Letter

A Voluntary Trap Approval scheme to end trap welfare inequality in the UK

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Spring traps are widely used for killing small mammals in the UK. By UK law, most spring traps are required to meet welfare approval standards, but break-back traps for rats (*Rattus norvegicus*) and mice (*Mus musculus*), and all mole (*Talpa europaea*) traps, are exempt. I argue that these exemptions are unjustified and should be repealed. Given that this is unlikely to happen soon, I propose an alternative approach — a 'Voluntary Trap Approval (VTA)' scheme, which could drive the necessary change via 'carrot' rather than 'stick'. Such a scheme might benefit the welfare of many thousands of animals each year.

In 1951, The Committee on Cruelty to Wild Animals produced a report in which they concluded that, "It should be made illegal for any spring trap to be used, the design of which has not been approved by the Minister of Agriculture and Fisheries and the Secretary of State for Scotland, and those Ministers should approve only spring traps which will catch and kill wild animals without causing them unnecessary suffering" (Scott Henderson 1951); see also http://hansard.millbanksystems.com/lords/1951/nov/28/spri ng-traps-bill-hl). However, the Committee also observed the following, "the rat is regarded as one of the greatest animal pests... It is also a menace to public health... For these reasons its control and destruction are essential...". They concluded [without evidence] that break-back traps for use with rats and mice involved no unnecessary suffering. Concerning mole traps they said "... We have had no evidence that [mole] trapping causes unnecessary suffering, except that one organisation mentioned that they had been given to understand that the spring of the ordinary type of mole-trap [it is not clear which they meant] was too weak to kill instantaneously". The Committee concluded that there was no need to make any special recommendations regarding mole-trapping practices.

In 1954, The Pests Act implemented The Committee's recommendations, making it an offence (amongst others) to use a spring trap for the purposes of killing or taking animals in England, Scotland or Wales, other than one approved by an Order of the Secretary of State, but exempting "traps of any description specified by order of the Minister of Agriculture and Fisheries as being adapted solely for the destruction of rats, mice or other small ground vermin" (http://www.legislation.gov.uk/ukpga/Eliz2/2-

3/68/section/8). In 1958, The Small Ground Vermin Traps Order 1958 defined such exempt traps as: "(1) Spring traps known as break-back traps and commonly used for the destruction of rats, mice or other small ground vermin; (2) Spring traps of the kind commonly used for catching moles in their runs". These exemptions persist today, although other spring traps used for killing rats or mice (eg currently certain BMI Magnum traps, DOC traps, Fenn traps, etc) have never been exempt and so do require approval.

Sixty years on it is difficult to think of a logical reason for excluding from welfare approval either: (a) traps intended for use with some species, ie rats, mice and moles, but not others, when the species concerned have similar cognitive and emotional complexity and therefore likely similar capacities for suffering (Mellor et al 2009); or (b) only some of the traps available for use with a certain species, ie breakback traps for use with rats or mice. A utilitarian stance might tolerate lower welfare standards in the control of animals that are considered to be particularly numerous or dangerous pests. However, consideration of animal welfare in any particular case should not depend on the potential detrimental effects of that particular species' presence or behaviour (Dubois et al 2017). And, anyway, there is no reason to believe that higher welfare traps would be more expensive than their poorer welfare counterparts (Baker et al 2012), and good reason to believe that traps meeting the greater welfare standards would also be more efficient.

Rats, mice and moles probably account for the majority of animals killed in spring traps in the UK — many thousands each year. Indeed, a recent survey showed that kill-trapping is now the preferred option for controlling moles on British farms and amenities (Baker et al 2016). And, probably because break-back traps and mole traps are unregulated, there has been a proliferation of break-back designs available for use with rats and mice, while three main types of mole trap (scissors, duffus and talpa) are available from many brands (Baker et al 2012). However, the humaneness of these unregulated spring traps has been questioned (Rudge 1963; Atkinson et al 1994; Baker et al 2012, 2015). Baker et al (2012) measured impact momentum and clamping force (widely accepted indicators of welfare performance among spring traps both internationally [ISO 1999] and in Europe [Talling & Inglis 2009]) in a wide range of unregulated rat, mouse and mole traps available in the UK. They found that both forces varied several-fold among traps intended for use with each species, and overlapped considerably between mouse and rat traps (the strongest mouse traps exerted greater forces than the weakest rat traps), thus indicating significant scope for improving the humaneness of unregulated spring traps for rats, mice and moles. Spring traps that crush the skull are thought to be the most efficient and humane (Proulx & Barrett 1991; Mason & Littin 2003). However, Baker et al (2015) found that none of the moles spring-trapped by pest controllers in their post mortem study had damaged skulls



