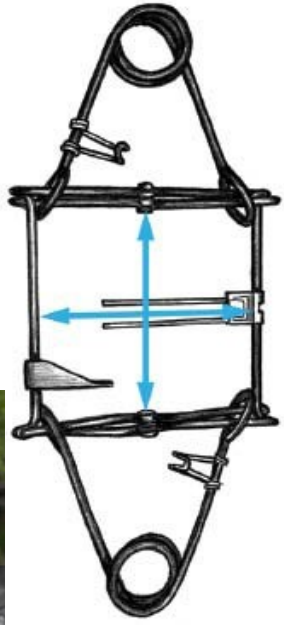
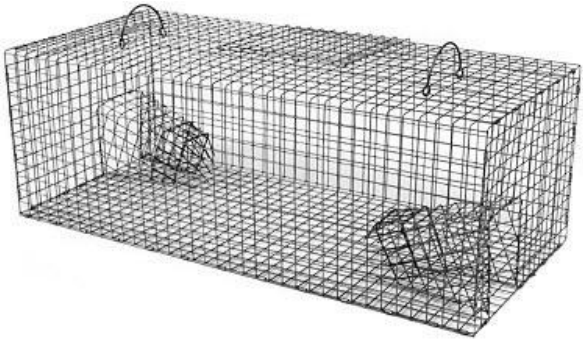
Wildlife Control Operator

Occupational Standards

A Summary of Hiring and Training Goals





National Wildlife Control Training Program

Research-Based Wildlife Damage Management Information

National Wildlife Control Training Program

The National Wildlife Control Training Program (**NWCTP**) is a cooperative venture of concerned professionals interested in wildlife damage management. The NWCTP uses a structured curriculum and develops national standards for the wildlife control industry in collaboration with states, agencies, and stakeholders. The NWCTP presents information through an **Integrated Wildlife Damage Management (IWDM)** perspective, which includes the timely use of a variety of cost-effective, environmentally safe, and socially acceptable methods to reduce human-wildlife conflicts to a tolerable level. This approach balances concerns about safety; the humane treatment of wildlife; practicality; landowner rights; the protection of wildlife populations and habitats; and ethical, legal, financial, and aesthetic issues.

For information on Professional Wildlife Damage Management

Visit WildlifeControlTraining.com

- Proven, safe, integrated approach to resolving wildlife conflicts
- Emphasis on prevention and habitat modification
- Effective wildlife management options for urban and residential areas
- Physical safety and wildlife disease information
- High-quality online training program with printed manual
- Consistent management methods applicable across states
- Great do-it-yourself methods for protecting your property

Comprehensive information on wildlife species and methods to prevent and control wildlife damage

National Wildlife Control Training Program

Developing Standards and Training Products for: Wildlife Control Operators, Pest Control Professionals, Government Agencies.

NWCTP.com

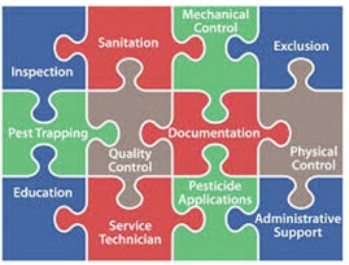


Table of Contents

The information is this booklet references national vertebrate pest management standards from a variety of government and private agencies. This information is for reference use only. The laws and regulations of your local, state, or provincial government supersede any of the information listed here. The standards listed here are recommendations for training professional Wildlife Control Operators.

For more information on professional training programs, visit WildlifeControlTraining.com

Executive Editors of the National Wildlife Control Training Program

Raj Smith, Cornell University, Department of Natural Resources

Paul Curtis, Cornell University, Department of Natural Resources

Scott Hygnstrom, University of Wisconsin-Stevens Point

This booklet is published by the National Wildlife Control Training Program LLC, January 2019.

Contact: Admin@NWCTP.com - WildlifeControlTraining.com - 607-251-3366

Written and reviewed by leaders in the wildlife control community, the National Wildlife Control Training Program (NWCTP) curriculum is designed to provide professional training for wildlife control operators throughout the U.S. The focus is on essential information needed to resolve human -wildlife conflicts using best practices in safe, humane, effective, and practical ways.

