

Consultation on the Animal Welfare (Sentencing and Recognition of Sentience)  
draft Bill

Response from The Physiological Society

The Physiological Society is a membership not-for-profit organisation. It brings together scientists from over 60 countries and has over 3,500 members. The Society was founded in 1876 and its members have made significant contributions to our knowledge of biological systems and the treatment of disease. Society members and the wider bioscience sector also provide a significant economic contribution to the UK, as recognised by the government's Life Sciences Sector Deal. This draft Bill as published presents a risk to the physiological, medical and veterinary research using animals that underpins the sector, and could lead to significant damage to this cutting-edge and vital aspect of the UK economy.

1. Defining Sentience:

- a) The proposed Oxford English Dictionary (OED) definition of “sentient” - “able to perceive or feel things” - is unsatisfactory for the current purpose and due consideration should be given to explicitly defining within the draft Bill what is meant by sentience.
- b) Using the OED definition would cause sufficient confusion to undermine effective implementation of the draft Bill, and would risk making consideration of welfare needs of animals, and determining suffering in them, highly difficult. For example, an involuntary withdrawal reflex in an invertebrate due to a change in the environmental surroundings (“escape reflex”) would not be sufficient evidence that it is sentient, or capable of discriminating either pain or pleasure and learning from this experience. A mosquito flying off when we try to hit it is displaying escape behaviour but that does not imply an ability to suffer, let alone that it is taking a conscious decision.
- c) There is a need to align the definition of “sentience” with that of “animal” such that it recognises the ability of an “animal” to determine what is pleasurable or painful and consciously make learnt choices that reflect these perceptions.
- d) Use of overly broad definitions could, for example, mean that the use of pesticides/repellents to control disease vectors such as mosquitos becomes an offence under the draft Bill – clearly there are circumstances in which everyday activities necessary for human health and prosperity require harm to certain organisms.
- e) It is necessary that the draft Bill contains a robust definition of “sentience” because any ambiguity could in future be seized on for potential legal challenges, forcing the courts to determine the definition intended by the draft Bill. This point was made very eloquently in the evidence submitted by Sir Stephen Laws.

Proposed definition of sentience: The ability of an animal not only to escape from an adverse environment, but to be able to learn, to take informed decisions based on its environment and, if treated adversely, to demonstrate adverse physiological changes and behavioural suffering.

2. Defining Animal:

- a) The draft Bill should explicitly define what is meant by “animal” and should allow for incorporation of additional classifications of living organisms if and when supporting evidence becomes available.

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- b) The proposed use of “an organism endowed with life, sensation and voluntary motion” to define “animal” lacks specificity and again has the potential to make achieving the aims of the draft Bill extremely difficult. Although this definition is narrower than the Kingdom “Animalia” (which encompasses all multicellular eukaryotic organisms that depend on organic carbon for food, from coral upwards) it makes no scientific or taxonomic reference to those organisms capable of displaying sentience. As indicated in section 1c) above, there is a need to align the definition of “animal” with that of “sentience” and express them in equally robust terms. Being an “animal” is a necessary but not sufficient condition of displaying “sentience”. Therefore the definition used within the Bill should consider those taxonomic groups with sufficiently developed sensory and neuromotor mechanisms as to merit the classification of “an animal capable of sentience”.
- c) The definition of “animal” should remain consistent with that in existing legislation including the Animal Welfare Act 2006 (AWA) and Animals (Scientific Procedures) Act 1986 (ASPA). In the former, “animal” is defined as all vertebrates other than man excluding foetal or embryonic forms. In ASPA the term “protected species” is more extensive than that used for “animal” in AWA and includes any non-human vertebrate and any living cephalopod as well as certain foetal and larval stages of such protected species. It would seem both logical and practicable for any this draft Bill to adopt an approach consistent with these Acts.
- d) In the lead up to EU Directive 2010/63 the European Commission had multiple expert working groups over around 10 years deliberating on what species justify regulation. Unless the UK government wishes to duplicate and update this effort, the pragmatic approach would therefore be to adhere to the EU conclusion: that is, “animal” includes non-human vertebrates and cephalopods. However, the practical benefit of including cephalopods is questionable given the difficulties inherent in dealing with microscopic forms that would not necessarily be sentient. A clear cut-off point in development / gestation where sentience is relevant should be considered and remain consistent with the term “last third of gestation / development” used in ASPA.

Proposed definition of animal: All vertebrates (excluding humans) including, in the case of a mammal, bird or reptile, organisms in the last one-third of the relevant gestation or incubation period, and in any other case, when it becomes capable of independent feeding.

### 3. Defining ‘welfare needs of animals’:

- a) The concept of suffering only makes scientific sense in relation to those animals displaying sentience. Understanding the intent of this legislation as requiring the avoidance of suffering, “welfare” should be considered in terms of avoiding suffering; therefore obligations under this draft Bill to ensure “welfare” should apply only to those “animals” displaying “sentience”.
- b) The five needs defined in AWA Section 9.2 provide a good basis for ensuring welfare:
  - i. Need for a suitable environment
  - ii. Need for a suitable diet
  - iii. Need to be able to exhibit normal behaviour patterns
  - iv. Need for housing with or apart from other animals
  - v. Need to be protected from pain, suffering, injury and disease

These needs are also encompassed by the “Five Freedoms” developed by the UK Farm Animal Welfare Committee (freedom from hunger/thirst, discomfort, pain, fear, and restriction of normal behaviour).

