

Syllabus

CRRU-IASIS “Wildlife Aware” Course

for

Professional Pest Control Technicians / Operatives

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Irish Agricultural Supply Industry Standards

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“WILDLIFE AWARE” COURSE AND ACCREDITATION

Background Information

The “Wildlife Aware” training course is provided by the Campaign for Responsible Rodenticide Use (CRRU) in collaboration with IASIS. The course is NOT a course on basic rodent control. Those who attend the course are expected already to possess proficiency through prior training and practical experience in rodent pest management, and to have obtained relevant qualifications such as those offered by Quality and Qualifications Ireland (QQI), the Irish Pest Control Association (IPCA), the National Pest Technicians Association (NPTA) Irish branch, City & Guilds, or equivalents.

The use of rodenticides is essential to many rural, semi-urban and urban enterprises. Rodenticide use is important in: -

- maintaining good husbandry on farms,
- maintaining hygienic conditions on farms, in manufacturing and other business premises, in hospitals, in offices, and in public areas,
- maintaining good manufacturing practice,
- protecting human and animal health,
- prevention of the spoilage of foodstuffs due to contamination by rodent pests.

The use of rodenticides is increasing, both because rodent populations are themselves increasing and because many audit schemes now insist on structured rodent pest management procedures in all facilities audited.

However, there is growing evidence of widespread contamination of wildlife with anticoagulant rodenticides. Many of the species involved are of high conservation status, such as the Barn Owl, Red Kite and Kestrel. The effects on raptor species populations of the low-level residues commonly found are not fully understood – further research is required. Nevertheless, low-level residues are worrying, are unwanted and can be reduced significantly if fundamental guidelines are followed during the application of rodenticides.

The “Wildlife Aware” course will explore these apparently conflicting requirements. The course will increase understanding of current levels of contamination of wildlife to rodenticides, explain the main primary and secondary routes of exposure of wildlife to rodenticides and alert competent professionals to the techniques that should be adopted to minimise wildlife exposure during rodent pest management in rural, semi-urban and urban settings. This advice is based on the code of practice for the responsible use of rodenticides known as the CRRU Code (<http://www.thinkwildlife.org>).

Who should attend the course?

The course is primarily aimed at those who offer a service of rodent pest management to: -

- farming enterprises and other businesses in rural areas,
- manufacturing and other business sites in semi-urban and urban areas,
- hospitals, office premises and sports facilities, and
- local authorities and other public bodies.

In particular, professional pest controllers and the employees of Local Authorities involved in pest control will find the course, and the accompanying accreditation scheme, advantageous in their activities.

All workers that conduct rodent pest management as a routine part of their duties including Local Authority employees, farm contractors, and farm workers will also benefit from the course. The course is also relevant to those involved in game-rearing and who carry out rodent pest control as a part of such activities. Those who attend the course should have already attended training courses in rodent pest management so that they are fully competent in the use of anti-coagulant rodenticides.

While not the main target audience for the course, those involved in wildlife conservation may find the course useful through familiarisation with rodent pest management techniques and best practice in avoiding unwanted wildlife impacts.

Accreditation

“Wildlife Aware” accreditation is offered to all those who complete the course and pass the examination. This accreditation is designed for professional pest controllers, Local Authorities and others offering or providing a rodent pest management service. This accreditation is intended to signal to prospective customers that those who hold the accreditation will work to the highest standards to achieve effective pest control with minimum adverse effects on wildlife and the wider environment. Accredited technicians will be able to use the licensed “Wildlife Aware” logo as a visual representation of their skill and increased competence.

“Wildlife Aware” accreditation is given to the individual who satisfactorily completes the course and passes the examination and will follow the individual wherever he/she works. It does not provide accreditation for the company or organisation which employs him/her. However, attendance at the course by company employees, and the subsequent accreditation of those trained, will provide evidence that the organisations involved wish to operate to the highest practical standards so as to avoid wildlife exposure to rodenticides during rodent pest management operations.

Continuing Professional Education

The course, consisting of directed reading followed by a one day of course work will carry 35 IASIS Continuing Professional Education (CPE) Credits.

