



Pest NI
The Training Experts
IRELAND

IPM

- **Integrated Pest Management (IPM)**
- **Site Survey – Gather information on Site conditions (at every visit)**

THESE ARE

Measures to make rodenticides unnecessary & reduce risks to other animals

Rodent Management (IPM) Approach

Key Reference: CRRU Ireland *Best Practice Requirements for Rodent Control and Safe Use of Rodenticides*

An integrated approach is essential for long term management of rodents

IPM is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties.**Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.**

The 'Risk Hierarchy' concept

All rodent control methods carry risks

These risks differ:

- between methods, and
- for the same method in different use situations

Always consider risk

Always use the least risky but effective

Rodent Control – based upon IPM

The Site SURVEY or PRA is a recorded document listing :

- The location of Rodent activity on site**
- Conditions which have given rise to the presence of Rodents**
- Conditions which could give rise to Rodent activity in the future**
- Wildlife species likely to be present**
- Recommendations on Env/Proofing/Exclusion**

Rodent Control – based upon IPM

BASICS

1. MAKE THE SITE **OUTSIDE** UNATTRACTIVE TO RATS
2. MAKE SURE THEY CAN'T GET **INSIDE**
3. **MONITOR CLOSELY & GIVE GOOD ADVISE**

Rodent Control – based upon IPM

If Rodents are present - Identify appropriate treatment combination:

- option of biological control (domestic cat, dog)
- Physical control techniques (exclusion)
- Mechanical control techniques (trapping)
- Chemical control - Acute poison?

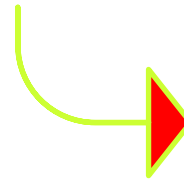
Chronic Poison - 1st generation anti-coagulant, or 2nd generation anti-coagulant (SGAR)

Rodent Control – Risk Hierarchy

- ↓ Removal of food water & cover
- ↓ Use of dogs
- ↓ Shooting
- ↓ Use of traps
- ↓ Fumigants
- ↓ FGARS ?????
- ↓ SGARS

**But consider
other risks ...**

**Human
Health risk**



**Increasing risk to
the environment**

IPM - Responsibilities

- **Responsible rodent control not achievable without Client commitment**
- **Client responsibilities are critical and will minimise need for Rodenticide use**

IPM - Responsibilities

- Identify who is responsible for each step

Step 1 - Site Survey

Step 2 - **Rodent Control (Eliminate when present -Traps/Rodenticide) Remove alternative food & Water Why is this done before next stages?**

Step 3 - Habitat modification

Step 4 - Proofing of buildings

Step 5 – Scheduled Monitoring

The Site Survey

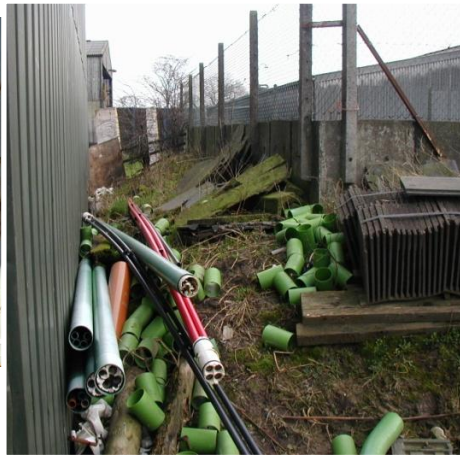
- Site survey essential - for every inspection
- Map the area – buildings and surrounding areas or update existing map if required
- Show fixed and temporary monitoring points essential to record application of best practice
- Rats travel hundreds of metres - hedgerows and ditches
- Activity can exist in 3 dimensions - check

The Site Survey



inspecting the site to find and record: -

- **Signs of rodents** (*e.g.* burrows, droppings, feeding, footprints, runways)
- **Harbourage** (*e.g.* ducting, panelled walls and ceilings, rough and overgrown ground. Pallets, discarded plant)
- **Alternative food sources, water**



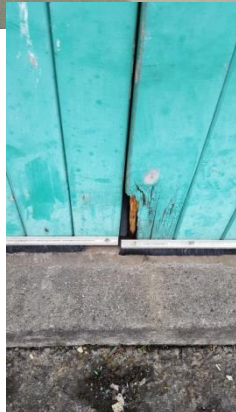
The Site Survey



The Site Survey

Record:

- Proposed sites of baiting / monitoring stations, by **mapping**
- Points of rodent entry to premises (*e.g.* ill-fitting doors, holes in masonry, gaps between walls and roof timbers)
- Areas where special care is needed to prevent access by non-target animals to bait (*e.g.* pets, domestic stock and wildlife)

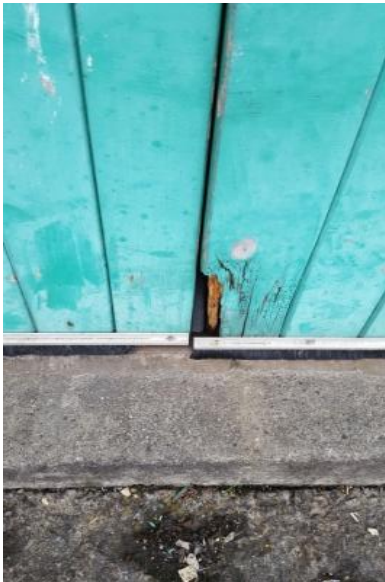


Rodent Proofing

- **Install proofing methods to prevent rodents from getting into buildings:**
 - **make sure that doors and windows are tight-fitting,**
 - **fill gaps around utility pipes where they enter structures**
 - **fit rat-guards on rain water down-pipes**
 - **make sure building fabric is in good order**



Rodent Proofing





Rodent Proofing



Recommended materials for rodent-proofing.

