

Report on the use of handheld remote-controlled training devices (e-collars) in dog training

Scottish Animal Welfare Commission

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1. Introduction

The Scottish Animal Welfare Commission (SAWC) was established by the Scottish Animal Welfare Commission Regulations 2020, made under section 36 of the Animal Health and Welfare (Scotland) Act 2006. The function of providing advice on the protection of wildlife under section 23 of the Wildlife and Countryside Act 1981 has been assigned by Ministerial declaration.

Further information on the Commission, including reports and minutes of previous meetings, is published when available on the [SAWC web page](#).

SAWC's terms of reference are to focus on the welfare of wild and companion animals in Scotland while also providing scientific and ethical advice to the Scottish Government. The Commission will only consider areas that are within the normal current remit of the UK Animal Welfare Committee and the UK Zoo Expert Committee where these relate to the overall responsibility to consider the welfare needs of sentient animals in all areas of Scottish Government policy or at the specific request of the Scottish Ministers. The Commission will not consider matters that are reserved to the UK Government, including the welfare of animals used in scientific procedures.

The Commission provides written reports and opinions to Scottish Ministers giving practical recommendations based on scientific evidence and ethical considerations on the welfare of sentient animals in Scotland, and the impact of policy on welfare.

The Scottish Animal Welfare Commission Dog Training Working Group was established at the March 2021 SAWC plenary meeting. The Working Group remit was to consider the matter of (aversive) training aids within the wider context of dog training and to make recommendations to Scottish Ministers on possible future legislation or guidance on dog training and dog training aids, as noted in Guidance on Dog Training Aids review, June 2021 ([Gov.scot, 2021](#)).

Regarding aversive training aids, the Commission decided that priority should be given to a review of the use of handheld remote-controlled static pulse devices (e-collars); this issue has been the subject of previous scrutiny by the UK government and the devolved governments in Scotland and Wales. It was agreed that in addition to making recommendations regarding training methods and aids, the Working Group would consider the current state of dog training in Scotland.

2. Definitions

- a. E-collars may be defined as devices designed for use in the training of dogs, cats and other companion animal species, which involve the application of an electric current to the skin to aid the training process (CAWC, 2012). Alternative names for the devices include 'handheld remote controlled dog training devices', 'shock collar', or 'electric pulse training aid (EPTA)'.

Additional types of electronic collars include bark- or noise-activated control collars; and those used in containment systems. Additional types of stimuli used

in electronic collars include noise, vibration and noxious sprays. These devices are not discussed further.

- b. The four Quadrants of Operant conditioning. Operant conditioning is a learning process, where behaviour is modified through the association of stimuli with punishment or reinforcement. The following definitions are widely used in the dog training and behaviour literature.
 - i. Positive punishment – Adding an aversive stimulus, such as shouting, applying electric shock, or tugging on a lead when an undesired behaviour is performed, thus decreasing the likelihood of an undesired behaviour.
 - ii. Negative reinforcement – Ending an aversive stimulus when the desired behaviour is performed, for example, a sustained sound or shock that is stopped when the animal performs the desired behaviour, thus increasing the likelihood of a desired behaviour.
 - iii. Positive reinforcement – Adding good things/rewards when the desired behaviour is performed, thus increasing the likelihood of a desired behaviour.
 - iv. Negative punishment – Ending good things /rewards when undesired behaviour is performed, such as stopping walking when a dog pulls on the lead, thus decreasing the likelihood of an undesired behaviour.

Opinions differ on whether e-collars act solely as positive punishment or may also be regarded as negative reinforcement devices, depending on the timing of the aversive stimulus relative to the behaviour.

c. Training Methods

- i. Reward-based methods are defined as those of positive reinforcement and negative punishment. Such methods may include giving praise, food and/or play rewards when the dog performs a desired behaviour.
- ii. Aversive training methods are defined as those of positive punishment and negative reinforcement. Such methods may include shouting, tugging sharply on the lead, giving a painful electric stimulus (e-collar), and use of prong collars. The timing of the administration of electric shock relative to the observed behaviour may influence whether activation is considered positive punishment or negative reinforcement.

Methods that rely on positive punishment combined with negative reinforcement may be considered as being more traditional, or aversive, and those dependent on techniques that promote positive reinforcement plus negative punishment have been termed non-aversive, or humane (McBride, 2018).

3. Scope

To consider the animal welfare impact of the use of handheld remote-controlled static pulse device (e-collars) on dogs and make recommendations regarding possible future legislation or guidance in Scotland within the wider context of dog training services.

4. Background

Dog training in the UK

Whilst there is no universally applied terminology for those who train dogs, the main distinction is between dog trainers and dog behaviourists. Dog trainers primarily teach dogs to carry out specific tasks, such as recall and general obedience.

Trainers may apply behaviour modification practices to some limited extent, but it is generally dog behaviourists who work with dogs that display unwanted behaviours/behavioural problems. Such behaviours may include predation and aggression.

In practice the difference between the two types of practitioner may be indistinct. Whilst trainers modify behaviours when training a dog, it is generally accepted that behaviourists apply behaviour modification plans, and trainers apply training plans.

Various terms are used to describe those who provide dog behavioural or training services to the public. For example, the Animal Behaviour and Training Council (ABTC) website defines standards for roles such as Animal Trainer, Animal Training Instructor, Accredited Animal Behaviourist, Animal Behavioural Technician, Clinical Animal Behaviourist and Veterinary Behaviourist (ABTC 2021), see Table 1:

Animal Trainer	Works directly with an animal to train it to carry out required behaviours.	AT
Animal Training Instructor	Works with owner/handler and animal e.g., dog training classes.	ATI
Animal Behaviour Technician	Works with owner/handler and animal to prevent problem behaviours and to provide behavioural first aid.	ABT
Animal Behaviourist/Clinical Animal Behaviourist	Works with owner/handler and animal to address unwanted behaviours, including all types of undesirable, inappropriate, problematic, or dangerous behaviours, on veterinary referral.	ABB/CAB
Veterinary Behaviourist	Clinical Animal Behaviourist who is also a Veterinary Surgeon.	CB

Table 1. The table shows the definitions of the terms used for people who provide dog behavioural or training services to the public, as defined by the ABTC, source: <https://abtc.org.uk/owners/types-of-practitioners/>

In the UK there are several training paths available to aspirant dog trainers and behaviourists including: National Occupational Standards; ABTC Standards for Animal Trainer, Animal Training Instructor, Animal Behaviour Technician and Clinical Animal Behaviourist; Kennel Club Accredited Instructors, and the Association for the Study of Animal Behaviour (ASAB) Clinical Animal Behaviourist Certification.

There is no legal requirement for those who train dogs commercially to have received formal training or to undertake Continuing Professional Development in the subject, and many experienced dog trainers and dog behaviourists have no formal training.

The scale of the dog behaviourist and training industry has not been quantified. Although some practitioners (and organisations) are members of umbrella bodies that have Codes of Conduct and detailed practitioner standards, many are independent. As identified in the 2015 All-party Parliamentary Group for Animal Welfare (APGAW) Sub-Group for Dogs 'Dog strategy', it is not clear to members of the public how to access training and behaviourist advice. In the Dog strategy document, DEFRA were recommended urgently to "identify and endorse a suitable industry standard and independent regulatory body" for dog behaviourists and trainers (APGAW, 2015, p.10).

The Animal Behaviour and Training Council was formed in response to the call from the Companion Animal Welfare Council (CAWC) for the self-regulation of the dog training and behaviour therapy sector (ABTC, 2022).

Unwanted behaviour and veterinary assessment

Several unwanted behaviours, including aggression, fear reactions and inappropriate urination/defaecation can result from pathology that requires veterinary attention (Camps, 2019). In cases such as neuropathology, endocrine disease, and pain, behavioural changes may respond to prescribed medication, with or without behavioural adaptation. Therefore, because veterinary assessment may be required to identify whether a dog is suffering from a pathophysiological condition rather than a primary behavioural change, the role of veterinary surgeons in referral of a dog by an owner to a behaviourist requires clarification. Veterinary surgeons do not currently have a formal role or responsibility in the process that results in the evaluation and treatment by trainers or behaviourists of abnormal behaviour in dogs.

Furthermore, in circumstances where veterinary surgeons decide that it is appropriate to recommend the use of a trainer or behaviourist, the nature of their professional responsibility in making such a recommendation is unclear. In the case of referral to another member of the veterinary profession, the referring veterinary surgeon is required to satisfy themselves that the colleague, organisation or institution to whom they are referring the case, 'is competent to carry out the investigations or treatment involved.' (RCVS, 2022). Similarly, where a veterinary surgeon decides that it is appropriate to delegate a case to a physiotherapist, they 'should ensure, before delegation, that they are confident that the musculoskeletal therapist is appropriately qualified and competent; indicators can include membership of a voluntary register with associated standards of education and conduct, supported by a disciplinary process' (RCVS, 2022). While there is no

equivalent duty formally imposed on a veterinary surgeon recommending a behaviourist, a client may reasonably assume that any such recommendation is based on the veterinarian's professional judgement. Yet, in the absence of a regulatory framework for standards and competence in the dog behaviourist profession, it is unclear on what due diligence basis veterinarians can make appropriately informed recommendations for the benefit of clients.

Dog trainer and behaviourist methods and aids in Scotland

There is no formal public regulation of dog training or dog behaviourist activities in Scotland by Scottish Government (SG) or other statutory bodies. Regulation of other activities that impact animals have been prioritised by SG, for example in areas such as animal welfare establishments, dog breeding, and kennelling ([Gov.scot, 2021](#)). A Code of Practice has been published to assist those who own and manage dogs. This refers to 'pet care specialists', which are described as 'people who, through qualification or experience, can provide expert advice on welfare and some aspects of health for one or more types of pet animal. Examples are clinical animal behaviourists, veterinary nurses and dedicated welfare organisations'. (Gov.Scot, 2010). However, to equate the term animal behaviourist – clinical or otherwise – with that of a veterinary nurse is inappropriate. The latter practise within a legislative framework and are regulated by the Royal College of Veterinary Surgeons (Veterinary Surgeons Act 1966, as amended; RCVS (ND), *Code of Professional Conduct for Veterinary Nurses and Supporting Guidance*).

Whilst regulation regarding animal welfare generally does impact animal behaviour and training practices¹, there is no specific legislation that controls the provision of animal training and behaviourist services in Scotland or elsewhere in the UK.

Neither is there any legal control of e-collar use, supply, or possession in Scotland. Scottish Government guidance is that dog training should be conducted with the assistance of a qualified dog trainer, and that the most effective methods of dog training are reward-based (positive) training techniques. Further, training that includes unpleasant (aversive) techniques or physical punishment may cause unacceptable pain, suffering and distress ([Gov.scot, 2018](#)). With respect to training devices, the Scottish Government does not condone aversive devices/training aids, including electronic shock collars (e-collars), electronic anti-bark collars, electronic containment systems, or any other method used 'to inflict physical punishment or negative reinforcement.' ([Gov.scot, 2018](#), p.2).

Scottish public opinion and e-collars

Public opinion on the merits and demerits of e-collars was consulted by Scottish Government in both 2007 and 2015-16. In 2007 the Scottish Government issued a consultation paper on the sale, use, distribution, and possession of 'Electronic Training Aids' (i.e., including electronic shock collars (e-collars), sonic and spray collars). In 2015-16 it consulted on the potential controls or prohibition of electronic training aids, including e-collars, anti-bark collars, and boundary fences (again

¹ e.g., Animal Health and Welfare Act (Scotland) 2006, Animal Welfare (Electronic Collars) (Wales) Regulations 2010.

including shock, sonic and spray collars), in relation to both dogs and cats ([Gov.scot, 2016](#)). Respondents were evenly divided between those who supported, and those who opposed electronic training aids. Self-identified animal-care- and animal-welfare-focussed respondents tended to be opposed to the use of electronic training aids. Respondents self-identified as providing pet supplies, and owners of working dogs tended to be supportive of their use. The largest single category of respondents - pet owners - was relatively evenly divided on the issue ([Gov.scot, 2016](#)).

Scottish Government published, 'Guidance on Dog Training Aids' ([Gov.scot, 2018](#)), to fulfil a commitment made to the Scottish Parliament in January 2018 to issue guidance on electronic training aids under Section 38 of the Animal Health and Welfare (Scotland) Act 2006. The guidance states that causing unnecessary suffering using any type of aversive training aid, including electronic training aids, may be an offence under the Animal Health and Welfare (Scotland) Act 2006. That said, it is probably only in the most extreme circumstances that a court would be satisfied the offence had been committed, not least because the considerations, which are to be taken into account in determining if any suffering inflicted on an animal is unnecessary, include whether the conduct concerned was for a legitimate purpose, including benefitting the animal or protecting a person, property, or another animal. While the use of electronic training aids remains legal, it is assumed that a court would consider their (proper) use to be legitimate. To secure a conviction, the onus would be on the prosecution to demonstrate beyond reasonable doubt either that the degree of suffering caused to the animal was disproportionate to the purpose for which it was inflicted, or the use of the aid was inconsistent with that of a reasonably competent and humane person (Animal Health and Welfare (Scotland) Act 2006, s 19(4)).

The Scottish Government committed to review the effectiveness of the 2018 guidance after 12 months to consider the practical experience of Scottish enforcement bodies. Work was delayed during the COVID pandemic; and the report was published in June 2021 ([Gov.scot, 2021](#)).

The review confirmed what previous studies had found ([Gov.scot, 2018](#)): that two polar views exist. On one side, respondents believed that only reward-based training should be used and that aversive training techniques, including e-collars, should be banned, and on the other, that e-collars should be strictly regulated and used, where appropriate and with supervision, as one element of a mainly reward-based training programme. Those respondents holding 'either of the polar views' thought that the Guidance on Dog Training Aids ([Gov.scot, 2018](#), p.2) was of little use, although others believed that it was acceptable as it was. Those local authorities which responded to the call for evidence found the guidance useful on the rare occasion that they had to speak to dog owners about training aids. Public awareness of the guidance appears to have been very limited, and the authors noted that it was difficult to assess whether the guidance had had any impact on the casual use of aversive training aids. There do not appear to have been many welfare complaints involving aversive training aids in Scotland among those enforcement agencies which responded. Three of the nine reported complaints involving dog

training aids (there were 80 complaints reported over four years), none of which warranted written warning on investigation, or prosecution ([Gov.scot, 2021](#)).

UK Government

DEFRA conducted a consultation regarding ‘Electronic training collars for dogs and cats in England’ in 2018 (DEFRA, 2018). As a result of the consultation, DEFRA proposed to ban the use of hand-held remote-controlled e-collar devices under the authority of the Animal Welfare Act 2006. In 2019 The Electronic Collar Manufacturer’s AssociationTM (ECMA) challenged the lawfulness of this decision by way of judicial review. The claimant’s application was dismissed at first instance by the High Court and subsequently by the Court of Appeal, which held that the Secretary of State’s decision was not irrational in law and did not breach the appellant’s rights under the European Convention on Human Rights (*on the application of Electronic Collar Manufacturers Association and another*) v *Secretary of State for the Environment, Food and Rural Affairs* [2019] EWHC 2813 (Admin); [2021] EWCA Civ 666 (CA)). DEFRA reiterated its intention to ban e-collars in its Action Plan for Animal Welfare (DEFRA, 2021), ‘given their scope to harm cats and dogs’ (DEFRA, 2021, p 16). To date the policy has not been pursued and e-collars remain legal training aids in England.

Wales

Under the Animal Welfare (Electronic Collars) (Wales) Regulations 2010, it is prohibited to attach any type of e-collar using a static-pulse (shock) stimulus to a cat or dog or be responsible for a cat or dog to which an e-collar is attached. The sale of e-collars is not banned under this regulation. There has been one prosecution under the regulations – in 2010 a dog was found to be wearing an electronic collar activated by a containment fence and the owner was fined (BBC, 2011).

The ban in Wales has been challenged and was subject to judicial review at the instigation of the ECMA, which was unsuccessful (Sinclair, 2011). Despite this, a number of media reports continue to call on Welsh ministers to review the ban, largely due to the unsubstantiated assertion that the e-collar ban has caused an increase in sheep worrying/attacks in Wales; see further below). The Welsh Government is reported to have no plans to review the regulations (Dixon, 2022). In response to the reported increase in livestock attacks, the Farmer’s Union of Wales has advised the public to keep dogs on a lead when visiting the countryside (FUW, 2021).

Proponents vs. critics of e-collar use

A recent survey (PDSA, 2022) found that 86% of dog owners used training devices for their dogs, and 20% of owners have used aversive training devices²; of these, water pistol or spray were most widely used (7%), and prong collar and electric shock collars (e-collar) were least used (1%). An earlier survey (PDSA, 2019) found that 25% of owners reported aversive device use, and the PDSA noted that on extrapolation, aversive and negative training methods are used in two million dogs (PDSA, 2022).

² citronella collar, electric shock collar, vibrating collar, prong collar, choke chain, pet corrector spray, water pistol or spray, homemade rattle, or noise devices.

