 cm. However, growing rats will be able to rear upright for longer in the higher cage. A higher cage also provides additional room to facilitate provision of a platform as is done in some establishments. In our view, there is a welfare benefit in retaining the higher cage sizes.

Given the number of rats used in the UK, we consider it is extremely unlikely that the 20cm cage will become bespoke.

### Gerbils

The RSPCA disagrees with the proposal to adopt Annex III cage height of 18cm and recommends that the current height of 20 cm for breeding animals be retained for gerbils in breeding establishments and extended to animals used in procedures.

We believe the Sørensen et al. (2005) paper provides good evidence that gerbils should be housed in cages of at least 18cm to allow them to rear. However, gerbils also require deep litter to satisfy their burrowing behavior, and this is not taken into account in calculating the 18cm cage height. Waiblinger and König (2004) recommend provision of at least 3 to 5 cm of wood chip litter. Cages therefore need to be at least 19 to 20 cm high to accommodate sufficient litter and permit upright rearing.

Waiblinger and König also showed that gerbils require a burrow approach to their sleeping area in order to prevent the development of stereotypies. Whilst we support

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<sup>1</sup> The then Parliamentary Under Secretary of State and Government Spokesperson in the House of Lords for the Department for Environment, Food and Rural Affairs

<sup>2</sup> HL [www.forschung3r.ch/en/projects/pr\\_58\\_97.html](http://www.forschung3r.ch/en/projects/pr_58_97.html) Deb, 4 October 2011, c1013.  
<http://tinyurl.com/7zkteaa>

<sup>3</sup> HL Deb, 24 October 2011, c630. <http://tinyurl.com/79modyx>

<sup>4</sup> HC Deb, 7 December 2011, c371. <http://tinyurl.com/6shl3o9>

the requirement to provide deep litter we would also like to see the provision of an appropriately designed refuge, that incorporates a 'burrow' entrance, encouraged in the Code of Practice (COP).

## **Hamsters**

The RSPCA believes hamsters should be given the benefit of any doubt and that current UK standards should be retained. The higher cage will allow juvenile animals, who are more active, to rear for longer and facilitates provision of enrichment.

## **Rabbits**

The RSPCA agrees that the current UK standards should be retained for both health and welfare reasons and the literature on exercise and bone strength in rabbits justifies the provision of adequate space. In fact, even the UK cage sizes are small for such active animals as rabbits. Animals should be able to stretch out fully and take at least a few hops in each direction. The Australian New South Wales guidelines (ARRP 2003) have no problem in requiring more space. Their cage dimensions are designed such that rabbits can take at least 3 hops in any direction and require a minimum area of 2.0 m<sup>2</sup>, with a minimum length in one direction of 2.0 m. The minimum area in the UK Code of Practice is less than a third of this. The Australian guidelines also point out that adult New Zealand White rabbits have been measured travelling 1.5 to 2.0 m in three 'normal' hops.

A study on companion rabbits that evaluated behaviour in pens of size 8,800 cm<sup>2</sup>, 16,800 cm<sup>2</sup> and 33,500 cm<sup>2</sup> reported that rabbits were more active, and interacted more with resources, in larger pens. There was also a 'rebound effect' in both activity and rearing when rabbits were moved from smaller to larger pens, all of which suggests that smaller pens can jeopardise rabbit welfare (Dixon et al. 2010). Note that the smallest pen in this study was 1.6 times the size of the largest enclosure in the current UK Code of Practice.

## **Dogs**

The RSPCA believes that current UK standards of a minimum area of 4.5 m<sup>2</sup> should be retained "for users and breeders". The Society does not agree with the proposal to allow the provision of 4.0 m<sup>2</sup> with a shelf. In the Society's view, a space allowance of 4.5 m<sup>2</sup> is already extremely small for large, active animals such as dogs. The text of the draft COP itself acknowledges the importance of increasing the available floor space (see section 4.3.1).

Hubrecht et al. 1992, and Hubrecht 1995, reported that stereotypies and other behavioural abnormalities have been observed in dogs kept in pens of 4.5 m<sup>2</sup>. This suggests that a reduction in pen size of 11% (to 4.0m<sup>2</sup>) would present a significant risk to the welfare of the dogs. A pen size of 4.0m<sup>2</sup> is significantly less than that provided in UK quarantine kennels (6.9 m<sup>2</sup>) or boarding kennels (4.67 m<sup>2</sup>). There is no apparent reason why less space should be provided for dogs in user and breeder establishments, particularly in view of the fact that quarantine and boarding kennels are only intended to provide short-term accommodation, whereas dogs are confined in the laboratory for years. The logic and fairness of these differences in space requirements is highly questionable.

We agree with the consultation document that both raised platforms and areas of restricted visibility are of benefit to dog welfare. However, provision of these facilities

should not be at the expense of the space available for providing other forms of environmental enrichment, or for dogs to express normal behaviours, including social behaviour.

