



The danger of DIY pest control

**A survey of 'pest control' products and advice offered by the
UK's biggest DIY stores and garden centres – 2019/2020**



**HUMANE SOCIETY
INTERNATIONAL**
UNITED KINGDOM

Content

- 3 EXECUTIVE SUMMARY**
- 4 INTRODUCTION**
- 4 OBJECTIVES**
- 5 METHODOLOGY**
- 8 FINDINGS**
- 17 CONCLUSION & RECOMMENDATIONS**
- 18 APPENDIX**
- 23 REFERENCES**



EXECUTIVE SUMMARY

Amateur ‘pest control’ products are widely available on the UK market and a popular choice for resolving conflicts with mice and rats in and around people’s homes. Yet, the purchase and use of lethal and inhumane devices by members of the public pose major threats to animal welfare and public health.

Poisons targeting mice and rats have been shown to cause extreme and prolonged suffering, with the Health and Safety Executive (HSE) describing anticoagulant rodenticides as “markedly inhumane”. However, more than 300 rodenticide products are currently authorised for sale to non-professional users in the UK, 93% of which contain anticoagulants. An undercover survey carried out by Humane Society International/UK at 30 stores owned by the UK’s 10 leading hardware, DIY and gardening retailers found that highly toxic rodent poisons are being supplied to the public on a vast scale. At Dobbies Garden Centres, over 68% of all amateur rat ‘control’ products were rodenticides, while at Wickes poisons made up as much as 83% of all ‘control’ products for mice.

A further cause for concern is that the sale of highly toxic poisons to untrained users can present a threat to the health and safety of people, pets and other wildlife, including non-target and protected species. Recognising the unacceptable impact rodenticides have on local wildlife, in September 2020 the State of California adopted legislation to ban all public and commercial use of common poisons known as second-generation anticoagulant rodenticides. In the UK meanwhile, professional rodent exterminators are advised to use rodenticides only as a last resort when other methods have failed, in order to reduce the risk of accidental and secondary poisoning. The public, on the other hand, are often not informed of these dangers: our survey showed that at 26 stores, householders were given no or insufficient warning of the risks involved in applying rodenticides, and across all 10 retailers staff omitted safety information or gave unsafe or incorrect advice on how to use the DIY ‘control’ products they recommended.

Despite the hazards of ‘control’ products sold to the public and concerns over their humaneness, our survey revealed a lack of availability and promotion of humane and non-lethal products. Although safe and ethical methods and products for residents to deter unwanted wildlife and proof their property exist, the majority, and in the case of Wickes and Wyevale the entirety, of amateur rodent ‘control’ products stocked by the retailers we investigated were designed to kill the animal. And at 93% of stores, staff immediately advised to employ a lethal method, despite strong evidence that lethal ‘control’ alone does not offer a viable long-term solution and can perpetuate or worsen the problem for the resident.

For these key reasons, Humane Society International/UK is calling on HSE to follow California’s lead and prohibit the public use of anticoagulant poisons and to impose stricter regulations and requirements for amateur ‘pest control’ product suppliers. We also urge retailers to increase their range of ethical rodent ‘control’ products and to ensure their staff provide safe and correct advice on how to manage unwanted wildlife humanely and effectively.



INTRODUCTION

Each year across the UK, many thousands of householders encounter wild rats and mice in the home or garden. Incidents of rodents entering properties typically increase during autumn and winter, as the animals search for food and seek shelter from the cooler weather.¹ Attempts to ‘control’ the animals largely involve the use of lethal measures, and it is estimated that several million rodents are killed annually as ‘pests’ in the UK alone.² Yet, the humaneness and effectiveness of the methods used receives little attention.

Amateur ‘pest control’ treatments carried out by members of the public significantly contribute to the overall ‘pest control’ activity in the UK, although little data exists on their extent and the number of animals involved. Humane Society International/UK (HSI/UK) was concerned at the extensive anecdotal reports of inappropriate use, and overuse, of lethal and inhumane Do-It-Yourself ‘pest control’ products, including poisons, glue traps and unsafe or poorly designed killing traps. The use of such products by untrained members of the public poses a major threat to the welfare of the target animals, increasing the risk of extreme and prolonged suffering, and is also a danger to people, pets, non-target wildlife and (in the case of rodenticides) the wider environment. Anecdotal evidence suggests that inhumane poisons and other products are currently sold in most hardware stores and garden centres up and down the country.

OBJECTIVES

HSI/UK sought to determine and compare the range of lethal and non-lethal DIY vertebrate ‘pest control’ products sold to the public by the UK’s leading hardware and garden centre retail companies.

In addition, we examined the availability and quality of advice provided to customers by the companies’ in-store staff on how to effectively and humanely manage unwanted rodents entering people’s properties, including advice relating to the correct and safe use of the products recommended and sold.

METHODOLOGY

Between September 2019 and August 2020, HSI/UK undercover shopper visited stores owned by the UK’s 10 leading retailers for hardware, DIY and gardening products:³ Wilko, B&Q, Wickes, Homebase, The Range, Robert Dyas, Dobbies Garden Centres, Blue Diamond, Notcutts and Wyevale Garden Centres (note: all Wyevale stores visited are now owned and managed by British Garden Centres). In total, 30 stores were inspected at locations across East Anglia, including London, Cambridge, Oxford, St Albans and Stevenage. Per retailer, HSI/UK’s investigator visited 3 stores spread across different locations in order to obtain reliable and representative data.

1 Gathering product data:

To determine the range of products sold, in each store all items offered for ‘pest control’ or wildlife management purposes were noted and checked against the product labels on the shelf (if a product item did not appear on the shelf but a valid product label was found, the product was included since items may have simply been misplaced or the stock not yet replenished). Where products were sold in different sizes (e.g. rodenticide bait sold in 15-block and 30-block packs), these were counted as separate products.

The survey examined products sold to ‘control’ and/or manage any wildlife species other than invertebrates. It covered mammal species (e.g. foxes, moles, grey squirrels, rabbits, badgers), mammal groups (e.g. rats, mice) and bird groups (e.g. pigeons, gulls). Data regarding the species for which a product was intended to be used were obtained from information provided on the product packaging, which was then checked against the manufacturer’s and the retailer’s websites. Where the information differed, the online information was preferred. Products that could be applied to multiple species, such as rodenticides targeting rats as well as mice, were recorded for each of the individual species. Where it was not specified which species or animal group a product was designed to be used for, the product was recorded as targeting ‘other wildlife’.

Products were subsequently placed into three categories, ‘lethal’, ‘non-lethal’ and ‘other’, defined as follows:

LETHAL:

- products designed to kill the animal;
- products intended to be used in combination with a lethal device, such as bait stations designed to contain rodenticides or kill traps;

N.B. This did not include products designed to be used with either a lethal or a non-lethal device (e.g. non-toxic rodent attractant gels that can be applied to killing traps or live traps).

NON-LETHAL:

- products designed to ‘control’ but not kill the animal;

N.B. This included chemical deterrents,⁴ physical deterrents and proofing products,⁵ and live/catch-and-release traps.