Course Outline

Part 1 Prescribed Reading Programme

The prescribed reading programme is necessary to refresh course participants' knowledge of aspects of rodent control techniques, to emphasise Integrated Pest Management (IPM) approaches to rodent control and to introduce course participants to research and monitoring findings concerning rodenticide impacts on wildlife.

Part 2 One Day Course of Lectures

Six modules will be presented during the one-day course:

Introduction

- Provides an introduction to the course and to the objectives that the course is intended to achieve.
- Key concepts and definitions are highlighted and explained.

Module 1 Rodent Damage, Rodent Identification, Rodent Biology, Accreditation Schemes

- Provides an understanding of the problems caused by rodents to the economy. Particular emphasis is given to diseases carried by rodents and to the quest for quality within accreditation schemes driving an increased requirement for rodenticide use.
- Describes important rodent pest recognition characteristics and behaviour relevant to implementing effective control.

Module 2 Non-Target Rodent Species, Rodents as prey species

- Draws attention to other non-target rodents that may be affected by rodent control programmes.
- Highlights the importance of rodents as prey of wildlife species.

Module 3 Rodent Control – An IPM Approach

- Explains the fundamentals of rodent control using an Integrated Pest Management (IPM) approach and the effective and safe use of rodenticides in the countryside and in and around buildings.

Module 4 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.

Module 5 The Campaign for Responsible Rodenticide Use

- Explains the objectives of the CRRU initiative, the important risk mitigation measures required to reduce wildlife contamination and the potential benefits of each of the measures recommended.

Final Presentation

- Explains the feed-back procedure for course participants.
- Provides details of the examination system and of the 'Wildlife Aware' accreditation arrangements.

Part 3 Examination

Course participants will be examined to assess their knowledge and appreciation of the concepts and procedures addressed. Examination will be by means of a written answers to questions provided.

Aims and Objectives

The syllabus has been designed to allow participants that have completed a prescribed reading programme to complete their training in a single day. The structure of the day does not permit practical sessions to be held but the training is intended to provide useful practical advice. Where theoretical material is presented, a clear linkage to practical outcomes is provided throughout.

All course participants will be expected to possess clear and current practical competence in rodent pest management derived formally from prior attendance at appropriate training courses, such as those offered by Quality and Qualifications Ireland (QQI), the Irish Pest Control Association (IPCA), the National Pest Technicians Association (NPTA) Irish branch, City & Guilds, or equivalents. They will also be able to demonstrate competence by being engaged in rodent pest management on a regular basis and having experience in a range of practical situations.

The course will provide relevant practical information on: -

- the importance of rodents and the damage that they cause,
- the biology of rodent pests as it is relevant to effective management and to environmental concerns,
- non-target rodents which are the principle route of exposure to rodenticides for many wildlife species,
- the fundamentals of rodent control based upon an Integrated Pest Management (IPM) approach, with particular regard to the risks that can arise for wildlife,
- how wildlife is exposed to rodenticides, the species concerned and the extent of contamination, and
- a code of practice which, when adopted as a part of practical rodent pest management processes, will result in minimised exposure of wildlife and reduced adverse environmental effects.

THE COURSE SYLLABUS

Part 1 Prescribed Reading Programme

1.1 Competence

To refresh the knowledge of course participants regarding best practice in rodent pest management using and an Integrated Pest Management (IPM) approach.

1.2 Performance Criteria

Candidates must have to ability to: -

- explain the basis for choices made in relation to method of rodent control deployed in particular situations,
- describe the elements to be considered in conducting a site survey,
- understand the techniques to be used in assessing risks for operators and bystanders and in risk mitigation
- understand the techniques to be considered in assessing risk for the environment and in risk mitigation, and
- know how to prepare a rodent control programme

1.3 Essential Knowledge and Skills

Candidates must have the ability to: -

- list the various techniques and methods available to control rodent pests,
- explain the advantages and disadvantages of each approach to rodent control,
- describe the steps involved in developing a rodent control programme, and
- describe the elements required to successfully implement rodent control programmes.

THE COURSE SYLLABUS

Part 2 One Day Course

Introduction

2.1.1 Competence

To develop an appreciation of the objectives of the course, and an understanding of important concepts and definitions involved.

