

Stored Product pests. Lecture 9. Grade 3

2-Birds

There are three kinds of birds that are involved in most damage near stored product facilities are:

- 1- Starlings
- 2- European sparrows,
- 3- Feral pigeons.

Bird feces can contaminant grain destined for human consumption.

Birds in rural and urban sites cause:

- 1-Health, filth, noise, and odor problems.
- 2-Their droppings damage and deface equipment and vehicles.
- 3-Sparrows compete for nest sites with native hole-nesting birds such as bluebirds.
- 4-Pigeons may carry: Newcastle disease, aspergillus's, toxoplasmosis, and Salmonella typhimurium.
- 5-Bird ectoparasites —bugs, fleas, tick and mites— frequently invade homes from bird nests in or on buildings and transmit diseases by biting. Some bites cause welts and skin infection

Controlling Damage

1- Exclusion

The following practices used singly, or preferably in combination

1. Clean up spilled grain
2. When storing grain, use bird proof facilities.
3. Use bird-proof livestock feeders and avoid feeding on the ground because this is an open invitation to starlings.
4. Feed livestock in covered areas such as open sheds because these areas are less attractive to starlings.
5. Use feed forms that starlings cannot swallow such as cubes or blocks greater than 1/2 inch in diameter.
6. Where possible, adjust feeding schedules. For example, when feeding once per day, delay the feeding until late in the afternoon when foraging by starlings is decreased.
7. Drain or fill in unnecessary water pools around livestock operations by controlling the water level.
8. Modify starling roost sites by closing openings in buildings or other structures so starlings cannot enter

2-Repellents

Soft, sticky repellents are non-toxic materials used to discourage starlings from roosting on ledges or roof beams. Examples include Roost-No More, Bird Tangle foot and 4-TheBirds. It often helps to first put masking tape on the surface needing protection, then apply the repellent onto the tape. This increases effectiveness on porous surfaces makes removal, if desired, easier. Over time, these materials lose their effectiveness and must be replaced.

3-Frightening

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1-Recorded distress or alarm calls.

2-Gas or pirated exploders.

3-Chemical frightening agents.

4-Lights (for roosting sites at night), bright objects.

5-Noisemakers.

6-Beating on tin sheets or barrels with clubs also scares birds.

7-Some novel visual frightening devices with potential effectiveness are eye-spot balloons, hawk kites, and Mylar reflective tape.

8-Harassing birds, throughout the evening as they land, can be effective in dispersing bird roosts if done for three to four consecutive evenings or until birds no longer return.

9-Spraying birds with water from a hose or from sprinklers mounted in the roost trees has helped in some situations.

Two additional tips for successful frightening efforts:

(1) Begin early before birds form a strong attachment to the site.

(2) Be persistent until the problem is solved.

4-Trapping

However, trapping and removing starlings can be successful at locations where a static population is causing damage or where other techniques can't be used. An example is using decoy traps to remove starlings from an orchard where they are damaging fruit crop. In addition, decoy traps can be set up on a farm wagon and moved to the best places to catch starlings. To be successful, the trap should be

1-placed where starlings are likely to congregate.

2-Leave a few starlings in the trap as decoys; their feeding behavior and calls attract other nearby starlings. 3-Decoy birds in the trap must be including a bird bath and fed. Should any non-target birds be captured, release them immediately. To kill captured starlings humanely, use appropriate procedures such as carbon dioxide exposure or cervical dislocation (quickly breaking the neck)



Starlings



Feral pigeons



European sparrows