

Successful Rat and Mouse Control The PelGar Guide



www.getthatrat.com

Welcome to Successful Rat and Mouse Control - the PelGar Guide

Rats and mice cause millions of pounds worth of damage on UK farms every year – and the problem is getting worse.

Why are rodents such bad news?

- They contaminate and consume animal feed and stored crops.
- They cause structural damage.
- They create fire hazards by chewing electrical wiring.
- They spread diseases to livestock and farm staff.

But you **DO NOT** have to put up with rats and mice on your farm.

This booklet has been put together by industry professionals to help you manage your rodent problem.

It will help you to choose the right products for your situation, and provide useful tips and advice on running a successful baiting campaign.

In partnership with PelGar you **CAN** 'get that rat!'



Leading the way in Rodent Control

PelGar is a UK company that develops and manufactures a comprehensive range of high quality rodenticides. It is one of very few companies worldwide to offer both second generation anti-coagulants – difenacoum and bromadiolone, and provides the leading brands; **Roban and Rodex**.

The company was founded in 1995. The directors have a wealth of academic and practical experience of pest biology and behaviour, and the full range of chemical and physical control methods that can be used in urban and rural environments.

Research

PelGar runs an extensive R&D programme and develops products that specifically exploit the behaviour and feeding preferences of the target pest.

The baits are designed to be highly palatable and attractive to both rats

and mice, which encourages the consumption of a lethal dose in the shortest time possible.

PelGar is one of few UK companies licensed by the Pesticides Safety Directorate (PSD) to carry out field evaluations on new formulations. This means it can test and refine its products in real-life situations, before bringing them to the market.

Wildlife protection

A founding member of the Campaign for Responsible Rodenticide Use (CRRU), PelGar takes its responsibilities in this area very seriously. The company helps to protect wildlife by promoting best practice in rodent control on farms.

For further details of the CRRU campaign visit www.thinkwildlife.org.uk or email info@thinkwildlife.org.uk.

Education

Rats and mice are inevitable on farms

and some farmers feel they can never be totally conquered. But this is not true. By using the right products, in the right place, at the right time – in a well planned baiting campaign, they can be overcome.

PelGar is determined to help farmers get on top of their rodent infestations, and has introduced a host of new initiatives to provide guidance and advice on how to bait successfully.

These include publishing 'Rat Watch' Bulletins throughout the autumn and winter, running a 'get that rat' campaign, and publicising *PelGar's Six Steps to Successful Rodent Control*, in this booklet, and on the dedicated website www.getthatrat.com



Why should you use PelGar rodenticides?

Quite simply because they have been designed and formulated to be the most effective rat and mouse baits on the market.

All Roban and Rodex products will kill rats and mice quickly and efficiently because they:

- Are flavour-enhanced.
- Are moisture balanced.
- Contain a variety of food grade additives.

These encourage rapid bait acceptance and prolonged feeding. No other manufacturer adds all these extra ingredients to their products, and rats and mice readily feed on PelGar baits.

Average food material + active ingredient = most other manufacturer's products

Top quality food material + active ingredient + flavours + special aroma + moisture balancing + added sugars + preservative = **Roban and Rodex**

Did you know...?

Rats and mice prefer to eat baits that are highly palatable.

Roban and Rodex wheat-based baits are moisture balanced and 'cooked', creating some of the most palatable baits on the market.

The sweeter the bait, the longer a rat or mouse will stop and eat it.

Roban and Rodex wheat-based baits contain added sugars to make rodents eat more at each feed.

If rats and mice can smell the bait – they will find it more easily.

Rats mostly feed in the dark. Roban and Rodex have added aromas that rats and mice find highly attractive.

How much Roban is needed to kill a rat?

- An average adult brown rat may eat up to 30g of food a day.
- It may take 8-10 meals a day.
- A lethal dose of Roban can be eaten by a rat in less than half a day.

How much Roban is needed to kill a mouse?

