



# Managing Iowa Wildlife

## Problem Birds Around Homes and Farmsteads

### Introduction

Many people attract wildlife—particularly birds—to their backyards with plantings and with feeders. But sometimes efforts such as these result in unexpected or unwanted birds. On the farmstead birds may be attracted by feed lots and stored grain. Though some problem birds must be tolerated, others can be controlled.

The most effective way to control problem birds is to understand what the bird's daily requirements are and then remove or exclude these requirements from the bird. Manipulation of a wild animal's daily requirements for purposes of increasing or decreasing numbers is an important part of wildlife management. Some basic principles can provide a background for understanding how to control problem birds effectively and appropriately.

To survive, all wild animals need habitat, which is comprised of four essential factors: 1) space, 2) food, 3) shelter, and 4) water. Each factor is essential. Wildlife managers manipulate each factor to attract and maintain wildlife species, and to control problem species. For more information on how to use these factors to attract birds see *Managing Iowa Habitats: Attracting Birds To Your Yard*, Iowa State University Extension, Pm-1351d.

### Space

Space is the area needed by a wild animal. Just as some people are happy in a city apartment and others need a ranch with no near neighbors, some bird species need more space than others. Two kinds of space used by wild animals are:

- *home range*—the entire area that an animal uses to eat, sleep, and go about its daily activities;
- *territory*—a portion of the home range an animal defends against intruders; it is usually where the animal raises young.

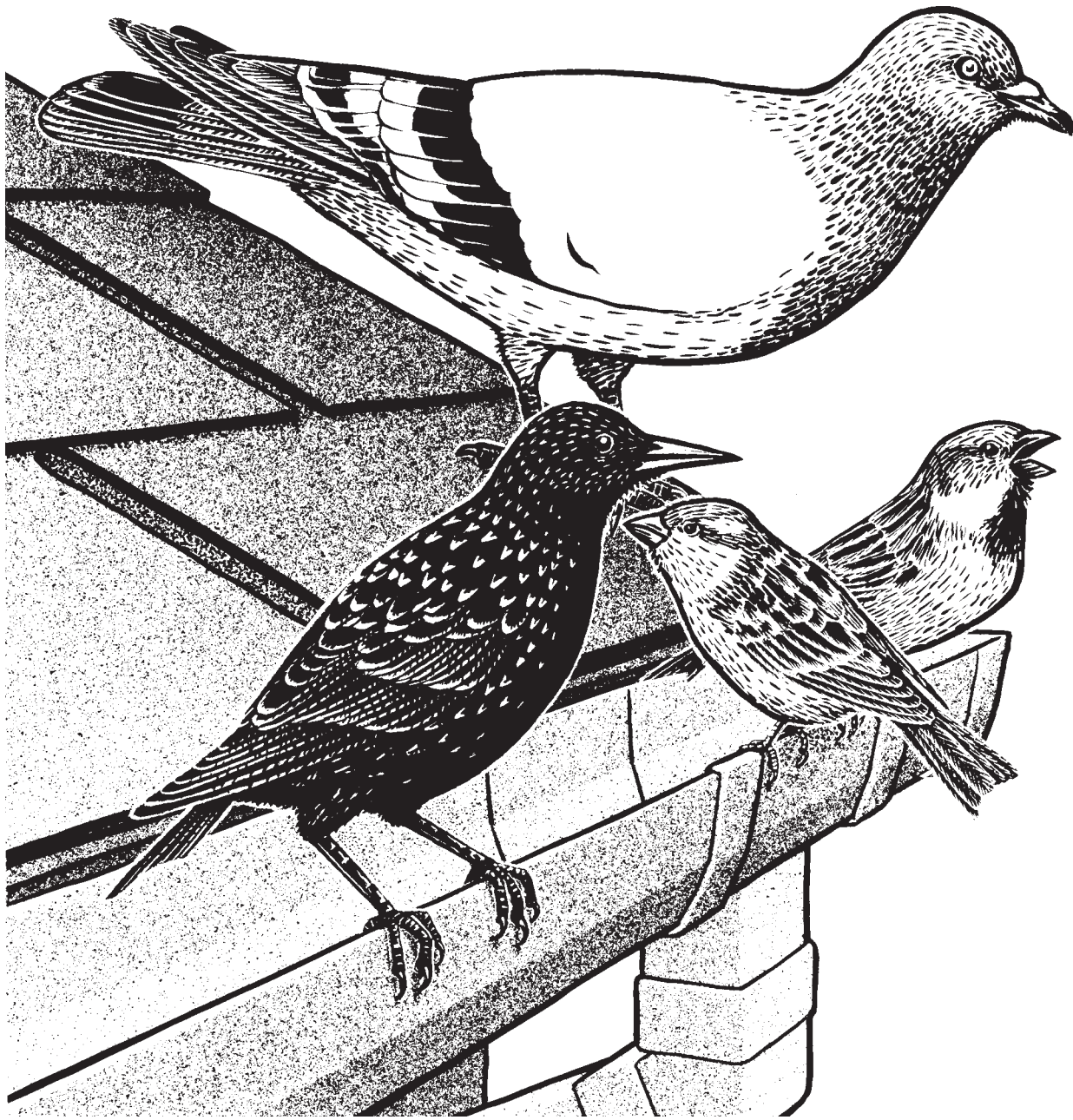
Usually the male bird establishes and defends the territory. In the spring, the brightly-colored male sings to attract a mate and to announce to other male birds of the same species the location of his territorial space. After the pair builds a nest, the male continues to defend the territory while the female hatches eggs. Space is limited by the area of a yard or farmstead so this factor cannot be controlled.

