Is boredom an animal welfare concern?

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Abstract

Boredom, while often casually attributed to non-human animals by both laypeople and scientists, has received little empirical study in this context. It is sometimes dismissed by others as anthropomorphic or a trivial concern in comparison to other welfare problems faced in captivity. Recent work on human boredom, however, has led to evidence that, far from being trivial, it can have serious consequences in the form of risky behaviour and reduced physical as well as mental health, and potentially contributes to social problems. Research on mink, supported by older literature on farm and laboratory animals, suggests that monotonous, stimulus-poor environments can induce an increased motivation for diverse stimuli, consistent with the experience of boredom. This experience is likely to be aversive and may lead to problems such as depression-like states or self-injurious behaviour if not addressed. Boredom should therefore be treated as an important welfare concern. Research is needed to find practical ways of identifying this state and to determine how widespread it is across species and which animals are most at risk. Possible ways of alleviating or avoiding this problem include offering animals in our care a choice in the level of stimulation they experience and opportunities to experience appropriate cognitive challenge.

Keywords: animal welfare, boredom, emotional states, exploratory behaviour, individual differences, sensation-seeking

Introduction

Boredom is... the shriek of unused capacities.
Saul Bellow, The Adventures of Augie March (1949)

Many members of the general public do not hesitate to attribute emotional states, such as boredom, to their pets and, perhaps less ubiquitously, to other animals they encounter, such as those in zoos and aquariums. Scientists, too, have referred to boredom as a welfare concern in captive animals for decades (e.g. Wood-Gush & Beilharz 1983). However, other scientists believe that such statements are anthropomorphic (e.g. Anderson 2004; Harfeld 2013), and indeed there has been little systematic research on the topic of boredom in non-humans to justify using the term. This leaves us with a few major questions. First, can animals really experience boredom? If so, which ones do? Finally, how much does it matter?

The topic of whether non-human animals (hereafter simply called ‘animals’) subjectively experience any affective states in the same way as humans do is complex and has been covered elsewhere (e.g. Mendl & Paul 2004). The general consensus, supported by behavioural, physiological and neurobiological evidence as well as evolutionary arguments, is that other animals are capable of experiencing emotions (Low et al. 2012). While animals may not have analogues of every human emotional state, if they can experience states such as fear and frustration, there seems little reason to dismiss the possibility they might also exhibit boredom-like states.

In this paper, I will briefly review our understanding of boredom and its symptoms based on humans, and how this has been applied to animals. This includes a discussion of the ongoing challenges with assessing boredom in this context. I will then outline why boredom is important to animal welfare, and finally suggest some possible approaches to addressing the problem.

What is boredom and how is it detected?

The concept and its assessment in humans

Boredom, as traditionally defined based on human experience, is essentially a negative affective state caused by a lack of desired stimulation or behavioural opportunities. It can be divided into that which is extrinsically caused by such situations and that which stems from intrinsic causes, such as attentional difficulties, that can make it difficult to engage in meaningful activity (Eastwood et al. 2012); the latter is what the French would call ennui. Boredom bears some similarity to, but can be distinguished from, frustration (Mikulas & Vodanovich 1993; van Tilburg & Igou 2017). It is consistently self-reported by most people in situations where behavioural opportunities are constrained and little variation in stimulation is available, in either the long or short term (see, e.g. Berlyne 1960). Extremely ‘boring’ situations, such as...