THE KILLGERM GUIDE TO ENVIRONMENTAL ASSESSMENTS WHEN USING RODENTICIDES

ENSURING A SAFER ENVIRONMENT FOR US AND THEM

Killgerm® TRAINING

1. Introduction

The control of rodent populations on farms and in other rural settings is essential because they spread disease, contaminate foodstuffs and cause damage to buildings. They can also become the source of infestation for nearby suburban areas.

Other reasons for needing to control rodents in rural areas are to protect game rearing, fisheries, horticulture and forestry; as well as preventing infestations in landscaped areas surrounding out-of-town sites, such as supermarkets and industrial estates.

However, research by government research institutes and agencies of the Department for Environment, Food and Rural Affairs and several universities has shown that, as a result of rodent control programmes in rural areas, many species of wildlife are exposed to contamination by rodenticides, particularly by the second generation anticoagulants. These species include protected birds, particularly raptors, and mammals such as polecats, stoats and foxes.

The residues of rodenticides discovered in wildlife are usually at very low levels and there is no evidence that such exposure affects wildlife populations.

There is, however, laboratory evidence that the behaviour of rats changes when they have ingested potentially lethal doses of anticoagulants and, as a result, they may be more likely to be taken by predators, leading to an increased risk of secondary poisoning.

There is also evidence that sub-lethal dosing of anticoagulant rodenticide increases the risk of scavengers or predators succumbing to the effects of subsequent exposure.

As even the current low-level but widespread contamination of wildlife is unacceptable, action is required to reduce this exposure and with it the risks of secondary poisoning.

These notes are intended to give guidance to anyone involved in pest control in rural areas or indeed in any area where non-target wildlife may be at risk. They are not definitive but it has been agreed between Killgerm and Natural England that following them will be evidence of good and responsible practice. Authorised uses of rodenticides within the European Union are being currently reviewed as a result of the implementation of the Biocidal Products Regulations (528/2012).

Undertaking an environmental risk assessment is part of the responsible stewardship of rodenticides, under the 'UK rodenticide stewardship regime'.

Further details regarding the UK rodenticide stewardship regime can be found here http://www.thinkwildlife.org/stewardship-regime/

The 'CRRU UK Code of Best Practice: Best Practice and Guidance for Rodent Control and the Safe Use of Rodenticides' must also be followed.

2. Product approvals

Pest Control

Products containing the following active ingredients are currently available in the UK:

First generation anticoagulants:	warfarin, coumatetralyl
Second generation anticoagulants:	difenacoum, bromadiolone, brodifacoum, flocoumafen, difethialone
Non-anticoagulants:	alphachloralose, aluminium phosphide, powdered corn cob.

The first generation anticoagulants, are approved for use both indoors and outdoors. Many second generation anticoagulants are approved for use 'in and around buildings'. The EC definition of this is '... the building itself, and the area around the building that needs to be treated in order to deal with the infestation of the building.' Alphachloralose is approved for use as a rodenticide indoors against mice only. Please note that this advice is correct at the time of printing. Due to the changes associated with the ongoing implementation of the UK rodenticide stewardship regime, and changing product authorisations please consult product labels prior to use, as label text changes will supersede advice given in this document.

Further products will be approved under the Biocidal Products Directive in due course. Details of all approved products are available from www.hse.gov.uk.

The definition of "indoors" and "predominantly living indoors" is as follows:

Indoors means situations where bait is placed within a building or other enclosed structure. Covered drains and sewers are considered to be "indoors".

Predominantly living indoors means bait should be laid only where the target rodents are living or feeding predominantly within that building or structure. Any burrows within the structure should not extend to the outside.

A distinction is also made between professional and amateur use. Products approved for use by professionals may only be used by people as part of their work and they must be trained and competent in their use. Amateur products may be used by the general public.

Crop Protection

Products used to control mice or other rodents outside plant growing areas, for example in farms, cities, industrial premises, and in plant growing areas not to protect plants or plant products, are considered as biocidal products.

Rodenticides applied in plant growing areas (agricultural field, greenhouse, forest) to protect plants or plant products temporarily stored in the plant growing areas in the open without using storage facilities.

If a product is used in both situations, then it falls within the scope of both Directive 98/8/EC and Directive 91/414/EEC for the purpose of these Directives and it will need dual authorization for the relevant use.

It should be noted therefore that when a rodenticide is used in greenhouses to protect the bulbs, plants and fruit from being eaten by rats or mice, or used on potato or silage clamps and haystacks etc., in fields, it will need to be approved under the PPPD.

Rodenticides approved in the UK for crop protection uses are listed at www.ec.europa.eu.

3. Legal requirements for training

Employers must ensure that employees who use pesticides are given the instruction, training and guidance necessary to enable them to do their work properly.