But **food, water, and shelter** are elements of habitat that can be manipulated to manage birds in the yard or farmstead. Provide these elements to attract the birds; remove them to keep the birds away. All three are essential needs. Not all bird problems can be eliminated by taking away just one of them.

*Variety* is a key word in wildlife management. It is often necessary to use a variety of excluding and repelling methods simultaneously to control nuisance birds.

### Food

Food sources for birds include seeds, fruits, berries, and insects. To reduce the number of problem birds, eliminate or control their access to the source of food. The strategies needed to control problem birds around homes are often different from around farmsteads. For example,



**Figure 1:** The most common pest species are (from left) European starlings, pigeons (sometimes called rock doves), and the female and male house sparrows (sometimes called English sparrows).

reduce the number of undesirable birds around homes by choosing plants that do not produce edible nuts, fruits, and berries— or by changing the type of food offered in bird feeders. Around farmsteads protect possible sources of food from the birds, such as grain storage and livestock feed. In both situations, variety in technique is essential to successful bird damage control. Use a variety of

methods, and move them around so that the birds do not become accustomed to them.

House sparrows (see Fig. 1) are often a problem at the feeder. To reduce their number, feed straight sunflower seed (preferably the black, oil type) rather than a seed mixture, and discontinue feeding in the spring, summer, and early fall when

house sparrows are often attracted. Make it more difficult for house sparrows and other large problem birds to feed by using tubular feeders without perches. These feeders are easily accessible to the clinging birds, such as nuthatches, chickadees, and titmice. Try to lure house sparrows away from the feeding station by using a platform-type feeder at the back of the yard away from the other feeders, loaded with a mixture of white proso millet and cracked corn. If a large number of house sparrows still visit the feeder near the house, try one of the trapping methods described below to reduce the population. For more information on bird feeding see *Bird Feeding: Tips for Beginners and Veterans*, G3176, available from your county Extension office.

Woodpecker damage, another type of wildlife problem in urban areas, also is related to food. Insect larvae living in the cracks and grooves of house siding attract woodpeckers, who can cause considerable damage by drilling feeding holes in house siding. Caulk the edges of the grooves to fill any open tunnels, or use the non-chemical frightening methods described below. For more information on woodpecker damage control see the publication, *Managing Iowa Wildlife: Woodpeckers*, Pm-1302c available at county Extension offices.

On farmsteads, denying birds access to food sources such as grain storage and livestock feed can be effective. In both situations, variety in technique and method is fundamental to successful bird control. Around barns and feedlots, the first step is to determine whether birds can be excluded from the food source—grain and other livestock feed. Deny the birds this food by cleaning up spilled grain, by using bird-proof grain storage facilities (netting or other means), and by using covered feeders where possible—such as flip-top pig feeders.