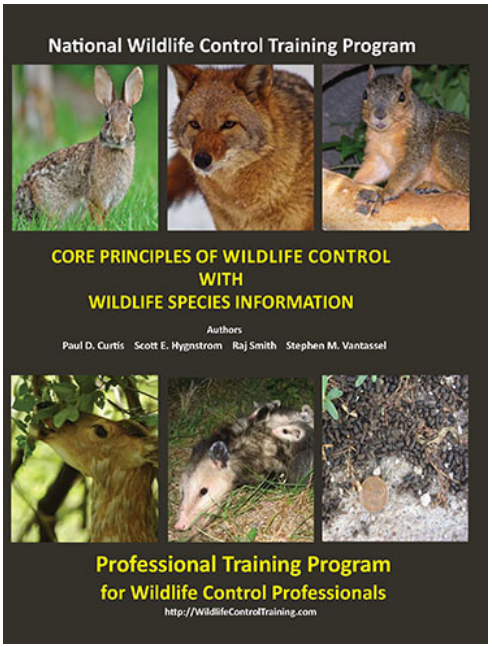
Knowledge Expectations for Wildlife Control Operators

Laws and Regulations

Wildlife Control Operators (WCOs) should be able to list the basic laws and regulations pertinent to vertebrate pest management such as state wildlife control laws, including trapping and hunting laws, the Migratory Bird Treaty Act, Endangered Species Act, and local ordinances.

A WCO must be able to describe how different laws and regulations may pertain to the control or management of specific vertebrate pests and how they influence:

- which species can be managed
- the techniques or methods used
- the considerations and safeguards needed to protect nontarget species
- humane and ethical considerations.



A WCO must know the agency or agencies that enforce laws and regulations pertinent to wildlife damage control.

WCOs must be able to find information on laws and regulations pertaining to nuisance wildlife control and wildlife damage management. Always consult the relevant authorities before capturing, removing, or excluding wildlife.

A state issued pesticide applicator license is required to use chemical controls, repellents, and toxicants in most states.

If necessary, animals must be dispatched humanely using veterinary and ethical standards and the carcasses properly disposed.

Vertebrate Pest Identification

Be familiar with common vertebrates and understand their general biology, ecology, and management tactics.

Know the Threatened and Endangered species in your state:
EPA Endangered Species Protection Program Fact Sheets– http://www.epa.gov

Define what is a vertebrate pest or nuisance animal. Describe characteristics that make an animal a pest. (high reproductive rate, high density, overabundance, congregating behavior, propensity for feeding on crops, propensity for damaging property, value of plants being damaged, problem behaviors, vectors or reservoirs ofdisease).

Identification

Identify the major mammal pests in your state's agricultural crops and urban environments. (gray and red squirrels, deer, cottontail rabbits, meadow voles, Norway rats, Raccoons, chipmunks, etc.)

Identify the major bird pests in your state's agricultural crops. (blackbirds, crows, Canada geese, house sparrows, house finches, jays, robins, starlings)

Describe ways in which the identity of a vertebrate pest might be confirmed. (direct observations, use of remote-triggered cameras; location and patterns of damage; look for further signs such as tracks, droppings or hair; time of day that damage occurs; tooth marks, and trapping)

List resources to assist in vertebrate pest identification. (NWCTP Training Manual, Vertebrate Pest Control Handbook, IPM Web sites, Peterson bird ID book, *Managing Wildlife Damage* by NWCTP)

Pests and Crop or Environmental Associations

List the vertebrate pests most commonly associated with the following agricultural crops:

1. gardens (deer, rabbits, meadow voles, woodchucks)
2. fruit trees (house finches, robins, jays, meadow voles, raccoons, starlings, tree squirrels)
3. other forage crops (deer, meadow voles, woodchucks, rabbits)

4. grapes (starlings, house finches, robins, deer, turkeys)
5. lettuce (rabbits, voles)
6. nut trees (crows, jays, tree squirrels)
7. strawberries (house finches, meadow voles)
8. tomatoes (chipmunks, meadow voles)

Identify the vertebrate pest for the following problems:

1. *commonly cause problems in forestry*. (deer, beaver, porcupines, rabbits, tree squirrels)
2. *cause problems at cattle feedlots, dairies, and poultry and pork producing facilities.* (blackbirds, house mice, house sparrows, Norway rats, pigeons, starlings)
3. *are considered of significance to public health.* (bats, coyotes, deer, house mice, fox, raccoons, rats, skunks)
4. *are major pests of stored commodities and food processing facilities.* (house mice, house sparrows, pigeons, rats)
5. *know the predators responsible for major livestock losses in your state.* (coyotes, bears, dogs)

Suburban and Urban Environments

Know the mammals that often are considered problem animals. (bats, meadow voles, moles, raccoons, skunks, tree squirrels, deer, etc.)