- An average mouse may eat 2-3g of food a day.
- It may take 150 meals a day.
- Mice are particularly susceptible to the difenacoum in Roban.
- A lethal dose of Roban can be eaten by a mouse in only a few hours.

Visit www.getthatrat.com and download the PelGar bait estimator.



All Roban and Rodex baits contain the bitter human aversive agent denatonium benzoate, which is undetectable by rats and mice at the rate of inclusion.

All Roban and Rodex rodenticides can be antidoted with Vitamin K1 if accidentally ingested by non-target animals or children.

All Roban and Rodex baits contain a preservative which minimises mould and bacterial growth, thereby reducing the risk of spoilage.

Roban, Rodex and Okta-Blok are registered trademarks of PelGar International.

Roban

The following pages will give you a guide to the products best suited to your individual needs...

All Roban baits come in ready to use formulations and contain 0.005% w/w (50ppm) of the second generation anti-coagulant rodenticide difenacoum.

All Roban baits contain an indicator dye which shows up clearly in the droppings, providing a useful sign of bait uptake.

Roban comes in a full range of baits to suit a variety of situations.

Many Roban packs have clear lids for ease of identification. Buckets contain a handy measuring scoop.

Roban Whole Wheat

Particularly useful on farms where whole grain cereals form the basis of the rats' diet.



This formulation uses high quality, food grade whole wheat which is virtually dust-free. It is micronised to prevent germination and to begin the conversion of starches to sugars.

Roban Whole Wheat is:

- **Easy to use.**
- **Effective against all pest rodents.**
- **Highly palatable, so rats and mice eat a lot of it, quickly.**
- **Supplemented with additives to make the target species feed for longer.**

Roban Whole Wheat is available in a wide range of pack sizes to suit every situation – from 100g sachets to 25kg polypropylene sacks.

HSE no. 7205



Roban Cut Wheat

Particularly effective against mice as they have a tendency to 'kibble' whole grain baits - stripping off the treated outer surface and only eating the inside.

High quality, dust free food grade wheat is chopped to an even size.

Roban Cut Wheat is:

- **Easy to use.**
- **Particularly effective against mice.**
- **Highly palatable, so rats and mice eat a lot of it, quickly.**
- **Supplemented with additives to make the target species feed for longer.**

Roban Cut Wheat is available in a wide range of pack sizes – from 100g sachets to 20kg polypropylene sacks.

HSE no. 7175



Roban Pellet Bait

Offers a complete diet and works well where rodents have been used to eating compound feedstuffs.

The pellets are made with high quality culinary grade wheat flour, blended with milled oats, added sugars, milk protein and fat.

Roban Pellet Bait is:

- **Easy to use.**
- **Effective against all pest rodents.**
- **Excellent for using indoors.**
- **Highly palatable, so rats and mice eat a lot of it, quickly.**
- **Supplemented with additives to make the target species feed for longer.**

Roban Pellet Bait is available in a wide range of pack sizes to suit every situation – from 100g sachets to 10kg buckets.

HSE no. 7182



Roban Pasta Bait

A very attractive bait that will tempt rodents away from any other feed sources that are near-by. Its high energy content makes it particularly useful in cold weather and during the breeding season.

The pasta is made with a blend of high quality culinary grade wheat flour, chopped grain, soft lard and peanut flavouring to produce a high calorie, high energy feed.

Roban Pasta Bait is:

- **Easy to use.**
- **Effective against all pest rodents.**
- **Highly palatable, so rats and mice eat a lot of it, quickly.**
- **Supplemented with additives to make the target species feed for longer.**
- **The product of choice in situations where highly attractive feedstuffs are available, or the take of other baits is limited.**

Pasta bait is available in 15g 'T' bags, each containing a lethal dose even for the largest of rats. It is also available in mastic tubes for spot placement into bait boxes, cracks and crevices – making it ideal for mouse control.