OTHER:

- products designed to be used in combination with either a lethal or a non-lethal device (e.g. non-toxic rodent attractant gels);
- products not designed to ‘control’ or kill the animal (e.g. sprays designed to mask animal odours).

2 Conducting staff interviews:

HSI/UK’s secret shopper approached a member of staff at each store with an initial request for advice on how to deal with unwanted mice entering a home kitchen, using a standardised opening statement and question (“I have mice coming into my kitchen. I’ve seen them and their droppings. What would you advise I should do?”). The ensuing conversation was recorded (without knowledge of the member of staff, since informing them would have likely influenced standard practice) and transcribed. If staff recommended a particular product, the secret shopper enquired whether the product would solve the issue permanently and whether the mice would suffer if it was used. Any queries that could be considered to be leading questions were avoided as much as possible.

& MOU KILLER GRAIN BAIT

Many of these poisons, including highly toxic 'second-generation' anticoagulant rodenticides, are widely available to the general public with no training required prior to use.



3 Ranking the retail companies:

Each of the retail companies was given a score in two separate categories: provision of adequate advice by staff on how to humanely and effectively manage wildlife in the home, and on how to safely and correctly use any DIY 'pest control' products suggested by staff. A set of questions and a points-based scoring system were established for each category, and the advice and information supplied by staff in each of the stores assessed accordingly. First, we determined the score per question for each retailer's three stores. Then we calculated the score per question for an average company store selling DIY 'pest control' products (for each company's score per question see Appendix) and determined the overall score for each company.

ADEQUATE ADVICE ON HUMANE AND EFFECTIVE WILDLIFE MANAGEMENT:

Each store was rated according to the six questions below. For each question answered affirmatively the store was awarded one point; for a question answered in part it received half a point, and for questions answered negatively no points. The maximum overall score was therefore 6 points.

THE QUESTIONS:

- Q1** Did staff inquire about the number of animals, the area of animal sighting and/or activity, and existing conditions attracting the rodents, e.g. possible entry points or food sources?
- Q2** Did staff recommend to use a non-chemical (lethal or non-lethal) 'control' method prior to the use of a poison?
- Q3** Did staff recommend the use of a physical or chemical deterrent product as the primary course of action?
- Q4** Did staff advise to identify and block any access points?

- Q5** Did staff provide practical and specific advice on how the customer can block any access points? (Does not include advice to request a third party, e.g. 'pest control' company or local council, to carry out work.)

- Q6** Did staff advise to clean the affected area and remove access to possible food sources?

ADEQUATE ADVICE ON SAFE AND CORRECT PRODUCT USE:

Stores were rated according to the five questions below. It is expected that store staff should provide customers with adequate information on safe and correct use of products recommended for purchase. Therefore, the maximum number of points awarded in this category was zero, with a point deducted if staff omitted safety information or gave unsafe advice, and half a point deducted if only part of the safety advice was provided.

THE QUESTIONS:

- Q7** If use of a disposable killing trap (aka sealed trap) was suggested, did staff advise that disposable killing traps may cause prolonged suffering for the trapped animal?
- Q8** If use of a rodenticide was suggested, did staff advise that rodenticides must be used in tamper-proof bait stations only in order to prevent access by humans or other animals?
- Q9** If use of a rodenticide was suggested, did staff warn of the risks rodenticides pose to humans, pets and non-target wildlife? (if explicit = 0 point, if implicit = -0.5 point)
- Q10** If use of a live trap was suggested, did staff advise that live traps may cause suffering to the animal if it is released away from its familiar territory, and that the traps must be checked regularly (at least twice daily)⁶ and the trapped animal released without delay or killed humanely?
- Q11** If use of a spring-powered killing trap (aka snap trap, spring trap or break-back trap) was suggested, did staff advise that these must be checked as often as possible (at least twice daily)?⁷

swallowed, seek
medical professionals
out of reach of
on skin. Do not
th local

May cause damage
to organs (blood)
through prolonged
or repeated
exposure



Across the country, DIY and garden stores typically sell a wide range of poisons.



Ingestion of poisons, such as widely sold anticoagulant rodenticides may cause animals acute suffering lasting several days, including through internal bleeding.

FINDINGS

1 Excessive availability of inhumane poisons to untrained users

Rodenticides (colloquially known as rat or mouse poisons), and highly toxic anticoagulant rodenticides in particular, are the most commonly used method for ‘controlling’ rats and mice in the UK.⁸ They are usually formulated as baits designed to attract and be ingested by the target species. Introduced in the UK in the 1950s, the first kind of anticoagulants, known as ‘first-generation anticoagulant rodenticides’ (FGARs), require multiple doses to be lethal, whereas the substantially more potent ‘second-generation’ anticoagulant rodenticides (SGARs) are designed to kill after a single dose. These were developed as rodents in parts

of the UK became resistant to FGARs, although some rodent populations have since evolved resistance to several SGARs also.⁹

In the UK, **over 300 rodenticide products are currently¹⁰ authorised for sale to non-professional users**, i.e. to amateurs and the general public, with no training required prior to use.¹¹ As much as **93% of these products contain SGARs and FGARs** as active substances (see Table 1).

Yet, extensive scientific evidence shows that all ingested poisons have several considerable welfare issues in common. Poisoning can cause extreme levels of suffering, severe pain and distress over a prolonged period. Anticoagulants kill the animal by disrupting the body’s blood clotting process, causing internal and/or external haemorrhaging with bleeding occurring in the gut, tissues, body cavities, joints and the skull.¹² Animals may experience severe abdominal pain,

Table 1: Rodenticide products authorised for sale in the UK for non-professional use (as of 14 October 2020).¹⁶

Rodenticide class	Number of authorised products	Active substance (number of products)	Applicable to mice*	Applicable to rats*	For indoor use	For outdoor use around buildings
SGARs	291	Brodifacoum (122) Difenacoum (98) Bromadiolone (48) Difethialone (14) Flocoumafen (9)	99.3%	98.3%	99.3%	97.6%
FGARs	1	Coumatetralyl (1)	100%	100%	100%	100%
Other	22	Alphachloralose (22)	100%	0%	100%	13.6%

* where target species of product specified

Total number of authorised products: 314

muscle pain, weakness, lameness and breathing difficulties for up to 48 hours prior to death.¹³ In rats, death typically occurs between 3 and 9 days after ingesting a lethal dose, and animals ingesting a lower dose can take longer still to die.¹⁴ Animals typically remain conscious throughout this time. For these reasons the UK’s Pesticides Safety Directorate (PSD), now part of the Health and Safety Executive’s (HSE) Chemicals Regulation Directorate (CRD), concluded that “anticoagulant rodenticides are markedly inhumane”.¹⁵

There are also welfare concerns around the use of non-anticoagulant rodenticides. For instance, poisons such as zinc phosphide and calciferol are generally considered to be inhumane, with the former “typically causing severe pain for several hours, and the latter, pain and illness for several days”.¹⁷

Table 2: Proportion of poisons out of all (i.e. lethal, non-lethal and other) products applicable to rats, per average company store.