or upper cervical vertebrae, either of which could cause unconsciousness immediately. The primary identifiable cause of death, in their sample, was acute haemorrhage, from which time to unconsciousness or death could not be inferred. X-rays revealed that although some moles initially appeared to have sustained a broken spine at the capture point, none had actually done so. They had sustained only soft tissue damage (Baker *et al* 2015). Furthermore, both Rudge (1963) and Atkinson *et al* (1994) reported that 9-10% of moles spring-trapped in their studies were caught at extremities (forelimbs, skin) and may therefore have remained conscious for an extended period prior to death.

The exemption of break-back traps and mole traps from regulation has probably hindered improvements in trap welfare standards (Baker *et al* 2012). Given the scale of rat, mouse and mole spring-trapping in the UK, the wide range of unregulated spring traps available for killing these species, and the doubt expressed over the humaneness of at least some of these traps, there is a strong case for these traps to be subject to the same welfare approval standards as other spring traps.

In 1998, the European Community signed the Agreement on International Humane Trapping Standards (AIHTS) with Canada and the Russian Federation, and a related Agreed Minute with the USA. The AIHTS prohibits the use of leghold traps in the European Community and the introduction into the European Community of pelts and manufactured goods of certain wild animal species (not including rats, mice or moles) originating in countries which catch them by means of leghold traps or trapping methods that do not meet AIHTS standards. In 2004, the European Commission proposed a European Union trapping Directive, the goal being to set new standards for the approval and use of traps for wildlife management more generally in Europe, and potentially to reconsider which species were covered. A report, released in 2011, examining options for such a Directive, concluded inter alia that European Union trapping legislation should apply equally to all trapped species (Talling & Inglis 2009). Yet, in 2012, the European Commission withdrew its proposal for a trapping Directive. In 2011, the UK Law Commission began work to reform UK wildlife law; in 2015 they produced their final report and draft Bill and are now awaiting Government's response to their recommendations (http://www.lawcom.gov.uk/project/wildlife-law/). The related 2012 consultation exercise included (among many other issues) consideration of The Pests Act and more generally of inconsistencies in the law (The Law Commission 2012), but no changes have been proposed in the final report regarding the regulation of spring traps. In 2006, however, the UK Animal Welfare Act made it an offence for a person to cause 'unnecessary suffering' to an animal under their control

(http://www.legislation.gov.uk/ukpga/2006/45/contents) which includes a wild animal held in a trap (Natural England 2010). In the spirit of this Act, surely there is an obligation for all lethal traps in the UK to meet equivalent welfare standards?

One way to achieve this goal without legislative change could be through a Voluntary Trap Approval (VTA) scheme, whereby trap manufacturers submit lethal traps (primarily, but not necessarily exclusively, spring traps) that are exempt from regulation for approval in the same way as non-exempt (regulated) traps. The approval of traps is a devolved issue in the UK and, in England and Wales for example, non-exempt traps requiring approval are tested by the Animal and Plant Health Agency (APHA). Traps are required to render the target animal irreversibly unconscious within 5 min in $\ge 80\%$ of twelve tests (Baker et al 2015), these criteria being in line with those stated in the AIHTS. If an exempt (unregulated) trap were to be considered for approval under the proposed VTA scheme, the costs of testing would need to be covered by the manufacturer, as is now the case for nonexempt (regulated) traps. However, once approved, the trap could then be marketed as 'welfare approved' and perhaps display a formal certification mark. (Non-exempt traps that already require approval could also be given this certification mark for consistency). Such a system would provide a simple way of highlighting to the public the issue of unregulated traps, as well as providing them with a choice and allowing them to demonstrate any demand for more welfare-friendly traps. Some stockists/suppliers might decide to stock only approved traps and a cascade effect might follow, with more unregulated traps being submitted for approval, and more stockists/suppliers rejecting traps that have not been approved, such that non-approved traps are edged out of the market. (UK retail industry concern to avoid selling poor-welfare rodent control products was demonstrated recently when the Humane Society International UK persuaded more than 200 UK suppliers of pest control products not to stock lethal rodent glue traps on welfare grounds [Claire Bass, HSI-UK, personal communication 2016]). Ultimately, following successful implementation of a VTA scheme, legislative change to formalise equality in trap welfare in the UK might become a straightforward and non-contentious issue.

