

Highly Pathogenic Avian Influenza (HPAI)

Improving Biosecurity With Wildlife Management Practices: Preventing Access to Barns and Other Facilities

Avian influenza viruses and other pathogens that impact domestic poultry often cause little or no illness in wildlife. For this reason, apparently healthy wild birds and mammals could spread disease onto farms when they are attracted to areas with abundant food, water, and/or shelter.

You can build on and enhance your farm biosecurity by putting wildlife management practices in place. There are several nonlethal ways to make farms less welcoming to wildlife.

Wild birds and mammals visit barns, silos, and other structures at farms and poultry facilities to nest, rest, or seek shelter. The practices below can help you stop wildlife from nesting and living in and near your poultry facilities, and coming into direct contact with your poultry. Keeping wildlife away from your farm also helps you avoid accidentally transporting wildlife fecal material and secretions into your facilities on boots, equipment, and food.

Inspecting Structures

The design of some poultry facilities may help to attract or deter wildlife. For instance, structures with shorter or no eave overhangs are less likely to attract nesting birds. Structures with top-vein ventilation, roof-top vents, and overhead wires may attract perching birds—allowing their feces to drop near or directly onto the barn floor. You can easily spot problem areas by looking for whitewash from bird fecal material on the ground below eaves or on rafters.

Take time to inspect your facilities and look for design elements that may attract wildlife. Biologists with Wildlife Services, a program within the U.S. Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service, can help you conduct an onsite assessment.

Plugging Holes and Burrows

Plug and patch holes in building exteriors to prevent rodents and wild birds such as European starlings from using them for nesting or shelter. Also, check all screens and door openings regularly and repair or replace them when damaged to prevent wildlife from entering your facilities.

Concrete aprons around building side walls can deter rodents, cottontail rabbits, and other small mammals from burrowing into buildings. Fill small burrows, tunnels, and other holes around structures with gravel.



There are several nonlethal management methods for reducing wildlife's potential spread of disease on farms.



Installing Barriers, Netting, and Other Deterrents

Wild birds often use ledges, rafters, and eaves as roosting and nesting sites. Install barriers or other deterrents, such as repellent gel or bird spikes, to these areas.

Nylon netting or wire mesh should be tightly secured on all sides and regularly inspected for holes and wear. Ten- or 12-gauge mesh with 1-inch openings will exclude most bird species if it's properly installed and maintained. If it's improperly installed and maintained, exclusion netting can actually benefit nesting birds by forming small pockets that protect their nests from predators, so be sure to inspect it regularly.

Before nesting season begins, remember to wash away or remove old nests per Federal and State regulations. If their nests were successful, birds often return to the same nesting location year after year. Farm managers can consult with local, State, or Federal biologists to learn more about the wildlife nesting period in their area. Please note that it is unlawful to remove native wild bird nests with eggs or young in them.

Recommended Actions

- Conduct a wildlife assessment at your farm. Do wild animals have access to food, water, and shelter on your site? If so, learn about and use wildlife management methods to improve your biosecurity.
- Inspect your buildings and other structures regularly for holes, tears, and other openings that would allow wildlife access to poultry or poultry feed and equipment.
- Prevent wild birds and other wildlife from nesting, roosting, and living in or near your poultry facilities by plugging and patching holes and installing barriers and deterrents.
- Do not walk or drive trucks, tractors, or other equipment through areas where waterfowl or other wildlife fecal material may be present.

Please note that the lethal removal of native wildlife is regulated under Federal and State laws. USDA and other experts do not recommend lethally removing native wild birds to prevent the spread of highly pathogenic avian influenza or other diseases. Because wild birds are abundant and constantly moving, using lethal methods is not practical or environmentally sound. It is much more effective to remove sources of wildlife attraction than to manage wild animals after they have arrived on your property.

Learn More

If you have specific questions about wildlife management on your farm or need help conducting a wildlife assessment, call your nearest USDA Wildlife Services office toll free at 1-866-4USDA-WS (1-866-487-3297).

For general information on avian influenza and emergency response, go to www.aphis.usda.gov/animal-health/aiupdates.



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