As the consultation states, the Joint Working Group on Refinement report (JWGR 2004) noted that pen sizes should be considered in relation to existing opportunities for out-of-pen activity. However, a minimum space requirement cannot be set on the assumption that a sufficient level of out-of-pen activity will be provided. In practice, most establishments will not provide more than 30 minutes out-of-pen activity a day for laboratory dogs. This is insufficient to justify confining dogs to very small spaces for the majority of their lives, and certainly does not justify a reduced minimum pen size of 4.0m<sup>2</sup>.

The consultation document suggests seeking agreement of a binding SOP on social and environmental enrichment. In our view, the Survey of Dog Accommodation and Care, described in Appendix D to the 1998 APC report (APC 1999) constitutes a suitable basis for such an agreed SOP, and should form part of the new Code of Practice for dogs. However, it is not clear why this suggestion is made in relation to the stated 'issue' which exclusively concerns minimum enclosure size. Since the good husbandry practices concerned are supposed to be in place already, it might be wrongly assumed that they can be 'traded off' against providing basic living space.

### **Non-human primates**

The RSPCA agrees with the proposal to maintain the higher UK standards for marmosets.

### **Cattle**

The RSPCA believes current UK standards should be retained particularly in view of the fact that "*virtually all respondents*" agreed with this view on the basis of quoted published evidence and informed veterinary experience.

The consultation suggests that Annex III trough space allowances for ad lib feeding will be used, but only "*subject to agreement of measures to be taken to ensure all animals are able to access sufficient food without either aggression in the feed area or other factors which might effectively reduce the feed intake of animals low in the dominance hierarchy*". It would be helpful to have an example of what such measures might be, in order to decide whether or not this is acceptable.

### **Sheep and goats**

The RSPCA believes that the higher UK standards for enclosure size for sheep and goats should be retained, particularly since this was again the view of virtually all respondents. Even the higher UK minimum enclosure sizes are small for animals to spend their entire lives, and the very small EU areas for lambs is inconsistent with current thinking about providing proportionately more space for active, juvenile animals. For example, a lamb under 20 kg could have a space allowance of just 100 cm by 70 cm with no mandatory provision for additional exercise.

The consultation suggests that Annex III trough space allowances for ad lib feeding will be used, but only "*subject to agreement of measures to be taken to ensure all animals are able to access sufficient food at the same time*". It would be helpful to have an example of what such measures might be in order to decide whether or not this is acceptable.

We agree there should be no requirement for partitions for sheep.

### **Pigs and minipigs**

The RSPCA believes that current UK standards, both for minimum floor areas and for trough space, should be maintained. With regard to space allowances, studies have shown that providing too little space can result in an increase in levels of aggression, tail biting and agonistic behaviours.

Water flow rate is a very important parameter for pigs, and should be stipulated in the UK Codes of Practice. The minimum flow rates set out by DEFRA are above those set out in the Directive, and these should be used instead if possible for the benefit of animal welfare

(<http://www.defra.gov.uk/publications/files/pb7950-pig-code-030228.pdf> (see page 20)).

### **Equines**

The RSPCA believes that the higher UK standards should be retained and notes that virtually all respondents agree with this position. The larger space allocations allow for rolling which is an important comfort activity.

Provision of grazing, free (i.e. unridden) exercise and socialization with other conspecifics is *essential* to good horse husbandry in our view and is not just an option to offset a reduced enclosure size. Even if the 6 hours grazing proposed in the COP is provided, animals will still spend 18 of every 24 hours effectively in the equivalent, size for size, of a cage.

## Draft Code of Practice on Care and Accommodation

### General comments

The RSPCA welcomes the fact that the text of Council of Europe ETS 123 Appendix A (Council of Europe, 2006)) has been used as a basis for the draft Code of Practice (COP). However, there are several points associated with this that need to be addressed.

- (i) The text of the Appendix A was based on reports by Council of Europe Expert Working Groups on the accommodation and care of the species of animals used for scientific purposes that were produced between 1997 and 2006. The Working Groups for the individual species presented widely differing amounts of information to support their recommendations, reflecting the approach of each group and the point in the process at which the reports were drafted. The reports produced earlier in the revision process generally included less information than those produced later as the working group 'process' developed. Direct transposition of the text of Appendix A has therefore resulted in considerable disparity between the guidance for different species in the draft COP. For example, the introductory text for rabbits comprises only a few lines, whereas there is an extensive introduction to non-human primates and birds. The introduction to each species is important because it sets the scene for the guidance that follows and explains why, for example, certain types of environmental enrichment should be provided. We have indicated in the individual sections where we believe more background information would be beneficial and should be included.
- (ii) The Council of Europe expert working groups presented an overview of the knowledge about species-specific biology and welfare requirements at the time when they were written. This was at least 6 years ago and over 12 years in the case of the species dealt with early on. The text does not reflect subsequent developments in understanding of animal behaviour, needs and welfare; for example the draft COP does not take into account new research on the temperature range for rodents. Since knowledge of animal welfare continues to develop, it is important that the COP reflects current knowledge, and that it is sufficiently flexible to allow incorporation of updated guidance and advice in the future.
- (iii) The explanatory section at the beginning should clarify the relationship between Appendix A and the Directive, i.e. that the requirements of Appendix A were endorsed by the Commission as a Recommendation (European Commission, 2007) and are appended to the Directive. The purpose and expectations of the COP also need to be clarified i.e. what *must* be provided, what *should* be provided unless there is a very good reason, and what is merely *recommended* to encourage good practice.
- (iv) The text of Appendix A had to be agreed by a multinational committee and the English of this, and hence the COP, is therefore not necessarily as concise or 'user-friendly' as it could be. The final version needs editing with this in mind.
- (v) It is important to include a statement in the text about the need for users of the COP to maintain an up to date understanding of animal biology and behaviour and to seek out specialist publications on animal behaviour, housing and care. Some key references in each section, for example the

