

Wild animals and birds serve as vectors for several diseases and carry disease pathogens on their fur, feathers or feet and can also contaminate feed and water sources. Control programs should be used to decrease rodents and birds in and around shelters and reduce the risk of disease spread in your facility.

## ■ Eliminate openings for rodents or birds to enter, especially food storage or preparation areas

- Seal any openings greater than ¼ to ½ inch with a durable material (e.g., tightly packed steel wool).
- Use materials that cannot be easily gnawed or pecked through (e.g., concrete, sheet metal, wire mesh, aluminum, 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.
- Doors, windows and screens should fit tightly. The distance between the bottom of the door and threshold should not exceed ¼ inch.
- Drainage pipes or sewage systems may be used by rodents as routes to enter buildings. Equip floor drains with metal grates (openings less than ¼").

## ■ Remove potential hiding, resting and nesting sites

- Equipment (e.g., refrigerators, powerwashers, etc.) should be raised and easily movable to allow for easier cleaning, especially behind and underneath the item.
- Sacked feed should be stacked on pallets with adequate space around and under them to allow easy inspection for signs of rodent activity and trap or bait placement.
- Rats can burrow and nest under feed bunks placed directly on the ground. Use of a concrete base around feed bunks can eliminate this potential habitat.
- Hanging strips of heavy plastic vertically in doorways of buildings will allow machinery and people to pass through but keeps birds out. This will not prevent rodent entry.
- Cover the undersides of rafters with netting to exclude birds from nesting sites.

## ■ Eliminate potential food sources

- Store feed in well sealed containers (preferably metal with tight fitting lids).
- Use covered feeders that exclude birds.
- Clean up any spilled feed immediately.

## ■ Proper disposal of garbage will aid in deterring and controlling rodents

## ■ Establish a rodent barrier around buildings

- A 3 foot wide weed free area with a gravel rock perimeter can be used to prevent weed growth and discourage rodents from burrowing.
- Gravel (at least 1 inch diameter) should be placed in a band at least 3 foot wide and 6 inches deep.

## ■ 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.

## ■ Baiting may be used to control rodents

- 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.
- Protect baits from the weather.
- Be sure baits are not accessible to children, animals and birds.
- Inspect baits regularly. Check often for dead rodents and burn or bury those you find.

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

## ■ Check local legislation for allowable bird control measures. Many birds are protected by state and/or federal law.

## For More Information

Pierce RA. Bait Stations for Controlling Rats and Mice. University of Missouri Extension. <http://muextension.missouri.edu/explore/agguidees/wildlife/g09444.htm>.

Brittingham MC, Falker ST. Controlling birds around farm buildings. Pennsylvania State University Extension. <http://pubs.cas.psu.edu/FreePubs/pdfs/uh126.pdf>.

See T. Controlling rodents. North Carolina State University Extension. <http://www.thepigsite.com/Featured Article/Default.asp?Display=1015>.

Baker RO, Bodman GR, Timm RM. Rodent- proof construction and exclusion methods. University of Nebraska. [http://www.ces.ncsu.edu/nreos/wild/pdf/wildilfe/RODENT\\_PROOF\\_CONSTRUCT.PDF](http://www.ces.ncsu.edu/nreos/wild/pdf/wildilfe/RODENT_PROOF_CONSTRUCT.PDF).