- c) Any definition in the proposed draft Bill should not impact on the exemptions provided through ASPA or other legislation (e.g. Veterinary Surgeons Act 1966) that permits approved scientific or clinical procedures. Definitions and categorisations have to be consistent across all pieces of relevant legislation.

- d) The term “animal welfare needs” should be taken to apply to animals under human control, which itself requires definition as applicable to the draft Bill. Domestic species kept in captivity are clearly under human control, but legal clarity is needed for non-domestic species interacting with humans (e.g. an injured wild animal picked up by a child or a fish hooked on a line). It would be totally impractical to imagine that there are legal welfare obligations to all wild “animals” not under human control and this possibility must be explicitly excluded from the legislation.
- e) The draft Bill must clarify whether it covers the application of good husbandry of all animals kept in captivity / under human control (which could therefore include non-sentient species e.g. certain molluscs). However, in terms of this being a draft Bill dealing with “sentience”, the avoidance of suffering in these non-sentient species is not of direct relevance and should probably be specifically excluded.

Proposed definition of animal welfare needs: The requirement to provide the five freedoms and prevent suffering for all animals (as defined above) held under human control, whether permanently or transiently.

#### 4. Policy Scope:

The draft Bill should be consistent with, and avoid conflict and uncertainty with, other areas of legislation e.g. ASPA and The Veterinary Surgeons Act 1966 as well as various Acts covering wildlife and formal guidance covering agricultural practices.

- a) Consideration should be given to the impact of having potentially separate and differentially operating Acts in the devolved governments. Would this disadvantage certain sectors? Would it make inter-institutional cooperation unworkable?
- b) There are a number of key sectors for the UK economy likely to be affected by this draft Bill. Obvious examples include fishing and agriculture. It is important to also note that bioscience is a large contributor to UK plc (£30.4bn contribution to UK economy from the life sciences sector in 2015),<sup>1</sup> and the work done in this sector is underpinned by research involving the use of animals. Additional complication, or even the prohibition of certain procedures, brought about by this draft Bill, could see bioscience companies leaving the UK, and/or the economic contributions from this key sector falling in future.
- c) As described above, the scope of the draft Bill needs to be compatible with existing legislation covering the use of animals for specific purposes such as scientific research. Legislation e.g. ASPA or Veterinary Surgeons Act 1966 has already considered the scope of necessary harms that may be caused in these specific circumstances. Therefore the draft Bill must not undermine this legislation by outlawing practices considered of little/no relevance to welfare concerns, and therefore not explicitly mentioned previously, such as research conducted on mosquitos or fruit flies.

#### 5. Should have Regard:

- a) It is important that the scientific principles underlying the terms defined within the draft Bill (using robust and clear definitions for the reasons described above) take primacy when considering matters of relevance to this draft Bill.

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<sup>1</sup> [https://www.abpi.org.uk/media/1371/the\\_economic\\_contribution\\_of\\_the\\_uk\\_life\\_sciences\\_industry.pdf](https://www.abpi.org.uk/media/1371/the_economic_contribution_of_the_uk_life_sciences_industry.pdf)

- b) That being said, this is clearly an area of public interest, as demonstrated by the level of consternation observed when terms such as “animal sentience” become part of the political debate. It is right that consideration of these matters should give regard to informed public opinion when public interest is considered.
- c) The scope of public interest is too broad to address this clearly. It is clear that the public has considerable interest in the issue of animal suffering/welfare (pertaining to sentient animals) and wishes to see animal suffering prevented. It is less clear how informed much of the public is over what “sentience” entails and how “suffering” should be assessed. The draft Bill should therefore explain the scientific evidence behind its terms; only in that way can all parties see that natural justice is being implemented.
- d) There is also significant public interest in advances in human and veterinary medicine, as well as in the promotion of our wildlife, all of which are realised in part through the use of animals for research (which explains the provisions of ASPA).
- e) There has to be clarity over what is meant by welfare and suffering. It should be clear that this relates to sentient animals, and that a distinction remains between those actions that are a voluntary response to a stimulus and those that are an involuntary withdrawal reflex.

#### 6. Overall Approach:

- a) The creation of this draft Bill in response to the actions of the public after the parliamentary discussion of animal sentience is understandable.
- b) However, The Society is in agreement with the evidence submitted by Sir Stephen Laws, describing the use of legislation to reinforce a commitment to a policy objective as likely not to be the most effective action. The introduction of this legislation in its present form, with its broad scope and wide applicability, would cause uncertainty and almost inevitable misinterpretations, both accidental and mendacious.
- c) This potential could lead to action designed to inhibit scientific research by those opposed to the bioscience sector’s use of animals.
- d) Even if the legislation is not used in this aggressive way, there is too wide a possibility for legal inconsistencies with other legislation used regularly and effectively to govern the use of animals in research, agriculture, leisure, tourism and other purposes. It is essential to avoid ambiguity and uncertainty over what is authorised for research and other purposes on laboratory animals, agricultural species and wildlife.

#### 7. Sentencing:

- a) It is reasonable that sentencing should take into account the level of harm caused and the degree of intent behind the actions, and impart a greater penalty for offences entailing more serious transgressions on either count.