JWGR reports on dogs and primates (JWGR, 2004 and 2006) and the RSPCA/UFAW guidelines on housing and care of rabbits (Hawkins et al, 2008) would facilitate this. Reference to other key publications such as the UFAW Handbook (Hubrecht and Kirkwood, 2010) and informative guidelines from other countries such as those of New South Wales (NSW, various dates) would also be helpful.

- (vi) The COP itself needs to be well referenced.
- (vii) Cephalopods need to be covered.

The RSPCA recommends that the Home Office spend the necessary time and resources in the coming year to produce a document that is more consistent across the species and which takes the general points above into account.



## General section

**Introduction Para 7:** What does a “...reasonable period of time...” and “.. in order to comply as far as possible ...” mean? A final deadline not later than that in the Directive (i.e. 2017) must surely be applied.

### 2. The environment and its control

**Line 274:** “...Good control of variables...” contributes to animal welfare as well as science so this should be added in to the text.

**Line 280-281:** This sentence: “*Considerations should not over-ride the welfare of the animals concerned unless necessary to achieve the scientific objectives*” needs a qualification otherwise the flimsiest scientific reason could be used to over-ride the welfare of animals!

### 2.4 Lighting

**Line 372:** A little more information on the concerns regarding albino animals or a reference would be helpful here.

### 4.3 Transport

**Line 527:** What is a “slightly” injured or sick animal as opposed to a sick or injured animal? The distinction needs to be clarified otherwise it will result in subjective and inconsistent judgements about whether or not animals are fit to be transported.

### 4.5 Housing and enrichment:

**Line 623:** Are the enclosure sizes in this COP really only “suggested” minimum? We thought they are minimum requirements as stated in Annex III of the Directive.

**Line 649-650:** “...*Visual, auditory, olfactory and tactile contact should be maintained where appropriate to the species, strain and sex.*”

It would be helpful to include advice on the special needs of breeding animals as set out in Paragraph 2.40 of the COP for Breeding and Supplying Establishments (the Breeders’ Code).

#### 4.5.3 Enrichment

**Lines 682:** The last sentence of this paragraph about enrichment would be better expressed more positively as: “*They should be aware that enrichment initiatives require adequate evaluation, monitoring and review to ensure they are in the best interests of the animals.*”

## Species sections

### A. Rodents

See comments on 'Options' document regarding enclosure sizes for rats, hamsters and gerbils.

#### 1. Introduction

**Line 17:** typo: “..behaviours...”

Add the point that albino mice and other rodents also avoid areas with light levels over 25 lux as stated for rats.

**Line 31:** Amend: “...gerbils build extensive burrows...”

Include reference to the extensive hoarding behaviour of gerbils.

**Line 40:** Include reference to the hoarding behaviour of hamsters.

#### 2.2. Temperature

**Line 57-64:** This paragraph needs to be rewritten in line with current thinking on temperature requirements for rodents. Gaskill et al (2009) state that it may not be possible to select a single preferred temperature for all mice (and by extrapolation all rodents). The authors showed that 20-24°C is not within the thermoneutral zone for C57BL/6J mice and that the thermoneutral zone for many strains lies between 26-34°C. In this case the enclosed temperatures of an additional 6°C may be what the animals need! Nesting material must be provided if the temperature is 20-24°C.

#### 2.4. Lighting

**Line 77:** It would be helpful to give a lux value for the 'low' lighting.

The use of reversed day/night periods could be mentioned as could the use of automatic dimming if light is increased during inspection of animals and not subsequently turned down.

#### 2.5. Noise

**Line 90:** Amend: “...It ~~may be~~ is advisable to...”

#### 4.1. Housing

**Line 102 - 105:** Group housing of social species is a very important issue and we believe this paragraph should be written in a more positive way and with advice to seek expert guidance on successfully achieving social housing with different species and strains. For example:

“...Social species should be housed in stable, harmonious groups; disruption of such groups should be minimised as this can be very stressful for the animals. Care needs to be taken in cases where there may be conspecific aggression, for example with male mice, adult hamsters or gerbils which may need to be housed individually. In such cases, greater attention should be paid to the provision of environmental enrichment...”