Know the birds that are often considered problem birds.
(crows, Canada geese, pigeons, starlings, sparrows, gulls, cormorants)

Nature and Type of Pest Damage

Recognize signs and symptoms used to identify damage caused by thefollowing vertebrate pests: List the vertebrate pests associated with the following damage symptoms:

1. girdling of trees—above ground,
2. girdling of tree roots—below ground,
3. vegetable seedling damage,
4. bud removal of fruit trees,

5. damage to ripening fruit,
6. damage to attic insulation,
7. damage to soffits,
8. damage to irrigation systems or tubing.

Vertebrate Pest Biology and Ecology

Population Dynamics

Describe how populations of vertebrate pests may be influenced by:

1. time to maturity
2. litter size
3. number of litters per year
4. cyclic population trends
5. habitat requirements
6. survival rates
7. lifespan

Describe how populations of vertebrate pests may be limited by the following external factors:

1. food sources and abundance
2. shelter
3. water
4. habitat fragmentation
5. predators/diseases

Behavioral Characteristics

Describe how the following may influence management:

1. hibernation/estivation
2. dietary changes
3. bait shyness
4. neophobia
5. cover or shelter
6. soil moisture and composition
7. migrations
8. activity patterns (diurnal/seasonal)

Habitats

Describe the common habitats used by the following animals:

1. crows
2. deer
3. woodchucks
4. raccoons
5. meadow voles
6. moles
7. eastern chipmunks
8. rabbits
9. rats
10. tree squirrels.

Describe the visible differences between the burrows and mounds of the following vertebrate pests:

1. meadow voles
2. moles
3. pine voles

Describe how to distinguish between an active and inactive burrow.

Disease Carriers

Identify the pest(s) most often associated with the following diseases:

1. plague (rats, mice, chipmunks),
2. histoplasmosis (bats, pigeons)
3. leptospirosis (Norway rats, house mice)
4. hantavirus (deer mice)
5. Lyme disease (deer mice and chipmunks)
6. rabies (bats, foxes, skunks, raccoons, and coyotes)
7. salmonellosis (rats and house mice)

Identify the most common methods of human exposure for each of thefollowing diseases:

1. plague (flea bites)
2. histoplasmosis (inhalation)
3. tularemia (physical contact)

4. salmonellosis (ingestion)
5. hantavirus (inhalation)
6. Lyme disease (ticks)
7. Rabies (bites or scratches)

Describe the importance of ectoparasite control:

1. when carrying out chipmunk management in areas of high disease potential;
2. in association with commensal rodent management or bat exclusion;
3. when cleaning and decontaminating an area full of bird excrement.

Dealing with nuisance animals

Assessing the Problem and Determining Strategies

Describe the steps taken to assess a nuisance wildlife problem: (identify species; location of damage; survey extent, severity, type of damage; cost; and health and safety issues)

List the factors that must be considered in determining whether a management action should be taken: (pest population, management costs, efficacy of the management strategy, time of year, cost of damage and risk of future damage, season, environmental concerns, human health concerns)

Describe how the following short- and long-term solutions may differ and when each may be the best choice:

1. deer repellents vs. deer-proof fence,
2. acute toxicant vs. habitat management for meadow voles.

Describe how a combination of methods in an integrated pest management program would be used over time to manage:

1. tree squirrels,
2. meadow voles,
3. starlings,
4. Norway rats.

Describe several key management options available for the following vertebrate pests in fruit crops:

1. raccoons,
2. starlings,
3. meadow voles,
4. pigeons.

Environmental Management and Habitat Manipulation, Including Crop Cultural Practices

Describe how the following habitat modifications in urban situations can impact vertebrate pests:

1. food removal,
2. cleaning up rotten fruit,
3. removing bird feeders,
4. removing wood piles,
5. eliminating cover,
6. eliminating water sources,
7. eliminating bird nesting sites.

