Keeping birds out of barns

A combination of methods that do not cause death or injury is regarded as the most effective strategy

by Cynthia McFarland

A world without a bird's song would be a sad place. When it comes to horse farms, however, most farm owners prefer to keep birds outside the barn, and with good reason.

Some birds can carry the potential for disease, and horse feed and water can be contaminated by their droppings. In addition, an abundance of birds in and around the immediate barn area can result in the nuisance of droppings, which require continual cleanup.

Several experts were consulted to discover how to keep birds out of the barn, and they said a combination of deterrents is often most effective.

"It's not rocket science; it's mostly about good sanitation practices and blocking access," said Tom Barnes, Ph.D., extension professor and extension wildlife specialist at the University of Kentucky.

"If you eliminate the incentive for birds to stay, they won't come back. If you just eliminate those birds but don't eliminate the incentive, a new flock of birds will come and replace those," said Mona Zemsky, technical consultant with Bird-X Inc., a Chicago-based company that has been in the nonlethal bird-control business since 1964.

"If you solve the problem by making the area undesirable for birds, you've got a permanent solution," Zemsky said. "You don't have to harm birds in order to make them go away. There are plenty of safe places for them to go where they don't cause any danger to humans or animals, and it doesn't cost money to clean up after them.

"Your goal is to make the barn permanently undesirable to birds. They are quite smart; we just have to work with them. Birds can be lovely additions to the rest of the property if you just keep them out of the places where you do not want them."

Variety of methods

A variety of methods will repel birds. What you most assuredly do not want to do is put out poisoned grain to kill birds. While there are some species that are not protected by federal law, many others that are commonly found around farms are protected, including mockingbirds, mourning doves, cardinals, sparrows (other than house sparrows), and other species. Killing these birds is a violation of federal law.

While birds can be trapped in live traps and removed, this method is time-consuming and is not a long-term solution.
A chemical bait known as Avitrol should be used only by certified pesticide applicators with bird-control training. This is a chemical frightening agent that causes birds that eat the bait to display distress symptoms, such as erratic flight, with the goal of frightening away other members of the flock. Birds that eat the bait will die or become sick. In either case, this is not a permanent solution. Lethal methods are not recommended because protected species could be harmed.

“Birds love warm safe places with good vantage points, and food and water nearby, so the rafters of a barn appeal to them,” Zemsky said.

When you think of it this way, it is only natural birds would want to congregate in barns. With that in mind, good sanitation practices will go a long way toward discouraging birds. Grain and feed should be stored in covered bins and all loose feed removed regularly. This includes feed tubs and surrounding areas in stalls.

Barnes suggests doing a cost-benefit analysis to determine which method or methods will be best for your situation. Some methods cost more initially but offer a permanent solution, so they end up paying for themselves, as opposed to methods that are only temporary.

Whatever method or methods you choose, make sure all barn vents are screened so birds cannot access the building and bring in nesting material.

**Physical barriers**

Keeping birds from seeking shelter in the first place is the best plan for horse barns. A very effective way to keep birds out of farm rafters is to use bird netting.

“It takes labor to put it up, but once it’s up, there is no way birds can get through,” Zemsky noted. “You can easily net off the rafter area and it’s a one-time fix. Bird netting is one of our biggest sellers. It is not very visible to people, is very heavy-duty and since it’s [ultraviolet]-treated, it won’t break down from sunlight.”

Spikes, sometimes referred to as porcupine wires, are highly effective physical barriers. These are strips with short prongs that resemble thick needles extending at all angles; they prevent a bird from landing. Imagine sitting on barbed wire, and you will understand why birds avoid these products. Holes in the base of the strips allow you to nail or screw the strips down, or you can use an adhesive to secure the strips in place.

“These spikes of wires come in stainless steel or polycarbonate plastic, which is nearly invisible, and both will last decades,” Zemsky said. “Put them on window sills, ledges, roof perimeters, beams, chimneys, anywhere you don’t want birds to land.”

Perch repellents are sticky or slippery substances that can be applied to rafters or ledges where birds like to roost. Birds do not want to land on the product, so they avoid treated areas. Easy to use and economical, this is a long-term solution and can be permanent, if you apply it every year, or as needed.

One such product, Bird-Proof, is a gel that is applied with a caulking gun. One tube treats ten linear feet. “After about a year, dust and dirt adhere to it and lessen the effectiveness,” Zemsky said. “When it is no longer sticky, just peel it off with a putty knife or paint scraper and reapply fresh product.”