Company	Percentage of rat control products that were poisons
Dobbies	68.3%
The Range	66.3%
Wilko	63.9%
Wickes	62.5%
Wyevale	62.2%
B&Q	55.8%
Notcutts	48.1%
Blue Diamond	44.1%
Homebase	42.8%
Robert Dyas	41.2%

However, our survey found that as much as **68%** of all DIY rat ‘control’ products sold by **Dobbies** to the public were rodenticides. Indeed, across all companies **more than 2 in every 5 rat control products sold to the public were poisons**, with 6 of the 10 retailers opting to fill more than half of their in-store range with these toxic substances (see Table 2). For mice, the proportion of rodenticides among all products sold to untrained persons was similarly concerning, amounting to more than **83%** at **Wickes**. For all but one of the other companies, **at least 1 in 3 products offered in store to treat mice consisted of a poison** (see Table 3).

Despite the UK’s Pesticide Safety Directorate’s conclusion that they are “markedly inhumane”, anticoagulant rodenticides make up 93% of the more than 300 rodenticide products authorised for non-professional use.

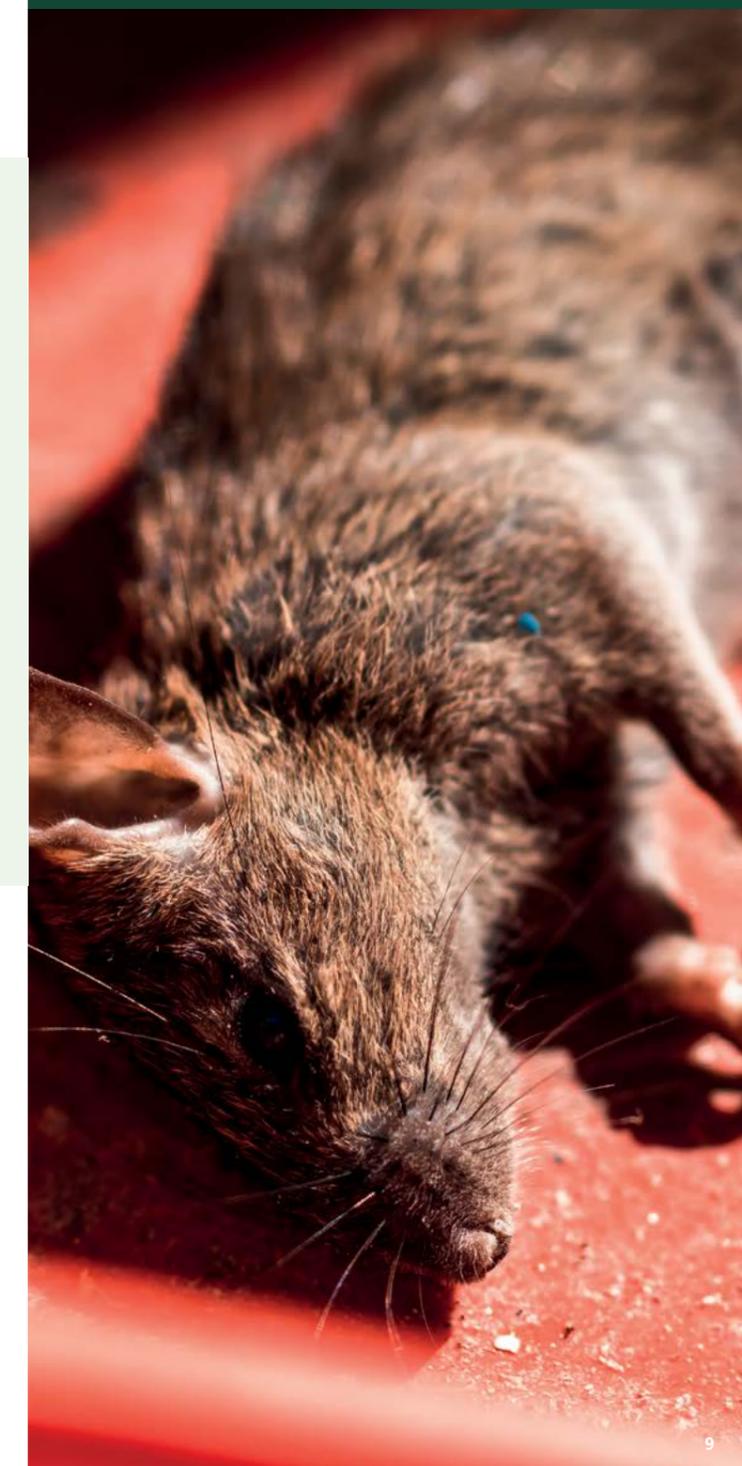


Table 3: Proportion of poisons out of all (i.e. lethal, non-lethal and other) products applicable to mice, per average company store.

Company	Percentage of mouse control products that were poisons
Wickes	83.3%
Wyevale	60.0%
Dobbies	54.6%
Wilko	53.3%
B&Q	49.2%
The Range	46.3%
Homebase	38.5%
Robert Dyas	36.7%
Notcutts	35.1%
Blue Diamond	32.8%

Despite the extensive range of poisons sold by the companies, including second-generation anticoagulant rodenticides, their in-store staff often appeared to have **very limited knowledge of the effect and welfare implications** of the poison products, even when they recommended their use. When asked if applying the recommended poison would result in any suffering for the mice, staff at several stores suggested they would cause little or no suffering to the animal:

“**It tends to be just a stomach ache.**”
Dobbies, Bury St Edmunds.

“**It [the mouse] goes, well it goes to sleep, probably.**” Dobbies, Royston.

“**They [the mice] just kind of get paralysed and die.**” Blue Diamond, Cambridge.

“**I think it [the poison] just shuts them [the mice] down. I don't know what it does to them exactly. ...I think it would just shut down their nervous system first so that they are not in pain, and then kill them gradually.**”
Wilko, London.

2 Dangerous poisons recommended as a default response

In addition to the considerable concerns regarding the humaneness of poisons, especially in the hands of amateur users, applying rodenticides in and around the home can pose a danger to people, particularly children. Ingestion of sub-lethal or near-lethal doses in humans has been shown to lead to internal damage, blood loss and anaemia, requiring immediate medical intervention.¹⁸

Poisons used to treat rodents are also toxic to wildlife, domestic livestock and pets. Every year in the UK, wild mammals, including hedgehogs, badgers, foxes and shrews, and predatory birds, such as barn owls, buzzards, kestrels and red kites, suffer and die after coming into contact with a rodenticide or feeding on a poisoned rodent.¹⁹ A recent study by the UK Centre for Ecology and Hydrology, commissioned by the Campaign for Responsible Rodenticide Use, revealed that residues of highly toxic, yet publicly available, anticoagulants were detected in 87% of British barn owls in 2018,²⁰ and they are suspected to be a significant cause of the birds' population decline.²¹ Pets too are at risk: in February 2020, four pet dogs were reported to have died in the Swansea area after ingesting rat poison.²²

HSE, which is charged with authorising rodenticides in the UK, has noted “a very high concern for primary and secondary poisoning of non-target species”²³ from the five SGARs it currently authorises for use by non-professionals (see Table 1), and concludes that “the use of First and Second Generation Anticoagulant Rodenticides (FGARs and SGARs) present a higher level of risk to humans and non-target animals (such as predatory birds and mammals) than

would normally be considered acceptable.”²⁴ Owing to the threat from poisons to human and animal health and the environment, even professional users are advised to only apply rodenticides as a last resort when alternative treatment methods have been tried and have failed.²⁵ Nonetheless, these products continue to be authorised for purchase and use by the general public.²⁶

Our research found that the DIY ‘pest control’ industry is a significant contributor to the high level of poison use in the UK, with customers encouraged to use poisons by advice from companies’ staff.