Describe the impact of the following cultural practices on vertebrate pests in crop or garden situations:

1. brush and pruning pile removal
2. irrigation methods
3. crop type and variety
4. field border sanitation
5. cover crops
6. mowing treatments
7. burrow destruction
8. crop rotation
9. cultivation
10. tree and vine row herbicide

Exclusion

Describe how the following might be used to prevent damage or pest access:

1. non-electric fencing and exclusion fencing: (deer, rabbits, woodchucks),
2. electric fencing (deer, raccoons, woodchucks),
3. tree guards (deer, rabbits, voles),
4. netting (birds),
5. wire mesh planting baskets, (moles).
6. chimney and vent guards, (birds, raccoons)
7. excluding soffits and decks. (bats, squirrels, skunks)

Recognize the importance of removing animals and their progeny from buildings before installing exclusion materials. (bats, raccoons, skunks, tree squirrels)

Frightening Methods

Describe how each of the following bird frightening devices or methods might best be used, alone or in combination, to temporarily protect orchard or garden crops from damage:

1. reflective tapes;
2. scare-eye balloons;
3. human effigies;
4. distress calls;
5. electronic noisemakers.

Explain how habituation may influence the effectiveness of many frightening methods.

Know the methods to reduce habituation and/or increase the efficacy of frightening devices.

Trapping

List pests for which the following traps would be used:

1. cage-type live-traps (tree squirrels, rabbits, raccoons, skunks),
2. harpoon trap (moles),
3. glue boards (house mice),
4. snap traps (house mice, meadow voles, and rats),
5. body gripping traps (muskrats, squirrels, beaver).

Recognize that translocation of vertebrate pests, such as woodchucks, rabbits, raccoons, chipmunks, skunks, and especially rabies vector species, is illegal in many states. Moving an animal out of its home range is not recommended.

Shooting and Hunting

Explain why shooting and hunting is usually not a recommended control method for WCOs. (Often not legal in urban areas, requires special training and hunting license, homeowners may prefer non-lethal options)

Chemical Repellents

Describe how chemical repellents deter vertebrate pests. Note that pesticide certification is usually required to use chemical repellents and toxicants anywhere but your own property. (tactile/sticky compounds make area unpleasant, by odor, by taste, combination of taste and odor)

Explain why the effectiveness of sticky type repellents may be limited. (time consuming to apply, adversely affected by temperature, dust readily adheres to them; must be reapplied periodically, difficult to remove)

Explain why chemical repellents are not an effective long-term solution for the management of deer. (Adversely affected by snow, must be reapplied periodically, less than 100% effective)

Economic Evaluations and Considerations

List the economic factors to be considered in vertebrate pest management programs. (damage assessment, damage threshold, initial cost, long term cost)

Describe how the cost can be compared with the benefit of vertebrate pest management. (the cost of a management program or solution results in the reduction of elimination of the human-wildlife conflict)

Know that benefits may have to be assessed for several years beyond the year of management action. (habitat modifications and exclusion work like fences or chimney caps provide protection from wildlife conflicts for many years).

10 Principles of Wildlife Damage Management

Principle 1 – Animals are not Pests

Animals are not considered pests until they create conflicts with humans, their habitats, and/or values.

Principle 2 – Animals create problems

Animals may be classified as pests when they cause:

1. Damage to food, crops, fiber, buildings, vehicles, landscapes, and other natural resources;
2. Safety issues from wildlife attacks, diseases and health issues, vehicle collisions; and
3. Conflicts associated with noise, odors, excrement, and other unwanted behaviors.

Principle 3 - Control Animal Damage

The objective of wildlife damage management is to mitigate or prevent the damage that is caused by wildlife, not to control or eliminate wildlife.

Principle 4 – Use IWDM Problem Solving

Integrated Wildlife Damage Management (IWDM) includes 5 objectives:

1. Reduce damage to a tolerable level;
2. Use methods that are low risk for people, non-target animals, and the environment;
3. Implement control and habitat modifications efficiently and economically;
4. Use humane and ethical methods when capturing and disposing of wildlife; and
5. Follow all local, state, and federal laws.

Principle 5 – Understand Wildlife Problems

People conducting IWDM need to be knowledgeable of both the animals and the associated damage that they may cause, and be able to:

1. Identify common wildlife species;
2. Identify the damage caused by wildlife, and which species is responsible;
3. Be aware of the variation in damage in agricultural, urban, and suburban environments; and
4. Know the different problems associated with native vs. introduced wildlife.

