

RESPONSE TO VINKE'S SHORT COMMUNICATION: COMMENTS ON MINK NEEDS AND WELFARE INDICATORS

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Vinke (2001; in this issue, pp 315–323) discusses usefully various issues concerning domestication and tameness, especially in mink. In our review (Nimon & Broom 1999), we devoted only three sentences in the main text and one in the conclusions to domestication and how long mink have been kept in captivity. We do not suggest a “causal relationship” between “less domestication, which leads to poorer welfare” (Vinke 2001, p 316, paragraph two) but say, in the second paragraph of our Introduction in which we compare mink with cattle or pigs, “mink are not domesticated in the same sense. This renders it highly unlikely that all their requirements for good welfare in captivity will have been identified”. We took account of and referred to almost all of the publications on mink that Vinke quotes. We consider unscientific Vinke's reference to the ferret as being the ‘nephew’ of the mink and, having written a wholly scientific review, we object to the suggestion (Vinke 2001, p 316, paragraph five) that we might be taking into account “ethical objections” in part (ii) of our Conclusion (p 222).

We agree with Vinke that a key issue in animal housing and management is whether the needs of the individual are met (see Broom & Johnson 1993). In relation to one aspect of the needs of mink, the recent publication by Mason *et al* (2001) emphasises the importance that mink give to the possibility of being able to swim in water.

The key point concerning the use of stereotypies as indicators of poor welfare in animals is made in the text of our paper (p 213, paragraph three) and is explained in detail elsewhere (Broom 1991a, b; Broom & Johnson 1993; Dantzer & Mittelman 1993; Zanella *et al* 1996). It is likely that, in many cases, the performance of stereotypies confers no advantage on the individual, although it may occasionally do so. However, whether or not the stereotypy helps the individual to cope, its performance indicates that the individual has a problem; the more prolonged the stereotypies, or the more frequent the bouts of stereotypies, the greater the problem. This argument also applies to other abnormal behaviour and physiological responses that occur when an individual is having difficulty in coping, or is failing to cope, with its environment. It is very likely that some stereotypies indicate a more severe effect on an individual than do others, but all stereotypies are indicators of poor welfare.

Vinke (2001, p 320, paragraph one) mentions that farmed mink “may not score badly” using the welfare indicators: “ability to grow, reproduction, body damage and disease, and immunosuppression”. Body damage caused by self-mutilation, or more rarely by other mink, occurs to some extent on many mink farms. Mink in cages of a widely used type, provided with adequate food and water, often chew their tails, removing fur, and may chew the tail itself until it is a stump, or may chew and shorten a limb (D M Broom, personal observation).

We know of no studies using immune system function as a welfare indicator in mink except for those in which leucocytes have been counted. As regards the other measures, the absence of evidence of poor welfare using one measure does not mean that welfare is good. However, we agree with Vinke that some problems which occur in other species that reduce the ability to grow and reproduce or that increase disease incidence are not evident in mink.

References

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