When requesting advice to deal with mice entering a home kitchen, HSI/UK's secret shopper was advised to apply poison by staff at 27 of the 30 stores visited. At 18 of these, staff even recommended the use of poison as a first measure, rather than resorting to more humane and less hazardous methods.

“**First of all, put some mice killer down.**”
Homebase, Wandsworth.

“**I would always recommend poison; it is the most effective.**” Robert Dyas, Holborn.

“**You don't know how many [mice] you have, but he [the store manager] just says put loads of poison down where they are all coming from. So, that is the only information I have.**”
Robert Dyas, Oxford.

In addition, **at 26 of the 30 stores staff gave no or insufficient warning of the risks** that the use of a DIY rodenticide in and around the home could pose to residents, children, pet animals and other wildlife.



Poisons cause suffering and death in non-target species, including birds of prey.



3 Lack of staff competence regarding safe and correct product use

It is a mandatory requirement in the UK under the European Chemical Agency's biocidal products regulations for all amateur users of rat and mouse poisons to place the toxic bait inside a tamper-resistant bait station.²⁷ This provision aims to protect people and non-target animals from exposure. Bait stations are enclosed boxes made from a weatherproof material, such as plastic or metal. With two small holes on either side, they are designed to allow rats or mice to enter and feed on the toxic bait but prevent access by larger non-target species. However, even when placed inside a bait station, rodenticides pose a considerable danger: earlier in 2020 a pet dog was reported to have died after ingesting rat poison from a bait box installed by a professional ‘pest controller’ in a Dorset home.²⁸

HSI/UK's survey found that **at 25 of the 27 stores in which staff recommended a rodenticide, they failed to advise that a bait station must be used.** Even more concerningly, in some cases **staff suggested applying poisons outdoors** without taking any protection measures. Following such advice would breach HSE's regulations for rodenticide use and pose a critical danger to people, pets and non-target species.

“**You've got ... the weatherproof ones [poison baits], which probably you are not going to need if you are going to put it down in the kitchen anyway, but that can work outside. So, if you did get some weatherproof ones, you could possibly put some outside as well.**”
Robert Dyas, St Albans.

“ This [poison bait] is cheese flavoured, so they [the mice] eat that and then they die as well and it’s waterproof, so you can put it outside as well because it stops them from coming in.”
The Range, Bury St Edmunds.

“ This is for mice, they’re bait blocks, so you can just put them in areas where you know they will nibble them.” Dobbies, Bury St Edmunds.

“ They [sachets containing rodenticide] are just like pads that you put down where they [the mice] are going and then it stops them.”
Wickes, Stevenage.

Overall, staff at all 10 retailers were found to have omitted safety information or given unsafe or incorrect advice regarding products they recommended, both lethal and non-lethal (see Appendix for each company’s score per question), with Wilko performing worst (see Table 4).

Table 4: Company ranking for the provision of information on correct and safe use of the products recommended by store staff, per average company store. A score of zero would indicate correct information provided.

Company	Score (maximum score of 0)
Wickes	-1.7
Homebase	-2.0
The Range	-2.5
B&Q	-2.7
Notcutts	-2.7
Dobbies Garden Centres	-2.8
Wyevale	-3.0
Robert Dyas	-3.0
Blue Diamond	-3.2
Wilko	-4.0



4 Lethal ‘control’ bias towards rats and mice

When intervention is necessary to remove wildlife from people’s properties, animals should be managed humanely, so as to prevent unnecessary suffering, and effectively in order to prevent the problem from recurring. These principles should be applied regardless of the species concerned.²⁹

However, we found that across all 10 retail companies lethal DIY ‘control’ products were strongly biased towards rats and mice. Historically, there has been little regard for the welfare of animals viewed as ‘pests’, especially high-profile ‘pest’ species such as rodents. As already discussed in Section 1, many DIY ‘control’ products authorised for the killing of rats and mice by the general public are known to cause severe suffering, while others are currently unregulated. For instance, break-back traps for rats and mice are exempt from mandatory quality and humaneness testing, and a comparative analysis study raised significant concerns about the humaneness of many products available on the market.³⁰

The range of DIY products available to deal with unwanted wildlife in and around the home appears to reinforce these double standards: across all stores visited, all products targeting wildlife species other than rats, mice and moles were non-lethal, and those for moles mostly non-lethal, whereas **the range of products for ‘controlling’ rats and mice consisted mostly, and in the case of some retailers entirely, of lethal products** (see Table 5). **At Wickes and Wyevale all rodent products on sale were designed to kill the animal.** Even at Robert Dyas, which stocked the highest proportion of non-lethal rat and mouse products (31.0% for rats and 34.5% for mice), the majority of products offered to treat rats and mice were lethal.

Table 5: Proportion of lethal products out of all (i.e. lethal, non-lethal and other) products applicable to rats and mice, respectively, per average company store.

Company	Percentage of rat control products that were lethal	Percentage of mouse control products that were lethal
Wickes	100.0%	100.0%
Wyevale	100.0%	100.0%
Wilko	97.2%	91.1%
Dobbies	91.7%	91.1%
Notcutts	84.3%	74.7%
B&Q	75.3%	72.9%
The Range	73.3%	66.4%
Blue Diamond	69.6%	66.1%
Homebase	66.2%	68.6%
Robert Dyas	64.6%	62.0%

Although none of the stores visited were found to be selling rodent glue traps,³¹ which the British Veterinary Association (BVA) describes as “inhumane,”³² a member of staff at The Range recommended buying these at a local corner store. Appearing to display a worrying disregard for the rodents’ welfare, they advised HSI/UK’s investigator:

“ What I’d do is use sticky tape, but we don’t sell that here. You know, the one where they run around and, sometime, they get stuck on the tape. It’s not very humane to use that, but I don’t care, I want to get rid of these things. I don’t have the problem anymore, but I would use that to catch the mouse.”
The Range, London.