#### 4.2 Enrichment

**Line 113:** Amend: “....conspecifics to ~~reduce competitive situations~~ escape agonistic encounters ....”

**Line 120:** Amend: “...be provided, especially if insufficient...”

**Line 126:** Nest boxes/refuges are also important for mice and this should be included in the text. However some qualifiers are necessary. Group housed male mice of some strains can fight over the refuge in which case they should have nesting material only. Refuges with two entrances can help to reduce aggression.

**Line 145:** Amend: "...nesting ~~or~~ and a burrow...."

Normal 'substrate' will not be adequate for gerbils to construct a burrow. More important is the provision of a 'house and tunnel' of appropriate configuration (Waiblinger and König, 2007). If this is not provided then sufficient burrowable substrate must be provided.

#### **4.3.2 Flooring**

**Line 232 and 236:** "Litter" is a more appropriate word than "*bedding*" here.

Sound scientific justification must be provided for the use of grid or mesh floors.

**Line 241:** "...floors with *bedding* litter and nesting material...."

#### **4.7 Cleaning**

**Line 253:** Given the debate about the pros and cons of different clean out procedures, it might be helpful to provide further information on the need to maintain odour cues when cleaning. Current thinking is that some nesting material should be transferred, but not litter.

## B. Rabbits

### 1. Introduction

**Line 5-8:** This section is very brief compared to the other species and has lost some of the useful comment from the Breeders' COP, for example the statements about the need to pay attention to rabbits' social wellbeing, and retention of a wide behavioural repertoire similar to their wild type ancestors. These introductory sections are important to give a 'feel' for the nature of the species. Additional points, for example that rabbits are largely nocturnal, have a wide field of vision and are easily frightened, are also important.

### 2.2. Temperature

**Line 16:** temperature range of 15°C to 24°C?

### 4.1 Housing

The two sentences from Appendix A should be inserted i.e.: "...Single housing should only occur if there is justification on veterinary or welfare grounds. Single housing on experimental grounds should be determined in consultation with the competent person charged with advisory duties in relation to the wellbeing of the animals..."

In the Breeders COP it mentions 'lack of concealment' as a problem, so if individuals are housed in close visual contact they also need to be able to withdraw. This is mentioned under enrichment but is important to include here as well for different reasons.

It may be worth mentioning the use of baffles and barriers to defuse agonistic encounters and minimize aggression. The addition of barriers is mentioned under 'enrichment' but without giving a reason. It would be helpful if the addition was linked to the reason for providing it.

There is an ongoing debate about whether male rabbits should be castrated in order to house them socially and this should at least be mentioned in the text.

### 4.2 Enrichment

**Line 55:** Add: "Rabbits should have opportunity to scent mark; studies should be produced for this."

### 4.3. Enclosures

**Line 58-59:** It would be helpful to explain why the enclosure should be rectangular and why a raised area is necessary. This would be in accord with the additional explanatory information provided for other species texts.

#### 4.3.1 Dimensions

**Line 82 - 91:** In the Breeders' COP it says that nest boxes must be provided not 'should'. Breeding does have very special needs and more information on their 'absentee' parenting style should be provided (see Hawkins et al, 2008)

### 4.4 Feeding

Is the rabbit one of the species for which foraging should be provided as per the General introduction? If so, then it should say so here.

#### **4.8 Handling**

Add: "Rabbits are easily frightened so it is important to minimize stress. Regular handling from an early age (e.g. 10 days) can help with this (see Hawkins et al, 2008)."

## C. Cats

### 2.2 Temperature

**Line 34:** Temperature is 15°C to 24°C in Breeders' COP.

### 4.1. Housing

**Line 109:** Are cats and kittens confined within cages in the UK? If not, then this text should be deleted.

**Line 129-132:** Amend: “*....Particular attention should be paid to social enrichment for single-housed cats by providing additional human contact, and ~~wherever practicable cats should be housed in social groups. Where they must be housed singly. They should be let out for exercise at least once a day. where this does not interfere with procedures.....~~*”.

We have deleted the text re social groups because it is repeated elsewhere, and because this paragraph seems to be about additional provision for singly housed cats.

Is it just exercise they are let out for or is it to allow a period of socialisation? If the latter then this should be stated.

### 4.3.2 Flooring

**Line 193-198:** Are cats ever kept in open floor systems in the UK, because if not it would be better to delete this? If the statement remains in, then the justification for the use of such systems needs to be “*compelling*”.

The statement about metabolism cages is a non-sequitor and needs clarification.

## **D. Dogs**

### **2.2 Temperature**

**Line 26:** Amend: “*...could affect physiology and welfare....*”

The paragraph leaves out the useful section in the Breeders' COP (Para 7.2) about dealing with extremes of temperature and ensuring a comfortable environment is maintained. This should be re-inserted.

### **4.1 Housing**

**Line 101:** Amend: There should be “*...compelling scientific or welfare justification for single housing.*”

The text from Para 7.7. of the dogs section of the Breeders' COP is informative in that it explains why single housing is a problem. “*.....Long term single housing and social isolation are closely associated with a range of behavioural disturbances and should only be used as an option of last resort for an aggressive dog, or in the case of the periparturient bitch.....*” We would like to see this re-inserted.

