

Module 1

Introduction to Animal Welfare

This lecture was first developed for WSPA by Dr David Main (University of Bristol) in 2003. It was revised by WSPA scientific advisors in 2012 using updates provided by Dr Caroline Hewson.

This module will enable you to understand

- Which animals we are concerned about and why
 - Sentience
 - Suffering
 - Anthropomorphism
 - Death and animal welfare
- Why animal welfare is complex
 - Different scientific definitions of animal welfare
 - Why animal welfare science involves more than veterinary medicine
 - The roles of science, ethics and law

Background

- For thousands of years, humans around the world have been concerned that animals are suffering.
- Is this just anthropomorphism, that is, attributing human characteristics to animals? No: we and many other species are sentient.

Definitions (1)

- Sentience
 - “A sentient being is one that has some ability: to evaluate the actions of others in relation to itself and third parties, to remember some of its own actions and their consequences, to assess risk, to have some feelings and to have some degree of awareness.” (Broom, 2006)
 - “that is, feelings that matter to the individual” (Webster, 2011)
 - “consciousness of feelings” (Mendl & Paul, 2004), i.e. ‘*This is painful/pleasant*’
 - not the same as *self*-consciousness – ‘*I feel pain/pleasure*’
- Sentient animals
 - Probably all vertebrates, some invertebrates, including e.g. squid, octopus and possibly some crustaceans (Mellor et al., 2009)

Sentience continued

- Sentience is the capacity to experience suffering and pleasure
- It implies a level of conscious awareness
- Animal sentience means that animals can feel pain and suffer and experience positive emotions
- Studies have shown that many animals can experience complex emotions, e.g. grief and empathy (Douglas-Hamilton et al., 2006; Langford et al., 2006)
- Animal sentience is based on decades of scientific evidence from neuroscience, behavioural sciences and cognitive ethology

Definitions (2)

- Suffering
- “One or more bad feelings continuing for more than a short period.” (Broom & Fraser, 2007)
- To suffer, an animal must be sentient

Anthropomorphism

- Anthropomorphism generally criticised
- Using a “human-based” assessment may be a useful first step (Webster, 2011)
 - E.g. surgery and pain (Viñuela-Fernandez et al., 2007)
- Anthropomorphic assessments must be qualified with scientific evidence and information to meet and treat the individual animals’ needs

Which sentient animals are vets concerned about?

- Species that we keep: domesticated and captive wild species (cf. Fraser & MacRae, 2011)
 - husbandry
 - usage e.g. in research, farming, companionship; abuse
 - transport, sale, markets
 - slaughter, euthanasia (also death of wild animals – pest control, hunting)

Welfare and death

- Welfare
 - Welfare concerns the quality of an animal's life, not how long the life lasts (quantity)
 - When an animal is dead he or she can no longer have experiences and his/her welfare is no longer a concern
- Death
 - How an animal dies is a welfare concern
 - High mortality rates are indicative of poor welfare

Summary so far

- Although highly criticised, anthropomorphism can be helpful, but is not enough on its own
- Some animals can suffer
 - Suffering – “one or more bad feelings continuing for more than a short period” (Broom & Fraser, 2007)
 - Sentience – “ability to evaluate the actions of others in relation to itself and third parties, to remember some of its own actions and their consequences, to assess risk, to have some feelings and to have some degree of awareness” (Broom, 2006)
 - Death is not a part of animal welfare, but the manner of death is, because it can be a source of suffering

Definitions of animal welfare

- There is still much disagreement about animal welfare because of different ethical values
 - E.g. 'If animals are healthy, their welfare must be good'

What is animal welfare?

- Complex concept with three areas of concern (Fraser et al., 1997)
 - Is the animal functioning well (e.g. good health, productivity, etc.)?
 - Is the animal feeling well (e.g. absence of pain, etc.)?
 - Is the animal able to perform natural/species-typical behaviours that are thought to be important to them (e.g. grazing)?

Three approaches when considering animal welfare

After Appleby, M. C. (1999) and Fraser et al. (1997)

Definitions of animal welfare: 'physical'

- “The welfare of an animal is its state as regards its attempts to cope with its environment” (Broom, 1986)
- “I suggest that an animal is in a poor state of welfare only when [its] physiological systems are disturbed to the point that survival or reproduction are impaired” (McGlone, 1993)

Definitions: 'mental'

- “... Neither health nor lack of stress nor fitness is necessary and/or sufficient to conclude that an animal has good welfare. Welfare is dependent upon what animals feel” (Duncan, 1993)
- Feelings have adaptive value (Broom, 1998; Keeling et al., 2011)
 - Negative: escape immediate harm
 - Positive: promote long-term benefit – animals stay in situations that promote those feelings

Natural behaviour

- “In principle, we disapprove of a degree of confinement of an animal which necessarily frustrates most of the major activities which make up its natural behaviour” (Brambell Committee, 1965)
- “Not only will welfare mean control of pain and suffering, it will also entail nurturing and fulfilment of the animal’s nature, which I call *telos*” (Rollin, 1993)

‘Feelings’, ‘naturalness’ and needs (Widowski, 2010)

- Specific behaviours that animals developed in order to obtain an essential resource
 - for example, nest-building in sows; suckling in calves
- Needs to show certain behaviours
 - If the domestic environment or handling prevents them from performing these behaviours, negative emotions such as frustration ⇒ suffering

Combined statements (1)

- World Organisation for Animal Health (Office International des Epizooties; OIE). *Terrestrial Animal Health Code* (OIE, 2011a)
 - “Animal welfare means how an animal is coping with the conditions in which it lives
 - An animal is in a good state of welfare if (as indicated by scientific evidence) he/she is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if he/she is not suffering from unpleasant states such as pain, fear and distress. Good animal welfare requires disease prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane slaughter/killing.”

