HOW DO YOU ASSESS ANIMAL HAPPINESS?

A dog wagging its tail, a purring cat and a grunting pig all seem happy to us, but are they really? WUR researcher Laura Webb wants to assess the happiness of animals. To do that, she must first define happiness and how she can study it in animals.

The definition of animal welfare has changed in recent years, says Webb, a postdoc researcher in the Animal Production Systems chair group. At first, researchers tended to define animal welfare in negative terms, as the absence of hunger, thirst, pain, disease, discomfort, anxiety and stress. If you could take away all these – measurable – negative factors, the animal would have a good life. A later addition was that animals should be able to display their natural behaviour. And nowadays, increasing importance is given to stimulating positive experiences.

What make it difficult, though, is that it is not clear exactly what happiness means in the case of animals, says Webb. Working with a sociologist, a philosopher and an ethologist, she analysed research on happiness in humans. People can feel happy (affective happiness) and they can think that they are contented with their lives (cognitive happiness). Given that most animals probably cannot reflect on the hand life has dealt them, we can only speak of affective happiness in their case.

But how do you then measure that affective happiness? Webb: 'For humans you might make an app and ask seven times a day for a week: how are you feeling right now? Using these data you can draw up an 'affect balance', a ratio of the number of times people felt good and the number of times they felt bad.' To apply that kind of affect balance to animals, we first need to be able to measure their emotions at many different moments, says Webb. 'A method that is being studied a lot at the moment is to get an idea of animals' emotions using behaviour assessments and tests.'

Her scientific article on animal happiness in the *Annals of the New York Academy of Sciences* sketches 'a conceptual plan for how to approach the happiness of animals,' says Webb. 'We want to use it to develop methods of measuring animal happiness'. In order to get more researchers involved in the study, Webb wants to run an international PhD course on emotions in animals in February 2019. ℗ **AS**