Roban Pasta Bait uses a red indicator dye. It is offered in three pack sizes, 2.5kg and 10kg 'T' bag buckets, and 300g mastic tubes. HSE no. 8116



Roban Wax Block Bait

Ideal for baiting in damp conditions or in places subject to occasional flooding.



These Okta-Bloks are made with high quality culinary grade wheat flour, blended with chopped wheat, oats and milk protein, and held together by edible waxes.

Wax blocks remain intact even when submerged in water and are ideal in damp conditions such as in drains.

Roban Wax Blocks are:

- **Easy to use.**
- **Effective against all pest rodents.**
- **Excellent in damp conditions.**
- **Easy to wire or nail securely into place.**

Wax blocks weigh approximately 20g and come with a pre-formed hole for ease of placement.

Roban Wax Blocks are available in 1kg, 2.5kg and 6kg buckets.

HSE no. 7474



Rodex

Rodex bait comes in a ready to use whole wheat formulation and contains 0.005% w/w (50ppm) of the second generation anti-coagulant rodenticide bromadiolone.



Rodex Whole Wheat Bait

Offers a high quality alternative to baits containing difenacoum.

This formulation uses high quality, food grade whole wheat which is virtually dust-free. It is micronised to prevent germination and to begin the conversion of starches to sugars.

Rodex is:

- **Easy to use.**
- **Effective against all pest rodents.**
- **Highly palatable, so rats and mice eat a lot of it, quickly.**
- **Supplemented with additives to make the target species feed for longer.**

Rodex baits contain a red indicator dye which shows up clearly in the droppings, providing a useful sign of bait uptake.

Rodex Whole Wheat is available in a wide range of pack sizes – from 100g sachets to 25kg polypropylene sacks.

HSE no. 7713



PelGar's Six Steps to Successful Rodent Control

Rats and mice can be quickly controlled by following a well planned and focussed baiting campaign.

Rodent control programmes often fail because:

- **Not enough product is used.**
- **Baiting stops too soon.**
- **The bait is put in the wrong place.**
- **The wrong type of product is used.**
- **Follow-up inspection is too late.**

To help farmers get the most out of their rodenticides, PelGar has developed their 'Six Steps to Successful Rodent Control' programme.

Follow this and your farm will soon be rodent free.

Step 1

Tidy up

Before baiting, tidy up the farmyard to reduce the number of places rats might like to nest, feed and drink.

Remove and destroy rubbish, old pallets, broken machinery, piles of old feed sacks/bags – as these provide ideal areas in which rats can live and hide.

Repair leaking pipes – inside and out of buildings. Rats must drink every day to survive. Deny them water and they will have to find it elsewhere.

Seal the bottom of wooden doors with a metal strip so rats cannot gnaw their way through to feed stores.

Keep all doors shut to keep rats out.

Store feed and dry goods away from walls – just a foot will do. This stops rats nesting behind them.

Clear up food spills immediately. If rats can access high energy animal feed easily, they are less likely to take even the highest quality bait.

Be ahead of the game – give rats a hard time this winter.





Step 2

Look for signs

Monitor rodent activity so you can plan an effective baiting programme.

Make a sketch of the farmyard and take it with you as you walk the farm at dusk. Date it and make a note of where you see signs of rat activity. This will highlight the area that should be at the centre of your baiting programme.

Look for:

- Actual sightings. Make sure your dog doesn't run ahead and scare rats back into their burrows before you see them.
- Footprints in damp earth. These will often lead back to the nesting and burrowing areas in any earthworks that surround the farm. These earthworks may be riddled with burrows, and are a must for treatment.

- Signs of fresh damage such as chewing through sacks and gnawing the edges of door and window frames.
- Fresh droppings. These will be softer and darker than older drier ones, and are a good sign of recent activity.
- Tell-tale smears of grease from their belly fur where they have climbed up and along walls and roof trusses.