2.1.2 Performance Criteria

Candidates must have to ability to: -

- describe the concerns created by use of rodenticides
- explain the concept of Integrated Pest Management (IPM) in relation to rodent pest management
- understand the relevant definitions

2.1.3 Essential Knowledge and Skills

Candidates must have the ability to: -

- describe the application of IPM in development of rodent control programmes,
- explain the meaning of terms used.

THE COURSE SYLLABUS

Part 2 One Day Course

Module 1 Rodent Damage, Rodent Identification, Rodent Biology, Accreditation Schemes

2.2.1 Competence

To develop knowledge of the scope of the impacts that rodent infestations have on rural, semi-urban and urban enterprises. Develop an ability to distinguish between the different rodent pest species, understand key differences in their biology and behaviour that are important in their control.

2.2.2 Performance Criteria

Candidates must have the ability to: -

- describe all important target species,
- explain the relative importance of the main impacts of rodent pest populations on different types of enterprise,
- understand the potential impacts of rodents as carriers of human and animal diseases, and
- understand aspects of pest biology and behaviour that are important in the management of rodent pests

2.2.3 Essential Knowledge and Skills

Candidates must have the ability to: -

- identify target rodents, using both common names and scientific names,
- list the main adverse impacts of rodents and discuss their importance,
- list some of the important diseases transmitted by rodents to humans and livestock and name the organisms that cause them,
- explain the drivers for improved hygiene in animal rearing and arable farming, in industry, in hospitals and in offices,
- describe some of the important accreditation schemes and summarise the positions they adopt with regard to management of rodent infestations, and
- describe those aspects of rodent behaviour that may influence the effectiveness of rodent pest management.

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Part 2 One Day Course

Module 2 Non-Target Rodent Species, Rodents as Prey Species

2.3.1 Competence

Know the important non-target rodent species and aspects of their biology and behaviour that predisposes them to accidental exposure to rodenticides and then become instrumental in the contamination of predators and scavengers.

2.3.2 Performance Criteria

Candidates must be able to: -

- describe some key non-target rodent species
- explain routes of exposure of predatory and scavenging wildlife via consumption of contaminated non-target rodents

2.3.3 Essential Knowledge and Skill

Candidates must have the ability to: -

- identify non-target rodents, using both common names and scientific names,
- describe which rodent species may be controlled with anticoagulant rodenticides and those that may not,
- understand the importance of non-target small mammals in the contamination of wildlife with anticoagulant rodenticides, and
- discuss routes of rodenticide exposure of wildlife through consumption of both target and non-target rodents.

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Part 2 One Day Course

Module 3 Rodent Control – An IPM Approach

2.4.1 Competence

Develop knowledge of all aspects of the control of rodents using an Integrated Pest Management (IPM) approach, with special emphasis on safe and effective use of rodenticides both in and around buildings and away from buildings.

2.4.2 Performance Criteria

Candidate must be able to: -

- describe the control options available and the role each plays in rodent pest management,
- understand the step-wise implementation of a rodent management plan, and
- know the different methods used for rodent control away from buildings

2.4.3 Essential Knowledge and Skills

Candidates must have the ability to: -

- describe the elements of an integrated rodent pest management programme and discuss strengths and weaknesses of each element,
- list the 5 steps to an effective rodent management programme,
- understand the importance of an operator and bystander risk assessment,
- understand the importance of an environmental risk assessment,
- know the key risks encountered during rodenticide applications,
- discuss important measures to mitigate risks,
- understand the requirement to keep accurate and complete written records of all activities undertaken,
- discuss the possible influence of rodenticide resistance on rodent control operations, and
- describe the different requirements of a rodent management plan when this is to be implemented away from buildings.

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Part 2 One Day Course

Module 4 Environmental Impacts of Rodenticides

2.5.1 Competence

Develop thorough understanding of the potential impacts of rodenticides on wildlife and the wider environment.

2.5.2 Performance Criteria

Candidates must be able to: -

- demonstrate an understanding of the effects of vertebrate pest control agents on wildlife,
- demonstrate knowledge of wildlife monitoring schemes (NPWS/DAFM/State Laboratory, Birdwatch Ireland, Golden Eagle Trust), and
- demonstrate an understanding of exposure/contamination pathways.