Nobody can use a pesticide in the course of their business or employment or instruct others on the use of a pesticide, unless they have received adequate instruction, training and guidance in the safe, efficient and humane use of pesticides, and are competent for the duties which they are called upon to perform.

Anybody using a pesticide must take all reasonable precautions to protect the health of human beings, creatures and plants, safeguard the environment and in particular avoid the pollution of water.

These requirements mean that pest controllers, farmers and gamekeepers must be properly trained and competent and the third requirement means that they must carry out their work in a proper manner.

Information regarding approved certification in line with the requirements of the UK Rodenticide Stewardship Regime is available at http://www.thinkwildlife.org/stewardship-regime/

4. Permitted laying of bait techniques

At present in the UK, there are three main application methods used to control rats and mice with rodenticide baits. These are:

- *Loose baiting:* loose bait made inaccessible to non-target species either by using it in secure premises or, elsewhere, by placing it under tiles, in pipes or using naturally occurring materials etc.
- *Use of bait stations:* bait applied in purpose-built bait stations is the most commonly used method by professional pest controllers but is not one that is compulsory in all circumstances.
- *Hole or burrow baiting:* loose bait applied directly into holes or burrows.

The UK Competent Authority for rodenticides is the Chemicals Regulation Directorate (CRD). CRD encourages an integrated approach to rodent control through proofing, good hygiene, trapping and baiting with rodenticides and all of the above application techniques are recognised as having a role to play in rodent control.

5. Research into baiting techniques

Work in the late 1970s and 1980s by the MAFF Pest Infestation Control Laboratory (latterly the Central Science Laboratory (CSL) and now the Food and Environment Research Agency (FERA)), showed that short treatments, rarely exceeding 28 days duration, using second-generation anticoagulants in bait trays under natural cover were very successful, with few reports of effects on non-target species.

Further treatments with these anticoagulants, again using bait trays under natural cover, were carried out in Hampshire and Berkshire following the discovery of difenacoum resistance. It was found that the treatments were taking longer and consequently there were significant numbers of non-target species being affected.

As a result, bait trays were increasingly replaced with bait boxes. This was important as many treatments included the baiting of field margins where there was little natural cover.

Closer monitoring of the treatments found that bird takes increased significantly after two weeks, even from bait boxes, highlighting the need to achieve control as quickly as possible.

Unfortunately, the treatments in Hampshire and Berkshire were taking seven or eight weeks to complete and some took even longer. Initially, this was thought to be caused by anticoagulant resistance, but later it was discovered that the rats were simply not taking enough of the bait, because they had plenty of alternative food.

Because bait, especially wax block formulations, was found occasionally in the open some distance from a protected container, the Pesticides Safety Directorate (PSD) asked CSL to investigate why this apparent transfer of bait was happening and how to prevent it.

The research concluded that bait transfer, including removal of loose-grain baits, was normal behaviour for foraging rats, which meant that the use of tamper-resistant containers could not always be relied upon to provide adequate bait security. In fact, the use of some types of box could encourage bait transfer rather than in situ bait take. However, wax blocks can be anchored inside boxes to prevent their removal.

The research also showed that hole or burrow baiting was much more successful in encouraging bait uptake resulting in quicker control. In fact control was often likely to be achieved within the optimal two-week period.

This led to the conclusion that hole or burrow baiting gives the best results, but it requires close management through frequent inspections of baiting sites to deal with situations where bait might become exposed. “Frequent inspections” in this context could mean every day or at least twice a week.

In spite of this research and for environmental reasons, the use of tamper-resistant bait boxes will often be the preferred method of bait placement in circumstances where the risks associated with hole or burrow baiting are considered too great, and it is not possible to provide the higher level of input necessary to manage the treatment safely.

Manufacturers are currently looking at ways to produce tamper-resistant bait stations that mimic more closely natural environments.

6. Environmental assessments

Irrespective of the type of baiting techniques used, an environmental assessment should always be carried out before treatments using rodenticide baits begin.

The purpose of an environmental assessment is to determine possible environmental effects and identify which precautions are necessary to protect wildlife and the wider environment. The main considerations are:

- where and what the rodent problems are;
- which protected species may be present in or near the treatment site;
- what alternative environmental measures would be appropriate;
- what is the risk to non-target species that have been identified;
- what is the treatment designed to achieve and how will success be measured;
- what is expected from the client (i.e. the owner or occupier of the infested premises/area);
- what follow up measures are required.

Proper record keeping is a fundamental way that users of rodenticides can help themselves in meeting their legal obligations. Failing to keep adequate records of the type of bait used and locations of bait points may form the basis of a case against the user.

How to carry out an environmental assessment

Although it deals primarily with the use of agricultural pesticides, the ‘Code of Practice for Using Plant Protection Products’ (section 3.8), available to download on www.pesticides.gov.uk, gives useful advice which will help operators using rodenticides in rural areas.