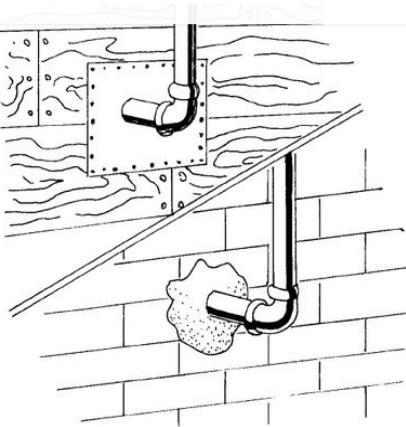
Concrete: Minimum thickness of 2 inches (5.1cm) if reinforced, or 3 3/4 inches (9.5 cm) if not reinforced.

Galvanized sheet metal: 24 gauge or heavier for wall or pipe barriers; 22 gauge or heavier for kick plates or door edging.

Hardware cloth (weld- mesh):

Woven, 24-gauge, 1/4- x 1/4-inch (0.6- x 0.6-cm) mesh to exclude mice and rats.

Aluminum: 22 gauge for frames and flashing; 18 gauge for kick plates



Group discussion

What should you look for during a site survey?

Non-Chemical Controls

- TRAPPING
- SHOOTING
- DOGS & CATS
- ENVIRONMENTAL & EXCLUSION

Trapping



- It is not always necessary to use rodenticides and trapping must be used first before PERMANENT BAITING can be considered
- Low levels of activity can be eliminated with traps
- These techniques require skill and effort
- Remember traps may also take non-target animals
- Check traps frequently and check the efficiency of trap mechanisms *etc.*



Trapping

Place tunnel traps before rats become apparent, so that they are accustomed to moving through them

Traps should be set as soon as rodent signs are noticed



Trapping

- Labour intensive
- Not suitable for large scale programmes
- Trap-Shyness – not all rodents equally “trappable”
- Prolonged use - more shy animals survive
- More become shy from trap “near misses”
- Absence of trapped rodents does not mean success! – more monitoring needed!

Use of Lethal Traps

- The following traps are declared to be approved under S.I. No. 620/2003 - Wildlife 1976 (Approved Traps, Snares and Nets) Regulations 2003
- (ii) a spring trap which is not a gin trap and which is designed to secure either-
 - (I) the immediate death, or
 - (II) the immediate unconsciousness and subsequent death without intervening consciousness,



Use of live catch traps

■ ANIMAL HEALTH AND WELFARE ACT 2013

Trapped live animals **in the possession or under the control of a human being whether permanently or on a temporary basis”**

You must safeguard the health and welfare of the animal, and (ii) not threaten the health or welfare of the animal or another animal

Must be dispatched

HUMANELY



Rodent Spring Traps

Advantages

Visual Confirmation of effectiveness

Removal & Disposal

Limited Environmental Issues

Fast death

Monitoring tool for noted activity



Disadvantages

Regular Checking

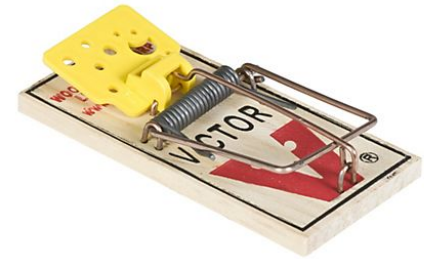
Setting

Non Target Environmental Concerns

One Trap/One rodent



Rodent Spring Traps



Rodent Spring Traps



Important Considerations

- **SENSITIVITY**
- **BAIT TYPE**
- **PLACEMENT/SETTING**
- **KINEASTHESIS**



Spring Traps

- **Key Considerations for Use of Lethal and Non-lethal Rodent Traps**
- **Traps should only be set after consulting the manufacturer's instructions regarding pest species and trap location. If in any doubt the trap should not be set.**
- **Every effort should be made to avoid trapping non-target species. Those who use lethal break-back traps must be able to recognise the signs and evidence of the presence of rodent pest activity. In the absence of clear evidence of the species being present, the need for trapping should not proceed.**

Spring Traps

- The entrance of trap tunnels should be restricted (e.g. with sticks) to discourage entry of non-target species.
- Traps, or the containers/vessels in which they are placed, should be firmly anchored in the treatment area.
- Traps should be checked at daily intervals and more often where, on the basis of an environmental risk assessment, a need for more frequent checking is identified. Traps should not be set in open or accessible areas where members of the public, animals and pets or non target wildlife can gain easy access to them.
- Suitable Personal Protective Clothing and Equipment (PPE) must be worn when dealing with traps and rodent carcasses to prevent the transmission of rodent borne disease.

Lethal Traps Legal requirements

- CAN NOT BE USED TO MONITOR EXTERNAL ACTIVITY**
- THIS ALSO APPLIES TO “SMART TRAPS”**
- MUST ONLY BE USED WHEN RODENTS ARE PRESENT**
- CHECKED AT LEAST EVERY 24 HOURS OUTDOORS**
- REMOVE or UNSET AT END OF DEPLOYMENT**