5 Lack of advice on humane, effective and sustainable management

The findings of our research indicate that customers seeking a permanent and safe solution to a rodent issue in their home or garden are often given no or little choice other than to purchase a lethal product. Yet, resorting to killing wildlife as a default response not only presents animal welfare problems; in addition, opting for a ‘quick-fix’ lethal method typically does not offer a viable long-term solution and may even perpetuate or ultimately worsen the problem. This is especially true where territorial animals such as rats and mice are concerned. When individual animals, or even larger colonies, are eliminated, e.g. through poisoning or trapping, they are swiftly replaced by others of their kind.³³ This can make lethal ‘control’ a potentially very costly and labour-intensive undertaking, and ultimately futile endeavour, for householders.

In order to achieve a sustainable, safe and ethical solution, the underlying conditions attracting the animals to the property and enabling their entry need to be identified and addressed. By removing access to food and shelter, modifying the existing habitat and implementing humane deterrence and eviction measures, unwanted animals can be encouraged to leave and prevented from returning to people’s properties.³⁴ Many proofing and hygiene measures can be carried out by the residents themselves, safely and often at little cost,



Removal of food and blockage of access points are key to sustainably solving rodent problems.

making this a more effective and welfare-friendly strategy than a lethal ‘control’ programme.

Although effective DIY deterrence and proofing methods and products for rats and mice exist, our findings suggest that these are not widely marketed or promoted to the UK public. As discussed in Section 4, the majority of rodent products stocked across all companies were lethal. Indeed, **at 93% of the stores visited**, including stores selling rodent deterrence and exclusion products, **staff immediately advised to use a lethal method**. Only at 2 stores, both of which were owned by The Range, did staff recommend the use of a deterrence product as the first course of action when asked how to deal with mice in a home.

Rats and mice are opportunistic and will take advantage of areas that allow access to food and harbourage. Proofing is therefore an essential method of managing rodents in and around the home. Typical entry points for mice into a property include air bricks, air vents, gaps around pipes and under doors, and holes around cables and in floorboards. To permanently exclude unwanted animals, these areas need to be identified and blocked. However, **at over half (17) of all stores, staff failed to advise to identify and treat entry points**; this was the case even in stores where appropriate DIY exclusion products, such as wire wool, ‘mouse mesh’ or quick-hardening sealant, were available. We were concerned to find that **at stores owned by B&Q, Dobbies and Wilko, none of the staff suggested taking any such action**. Our survey also revealed that **at stores owned by 6 of the 10 companies, namely B&Q, Dobbies, Wilko, The Range, Wickes and Blue Diamond, staff did not provide any practical DIY advice to customers on how to proof their homes**. At a Notcutts garden centre, a member of staff admitted,

“Well, they must be getting in somewhere, but I wouldn’t know how you would find it.”
Notcutts, Oxford.

In addition to proofing, improving hygiene and food containment is widely recognised as a major objective and key requirement of any rodent management strategy.³⁵ Householders can achieve this through simple and inexpensive steps, such as cleaning the affected area and removing access to possible food sources. **Yet, none of the staff at the stores owned by B&Q, Dobbies, Wilko, The Range, Wickes and Wyevale advised to take any hygiene or food containment measures.**

Overall, all companies scored quite poorly for provision of adequate advice on effective and humane wildlife management, with none achieving more than half the maximum score (see Table 6). **B&Q and Wilko performed worst**, with none of their stores achieving a point for any of the six questions (see Methodology).

Table 6: Company ranking for the provision of information on effective and humane management of wildlife, per average company store.

Company	Score for the average company
Notcutts	3.0
Homebase	2.5
The Range	2.3
Blue Diamond	1.7
Wyevale	1.5
Robert Dyas	1.5
Dobbies Garden Centres	0.7
Wickes	0.3
B&Q	0.0
Wilko	0.0



6 Lack of staff knowledge about ‘pest control’

After completing our fieldwork, we submitted a written enquiry to the managers of the stores visited and the head offices of each of the 10 companies, asking for details of any training and/or policy in place to guide staff in responding to customer queries on how to resolve problems with unwanted wildlife in the home and/or garden.

We did not receive any response to our enquiry from the store managers or company staff at The Range or Wickes.³⁶ The reply received from Blue Diamond did not answer our questions, while Notcutts and Robert Dyas stated that their training, policies and procedures were confidential and they were unable to share any information. The Stevenage branch of British Garden Centres, who took over ownership of this and the two other Wyevale garden centres shortly after our visits and have become one of the UK’s major gardening retail companies since, admitted that they did “not have any training in place under the recent new ownership.”³⁷

B&Q, Homebase and Wilko confirmed that they provided staff with training on safe and legal product use.

B&Q stated that their staff received mandatory training on the use of dangerous products:

“B&Q provides training for the use of any hazardous substances that our colleagues may come into contact with. All store colleagues receive this as mandatory training. On an ongoing basis, colleagues have access to COSHH/Safety Data Sheets as well as the details on the individual product packaging, to support safe storage and the sale of these products.”³⁸

Homebase explained that they offered their staff regular training on product use:

“All our training content (including e-learning courses and monthly ‘product huddles’) is reviewed on an annual basis to reflect changes in product range and relevant legislation. [...] We also have an e-learning course and validation (‘Helping Customers Use & Purchase Garden Chemicals Safely’), which fully complies with the Sustainable Use Directive for Plant Protection Products that came into legal force in 2014. We have a UK/ Northern Ireland version and a Republic of Ireland version of this course to reflect the differing legislation. Both courses were put together in collaboration with the relevant government bodies (HSE in UK / DAFM in ROI) and accredited by an external training provider.”³⁹

Wilko confirmed that a training course was in place for staff, but did not clarify whether this was mandatory and whether staff were trained to supply advice on how to deal with wildlife:

“**We sell a variety of products for unwanted animals and have an online training course available for team members. This reminds them to advise the hard-working families who shop with us to follow the product information labels carefully.**”⁴⁰

However, as discussed in Section 3, **across all 10 companies staff were found to have omitted safety information or given unsafe or incorrect advice,** with Wilko performing worst.

Despite many of the companies selling a considerable range of amateur ‘pest control’ products, including potentially dangerous and inhumane devices as noted in Sections 1 and 2, staff at several stores openly admitted to a lack of knowledge on how to use their products and what course of action to take:

“**I don’t know exactly; I don’t really use any of these things.**” B&Q, Cambridge.

“**I’ve never had the problem myself, so I don’t know what to recommend with it.**” B&Q, Stevenage.

“**I’m not sure how you can permanently get rid of [the mice].**” Robert Dyas, Holborn.

“**I don’t know how well [the range of pest control products by a particular manufacturer] works, if I’m being honest.**” Homebase, Cambridge.

“**I’m not really a specialist, to be honest, for like pest control.**” The Range, Stevenage.

“**I am not 100% [sure]... I just don’t know. ... I am not really a [mouse] person but I am just going to tell you what you can have and what you can’t have. ... I really, really don’t know what is the best for you.**” The Range Bury, St Edmunds.