The following recommendations, specific to rodenticide use, are not definitive but have been agreed with Natural England as providing a useful guide to carrying out an appropriate assessment.

Where and what are the problems?

The first requirement of any assessment is to establish what is the extent and location of the rodent pest problem.

In all but the simplest of situations a site plan should be drawn up which identifies which buildings and areas need to be treated. This plan should clearly show the layout of the site, and any buildings or other features that are relevant. The site plan should identify the position of all baiting points.

Some treatments may be near areas with a special status in law, for example

- Local Nature Reserves (LNR);
- Marine Nature Reserves (MNR);
- National Nature Reserves (NNR);
- Sites of Special Scientific Interest (SSSI);
- Special Areas of Conservation (SAC); and
- Special Protection Areas (SPA)

These sites must be protected from any possible harmful effects resulting from using rodenticides in or near them. If in doubt, Natural England, Scottish Natural Heritage, the Countryside Council for Wales and the Northern Ireland Department of the Environment should be consulted.

Normally, the owner or occupier of the area to be treated is responsible for giving notice to the appropriate conservation agency and getting any permission needed before pesticides are applied. However, if the treatment will be carried out by a person or company applying pesticides as a commercial service, the person applying the pesticide should:

- discuss with the owner or occupier of the area to be treated whether the area or its surroundings need special consideration; and
- ask if the necessary notice has been given and any necessary permission received.

Detailed treatment records are particularly important if pesticide is being used on, or near, such sites.

The site plan should also clearly state the inspection regime to be followed, always remembering that regular inspection of bait stations and searches for rodent carcasses should be undertaken.

Which protected species may be present in or near the treatment site?

Wildlife and domestic or companion animals that may be affected by a rodent treatment will include:

- raptors such as owls, kestrels, red kites, and hawks;
- mammals such as field mice, voles, weasels and stoats;
- domestic animals such as cattle, pigs and horses;
- companion animals such as cats and dogs;
- aquatic vertebrates.

Note should also be taken of any risk to humans that may occur through rodent baiting.

What alternative environmental measures would be appropriate?

By removing harborages such as rubbish and discarded equipment, rodent populations can be significantly reduced. Cutting undergrowth around and between buildings will also help to discourage rodents

Proofing of buildings and maintaining them in a sound condition combined with good housekeeping will also reduce the chances of rodents entering buildings and becoming established.

If possible, prevent or limit access to food sources and avoid spillages.

However, with the exception of removing food that may be attractive to rodents, these measures should not be carried out before a rodenticide treatment takes place since this may spread the infestation before the treatment has had a chance to be effective.

Adopting environmental measures is always good practice but it is likely to take longer to control rodent populations through these measures alone and so if used in isolation, will not provide a quick answer to the problem if rodent infestation.

What are the risks to non-target species that have been identified and how to mitigate them?

Wild birds and mammals, including pets, are at particular risk from pesticides in granule, pellet or bait form.
All precautions and advice on product labels should be followed to protect birds and mammals.
In some situations, such as if water voles are at risk of poisoning, special care is needed.

The evidence shows that many incidents of poisoning involve companion animals (i.e. cats and dogs). Where wildlife is concerned, buzzards, foxes and red kites are the most common species affected.

There is little evidence that first generation anticoagulants are involved in the secondary poisoning of wildlife and these compounds are most often found in cases involving the direct exposure of companion animals and foxes/badgers by consumption of baits. The second generation compounds can affect companion animals and wildlife by both direct consumption of baits and by the consumption of dead and dying rodents carrying residues of the rodenticides.

Further evidence from food studies suggest that contamination of some wildlife species, such as owls and kestrels, occurs mainly from predators taking non-target small mammals, such as field mice and voles, rather than from consuming the bodies of target rats and mice. Other species, such as red kites and polecats are more likely to take target rodents.

An essential requirement in rodenticide application is to ensure that all necessary measures are used to make baits inaccessible to non-target animals. However, for example in locked and structurally sound premises, it may be possible to achieve this requirement using open bait trays. Such applications are most likely to achieve rapid and effective rodent control because rodents do no need to overcome their innate suspicion of new objects.

In most practical circumstances, however, it will be necessary to protect the baits from non-target animals. This may be done with materials available on site, such as pieces of corrugated metal, bricks, concrete slabs, pipes, etc. But such protection must be robust enough to prevent access to bait placements by large animals such as dogs, foxes and badgers.

