Hot topics: Environmental enrichment

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Environmental enrichment: from flawed concept to pseudo-science

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The concept of environmental enrichment has been adopted by animal welfare science in an uncritical way that is liable to bring this discipline into disrepute. In this theoretical paper, we recommend a more rigorous approach. We contend that the term “enrichment” is used misleadingly most of the time. First, it is used to describe improvements to the environment that supply the animals with basic needs. However, “enrichment” actually means the process of making richer and not the process of alleviating poverty. Therefore, describing these manipulations as “enrichment” is fraudulent, creating the impression that the environments already cater for basic needs and that the described manipulation enhances the animals’ lives even further. Second, it is often used to describe any increase in environmental complexity regardless of the effect on the animal’s quality of life.

It has been suggested that states of suffering evolved to motivate behaviour in “need situations” which require immediate action, whereas states of pleasure evolved to motivate behaviour in “opportunity situations” where there is a long-term benefit of performing the behaviour but no need to act immediately.
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Short communication

A note on the effect of changes in flooring on the behaviour of housed rams

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Environmental enrichment

Time spent lying

Time spent lying

Environmental enrichment
Effects of dietary fibre and feeding frequency on wool biting and aggressive behaviours in housed Merino sheep

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Abstract. Wool biting is a behaviour that can develop in housed sheep, in which sheep start to bite and eat the wool of others. The aim of this study was to determine whether (i) supplementing the diet of housed sheep with fibre and (ii) increasing feeding frequency would help to reduce wool biting, aggressive behaviours and wool damage. In a \(2 \times 2\) factorial experiment, 40 Merino wethers were either fed with lucerne-based pellets only, or with pellets supplemented with barley straw. They received their pellets either on a low feeding frequency basis (once a day Monday to Friday mornings, double ration on Friday afternoon, nothing Saturdays and Sundays), or on a high feeding frequency basis (twice a day, every day). The sheep were housed in 4 treatment pens, each with 10 animals. Wool biting and aggressive behaviours were recorded through direct observation and the sheep were scored for wool damage twice a week during the 15-week study. The provision of fibre had a significant effect on reducing wool biting \((P<0.001)\) and wool damage score \((P<0.001)\). There was no consistent effect of feeding frequency on wool biting or wool damage, and no fibre \(\times\) feeding frequency interactions. Whereas wool biting in general increased with time during the study \((P<0.001)\), levels of aggressive behaviour showed no consistent time trend, and there were no effects of fibre or feeding frequency treatments. It is concluded that wool biting is largely a redirected behaviour in concentrate-fed housed sheep deprived of adequate levels of activity or oral stimulus, and that the provision of roughage will reduce the development of wool biting and improve animal welfare in housed experimental sheep.

Environmental enrichment
Fibre

No fibre

Environmental enrichment

Vasseur et al. (2006)
http://www.awionline.org/pubs/rabrodent/rodrab.html

Variables, Refinement and Environmental Enrichment for Rodents and Rabbits kept in Research Institutions
Making Life Easier for Animals in Laboratories

Viktor and Annie Reinhardt
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