Of the various physical barrier methods, Barnes noted that wire-spikes and bird nets work the best. “You have the one-time cost outlay and then don’t have to worry about it again for many years,” he said. “The sticky repellents can be pretty effective, but they must be reapplied and over time the expense can exceed the benefits. One of the best solutions is bird netting. This is an inexpensive method, and if put up properly it keeps birds out and bats, too. It doesn’t affect ventilation, it’s cost-effective, and it works.”

**Sound repellents**

Some repellent methods use noise as a deterrent and are useful in barnyards and other open areas. Noise methods, such as bird distress sounds, are very effective if used properly, Barnes said.

These sound repellent units operate on household current or 12-volt batteries and can cover areas as large as six acres. The machine emits various bird distress sounds at different volumes and frequencies so birds do not grow accustomed to it. The sound of one of their own in distress causes birds to flee the area. Predator calls also frighten birds away.

One such machine, the BirdXPeller Pro covers up to an acre and can specifically target up to eight different species, and also includes predator sounds, including a peregrine falcon, Cooper’s hawk and sharp-shinned hawk.

“These are natural sounds and not unpleasant for humans to hear. For example, most people wouldn’t know the difference between a happy sparrow and a sparrow in distress, but the sparrows do. These sounds are scary for the birds and make them think this isn’t a safe place,” Zemsky said. “You can set the machine to combine the sounds of species in distress along with predator calls, so the birds will quickly find some place else to go.”

**Visual deterrents**

When it comes to visual deterrent, the scarecrow started it all. Birds, however, are very adaptable, and it does not take long for them to realize an inanimate object is not a threat. Unless you simply like the looks of a fake owl or snake, it is prudent to save your money.

“Birds are adaptable to scare devices and quickly realize these pose no threat to them. They might work for only a couple days,” Barnes said. “When I first moved to Kentucky 20 years ago, I
Keeping birds out of barns — Thoroughbred Times

remember there was a barn with two fake owls on top of it. I've seen pigeons roosting on those owls. The birds quickly learned they weren't a problem.

“The key with any visual deterrent is movement. If it doesn’t move, it’s not going to work,” Zemsky said. “We learned from bird nature when making our products. One popular visual device is Terror Eyes, a large vinyl ball about two feet in diameter that has predator marking and holograms for eyes so it appears that the eyes are following you no matter how you look at it. You hang it so the light hits it at different angles and the wind makes it move. This way, birds can’t get used to it.”

As Zemsky noted, such visual devices are similar to the fake security camera some people install outside a home or business. They only deter intruders who see it and think it is real. For high effectiveness, visual deterrents work best when combined with another method.

**Taste or odor aversion**

If you have ever visited a place with an offensive odor, you probably wanted to leave in a hurry and not come back. That’s exactly the principle behind the use of methyl anthranilate, a chemical that has been used in the food industry for decades as grape flavoring in gum, gelatin, beverages, and other products.

Repellent sprays such as Bird Shield contain the chemical and provide a highly offensive odor to birds, causing them to leave the area. The same product can be sprayed aerially on crops or on the ground to prevent bird predation. In a barn, the spray lasts longer (sometimes for weeks) when used on porous surfaces. A gallon will cover more area if the product is applied to a nonporous surface, but it will need to be applied more often than on porous surfaces.

“You just spray it on barn surfaces such as walls and beams,” Zemsky said. “It’s a food-grade product developed with the assistance of the [United States Department of Agriculture], so it can’t harm horses or other animals. The odor is so offensive to birds, much like the way humans feel overwhelmed by the odor of bleach.”

Zemsky adds that methyl anthranilate is also a great goose repellent because geese avoid eating grass that has been sprayed with it.

“The only drawback to methyl anthranilate is expense, but it’s a good tool to have in the toolbox,” said Barnes.

**Clean it up**

If you already have a problem with birds, you will need to clean the barn first before installing any deterrents.

If you have a problem with Canada geese, Barnes recommends visiting the U.S. Fish and Wildlife Services website, [www.fws.gov](http://www.fws.gov), to find ways of dealing with this issue more effectively.

Bird-X offers a number of tested-in-the-field Canada goose repellent methods, including one sound method developed by scientist Philip Whitford, Ph.D., who has studied vocal communication and behavior of geese for 30 years.

The good news is that you do not have to harm birds or the environment to keep birds out of the barn.

“All of the deterrent methods can be used by anyone and don’t require special training,” Zemsky said. “Some people don’t want to spend much, some want an invisible method of control, and others don’t want to have to use electricity. Most often, a combination of methods ends up being the best way to repel birds, and the most effective method is to come up with a one-time solution. If you’re spending time and money to solve a problem, you’d like to solve it just once.”

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