

Vertebrate Pest Control 7B Exam Study Guide

This study guide is intended to serve as an outline of the knowledge base covered by the Vertebrate Pest Control 7B Exam. If you don't understand a statement or term, refer to Truman's Scientific Guide 6th Edition and Prevention and Control of Wildlife Damage for more information. This exam consists of 50 multiple choice and true/false questions. Topics include:

1. Hantavirus
2. Birds
3. Prairie Dogs
4. Rats & Mice
5. Urban Wildlife
6. Identification

1. Hantavirus

- a. The deer mouse is the most common carrier of hantavirus pulmonary syndrome (HPS) in the United States.
- b. Hantavirus pulmonary syndrome affects the lungs. Workers who experience respiratory illness after potential exposure should seek medical attention.
- c. Workers should wear a respirator and rubber or plastic gloves when removing rodents from traps or handling rodents in areas where deer mice are prevalent or areas that have housed infestations.
- d. Traps contaminated by rodent urine or feces should be disinfected with a commercial disinfectant.

2. Birds

- a. Starlings, sparrows and pigeons all travel in flocks. Starlings fly between 15-30 miles each day between their roosting and feeding sites.
- b. Trapping, exclusion, and repellents are all alternatives to toxic methods of bird management.
- c. Pre-baiting is the single most important aspect of a successful pigeon baiting program. Pre-bait and bait for pigeons should be placed just before sun-up because pigeons usually feed more vigorously right after leaving the roost early in the morning. Other effective management methods used on pigeons include mechanical repellents and netting.
- d. Woodpeckers are protected species and there are no legal toxicants for their control. They are not easily driven from their territories or pecking sites, but several kinds of repellent techniques or exclusion can be successful in getting rid of the occasional problem woodpecker.
- e. Mylar balloons, scarecrows, dead bird effigies, and other similar visual repellents must be moved around regularly, otherwise geese quickly acclimate to the devices.
- f. Successful crow management methods can include maintaining clean commercial dumpsters and parking lots, displaying visual repellents such as metallic looking

balloons, tapes and streamers, and utilizing commercial lasers for nighttime tree roosts.

3. Prairie Dogs

- a. The Gunnison and black-tailed prairie dogs are the most common species found in New Mexico.
- b. Fumigants, toxic baits, and trapping are all methods of controlling or managing prairie dogs. The best time to control prairie dogs with toxic bait is when the entire colony is active and green forage is not available.
- c. It is a violation of federal law to willfully poison prairie dog towns where black-footed ferrets are present.

4. Rats & Mice

- a. The term *commensal* refers to rodents which share food from man's table. The most common commensal rodent pests in the United States are the Norway rat, roof rat, and house mouse.
- b. A good rodent control program is based on controlling rodent populations, not individual rodents. The best method for permanently reducing rodent populations is denying them food and harborage.
- c. Baits, tracking powders, and fumigants are examples of rodenticide materials used in the pest management industry.
- d. Pellet baits are convenient, moisture-resistant baits that rodents can readily pick up and handle. Packet baits are convenient but may be moved by rodents to somewhere a child or non-target animal may find it. Block baits are versatile and offer an attractive gnawing surface for rodents.
- e. Traps provide an alternative for clients not wishing to have pesticides used at their site. They provide quick results for small infestations and allow for immediate disposal of dead rodents.
- f. For best results, traps for mice should be placed 6-10 feet apart. With rats, traps can be spaced 15-20 feet apart.
- g. Tracking powders take advantage of a rodent's habit of licking their feet and fur.
- h. Zinc phosphide is poisonous to all animals.
- i. Common anticoagulant rodenticides include warfarin, chlorophacinone and diphacinone. Common nonanticoagulents include zinc phosphide, bromethalin, and cholecalciferol.
- j. Anticoagulant rodenticides have a delayed effect and generally kill rodents in 3-10 days.
- k. Rats cannot survive for very long without water but can get water indirectly from moist food or directly from sinks, toilets and rain puddles, the dew off plants, or licking water off condensing utility pipes.
- l. The most commonly encountered sign of a rodent infestation is fecal pellets (droppings). The type of rodent can usually be identified by the shape of the pellets. Norway rats have capsule shaped droppings, roof rats have spindle shaped droppings, and house mice have rod shaped droppings.
- m. With the exception of humans, the house mouse is the most numerous and widespread mammal on earth. It is by far the *number one* rodent pest.

- n. The Norway rat is a social animal and lives in colonies, often as a ground dwelling animal in exterior earthen burrows.
- o. The roof rat is by nature somewhat skittish and is very sensitive to changes in its environment.

5. Urban Wildlife

- a. A bat is a small, night-flying mammal that feeds on live, flying insects. The best long term solution to problems with bats in the attic or other structures is exclusion.
- b. Habitat removal can provide long term, non lethal control of rabbit damage.
- c. Unless surprised, skunks exhibit warning signals before they spray including arching their backs, stamping their front feet, and shuffling backwards. They can spray with some accuracy up to 20 feet. Live traps baited with peanut butter on bread, fish (canned or fresh) or chicken parts are an effective means of capturing and removing skunks.
- d. Raccoons can be discouraged from raiding garbage cans by storing the garbage only in metal or tough plastic containers with tight fitting, secure lids; wiring, weighting, or clamping lids down; and holding cans on a rack or tying them to a support to prevent tipping.
- e. Woodrats (packrats) may construct large stick nests beneath porches, inside woodsheds and attics, or up on carport corners and other similar structures.
- f. The deer mouse is a *semicommercial* (partly commensal) rodent.
- g. Pocket gophers dig burrows in lawns and gardens, pushing the soil from the burrows into mounds on the surface.
- h. Pest management professionals often confuse meadow mice (meadow voles) with moles and shrews. Moles are considerably larger and shrews are smaller than voles.
- i. The preferred habitat of ground squirrels is open fields or brushy areas, and they are not usually found in forests or damp areas.
- j. Because tree squirrels frequently gain access to buildings from overhanging tree limbs, common control methods include removing tree limbs as well as screening and the use of repellents.

6. Identification - Be able to identify (from pictures) the following vertebrates:

- i. Pigeon
- ii. Sparrow
- iii. Starling
- iv. Ground squirrel
- v. Pocket gopher
- vi. Tree squirrel
- vii. Chipmunk
- viii. Crow
- ix. Woodpecker
- x. Grackle