If sufficient materials are not available on site or are not sufficiently robust, purpose-made tamper-resistant bait stations should be used. These are often the choice of professional pest controllers because they offer the most reliable protection of baits from access by non-target animals, although they do not protect baits from consumption by animals smaller than rodents. However, the use of tamper resistant bait stations may inhibit the uptake of bait by rodents for a time, thereby extending the length of treatments.
They may also encourage bait transfer, where rodents take unsecured baits from the stations and hide them elsewhere for later consumption.

Where safe to do so, the direct application of baits to rat burrows is a highly effective method of control. Frequent checks of baited burrows are required to clear up bait that is kicked out by rodents.

Most rodent infestations will be effectively controlled with rodenticides within 35 days. Some smaller infestations will be controlled sooner.

To ensure that treatments can be properly monitored, full written records should always be kept. In the event of a dispute, these records will be needed to show that all due diligence has been used in conducting the rodenticide treatment.

Where a major infestation exists on neighbouring land and is not being controlled by the occupier, permanent baiting to protect a customer's land and buildings may be applicable. Again, where this method of control is chosen, a written record of the assessed requirement for permanent baiting should be kept.

In order to achieve control of the whole population, an attempt should be made to co-ordinate treatments on adjoining sites.

Finally, regular collection and disposal of rodent carcasses will minimise the risk of non-target species feeding on the carcasses leading to secondary poisoning. Diligent searches for the bodies of all poisoned animals should be conducted regularly, and this should be done at least as often as the site is visited to check and replenish bait points.

On completion of the treatment all reasonable efforts must be made to clear up and remove uneaten or contaminated bait. This must then be disposed of properly. It is very difficult to retrieve uneaten bait in the case of hole or burrow baiting, but this should be done wherever possible and at least no bait should be left outside burrows that have been ejected from them.

Further information on the safe use of rodenticides in rural settings is given in HSE 'Safe use of rodenticides on farms and holdings' Agriculture Information Sheet No. 31.

What is the treatment designed to achieve and how will success be measured?

A major requirement will be to identify the exact purpose of the treatment and to assess how its success will be measured. It is often not practical to expect total eradication but contractors and others will be expected to identify what is considered to be effective control before the treatment starts.

At the end of the treatment period, an assessment should be made of the outcome and level of success. The results and findings should be recorded.

What is expected from the client?

Too often clients fail to accept responsibility for the part that they should play during the course of a treatment. The operator or other person laying the bait should provide instruction and guidance on the measures that need to be taken. These will include how to deal with spilled or disturbed bait points and the discovery and disposal of rodent carcasses. Advice on proofing, good housekeeping measures, such as keeping sites clean and tidy, as well as the removal of alternative food sources, should be included.

Where environmental management measures are planned, these must be implemented and subsequently maintained.

Incidents will inevitably occur between visits and clients should be advised as to suitable emergency measures which can be implemented by them in such cases.

If clients do fail in their responsibilities, this should be recorded and the client advised.

What are the follow up measures that are required?

Once a treatment has been carried out, pro-active measures to prevent re-infestation should be introduced.

Clients should be advised of the part they can play and full written details left with them.

Keeping proper written records of assessments and treatments will often reduce the risk of prosecution and these should be kept for at least five years after the end of the treatment.

7. Disposal of waste

Defra has brought in regulations that apply to waste from agricultural premises – the Waste Management (England and Wales) Regulations 2006. These guidance notes will help operators, farmers and gamekeepers to reduce unwanted effects on the environment.

Pesticide waste

Limiting the use of pesticides will reduce the amount of product and empty containers that have to be disposed of. Effective control of pesticide stocks, storage and use will help to avoid having to dispose of damaged, deteriorated, out-of-date or unapproved products.

The generation of waste can be reduced by buying and using only the quantities that are needed. However, the legal requirement to take up uneaten and contaminated bait at the end of a treatment will unavoidably create waste and so, despite good management, it may be necessary from time to time to dispose of some concentrates or ready to use rodenticides.

The following points should be considered:

- Unwanted concentrates should never be diluted and disposed of as dilute pesticide waste.
- Pesticide concentrates are likely to be "hazardous waste" and may present a risk to humans and the environment. They should be disposed of using a registered carrier and through a licensed waste-disposal contractor. Killgerm operates such a scheme and details are available from Stephen Leahy on tel: 01924 268400.
- Unwanted, unusable or uneaten baits should be stored securely in a chemical store until disposed of.
- All pest control waste is classed as hazardous and will require a consignment note for its movement. The waste producer and the waste carrier must keep copies of the consignment notes for at least three years. Hazardous waste producers must register (and pay a fee) with the Environment Agency unless exempt. (See web site for more details: http://www.environment-agency.gov.uk/subjects/waste/1019330/1217981/1772529/.)
- The producer of the waste is responsible for ensuring that the transporter and the waste-disposer are suitably registered and that the waste is safely disposed of or recycled.
- Both the producer and the waste disposer must keep consignment notes for three years.
- Where unwanted pesticides can be transported safely and legally, they can be taken to a licensed treatment or disposal site, after checking whether the site will accept the waste.
- 'Hazardous waste' is defined under the European Hazardous Waste Directive 1991 and the EU has produced the European Waste Catalogue (EWC) which lists all wastes (whether hazardous or not). The EWC also states whether materials that can be dangerous are classified as 'hazardous waste' under all circumstances.
- The EWC and guidance on deciding whether the waste is hazardous waste can be found on the Environment Agency website www.environment-agency.gov.uk
- Do not reuse an empty pesticide container for any purpose unless it is specifically designed to be returned and refilled and this is in line with the label instructions; or if an identical pesticide product is being transferred from a damaged container.
- Before disposing of a non-returnable container, it is necessary to make sure it is completely empty.
- If possible, containers for products which are concentrates and are applied as a solution should be thoroughly rinsed before being disposed of.
- Containers and other packaging for ready-to-use formulations or products not applied as a solution are normally not rinsed after emptying.
- Packaging containing a powder formulation should not be rinsed as this may cause any product residue to solidify, hence if the product was hazardous, the packaging will then become hazardous waste.
- Aluminium phosphide fumigant containers must never be rinsed or cleaned. HSE advice also prohibits the shaking of these containers.
- Suppliers of rodenticides should always be able to give clear guidance on the correct manner of disposal of uneaten rodenticides or packaging. Killgerm runs a waste disposal scheme for such products. Further details are available from Stephen Leahy on tel: 01924 268400.

8. Disposal of rodent bodies

The Environment Agency Position Regulatory position statement

The burial of rodents poisoned on farmland

If you comply with the requirements below, we will allow the burial of rodents poisoned on farmland.

Background

The bodies of vermin poisoned by routine baiting should be disposed of without delay to prevent contact with other wildlife. We originally agreed that farmers and gamekeepers could dispose of the bodies on site. We have now extended this position to include individuals acting as pest controllers and small pest control businesses. When a rodent control company is employed for routine or larger scale extermination, we expect its employees to gather and remove the carcasses off farm for suitably authorised incineration or landfill.

The Environment Agency ´s position

We will not pursue an application for an environmental permit for the activity where:

- Small numbers of poisoned rodents are buried on farmland by farmers, gamekeepers or pest control operatives and this is done without delay.
- The burial site:
    - is at least 250 metres away from any well, borehole or spring that supplies water for human consumption or to be used in farm dairies
    - is at least 30 metres from any other spring or watercourse, and at least 10 metres from any field drain
    - has at least one metre of subsoil below the bottom of the burial pit, allowing a hole deep enough for at least one metre of soil to cover the carcass
    - when first dug, is free of standing water at the bottom of the hole.
- The activity is managed through the monitoring and feedback system developed by the Chartered Institute of Environmental Health which assesses the risks and benefits of the scheme.
- You meet the relevant objectives of the Waste Framework Directive; '... ensuring that waste management is carried out without endangering human health, without harming the environment and in particular:

    i without risk to water, air, soil, plants or animals;

    ii without causing a nuisance through noise or odours; and

    iii without adversely affecting the countryside or places of special interest.'

Disposal of rodent bodies by distributors

The Environment Agency has also advised that the position is as follows:

a) If a distributor is taking back rodent bodies to their own premises, or allowing customers to deliver them to their premises, this would be considered as a bulking up activity hence the premises would need to be licensed as a waste transfer station and the relevant criteria met by the licence holder.

b) If the distributor disposed of the carcasses at their own premises, again a WML (or environmental permit depending on the method of disposal - incineration/burial etc) would need to be obtained.

c) A distributor can have a contract with a third party licensed waste transfer site providing that the waste is not stored at the distributor's premises between collection from the customer and disposal at a licensed site. The site must be licensed to accept that waste and the distributor must be registered as a waste carrier if they are going to be transporting the waste from the customers premises. The distributor's premises cannot act as a drop off point for customers without being licensed - even if another licensed site is then used for disposal - see a)

9. Trapping

Where traps are used, they must conform to current regulations. There are three types of trap currently in common use - spring traps, live catch traps and glue boards.

Spring traps

Under the Pests Act 1954, only certain types of spring traps are approved for killing and taking animals. These are listed in Spring Traps Approval Orders issued by Defra and details are available on their website. Such traps must be used in accordance with their conditions of approval.

Break-back traps commonly used for the destruction of rats, mice and other small ground vermin are exempted from the requirement to be approved.

Live catch traps

There are environmental benefits to be gained from using live catch traps. In particular, rodenticides are not used and non-target species can be released provided this is permitted.