Listen for:

- Squeaking as rats jostle and fight as they try and establish a territory. Once this has been defined, the rats will settle down into a routine of sleeping in their nests and moving out to feed and drink.

Take time to survey the site so you can plan a focussed campaign

Step 3

Choose the right rodenticide

There is no such thing as a 'universal' rodenticide.

Successful control will be achieved where the best product is chosen for the problem in hand.

Rats like to feed on one food source at a time. Take advantage of this by matching the type of bait to their preferred food source.

Roban comes in a variety of bait types to use in different situations.

- Whole wheat – use where rodents are feeding on stored cereals
- Cut wheat – Good for mice who often 'kibble' whole grain, stripping off the treated outer surface.
- Pellets – use where rodents are eating compound feed.
- Pasta – will tempt rodents away from other high calorie feedstuffs.
- Wax blocks – good in damp conditions.

Use enough rodenticide

The main reason control programmes fail is due to under- dosing. This occurs if:

- Not enough bait is used per baiting point.
- Not enough bait stations are put down in the key locations.
- Active bait stations are not replenished quickly enough.

The bait estimator below offers a useful guide to how much rodenticide would be needed in certain situations.

Choose the right bait, use the right amount, do the job right!

Bait estimator

How to use

- 1 Identify the target species.
- 2 Determine treatment area.
- 3 Estimate the minimum bait purchase in kilograms.

The bait estimator will help you work out how much bait is needed in one campaign i.e. an initial treatment plus one to two follow-ups

Pest

Intensity

Rats

High

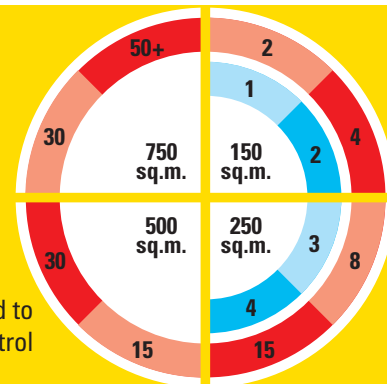
Low

Mice

High

Low

Kg of bait required to give effective control



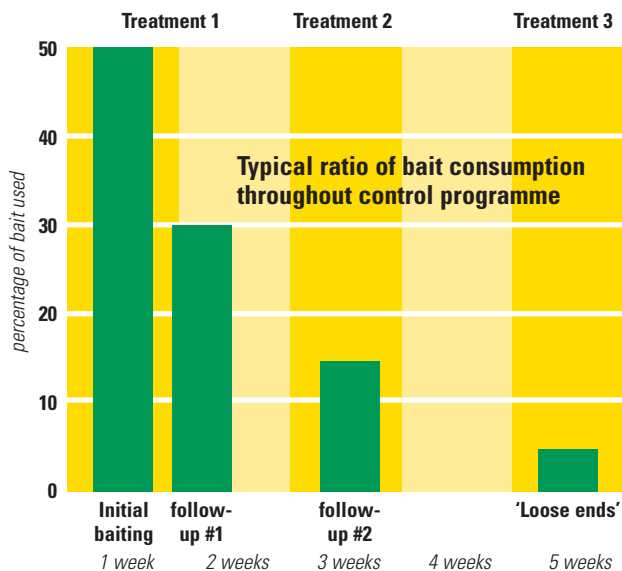
A full site survey would be necessary to more accurately estimate the quantities of bait needed to achieve full control.

Step 4

Follow a sound baiting routine

Follow the PelGar **'SUNSHINE'** formula for successful rat control.

- Securely place the bait. Mark the site, with the date, on the farm plan.



Each treatment will consist of several applications/top-ups of rodenticide

- Use the correct amount of bait.
- Never under-bait, it is a false economy. Place enough baiting points to cover the treatment area.
- Service the bait points as often as you can, at least every 2-3 days, preferably every day. The more often you check, the quicker you will achieve control. Replenish 'busy' bait stations.