Combined statements (2)

- The Five Freedoms (Farm Animal Welfare Council, 1992) are often used as a framework to assess animal welfare
 1. Freedom from **hunger and thirst.**
 2. Freedom from **(thermal) discomfort.**
 3. Freedom from **pain, injury and disease.**
 4. Freedom to **express normal behaviour.**
 5. Freedom from **fear and distress.**

Summary so far

- Definitions
 - Suffering – “one or more bad feelings continuing for more than a short period”
 - Sentience – “ability to evaluate the actions of others in relation to itself and third parties, to remember some of its own actions and their consequences, to assess risk, to have some feelings and to have some degree of awareness”
 - Animal welfare – animal’s state – physical functioning, mental state and natural behaviour
- How animal welfare science developed, and why it is not the same as veterinary medicine

History

- India
 - *Ahimsa*: do not cause injury to any living being
 - Hinduism, Buddhism, Jainism (Taylor, 1999)
 - Bishnoi tribe in Rajasthan
 - ecological philosophy for ~500 years
 - don't eat anything animal, and give 10 per cent of harvest to wildlife (Templar & Leith, 2010)

History

- China: Confucianism
 - Because of one-ness with all beings, the suffering of animals is a source of distress in humans (Taylor, 1999)
- Europe (Fraser, 2008a)
 - Ancient Greece
 - Britain in 18th and 19th centuries

Ancient Greece

(Fraser, 2008a)

- The same range of arguments as we have today.
For example:
 - Pythagoras and others (~500 to 300 BCE): we are similar to animals so we shouldn't eat them
 - Stoics: animals aren't rational, therefore we don't need to worry about whether we are treating them fairly
 - Plutarch: animals may not be rational, but we should still be kind to them
 - Porphyry (~250 ACE): animals deserve moral consideration because they can feel distress

Britain in 18th and 19th centuries (Fraser, 2008a)

- Treatment of animals in Britain had been very uncaring for many centuries
- This became a concern because religious and other authorities believed humans should act virtuously (e.g. Jeremy Bentham in the 1700s; first formal animal protection law passed in 1822)
 - c.f. earlier religious laws elsewhere (Taylor, 1999)
e.g. Judaism forbids causing animals pain; Islam forbids cruelty to animals

Modern agriculture

- In Europe and North America, farming became more industrialised in 1950s and 1960s
 - focus on production and efficiency ⇒ cheaper food for humans ⇒ better human health
 - housing animals in large numbers ⇒ easier supervision, but increased disease
 - important welfare contribution from veterinary medicine ⇒ vaccinations, treatment

History

- Growing public and scientific concern in 1960s onwards, regarding
 - farmed animals
 - UK: Ruth Harrison (1964) *Animal Machines*
 - UK: Brambell Committee (1965)
 - wildlife affected by human activity
 - Jane Goodall: studies of chimpanzees in Tanzania
 - conservation movement
 - trade in endangered species

Animal welfare science

- Mandated to answer specific questions of public concern (Fraser, 2008a)
 - Brambell Committee (1965)
 - E.g. do hens need to dust-bathe?

Scientific

International importance (1)

- World Organisation for Animal Health (OIE, 2011b)
 - 178 member countries and territories
 - “Takes the lead internationally on animal welfare”
 - Terrestrial Animal Health Standards Code: seven animal welfare standards
 - Aquatic Animal Health Standards Code: two standards
- Food and Agriculture Organization (FAO) of the United Nations (UN)

International importance (2)

- One Health Initiative (2011)
 - “Worldwide strategy for expanding interdisciplinary collaborations and communications in all aspects of health care for humans, animals and the environment”
 - Shared risk to animals and humans from many diseases, environmental practices etc. that affect animal welfare and human welfare, such as avian flu:
 - spreads quickly in situations where animals are not well housed
 - when slaughtered to control the disease, urgency may mean that animals are not handled or slaughtered humanely, and personnel may be at risk

Vets and animal welfare science

- Infectious disease prevention and eradication
 - ~60 vaccines (Mellor et al., 2009)
- Importance of behaviour
 - clinical signs; pain
 - behaviour as an indicator of emotional state

In the 21st century (1)

- Animal welfare science now a recognised discipline in vet schools around the world
 - Many research chairs and professorships, research groups and postgraduate training
 - Day 1 competency of new veterinary graduates (OIE, 2011c)
 - Explain animal welfare and related responsibilities
 - Identify and correct welfare problems
 - Know where to find information and local/national international standards of humane production, transport and slaughter

In the 21st century (2)

- Many people feel we have an obligation to animals (Broom, 2010)
- This is for different reasons, e.g.
 - Because animals have intrinsic value
 - Because animals have value to us, e.g. we eat them/they are useful to us
 - Because animals can suffer
 - Because the species is endangered
- Ethics and law

Final points

- Animal welfare is a complex concept
- Understanding it requires science (how different environments affect an animal's health *and feelings*, from the animal's point of view)
- Deciding how to apply those scientific findings involves ethics (how humans *should* treat animals: people worldwide have always been concerned about this)
- Enforcing those decisions in society involves the law (how humans *must* treat animals)

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