Proponents of e-collar use state that the devices may offer a complementary or alternative training method to positive reinforcement methods, and whilst opinions vary between proponents, many espouse the view that whilst abuse or misuse is a potential risk, e-collar use may also be effective with limited risk of harm. Some proponents oppose regulation, some support regulation (see stakeholder written responses, Appendix II).

Proponents for e-collars include the ECMA, the Association of Balanced Dog Trainers, the Scottish Countryside Alliance, and the Association of Responsible Dog Owners.

Critics of e-collars support a ban on their use. They argue that positive reinforcement methods are effective and non-harmful whereas aversive methods are unnecessary, no more effective than positive reinforcement methods, and carry a significant risk of adverse welfare. Critics of e-collars include organisations such as SSPCA, RSPCA, Dogs Trust, Kennel Club, the British Veterinary Association and British Small Animal Veterinary Association, the Animal Behaviour and Training Council, the Deaf Dog Network and the PDSA.

Predation

When e-collar use is discussed, debate frequently refers to their use in dogs at risk of chasing livestock and other animals – i.e., predation, also termed ‘predatory behaviour’, or ‘predatory aggression’. Other uses to which e-collars are put include obedience training, treatment of other forms of aggression, and in daily use to enhance compliance with previously taught owner instructions.

Predatory aggression is distinct to other forms - for example, pain-related aggression- in that it is motivated by the desire to capture, kill, and consume a species viewed as prey (Martin, 2022). The treatment and prevention of predatory behaviour is contentious. Some authors observe that because reward centres in the brain are activated by the behaviour ‘it is difficult to treat by systematic desensitization and counterconditioning techniques, and punishment does not extinguish this behaviour’ (Chavez, 2012, p.1), implying that other forms of control, such as lead exercise in the vicinity of livestock and secure containment, may play a significant role in preventing predation. Proponents of e-collar usage point to their success in prevention of predation using the device.

Livestock predation is a distressing and potentially costly behaviour. Allowing or being responsible for a dog that predaes livestock may result in statutory punishment. Keeping dogs under proper control, i.e., at heel and obeying commands (CrombieWilkinson, 2022), or on a lead and not allowing them to ‘worry’ livestock, is a requirement of the Scottish Outdoor Access Code (SOAC, 2018). An owner or person in charge of a dog that attacks or worries livestock commits an offence under the Control of Dogs (Protection of Livestock) Act 1953, as amended by the Dogs (Protection of Livestock) (Amendment) (Scotland) Act 2021. In this context, the term ‘worrying’ relates to a dog chasing livestock in such a way as may reasonably be expected to cause injury, suffering or abortion, or being loose in a field or enclosure containing sheep. By virtue of the 2021 Act, the maximum penalty

has been increased to a term of imprisonment for up to 12 months, or a fine of up to £40,000, or both, and the court may impose orders on the convicted person concerning the owning, keeping and responsibility for dogs. Under the Animals Act 1971, in certain circumstances³, a farmer or landowner has the right to shoot a dog found attacking or worrying their livestock, in order to protect the welfare of the livestock and their livelihood. Further offences may result under the Wildlife & Countryside Act 1981 through causing damage or disturbance to both protected species and other animals, e.g., badgers and wild birds.

Environmental management, or 'restrictive practices' (CAWC, 2012), such as lead exercise, secure fencing, etc., may enable control of dogs at risk of predatory behaviour and prevention of predation. Data to assess the impact of these methods, compared to methods of control such as training, have not been published in the scientific literature, but a police-led pilot study has produced encouraging results (see below).

In Wales, where e-collar use is banned, statistics regarding cases of livestock worrying have been used both to argue for greater penalties, and to defend the use of e-collars.

Recent press reports have linked the Welsh Government ban on e-collar sales to increased livestock deaths (Sunday Telegraph, 2022). The number of recorded livestock worrying cases between 01 September 2013 to 31 August 2017 was 449, (National Police Chiefs Council, 2017), an average of 112 attacks/year, and in 2020 was 72, a slight reduction (North Wales Police, 2022). The Home Office does not require the police to formally record livestock attacks, and so there is no national uniformly recorded statistical picture of the true scale and economic loss to the rural community and of the impact on the UK's food supply.

In a trial period between 01 March and 31 August 2017 five police forces (four in England, and the North Wales Police) conducted a trial that aimed to:

- i. Establish a better understanding of the extent of the livestock-worrying problem.
- ii. Improve education for police investigations and force control rooms and improve the recording of this crime.
- iii. Improve education for farmers to explain legislation, e.g., shooting of dogs.
- iv. Raise local and national public awareness through traditional and social media.
- v. Enhance partnership working with key stakeholders including National Sheep Association, Sheep Watch UK and Animal Health and Welfare Board for England.

³ Circumstances included in the Animals Act 1971 include if the dog is worrying or is about to worry the livestock and there are no other reasonable means of ending or preventing the worrying, or the dog has been worrying livestock, has not left the vicinity and is not under the control of any person and there are no practicable means of ascertaining to whom it belongs.

Following the trial, reported incidents of livestock worrying in the Welsh area were significantly reduced when compared to the same period in the previous four years, i.e., 45 cases (National Police Chiefs Council, 2017).

The National Sheep Association (NSA) has said that ‘while in Scotland the legislation has been strengthened, NSA feels there is an increased need for dog owner education to reinforce the unpredictable behaviour of even a well-trained dog’ (National Sheep Association, 2022). Other livestock-sector bodies have called for continued access to e-collars as an aid to prevent predation, but a recent statement by NFU Mutual regarding livestock attacks advocates that dogs should be kept on leads and does not mention the use of e-collars (NFU Mutual, 2023).

In Scotland, livestock predation has fluctuated, but the 10-year trend has seen significant increases. The table below shows the number of offences under the Dogs (Protection of Livestock) Act 1953, recorded by Police Scotland in each year from 2008-09 to 2017-18:

Year	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17	2017/ 18
Livestock offences recorded	115	95	122	133	125	98	109	174	175	170

Table 2: Number of offences of livestock worrying recorded by Police Scotland, during the years 2008-09 to 2017-18. Source: Scottish Government.

There was a considerable increase in reporting between 2014-15 and 2015-16, which has been maintained in subsequent years. This may partly reflect the impact of efforts to raise awareness of livestock worrying, leading to an increase in reporting. Further, it may be noted that there was a rise in the number of prosecutions and convictions in 2015-16 and 2016-17, which is not reflected in the most recent year (2017-18), despite the overall number of recorded offences having remained at an approximately similar level. It is not clear why this apparent fall in successful prosecutions took place in 2017-18.

Relinquishment and euthanasia of dogs due to unwanted behaviour

Unwanted behaviour in dogs has a significant impact on owners and dogs, but application of reward-based training can reduce this impact.

Dogs' behavioural problems are a leading cause for relinquishment of dogs to dog shelters, and relinquishment can exacerbate the unwanted behaviour (Powdrill-Wells, 2021). Unwanted dog behaviour can adversely affect the human-animal bond, upsetting daily activities and cause owner frustration (Verga, 2009). In both the UK and Australia, the most common cause of death in young dogs (< 3-years old)⁴ was euthanasia due to unwanted behaviour (Yu, 2021). When owners were

⁴ Dog adolescence falls within this age bracket during which time behaviour can regress, even if previous response to training has been successful.

offered behavioural advice at the point of relinquishment, 24.4% accepted the offer (Powdrill-Wells, 2021), and Vandergraaf (2017) found that the application of reward-based training improved dogs' behaviour, increased the likelihood of being adopted, and decreased the likelihood of euthanasia.

Section Summary

Currently, there is no legal requirement for those who train dogs to complete formal training, or continuing professional development, and many experienced dog trainers and dog behaviourists have no formal training. Scottish Government guidance is that dog training should be conducted with the assistance of a qualified dog trainer. However, there is no universally applied industry standard of competence or conduct for dog trainers or behaviourists.

Although the use of aversive training techniques, such as e-collars, is not condoned by the Scottish Government, in Scotland there is no legal control of e-collar use, supply or possession, nor is there reliable data on how many e-collars are currently in use. While the uses for e-collars include daily use to reinforce learned behaviour, and treatment of many unwanted behaviours, the application of the device to prevent livestock predation is commonly cited by those in favour of their use.

In Wales, where e-collar use is banned, statistics regarding cases of livestock worrying have been used both to argue for greater penalties, and to defend the use of e-collars. A trial by Welsh police to reduce sheep predation by dogs through stakeholder education was successful.

5. Evidence Gathered

In keeping with SAWC ways of working⁵, the Dog Training Working Group followed a three-step approach.

- i. Gather written evidence from stakeholders (proponents and critics of e-collar use).
- ii. Gather verbal evidence at stakeholder meetings.
- iii. Conduct a literature review.

Stakeholders

A list of the organisations and individuals engaged is at Appendix I. Stakeholders were selected to achieve a balance of views from both proponents and critics of e-collar use, and because they had had previous contact with Scottish Government consultations on the topic.

Written evidence

In line with SAWC ways of working, a call for written evidence was made through a six-part questionnaire that referenced some of the Working Group's areas of concern. In line with SAWC ways of working, a call for written evidence was made through a six-part questionnaire that referenced some of the Working Group's areas

⁵ [Scottish Animal Welfare Commission - Ways of Working](#)

of concern. This was emailed to organisations and individuals on 02 December 2021 and results were compiled. They can be found on pages 16-20 and in Appendix II⁶.

The questions posed by SAWC and the responses are briefly summarised and discussed below. The questions were intended to explore the rationale and methods behind e-collar use, as these are not widely discussed in the published literature. This resulted in those stakeholders that are critical of e-collar use summarising their opposition to use of the aids without elaborating on their use. Proponents of e-collar use provided answers to the questionnaire and those responses form the basis of the Q&A summary below.

Written evidence provided in response to the questionnaire can be read in full at Appendix II.

Written responses from critics of e-collar use

British Veterinary Association (BVA)

BVA provided a policy statement 'BVA and BSAVA⁷ policy position on the use of aversive training devices in dogs and cats' (Appendix III), and a peer-reviewed paper 'Efficacy of Dog Training with and without Remote Electronic Collars vs. a Focus on Positive Reinforcement' (China et al. 2020). In summary, the BVA:

- support and recommend positive training methods as the most effective training intervention for companion animals in terms of health, welfare, and behavioural outcomes.
- believe that aversive training devices, including electric collars, used as a means of punishing, or controlling behaviour of companion animals are open to potential abuse and incorrect use, and have the potential to cause welfare and training problems.
- call for a complete ban on the sale and use of electric-pulse training collars used to deliver electric shocks in dogs.
- believe that electric-pulse collars raise several welfare issues, such as the difficulty in accurately judging the level of electric pulse to apply to a dog or cat without causing unnecessary suffering.

The paper submitted by the BVA (China et al. 2020) concludes that training with positive reinforcement was found to be more effective at addressing the study target behaviour as well as general obedience training. Further, the authors of the paper state that positive-reinforcement training poses fewer risks to dog welfare and quality of the human-dog relationship than e-collar use⁸.

Animal Behaviour & Training Council (ABTC)

⁶ This line was amended from the original version, which incorrectly suggested that the questionnaire results were previously published separately on the SAWC web page.

⁷ British Small Animal Veterinary Association

⁸ SAWC acknowledges that the China (2020) paper referred to by the BVA has flaws in the experimental design. These are discussed in more detail in subsequent sections of this report.

The ABTC's code of conduct 'prohibits the use of e-collars or any device that emits an aversive stimulus'. As a result, ABTC practitioners do not use e-collars, but rely on rewards-based training. ABTC asserts that the risk in using (such) 'punitive devices' is that they will aggravate the target behaviour, thus increasing the risk to all concerned. Good results can be achieved without e-collars.

The Deaf Dog Network (DDN)

The Deaf Dog Network does not support any form of physical punishment in the training of dogs. The DDN does not endorse training methods using tools such as check/chains, prong collars, squirting water, shock collars and the like, but approves and supports modern, science-based force and fear-free training methods.

Questionnaire responses from proponents of e-collar use.

The commentaries below summarise respondents' key points. Full responses can be found at Appendix II.

Q1. What behavioural challenges are e-collars used for? In your experience are cases referred by veterinary surgeons? What proportion?

A. The inclusion or not of an e-collar in training requires evaluation of the animal and its behaviour. Candidate dogs may already have been exposed to other training methods without success. The devices may be used to treat challenging behaviours, such as aggression, predation, off-lead control and pulling on the leash. In some instances, e-collars are used more routinely, for example for training and routine communication, including with deaf dogs, or to enhance response to learned commands, and aim to teach dogs confidence, relaxation, and better communication. E-collar training has also been used to assist elderly, infirm or disabled owners, as well as the physically able, to control their dogs. E-collars may also be used to train basic obedience, development of leash pressure, trick training, and agility.

Some proponents of e-collars believe that vets are not qualified to advise on dog behavioural matters, or the inclusion of an e-collar in training, and that 'For behavioural issues where welfare is concerned then you would need to consult a behaviourist as opposed to a vet. Vets have no knowledge or expertise when it comes to remote collars and dog training in general.'

Occasionally, behavioural referrals are received by e-collar-using dog trainers from vets, but not explicitly for e-collar use.

Q2. What is the range of training methods used before an e-collar is used? Is this always the process?

A. ECMA recommends that where possible a suitable, competent supervisor should be consulted prior to e-collar inclusion in a training programme to increase success rates and minimise the potential for improper use.

It is not possible to generalise about the methods used as there is much variability between e-collar users. However, an assessment of cases may be undertaken and may be 'based upon consideration of multiple factors', and is not limited simply to 'what methods have been used before'. Such assessment may or may not result in use of an e-collar.

An e-collar can be used in any type of training to increase understanding between owner and dog, and is 'layered on top of a command that a dog has already been taught to full proof that command'. E-collars have been used in dogs, which have previously been trained by positive reinforcement methods, but which were not effective.

Remote trainers (e-collars) allow pets and owners the freedom to go on walks safely, without a lead. Following a period of training, the e-collar 'allows the owner to reach out to the dog while it is in full flight and break its concentration', 'Nothing else exists that is capable of providing clear, instant, and consistent communication to the dog through associating unpleasant consequences with dangerous behaviours.'

Q3. What risk does a dog pose and / or what is the risk to the dog or others if an e-collar isn't used?

A. The ECMA response summarises the risks listed by the respondents:

'Risk potential is determined in accordance with social expectations, legal obligations, and the individual animal/context. It is not possible to provide a single, cover-all answer to the question asked. Typically, risks to the individual dog and other people or animals includes:

- Death of healthy dogs having been shot by a livestock keeper.
- Death of healthy dogs by a veterinarian following livestock worrying.
- Death of healthy dogs following a court destruction order under various laws, such as S3 offences under the DDA 1991, the Protection of Livestock Act 1953 and S2 Dogs Act 1871.
- Avoidable death or serious injury to livestock animals, companion animals (cats / dogs) or wildlife resulting from unresolved chasing/failing to come when called using reward-based training.
- Substantial loss of income to livestock keepers.
- Veterinary destruction of healthy dogs for unclassified 'undesirable behaviour' which has proven intractable following reward-based training.
- Dogs being surrendered / abandoned / rehomed due to resolvable behaviours such as chasing other animals, people or vehicles, reactivity / lunging on lead, failing to come when called, excessive barking or over-excitability due to prolonged lead confinement.
- Lifelong confinement to leads and inadequate exercise.

- Owner prosecution under animal control laws.'

Further comment referred to 'enabling access to quality electronic collars under supervised tuition encourages owners to come forward and self-refer, rather than remain silent and leave the risk of further attacks unresolved.'

Q4. Describe the range of equipment used, including make and model. Describe how it is used, including frequency of use, duration etc.

A. ECMA note that: 'remote trainers' (i.e., e-collars), enable dogs to go on walks safely without a lead. Following a period of training during which the dog is taught to become fluent in understanding the behaviour required to remove and avoid the stimulation from the collar, the remote trainer allows the owner to reach out to the dog while it is in full flight and break into its concentration. ECMA add that, nothing else exists that can provide clear, instant, and consistent communication to the dog through associating unpleasant consequences with dangerous behaviours.

Several brands of e-collar are referenced by stakeholders, Ecollar Technologies, Dogtra, Garmin, Sport Dog, Dogtra Arc, and Chameleon, not all of which are ECMA products. It was reported that, in general, the mini educator from Ecollar Technologies tends to be the best remote collar to use for pet dog training. Owners may learn how to use the e-collar by reference to YouTube videos.

Patricia Bowerbank gave a comprehensive example of how e-collars are used, which, over a 2-week period, broadly split into:

- i. 'Tuning' dog in, or familiarising dogs to the sensation of the e-collar, walking on a 10ft lead giving occasional low-level (level 2 of 100 potential stimulus settings, with 100 being the maximum shock stimulus) exposure to the electric stimulus. This exercise would last around 2 minutes then rest, let the dog absorb for around 10 to 20 minutes then repeat, repeat about 3 times.
- ii. Practice recall on 30ft long line using low-level stimulus.
- iii. Basic obedience work and 'layering' with the level 2 on the e-collar. Practice until 'proofed'.
- iv. Remove verbal and other stimuli and use only the e-collar stimulus.

