

Best Practice

on the Farm



Rodent Control



An Aviagen Brand



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Introduction

- 1 Rodents carry diseases which can contaminate a poultry flock; however, preventing rodents on a farm can be difficult due to plentiful food sources and nesting sites. Farm design, ensuring the house exterior is free from vegetation and debris, properly storing feed and litter material and using an integrated pest management program are key factors in preventing rodent infestations. The best programs for preventing or limiting rodent populations on the farm utilize biological controls (elimination of food sources, debris and nesting sites), mechanical (traps) and chemical (rodent baiting) controls.

Best Practice for Rodent Control

- 1 Rodent control requires an integrated pest management program involving techniques such as:
 - rodent-proofing the farm area and houses,
 - eliminating nesting sites and food sources,
 - controlling / eradicating existing populations
 - and preventing re-infestation.
- 2 These control strategies must be carried out continuously to effectively control rodents on the farm.



Importance of Rodent Control

- 1 **Rodents can harbor and transmit diseases.** They can serve as mechanical carriers for disease-causing agents by carrying them on their feet and body, and are primary carriers of poultry pathogens such as:
 - E.coli
 - Salmonella
 - Campylobacter
 - Mycoplasma
 - Newcastle disease virus
 - Avian metapneumovirus
 - Fowl mites
 - Intestinal worms
- 2 **Rodents eat and contaminate poultry feed.** A colony of 100 rodents can consume approximately one ton of feed per year, and can contaminate 10 times the amount of feed they eat with droppings, urine and hair.
- 3 **Rodents damage farm structures by burrowing into insulation and chewing wood and electrical wiring, causing potential fire hazards.**



Farm Design and Maintenance

1 Proper construction and maintenance of buildings helps prevent rodents from entering the house.

- The farm site should have a perimeter fence with a sheet metal barrier at the bottom that is 30 cm (1 ft) high to deter rodents from entering the farm grounds.
- To prevent rodents from nesting under the house, concrete footings should extend 50 cm (19 in) into the ground with an apron of concrete that extends 20 cm (8 in) outward from the house.
- House entrances should not sit directly on the ground and all doors must fit properly so that no gaps exist when they are closed.
- Examine buildings regularly for possible entry points for rodents.
- Eliminate vegetation from an area of 15 m (50 ft) around the farm perimeter and 1 m (3 ft) between houses. Cover the cleared area with gravel to help deter rodents.
- Do not leave equipment, litter or building materials lying around.
- Keep all feeds in rodent-proof bins, covered cans or metal hoppers.
- Clean up feed spills as soon as they occur.
- Eliminate water sources by ensuring that rain water is not collecting in bins outside the houses.
- Immediately dispose of dead birds using methods approved by local legislation.



1

Eliminate vegetation for 1 m (3 ft) between houses and add gravel to deter rodents.



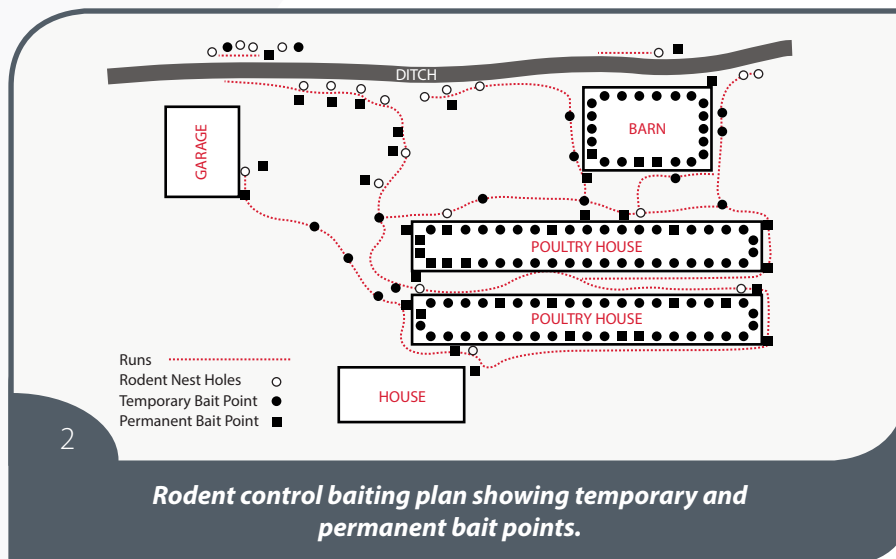
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House aprons should extend at least 20 cm (8 in) outward.