### **4.2. Enrichment**

**Line 153:** Amend: “*...Therefore, unless there is compelling scientific or veterinary grounds....*”

### **4.3.3 Flooring**

**Line 224:** Amend: “*...Where there is compelling scientific justification...”. Add: “*..A solid area or solid bed should be provided....*”*

It must be made clear that open floor systems are not allowed for normal dog husbandry – as in the case of ferrets.

## **E. Ferrets**

### **2.2 Temperature**

This section misses out the statement from the original Ferret COP about avoiding extremes of temperature and maintaining a comfortable environment. This needs to be reinserted.

### **2.4 Lighting**

**Line 42-43:** In the original Ferret COP it points out the need to take care with animals in the top tier to ensure they are not exposed directly to high intensity lighting and we believe this should be re-inserted.

### **4.1 Housing**

**Line 101:** Amend: “... *Animals should be kept in socially harmonious groups unless there are compelling scientific or welfare justifications for single housing....*”

**Line 121-124:** This para is expressed well and the text could be substituted for other species. The same applies to **Lines 174-179** which are expressed better here than in the equivalent text for cats.

### **4.3.2 Flooring**

**Line 205:** We agree open floor systems should not be used for ferrets, but why then can they be used for dogs and cats?



## F. Non-human primates

See Options document for comments on space allowances for marmosets.

**General comment:** This section is well written and informative and sets a higher standard than for most other species. We would recommend making all sections consistent with this one in level of detail, information and advice.

### 1. Introduction

**Line 30:** How does group structure affect expression of behaviours indicative of stress and pain? Surely one would want animals to indicate that they were in pain. Does it mean that the group structure should be such that behaviours leading to pain, distress etc are minimized?

**Line 34:** “bred” on site would be a clearer term than “reared” on site.

**Line 37:** “...be obtained as F2 offspring...”

**Line 41-45:** The reason for not using wild-caught non-human primates is primarily ethical, as was recognised in the Home Office policy introduced in 1995 to prohibit the use of wild-caught non-human primates in scientific procedures unless there is exceptional and specific justification. The wording in the draft COP is not as strong as the policy ban, which we had assumed was going to be carried across to the new legislation (along with the prohibition on great ape use). The text of the COP should affirm that the use of wild-caught primates in scientific procedures is prohibited on ethical grounds unless there is exceptional and specific scientific justification.

### 2.4. Lighting

**Line 79-80:** The text needs to clarify which species are covered by the ‘most’ and ‘some’ in the first two sentences.

### 2.5. Noise

**Line 91-92:** There is a serious debate regarding whether music is a benefit and an environmental enrichment.

### 2.6 Handling

**Line 354:** Amend: “...training animals to co-operate through positive re-enforcement training (PRT) ....”

**Line 367:** Need to clarify whether the ‘recovery periods’ are from the training or the experiments. If the latter, then there should be a cross reference with the policy on continued use and re-use.

### 4.1 Identification

**Line 384:** Add: “Sedation for tattooing is common practice, and has the advantage that animals can recover and join their social group more rapidly. General anaesthesia may be necessary for some individuals and this should be judged on a case by case basis.”

The key point that should be made here and for other species is that the least invasive method of identification must be used

- **Macaques**

#### **4.1 Housing**

**Line 865:** Prescott et al (2011) state that weaning age should not normally be less than 10-14 months. We therefore consider 8 months to be unacceptable and that the COP must define the minimum weaning age as 10–14 months.

- **Baboons**

Given that baboons have not been used for such a long time in the UK, we do not believe it is necessary to have a COP section for them. If they are included, then the text should contain a greater level of detail to accord with other primate species.

## G. Farm animals and mini-pigs

See comments on 'Options' document regarding space allowances, trough space.

### a. General considerations

#### 2.1 Ventilation

**Line 61** Amend: "...Dust levels in the air from feed and bedding should be minimized along with ammonia levels and other aerial contaminants..."

#### 2.2 Temperature

**Line 65:** Amend: "...Some farm animals living outdoors can, given time, develop a thick layer of hair/wool during the winter..."

#### 3.3 Husbandry

**Line 146:** Amend: "...Disbudding, dehorning of adult animals, castration, ~~and~~ tail docking, teeth clipping or nose ringing (of pigs), should not be done unless justified on welfare or veterinary grounds...."

#### 3.4. Neonatal care

**Line 185:** A weaning age of 5 months is unacceptable in our view. The natural weaning age of equines is 8 – 9 months, so 5 months counts as early weaning. The text should give 8-9 months as the minimum weaning age.

#### 4.2 Enrichment

**Line 237-239:** Amend: "...Suitable opportunities should be provided to meet these behaviours, preferably by access to pasture, or if this is not possible, by providing hay or straw. If there are compelling reasons why this is not possible, manipulable objects relevant to the species (such as chains or balls for pigs) should be provided...."