The level of the stimulus is adjustable and can be set to a minimum level to suit the animal's nature and the situation.

Q5. How do you assess that e-collar use is necessary?

A. ECMA advises that use of e-collars should complement pre-existing training efforts, with a focus on reinforcing desired behaviours. Working with a competent supervisor greatly increases success rates, whilst minimising the potential for improper use.

Jamie Penrith advised that e-collar users must appreciate breed (traits), heritage, individual learning history, owner requirements and capabilities, choice of equipment, the context/s in which the behaviour presents and, more importantly, the probability of inclusion [of an e-collar in a training programme] improving the existing situation.

Patricia Bowerbank states that [the need for e-collar use] depends on the issue or training need. If the owner wants to stop a critical /risky behaviour that they are unable to with the leash, plethora of other tools, training, education, exercises listed above, the e collar is an option.

Q6. On what proportion of dogs that you work with are e-collars used? How many dogs do you work with annually?

A. Respondents use e-collars on approximately 20-50% of dogs, and with approximately 250-1500 dogs/year.

Additional comments / covering notes

ABTC

'It is our strongly held view that there can be no justification for subjecting dogs (or any animals) to unnecessary pain and / or stress in order to modify their behaviour. Suitably educated and assessed practitioners will only employ more reliable, humane methods to achieve more dependable results.

Any training device that works on the basis of inflicting an aversive stimulus on the dog for not carrying out the handler's wishes and / or until they exhibit acceptable behaviour compromises the animal's welfare, subverts the human / animal bond, is unethical and illegal under the terms of the Animal Health and Welfare (Scotland) Act 2006.'

Lez Graham

'Although I don't use a 'shock' collar I would hate to see them banned. There are a great many trainers that can use them with finesse and incorporate them as part of a training protocol rather than them just being placed on the dog and the dog punished for misdemeanour; these trainers are helping owners with their wayward dogs enjoy freedom on walks whilst keeping dog and other animals safe. As such I would urge instead of banning them from public sales, licencing them to trainers that are conversant in conditioning them effectively.'

Roddy Kirk

'We recognise both the efficacy of the tool and the possibility of misuse. Therefore, value the opportunity to be involved in the discussion around sensible legislation to minimise misuse. In a climate where "unwanted behaviour" is one of the primary causes for the euthanasia of dogs any tool which has a proven track record of stopping such behaviours is an important factor in stopping the need for such drastic

action, not only for the welfare of the dogs themselves but also for the owners whose lives are deeply affected by trying to manage them.'

Jamie Penrith

'In closing, I would like to repeat my offer to meet with the SAWC in order to answer and clarify any and all points raised and to provide further information as required / requested. I am regarded a national lead figure on the responsible consideration / inclusion of electronic training collars for dogs, having studied the topic extensively from both theoretical and applied perspectives.'

Deaf Dog Network

'Underpinning the ethos of the group is this statement: The Deaf Dog Network does not support any form of physical punishment in the training of dogs. We do not endorse training methods using tools such as check / chains, prong collars, squirting water, shock collars and the like. We approve and support modern, science-based force and fear free training methods.'

Section Summary

In discussion, both stakeholders that support and those that oppose the use of e-collars acknowledge the risk of misuse and abuse, and the resultant dog welfare harm inherent to the devices. ECMA stipulates minimum requirements for its products, but there are e-collar brands currently in use that are not regulated by ECMA and therefore have no specific quality or electrical output requirements or limitations.

Proponents of e-collar use support their application in various training situations, including to prevent and treat livestock predation, routine use to enhance obedience training, and treatment of other unwanted behaviours and use on deaf dogs. They may apply both positive reward-based techniques, and e-collar use to the same dog, and advocate that better results may be achieved by those experienced in e-collar use.

Stakeholder meeting

The SAWC Dog Training Working Group, SG representatives and stakeholders met at the Science & Advice for Scottish Agriculture (SASA) building, Edinburgh on 14 April 2022. A summary of the evidence presented is given below. Attendees are listed at Appendix I; initials in parenthesis in this report refer to stakeholders' names. An outdoor session at the start of day enabled the Working Group to observe dogs wearing e-collars and experience e-collar use in trained dogs in close proximity to their trainers. Three dogs, including one deaf dog, came to heel promptly with low-level shock stimulus and exhibited no outward sign of discomfort. The group was able to examine the e-collars and their control handsets.

During the meeting, both proponents and critics of e-collar use observed that their methods alone promote animal welfare.

Morning session summary

During this session the SAWC working group met proponents of e-collar use. The opinions below reflect the views expressed at the meeting by those individuals, or when in [parentheses], those expressed by SAWC members.

A video of sheep being predated and dogs in training for predation deterrence was shown by JP. Proponents of e-collar use argue that in Wales there has been a significant increase in sheep worrying since the use of e-collars in cats and dogs was banned in 2010, and state that livestock worrying by dogs is a greater animal welfare concern than the potential for misuse of an electronic training collar, which when used correctly, instils a lasting and immediate avoidance of the livestock by the dog. Further, they state that prohibition of e-collars may encourage owners to revert to other options, which are cruder and present their own animal welfare issues. The Association of Responsible Dog Owners advocate keeping dogs on a lead when near livestock, the training of dogs to prevent predation, and after an episode of predation the use of methods, including positive reinforcement and use of e-collars in training. One justification for e-collar use is that when lead restraint is used (either routinely or to prevent predation), a large dog can cause injury to its owner when it attempts to run away, particularly if the owner is frail or weak. Anti-predation training may be used to avoid this scenario.

E-collar users state that e-collars 'can lead to negative welfare states for some dogs', but that the welfare impact of not using e-collars is greater.

The technical aspects of e-collar use were discussed. The setting (i.e., the level of shock delivered by an e-collar to the dog) used for an aversive/startling stimulus may be 65-75 out of 100, or at the maximum (i.e., 100), but the stated objective is less about the amount of pain delivered, but more the 'startling' effect, which the dog then associates with the livestock. For more routine training on an e-collar with settings from zero to 100, a setting of 2-5 may be used. E-collars with gradations up to 100 may not deliver more shock compared to those with fewer settings, but the smaller gradations may provide finer control. There is significant breed and individual variation in the level of stimulus/shock required. Minimum and maximum electric

output levels are specified in ECMA standards for the aids, but cheaper, non-ECMA-compatible collars may exceed those levels. In Australia, where some use is licensed, ECMA-approved collars are used and comply with the ECMA-derived standards.

A paper by Elliffe, critical of China et al. (2020), was circulated prior to meeting by JP (Elliffe, 2020). The author states that due to flaws in the study, it is not possible to determine whether e-collars are less effective than positive reinforcement methods and concludes that using e-collars as negative reinforcement is problematic, and that they are more suited to positive punishment in training. [The author states that e-collars are reliable in reducing predatory behaviour in dogs, although the China et al. (2020) paper does not address this issue, but merely refers to e-collar manufacturers' claims that the aids may suppress such behaviour].

In discussion regarding whether control or regulation of e-collars was required, some e-collar users do not seek a ban or any controls, but believe that education of owners and other stakeholders is the key to better use and understanding of e-collars. Other users believe that regulation would allow e-collar use to be more openly promoted, discussed, and understood.

Proponents question whether, if regulation controlling e-collar usage was implemented, all usage would be controlled and observe that whilst discussion tends to focus on anti-predation training, '90% of the time' e-collar use is not aversive / punishing and observe that e-collars produce such a positive outcome that they should be used routinely (RK).

ECMA advised that the operating model used in Victoria State, Australia is an exemplar of how regulated use can be applied.

Critics of e-collar usage observe that regulation would be hard to enforce, but a regulatory model whereby chosen trainers have specific equipment, which they retain at the end of the training period, would be easier to regulate. [The Scottish SPCA get few complaints about e-collars, but this may be because users of e-collars are not witnessed, as they use them in the countryside. Furthermore, remote-control e-collars, anti-bark collars, and containment collars appear similar, and an observer cannot readily discern which type, regulated or not, is being worn by the dog].

Compared to scenarios where e-collars are used on daily basis, when applied for anti-predation training, their use is for a limited period, not a continued tool – 'it's a tool, not a crutch' (JP). For anti-predation training, clients are encouraged not be reliant on the collars, but it takes time to train the dog. However, periodic reinforcement training is required. Owners buy a specific product recommended by the trainer and once clients have started the training process, they usually retain the e-collar.

Improper use is a recognised risk with e-collars, for example, through not using the collar for the use it was intended, or out of anger, or anything ‘that causes unnecessary pain or suffering’ (AC).

Afternoon session summary

In this session SAWC met critics of e-collar use. The opinions below reflect the opinions of this group; those comments in [parentheses] reflect those of SAWC members.

The Animal Behaviour & Training Council was formed in 2010, following a report published in 2008 by CAWC that concluded that regulation of trainers and behaviourists was highly desirable and would have benefits for animal welfare (DM). Voluntary self-regulation of the sector, and assessment of individuals is now conducted. ABTC would not agree to use of electronic devices, due to animal welfare, preservation of owner-animal bond, lack of long-term viability of e-collar results as they are based on positive punishment and not a desirable way of training any animal and so those that use them would not qualify for use of them. ABTC would not deem it appropriate for e-collar users to train themselves.

ABTC does not believe that use of e-collars should be regarded with the same utilitarian Harm-Benefit Analysis as, e.g., surgical procedures carried out under the Veterinary Surgeons Act, i.e., procedures that benefit animal welfare that are carried out by select professionals, but cause pain. Rather, owners should be educated in the patient application of positive reinforcement methods, and trainers, behaviourists and others should encourage responsible training methods, rather than ‘abrogating the responsibility by using e-collars’ (DM). Education of owners for responsible dog ownership is needed. People want a quick fix for training their dogs, and e-collars are used for some people, who ‘don’t want to put the groundwork in’ (DM). This quick gratification, through e-collar use for training dogs, is not to representative of progressive society that we want to be part of.

Section summary

E-collars have been used by trainers to treat dogs that are at risk of, or that have previously exhibited, livestock predation. Although often e-collar training to prevent livestock predation is initially performed by, or under direct supervision of a trainer, we were concerned regarding the continued use of e-collars by owners when unsupervised. Regulation of e-collar use is currently in place in some jurisdictions, which allows for their use under certain stipulations.

E-collar users state that e-collars ‘can lead to negative welfare states for some dogs’, but that the welfare impact of not using e-collars is greater. E-collar use is difficult to witness, and remote control e-collars, anti-bark collars, and containment collars appear similar - an observer cannot readily discern which type of collar is being worn by a dog, nor whether it is currently in use.

ECMA advised that the operating model used in Victoria State, Australia is an exemplar of how regulated use can be applied.

Literature review

High-quality research regarding the beneficial or adverse effects of e-collar use is limited but growing. Most of the research evidence relating to e-collars falls into the categories of background information, anecdote, expert opinion, and questionnaire responses. The evidence resulting from higher quality research, such as observational studies, comparative studies, and meta studies, is more limited. Questionnaire data from users of e-collars provide mixed results.

A significant weakness of the available literature is that studies do not compare the efficacy of available techniques, e.g., in the case of predatory behaviour, comparing reward-based training vs. e-collar training vs. environmental management.

A further weakness is that where e-collar-based schemes are currently in use, such as snake or kiwi, *Apteryx* spp., predation, no field evidence is available to measure the efficacy of the regimen in protection of dogs, or prey species.

E-collar devices

ECMA is the sole industry body to publish technical requirements for electronic pet training and containment collars (ECMA, 2012b). These are a voluntary standard adhered to by select manufacturers. The standards include specifications for unit energy output, output current, and peak current output. Non-ECMA-compliant versions of e-collars that can be purchased online may not have safety mechanisms, such as maximum output controls, or guidance on usage. Although some non-ECMA manufacturers may produce e-collars to ECMA-equivalent specifications, the overall lack of technical requirements for non-ECMA e-collars may present a greater welfare risk to dogs trained with such tools.

The strength of the electric stimulus produced by an e-collar can vary between models and brands of device, even when used on the same strength setting (Lines et al., 2013). The electrical resistance of a dog's skin and therefore the shock delivered can vary significantly due to factors, such as density of the hair overlaying the skin or whether the skin is wet or dry (CAWC, 2012). It has been reported that e-collars generally deliver stimuli of similar energy when the resistance is varied, but it is not known whether the perceived stimulus strength to the dog is unchanged (Lines et al., 2013).

The number, age and quality of e-collars in circulation is not known, but in one study, 170 types of e-collar were available for purchase online (AW1402, 2013), and it is estimated that between 300,000 (in England) and 560,000 (in the UK) devices are believed to be in use (Blackwell et al, 2012; Pickwick, 2014). It is not known how many e-collars ECMA members sell annually, nor the specification of all available e-collars, and it is therefore not possible to know the volume, and proportion of ECMA-compliant and non-compliant e-collars in circulation. It is reasonable to assume that a number of non-compliant collars are in circulation, given that in our stakeholder discussions, these were being used by subject matter experts.

In its Code of Practice ECMA advises that 'all training and use of electronic collars must be done either in accordance with ECMA member's guidelines or under the close supervision of a qualified dog trainer' (ECMA, 2012a, p4). The ECMA training document describes the general usages of e-collar systems both for problem behaviours, such as chasing/predation, and for basic obedience. Further they advise that collars should not be used for certain categories of dog; dogs less than six months of age, pregnant or nursing bitches, dogs that cannot respond appropriately due to injury, illness, or age, dogs with aggressive tendencies, and dogs with certain anxiety-related disorders, such as separation anxiety (Radio Systems Corporation, 2011; ECMA, 2012a, p.4).

Purposes for which e-collars are used

The methods applied in the use of e-collars in dog training vary considerably within the community of dog trainers. There are no peer-reviewed data on how many trainers recommend the use of e-collars, or how they are used (e.g., 'communication' tool vs. positive punishment), but survey data from 2012 reported that the main reason for e-collar use was to prevent dogs from chasing livestock, or wildlife, and to improve recall (Blackwell et al., 2012).

General Obedience

Some trainers describe using e-collars at low settings as a 'communication tool' as a cue to perform a behaviour, for example, to come back to the owner to get a reinforcer / reward. Dog trainer Roddy Kirk explained in his written response to SAWC that 'most commonly a remote collar is used to communicate with the dog at a distance from their owner. The remote collar guarantees clear and concise communication even with real life distractions.' (Appendix II, Question 1). Katz observes that by using e-collars, dogs may be kept under control at a distance from their owners (Katz, 2010). A study by China et al. (2020) concluded that training with an e-collar did not provide any significant benefit over positive reinforcement when training a 'come' and 'sit' command. In one self-selected online survey, 92% of contributors stated that electronic training aids 'resolved their problem', and 99% of respondents 'state that there were no negative effects'. Respondents used electronic training aids to address a number of behavioural issues, including predatory behaviour, failure to come when called, and off-lead reliability (ARDO, 2022).

Overall the published evidence of e-collar use for 'general obedience' is limited, with studies such as China et al. (2020), omitting key details such as the shock regimen used during training. Therefore, the evidence relating to this type of use is largely anecdotal.

Deaf dogs

Whilst advocated for use by some trainers, for example, in his written response to SAWC, Dog Trainer Roddy Kirk states that 'A remote collar can be used for a variety of issues, from a deaf dog to an aggressive dog and everything in between' (See Appendix II, Question 1), another stakeholder, The Deaf Dog Network, is critical of the use of e-collars in deaf dogs.

Prevention of predatory behaviour

Predatory behaviour is mostly genetically influenced, where dogs chase other animals, which can lead to injury or fatality for the animals concerned (Miklósi, 2014). Attacks on sheep and other livestock by dogs is a worldwide concern⁹. Work commissioned by the Scottish Government in 2019 evidenced that 14% of sheep farmers reported that dogs had attacked or chased their sheep in the previous 12 months, and estimated that the total number of incidents of dogs, chasing or attacking sheep in Scotland in the period 1 May 2018 to 30 April 2019, was around 7,000, with the true figure likely to be within the range of around 4,500 to 10,000 ([Gov.scot, 2019](#)).

There is some evidence in the published literature that aversive training, using an e-collar, can be effective in preventing predatory behaviour in dogs under specific circumstances. For example, training dogs to avoid taxidermy kiwis in New Zealand¹⁰ (Dale et al., 2017, Dale et al., 2013), reducing the probability of sheep attacks in Norway (Christiansen et al., 2001) and approaches to sheep in the UK (Cooper et al., 2014). Authors have remarked that using this approach to control predatory behaviour requires good timing on behalf of the trainer/handler. Poor association between the stimulus and cue can be ineffective at changing behaviour (Hiby et al., 2004), has negative welfare consequences (Schalke et al., 2007), and there is an increased risk of fearful and aggressive responses by the dog (Polsky, 1994, Christiansen et al., 2001).