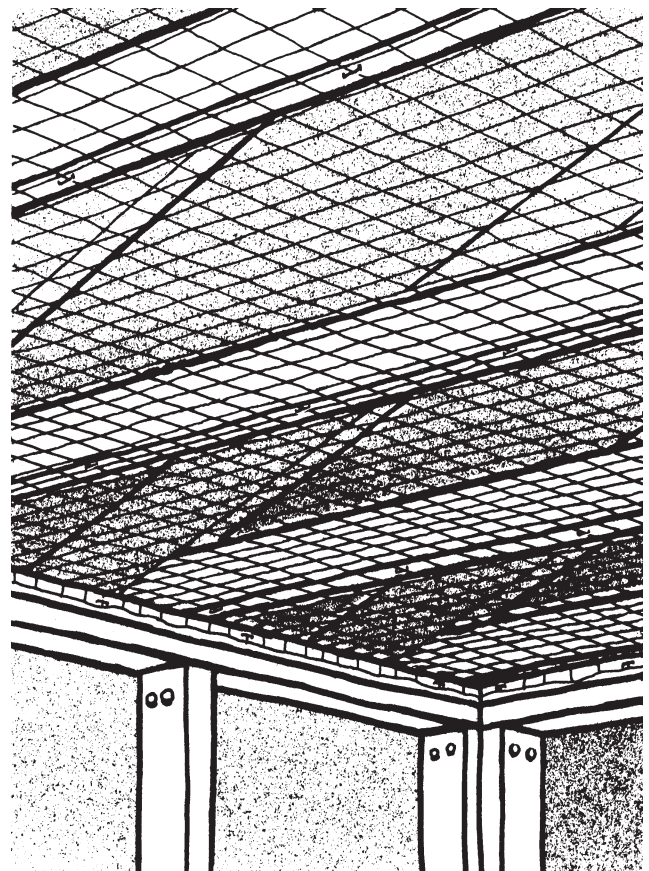
### Shelter

All birds need shelter for cover, roosting, and nesting. The kind of shelter a bird will use varies with the season, the species of bird, and the reason the bird is looking for shelter. Sometimes birds roost or nest in inappropriate places. On farms, birds like to roost in places that provide them easy access to a source of food—such as livestock feed or grain storage. In these cases, denying access to roost sites also will discourage their feeding.

When birds nest in inappropriate places, be persistent about removing nests; they will keep trying to re-establish their nests in the same place. A more long-term solution is either to exclude the birds from the area or make it less comfortable for them.

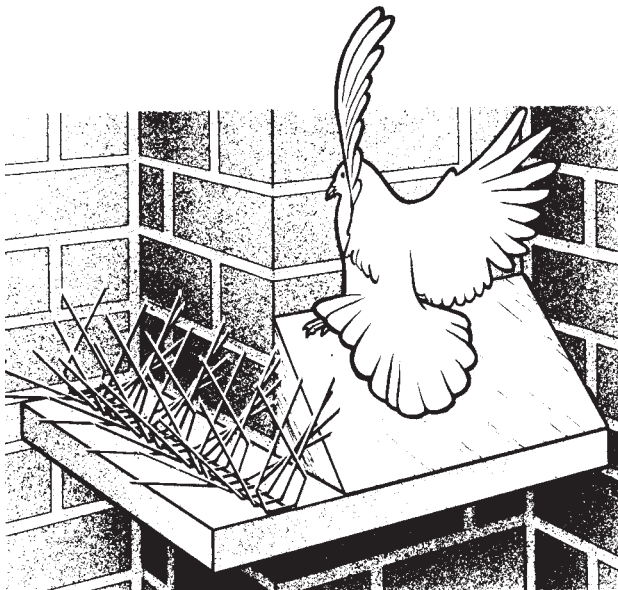
Various methods can be used to prevent birds from nesting or roosting on ledges and rafters, or under eaves and other overhangs:

- Put nylon or plastic netting on the underside of rafters or overhangs to exclude the birds (see Fig. 2).
- Use sticky repellants (Tanglefoot™, Roost NoMore™, 4 The Birds™) on rafters and ledges. These are messy, collect dirt, and may need to be reapplied several times each year, but they are effective in discouraging roosting.
- For birds outside the building, place netting or a metal covering from the outside edge of the eave down to the wall;



**Figure 2:** To discourage birds from nesting or roosting on ledges and rafters in farm buildings, put nylon or plastic netting on the underside of the rafters to exclude the birds.

