

Searching for the Animal of Animal Ethics

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Animal welfare: On essential measures to take and how to avoid anthropomorphism

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Abstract

Is it possible to infer from the behavior of laboratory mice and rats to a mental state relevant for animal welfare or to find a model in animals that match a particular human mental condition?

Certain behaviors have a survival value and should be evolutionary conserved and thus be found in most species with possibly certain characteristics in common. It seems relevant to look for such behaviors within the sphere of the individual's estimate of cost/benefit, risk assessment, risk taking, shelter seeking etc. We assume the response on environmental stimuli represents an integrated outcome of the phylogenetic memory and the animal's acquired experience. The multivariate concentric square field (MCSF) method combined with a Principle Component Analysis was used to measure the behavior strategies in wild versus laboratory mice, strain differences, various acts of interference under laboratory conditions (restrain, starvation, social dominance etc.). The method implies an etho-experimental approach of measuring welfare and personality traits in laboratory animals.

References

- Augustsson H and BJ Meyerson; *Physiol Behav* 2004;81:685-698
- Meyerson BJ, Augustsson H, Berg M and E Roman ; *Behavioural Brain Reseach* 2006;168:100-113
- Roman E, Gustafsson L, Berg M and I Nylander; *Hormones and Behavior* 2006;50:736-747