Breeds may respond variably to e-collar-based sheep aversive training, with Elkhounds requiring more electric shocks in one study (Christiansen, 2001), and Alaskan Huskies not responding readily to the treatment (Hansen, 1997). These authors did not compare the efficacy of e-collars to other methods.

Howell and Bennett (2020) surveyed and interviewed dog training and behaviour experts, and stated that in relation to dogs with a history of predatory behaviour, experts who used only positive, reward-based techniques were 'typically (but not exclusively) more pessimistic about preventing predatory behaviour than experts who incorporate both aversive and reward-based methods into their training practices'. However, experts concluded that effectively managing a dog's environment, such that it never has an opportunity to engage in predatory behaviour, is the best way to prevent the behaviour (Howell and Bennett, 2020).

E-collar devices have been tested on predatory coyotes, *Canis latrans*, and wolves, *C. lupus*. In coyotes, maximal-strength electric shocks delivered by observers was found to reduce the majority of attacks on enclosed lambs – and the use of e-collars 'would likely have somewhat limited application in the field' and would need to be tested 'under field conditions' (Andelt, 1999). Studies have also been carried out

⁹ There are also concerns regarding predation and disturbance of wild animals (deer, nesting birds etc.) however the vast majority of evidence heard by SAWC was in regard to the use of e-collars to prevent predatory behaviour towards livestock.

¹⁰ It should be noted that stuffed kiwis were used in these studies and the work does not evidence efficacy of predation prevention towards live kiwi birds.

with e-collars on captive wolves, e.g., where they were able to stop a wolf's approach to a chosen food but did not elicit a deterrent effect when wolves were repeatedly offered food. Authors wrote that these findings highlighted 'the complexity of application of nonlethal techniques in real-world situations' (Shivik, 2003).

Duration of e-collar use in training is variable. For dogs undergoing predation behaviour modification, these appear to be intermittent sessions, in between which the owner keeps the device to be used as trained by the dog trainer, but in their absence. For more general routine communication, to supplement the learning process, owners retain the e-collar for use on a continuing basis.

Use of e-collars internationally

1. Kiwi aversion training in New Zealand

In New Zealand the Department of Conservation (DOC) is charged with conserving the country's natural and historic heritage. Kiwi conservation falls under the DOC wildlife protection remit. The threat to these flightless birds from pets is well recognised, and advice to dog owners in kiwi-populated areas includes that dogs should be contained on owners' property, should be on a lead when out walking, and that Kiwi Avoidance Training (KAT), using e-collars, may be stipulated for hunting dogs, and farm dogs intending to access to some areas (Kiwi Avoidance Training, 2022). Successful completion of avian aversion training does not override any dog access restrictions for an area and is just one of many tools used to reduce the threat pets pose to ground-nesting birds.

Dogs should first be trained to obey basic obedience commands. They are then fitted with an e-collar and exposed to dead ground-dwelling native birds and their faeces in a controlled situation. Whilst sniffing these, the dog is given a 'short sharp shock' through the e-collar. Once the dog shows good kiwi avoidance behaviour, a certificate is issued. Refresher training is held every six, 12 or 24 months, depending on the outcome of the first training, to make sure the dog remembers what it has learnt (Kiwi Avoidance Training, 2022).

Dale (2017) observed that in KAT training, many dogs displayed avoidance to the training stimuli after the first training session, and that 100% of dogs responded by the fifth session. Some dogs displayed lower levels of avoidance, including older dogs trained for the first time and those with a three-year gap or longer between training sessions.

The authors did not present data on the technique's effectiveness in the field, or efficacy versus other techniques, such as positive reinforcement, and recommended that the ecological translation of the training be investigated – i.e., to establish if KAT training benefits kiwis in their habitat (Dale, 2017).

2. Snake avoidance training in Australia

The licensed use of e-collars in the State of Victoria, Australia is enabled by the Prevention of Cruelty to Animals Regulations 2019, made under section 42 of the Prevention of Cruelty to Animals Act 1986. The regulations specify by whom, under which circumstance, and which types of e-collars may be used and supplied. For example:

Requirements for use of authorised electronic collars

A person must not use an authorised electronic collar on a dog or cat unless—
(a) a veterinary practitioner has examined the physical health and temperament of the dog or cat and reasonably believes that the dog or cat is suitable to have an authorised electronic collar used on it; and (b) the dog or cat is over six months of age; and (c) a collar is not left on the dog or cat for more than 12 hours in any 24-hour period; and (d) the use is in accordance with any instructions for use of the collar provided by the manufacturer; and (e) the dog or cat is introduced to the use of the collar in accordance with a training programme that complies with the Victorian Code of Practice for the Training of Dogs and Cats to Wear Electronic Collars; and (f) the design and technical specifications of the collar comply with standards that have been approved by the Minister. (POCTA, 2019, Part 2, Division 2, section 24)

Snake avoidance training is an example of aversive training, to which e-collar use is applied, and ECMA (in a written response to SAWC) states that: 'In the State of Victoria (Australia), a tried and tested welfare-focussed regulatory model has been in place for over 10 years, having been agreed between ECMA™ and relevant stakeholders. This model involves veterinary input. It was recently reviewed (2020) and deemed fit-for-purpose.'

In the USA, snake avoidance training, using positive reinforcement (clicker) training, has also been applied (Karen Pryor , 2022).

E-collar use vs. keeping dog on lead where there is a risk of predatory behaviour

Many of those concerned about livestock predation observe that the most essential management method is to keep dogs at risk of undesirable behaviours, such as predation, on a lead, or safely enclosed. In 2022, the UK Minister of State, Department for Environment, Food and Rural Affairs, stated that;

'Dog owners can prevent incidents of livestock worrying through keeping their dogs on a lead in the vicinity of livestock and/or undertaking appropriate training. It is important that dogs are trained to behave well, ideally from a young age, and introduced gradually and positively to different environments, people and animals. Reward-based training for dogs is widely regarded as the preferred method of training. Owners who have concerns about controlling their dog's behaviour may take advice from their vet or a suitably qualified dog behaviourist or trainer. The Animal Behaviour and Training Council maintains national registers of appropriately qualified trainers and behaviourists.' (UK Parliament, 2022)

In one police report, 89% of dogs that killed livestock were unaccompanied by their owners (therefore had escaped, or been let off the lead), and 5% of offences were caused by repeat-offending owners/walkers (North Wales Police, 2022). This suggests that secure dog enclosures and public education may also be required to prevent predation of livestock by dogs.

Section summary

We acknowledge that e-collars have been shown to prevent predatory behaviour in dogs under specific circumstances, but in those studies there are no robust data comparing the efficacy of e-collars to other methods, nor the technique's efficacy in field conditions. The use of a lead and safe enclosures to control dogs can also effectively prevent livestock predation without the welfare harms associated with aversive methods. Although e-collars can also be used for general obedience training, there is evidence that positive reinforcement methods are equally as impactful and are not associated with the same risk of welfare harms.

Owing to variability between breed responses, and individual dogs' susceptibility to electric shock, judgement is required in the use of e-collars. ECMA advises that 'all training and use of electronic collars must be done either in accordance with ECMA member's guidelines or under the close supervision of a qualified dog trainer'.

E-collars and Animal Welfare

The ethical cost of effectiveness

Operant conditioning is a method of learning, in which a behaviour becomes stronger or weaker depending on its consequences (Chance, 2003), and which forms the basis of the two broad categories of training methods applied in dog behaviour modification scenarios. 'Aversive based training methods' (including e-collars) rely for their effect on positive punishment and negative reinforcement and 'reward-based training methods' rely on of positive reinforcement and negative punishment (Blackwell et al., 2012). When e-collars are used to modify behaviour, they are typically used as positive punishment, but may be used as negative reinforcement, by applying the shock stimulus until the dog does the required behaviour (Masson 2018). A third category of training, 'balanced' training, incorporates both reward-based and aversive training methods, and is referenced by some proponents of e-collar use (Hunter et al., 2020, ABDT, 2017).

Ethological (i.e., behavioural) algorithms have been referred to in the literature, describing behaviour-change strategies applied to both humans and animals. The application of these algorithms is intended to highlight that behaviour change should be achieved with the minimum of aversive effects. Further, they are a reminder that effectiveness is not the only measure by which a training intervention should be measured, and that 'if we make effectiveness the only criterion by which we determine the appropriateness of an intervention, we risk failing to consider some other ethical objectives' (O'Heare 2012). Friedman (2009) also observes that an ethical hierarchy of behaviour-change procedures encourages actions that are both effective and humane'; Fig.1 below shows the series of steps in which behaviour-

change procedures should be considered and applied (taken from Friedman, 2009). The authors highlight many detrimental potential side effects of punishment, including increased aggression, generalised fear, apathy, and escape avoidance fears (Friedman, 2009)

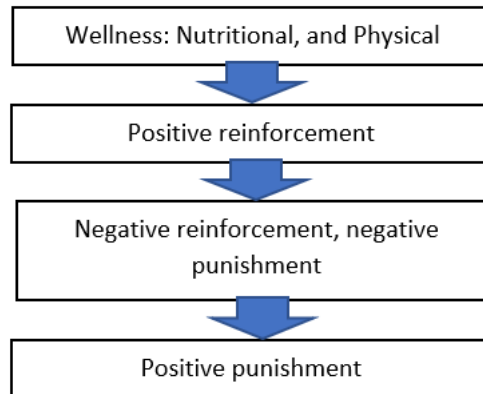


Fig 1. Suggested hierarchy of behaviour-change procedures, according to the least intrusive, effective intervention guideline from Friedman (2009). The table shows the four steps in which behaviour-change procedures should be considered and applied – from wellness to positive punishment.

The ECMA Code of practice aims 'to specify the minimum standards required when using an electronic collar on dogs or cats' (ECMA, 2012a), and to follow the LIEBI (Least Intrusive, Effective Behaviour Intervention), and LIMA (Least Intrusive, Minimally Aversive) algorithms regarding intensity of electric stimulation delivered by e-collars. Users should use the minimum stimulation necessary to achieve the training objective' (ECMA 2012a.).

Pain and distress

Prevention of pain and distress is a well described goal of good animal welfare, for example, in the Five Freedoms formula (Brambell, 1965). All mammals are known to be capable of experiencing emotions such as pain and distress.

Behavioural indicators, suggesting that dogs are in a negative welfare state during training with e-collars, include incidences of vocalisation (Tortora, 1983, Schilder and van der Borg, 2004, Salgirli et al., 2012), low body posture (Schilder and van der Borg, 2004, Beerda et al., 1998), backwards ear position (Salgirli et al., 2012) and time spent in a tense state (Cooper et al., 2014). Studies that have shown success in e-collar use, also reported that e-collar use caused signs consistent with discomfort, for example, vocalisation, head shaking and jumping (Christiansen et al, 2001, Christiansen et al, 2001a and Salgirli, 2012). Further, in another study, 36% of owners reported their dog vocalised on first use (a strong implication the dog experience distress and/or pain) and 26% on subsequent use (AW1402, 2013).

Shocks that cause pain can interfere with the dog's ability to learn (Polsky, 1994), and if a dog's motivation to continue the behaviour is strong, shock may require repeated application (Polsky, 2000). Polsky further states that pain induced by e-collars may subsequently lead to aggression (Polsky, 2000).

Physiological stress

In a study to assess stress levels by measuring salivary cortisol in laboratory Beagles exposed to electric shocks via an e-collar, those dogs which were able to clearly associate the electric stimulus with their action did not show considerable or persistent stress indicators, but dogs that received unpredictable shocks did show severe and persistent stress symptoms (Schalke, 2007). As a result, Schalke states that 'use of these devices should be restricted with proof of theoretical and practical qualification required and then the use of these devices should only be allowed in strictly specified situations' (Schalke, 2007, p.379).

Salgirli et al. (2012) reported an increase in cortisol with e-collar use, but more dogs showed elevated cortisol with a verbal quitting signal. Steiss et al. (2007), Beerda et al. (1998) and Cooper et al. (2014) found no increase in cortisol levels with e-collar use. Although these studies indicate that the behaviour of dogs can be affected by e-collar use, there are important limitations to the utility of these studies. These include, but are not limited to, complicated experimental designs with inadequate controls, selective or unjustified data analysis and over-extrapolation of results.

Whilst adverse welfare effects, such as vocalisation, have been observed in acute response to e-collar activation, there is conflicting evidence on the long-term welfare implications of e-collar use. Owner questionnaire data showed that e-collar use had

no negative effect on their dog's behaviour during the year after its use (Christiansen et al., 2001) and similarly, cognitive-bias tests did not demonstrate any long-term effects on affective state of dogs due to e-collar use (AW1402, 2013).

Conversely, behavioural observations from training German Shepherd dogs for use as guard dogs described increased incidences of stress-related behaviours in dogs trained with e-collars compared to controls. This difference was recorded outside the training environment, and the authors concluded that the use of an e-collar may influence the dog's long-term wellbeing in a negative way (Schilder and van der Borg, 2004).

Unintended Behavioural change

The results of several questionnaires indicate that the use of training methods, based on positive punishment and negative reinforcement (not exclusively e-collar based training), are related to higher incidences of behaviour problems, aggression, and fear (Blackwell et al., 2008, Casey et al., 2014, Herron et al., 2009, Hiby et al., 2004). The results of the self-selected ARDO study (ARDO, 2022), referenced earlier, suggests that many e-collar users do not report such issues. Rooney and Cowan (2011) observed that there are clear links between a dog's current behaviour and its owner's reported training history, as well as with the owner's present behaviour, with aversive training methods impacting negatively on future behaviour. Chavez (2012) states that aversive training methods compromise dog welfare, and that high levels of punishment may have adverse effects on a dog's future behaviour, whereas reward-based training may improve a dog's subsequent ability to learn (Rooney and Cowan, 2011).

Observational studies have shown that dogs trained with aversive methods showed stress-related behaviours in training (Cooper, 2014; Haverbeke, 2008; Schilder 2004).

Recent studies have found that the use of aversive training methods, including leash jerks with choke or pinch collars, e-collars, water pistols, rattle cans, citronella spray collars, slapping the dog, yelling at the dog and leaning towards the dog in a threatening way. may induce longer-term negative mood states (Vieira de Castro et al., 2020), and that dogs appear to show a more pessimistic cognitive bias, where trainers report using two or more aversive training methods (Casey et al., 2021). These studies observed the use of a range of training tools. Therefore, although the results of Vieira de Castro (2020) and Casey (2021) highlight the welfare impact of aversive training methods in general, care must be taken when specifying individual training tools/methods such as e-collars.

Authors have observed that the use of positive punishment in the form of a pinch collar or an electronic collar can have detrimental effects on dogs' physical and mental welfare, and that using punishment without clear or consistent instructions of what is expected of the dogs can lead to fear and stress (Ziv, 2017).

German Shepherds trained with e-collars were shown to display more behavioural signs of fear towards their handlers, even outwith training environments, compared to those trained without shock collars (Schilder and van der Borg, 2004). It has also

been argued that aversive stimuli could be associated with an unintended object or person (Polsky, 1994). As an example, Polsky (2000) reported a case in which a dog fitted with a boundary-fence-associated electronic collar, associated a person walking near the electronic fence with the pain from the shock and exhibited human-directed aggression. However, as noted by CAWC (2012), a major limitation of this report is that it lacks comparison with other examples of apparently unprovoked attacks by dogs that do not involve electronic boundary systems.

Physical harm

ECMA identifies the risk of pressure necrosis (i.e., death of the skin on the neck) from e-collar use, especially in dogs who wear e-collars for prolonged periods: 'If electronic collars are worn by dogs for prolonged periods, pressure from the dermal contacts can reduce blood supply to the skin resulting in skin damage.' (ECMA 2012a). Instructions for electronic collar use include advice regarding the risk of pressure necrosis (ECMA 2012b). The risk of pressure necrosis is also reported anecdotally, but not in the peer-reviewed literature, which suggests either that the risk is exaggerated, or that such injuries are underreported to vets.

Despite the warnings given by ECMA that prolonged wearing of e-collars carries the risk of skin damage, there is very limited published evidence that wearing an e-collar can cause physical injury to a dog. Polsky (1994) argues that electronic collars must be 'snug' to have effective contact with the skin, and that lesions can develop from abrasion of the electrodes, which are worse in animals with skin conditions. An online questionnaire of dog owners in France reported that 7% of e-collar users reported physical damage/burns (Masson et al., 2018). However, other authors refute that e-collars cause physical damage (Klein, 2000, Lindsay, 2005).

Effect of trainer competence

The ECMA Code of Practice states that all training and use of electronic collars must be done either in accordance with ECMA members' guidelines or under the close supervision of a qualified dog trainer (ECMA, 2012a). Further, problem behaviours associated with training are more likely to arise because of inconsistency and inappropriate delivery of both unpleasant stimulation and reward. These are issues which need to be addressed by better informing and instructing trainers regardless of the training technique they employ (ECMA, 2012a).