#### 4.4 Feeding

**Line 316:** Care needs to be taken when feeding cut grass to equines because there may be a risk of laminitis.

#### 4.11 Identification

**Line 384:** Amend: "...Animals should be identified by the appropriate use of transponders, ear tags, plastic neck collars and/or rumen boluses. The least invasive method should be used. Freeze..."

### b. Cattle

#### 4.1. Housing, enrichment and care

**Line 422:** Need to clarify whether the highlighted text below relates to all cattle – when it should therefore be a new paragraph - or whether it is only meant to relate to the horned cattle mentioned in the preceding sentence. "...Horned and polled animals should not be mixed, except for young calves and their mothers. Where horned cattle are housed together in groups, more space will be required. Pens should be rectangular not square. The width of the pen should be no less than the length of the animal from the nose to the root of the tail..."

#### 4.2 Enrichment

**Line 443:** Amend: "...If individual open-ended cubicles are provided as the bedded area, this may be reduced in size, but the total number of cubicles should exceed

*animal numbers by 5% (or 10% for dairy cattle - who spend longer lying down) to reduce competition and permit all animals to lie simultaneously...".*

#### **4.4 Watering**

**Line 471:** Amend: "...Water bowls: a minimum of two water bowls should be provided when cattle are group-housed. For groups of over twenty cattle, at least one drinking bowl for ten animals should be provided. Water bowls are not suitable for lactating animals as they have a higher water requirement than can be provided using bowls..."

The consultation suggests that Annex III trough space allowances for ad lib feeding will be used, but only 'subject to agreement of measures to be taken to ensure all animals are able to access sufficient food without either aggression in the feed area or other factors which might effectively reduce the feed intake of animals low in the dominance hierarchy'. It would be helpful to have an example of what such measures might be in order to decide whether this is acceptable.

### **c. Sheep and goats**

#### **2. Environment**

**Line 513:** Amend: "... Recently shorn animals may need higher environmental temperatures than fleeced animals and should be kept inside during winter to avoid cold stress..."

#### **4.1 Housing**

**Line 528:** Add: "...When not breeding, rams should not be kept isolated and can be kept in groups of 3..."

Should there also be specific space provisions for ewes with lambs?

The consultation suggests that Annex III trough space allowances for ad lib feeding will be used, but only 'subject to agreement of measures to be taken to ensure all animals are able to access sufficient food at the same time'. It would be helpful to have an example of what such measures might be in order to decide whether it is acceptable.

### **d. Pigs and mini-pigs**

#### **2.1: Temperature**

**Line 613:** Add: "...For group-housed dry sows, maintenance of the housing temperature between the range 15-20°C will help to prevent the occurrence of certain diseases and conditions during the post-farrowing period..."

#### **4. Housing**

**Line 631:** Amend: "... All pigs should at all times have access to adequate amounts of materials such as straw for investigation and manipulation, including rooting, in order to reduce the risk of behavioural disorders..."

#### **4.2 Enclosures**

**Line 662:** "...Thus, although the use of farrowing crates can ~~safeguard~~ improve piglet survival and welfare..." [amended because piglets can sometimes get crushed in farrowing crates]

**Line 670:** 'Council Directive 2008/120/EC laying down minimum standards for the protection of pigs' (applicable from 2013) has slat dimensions which could be incorporated here.

#### **4.4: Table G.7. Water flow rates**

**Line 715:** Water flow rate is a very important parameter for pigs, and should be stipulated in the UK Codes of Practice. Those set out in the Directive are less than set out by DEFRA (<http://www.defra.gov.uk/publications/files/pb7950-pig-code-030228.pdf>) - see page 20) and the latter should be used for the benefit of animal welfare.

### **e. Equines, including horses, ponies, donkeys and mules**

#### **Section 2 Environment**

**Line 763:** The comment about rugs being used in cool conditions is a bit brief since whether or not to rug will depend on the type of housing (indoor/outdoor), the coat and the breed of horse/pony. The reason for removing rugs at the daily check is so that horses can be checked properly, after which presumably the rugs would be put back on – again depending on housing etc. The text just sounds a bit naive as written, though we recognize it is a straight take from Appendix A.

#### **4.1 Enclosures**

**Line 786:** Stallions are not mentioned - entire males will need to be individually housed, although not completely isolated from other horses.

Space needs to be provided for rolling (a comfort activity) - the current UK space allowance for average sized horses used for research takes this into account and should be maintained.

#### **4.2. Feeding**

**Line 819:** Is it right to include straw without any qualification in the list of forage since it is reported to be associated with impaction colic.

## H. Birds

General point: '*Litter*' should be used throughout, rather than '*substrate*'.

### 1. Introduction

**Line 7-16:** Delete paragraph down to "...zoology research..." since the information on use is not relevant to the COP. The last sentence of the paragraph should be retained and transferred to the end of Paragraph 2.