However, traps should always be visited at least once every 24 hours to prevent unnecessary suffering to captured animals, such as exposure to adverse weather conditions. It is permissible to arrange for the customer to carry out the visits but the responsibility for ensuring that this is done should remain with the person laying the traps.

Once caught, non-target species must be released as soon as possible and pest species disposed of humanely. Drowning is not an acceptable method of dispatch.

Glue boards

The use of glue boards is controversial. There are times when their use is required as a method of last resort, when all other methods of control have been tried unsuccessfully or are inappropriate. However, they should never be used as a routine method of control and only placed in areas where there is no risk to wildlife.

Regular inspections are necessary to prevent unnecessary suffering and captured rodents should be dispatched as humanely and quickly as possible. The recommended methods of dispatch are: a) quick and positive dislocation of the neck; and b) the use of lethal chambers is permitted provided that the gas introduced is approved for that purpose. Once again, drowning is not an acceptable method of dispatch.

All boards must be removed at the end of the treatment and disposed of appropriately to avoid risks to non-target species.

Documentation should show clearly why glue boards have been chosen as the method of control and the location and dates of initial laying down, use and removal must be fully recorded. Keep documents for at least a three year period.

Further information is available from the Pest Management Alliance - Code of Best Practice Humane use of Rodent Glue Boards, see www.bpca.org.uk or www.npta.org.uk.

10. Aluminium Phosphide

Aluminium phosphide based fumigant products are approved for use against rats in outdoor burrows. However, the toxicity of these compounds and potential risks that careless or misuse may pose to humans and non-target animals must be considered.

The main considerations include that users must be trained , hold an appropriate certificate of competence and be familiar with the precautions to be taken and the procedures to follow in the case of an emergency arising during the use of the product. Burrows less than 10 metres from any building occupied by man or animals must not be treated. Flasks must be stored correctly and disposed of according to the label instructions. Further information on training requirements, use and other aspects is available in the HSE 'Gassing of rabbits and vertebrate pests' Agriculture Information Sheet No. 22 and 'Guidance on storing pesticides for farmers and other professional users' Agriculture Information Sheet No.16 and the Register of Accredited Metallic Phosphide Schemes (RAMPS) at www.ramps-uk.org.

Pest Management Alliance - Code of Best Practice

Humane Use of Rodent Glue Boards

In order to protect public health within high-risk environments, the use of rodent glue boards remains an important last option when all other control methods have been considered ineffective. Although glue boards are not designed to physically harm rodents, their use raises valid concerns and they should only be sold to or used by technicians who have been given adequate training and are competent in the effective and humane use of this technique. The following principles must be followed in order to minimise animal welfare concerns:

1. **Option of last resort**
   All other options for rodent control must be considered before glue boards are used. Detailed records must show why other control methods are either considered inappropriate or have failed. Where there is a rodent in a high risk environment, it may be appropriate for glue boards to be placed strategically to ensure immediate control.

2. **Check boards frequently**
   Where rodent boards are used these must be inspected at appropriate intervals. This should be within 12 hours of placing, or at least as soon as is reasonably practicable, including weekends and bank holidays. If unavoidable events cause slight extensions to inspection intervals then the reasons should be recorded. Longer delays must be avoided (see contingency plan below). Where possible and practical, inspection times must be organised to minimise the time rodents are likely to be on the board (e.g. if rodents are known to be active during certain periods, inspection times should be arranged with this in mind). If a caught animal displays signs of undue suffering or serious physical harm, the intervals between inspection times must be shortened. Records must be updated after all inspections.

3. **Contingency plan**
   A contingency plan must be in place so that in the event of an emergency a second competent person can be called upon to inspect the boards and deal with any captures or safely remove the boards as appropriate. Where it is known boards will not be inspected at appropriate intervals they must be taken up (even if only temporarily).

4. **Protect non-target species**
   Boards must be placed in such a manner that they do not present a risk to non-target species.

5. **Use the correct size board for the pest species**
   The size of board must be appropriate for the target species.

6. **Detailed records**
   Detailed copies of records and location plans should be available on site at all times for all boards laid during any treatment and must be updated as necessary to ensure traceability. Copies ensure information is available should site records be lost or unavailable.

7. **Dispatch of trapped rodents humanely**
   Rodents trapped on rodent boards must be dispatched quickly and humanely by technicians with appropriate training. Placing the glue board in a clear plastic bag and dealing the rodent a sharp blow to the head with a blunt instrument would be an appropriate mode of dispatch. Drowning is not an acceptable method of dispatch.

8. **Non-target animals**
   In the event that a non-target animal is trapped, a suitable food grade oil or similar emollient should be applied to the animal for removal, or if not a protected species it may be killed humanely. Non-targets should only be released at their site of capture, not elsewhere, and only if they appear to be physically unharmed and their release is not prohibited by law.