The ECMA Code of Practice also states that e-collars must not be used when the dog is out of sight until the trainer is confident that the dog will return to them. Using e-collars when the dog is out of sight risks mistiming of electric stimulation via the e-collar and the undesirable behaviour. The need for users to adequately observe behaviour prior to application of shock is encompassed in CAWC's observation that 'it is clear that poor contingency between the application of an electrical stimulus and the behaviour to be modified can give rise to both behaviour and welfare problems.' (CAWC, 2012). The inappropriate use of e-collars carries the risk that the dog may not link delivery of the e-collar stimulus with the conditioning stimuli (Klein, 2000), and that reinforcement may lead to stress and pain (Schilder, 2004).

Because some interventions can exacerbate unwanted behaviours and, for example, render dogs more aggressive, care is required when deciding to whom we entrust the training of our pets and the methods that are to be used (Chavez, 2012).

As noted above, in one study Christiansen observed success in prevention of dogs approaching or attacking sheep. However, he recommended that e-collars be used only for the purposes described in the paper, and only if it is used by skilled trainers with special competence in dog behaviour, learning mechanisms, and of the particular device used (Christiansen, 2001).

Efficacy as training device

As stated above, the efficacy of training methods should be considered against their superiority to other methods, and their welfare impact on the dog. Considering these factors, the European Society of Veterinary Clinical Ethology concludes that better training options than e-collars exist and that it 'strongly opposes the use of e-collars in dog training and urges all European countries to take an interest in and position on this welfare matter' (Masson, 2018).

DEFRA states that whilst it has been suggested that e-collars might have a beneficial impact in preventing dangerous and harmful behaviour by dogs, which are out of control, and e-collars might be proposed as a last-resort measure for poorly behaved dogs, which would otherwise be put down, little evidence has been provided to support these suggestions. On the other hand, evidence about the harm e-collars inflict on pets has been growing (DEFRA, 2018). In the same vein, Cooper states that there is no consistent benefit to be gained from e-collar training, but there are greater welfare concerns compared with positive reward-based training (Cooper, 2014). Ziv (2017) holds a similar position, stating that there is no evidence to suggest that aversive training methods are more effective than reward-based training methods.

Survey data from 3,897 dog owners demonstrated that the use of reward-based training techniques had higher effectiveness in teaching a dog recall or preventing chasing than those who used e-collar training (Blackwell et al., 2012), but this could be due to confounding factors, such as the seriousness of the problem behaviour and owners' perception of success (Ziv, 2017).

In the context of routine education, rather than modification of unwanted behaviour 42 police dogs (Salgirli et al., 2012) were trained to maintain a 'heel' position with distractions. The effectiveness of an e-collar, prong collar, or a quitting signal (that was conditioned to signify the withdrawal of a reward) was evaluated. A greater number of dogs learned to disregard the distraction with the use of the electronic collar (39) and the pinch collar (32), compared to only three dogs with the use of a quitting signal. The authors propose that the e-collar was the most effective form of punishment. Ziv (2017) suggests that the dogs receiving the quitting signal did not understand what was expected of them in this specific setting.

Results from owner questionnaires reveal that highest obedience scores were reported by owners who used reward-based training only, followed by those who used a combination of reward- and punishment-based methods, and lastly by those using punishment only (Hiby et al., 2004). However, this result is based on subjective answers to questionnaires and causality cannot be drawn. Conversely in a questionnaire given to owners seeking advice from a dog behavioural service, owners reported positive effects of aversive methods, such as lead corrections, prong collars, e-collars and forcing a dog to lie down using a leash (Herron et al., 2009). The authors highlight some limitations of the study, in addition to those applicable to all owner questionnaire methodology, and highlight that correction or punishment alone does not selectively reinforce desirable behaviour and is an inefficient way to train an animal to perform a specific behaviour.

Pet dogs, trained with reward-based methods, have been reported to perform better in novel training tasks (Rooney and Cowan, 2011) and cognitive-bias tasks (Vieira de Castro et al., 2020), whilst military dogs that received more aversive stimuli during obedience exercises and protection work were more distracted and showed poorer performance compared to dogs that received less-aversive stimuli (Haverbeke et al., 2008).

A study conducted by China et al. (2020), re-analysing video originally recorded in previous DEFRA-funded project AW1402, concluded that training with an e-collar did not provide any significant benefit over positive reinforcement alone, when training a 'come' or a 'sit' command. In this study 63 dogs with owners that reported off-lead problem behaviours, such as poor recall, were allocated to three training groups, each run by a professional dog trainer. One group used only an e-collar, one group used dummy e-collars and the last group used predominantly positive reinforcement. Measures of training efficacy included the number of commands given to elicit the response, and response latency. Dogs trained with positive reinforcement only had reduced response latency to commands, required fewer commands and had a better response after a single instruction. No difference was found in owner perception of training efficacy between the groups (Cooper et al. (2014)). The research also found that many owners did not read the e-collar manufacturers' instructions prior to use.

However, there has been criticism of this work, noting design constraints, inappropriate analysis of results, and that the results are not generalisable to the use of e-collars for all training purposes (Sargisson and McLean, 2021, Bailey, 2020, Elliffe, 2020).

Section Summary

Given the data available, our main concern is for the welfare of dogs being trained by e-collars and the pain caused by the device. This can have detrimental side effects, such as increased aggression, and generalised fear and apathy. Although adverse welfare effects have been reported in the acute response to e-collar activation, we acknowledge that there is conflicting evidence regarding long-term welfare harms associated with their use.

There is evidence that in many circumstances, e-collars are not as effective as other methods used in dog training. SAWC acknowledges that e-collars may be effective in certain circumstances, to prevent predatory behaviour, but notwithstanding the avoidable risk of welfare harm and lack of justification for their use when compared with other methods, the operator must be competent in their use in order to produce the desired behaviour change.

Currently, with no regulation of who can access and use e-collars, there is an increased risk that e-collars may be used ineffectively, increasing the potential for welfare harms.

6. E-Collars and Ethics

Background

In discussion with stakeholders the Working Group recognised three main instances of e-collar use.

Scenario 1.

Routine use by trainers and owners for 'layering' on top of an already learnt command. In this case the stakeholders are the dog in training, the dog owner, the dog trainer, the seller and manufacturer of the e-collar, and other stakeholders, who may be affected by the dogs positive or negative behaviour. The goal is that dogs will benefit from increased wellbeing through closer communication with the owner, and that commands will be more effective.

Scenario 2.

Targeted use for prevention or correction of behaviours that the owner does not want, for example, jumping up, barking, destruction, etc.

Scenario 3.

Targeted use for prevention of predation. In this case the stakeholders are the predating dog, the dog owner, the dog trainer, the seller and manufacturer of the e-collar, the predated animal/person, (in the case of livestock predation) the keeper of the livestock, and other stakeholders, who may be affected by the dogs positive or negative behaviour.

Ethical perspectives

Opponents of e-collar use argue that they are harmful and unwarranted, and besides effective alternatives exist. Proponents of e-collars argue that whilst there are risks of poor welfare, misuse, and abuse in e-collar use, the outcome of e-collar use, e.g., superior control of livestock predation, warrants the risk of welfare harms.

Consequentialist ethics

A utilitarian approach may consider the positive and negative values of the outcomes of the use of e-collars. This approach analyses the net effect of pleasurable/good, and painful/bad effects on stakeholders, considering the severity, frequency, and likelihood of those outcomes, and considers which course of action provides 'the greatest good to the greatest number'.

In practical terms, this may be illustrated as a Harm-Benefit Analysis (HBA) of the likely harms that the animals will experience and the likely benefits to be delivered and then determine whether the likely harms to animals are justified by the benefits likely to accrue (Home Office, 2015).

Harms and benefits should logically be assessed relative to the alternative courses of action (or inaction). In this consequentialist ethical view e-collar use may be justified. if (and only if) they are a superior training tool to other methods. Widely used methods to train and/or control dogs, which do not rely on e-collar aids, include voice commands, whistles, clickers, and hand signals, secure enclosures and leads. Keeping a dog on a lead around livestock is not only a low-cost, easily applicable option, but is a legal requirement in many cases.

Quantification of both the benefits and harms of e-collar use is challenging, as the electric stimulus delivered in different scenarios is not of uniform intensity or frequency. Ethical constraints also limit the possibility of studying some of the risks of harm: Academic institutions' ethical committees are unlikely to approve application of significant electric shocks to dogs in order to mimic the effects of abuse or misuse. However, CAWC note that the onus should be on the proponents of e-collars to demonstrate that their use is 'at least as effective' as the alternatives, without causing significantly more harm than those alternatives (CAWC 2012). In 2012, CAWC stated that on utilitarian principles it is not possible to 'formulate an evidence-based argument' either for or against the use of EPTAs (e-collars) (CAWC 2012). However, using evidence (and, under CAWC's principle above its absence) published since then, HBA can allow us to assess the key outcomes.

Deontological ethics

Moral opposition to e-collar use may be based on the ethical position that it is wrong to cause (certain types of) harm to an animal. In particular:

- It might be thought that electric shocks are *per se* wrong to inflict.
- It might be thought wrong to cause significant pain that is not necessary for the benefit of the animal.

Our approach

In order to justify the harms of electric shocks, there should be positive evidence that their use is necessary to gain significant benefit to the dog (relative to other options). In the absence of that, the overall harms are likely to outweigh the benefits and the harm is itself not justified and therefore a wrong action.

Analysis of harms and benefits/justifications

E-collar use can harm dogs (relative to most alternatives) insofar as they:

- Prevent motivated behaviour
- May cause anxiety and cognitive changes
- Regarding scenarios 2 and 3 in particular, e-collars inflict repeated episodes of pain on dogs (which could be avoided or replaced with positive training methods or keeping dogs under other forms of control)

- Risk abuse or misuse and thus have the potential for severe (and unnecessary) pain in all scenarios ¹¹

The evidence presented to support e-collar use is:

Scenario 1:

- Anecdotal evidence of the benefit of layering, resulting in improved communication and thus an improved relationship with owners.

Scenarios 2 and 3:

- Some scientific and anecdotal evidence that e-collars can reduce the incidence of problem behaviours/livestock predation. There is anecdotal evidence that this in turn may reduce the risks of relinquishment/euthanasia/RTA relative to other training methods, however supporting statistical evidence is not available.

E-collar use can harm and benefit owners insofar as there is:

Scenario 1:

- No scientific evidence of benefit or harm as there is an absence of published, peer-reviewed evidence that 'layering' is a necessary augmentation to learning in dogs.

Scenarios 2 and 3:

- No scientific evidence of better behaviour relative to other methods. Research published since 2012 has tended to find that e-collar use is not superior to reward-based training methods.
- No scientific evidence of benefit since there is no evidence that more effective in eliminating unwanted behaviour or reducing relinquishment/euthanasia than other methods.

Section summary

In all three scenarios, given the known and acknowledged risk of misuse and abuse of e-collars, the absence of published, peer-reviewed evidence that e-collars are necessary, and the availability of alternatives, there is insufficient ethical justification to permit their use.

¹¹ Abuse and misuse inevitably have a negative HBA. The pain is harmful and not necessary to procure any benefit (discounting the immoral enjoyment of cruelty).

7. Conclusions

In this paper SAWC consider the welfare impact of handheld remote-controlled (e-collar) training devices that deliver electric shocks to dogs and make recommendations regarding possible future legislation or guidance on dog training and dog training aids within the context of dog training services in Scotland.

To this end, the Commission consulted extensively with stakeholders on both sides of the debate regarding e-collar use. To inform its recommendations, written and verbal evidence was gathered from both proponents and opponents of e-collar use, and an extensive review of the published literature was undertaken.

E-collar usage

Three primary uses of e-collars as remote-controlled training devices are described:

Scenario 1. Routine use by trainers and owners for ‘layering’ on top of an already learnt command.

Scenario 2. Targeted use for prevention or correction of behaviours that the owner does not want, for example jumping up, barking, destruction, etc.

Scenario 3. Targeted use for prevention of predation.

Efficacy

Whether training methods are effective requires that they are capable of achieving the training objective, that dogs learn through application of training methods and that the methods do not cause disproportionate harm. Dependent on the ethical stance taken, ‘disproportionate’ may be interpreted for example as that no harm is justifiable, or that a more utilitarian view is taken.

Ethologists and e-collar critics, including the Animal Behaviour and Training Council, state that correction or punishment using aversive tools such as e-collars alone does not reinforce desirable behaviour and that positive reinforcement methods are effective and non-harmful, whereas aversive methods are unnecessary, no more effective than positive reinforcement methods and carry a significant risk of adverse welfare.

The published literature does not demonstrate that e-collars are more effective than other methods to control unwanted behaviour such as sheep worrying in Scotland.

When considering the efficacy of aversive versus reward-based training methods, in isolation to other considerations, such as welfare and ethics, the published literature shows that in multiple scenarios, reward-based training methods are at least as effective as aversive techniques. Many studies demonstrate that reward-based training is more effective, but some studies are ambiguous, and some commentators defend e-collar use.

Programmes of avoidance training of kiwis and snakes are well established in some areas of New Zealand and Australia. Similar models might be researched for use in Scotland. However, given that training alone does not guarantee that dogs will not predate livestock, irrespective of whether training has been undertaken to prevent predation, there are strong legal and practical arguments for keeping dogs on a lead when in the vicinity of livestock, and for ensuring that dog enclosures are secure.

Regulation of trainers/behaviourists

E-collars may currently be supplied, bought, and used by anyone. Given the acknowledged potential for welfare harm through misuse or abuse, it is concerning that even users, who are professional trainers and behaviourists, are unregulated and are not legally required to have understanding of or training in animal welfare, learning theory or the harm/benefit analysis of e-collar use.

It is not clear to members of the public how to access training and behaviourist advice, and DEFRA has been urged to identify and endorse a suitable industry standard and independent regulatory body for dog behaviourists and trainers. There is no legal requirement for those who train dogs to have received formal training, or to undergo continuing professional development in the subject, and many experienced dog trainers and dog behaviourists have no formal training. Further, the scale of the dog behaviourist and training industry is not known. Although some practitioners (and organisations) are members of umbrella bodies that have Codes of Conduct, and detailed practitioner standards, many are independent.

The role of veterinary surgeons in referral of a dog to a behaviourist requires clarification. In the absence of a regulatory framework for standards in the dog behaviourist profession, it is unclear on what due diligence basis veterinarians can make referrals on behalf of clients.

Ethics

Given the known and acknowledged risk of misuse and abuse of e-collars, the absence of published, peer-reviewed evidence that e-collars are necessary, and the availability of alternatives, the Commission has concluded that there is insufficient ethical justification to permit their use. As such, in the view of the Commission, they should be assumed to be a potential cause of unjustified harm and unnecessary suffering.

Regulation

During our discussions, it became evident that some proponents of e-collar usage oppose regulation, some support regulation, but that all critics of e-collars support a ban on their use.

There is no legal control of e-collar use, supply, or possession in Scotland. The Scottish Government published 'Guidance on Dog Training Aids' in 2018, to fulfil a commitment made to the Scottish Parliament in January 2018 to issue guidance on electronic training aids under Section 38 of the Animal Health and Welfare (Scotland) Act 2006. The guidance states that dog training should be conducted with the assistance of a qualified dog trainer, and that the most effective methods of dog training are reward-based (positive) training techniques.

The Commission endorses the Scottish Government's Guidance. Therefore, it is particularly regrettable that public awareness of the guidance appears to be limited, and it is not known whether the Guidance has had any impact on the casual use of aversive training aids.

In England, banning e-collars was included in the 2021 DEFRA action plan for animal welfare. In the absence of any announcement to the contrary, it is assumed it remains its policy to introduce regulations under the Animal Welfare Act 2006 to ban the use of hand-held remote-controlled e-collar devices.

In Wales, under the Animal Welfare (Electronic Collars) (Wales) Regulations 2010, it is prohibited to attach any type of e-collar, administering an electric shock, to a cat or dog, or be responsible for a cat or dog to which an e-collar is attached. The sale of e-collars is not banned under this regulation. The ban in Wales has been challenged and was subject to judicial review at the instigation of the ECMA, which was unsuccessful (Sinclair, 2011). Despite this, a number of media reports continues to call on Welsh ministers to review the ban, largely due to the unsubstantiated assertion that the e-collar ban has caused an increase in sheep worrying/attacks in Wales. The Welsh Government is reported to have no plans to review the regulations.

Recommendations

SAWC has identified four potential options for the future regulation of e-collars, each of which is discussed below.

Option 1 – maintain current status quo

The current situation is that e-collar devices are widely available for purchase and use.

There is evidence that handheld remote-controlled training devices (e-collars) have the potential to cause pain and distress. During the Working Group discussion sessions, welfare harm through intentional abuse or misuse and through ignorance of training methods was recognised as a risk by both proponents and opponents of e-collar use. In addition to acute pain, there is evidence that there may be long-term adverse behavioural and welfare effects of using e-collars. In discussion with stakeholders, and as evidenced in the literature, an experienced dog trainer is best placed to deliver optimal results.

