

© 2012 Universities Federation for Animal Welfare
 The Old School, Brewhouse Hill, Wheathampstead,
 Hertfordshire AL4 8AN, UK
www.ufaw.org.uk

Animal Welfare 2012, 21: 363-371
 ISSN 0962-7286
 doi: 10.7120/09627286.21.3.363

The development of on-farm welfare assessment protocols for foxes and mink: the WelFur project

J Mononen^{*†}, SH Møller[‡], SW Hansen[‡], AL Hovland[§], T Koistinen[†], L Lidfors[#], J Malmkvist[‡],
 CM Vinke[†] and L Ahola[†]

[†] Department of Biology, University of Eastern Finland, PO Box 1627, FI-70211 Kuopio, Finland

[‡] Department of Animal Science, Aarhus University, PO Box 50, DK-8830 Tjele, Denmark

[§] Department of Animal and Aquacultural Sciences, Norwegian University of Life Sciences, PO Box 5003, NO-1432 Aas, Norway

[#] Department of Animal Environment and Health, Swedish University of Agricultural Sciences, PO Box 234, SE-532 23 Skara, Sweden

[†] Department of Animals in Science and Society, Faculty of Veterinary Medicine, PO Box 80166, 3508 TD Utrecht, The Netherlands

* Contact for correspondence and requests for reprints: jaakko.mononen@uef.fi

Abstract

The WelFur project aims at the development of on-farm welfare assessment protocols for farmed foxes (the blue fox [Vulpes lagopus], the silver fox [Vulpes vulpes]) and mink (Neovison vison). The WelFur protocols are based on Welfare Quality® (WQ) principles and criteria. Here, we describe the WelFur protocols after two years of developmental work. Reviews for each of the 12 WQ welfare criteria were written for foxes and mink to identify the welfare measures that have been used in scientific studies. The reviews formed the basis for potential measures to be included in the WelFur protocols. All measures were evaluated for their validity, reliability and feasibility. At present, we have identified 15 fox and 9 mink animal-based (or outcome-based) welfare measures, and 11 and 13 input-based (resource-based or management-based) measures. For both foxes and mink, each of the four WQ principles is judged by at least one criterion, and seven out of the 12 criteria include animal-based measures. The protocols will be piloted in 2012. Using the WQ project and protocols as a model has been a fruitful approach in developing the WelFur protocols. The effects of the WelFur protocols will provide benchmarks from which the welfare of animals on European fur farms can be assessed.

Keywords: animal-based welfare measures, animal welfare, input-based welfare measures, fox, fur farming, mink