CRRU-IASIS “Wildlife Aware” Training Course and Accreditation

Professional Pest Controllers in Rural, Semi-Urban and Urban Settings

Introduction to the course

CRRU Overall Objective

CRRU aims to protect wildlife while promoting and providing effective rodent control through the responsible use of rodenticides

Rodenticide use

- **Rodenticides are used in Agriculture**
  - 80-90% of arable & pastoral farms in and around buildings, hedgerows, field
  - to protect animal production and poultry units
- **Rodenticides are used in urban, semi-urban and rural settings**
  - To protect office buildings, Food and Feedstuff premises, Pharmaceutical plants, IT factories, Warehouses, Sports and other premises
  - In open areas, waste dumps and sewers
- **Large use of second-generation compounds**
  - Flocoumafen and brodifacoum most widely used
  - Difenacoum, bromadiolone and difethialone also used

Three main concerns about rodenticide use

1. Incidents of exposure of wildlife to compounds used in vertebrate pest control (investigated by the National Parks & Wildlife Service in co-operation with the Veterinary Service of the Department of Agriculture, Food & the Marine and the State Laboratory; Birdwatch Ireland; Golden Eagle Trust)

2. Widespread distribution of low-level, non-lethal residues of anticoagulants

   This is the main issue addressed by CRRU & “Wildlife Aware”

3. Incidents of illegal use / intentional poisoning (outside scope of CRRU)

Exposure: the exposure fingerprint

- Many species exposed
- Residues in high percentage of some populations
- Geographically widespread
- Suspect main route of contamination is outdoor use of rodenticides
- Contamination *via* multiple food-chains
  - *via* target rats and mice & non-target small mammals to raptors Barn Owl, Red Kite, Buzzard, Kestrels, etc.), & mammalian predators (Stoat, Pine Marten, Fox, etc.)

What is IASIS?

- Irish Agricultural Supply Industry Standards
- Not-for-profit limited company set up in 1993 to -
  - promote excellence in training pesticide advisors & distributors
  - ensure that distribution facilities provide a high level of protection for workers & the environment.
- IASIS Board: representatives of wholesale & retail trade associations, DAFM and HSA
- IASIS Requirements & Guidelines for Pesticide Stores, Sales & Display Areas: legal standards
- IASIS Course for Distributors
- CPE training events – Advisors & Distributors
- CPE Registers – Advisors, Distributors, and
- Wildlife Aware Technicians

Purpose of course

- To indicate to customers that those with IASIS Wildlife Aware accreditation will work to the highest standards in order to achieve effective pest control with minimum adverse effects on wildlife and the wider environment.

- Establish a core of specially trained “Wildlife Aware” technicians

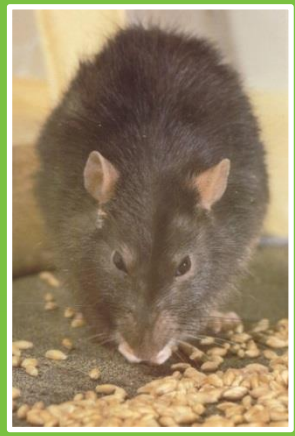
- Never lose sight of the need to conduct effective rodent control to protect human and animal health and the profitability of enterprises

CRRU–IASIS Wildlife Aware Course Outline

- **Part 1 – Directed Reading programme**
- **Part 2 – One-day Course**
  - Introduction to the Course
  - Module 1: Rodent Damage, Identification, Biology
  - Module 2: Non-target Rodent Species, Rodents as prey of raptor species
  - Module 3: Rodent Control – An IPM approach, Quality Assurance Schemes
  - Module 4: Environmental Impact
  - Module 5: The Campaign for Responsible Rodenticide Use
- **Part 3 – Examination**
- **IASIS Certification and Accreditation**

Key Concepts

- **Rodent Control programmes and Techniques must:**
  - be based on an Integrated Pest Management (IPM) approach.
  - reflect European Standard EN 16636 Pest management services – Requirements and Competencies
  - reflect application of the CRRU Code
  - avoid primary or secondary poisoning of non-target species



Definition: Integrated Pest Management (IPM)

- **Survey Site & Surrounding Area to identify -**
  - nature, location and extent of infestation, if any
  - wildlife species potentially present and that may be at risk
- **Identify appropriate treatment combination:**
  1) habitat modification
  2) option of biological control (domestic cat, dog)
  3) Physical control techniques (exclusion)
  4) Mechanical control techniques (trapping)
  5) Chemical control - Acute poison,
     1st generation anti-coagulant, or
     2nd generation anti-coagulant

Rodenticide Types

- **Non anti-coagulants**
  - Alphachloralose, CO_2 (only for mice)
  - Powdered Corn Cob
- **First-generation anti-coagulants**
  - warfarin, coumatetralyl, chlorophacinone
- **Second-generation anti-coagulants (SGARs)**
  more acutely toxic and persistent in the environment - introduced because of resistance:
  - difenacoum & bromadiolone (some evidence of resistance)
  - brodifacoum, flocoumafen & difethialone (more potent)

Definitions - Primary & Secondary Poisoning

- **Primary Poisoning**
  occurs when non-target species feed directly on bait
- **Secondary Poisoning**
  occurs when non-target species feed on species that have consumed bait & as a consequence contain traces of rodenticides