In our evidence we note that subject-matter experts recommend that users of e-collars should be familiar with e-collar devices, principles of learning and dog training, in order to produce the desired results. We believe that e-collar users should have demonstrable skill and knowledge, and that unregulated use of e-collars is not defensible.

On the basis of the evidence considered during the course of our inquiry, the Commission has concluded that maintaining the current status quo presents a significant and unacceptable risk to the welfare of dogs.

Option 2 - restrict use of e-collars to trainers but no restriction on the behaviours/type of training they are used for

The published literature provides evidence that e-collars are no more effective for general obedience than other dog training methods and that the welfare harms are significantly greater. Whilst proponents argue that e-collar use may be effective with limited risk of harm, we believe that independent of the inherent potential for these devices to be misused and abused, there are alternative control and training methods, which are at least as effective as e-collars.

On the basis of the evidence considered during the course of our inquiry, the Commission has concluded that there is insufficient evidence to justify the general use of e-collars to augment learned commands and the correction of unwanted behaviours (Scenarios 1 and 2 above). In the view of the Commission, there are more humane and more widely applied training methods. Reward-based training methods offer an alternative approach that does not risk welfare harm.

Option 3 – restrict access to e-collars to trainers only and only for the purpose of preventing livestock worrying

This option addresses the use of e-collars in Scenario 3, above. We recognise that livestock worrying is a significant financial and animal welfare issue, and that all stakeholders affected by livestock worrying wish for an effective solution to the

problem. We have found evidence that education of those using areas where livestock graze can bring significant reduction in worrying, and note that in Wales, where wearing of e-collars by dogs is banned, the government has found insufficient evidence to overturn this ban when challenged. Environmental controls, such as securing dog enclosures, avoiding livestock for dogs known to attack, and following applicable guidance to keep dogs on a lead, offer solutions that carry less welfare cost.

In discussion with stakeholders, it is recognised by both sides of the e-collars debate that e-collars are capable of causing welfare harm. The evidence shows that dogs trained with e-collars may experience adverse welfare, such as stress-related behaviours, pain, and physical harm. SAWC considers incorrect use by inexperienced users an especial concern, but as evidenced in the published literature, even in the hands of experienced users, e-collar use is sometimes associated with adverse welfare. The literature further demonstrates that e-collars and other aversive devices may cause significant physical and behavioural animal welfare problems, and that the human-animal bond between owner and dog has also been adversely affected.

SAWC acknowledges there is some anecdotal and scientific evidence that e-collar training can have an impact in reducing the risk of an individual dog attacking livestock and, on that basis, has considered whether their continued use, albeit strictly limited and closely regulated, should be permitted. In the view of the Commission, to be effective such a scheme would need to include the following minimum requirements:

- a. E-collars may only be used for the specific purpose of training a dog to avoid livestock.
- b. Trainers must demonstrate that all other avenues for behaviour modification had been explored prior to e-collar use.
- c. The devices may not be used or possessed by owners other than under the direct supervision of the trainer.
- d. Dog trainers should be licensed by Scottish Government, be appropriately trained, and their competence regularly evaluated.
- e. E-collar devices should be of prescribed quality only.

In view of the costs and bureaucracy of establishing such a regulatory scheme, and doubts about its potential effectiveness, the Commission has concluded that it is unable to recommend it as an appropriate way forward.

Option 4 - ban the use of e-collars for any training purpose

As stated above, it is acknowledged both by those that use and by those who oppose the use of e-collars that e-collars are capable of causing welfare harm.

There is a widespread consensus amongst animal welfare specialists, behavioural specialists, and legislative bodies which strongly oppose any use of e-collars.

Our findings align with these views. The Commission has concluded that, whatever the skill of the user, e-collars have the potential to cause harm and that that risk is

disproportionate to the perceived training benefit. Reward-based training methods appear to be at least as effective, and environmental controls have the potential significantly to reduce livestock predation. Further, in our view there is no exemplar for e-collar use in training with sufficient evidence to illustrate how such a scheme in Scotland would overcome the risk that the training may be ineffective, and harmful to dogs.

The Commission is also mindful that responsible dog ownership includes ensuring that an animal is securely enclosed in its home environment and kept under close control when out walking. In areas where livestock are known, or it may reasonably be assumed, to be present, dogs should be on a lead. In the view of the Commission, this is both the most appropriate and most effective approach to preventing a dog chasing or attacking livestock.

Therefore, the Commission has concluded on the basis of the evidence considered during the course of our inquiry and in accordance with our remit to provide advice to Scottish Ministers on matters concerning the welfare of protected animals, that the use of e-collars for the training of animals in Scotland should be prohibited in Scotland.

8. References

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Appendix I - Individuals who attended the stakeholder meeting on 14 April 2022

SAWC

Paul Boyden – Veterinary Director at Dogs Trust
Harvey Carruthers – Veterinary surgeon
Mike Flynn – Chief Superintendent SSPCA
Mike Radford – University of Aberdeen School of Law
Ellie Wigham - Glasgow School of Veterinary Medicine

Scottish Government

Andrew Voas
Andy McKinlay

Morning session

Patricia Bowerbank (Dog trainer) – Bow Wow Know How
Angela Critchley (ECMA) – Radio Systems PetSafe Europe Ltd.
Louise Dickson (Dog trainer)
Lez Graham (Dog trainer) – Trained for Life
Roddy Kirk (Dog trainer) – member of Association of Balanced Dog Trainers
Jamie Penrith (Dog trainer) – Association of Responsible Dog Owners

Afternoon session

Tricia Colville – British Veterinary Association
Lisa Jarvis - Deaf Dog Network
David Montgomery – Animal Behaviour and Training Council

Appendix II - Responses to SAWC Dog Training Working Group, Electronic Collars Survey – February 2022

1. What behavioural challenges are e-collars used for? In your experience are cases referred by veterinary surgeons? What proportion?

ABTC

The ABTC's code of conduct prohibits the use of e-collars or any device that emits an aversive stimulus Therefore none of our practitioners use them for any reasons.

ECMA

As a global trade association for the manufacture and supply of electronic training aids (ETAs) - handheld remote electronic collars, electronic containment systems and bark-control collars. ECMA™ do not directly refer or receive behaviour cases. All ECMA™ members' products meet the latest technical requirements, which enable efficient and effective training while protecting and promoting animal welfare. All members' user guides use the ECMA™ Code of Practice as a reference, providing consistent instructions for effective training techniques while protecting animal welfare. This information is available on our website here: -

<http://ecma.eu.com/wp-content/uploads/2016/10/Training-with-an-Electronic-Remote-TrainingSystem-EN.pdf>

ECMA™ is committed to improving the quality of lives of pets while protecting animal welfare. The ECMA™ welcomes debate surrounding robust scientific evidence with a view to constantly improving the effectiveness and safety of our products.

In the State of Victoria (Australia), a tried and tested welfare-focussed regulatory model has been in place for over 10 years, having been agreed between ECMA™ and relevant stakeholders. This model involves veterinary input. It was recently reviewed (2020) and deemed fit-for-purpose.

Lez @ Trained For Life

Behavioural issues that I have in the past used a remote spray collar for are recall issues, as a way of interrupting the behaviour in order to gain the dogs attention back on the owner.

The spray collar is also an excellent deterrent in relation to counter surfing and coprophagia.

In the past I would say that approximately 80% of my behaviour cases have been under veterinary referral.

Roddy Kirk

E-Collars are used to reinforce the welfare of dogs giving them a better more fulfilled life.

A remote collar can be used for a variety of issues, from a deaf dog to an aggressive dog and everything in between. Most commonly a remote collar is used to communicate with the dog at a distance from their owner. The remote collar guarantees clear and concise communication even with real life distractions. An e-collar doesn't also have to be used for any challenging behaviour. The tool is simply allowing you to communicate with the dog. A remote collar is firstly a reinforcer and is used to activate a dog, not deactivate or punish, to think otherwise is not only factually incorrect but shows ignorance of the tool.

For behavioural issues where welfare is concerned then you would need to consult a behaviourist as opposed to a vet. Vets have no knowledge or expertise when it comes to remote collars and dog training in general.

Jamie Penrith @ Take The Lead

i) The determinants governing the professional, ethical inclusion or omission of an electronic collar extend beyond simply that which we might consider to be a 'behavioural challenge'. As with anything else, we must appreciate breed (traits), heritage, individual learning history, owner requirements and capabilities, choice of equipment, the context/s in which the behaviour presents and more importantly, the probability of inclusion improving the existing state of affairs not simply for the dog, but the family, the community and other animals affected or likely to be affected by the behaviour of the dog. As well we know, the welfare effects of an act or failure to act are not limited to those experiences of the single animal under our legal care, certainly not where the behaviour of that animal is known or likely to impact negatively or critically on the welfare of others. Consequently, from an animal welfare perspective, we should be guarded against seeing a definitive list of 'behavioural challenges' as either accurate or beneficial. Proactively preventing depredation by dogs towards other, equally protected, deserving and sentient animals in a controlled, structured and proven manner is unarguable from a genuinely objective animal welfare perspective. When we assume control of an opportunistic predator, it is incumbent upon us from an ethical and legal perspective to do so with full recognition, responsibility and accountability. When we account for the fact that those animals seen as prey from our dogs' perspective may belong to an endangered species or to owners whose livelihoods depend upon their protections, then any argument against taking every responsible course of action to prevent potential attacks becomes weaker still. Where scientific research has repeatedly shown that the responsible inclusion of electronic collars stops depredation by canids efficiently, effectively and for extended periods of time between evaluations without significant lasting harm to either species, then such arguments are revealed to be emotively, ideologically, financially and ultimately politically motivated, devoid of legitimate 'animal welfare' substance [1]. I have personally worked directly with over two thousand companion and working dogs. I specialise only in education, training and behaviour modification regarding canine predatory prevention and control and increasing off-lead reliability in high-drive dogs. The nature of my area of specialism means that I work exclusively with dogs that pose - or have proven themselves - a serious threat to the safety and freedoms of both themselves and other species. The owners who work with me have already effectively passed through a filtration system of alternative tried and failed advice and approaches.

Consequently, the electronic training collar – in conjunction with beneficial aspects of existing procedures – proves invaluable in providing clear and consistent communication in productively taking these dogs forward. The owners who work with me are committed, conscientious, often cautious and always compassionate. They travel from all over the United Kingdom (and beyond), often incurring substantial cost and inconvenience to ensure that they are doing everything humanly possible to provide and promote the protections and freedoms of their dogs and other animals. I feel that it would be highly beneficial to direct the SAWC to the current results of an ongoing survey conducted by the Association of Responsible Dog Owners (joinardo.com). This is the largest survey of its kind. It is not aimed purely at animal professionals or based upon the ‘opinion’ of dog owners, but at dog owners with actual, direct experience of using electronic collars with their dogs. Latest (unpublished) results show the number of responses to be close to 1,500 together with some 90+ pages of owner-provided additional free text covering history, justification, inclusion and outcome. A synopsis of the results follows: The majority (70%) of respondents are experienced owners, having over 10 years ownership behind them. • Almost 1/3 (28%) of dogs have come from rescue centres, suggesting that the problem behaviour was inherited as existing and unresolved. • 41% of respondents used an ETA to address chase (predatory behaviour), with a further 32% using an ETA to address failing to come when called. 73% of respondents used/using an ETA for off-lead reliability – providing for behavioural needs, safely. • 57% of respondents had already undertaken alternative training to attempt to resolve the problem behaviour, with 34% of those having already tried a ‘rewardonly’ trainer. • Only 3% of respondents have used a veterinary referred behaviourist, suggesting that such professionals have little direct experience of working with the problem behaviours concerned and almost no experience of working with electronic training aids. • 75% of respondents used their ETA under supervision with 84% of respondents combining reward training with ETA use. • 41% of respondents believe that without the ETA inclusion, their pet would have been confined for life. • 41% of respondents believe that the inclusion of an ETA prevented the death of their pet or another animal. • 92% of respondents state that the inclusion of the ETA resolved their problem behaviour. • 99% of respondents state that there were no negative effects.

ii) The answer depends upon the individual veterinary surgeon. When it comes to matters of effective/appropriate training and behaviour modification, a great many vets are in no better position than a general pet owner to advise on matters involving the inclusion of electronic collars. Like other members of society, many vets are as susceptible to advising based on personal beliefs and/or prejudice rather than direct experience and diligent, objective research. I have trained and advised several individual vets far more veterinary nurses on the use of electronic collars for controlling predation and enhancing recall and in their own dogs, together on occasion with addressing pica and self-injurious obsessive compulsions. I lectured on electronic collars before several University of Nottingham veterinary students along with Dr Cooper (Lincoln). The feedback was overwhelmingly positive with students explaining that their studies didn’t cover training or behaviour modification in any depth. Many vets will use and/or ‘privately’ endorse the use of electronic collars - particularly for preventing or deterring livestock/wildlife attacks – but sadly, they are reluctant to admit this publicly. ‘Professional suicide’ is a term I have heard

from members of the veterinary profession. “I completely agree with their responsible use, but I cannot say so publicly” is another. Veterinary referral for electronic collar use would go against the official BVA position statement which is to oppose their use. This is peculiar as the BVA is ‘science led’, however no science whatsoever confirms the efficacy of alternatives to electronic collars for reliably instilling avoidance through aversion between canids and prey animals. This has been confirmed by Defra (England) in November 2021.[2] Defra also state that “The best proven method of preventing a dog from attacking livestock is to keep the dog on a lead when exercising around other animals.” I know of no confirmatory scientific studies to confirm this statement. As I type this response, I have just been contacted by the Dartmoor Livestock Protection Officer about an owner who’s on lead dog has just pulled him from his feet, knocking him out for 10 minutes as his head struck the floor. His dog proceeded to attack and kill a nearby sheep, the owner is awaiting a scan in hospital [3] The ARDO survey results provides the following data regarding veterinary referrals: “Only 3% of respondents have used a veterinary referred behaviourist, suggesting that such professionals have little direct experience of working with the problem behaviours concerned and almost no experience of working with electronic training aids.”

Patricia Bowerbank @ Bow Wow Know How

The 100 level sophisticated e-collar is used to communicate with the dog and is used to teach a behaviour or stop a behaviour, so dogs and owners who benefit use the collars to prevent:

- dogs chasing/attacking sheep
- dogs attacking other dogs
- Chasing cats
- attacking/biting people including family members
- running away and running across roads
- chasing wildlife
- barking/chasing horses
- barking in the home, causing a nuisance with neighbours
- resource guarding food, toys and people
- pulling on the leash

Used as a communication tool it can teach dogs:

- to learn to relax
- build confidence
- communicate better with their owner
- enjoy off leash control and recall

In your experience are cases referred by veterinary surgeons? Proportion?

Around 50% of my referrals come as a result of vets speaking to my clients.

Deaf Dog Network

We do not permit or engage in posts on e-collars on the Deaf Dog Network and actively monitor and edit posts where they are mentioned in responses, however the list of queries/behaviour challenges that people have sought advice for on their use includes (posts are seen before being allowed or declined):

- I have new deaf puppy and people have said I need an e-collar
- Puppy toilet training
- Getting their attention
- Recall
- Separation anxiety
- Barking
- Jumping up
- Playing rough with other dogs
- Chasing – dogs, cats, squirrels, bikes, joggers etc
- Obsessive behaviour – lights, shadow chasing
- Older dogs becoming hard of hearing and walks

These are all owner/guardian raised questions, no veterinary referral although we have had DDN members advised to use e-collars by their veterinary surgeon.

2. What is the range of training methods used before an e-collar is used? Is this always the process?

ABTC

ABTC practitioners do not use e-collars at any point in the training and behaviour modification process. Appropriate use of reward produces more reliable results without compromising animal welfare

ECMA

ECMA™ would always recommend that where possible owners seek supervision from a suitable, competent supervisor prior to the inclusion of an ETA. Where appropriate, this trainer can then determine whether the dog requires veterinary examination to rule out possible medical factors which might be contributing to undesirable behaviour. Clearly this isn't always the case, such as when dogs chase or attack other animals. ETAs should complement pre-existing training efforts with a focus on reinforcing desired behaviours and working with a competent supervisor greatly increases success rates whilst minimising the potential for improper use.

Handheld ETA's can be used for: -

- Enhancing essential obedience skills where 'reward-only' training has broken down or failed.

- Electronic collar training is best incorporated into existing training programmes to compliment the use of rewards.

- Off-lead control in challenging situations, especially recall where the dog has shown a preparedness to ignore commands associated purely with owner-delivered rewards.
- Management of a variety of behavioural problems, including chasing.
- Elderly, infirm, or disabled owners who have difficulty controlling and providing for the exercise needs of their dog purely with leads or other restraints.
- Otherwise physically capable owners with strong or unruly dogs that have proven difficult to manage.

Lez @ Trained For Life

I wouldn't automatically use a remote spray collar for recall, rather I would take the dog on a longline first. If the owner is struggling with a line, either because of age or because the dog is simply too strong for the owner, then a collar would be used. I have used combination of spray collar and line to work with sheep chasers, however, in severe cases the dogs have been referred to an e-collar (shock) trainer.

