

Preventing Disease Transmission in Livestock and Poultry

VECTORS: RODENTS AND BIRDS



Wild animals and birds can carry disease-causing organisms on the fur, feathers, or feet. They can contaminate feed and water sources with their urine and feces.

Efforts to control rodents and birds can help protect your animals.

RODENT AND BIRD CONTROL ON THE FARM

Wild animals and birds are important reservoirs for many diseases of animals. Rodents and birds can spread salmonellosis and wild birds are known reservoirs for avian influenza.

While the elimination of rodents and birds on the farm is not likely, various prevention and control measures can reduce exposure of your animals and prevent disease spread.

Managing wildlife and bird populations on your farm should focus on three key areas: exclusion, habitat reduction, and control measures.

Exclusion

One of the first goals is exclusion – or preventing contact between domestic animals and wildlife.

Eliminate openings for rodents or birds to enter, especially to feed storage or processing areas.

- Seal any opening greater than ¼ to ½ inch with a durable material such as steel wool packed tightly into openings.
- Use materials that cannot be easily gnawed or pecked through such as concrete, sheet metal, wire mesh, aluminum or brick. Plastic sheeting, wood, rubber will not be adequate.
- Check openings around augers, pipes and wires. Use mortar, masonry or metal collars in these areas.
- Ensure doors, windows and screens seal tightly.
 - The distance between the bottom of the door and threshold should not exceed ¼ inch.
- Equip floor drains with metal grates (openings less than ¼”).
 - Drainage pipes or sewage systems may be used by rodents as routes to enter buildings.



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Reduce Habitat

Eliminate hiding, resting, or nesting sites

- Reduce habitat around the outside of barns or buildings.
 - Mow and remove weeds within 3 feet of the building .
 - Establish a rodent barrier around buildings. Place a 3-foot-wide gravel rock perimeter to discourage rodents from entering or burrowing.
- Reduce habitat inside barns or buildings
 - Ensure equipment can be easily moved for easy cleaning. Raise stationary objects (e.g., refrigerators) to allow access for cleaning behind and underneath them.
 - Stack bagged feed on pallets, with adequate space around and under them, to allow easy inspection for signs of rodent activity and trap or bait placement.
 - Hang strips of heavy plastic vertically in building or barn doorways to deter bird entry but allow machinery and people to pass through.
 - Cover the undersides of rafters with netting to exclude birds from nesting sites.
- Reduce habitat in animal areas
 - Use a concrete base around feed bunks to eliminate habitat and prevent rodents from burrowing or nesting underneath
 - Maintain the water level in livestock waterers so it is deep enough that birds cannot stand in it.
 - Minimize birds gathering in livestock and poultry areas by using measures to discourage nesting and roosting and netting or screens.

Eliminate potential food sources.

- Store feed in closed containers (preferably metal with tight fitting lids).
- Use covered feeders to exclude wild birds.
- Clean up any spilled feed immediately.
- Dispose of trash or food waste regularly.

Control

Despite the previous mentioned efforts, additional control measures may be needed. Rodent control may involve the use of traps or rodenticides.

Before taking any action, ensure that rodents are not endangered, threatened, or protected in your local area. Many birds are protected by state and/or federal law. Contact your local extension office or department of natural resources to learn more about any regulations and rodent and wild bird control.



Photos from Danelle Bickett-Wedde and Renée Dewell, CFSPH, Iowa State University

Trapping

- Trapping is an effective way to control rodents.
- Proper placement of traps and baits is important.
- Set traps close to walls, behind objects, in dark corners, in places where rodent activity is evident.
- Use talc or flour patches to visualize and track where rodents are active.

Baiting

- When using rodenticide baits, first read the label carefully and fully follow the directions.
- Use the amount of bait indicated on the package. Requirements differ between products.
- Wear gloves when handling baits.
- Inspect baits regularly. Check often for dead rodents and burn or bury those you find.
- Protect baits from the weather.
- Be sure baits are not accessible to children, farm or domestic animals and birds.



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Other control measures are available, but beyond the scope of this document. Contact a wildlife pest control operator in your state for further assistance.

It is a violation of state and federal law to use a pesticide in any manner that differs from the product label. Use only according to label directions to avoid environmental damage, and animal or human injury.

FOR MORE INFORMATION

[Bait Stations for Controlling Rats and Mice](#). RA Pierce, University of Missouri Extension

[Controlling Birds Around Farm Buildings](#). MC Brittingham, Penn State Extension

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