Also, given that the EU is a signatory of the AIHTS, which obliges EU countries to use only traps that meet AIHTS standards for a given list of fur-bearing species, eg stoats (*Erminea nivalis*), it might be timely to introduce a similar VTA scheme across Europe, such that lethal traps for all species can be considered for equivalent welfare accreditation.

References

Atkinson RPD, Macdonald DW and Johnson PJ 1994 The status of the European mole *Talpa europea* L as an agricultural pest and its management. *Mammal Review* 24(2): 73-90. https://doi.org/10.1111/j.1365-2907.1994.tb00136.x

Baker SE, Ellwood SA, Johnson PJ and Macdonald DW 2016 Moles and mole control on British farms, amenities and gardens after strychnine withdrawal. *Animals* 6(6): 39. https://doi.org/10.3390/ani6060039

Baker SE, Ellwood SA, Tagarielli VL and Macdonald DW 2012 Mechanical performance of rat, mouse and mole spring traps, and possible implications for welfare performance. *PLoS ONE* 7(6): e39334. https://doi.org/10.1371/journal.pone.0039334

Baker SE, Shaw RF, Atkinson RPD, West P and Macdonald DW 2015 Potential welfare impacts of kill-trapping European moles (*Talpa europaea*) using scissor traps and Duffus traps: a post-mortem examination study. *Animal Welfare* 24: 1-14. https://doi.org/10.7120/09627286.24.1.001

Dubois S, Fenwick N, Baker L, Baker S, Beausoleil N, Carter S, Cartwright B, Costa F, Draper C, Griffin J, Grogan A, Howald G, Jones B, Littin K, Lombard A, Mellor D, Ramp D, Ryan E, Schuppli C, Sharp T and Fraser D 2017 Consensus principles for ethical wildlife control. *Conservation Biology*, in press

ISO 1999 TC191. Animal (Mammal) Traps. Part 4: Methods for Testing Killing Trap Systems used on Land or Underwater. International Standard ISO/DIS 10990-4. International Organization for Standardization, Geneva, Switzerland Mason G and Littin K 2003 The humaneness of rodent pest control. Animal Welfare 12: 1-37

Mellor DJ, Patterson-Kane E and Stafford KJ 2009 The Sciences of Animal Welfare. Wiley-Blackwell: Oxford, UK

Natural England 2010 *The Animal Welfare Act 2006: What it Means for Wildlife; Technical Information Note TIN072.* Natural England: Sheffield, UK. http://webarchive.nationalarchives.gov.uk /20160930000001/http://publications.naturalengland.org.uk/publication/23021

Proulx G and Barrett M 1991 Evaluation of the Bionic trap to quickly kill mink (*Mustela vison*) in simulated natural environments. *Journal of Wildlife Diseases* 27(2): 276-280. https://doi.org/10.7589/0090-3558-27.2.276

Rudge AJB 1963 A study of mole-trapping. Proceedings of the Zoological Society of London 149: 330-334

Scott Henderson J 1951 Report of the Committee on Cruelty to Wild Animals. Home Office/Scottish Home Department, Cmd 8266, June 1951. Her Majesty's Stationery Office: London, UK

Talling JC and Inglis IR 2009 Improvements to trapping standards. DG ENV. http://citeseerx.ist.psu.edu/viewdoc/download? doi=10.1.1.306.7379&rep=rep1&type=pdf

The Law Commission 2012 Wildlife Law: A Consultation Paper. Her Majesty's Stationery Office: London, UK. http://www.lawcom.gov.uk/wp-content/uploads/2015/03/LCCP206 _Wildlife_law_consultation_paper_for_web.pdf