- Hang clear plastic strips from doorways of barns and sheds; machinery, livestock, and people can pass through, but most birds will think it is a solid door;
- Build a “catwalk” at rafter level that allows barn cats easier access to birds on rafters.
- Install “Porcupine wires”—permanent heavy wire prongs which stick out at different angles, making the area like a bed of nails (see Fig. 3). For barn swallow nests, the wire prongs must be placed on the side of rafters or underneath the eaves.
- Put a board or metal covering over the ledge at a 45 degree angle (or greater), making the ledge less suitable for a nest or roosting (see Fig. 3). Make certain that the ends are closed to prevent entry.



**Figure 3:** To discourage birds from nesting or roosting on ledges and rafters in farm buildings, put a wood or metal covering on the ledge at a 45° angle or try “porcupine wires.”

For great flocks of birds roosting in trees, habitat modification or frightening techniques (described below) may be most effective. Some species of birds—such as blackbirds, starlings, and crows—form into groups at evening to roost together through the night. These very social birds will try hard to stay together in the roost, a known meeting place.

One method for making the roost site undesirable or uncomfortable for birds is to reduce cover by thinning the roosting trees and shrubs (a habitat

modification technique). The changes need not be dramatic to be effective. Making the vegetation less dense often proves sufficient.

### **Water**

A source of water is essential for birds year round, and can attract problem birds to areas like feedlots and grain storage. Starlings, in particular, are attracted to water. Where birds are a problem in rural areas around grain storage and livestock facilities, any unnecessary water in the farmstead—water in troughs, junk piles, ruts or low spots in the barnyard—should be drained. The water level in livestock water troughs should be kept low enough so birds cannot reach it when perched on the edge, and deep enough so they cannot stand in it.

### **Non-chemical Control – Frightening and Trapping Techniques**

Frightening devices include: alarm and distress calls played over loud speakers, exploding shells, automatic gas exploders, tethered balloons with big “eyes” painted on them, hawk silhouettes, water sprays, flashing lights, and devices to shake roosting vegetation. These items and methods repel starlings and some other birds but seem to have little to no effect on house sparrows and pigeons. Some claim balloons offer a measure of control for house sparrows in buildings. Simultaneous use of visual scare devices and noisemakers seems most effective. The location of visual scare devices must be frequently changed so that birds do not become accustomed to them. When using scaring sounds, use mobile sound equipment so the location of the sound can be changed. When using automatic gas exploders, try to elevate them above the vegetation (see Fig. 4).

Birds are more willing to leave a roost site they have not been using long. Act as quickly as possible after detecting large numbers of roosting birds. Migrating species are easier to move in the fall when they are restless and are preparing to migrate.

To be effective, programs for frightening roosting birds often take four or five nights (or more) of continuous effort. Birds will sometimes move to a new roost not far away and must be moved several times within an urban area before they move to an “acceptable” site or out of town. Especially in these situations, the birds may become desensitized to the scaring devices, so several methods must be used.



**Figure 4: Common frightening devices include owl decoys, balloons with “eyes” painted on them, foil strips or shiny garland hanging from the eaves, gas-operated exploders, and distress or alarm calls played on a stereo.**

Birds scare most easily when they are flying. They are most difficult to scare when perched in the relative protection of their roost. Therefore, scaring should begin a least one-and-one-half hours before dark, when the first birds are coming in. Scaring should stop with darkness. Do not try to scare any longer because the birds will just become accustomed to the sounds. If you are using distress or alarm calls, play them only ten to fifteen seconds every minute when the birds are coming in. When most of the birds are perched, play the call continuously until dark. Early morning scaring also can be used in conjunction with evening scaring and should begin as soon as the

first bird movement is detected in the roost, often just before daylight.

On the first night of scaring, the birds will usually act alarmed and will circle around, but they will eventually come in to roost. Success may not be achieved for several nights and will entail continuous scaring efforts every evening and every morning. The birds may attempt to establish temporary roosts in other locations that may be unsuitable. Scaring efforts must continue until the birds are moved to an acceptable area. If birds are disturbed in their new roost site they may move back to the old site. Be prepared to resume scaring efforts if the birds return.