Given the hazardous nature of the products sold, it would seem critical that store staff should be fully trained and competent to advise customers on safe product use and risks. Relying on people reading and following label instructions may not be sufficient to protect people and animals. Furthermore, if customers are encouraged to buy a product such as a poison in store, and then read the label at home to find all of the safety limitations, they may be ill-equipped or prepared to use the product with the necessary caution and safety requirements. HSE recognises that, **“non-professional users [of anticoagulant rodenticides] are less likely than professionals to correctly interpret a set of safety instructions on product packaging, particularly if it is presented in an associated information sheet.”**⁴¹ Online product reviews made by members of the public for a widely-sold amateur anticoagulant poison for mice, stocked by half of the 30 stores visited, appear to confirm the lack of compliance with label instructions, with UK reviewers stating:

“**Seemed to work okay but was difficult to read the writing on the packaging as it was so small.**” (<https://www.ebay.co.uk/p/27016041428>)

“**Sprinkled it outside & in - they ate it all & not seen them since !?”** (<https://www.ebay.co.uk/p/27016041428>)

“**This mouse bait really works, but the instructions say to put the bait out unopened and the mice will chew through the plastic to get to it, well i must have had lazy mice because that never happened, the mice walked past. But when i opened the sachets then the mice really tucked in, and with using spring loaded traps it looks like they have gone.**” (https://www.amazon.co.uk/Rentokil-PSM22-Mouse-Killer-Grain/dp/B07BFNN92D/ref=pd_sbs_201_2/261-2618531-4339442)

CONCLUSION AND RECOMMENDATIONS

The use of highly toxic and inhumane products by untrained persons for the ‘control’ of wildlife in and around UK homes poses unacceptable risks to human health and animal welfare and should be avoided as much as possible. Yet, where rats and mice are concerned, the public are being encouraged by perhaps well-meaning but underinformed staff in stores owned by many of the nation’s leading hardware and gardening retailers to purchase dangerous and cruel products, especially poisons, and use them as a default response. Often, staff appear to have limited understanding of the extreme suffering such products can cause.

The casual and excessive availability of rodenticides to amateur users is made worse by a worrying lack of advice on how to apply them safely: oftentimes, unwitting householders are given no or insufficient warning by in-store staff of the risks involved in applying a poison and receive unsafe or incorrect advice on how to use the recommended products. As a result, rodenticides applied by untrained users and the general public are liable to misuse, putting people, animals and the environment at significant and unnecessary risk.

Unwanted wild animals on people’s properties should be dealt with in a way that is safe, sustainable and ethical. Deterrence and exclusion measures must be prioritised if a long-term solution is to be achieved. Although humane and effective methods and products exist to manage rats and mice, most stores choose to stock lethal devices and fail to provide their customers with information on essential steps, including hygiene practices and proofing. Instead, residents are advised to purchase products that are not only dangerous but likely to perpetuate or worsen the problem.

RECOMMENDATIONS FOR ACTION BY THE HEALTH AND SAFETY EXECUTIVE (HSE):

- 1 Prohibit the purchase and use of anticoagulant rodenticides by members of the public and any other non-professional users who are not formally trained in their use.
- 2 Require suppliers of amateur ‘pest control’ and wildlife management products to provide regular mandatory training to staff on: safe and correct product use; risks to users, target and non-target species; alternatives to chemical ‘control’; and humane management strategies, including deterrence and exclusion.
- 3 Monitor and enforce suppliers’ compliance with HSE regulations, best practice guidance and staff training requirements.

RECOMMENDATIONS FOR ACTION BY DIY, HARDWARE AND GARDENING RETAILERS:

- 1 Introduce mandatory training for all staff involved in the supply of amateur ‘pest control’ and wildlife management products to undergo regular (e.g. annual) training to advise customers on: safe and correct product use; risks to users, target and non-target species; use of poisons as a last resort and alternatives to chemical ‘control’; and humane and effective wildlife management methods, prioritising deterrence and exclusion measures.
- 2 Increase the stock of amateur products for the humane ‘control’ and management of rodents, e.g. deterrence and proofing devices.
- 3 Supply customers in all stores and on store and company websites with detailed information and advice on the humane and effective management of rodents and other wildlife species in and around the home.

California Bans SGAR Rodenticides 29 September 2020..... California Bans SGAR Rodenticides



California has become the first US state to ban Second-Generation Anti-Coagulant Rodenticides (SGARs), following concerns over their considerable impact on local and national wildlife. Bill AB 1788, known as the California Ecosystems Protection Act of 2020, was signed off by Governor Gavin Newsom on 29 September 2020. The ban will go into effect on 01 January 2021 and will prohibit all residential and commercial use of any pesticide product containing brodifacoum, bromadiolone, difenacoum or difethialone as active ingredients. A ban on consumer sales and use of SGARs was already

introduced by the Department of Pesticide Regulation in 2014. Citing scientific evidence of continued high levels of rodenticide exposure and poisoning in non-target species, including large carnivores and birds of prey, California’s state legislature voted to extend the restrictions and impose an all-out ban, with limited exemptions. The bill recognises that, “rodenticides lead to direct mortality and chronic long-term health impacts for natural predators, nontarget organisms, and endangered species”, and concludes that, “while all anticoagulant rodenticides have a harmful impact on nontarget animals, second generation anticoagulant rodenticides (SGARs) are particularly dangerous to nontarget wildlife.”⁴²

APPENDIX

B&Q Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0

B&Q Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	-1	-1	0	-1
2	0	-1	-1	0	-1
3	0	-1	-1	0	0

STORE 1 Postcode: SW18 1EG | Visited: 02/10/2019 STORE 2 Postcode: SG1 1XW | Visited: 13/09/2019 STORE 3 Postcode: CB5 8JH | Visited: 19/09/2019

BLUE DIAMOND Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0.5*	1	0	0	0	1
2	0.5**	0	0	1	0	0
3	0	1	0	0	0	0

* "Do you know where their point of entry is?" - did not inquire about number of animals or area of activity ** "Have you got decking in the house?" - did not inquire about number of animals or area of activity

BLUE DIAMOND Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	-1	-1	-0.5 ^{†††}	0
2	0	-1	-0.5 [†]	-1	-1
3	0	-1	-0.5 ^{††}	-1	-1

† "Do you have kids in the house?" - did not warn about risks for pets or non-target wildlife †† "Don't mess around with the poison unless you have an infestation problem because it's messy and you don't want to have poison floating around the house or outside." - no explicit mention of risks to humans, pets or non-target wildlife ††† "You would have to check it daily... they'll suffer if you don't check it daily, because obviously they will want to eat and drink" - recommended releasing animal in unfamiliar territory, did not warn of subsequent suffering: "drive him [the mouse] in the car to where you'd walk the dog or something, because if you just release him in the garden, he'll come back."