Principle 6 – Know Wildlife Biology

People conducting IWDM need to be knowledgeable about the biology of problem wildlife so that they understand basic population dynamics, including carrying capacity and overabundance. A common species does not become overabundant until it creates conflicts with people. Knowledge of basic biology includes:

1. Litter size and time of reproduction;
2. Behavioral and seasonal characteristics;
3. Typical home range size and habitat use; and
4. Potential of animals to spread diseases.

Principle 7 – Use Multiple Control Methods

IWDM includes many methods to reduce wildlife conflicts. They are generally classified in the following categories:

1. Habitat manipulation and environmental management;
2. Exclusion;
3. Frightening methods;
4. Direct lethal control (e.g., trapping, shooting, and hunting);
5. Chemical controls (e.g., toxicants and repellents); and
6. Biological controls (e.g., guarding animals, etc.).

Principle 8 - Problem Wildlife are Here to Stay

Some wildlife species adapt to and thrive in urban and suburban environments, sometimes becoming overabundant. Damage and conflict may result. People performing IWDM provide a valuable service for home owners, stakeholders and the community.

Principle 9 – Use Humane Control Methods

Peoples' attitudes about wildlife vary greatly. Many people enjoy seeing wildlife, and species are protected by the public trust. Clients' wishes should be considered when they are safe, legal, and practical. All IWDM should be performed humanely, ethically, and as transparently, but discreetly, as possible.

Principle 10 – Become Trained and Licensed

Licensing and training standards improve the working environment of wildlife control operators by applying consistent standards of professional behavior and knowledge, both legal and practical, of wildlife control methods, as well as standards for humanely dispatching and disposing of wildlife.

National Wildlife Control Training Program

To manage human – wildlife conflicts effectively, you must have good information on the species involved. Understanding the biology and habitat of the problem animal allows a trained technician to use methods effectively to control or eliminate unwanted behavior, conflict or damage, or the animal itself.

The NWCTP training manual describes common species of wildlife and methods for dealing with the damage they cause. This guide is an overview. Comprehensive, research-based profiles for wildlife control operators (WCO) can be found at http://WildlifeControlTraining.com. The training programs by the National Wildlife Control Training Program will help you resolve human-wildlife conflicts and act with integrity as a licensed WCO.

The first step in effectively managing a pest is accurate identification. You must also understand its life cycle, habitat, and behavior. Identification, however, often is difficult. Many mammals are nocturnal or crepuscular and may rarely be visible during the day. Your only clue may be the damage itself.

The most practical way to identify a pest is by examining the damage site. Often, you can distinguish the damage caused by one species of animal from that of another. For example, deer tear off plant parts while rabbits clip parts off cleanly. Groundhog damage usually occurs close to its burrow. Among predators, killing and eating styles differ by species and may help you identify the culprit. Signs like tooth marks, feces, hair, and tracks also are helpful.

Mammals that are causing human-wildlife conflicts can be controlled in a number of ways. Many methods are specific to certain pests in particular situations. Usually, a combination of these methods will give you the best control. Review the sections on Wildlife Control Methods and Animal Handling. If using a pesticide, be sure to read the label. It has directions for use, as well as hazards to humans, domestic animals, the environment, and how to reduce risk.

Some techniques used to manage birds are similar to those used for mammals. Birds have some unusual features, however. For example, few birds have a good sense of smell. Olfactory repellents, therefore, do not work on birds. A good understanding of workable techniques will help you choose a successful control strategy.

Integrated Wildlife Damage Management

Integrated Wildlife Damage Management (IWDM) is not a single animal control method but, rather, a series of wildlife management evaluations, decisions and controls. In practicing IWDM, technicians who are aware of the potential for wildlife problems follow a four-tiered approach. The four steps include:

Set Action Thresholds

Before taking any wildlife control action, integrated wildlife damage management (IWDM) first sets an action threshold, a point at which environmental or economic conditions indicate that wildlife control action must be taken. Seeing an animal in the back yard does not always mean control is needed. The level at which wildlife will become an intolerable nuisance, safety or health problem, or become an economic threat is critical to guide future wildlife control decisions.