### 4.1. Housing

**Line 178:** Insert the same comment about the need to avoid single housing as for other species groups.

### 4.2. Enrichment

**Line 192:** Amend: "...There should be compelling scientific justification..." for withholding enrichment..."

## b. Domestic fowl

**Line 328-332:** Amend text because it is too prescriptive – views on the best perch type may change "...Perches should be provided ~~3 to 4cm in diameter and with a flattened top~~. The optimum height above the floor varies for different breeds, ages and housing conditions and ~~but perches should initially be fixed at 5 to 10 cm and for older birds at 30cm above the floor~~ perch heights should be adjusted...."

## I. Amphibians

### General point

The text is very broad and needs to include some species-specific guidance, especially for the most widely used amphibian species e.g. *Xenopus laevis* and *Xenopus tropicalis*.

We do not believe that the space allowances, and in particular the minimum water depths, set out in ETS 123 are sufficient to meet the needs of *Xenopus laevis* frogs. For rationale and comparisons to other more generous recommendations in the literature, please see pages 17-19 of 'Guidance on the housing and care of the African clawed frog' (Reed, 2005).

### 1. Introduction

**Line 44:** In this section, it is important to remind users that obtaining *Xenopus* spp. and *Rana* spp. from purpose breeders is a requirement of the Directive (see Annex I).

### 2. The environment

**Line 73:** A new statement has been incorporated regarding respiratory needs, but we are not sure that the 80% figure given can be applied equally to all amphibians species (i.e. axolotls, *xenopus*, terrestrial frogs) so this needs to be checked.

### 2.4 Lighting

**Line 124:** A new line has been added stating that mortality of amphibians is positively correlated with solar UV radiation. However, many published references and handbooks (e.g. Wolfensohn and Lloyd, 2003, page 381) suggest that incorporating a UV element into the light provided is important for ensuring health (re vitamin D levels and calcium/phosphorous balance) for example in anurans. The statement in the draft COP therefore needs to be reconsidered.

### 4.1 Housing

**Line 147:** Amend: “....At very low stocking densities such feeding frenzies ~~de~~ may not occur and food is frequently not eaten...”.

### 4.2 Enrichment

**Line 160:** Typo: “*queues*” should be “cues”.

### 4.3 Enclosures

**Line 180:** Amend: “.....Care is needed to ensure that aeration does not cause injury to the animals or undue stress as a result of excessive water turbulence.....”

### 4.7 Cleaning

**Line 294:** Typo: “*because*” should be “become”.

### 4.11 Identification

**Line 319:** Reordered and reworded:

“...Where animals need to be identified individually, non-invasive methods such as tank labels, or monitoring pigment or wart configurations, should be considered first. If necessary, and appropriate to the size of the animal, microchip transponders may be used, though the smallest device appropriate should be employed.....”

## J. Reptiles

### Introduction

**Line 31:** Add to end of sentence: "... reputable suppliers where they have been captive bred."

### Table J.1

The red-eared terrapin is semi-aquatic and does not spend all of its time in water. The table should mention 'basking spots', which facilitate natural basking behaviour and create a temperature gradient, providing an element of choice. Higher basking temperatures should be provided within these areas, on land in the case of semi-aquatic species.

### 2.2 Temperature

**Line 58:** Alternatives to the flat heating device which could also be used include ceramic heat bulbs. Any heat source should include appropriate guards to prevent burns.

### 2.3 Humidity

**Line 74:** Different species have different humidity requirements so the guidance (70-90%) here is too broad. Given the potential variation it may be better just to refer to the specialist literature.

### 2.4 Lighting

**Line 81:** Amend: "... ultraviolet A and B radiation...".

### 4.1 Housing

**Line 106:** Delete "...do well in groups" and change to "...naturally live in groups...".

**Line 128:** There should be two land areas; one as a basking spot and the other in a cooler part of the enclosure.

**Line 157:** "*Eyesight*" is not an appropriate term as sight may not be the primary sense, so change this to "*sensing distance*".

### Table J3

Height will be very important for arboreal snakes, with appropriate structures to climb on such as branches.

### 4.5 Watering

**Line 188:** Add: "Some reptiles require sufficient water to bathe in".



## K. Fish

### 1. Introduction

**Delete line 5-11.** Information about use does not seem relevant in this COP and is not given for other species except Birds where it could also be deleted.

We would have expected to see some species-specific guidance incorporated in UK Codes of Practice, especially for the most used widely used fish species e.g. zebrafish and trout. As it stands, some of the text is so broad it is relatively meaningless e.g. “*it is essential that an adequate water supply of suitable quality is provided*”. Chapter 49 of the UFAW Handbook (Hubrecht and Kirkwood, 2010) provides useful general background – including a table of water quality parameters.

**Line 15:** Amend: “...*Fish are ectothermic animals and thus highly ~~adapted~~ sensitive to their particular aquatic environment...*”

**Line 22:** Amend: “...*should acquaint themselves with the ~~characteristics~~ biology, ecology and behaviour of the proposed...*”

**Line 29:** The Part B report from the Group of Experts on fish was never published.

### Section 2.4 Lighting

**Line 128:** “...*Many species of fish should not normally be kept in bright light, although some tropical species naturally encounter very bright light...*” The text needs to go on to explain whether these species will be OK if kept in dim or not very bright light.