9. **Remove boards at the end of treatment**
   At the end of treatment all rodent boards must be accounted for, removed by the technician and the records endorsed accordingly.

10. **Dispose of boards safely**
    Rodent boards should be disposed of with care. The sticky surface should be covered to avoid the accidental trapping of non-target species or subsequent misuse, and the board should be disposed of in accordance with local authority waste requirements.

11. **Communication with the customer**
    This Code of Best Practice must be provided to the customer to make them aware of the standards that the operative is working to.

The humane use of glue boards is the legal responsibility of the pest controller, and cannot be delegated to untrained people.

All technicians must be suitably trained and competent in their application, maintenance and ultimate disposal including the dispatch of the target species and safe removal of non-target species.

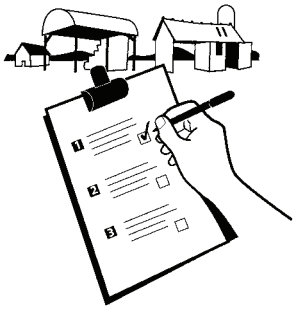
This Code of Best Practice was produced after consultation with Defra and Natural England.

THINK WILDLIFE
Campaign for Responsible Rodenticide Use

Schedule One: The Campaign for Responsible Rodenticide Use

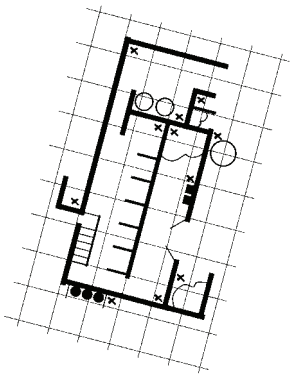
The Campaign for Responsible Rodenticide Use (CRRU) encourages pest controllers, farmers and gamekeepers to follow seven simple steps to reduce the risk of exposure of raptors and other non-target animals to rodenticides.

As part of the campaign, CRRU has also produced a code which stresses the need to adhere to the following good practice. Its prime slogan is Think Wildlife.



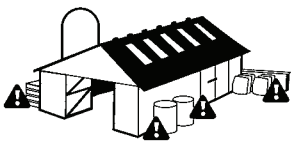
Always have a planned approach

- A thorough survey of the infested site before treatment begins is an essential key to success when using any rodenticide.
- Environmental changes which could be made to reduce the attractiveness of the site to rodents should be noted for implementing after the treatment. Usually this will involve rodent proofing, removing rubbish and weeds providing harbourages and cover. However, the site should not be cleared before treatment since this will disturb the rodent population and make bait acceptance more difficult to achieve.
- Obvious food such as spilled grain should be removed as far as possible and any food sources covered.
- Rodenticide baits should only be used for as long as is necessary to achieve satisfactory control.
- In most cases any anticoagulant bait should have achieved control within 35 days. Should activity continue beyond this time, the likely cause should be determined and documented.
  If bait continues to be consumed without effect, a more potent anticoagulant should be considered.
  If bait take is poor relative to the apparent size of the infestation, consideration should be given to re-siting the bait points and possibly changing to another bait base as well as making other environment changes.



Always record quantity of bait used and where it is placed

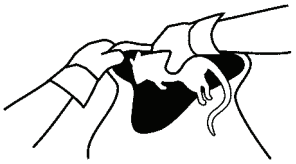
- A simple site plan or location list identifying areas of particular concern pertinent to the site should be drawn up and retained on file.
- A record of all bait points and the amount of bait laid should be maintained during the treatment. Activity should be noted at each bait point, including any missing or disturbed baits, as the treatment progresses.
- By carefully recording the sites of all bait points, responsible users of rodenticides are able to return to these sites at the end of the treatment and remove uneaten bait so that it does not become available to wildlife.



Always use enough baiting points

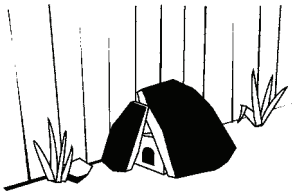
- Users should follow the label instructions regarding the size and frequency of bait points and the advice given regarding the frequency and number of visits to the site.
- By using enough bait points the rodent control treatment will be conducted most efficiently and in the shortest possible time. This will restrict the duration of exposure of non-target animals to the minimum.

Always collect and dispose of rodent bodies



- The bodies of dead rodents may carry residues of rodenticides and, if eaten by predators or scavengers, may be a source of wildlife exposure to rodenticides.
- It is essential to carry out regular searches for rodent bodies, both during and after the treatment period. Bodies may be found for several days after rats have eaten the bait and rats may die up to 100 metres or more away from the baited site.
- Any rodent bodies should be removed from the site and disposed of safely using the methods recommended on the label.