- Hunt for any untouched bait points and move them to sites of greater activity.
- Inspect for dead rats and dirty or spoilt bait. Collect these for secure disposal.
- Non-target protection. Make sure wildlife, domestic animals and children cannot reach the bait. This is a legal requirement.
- End of treatment tidy-up is an often

forgotten, but essential, part of a safe campaign. Store unused bait and any measuring cups/spoons out of reach of children and pets.

Ways to bait

- Spoon bait directly and deeply down active burrows.
- Bait stations can be 'home-made' from close-boarded wooden pallets, old car tyres with a weighted down dustbin lid on top, or cleaned-out 25 litre drums. Rats often prefer these to commercially made plastic bait boxes, but ensure that non-targets, especially birds and dogs, cannot gain access to the bait.
- Bait can be placed under propped sheets of wood, metal sheets or slates to protect it from bad weather. But remember if it can be seen, it can be accessed by non-targets.

Be responsible, use pesticides carefully. Always read the label.

Step 5

Stop new rats coming in

A well planned rat control programme that uses enough of the right type of bait, in the right places, at the right time, should achieve a high level of control.

However, in early winter this will not be the end of the story. New rats will soon come in to fill the gap left by the population just wiped out.

This means follow-up treatments may be needed two to three weeks after the initial baiting.

Most immigrant rats will travel down recognised and identifiable routes such as hedges, drainage channels and field margins. Anticipate their movements and cut off entry into the farmyard.

Permanent bait points are discouraged, as they pose a risk to non-target species. However, if rats are seen coming in this way, place temporary baiting points along their direction of travel.

In-comers will occupy deserted burrows and may soon gain a foothold on the farm if not dealt with swiftly.

The risk of migrant rats will lessen as winter progresses, as any rats left in the fields will generally die there.

Time spent on planned rat control before Christmas, will mean less to do in the New Year.

**Keep an eye out for immigrant rats.
Destroy them on arrival.**

Step 6

Remain vigilant

Don't give up once the resident population has been eliminated. There will always be new colonies waiting to take advantage of your farm yard. Successful rodent control requires on-going thought and attention.

Although rats will not breed in the depths of winter – they certainly will come spring time. As each female can produce eight young every 22 days, the population could explode before the rats move back out into the fields next summer.

If you see new rat activity carry out a new baiting programme immediately. It is easier to kill a few hungry rats than a plague.

Continue the tidy-up and maintenance schedule.

Keep your dated sketches in a safe place. These will provide a useful start when it comes to planning next winter's campaign, and can also form part of your Farm Assurance records.

If you would like to know more about rats, how they behave and how to control them, talk to Dr Jonathan Wade at PelGar International, telephone 01420 80744 or email: jonathan@pelgar.co.uk.



Baiting record sheet

Disposal of dead rats, spoilt or contaminated bait

- Waste Roban and Rodex baits should be disposed of by sealing in secure containers and placing in your industrial waste NON HAZARDOUS skip. Do not dispose of as domestic waste.
- Dead rats collected during and after baiting are Non-Hazardous waste. Place dead rodents in secure containers to prevent scavenging by birds, foxes or other animals and send to landfill by placing in your industrial waste NON HAZARDOUS skip. Do not dispose of as domestic waste. Burning or burying of dead rodents is not permitted on the farm or elsewhere.
- If a risk assessment suggests a suspected or confirmed infection hazard, seek advice on Clinical Waste Disposal. Dead rats must then be considered as HAZARDOUS WASTE and disposed of accordingly.

If any doubt exists over issues concerning disposal contact the Environment Agency.

Roban and Rodex baits have a long shelf-life. Unused bait should be safely stored in their original containers out of reach of children, unauthorised personnel, and domestic and farm animals. It can be used in future baiting programmes.

Use a copy of this sheet for each treatment within the baiting programme.