2.5.3 Essential Knowledge and Skills

Candidates must have the ability to: -

- describe the main anticoagulants used in Ireland and the restrictions placed on their use,
- understand the reasons why rodenticide use outside building is important in terms of contamination of wildlife,
- understand the two main unwanted impacts of exposure of wildlife to vertebrate control agents,
- understand the objectives and operation of wildlife monitoring schemes,
- understand the different causes and consequences of wildlife poisoning incidents,
- understand the extent of low-level residues of anti-coagulants in wildlife,
- understand the pathways by which different wildlife species are exposed to rodenticides, and
- interpret the findings of the relevant studies in terms of impacts on wildlife populations.

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Part 2 One Day Course

Module 5 The Campaign for Responsible Rodenticide Use

2.6.1 Competence

Develop knowledge of the purpose of the CRRU initiative and the principle ways in which undesirable impacts of rodenticides on wildlife can be avoided.

2.6.2 Performance Criteria

Candidates must be able to: -

- demonstrate knowledge the CRRU initiative, and
- demonstrate knowledge of why responsible use of rodenticides is important in Ireland.

2.6.3 Essential Knowledge and Skills

Candidates must have the ability to: -

- understand the objectives of the CRRU initiative,
- understand the importance of responsible rodenticide use in terms of the regulation of rodenticide use,
- understand the relationship between the CRRU code and product labels,
- demonstrate thorough knowledge of the CRRU Code, and
- explain the benefits of the Code's seven points in terms of their individual effects in reducing wildlife exposure to rodenticides.

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Part 2 One Day Course

Final Presentation

2.7.1 Competence

Develop knowledge of the feed-back procedures in place and an understanding of the examination system and of the purpose of the 'Wildlife Aware' accreditation system.

2.7.2 Performance Criteria

Candidates must be able to: -

- demonstrate knowledge of the feed-back system and of its function,
- explain the nature of examination system used, and
- understand the 'Wildlife Aware' accreditation system and demonstrate knowledge of its function.

2.7.3 Essential Knowledge and Skills

Candidates must have the ability to: -

- understand the objectives of the feed-back system for course participants,
- appreciate the nature of the examination system used,
- understand the options available to course participants that do not pass the examination,
- describe the benefits of 'Wildlife Aware' accreditation,
- explain the procedures to be followed to achieve 'Wildlife Aware accreditation

THE COURSE SYLLABUS

Part 3 Examination

Participants will be given an opportunity to provide feedback on the course towards the end of the training day. The examination consisting of a written paper (30 minutes) will be undertaken on completion of the course.

The examination will consist of 'true' or 'false' statements and multiple choice questions as well as questions requiring descriptive responses and will be moderated and marked by IASIS officers. The examination will cover material from the prescribed reading programme and each of the six modules shown above: -

- 10 'true' or 'false' questions – each worth 3 points (Total 30%),
- 10 'multiple choice' questions – each worth 4 points (Total 40%), and
- 3 questions requiring brief descriptive responses – each worth 10 points (Total 30%).

The following examination grading system will be used: -

Pass:	50% to 64%
Merit:	65% to 79%
Distinction:	80% to 100%

Those who pass the examination will receive notification and a certificate from IASIS. Those who wish to take advantage of the offer from CRRU and IASIS of "Wildlife Aware" accreditation must apply to IASIS after successfully completing the examination for accreditation.

Those who fail the examination will be given the chance to retake the exam. There will be one retake allowed ONLY. Details of how to retake the exam will be given in the candidate notification letter.

IASIS ACCREDITATION

Candidates who have completed the course and who have attained a pass mark in the examination should apply to the Irish Agricultural Supply Industry Standards Limited (IASIS) to obtain details about accreditation. Contact details are provided hereunder. “Wildlife Aware” accredited technicians may use the “Wildlife Aware” logo after signing the license agreement which will be sent to them with the application forms. The annual cost to maintain “Wildlife Aware” accreditation is €60 per annum. The cost of the accreditation to the end of the year in which the examination is passed is included in the course application fee of €210.



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