Never leave bait exposed to non-target animals and birds



- Care should be taken to ensure that bait is sufficiently protected to avoid accidentally poisoning other mammals and birds. Natural materials should be used where possible.
- Bait stations should be appropriate to the prevailing circumstances. They should provide access to the bait by rodents, while reducing the risks of non-target access and interference by unauthorised persons. They should protect the bait from contamination by dust or rain. Their design, construction and placement should be such that interference is minimised.

Never fail to inspect bait regularly

- Where the risk assessment or treatment records show that multiple visits are required, then those should be made as frequently as is considered necessary. Daily inspection may be required in some circumstances.
- At each visit, baits should be replenished according to the product label and a thorough search made to ensure that bodies and any spilled bait are removed and disposed of safely. Records of such visits should be maintained.

Never leave bait down at the end of the treatment

- Bait left out at the end of a treatment is a potential source of contamination of wildlife.
- On completion of the treatment, records should be updated to signify that the infestation is controlled and that, as far as reasonably practical, all steps have been taken to ensure that the site is now free of rodenticide bait.

Schedule Two: The short guide to environmental assessments Environmental considerations influencing the use of rodenticides

Pre-treatment

A recorded environmental risk assessment should be carried out to demonstrate that you have considered the following;

- Status of the site, e.g. Site of Special Scientific Interest.
- Adjacent features such as watercourses, woodland, specific wildlife habitats, public footpaths.
- Presence of mammal or bird predators/scavengers.
- Access by farm or domestic animals.
- Species, degree and extent of pest infestation to be controlled.
- Previous controls carried out which may influence treatment.
- Justification for the selection of the active ingredient, and bait formulation to be used.
- Materials and techniques to be employed for protecting baits.
- Potential for primary/secondary poisoning of non-target species.
- Measures to reduce risk to non-target species.
- Facilities for safe disposal of dead rodent bodies and waste rodenticide.

Treatment

Records should be kept to;

- Identify areas where bait has been laid.
- Identify the active ingredient, formulation and quantities used.
- Demonstrate the treatment frequency to check and replace baits and to search for and remove bodies was appropriate.
- Report any effect on non-target species and action taken to reduce risk.
- Report any interference or removal of baits.
- Report on conditions which may adversely affect treatment and remedial actions.
- Demonstrate that control has been achieved within the prescribed timescales.

Post-treatment

On completion of the treatment, records should be updated to demonstrate the following;

- That the infestation has been controlled.
- That as far as reasonably practical all baits have been removed and all bait stations emptied.
- A final search has been made to locate and dispose of any rodent bodies.
- Any proofing or other environmental changes which may prevent re-infestation have been discussed with the client.

Campaign for Responsible Rodenticide Use and BASIS

One-Day Course for Pest Control Technicians

"Wildlife Aware" Course and Accreditation

CRRU and BASIS have established the "Wildlife Aware" training course, and associated accreditation scheme, for professional pest control technicians and other competent users of rodenticides.

The course and accreditation are aimed at those who offer a service of rodent pest management to farming enterprises and other businesses in rural areas. Those who attend the course will have already attended training courses in rodent pest management so that they are competent in the use of anticoagulant rodenticides.

"Wildlife Aware" accreditation is offered to all those who attend the "Wildlife Aware" course and pass the online examination. This accreditation is intended to indicate to customers for rodent pest control services that those who hold the accreditation will work to the highest standards in order to achieve effective pest control with minimum adverse effects on wildlife and the wider environment. The accreditation is offered to the individual (not their companies) and follows the technician wherever they work. Accredited technicians are permitted to use the "Wildlife Aware" logo as a symbol of their special competence.

Those interested in attending "Wildlife Aware" courses can obtain details of forthcoming courses by contacting BASIS via its website (www.basis-reg.co.uk) or by contacting CRRU via this website.

All "Wildlife Aware" trainers are BASIS registered.

- **Why Control Rodents**
  Provides an understanding of the problems caused by rodents to the rural economy. Particular emphasis is given to diseases carried by rodents and to the quest for quality within accreditation schemes driving an increased requirement for rural rodenticide use.

- **Rodent Species – identification and behaviour**
  Outlines important pest recognition characteristics and behaviour relevant to implementing effective control. Draws attention to other non-target rodents that may be affected by rural rodent control programmes.

- **How to control rodents on farms**
  Explains the fundamentals of applying rodenticides safely and effectively on farms. Additional information for gamekeepers who apply rodenticides away from buildings.

- **Environmental Impacts of Rodenticides**
  Describes primary and secondary routes of wildlife exposure to rodenticides, adverse effects of rodenticides and distribution of residues among key wildlife species.

- **The Campaign for Responsible Rodenticide Use**
  Gives the objectives of the CRRU initiative, the important mitigation measures required to reduce wildlife contamination and the potential benefits of each of the measures recommended.

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Notes

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