Roddy Kirk

This is a very open question and very much depends on the dog in front of you, the process is simple, you work the dog in front of you and you use your knowledge to assess which training tool the dog will respond to most positively.

Simply a remote collar is layered on top of a command that a dog has already been taught to full proof that command. Therefore you can use the remote collar in any type of training to smarten up or increase the understanding between the owner and the dog.

The common misconception and lie is that dogs are and should be trained with purely positive reinforcement. The phraseology is firstly factually and scientifically not possible and certain tools ie. Remote collar are labelled as an aversive or punisher, which is also not correct.

97% of my clients have been to a form of so called force free or positive reinforcement training before coming to myself and 100% of the time it has not helped the owner in real life situations and has made the dog and owner confused.

Jamie Penrith @ Take The Lead

As per (1) above, the responsible inclusion of an electronic collar is based upon consideration of multiple factors and is not limited to simply to 'what methods have been used before'. Where an owner lives in a rural location with a dense livestock population and they have concerns that their dog might find opportunity to worry or attack those animals that they would like to address, then the responsible use of an electronic collar would be justified as satisfying the ethical and legal criteria of being justified in rapidly establishing avoidance between the dog and the livestock animal

in a controlled setting. When weighted against the potential possible/probable alternative outcomes of livestock worrying offences, sheep killed or dog shot and suffering, veterinary destruction or abandonment, then a few seconds of momentary, stark discomfort in order to form a healthy pattern of avoidance towards a lifethreatening stimulus is proportionate and would not constitute 'unnecessary suffering' since: "the conduct which caused the suffering was for a legitimate purpose, such as the purpose of benefiting the animal, or the purpose of protecting a person, property or another animal; (d) whether the suffering was proportionate to the purpose of the conduct concerned; (e) whether the conduct concerned was in all the circumstances that of a reasonably competent and humane person." The failure to permit such preventative action however, especially when the alternatives are known, could meet the criteria for prosecution for a S4 AWA 2006 offence: "An act of his, or a failure of his to act, causes an animal to suffer, (b) he knew, or ought reasonably to have known, that the act, or failure to act, would have that effect or be likely to do so, (c) the animal is a protected animal, and (d) the suffering is unnecessary." I would urge members of the SAWC to refrain from seeing conventional training approaches and the inclusion of electronic collars as being mutually incompatible. The ARDO data reveals that "84% of respondents combine reward training with ETA use" meaning that it is inaccurate to view the electronic collars inclusion as distinct from alternatives. In general, electronic collars are advisory under such circumstances where: The behaviour represents a threat to the safety and freedoms of dog, the family or the community. The behaviour represents a threat to third party animals. Alternative approaches to communicate requirements/resolve the issue/s have proven unsuccessful or have resulted in a worsening of the threat posed. Alternative approaches to communicate requirements/resolve the issue have been dismissed as inappropriate due to physical capabilities (disability, age, illness or injury) or contextual constraints (living in direct proximity to unavoidable behaviour triggers).

Patricia Bowerbank @ Bow Wow Know How

- Basic obedience (Place, Door work, sit, down, heel or back, recall, back up, out/drop)
- The development of leash pressure
- Understanding of body language
- Duration work
- body positioning
- spatial pressure
- Terminal and Intermediate marker exercises
- Free shaping
- Trick training
- Agility
- Energy and relaxation work
- Clicker Training
- with the use of food rewards
- Confidence building using a variety of games and obstacles

All these methods are used to create improved communication and relationships between owners and their pet.

This is always the process.

Deaf Dog Network

Often none and this speaks to our main concern wherein a dog being deaf or hard of hearing is often automatically linked to the use of e-collars, with some (more commonly DDN group members overseas, particularly the USA) recommending them as an essential piece of kit for a new deaf pup/dog as you might a harness or bed. We are also concerned to see that people seeking to justify the use of e-collars will cite deaf dogs without the knowledge or experience of living and training them.

3. What risk does a dog pose and / or what is the risk to the dog or others if an e-collar isn't used?

ABTC

This question is unclear, as clearly the risk a dog poses is determined by a wide range of individual factors. It is extremely unlikely that these risk factors would be significantly mitigated by the use of an e-collar. The risk in using punitive devices is that they will aggravate the target behaviour increasing the risk to all concerned.

ECMA

As per the information provided in 2 (above), risk potential is determined in accordance with social expectations, legal obligations, and the individual animal/context. It is not possible to provide a single, cover-all answer to the question asked.

Typically, risks to the individual dog and other people or animals includes: -

- Death of healthy dogs having been shot by a livestock keeper.
- Death of healthy dogs by a veterinarian following livestock worrying.
- Death of healthy dogs following a court destruction order under various laws, such as S3 offences under the DDA 1991, the Protection of Livestock Act 1953 and S2 Dogs Act 1871.
- Avoidable death or serious injury to livestock animals, companion animals (cats/dogs) or wildlife resulting from unresolved chasing/failing to come when called using reward-based training.
- Substantial loss of income to livestock keepers.
- Veterinary destruction of healthy dogs for unclassified 'undesirable behaviour' which has proven intractable following reward-based training

- Dogs being surrendered/abandoned/rehomed due to resolvable behaviours such as chasing other animals, people or vehicles, reactivity/lunging on lead, failing to come when called, excessive barking or over-excitability due to prolonged lead confinement.
- Lifelong confinement to leads and inadequate exercise.
- Owner prosecution under animal control laws.

Lez @ Trained For Life

If a dog has an out of control prey drive then the risk to other animals and the dog itself is immense. The dog could kill livestock or other animals, be legally shot by a farmer, be killed on the road and cause other road users to be injured or killed. The alternative would be to either keep the dog on lead for the rest of its life, assuming the owner has sufficient control and wherewithal to be able to walk the dog on lead, or destroy the dog.

Roddy Kirk

This questions is too broad and general to be able to know best how to answer. What I will say is whenever a remote collar is being used on a dog, what is guaranteed is the risk that that dog may have had towards themselves being hurt, or others being hurt, whether live stock or other dogs or humans or traffic or whatever it may be, that risk is significantly reduced if the dog is remote collar trained.

Jamie Penrith @ Take The Lead

Again, the question seeks to find specifics whereas working with animals is very often anything but specific. There are too many variables to consider if I am to provide an answer of genuine value. What I will say is that yesterday, within my local area a 4yr old healthy GSD was destroyed by a vet for escaping a gate left ajar by a delivery driver and attacking a sheep in the neighbouring field. I can also confirm that the healthy Doberman in the image at the foot of this response will also be destroyed. Two pregnant ewes have also unnecessarily lost their lives. I receive approximately 10-15 written requests for help to prevent dogs from attacking other animals every single day. In over 70% of those cases, the dogs have already chased/worried/attacked/killed other animals or chased traffic/runners/trains etc. Of those 70%, I would estimate that whilst they might have financially compensated a farmer, less than 2% have reported the incidents to the police or a farming stakeholder. Estimates based on actual reported attacks stand at 15,000 per year in the UK. Based on a vast amount of personal experience and data received, I would suggest that you could multiply that figure tenfold and still consider your estimate to be conservative. The only incentive people have to report attacks by dogs on livestock or protected animals is one of moral duty – of compassion. The default response from governments is to increase punishments for coming forwards. There is absolutely no incentive whatsoever for a dog owner to report an offence that will see them heavily punished, socially ostracised and a strong likelihood of their healthy dog being killed. The logic is backwards. It is not ‘attacks’ that you will

prevent, but admissions. Retaining access to quality electronic collars under supervised tuition encourages owners to come forward and self-refer, rather than remain silent and leave the risk of further attacks unresolved. Dogs do not recognise laws, read signs or respect social norms. Dogs do not act with morality or reflect with remorse. Dogs simply do what they choose to do, and given the slightest opportunity to do it, they will. A dog determined to chase/attack another animal does not respect fences, hedgerows, roads, rivers or railways. They can detect prey animals well over half a mile away, which is why so many owners "didn't know the animal was even there" and why relying purely on leads has repeatedly failed for the past 40 years. The only thing that will stop a dog from chasing another animal is changing the dog's own desire to do so. And this is EXACTLY what e-collar training does. Efficiently, effectively and ethically. An electronic collar is scientifically (see references below) and empirically proven to provide an incredibly beneficial additional means of addressing the problem of dogs failing to come when called when giving chase to prey animals, and the only proven means of instilling active avoidance via aversive association towards protected/vulnerable/life threatening stimuli.

Patricia Bowerbank @ Bow Wow Know How

For dogs that have the e-collar to stop or prevent a dangerous behaviour such as biting, attacking, being run over in every day to day task. The risk to the dog is:

death, injury, escalation of behaviour or the having to be put to sleep/adopted out where the risk is passed onto another family.

The risk to others: injury, death. (through road accidents, attacks on family members, other dogs and owners, livestock and wildlife).

Deaf Dog Network

From the DDN perspective, none of the guardians of the dog seek and follow other training methods preferably with support and guidance from an individual on the ABTC practitioner registers.

4. Please describe the range of equipment used including make and model. Please describe how it is used, including frequency of use, duration etc

ABTC

N/A

ECMA

Electronic training products fall into 3 main types: -

- Containment fences
- Remote training
- Bark Control

Containment fences

Containment fences protect an animal's freedom to roam within a safe area (such as your garden) without the risk of escaping. Animals escaping from gardens are frequently run over by cars, or cause road accidents. Fences consist of a transmitter mounted inside the house, connected to a loop of wire within which the animal will be contained. The animal wears a receiver collar which listens for the signal from the boundary. The collar emits a series of "beeps", warning the animal to stop. If the animal ignores the beeping and goes to the boundary, the collar emits a mild aversive stimulus. The level of stimulus is variable and is set to the minimum level necessary for the animal. Very quickly, the animal associates the beep with the aversive stimulus and learns to stay within the boundary of the safe area. Once this is learnt, the animal responds to the beep alone and does not receive the aversive stimulus.

Bark Control

Nuisance barking can result in problems with the neighbours, or even with local noise authorities. Dogs are frequently re-homed (sometimes many times) due to excessive barking. Bark control collars detect excessive barking and respond by delivering a beep followed by a mild aversive stimulus. The dog quickly learns to associate excessive barking with the beep and the aversive stimulus and nuisance barking stops.

Remote trainers

Remote trainers allow pets and owners the freedom to go on walks safely, without a lead. Untrained dogs can take it upon themselves to chase other dogs, cats, cars, bikes, wildlife, or farm animals with catastrophic results. In these situations, it is very difficult to get the dog's attention with treats.

Following a period of training during which the dog is taught to become fluent in understanding the behaviour required to remove and avoid the stimulation from the collar, the remote trainer allows the owner to reach out to the dog while it is in full flight and break into its concentration. This product is unique. Nothing else exists that is capable of providing clear, instant, and consistent communication to the dog through associating unpleasant consequences with dangerous behaviours.

This can save the lives of people, domestic, wild and farm animals. The owner carries a small transmitter which communicates with the collar worn by the dog. The owner can send signals to the collar which responds with either just warning beeps, or a predetermined, appropriate aversive stimulus which follows a known command (such as a whistle). The level of the stimulus is adjustable and can be set to the minimum level necessary to suit the animal's nature and the situation. Very quickly, the dog learns to associate the recall signal or a given aspect of the environment – such as a sheep - with the aversive stimulus and so learn to respond or avoid, thereby successfully controlling the presentation of the electronic stimulus.

Lez @ Trained For Life

Masterplus Pro Remote Dog Training Collar. Long spray (three seconds).

Roddy Kirk

There are a number of world leading brands that may be used, these are but not limited to:

Ecollar Technologies, Dogtra, Garmin, Sport Dog, Chameleon. In general the mini educator from Ecollar Technologies, tends to be the best remote collar to use for pet dog training.

There are hundreds of videos on my youtube channel and many other places showing exactly how the remote collar is used.

I would also happily demonstrate this for the committee, which would be the best way forward.

Jamie Penrith @ Take The Lead

There is a variety of electronic training equipment available, from remote activated sound to spray collars, vibration to static pulse. They can be automated or manually operated, including boundary fencing, bark control or handheld units designed to assist the dog in understanding essential safety commands. As technology advances, so too do the range of available products. Electronic fencing systems are moving to geo-fencing, where boundaries have become 'virtual' and – along with the stimulation level delivered by the collar - are specified by the owner via a handheld 'app'. This technology has also moved into the livestock market, where systems such as 'nofence'[4] are gaining a great deal of support amongst farmers and conservationists. Indeed, the distinct ethical division between the use of electronic pulse towards farm, zoo and wild animals is nothing if not glaringly apparent. Electric pulse to contain cattle and goats in a specified area to eat weeds is deemed a positive step in conservation [5], whereas a lesser version of the same pulse to stop dogs chasing and killing innocent animals is deemed cruel? One thing is common to all equipment and that is that from the dogs' perspective, the activation of the training collar is as a direct result of their own behaviour in response to a given/received signal or interaction with a specified aspect of their environment (sheep/deer/ground nesting birds etc). There is no difference whatsoever from the animals' perspective. I would like to give the question regarding "How it is used, including frequency of use, duration etc" the full answer that the SAWC deserve. In order to do so, could I please request/suggest that we arrange a meeting in which I can explain with absolute clarity, whilst answering questions from the commission that will undoubtedly arise? Simply providing a short, written response to that particular question is insufficient as there are so many nuances and variables to consider in order to ensure that animal welfare is maximised. This is something I arranged with Defra in December 2021 and it proved far more valuable to their decision making processes than written forms of responding.

Patricia Bowerbank @ Bow Wow Know How

The range of ecollars:

ET 300 mini educator by Ecollar Technologies around £235.00
Dogtra Arc by Dogtra around £278.00

The ET 300 has 100 levels, if you were to put it on your skin you wouldn't feel any sensation until level 15 or more, sometimes it can be up at level 50 before people are aware of it. The sensation is a blunt stimulation. It is the same technology as a Tens Machine or a Slendertone abs belt.

I start my level off with every dog at 2, I describe this as so faint it's similar to closing your eyes and moving your open hand across and in front of your face, you can feel a shift in air.

I walk a dog on a 10 ft leash hold the end of the leash and turn back and forward, every turn I use the level 2 and tap the button after a few reps the dog becomes aware of the sensation and is encouraged with the leash to move to me. When working with any animal it is important to be aware that any unusual stimulation in their environment will cause them to move to the familiar such as their handler, thus we keep the dog moving whilst 'tuning' them into the e-collar. This exercise would last around 2 minutes then rest, let the dog absorb for around 10 to 20 minutes then repeat, I'd repeat about 3 times.

We would then go on a walk using 30ft long line where I had a hold of the end and when the dog moves forward and is interested in smells I call Meg come, put a little pressure on the line and press the level 2 on the collar, when the dog recalled they receive food/treat then I'd say Break and encourage the dog out again and repeat this for the whole of the walk.

The next session would involved using the basic obedience work and layering it with the level 2 on the e-collar e.g. using a raised bed, walk your dog to bed, about a foot in front of it say 'Place' and tap the e-collar whilst moving onto the place mat, then give food.

The layering of the level 2 on the verbal instruction allows the dog become used to the language and as they receive a food reward they associate the sensation with something positive, it's enjoyable.

Over a few sessions in order to proof the training I would take away certain prompts e.g. on the long line walk I'd take away any leash pressure and let the dog return on the verbal recall and level 2 e-collar prompt, then I'd drop the verbal and use the collar, if the dog is in heightened arousal because of scent or distraction I'd slowly dial up from 2 to 3,4,5, etc and introduce a verbal recall at which point the dog returns and receives food.

It is my experience that building a confident dog on e-collar language takes about 2 weeks, I do this in sessions over a period of time or in a block 2 to 3 week Board and Train session.

I have had owners and their dogs come up from England for Ecollar training because the dogs were attacking and chasing sheep and the owners (who have been using

the e-collar at a level two for a number of months want guidance on using the e-collar correctly in intense situations. After a few hours of doing the above when we walk into our field of sheep with the dog on a secure line, they show interest but do not chase, the rolling up of the e-collar to a level the dog finds value in just turns them back to the owner for their reward...so chase, no major arousal simply giving people the ability to use neutral communication where the dog understands what the owner is looking for him or her to do.

Once the dog understands and has learnt the e-collar language it can be used where some dogs become nervous to help calm them, so a tap tap on a level 2 will reassure the dog that you are there with them, you are communicating with them, recall use is an everyday experience, not that your dog would ever be half a mile away but that is the reach on the e-collar or invisible leash as it's sometimes called. A dog becoming aroused by the energy of another dog can be tapped to again to offer reassurance for calm, dogs off leash where there could be trouble brewing, recall the dog, timing is important, using a low level to prevent an issue is better than waiting for a fight which you could break up with a high correction, the high levels are there just as your seat belt in you car is there, rarely if ever used but there if needed.

Deaf Dog Network

Not known, we do not allow or engage in posts about e-collars on the DDN.