Rodent Baiting Plan

- 1 An effective baiting plan should be in place before birds are placed on to the farm, with proper checks of baiting stations and rodent activity observations recorded throughout the life of the flock.
- 2 Identifying temporary and permanent baiting points, as well as approximate rodent population size, will determine which method of rodent control will be most effective.



- 3 Snap traps or box traps are very useful for eliminating small rodent populations. These should be placed according to the rodent baiting diagram.
 - Locate traps close to walls, behind objects, in dark corners or where you see droppings or gnaw marks.
 - Check traps daily for rodents.



4

Permanent bait stations are effective in areas of high rodent activity.

- They should be placed outside and inside the house, along the walls and in the attic area (refer to rodent baiting plan diagram).
- Stations should be spaced 15 - 23 m (50 - 75 ft) apart, with a maximum distance between stations of 30 m (100 ft). They should also be placed within 2 m (5 ft) off each side of entrance doors.
- When baiting, use gloves for safety and to prevent bait stations being contaminated with human scent.
- All bait stations must be serviced and restocked with new bait of an alternating active ingredient and attractant at least every 4 months.
- Bait stations should be thoroughly cleaned once per year with a pressure washer. It is a good idea to gently knock on the top of the bait boxes before opening them to ensure there are no live animals (rodents, snakes, etc.) inside.



4

Bait station placed near an outside wall.



Presence of Rodents on the Farm

1 **If the following signs are observed, it is likely that there is a rodent infestation on the farm:**

Sounds - gnawing, climbing / scratching noises in walls, squeaks.

Droppings - found along walls, behind objects and near food supplies.

Urine - urine stains are visible under UV light and are indicated by a blue-white color.

Burrows - rat burrows are indicated by fresh diggings along foundations, through floorboards and into wall spaces.

Runs - look for dust-free areas along walls and behind storage material.

Gnawing marks - look for wood chips around wall and floor boards, bins and crates.

Rodent odors - persistent musky odors are a sign of infestation.

Visual sighting - look around the house with a flashlight; rodent eyes will reflect the light.

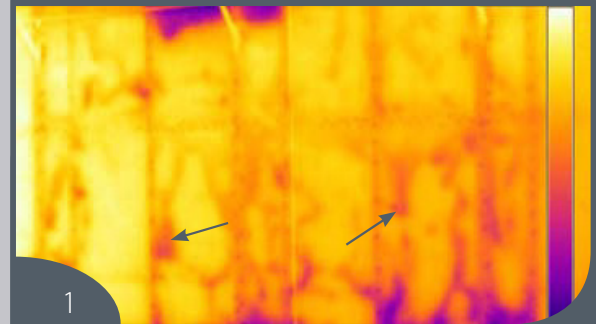
Smudge marks - these may be found on pipes or rafters where dirt and oil from their fur leave a greasy film.

2 **Determine the population size so that the rodent control and baiting plan can be adjusted accordingly.**

- If there are signs of rodents but rodents have never been observed, the population is likely to be small; **between 1 and 100 rodents.**
- Occasional sightings of rodents on the farm at night indicate the population is **between 100 and 500 rodents.**
- Occasional daytime and numerous sightings of rodents at night indicate a population of **400 to 1000 rodents.**
- Observing several rodents in the daytime can indicate a population as large as **5000 rodents or more.**



1 *Droppings.*



1 *Thermal image of burrows in walls.*



1 *Burrows in house foundation.*



2 *Live rodent sighting.*



Rodent Control Monitoring and Professional Pest Control

- 1 **Implementing an effective rodent control program will decrease or eliminate existing rodent populations on the farm.** Continue regular monitoring and surveillance of baiting stations and the environment to detect new rodents.
- 2 **If rodent populations do not decrease as expected, seek advice from a professional pest control organization.**

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