

## Workshop 8

### What should the criteria and process be for deciding which animals are sentient?

**Facilitator: Charlotte Burn – Royal Veterinary College**

When the Animal Welfare (Sentience and Sentencing) Bill was drafted, it referred to the ‘welfare of animals as sentient beings’ – but neither animals, nor sentience, were defined. There will clearly need to be appropriate criteria, and processes, for deciding which animals are sentient. The RSPCA’s response to the Bill made the following points:

- The Animal Welfare Act currently refers to vertebrates only, but there is increasing recognition that some invertebrates (e.g. octopuses and squid) may also be sentient. **‘Animal’ should therefore be defined in its broadest sense** as a living organism belonging to the animal kingdom, with a multicellular body, specialised sense organs, voluntary movement, responses to factors in the environment and the ability to acquire and digest food’.
- The definition of sentience should include the **capacity to have positive or negative experiences** such as pain, distress or pleasure.
- All animals have **intrinsic value**, which must be respected, but **not all animals are sentient**.
- A **complex, centralised nervous system** is essential for an animal to be sentient. This does not have to be a mammalian brain, but it must be sophisticated enough to take in sensory input and process this to create a conscious experience.
- The presence of **natural analgesics** (such as endorphins) is supporting evidence for sentience, as these are released when animals are injured, helping to reduce pain. However, if these are not present, an animal may still be sentient.
- **Behaviours** that indicate pain/suffering - such as whimpering in a dog, or joy/pleasure - such as rats ‘laughing’ in response to tickling by humans, indicate that animals are having negative or positive experiences and are sentient.
- Full, **‘human’ self-consciousness is not necessary** for an animal to be sentient.

#### Questions:

1. Do you agree with the definition of sentience as the capacity to have positive or negative experiences such as pain, distress or pleasure? Would you add any concepts, or is there anything about this suggested definition that you disagree with?
2. We have suggested considering an animal’s anatomy (structure of the nervous system), hormone systems (including natural analgesics/endorphins) and behaviour when deciding whether they may be sentient. Do you agree with these criteria? Is there anything else you would include?
3. What kind of decision-making process should there be regarding which animal species are sentient, for the purpose of implementing the Bill? A body or committee of some kind has been suggested - what kind of expertise, attitudes, competencies and stakeholder experience should be included? Can you suggest any other processes or mechanisms for making decisions as to which animals are sentient?
4. How much ‘weighting’ should be given to animal welfare science and biology, and how much to people’s feelings about different species, in different contexts? Should the public have a say, and if so according to what kind of process?

### Summary of the discussion:

The group discussed a proposed definition of sentience: ‘the capacity to have positive or negative experiences such as pain, distress or pleasure.’ An animal’s response to positive or negative experiences, and their capacity to evaluate those experiences, was felt important, rather than simply ‘having’ experiences. ‘Feelings’ were highlighted as a vital component of sentience; feelings that *matter to the animal* were emphasised. Subjectivity of experience was discussed, and how dissimilar experiences are likely to be for different species, particularly between humans and other animals. It was suggested that the definition should use the term ‘subjective experience’. Some were not sure that the examples given (pain, distress, pleasure) were helpful, in one case because they were felt to be too anthropomorphic and in another because it was felt that pain could be experienced without sentience. Someone felt that the terms ‘positive’ and ‘negative’ were confusing and questioned their meaning, as in everyday parlance the terms often refer to presence/absence or constructive/destructive rather than ‘good’/‘bad’, so this may require clarification. Conversely, a point was made that stating that an animal is sentient is not claiming we know how they see the world. No-one felt that ‘consciousness’, or a ‘sense of self’, should be part of a definition of sentience as it is too restrictive.

When considering criteria for deciding which animal species are sentient, the group agreed that behaviour should be included, in the context of what animals have evolved to do, their ecological niche, as this informs what matters to an animal. Phylogeny was also felt to be important, as evidence for one species could be used to make inferences about sentience in closely-related, lesser-studied species. Anatomy was seen as an important component, particularly nervous system complexity, but should not be the only criteria used to set a threshold for sentience. The importance of functioning, as well as structure, of the nervous system was raised, as was physiological functioning. Use of the term ‘centralised’ nervous system was questioned given the lack of centralisation in species like lobsters whose functioning suggests aspects of sentience. Evidence of intelligence and cognitive capacities/abilities are important as it can be a way to inform what matters to an animal, and should be distinguished from sentience as they do not necessarily indicate consciousness. The need for good scientific evidence to inform decisions was highlighted several times. There was mention of looking at different levels of sentience rather than having an absolute cut-off, but there was insufficient time to explore this further.

The group looked at a process for deciding which animal species are sentient for the purpose of implementing the Bill. Three potential mechanisms were suggested: a committee, targeted research funding, and a public consultation mechanism such as citizens’ assemblies. The group felt that a committee should include a range of scientists whose expertise mirrors the scope of species being considered. Animal welfare scientists, physiologists, neuroscientists and phylogenists were identified. Stakeholders, those affected by the decisions made, should be represented. Inclusion of ‘sceptics’ on the committee, within existing defined roles that are based on expertise, would help ensure criteria are robust to challenge. Researchers into human consciousness were specifically mentioned in this context. There was discussion about the difficulty of ensuring independence of committee members and the (positive and negative) influence of lobbying. Representation of the animals themselves in some way was felt to be important. Inclusion of vets and animal welfare organisations would go some way towards this, but there could also be some sort of showcasing of the abilities and complexity of species under consideration through talks and demonstrations (Dan Weary’s presentation was specifically referenced). Research funding would provide further evidence to support decision-making where there is still debate amongst scientists (e.g. decapods). The role and value of the public in the process was discussed and debated. Suggestions included representation of laypeople on the committee; gathering public opinion where scientific evidence is lacking, or to help prioritise research. Potential outcomes of the process may influence opinion, for

example a prospective ban on 'bug spray' may influence opinion about whether or not insects are sentient. A Citizen's Assembly was proposed as a useful addition to the process because representatives are given time and opportunity to learn about topics before making decisions (e.g. they can consider specific evidence), and specifically to help make value judgements like weighing up the interests of animals against benefits to society. The committee could help shape the research focus and the format of the citizens' assemblies, and could later consider the evidence provided by them along with existing evidence.

**Key points:**

- The criteria should include behaviour. The group would also add the functioning of the nervous system, cognitive abilities, physiological functioning, ecological niche and phylogeny (e.g. infer to closely related species).
- There should be three parts to the process. 1) Any committee should include a range of scientists, stakeholders, laypeople and animals represented themselves (e.g. demonstrations/talks about the animals). 2) The process should get input from the public (e.g. a Citizen's Assembly) whilst giving weight to scientific evidence. 3) A structured process of scientific research should be focussed on grey areas.

**Workshop held at:**

**Animal Sentience: science, policy and 'real world' application  
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