### Section 4.6 Handling

**Line 264-266:** Catching of fish by netting is considered to be stressful and many people suggest that they should be removed from the holding tank using a small container (in which the animals can also be anaesthetised). This means they do not have to endure the stress of being out of water. These issues were addressed and explained in the APC report on Appropriate Methods of Humane Killing for Fish included in the 2009 Supplementary Review of Schedule 1 of the ASPA. The report provides useful text which could be included in this COP.

## References:

- APC (1999)** *Report of the Animal Procedures Committee for 1998*. London: HMSO (Appendix D, page 19)
- APC (2009)** *Appropriate Methods of Humane Killing for Fish*. London: APC <http://www.homeoffice.gov.uk/publications/agencies-public-bodies/apc/pubs-2009/humane-killing-fish?view=Binary> last viewed 24 January 2012
- ARRP (Animal Research Review Panel) (2003)** *Guidelines for the Housing of Rabbits in Scientific Procedures* Orande NSW: Animal Welfare Unit, NSW Agriculture
- Büttner D (1993)** Upright standing in the laboratory rat – time expenditure and its relation to locomotor activity. *J. Exp. An. Sci.* 36: 19-26
- Council of Europe (2006)** Multilateral Consultation of Parties to the European Convention for the Protection of Vertebrate Animals used for Experimental and other Scientific Purposes (ETS 123) Appendix A. Cons 123 (2006) 3. Strasbourg.
- European Commission (2007)**. Commission recommendations of 18 June 2007 on guidelines for the accommodation and care of animals used for experimental and other scientific purposes. Annex II to European Council Directive 86/609. See 2007/526/EC.
- Dixon LM, Hardiman JR & Cooper JJ (2010)** The effects of spatial restriction on the behaviour of rabbits (*Oryctolagus cuniculus*). *Journal of Veterinary Behavior* 5: 302-308
- Gaskill, B. N., Rohr, S. A., Pajor, E. A., Lucas, J. R. & Garner, J. P. (2009)** Some like it hot: Mouse temperature preferences in laboratory housing. *Applied Animal Behaviour Science*, 116, 279-285.
- 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*. Horsham: RSPCA.
- Hubrecht, R. & Kirkwood, J. (2010)** *The UFAW Handbook on the Care and Management of Laboratory and Other Research Animals*, 8th edn. Oxford: Wiley-Blackwell.
- Hubrecht RC, Serpell JA & Poole TB (1992)** Correlates of pen size and housing conditions on the behaviour of kennelled dogs. *Applied Animal Behaviour Science* 34: 365-383
- Hubrecht RC (1995)** Enrichment in puppyhood and its effects on later behavior of dogs. *Laboratory Animal Science* 45: 70-75
- JWGR (2004)** Refining dog husbandry and care: Eighth report of the BVAAWF/FRAME/RSPCA/UFAW Joint Working Group on Refinement. *Laboratory Animals* 38 (Suppl. 1) 1-94.
- Joint Working Group on Refinement (2009)** Refinements in husbandry, care and common procedures for non-human primates: Ninth report of the BVAAWF/FRAME/RSPCA/UFAW Joint Working Group on Refinement. *Laboratory Animals*, 43, S1-S47.
- NSW Department of Primary Industries and Animal Research Review Panel**. Various dates. Guidelines on Animal Care (sheep, mice, guinea-pigs, rabbits, rats, dogs) [www.animaethics.org.au/webloc](http://www.animaethics.org.au/webloc)
- Prescott MJ, Nixon ME, Farningham DAH, Naiken S, Griffiths M-A (2012)** Laboratory macaques: When to wean? *Applied Animal Behaviour Science* in press
- Reed B. (2005)** Guidance on the housing and care of the African clawed frog *Xenopus Laevis*. RSPCA
- Sørensen DB, Krohn T, Jansen HN, Ottesen JL & Hansen AK (2005)** An ethological approach to housing requirements of golden hamsters, Mongolian gerbils and fat sand rats in the laboratory – a review. *Appl. Anim. Behav. Sci.* 94: 181-195

**Waiblinger E & König B (2007)** Housing and husbandry conditions affect stereotypic behaviour in laboratory gerbils. *ALTEX* 24, Special Issue 2007: 67-69  
[www.forschung3r.ch/en/projects/pr\\_58\\_97.html](http://www.forschung3r.ch/en/projects/pr_58_97.html)

**Waki H, Katahira K, Yamasaki M, Katsuda S, Shimizu T & Maeda M (2009)** Cardiovascular regulation during upright standing behaviour in conscious rats. *Neurosci. Lett.* 449: 10-14

**Wolfensohn, S and Lloyd, M (2003)** *Handbook of Laboratory Animal Management and Welfare*. 3<sup>rd</sup> Edition. Blackwell. Oxford.

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