Monitor and Identify Problem Animals

Not all animals require control. Many wildlife are innocuous, and some are even beneficial. All IWDM programs monitor for problem animals and identify them accurately, so that appropriate control decisions can be made in conjunction with action thresholds. This monitoring and identification removes the possibility that lethal control will be used when it is not really needed, or that the wrong kind of control method will be used.

Prevention

As a first line of pest control, IWDM programs work to manage the garden, lawn, or indoor space to prevent animals from becoming a threat. Exclusion and habitat modification are powerful control methods. It could mean using netting, fencing, structural building modifications and setting up a garden in a controlled space such as a yard patrolled by a dog. These control methods can be very effective.

Control

Once monitoring, identification, and action thresholds indicate that animal control is required, and preventive methods are no longer effective or available, IWDM programs then evaluate the proper control method both for effectiveness and risk. Effective, less *risky* controls should be chosen first, including exclusion, or mechanical control, such as trapping or the use of one-way doors. If further monitoring, sightings and action thresholds indicate that less risky controls are not working, then additional control methods would be employed, such as trapping and wildlife removal. Lethal controls are a last resort in most situations. Translocation of rabies vector species is illegal in most states.

National Wildlife Control Training Program

With rapid growth in the wildlife damage management industry, customers, states, and provinces, need professional training standards and requirements for Wildlife **Control Operators** (**WCOs**) wildlife technicians and conservation management.

Core Principles of Wildlife Control with Wildlife Species Information describes the fundamental skills and knowledge base needed to become a WCO along with the species information needed to identify and control problem wildlife. Included in the training manual is valuable, comprehensive, species information providing in-depth coverage of the biology, damage management, common control methods, and animal handling techniques used to manage dozens of common wildlife species.

Core Principles of Wildlife Control with Wildlife Species Information

Our newest book and training program, ***Managing Wildlife Damage: Practical Methods for Resolving Human—Wildlife Conflict,*** provides the basic information the general public needs to protect their homes, farms, businesses and other areas vulnerable to wildlife damage. Great for help desks! Look for it in our online store.

store.nwctp.com

The authors and collaborators welcome your feedback and invite you to participate in making this guide a better product for wildlife control professionals. If you are interested in helping create a better training program or need us to create one for you.

Contact us at

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Research-Based Wildlife Damage Management Information

National Wildlife Control Training Program

Buy the Online Training and Certification Program

- Get certified, show your credentials, be professional, and take the course.
- Complete online training and certification program. Self-paced, available at any time. Includes an electronic copy of the training manual.
- 12 professional training modules and sample wildlife species descriptions available as printable or downloadable files.
- **Leads to certification of competency for WCO license in several states**

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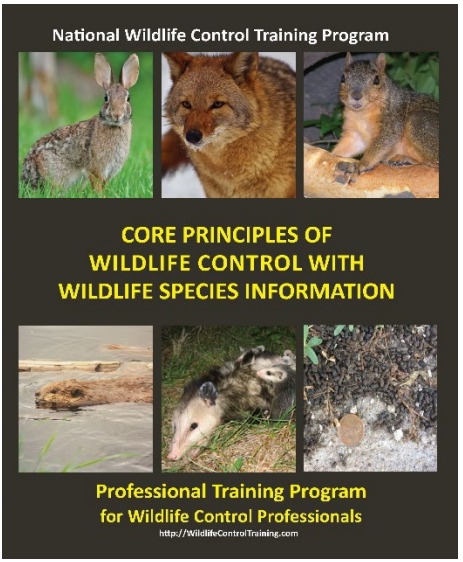
Buy the *must have professional* printed training manual!

Core Principles of Wildlife Control with Wildlife Species Information

Professional Training Program for Wildlife Control Operators

- **Comprehensive printed manual and online training program for WCOs**
- **Certified and approved by states. revised and updated for 2019**
- 450-page, fully illustrated training manual that leads to state certification (with purchase of the online exam). **Includes training modules and comprehensive wildlife information**
- 12 modules on the core principles of wildlife damage management
- Procedures for safe, legal, socially acceptable, and effective integrated wildlife management for common wildlife species
- Training on physical safety, diseases, inspection, trapping, and more
- Detailed information on exclusion, toxicants, and euthanasia
- Best training and certification program online and in print
- Professional, legal, and ethical Information



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