Farm name

Name and type of bait used

Bait point number	Date of first baiting	Date of bait replacement or top-up applications				Signature	Comments
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

Bait placement map

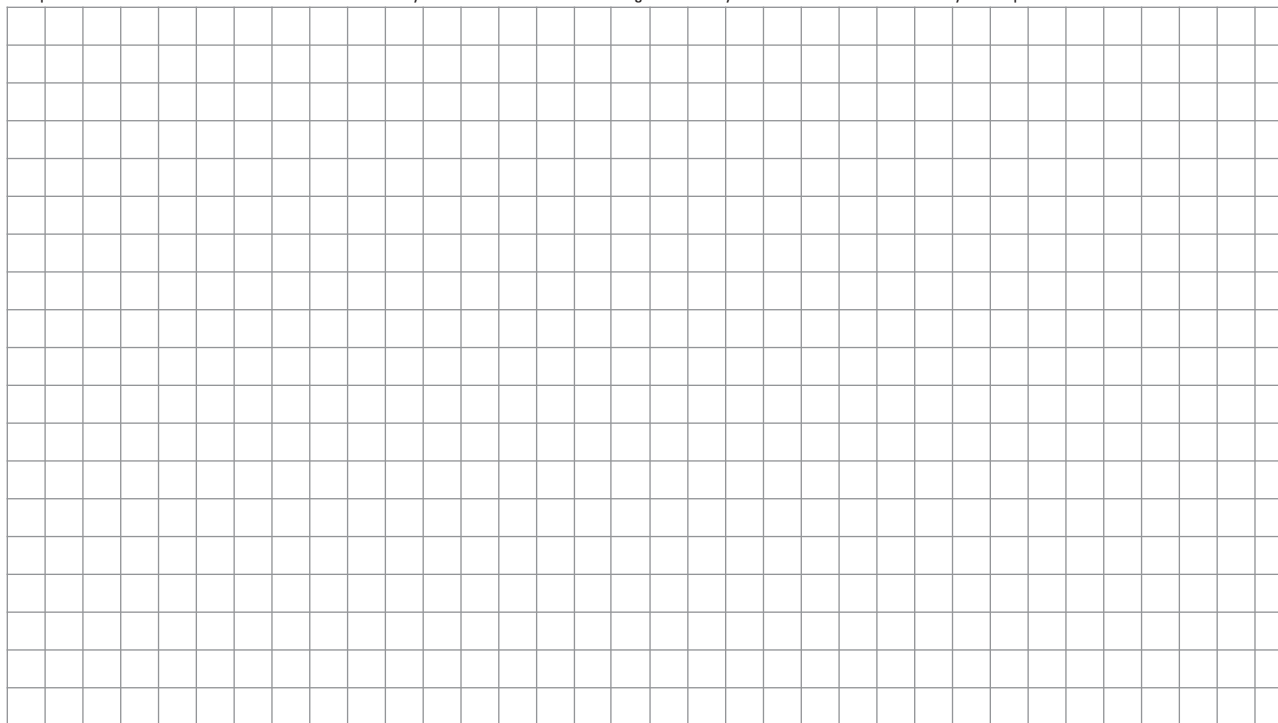


International

Use the grid to make a sketch of your main farm buildings, marking silage stocks or feed stores, etc. Identify places where you have seen rats and mice and/or locations where there is damage. Search any nearby banks or earthworks for old and new burrow systems. Ask farmhands and staff if they have any observations to add.

Mark the bait points on the grid. This will help you monitor bait consumption at each point over the period of control. It is possible for rats to clear a bait point overnight.

Bait points that remain untouched for more than 7-10 days can be moved to areas of high rat activity – make a note of the move on your map.



Larger versions of the Baiting Record Sheet and Bait Placement map are available from PelGar – email sales@pelgar.co.uk or telephone 01420 80744



**RATS LOVE THE
TASTE OF
ROBAN
& DIE FAST!**



International

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Use pesticides safely – read label before use

www.getthatrat.com