5. How do you assess that e-collar use is necessary?

ABTC

The ABTC does not believe that the use of e-collars is **ever** necessary. The fact that our practitioners are regularly achieving good results, with happy dogs and owners supports this.

ECMA

ECMA™ would always recommend that where possible owners seek supervision from a suitable, competent supervisor prior to the inclusion of an ETA. Where appropriate, this trainer can then determine whether the dog requires veterinary examination to rule out possible medical factors which might be contributing to undesirable behaviour. Clearly this isn't always the case, such as when dogs chase or attack other animals and a competent supervisor is able to assess and advise on whether an ETA is necessary and appropriate for the individual dog and owner requirements. ETAs should complement pre-existing training efforts with a focus on reinforcing desired behaviours and working with a competent supervisor greatly increases success rates whilst minimising the potential for improper use.

Lez @ Trained For Life

As above

Roddy Kirk

The welfare of the dog and those it comes in contact with is always our top priority.

In general the most common use for a remote collar is used to communicate with the dog at a distance. For example, general recall, prey drive, chase drive. A remote collar is simply an attention grabber to the dog, much like a clicker or whistle or verbal command. What makes the remote collar for more successful is the fact that it has the ability to touch the dog, regardless of where they are, within reason of course. The key is in the teaching of what the blunt stimulation is and what does represent and how should the dog respond to it. This is all taught in the conditioning phase of training.

Jamie Penrith @ Take The Lead

As per (1), The determinants governing the professional, ethical inclusion or omission of an electronic collar are largely dependent on a case-by-case evaluation. Every dog is seen as a unique individual as is the context/requirement compound. As with anything else, we must appreciate breed (traits), heritage, individual learning history, owner requirements and capabilities, choice of equipment, the context/s in which the behaviour presents and more importantly, the probability of inclusion improving the existing state of affairs not simply for the dog, but the family, the community and other animals affected or likely to be affected by the behaviour of the dog.

Patricia Bowerbank @ Bow Wow Know How

It depends on the issue or training need. If the owner wants to stop a critical /risky behaviour that they are unable to with the leash, plethora of other tools, training, education, exercises listed above, the e collar is an option. Some dogs who are currently attacking the children in the household, wear a muzzle outside but become gradually worse, those dogs I'd identify as good candidates, dogs who run away, who have no recall, dogs who are pulling their owners so badly they can't walk them do benefit from the e-collar, so I show them the collar, tell them the price of the training and collar, let them use the collar on my own dog which has a huge impact, meeting my dog for the first time, taking her for an off leash walk and pressing the level 2 on her e-collar and having her return to them for her bit sausage, every time!

Deaf Dog Network

We do not believe they are necessary for any dog.

6. On what proportion of dogs that you work with are e-collars used? How many dogs do you work with annually?

ABTC

N/A

ECMA

N/A

Lez @ Trained For Life

Roughly 20%

Roddy Kirk

I have worked with nearly 17000 dogs in my career. I work with approximately 1500 dogs a year and 25% of those dogs will be remote collar trained.

The reality is when people want to better their relationship with their dog, when they have the dogs welfare at the for front of their mind, when they went others to be safe and have the best communication possible with their dog. These are those that use remote collars.

Jamie Penrith @ Take The Lead

I have worked with over 2000 dogs that either failed to come when chasing other animals, or dogs that have killed (or have the potential to attack and kill) other protected animals including livestock, cats, deer and birds. I work with hundreds of such dogs annually. This is hardly surprising when a RSPCA survey report reveals that 24% of dogs have chased livestock or wildlife, some 3 million dogs in the UK. Personally, I specialise only in education, training and behaviour modification regarding canine predatory prevention and control and increasing off-lead reliability in high-drive dogs. The nature of my area of specialism means that I work exclusively with dogs that pose - or have proven themselves - a serious threat to the safety and freedoms of both themselves and other species. The owners who work with me have already effectively passed through a filtration system of alternative tried and failed advice and approaches. Consequently, the electronic training collar – in conjunction with beneficial aspects of existing procedures – proves invaluable in providing clear and consistent communication in productively taking these dogs forward. Broadly speaking, the nature of my specialism requires me to provide the least invasive, most effective, most efficient, most scientifically studied and validated equipment as a means of causing the dog to choose to avoid specific animals such as sheep and to choose to respond instantly when called where safety is paramount. That equipment is the highest quality electronic training collar, and it is only ever used in order to provide freedoms secure protections and enhance the quality of life for the dog, other animals affected by the presence and behaviour of that dog, the family and the community in which they live. This entire situation in respect of electronic collars is based not upon evidence of animal abuse, indeed there isn't a single shred of evidence to support such accusations. In decades, there hasn't been a single prosecution for abuse or cruelty and the Kennel Club submission to the Scottish government consultation on electronic collars also confirmed in writing 'no evidence of abuse or misuse'. The 'issue' is based entirely on a hypothetical possibility - a manufactured fear of a problem that has never been shown to exist. What does exist however, is a year-on-year increase in horrendous attacks by uncontrolled, untrained dogs on sheep, wildlife and other dogs. Many of these dogs have failed to respond to reward training. Why would any government with a genuine

interest in animal welfare choose to legislate on a possibility, yet ignore the horrific reality?

Patricia Bowerbank @ Bow Wow Know How

Around 50% are e-collar trained, It's difficult to calculate properly due to lockdowns and my partner's mum whom I help look after has Alzimers so this has affected the number in the last 2 years. Around 250 a year.

Deaf Dog Network

N/A

Additional Comments / Covering notes

ABTC

David Montgomery:

It is clear from the review that it remains the case that no animal welfare charities support the use of shock collars and neither do any responsible professional organisations representing trainers and behaviourists and neither does the veterinary profession. The only supporters are the manufacturers who stand to lose out financially in the case of a ban and those ill-informed trainers who do not understand the science behind animal learning as so clearly demonstrated by the person who wrote the ARDO response. The rambling explanation of learning theory seems to infer that these devices are categorised as negative reinforcers when in fact they deliver positive punishment.

I am reassured by your response but would like to point out that everyone that has seen the questionnaire has independently commented that it looks heavily biased towards the shock collar users.

Trustees:

Arguments presented in support of the use of punitive devices that deliver aversive stimuli in dog training are aimed at attempting to undermine ethical alternatives, they are based on misconceptions of the psychological principles involved in animal learning and mis-representation of the scientific terminology.

It is our strongly held view that there can be no justification for subjecting dogs (or any animals) to unnecessary pain and/or stress in order to modify their behaviour. Suitably educated and assessed practitioners will only employ more reliable, humane methods to achieve more dependable results.

Any training device that works on the basis of inflicting an aversive stimulus on the dog for not carrying out the handler's wishes and/or until they exhibit acceptable behaviour compromises the animal's welfare, subverts the human/animal bond, is unethical and illegal under the terms of the Animal Health and Welfare (Scotland) Act 2006.

ECMA

N/A

Lez @ Trained For Life

It is interesting that you refer to the remote device as an e-collar when the only e-collar that trainers refer to are shock collars; spray collars are just that as are vibration collars...

I don't use an E-collar (read shock collar) but have used a remote spray collar with non-smelling air – I don't use the citronella spray.

Although I don't use a 'shock' collar I would hate to see them banned. There are a great many trainers that can use them with finesse and incorporate them as part of a training protocol rather than them just being placed on the dog and the dog punished for misdemeanour; these trainers are helping owners with their wayward dogs enjoy freedom on walks whilst keeping dog and other animals safe. As such I would urge instead banning them from public sales and licencing them to trainers that are conversant in conditioning them effectively.

Would it be possible to be part of this working group please? As discussed previously with Andrew and Bev, I was very involved with working groups in England and wrote the National Occupational Standards for Dog Training & Behaviour on behalf of Lantra, and would like to continue to be involved now I live in Scotland.

Roddy Kirk

21/01:

Upon reading the email and in particular the questions, I must admit that the first thought that came to my mind was concern.

Either this committee has a biased view towards what a remote training collar is and does, or don't understand the tool at all.

Either way I strongly feel that meeting face to face or even on a zoom call would be beneficial to the committee. This would allow me to answer and explain in real time any welfare concerns with regards to remote collars.

That being said I will answer the questions as best I can.

Secondly, when looking at the committee I am wondering where the knowledge of training is? There is not one trainer on the committee and a number of representatives from the Dogs Trust, who clearly have their own agenda when it comes to remote collars. It concerns me that the committee will already have a biased view to this training aid. As well as a number of vets on the committee, where vets have no knowledge or training on remote training collars.

Again I would be delighted to provide knowledge on remote training collars to the committee.

25/01:

I do note that the members of the working group seem to be heavily weighted towards animal welfare and veterinary groups. It seems as though there would also be value in having an informed opinion in the group from those who work with the tool in question on a daily basis. It might also be valuable to hear the voice of those who struggle with unwanted behaviours from their dogs and how such a tool has impacted their lives.

The stance the ABDT takes in the matter of e-collars is akin to that of doctors prescribing opiates.

We recognise both the efficacy of the tool and the possibility of misuse. Therefore, value the opportunity to be involved in the discussion around sensible legislation to minimise misuse.

In a climate where "unwanted behaviour" is a one of the primary causes for the euthanasia of dogs [1] any tool which has a proven track record of stopping such behaviours is an important factor in stopping the need for such drastic action [2]. Not only for the welfare of the dogs themselves but also for the owners whose lives are deeply affected by trying to manage them.

Given the lack of expertise of the working group in training dogs using e-collars in the real world, I would like to invite the working group to see the way in which e-collars are used by trainers in a professional manner.

My aim would be to show that the value of an e-collar is not just to deliver a high-level correction (e.g. for preventing predation).

The e-collar is also very effective at low stimulus levels to help dog owners provide clear and consistent information to their dogs.

Having helped over 16000 dog owners, I know that giving dog owners the tools to build a great relationship with their dogs based on solid communication is the key to preventing more dogs being euthanised for unwanted behaviours.

This is clearly a key element for the welfare of all concerned and should not be overlooked.

My hope is that this will clear up any misunderstanding about the tool and its use. That will open the door for clear communication between our two groups. At that point, I would be happy to answer the questions posed and try to get as many answers as possible from other members of the ABDT to help with the data collection.

Jamie Penrith @ Take The Lead

In closing, I would like to repeat my offer to meet with the SAWC in order to answer and clarify any and all points raised and to provide further information as required/requested. I am regarded a national lead figure on the responsible

consideration/inclusion of electronic training collars for dogs, having studied the topic extensively from both theoretical and applied perspectives

Patricia Bowerbank @ Bow Wow Know How

N/A

Deaf Dog Network

The Deaf Dog Network is a group of people who aim to help deaf dogs and their guardians, wherever they are, whether they have experience of owning or training them, rescuing or fostering, primarily through a Facebook group. The DDN group is managed by a small group of Admin members, including the founder member Karen Lawe, and others with professional roles in behaviour and training as well as others with extensive deaf dog experience in the UK.

Underpinning the ethos of the group is this statement: The Deaf Dog Network does not support any form of physical punishment in the training of dogs. We do not endorse training methods using tools such as check/chains, prong collars, squirting water, shock collars and the like. We approve and support modern, science-based force and fear free training methods.

We would be happy to join any discussion meetings (virtually) if that would be helpful to expand on points of interest.

Appendix III - BVA and BSAVA Policy Statement

Introduction

BVA and BSAVA support and recommend positive training methods as the most effective training intervention for companion animals in terms of health, welfare and behavioural outcomes.^{1, 2, 3,4, 5, 6, 7, 8, 9, 10, 11, 12, 13}

A strong voice for vets

Under the UK Animal Welfare Acts^{14,15,16} humans responsible for animals must ensure that the animals under their care are protected from unnecessary pain, suffering, injury and disease. This includes unnecessary pain or suffering inflicted with inappropriate and aversive training methods or containment systems.¹⁷

We have concerns about the use of aversive training devices to control, train or punish dogs and cats. Aversive training devices include electric collars which are used as a means of punishing or controlling behaviour of companion animals is open to potential abuse and incorrect use of such training aids has the potential to cause welfare and training problems.

BVA and BSAVA position on electric pulse training collars used to deliver an electric shock in dogs and cats

BVA and BSAVA are calling for a complete ban on the sale and use of electric pulse training collars used to deliver an electric shock in dogs and cats in order to help protect animal welfare. Instead, we support and recommends positive training methods.

Electric pulse devices are sometimes used in dog and cat training as a form of punishment to prevent a dog or cat from repeating bad behaviour. Evidence demonstrates that positive training methods are the most effective training intervention for companion animals in terms of health, welfare and behavioural outcomes. Research has shown that the application of electric stimulus, even at a low level, can cause physiological and behavioural responses associated with stress, pain and fear.^{1, 2, 3,4, 5, 6,7, 8, 9, 10, 11,12, 13}

In light of the evidence, we have concluded that electric pulse collars raise a number of welfare issues, such as the difficulty in accurately judging the level of electric pulse to apply to a dog or cat without causing unnecessary suffering.^{1, 2, 3,4, 5, 6, 7, 8, 9, 10, 10, 11, 12, 13}

Since 2010, The Animal Welfare (Electronic Collars) (Wales) Regulations 2010 have made it an offence for a device capable of emitting an electric shock to be attached to a dog or cat in Wales. In addition, in 2018 Defra announced a ban on the use of electric shock collars for cats and dogs and the Scottish Government issued guidance making it clear that training that the use of aversive training devices, including electric collars, may constitute the offence of causing unnecessary suffering under the Animal Welfare Act (2006).

Defra's Code of Practice for the Welfare of Dogs also advises that 'good training can enhance a dog's quality of life, but punishing a dog can cause it pain and suffering ... All dogs should be trained to behave well, ideally from a very young age. Only use positive reward-based training. Avoid harsh, potentially painful or frightening training methods'.

Recommendation 1: The UK Governments should bring into force a complete ban on the sale and use of electric pulse training collars for dogs and cats to protect animal welfare.

Recommendation 2: BVA and BSAVA support and recommend positive training methods as the most effective training intervention for cats and dogs in terms of health, welfare and behavioural outcomes.

BVA and BSAVA position on the use of electric containment systems for dogs and cats

We note a paucity of evidence examining the effectiveness and welfare impacts of the use of electric containment systems for dogs and cats in comparison to the evidence available regarding the use of electric shock collars. In light of this lack of evidence, we are not currently calling for a ban on the use and sale of electric containment systems (which use a collar to deliver a shock) for use on dogs and cats. We would strongly support the undertaking of further independent peer-reviewed research, including a comprehensive literature of existing evidence, to robustly assess the effectiveness of electric containment systems and their impact on animal welfare.

Until further research is conducted however, we do not support the use of buried or hidden electric containment fences for dogs and cats that require animals to learn where the boundary is positioned through successive shocks in the absence of any physical or geographical demarcation. Pending further research outputs, the UK Government should only allow the sale and use of electric containment systems for dogs and cats which are either visible or audible to these companion animals.

Further, the sale of electric containment fences should only be permitted through approved vendors who must provide:

- Adequate instructions on the safe and responsible use of electric containment fences
- Clear information regarding the potential negative impacts on animal welfare if used incorrectly, referencing an owner's duty to ensure that the animals under their care are protected from unnecessary pain, suffering, injury and disease as set out in the UK Animal Welfare Acts.

Recommendation 3: The UK Government should urgently commission independent, peer-reviewed research to robustly assess the effectiveness of electric containment systems and their impact on companion animal welfare.

Recommendation 4: Pending further research outputs, the UK Government should only allow the sale and use of electric containment systems for dogs and cats which are either visible or audible to these companion animals.

Recommendation 5: Pending research outputs, the Government should only allow the sale and use of electric containment systems for dogs and cats through approved vendors who adhere to required criteria.

Alternative aversive training methods

BVA and BSAVA recognise that alternative aversive training methods also have the potential to result in negative welfare outcomes eg. choke collars, choke chains and prong collars, as well as collars using a noise, vibration, ultrasonic sound or spray of water or citronella. As outlined above, we support and recommend positive training methods as the most effective training intervention for cats and dogs in terms of health, welfare and behavioural outcomes.

We note the current lack of research and evidence regarding the welfare implications of the use of other aversive methods of training and control which may be equally stressful for a dog. We recommend that further evidence is collected on their use and effectiveness.

Until further research is undertaken to robustly assess aversive training collars which do not deliver an electric pulse eg. anti-bark spray collars, BVA and BSAVA are calling for a code of practice, as well as the regulation of the sale of these devices and manufacturer's instructions, to ensure that the potential adverse effects of use are highlighted to animal owners and trainers.

Recommendation 6: Further research should be undertaken to robustly assess the effectiveness of collars which deliver an aversive stimulus other than an electric pulse eg. anti-bark spray collar systems and their impact on animal welfare.

Recommendation 7: In the parts of the UK where their use remains legal, BVA and BSAVA call for a code of practice, as well as the regulation of the sale of other collars which deliver an aversive stimulus, such as anti-bark collars and detailed manufacturer's instructions, to ensure that the potential adverse effects of use are highlighted to animal owners and trainer.

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