STORE 1 Postcode: OX25 2NY | Visited: 27/09/2019 STORE 2 Postcode: CM17 9LD | Visited: 29/09/2019 STORE 3 Postcode: CB23 7PJ | Visited: 19/09/2019

DOBBIES Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0	1	0	0	0	0
2	0	0	0	0	0	0
3	0	1	0	0	0	0

DOBBIES Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	-1	-0.5 [†]	-0.5 ^{†††}	-1
2	0	-1	-0.5 ^{††}	-1	0
3	0	-1	-1	0	-1

† "I don't like poison because I worry about the dogs eating it, the children and stuff like that" - did not warn of risks to non-target wildlife †† "You haven't got pets or..." - did not warn of risks to humans and non-target wildlife ††† "Check it regularly." - did not warn of suffering if released in unfamiliar territory

STORE 1 Postcode: PE7 8NY | Visited: 20/09/2019 STORE 2 Postcode: IP33 2RN | Visited: 27/09/2019 STORE 3 Postcode: SG8 6RB | Visited: 10/09/2019

HOMEBASE Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0	0	0	1	1	1
2	0	1	0	0	0	0
3	0.5*	0	0	1	1	0

* "Do you know where they are coming from at all?" - did not inquire about number of animals or area of activity

HOMEBASE Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	0	-1	0	-1
2	0	0	0	-1	0
3	0	-1	-1	0	-1

STORE 1 Postcode: SW18 1EW | Visited: 02/10/2019 STORE 2 Postcode: AL4 0JJ | Visited: 04/10/2019 STORE 3 Postcode: CB5 8JL | Visited: 19/09/2019

APPENDIX

NOTCUTTS Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0.5*	1	0	1	0	0
2	0.5**	1	0	1	1	1
3	0	1	0	1	0	0

* "Do you know where they are coming in?" - did not inquire about number of animals or area of activity ** "Do you know where they are coming in? Do you know how they are getting in?... Do you know how many mice you have got? Have you seen them?" - did not inquire about area of activity

NOTCUTTS Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	0	0	-1	0
2	0	-1	-1	-1	-1
3	0	-1	-1	0	-1

STORE 1 Postcode: OX44 9PY | Visited: 26/09/2019 STORE 2 Postcode: AL4 OHN | Visited: 04/10/2019 STORE 3 Postcode: PE2 5UU | Visited: 20/09/2019

ROBERT DYAS Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0	0	0	1	1	1
2	0.5*	0	0	1	0	0
3	0	0	0	0	0	0

* "Is there more than one? Did you notice the droppings more in one place?" - did not inquire about conditions attracting animals, e.g. entry points

ROBERT DYAS Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	-1	-0.5†	-1	-1
2	0	-1	-0.5††	-1	0
3	0	0	-1	-1	-1

† "Are there kids or any little animals or anything?" - did not warn of risks to non-target wildlife †† "Have you got any other pets or children?" - did not warn of risks to non-target wildlife

STORE 1 Postcode: WC1V 6DR | Visited: 11/09/2019 STORE 2 Postcode: AL1 3DY | Visited: 04/10/2019 STORE 3 Postcode: OX1 2DP | Visited: 26/09/2019

THE RANGE Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0	0	0	0	0	0
2	0.5*	1	1	1	0	0
3	0.5**	1	1	1	0	0

* "Do you know roughly where they are actually coming from?" - did not inquire about number of animals or area of activity ** "Have you got a hole in your kitchen? ...How many [mice] have you got? ...How long have you had it?" - did not inquire about area of activity

THE RANGE Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	-1	-1	0	0
2	0	-1	-1	0	0
3	0	-1	-0.5†	-1	-1

† "Have you got kids? ...Have you got dogs or anything?" - did not warn of risks to non-target wildlife

STORE 1 Postcode: SE16 7LL | Visited: 18/09/2019 STORE 2 Postcode: SG1 1XN | Visited: 13/09/2019 STORE 3 Postcode: IP33 3SP | Visited: 27/09/2019

WICKES Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	1	0	0

WICKES Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	0	0	0	0
2	0	-1	-1	0	0
3	0	-1	-1	0	-1

STORE 1 Postcode: E16 4PA | Visited: 18/09/2019 STORE 2 Postcode: SG1 1XP | Visited: 13/09/2019 STORE 3 Postcode: AL4 0JY | Visited: 04/10/2019

APPENDIX

WILKO Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0

WILKO Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	-1	-1	-1	-1
2	0	-1	-1	-1	-1
3	0	-1	-1	-1	-1

STORE 1 Postcode: SW6 1BW | Visited: 02/10/2019 **STORE 2** Postcode: SG1 1DN | Visited: 13/09/2019 **STORE 3** Postcode: CB1 1ER | Visited: 19/09/2019

WYEVALE GARDEN CENTRES Wildlife Management Advice

Store Number	Q1 Score	Q2 Score	Q3 Score	Q4 Score	Q5 Score	Q6 Score
1	0.5*	0	0	1	0	0
2	0.5**	0	0	0	0	0
3	0.5***	0	0	1	1	0

* "Have you found out where the mouse hole is? They can get through very tiny spaces." - did not inquire about number of animals or area of activity ** "Where are they in your kitchen?" - did not inquire about number of animals and conditions attracting them, e.g. entry points *** "You don't know where they are coming in from?" - did not inquire about number of animals or area of activity

WYEVALE GARDEN CENTRES Product Safety Advice

Store Number	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
1	0	-1	-0.5†	-1	-1
2	0	-1	-1	0	-1
3	0	-1	-0.5††	0	-1

† "Have you got young children?" - did not warn of risks to pets or non-target wildlife †† "You don't have any other animals in the house, do you?" - did not warn of risks to humans or non-target wildlife

STORE 1 Postcode: HA2 6NB | Visited: 09/10/2019 **STORE 2** Postcode: SG1 4AH | Visited: 13/09/2019 **STORE 3** Postcode: SG4 0JT | Visited: 12/09/2019

