



Texas Agricultural Extension Service

The Texas A&M University System

PEST CONTROL

Fred D. Thornberry
Professor and Extension Poultry Specialist

Control of rodent, fly and beetle production on poultry farms is essential for the maintenance of a good neighbor policy and prevention of health and regulatory problems. **CAUTION:** It is essential that all pest control materials be utilized in strict compliance with labeling directions. Such materials must be kept away from children and domestic animals. Adequate records must be kept on the use of each pesticide (See Pesticide Application Record section).

RODENTS

Problems with rats and mice often are ignored or unnoticed by poultry producers. Rodents migrate to adjacent farms and homes and create health and nuisance complaints. They waste feed and can spread a number of diseases between farms and flocks. Rats and mice are major carriers of *Salmonella enteritidis* which can be transmitted to humans via contaminated poultry carcasses. Rodents have been implicated in the spread of mites. They also damage insulation, curtains, hoses and electrical wire and can destroy chicks and poults. A systematic rodent control program will pay dividends by minimizing these problems.

Two species of rats, the Norway and the Alex, or roof rat, as well as the common house mouse commonly infest poultry houses and neighboring premises. Field mice and wood rats seldom enter buildings except during unfavorable climatic conditions or food shortages. Rats and mice mature sexually by three months of age. Under normal conditions a female will produce 30 to 50 offspring per year which survive to maturity. The occasional sighting of a rat or mouse in a poultry house may indicate a large rodent population. More than 700 rats have been removed from a commercial broiler house where rodents were infrequently seen.

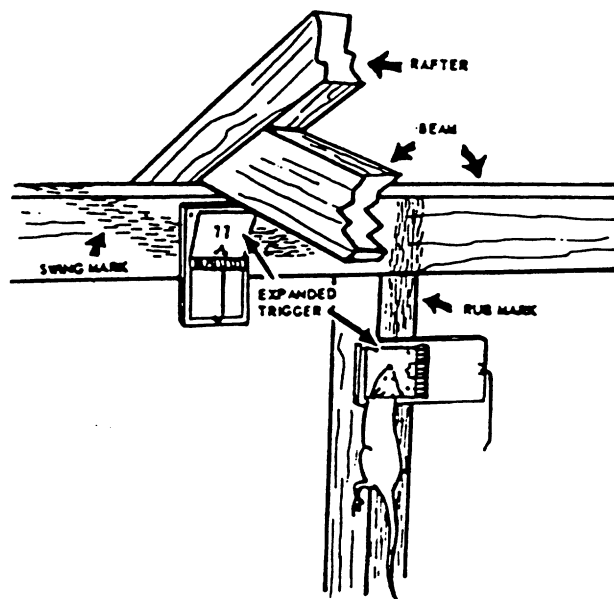
An effective rodent control program restricts shelter, food and water and includes making buildings as rodent proof as possible. Minimize feed spillage. Remove all lumber and refuse piled near poultry houses to eliminate sources of rodent infestation. Minimize breeding burrows by treating vegetation adjacent to house foundations with an approved herbicide.

A baiting program using an approved rodenticide should be maintained on every poultry farm. Be certain the bait used is readily accepted by the rodent population. Studies show rodents will not readily accept some commercially available baits.

Important: Properly bait affected poultry houses at the time birds and feed are removed. Bait can be placed in feed troughs or pans at 15-25 foot intervals. Leave water available to prevent cut hoses and rat migration away from the houses in search of water.

Block auger entrances if feed is in bins. Never run out of bait during the treatment period. Check bait daily and replace it as it is consumed. After the second day move untouched bait to major feeding areas. Disturb rodents as little as possible. Keep houses closed and dogs, cats and people out. Remove all left over bait before new birds are placed.

The effectiveness of baits cannot always be measured by counting dead rodents. When bait is no longer being eaten, when there are no fresh droppings and when live rats and mice are no longer seen results are as good as can be expected from a rodenticide.



Snap traps placed in runs can effectively assist in controlling migrating and residual rodent populations.

Unbaited spring traps placed in rodent runs along walls, rafters and on studs assist in controlling migrating and residual rodents. Runs are easily identified by smears and rub marks left by rats. Traps can be made more effective by attaching a square of cardboard or metal to the trigger. Place traps at right angles to runs with the enlarged trigger extending across the run. Trapped rodents should be removed and traps reset on a regular basis.

Ultrasonic and electrical shock rodent control devices have been repeatedly shown to have no detrimental effect on rodent populations.

LITTER AND MANURE BEETLES

Control of litter and manure beetles is a necessity on poultry farms. Beetles damage insulation and wood structure and can serve as reservoirs for a number of poultry diseases including Salmonella.

Beetles will also migrate from heavily infested houses, manure and litter piles and spread manure or litter to nearby farms and residences. Here, beetles can create severe "household" problems by invading the interior of homes and burrowing into rugs, carpets, cracks and crevices.

This invasion of homes often creates a significant public relations problem making neighbors less tolerant of nearby poultry production facilities. Complaints to public and regulatory officials are an eventual result.

Litter and manure beetles can be effectively controlled with the proper use of approved pesticides. Where sizeable populations are present treat houses before removal of litter to prevent migration to nearby residences and farms.

FLIES

Control of the common house fly, lesser house fly and various filth flies is often a real problem on poultry farms in warm and temperate weather. Migrating flies generate complaints from nearby residents, resulting in complaints to elected public officials and local and state health departments.

Effective control programs can usually be developed to meet individual farm needs. The program should be in place and implemented as a preventive measure prior to fly periods.

In litter houses the litter should be kept dry to prevent fly development. In slat-litter floor breeder houses where manure is stored beneath cages the use of an approved contact insecticide (misting or fogging) and Larvadex (feed) on a periodic alternating basis may be necessary for effective fly control. Prevention of water leaks is absolutely essential. Fly production increases dramatically in moist and wet manure and litter.

Litter should be inspected just prior to application as fertilizer. If pupa are found, the litter should be 1) plowed under immediately after spreading or 2) applied thinly to promote rapid drying and destruction of eggs, larvae and pupae.