REFERENCES

- Rentokil. 'When do pests come out to play?'. 01 February 2017. <https://www.rentokil.com/blog/when-do-pests-come-out-to-play/#.XuOco-FTVPY> [Accessed 12 October 2020].
- Fox N and Macdonald H. *Welfare Aspects of Killing Wild Animals in Britain*. 2nd Ed. The Hawk Board, Carmarthen, Wales, 1999.
- Suitable companies were selected among the UK Top DIY & Gardening Retailers by Market Share 2018/19 published by Retail Economics, see <https://www.retailereconomics.co.uk/top-10-retailers-diy-and-gardening> [Accessed 15 September 2019]. In addition, we carried out online research to identify retailers with the highest number of stores across the UK to be included in our survey.
- Substances or chemicals intended to deter an animal from approaching or settling in the target area, e.g. repellent sprays, scent sachets, etc.
- Physical devices intended to deter an animal from approaching or settling in the target area or to exclude the animal from that area, e.g. sound-emitting devices, physical barriers, sealants etc.
- Universities Federation for Animal Welfare (UFAW). *Guiding Principles in the Humane Control of Rats and Mice*. 2008. <https://www.ufaw.org.uk/downloads/welfare-downloads/guidance-on-humane-control-of-rodents-feb2509v19.pdf> [Accessed 12 October 2020].
- Ibid.
- Mason G and Littin K. The humaneness of rodent pest control. *Animal Welfare* 12 (1), February 2003: 1-37. https://www.researchgate.net/profile/Kate_Littin/publication/253097632_The_humaneness_of_rodent_pest_control/links/0c96053c5ca400bd7b000000/The-humaneness-of-rodent-pest-control.pdf [Accessed 12 October 2020].
- Buckle A, Prescott C, Coan E, Jones C, Baxter M, Rymer D. Anticoagulant Resistance in Rats and Mice in the UK – Current Status in 2018. Campaign for Responsible Rodenticide Use UK. 2018. https://www.researchgate.net/publication/329443254_Anticoagulant_Resistance_in_Rats_and_Mice_in_the_UK_-_Current_Status_in_2018 [Accessed 14 October 2020].
- As of 14 October 2020.
- Health and Safety Executive (HSE). UK Authorised Rodenticide Product Database. n.d. <https://webcommunities.hse.gov.uk/connect.ti/pesticides/viewdatastore?dsid=10116> [Accessed 14 October 2020].
- UFAW.
- Ibid.
- Mason.
- Department for Environment, Food and Rural Affairs (DEFRA). Evaluating the potential of analgesics to improve the humaneness of anticoagulant rodenticides – WM0412. SID5 (Rev. 07/10). 2011. http://randd.defra.gov.uk/Document.aspx?Document=9904_WM0412SID5v2final.pdf [Accessed 12 October 2020].
- HSE.
- Mason.
- Ibid.
- See Wildlife Incident Investigation Scheme annual reports. Available at: <https://www.hse.gov.uk/pesticides/reducing-environmental-impact/wildlife/wiis-quarterly-reports.htm> [Accessed 12 October 2020].
- Shore RF, Walker LA, Potter ED, Chaplow JS, Pereira MG, Sleep D, Hunt A. Second generation anticoagulant rodenticide residues in barn owls 2018. CEH contract report to the Campaign for Responsible Rodenticide Use (CRRU) UK. 2019. https://pbms.ceh.ac.uk/sites/default/files/stewardship-2018-owls_FINAL.pdf [Accessed 12 October 2020].
- Barn Owl Trust. *Barn Owl Conservation Handbook*. Exeter: Pelagic Publishing, 2012.
- Bannon C. 'Rat poison kills four dogs within 24 hours at two locations in Swansea', *Wales Online*, 17 February 2020. <https://www.walesonline.co.uk/news/wales-news/rat-poison-killed-four-dogs-17761904> [Accessed 12 October 2020].
- HSE. Environmental Risk Mitigation Measures for Second Generation Anticoagulant Rodenticides Proposed by the UK. 2012: 18. <https://www.hse.gov.uk/biocides/downloads/ermm-sgar.pdf> [Accessed 12 October 2020].
- HSE. 'Anticoagulant rodenticides and biocides legislation'. n.d. <https://www.hse.gov.uk/biocides/eu-bpr/rodenticides.htm> [Accessed 12 October 2020].
- Campaign for Responsible Rodenticide Use (CRRU) UK. Code of Best Practice - Best Practice and Guidance for Rodent Control and the Safe Use of Rodenticides. 2015. <https://bpca.org.uk/write/MediaUploads/Documents/Codes%20of%20Best%20Practice/COBP-CRRU-Rodent-Control-and-Safe-Use-of-Rodenticides-2015.PDF> [Accessed 12 October 2020].
- HSE. UK Authorised Product Rodenticide Product Database.
- See Biocidal Products Committee opinions on active substance renewals for rodenticides. <https://echa.europa.eu/regulations/biocidal-products-regulation/approval-of-active-substances/bpc-opinions-on-active-substance-approval> [Accessed 12 October 2020].
- Lewis J. 'Couple's pet dog dies after eating rat poison from bait box installed by council pest controller', *Bournemouth Echo*, 22 January 2020. <https://www.bournemouthecho.co.uk/news/18177534.couples-pet-dog-dies-eating-rat-poison-bait-box-installed-council-pest-controller/> [Accessed 12 October 2020].
- Dubois S, Fenwick N, Ryan EA, Baker L, Baker SE, Beausoleil NJ, Carter S, Cartwright B, Costa F, Draper C, et al. International consensus principles for ethical wildlife control. *Conservation Biology*, 31(4), 2017: 735-760. <https://onlinelibrary.wiley.com/doi/full/10.1111/cobi.12896> [Accessed 12 October 2020].
- Baker SE, MacDonald DW, Ellwood SA. Double standards in spring trap welfare: ending inequality for rats (Rodentia: Muridae), mice (Rodentia Muridae) and moles (Insectivora: Talpidae) in the United Kingdom. *Proceedings of the Ninth International Conference on Urban Pests*. Birmingham, UK. 9-12 July 2017: 139-145.
- Also known as glue boards or sticky boards, these devices contain a strong non-drying adhesive designed to catch and immobilise rats and mice, but not to kill them. They are currently available for professional and public purchase and use in the UK.
- British Veterinary Association (BVA). Policy statement: Rodent glue traps. 15 May 2019. <https://www.bva.co.uk/media/1159/rodent-glue-traps.pdf> [Accessed 12 October 2020].
- Hacker, KP, Minter A, Begon M, Diggle PJ, Serrano S, Reis MG, et al. A comparative assessment of track plates to quantify fine scale variations in the relative abundance of Norway rats in urban slums. *Urban Ecosystems*, 19, 2016: 561-575. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4955619/> [Accessed 12 October 2020].
- Smith RH and Meyer AP. *Rodent Control Methods: Non-chemical and Non-lethal Chemical, with Special Reference to Food Stores. Rodent Pests and their Control*, 2nd Ed, 2014: 101-122. doi: 10.1079/9781845938178.0101. https://www.researchgate.net/publication/283022830_Rodent_control_methods_Non-chemical_and_non-lethal_chemical_with_special_reference_to_food_stores [Accessed 12 October 2020].
- Ibid.
- Store and company staff were contacted by email, through customer services and/or via online enquiry forms between 28 October and 01 November 2019. As of the date of release of this report (16 November 2020), no response to our enquiry has been received from The Range and Wickes.
- Email received on 19 December 2019.
- Email received on 05 December 2019.
- Email received on 27 November 2019.
- Email received on 07 December 2019.
- HSE. Human health risk mitigation measures for anticoagulant rodenticide baits. Draft proposals for BPR product authorisation in the UK. 2011. <https://www.hse.gov.uk/biocides/eu-bpr/human-health-risk-mitigation.pdf> [Accessed 12 October 2020].
- California State Legislature. California Ecosystems Protection Act of 2020. Assembly Bill No. 1788. 2020. https://leginfo.ca.gov/pub/aces/bills_1701_1799_bill_1788_bill_00.html#bill_id=201920200AB1788 [Accessed 14 October 2020].

Photo credits: Stephanie Maw, David Ramsden, Shutterstock



**HUMANE SOCIETY
INTERNATIONAL**

UNITED KINGDOM

5 Underwood Street, London N1 7LY United Kingdom

Telephone **020 7490 528** | Email **info@hsiuk.org** | **hsiuk.org**

Charity number: 1098925