In extreme cases, such as large numbers of birds roosting in industrial facilities, chemical methods may be the most effective means of controlling problem roosting birds. Follow the chemical control methods outlined later.

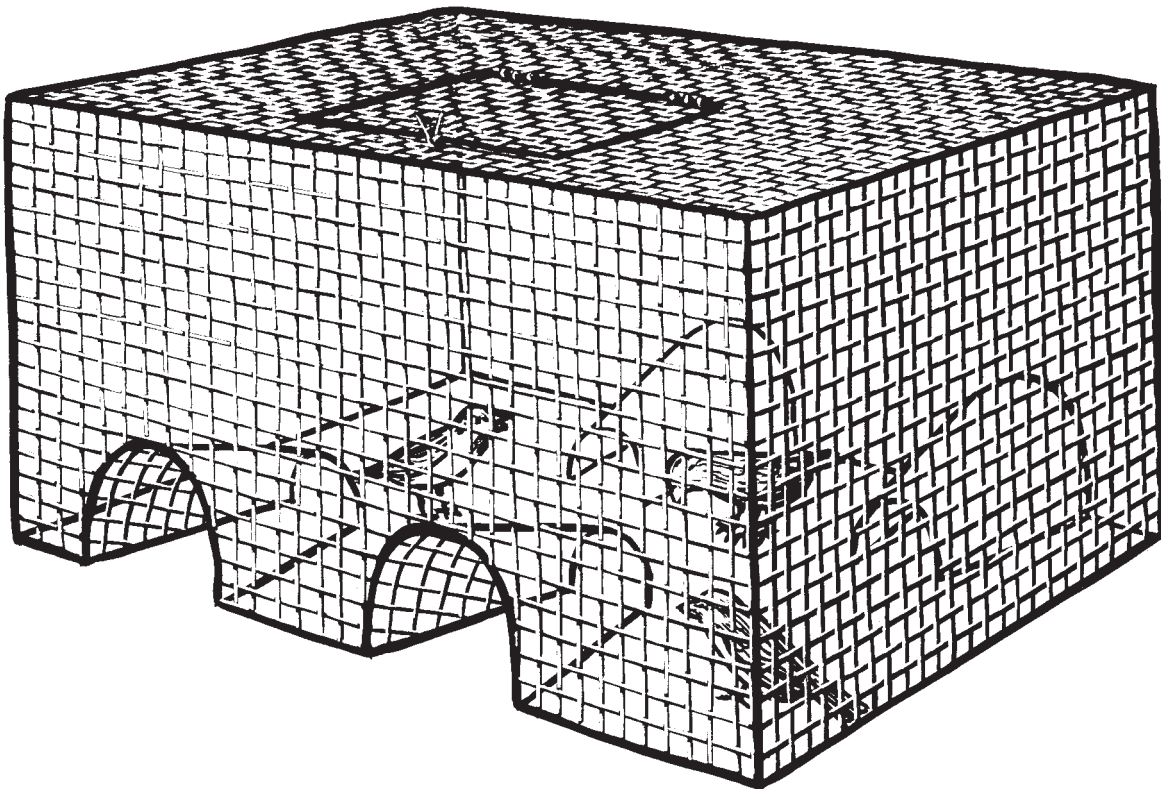
A good alternative for controlling house sparrows (in areas where other bird species may be involved) is netting or trapping. Live trapping methods such as funnel entrance, automatic and triggered traps, and mist nets are widely used for house sparrow control (see Fig. 5). Any protected songbirds can be released unharmed. To use any of the traps, pre-bait the area without a trap for one or two weeks by putting out bait like cracked corn. Then lay out the traps with the same bait inside the trap. Make the traps more attractive by placing live decoys of the same species being trapped inside the trap— enclosed in a separate compartment so they cannot escape. Provide food and water for the decoy birds. Check the traps several times each day so you can release non-target birds unharmed, and reduce the number of birds that might find a way to escape.

Destroy house sparrows, starlings, or pigeons caught in the trap in a humane manner. Check with local animal control or conservation officers for trapping rules. Some cities and towns require special permits.

### **Chemical Control of Problem Birds**

If exclusion from food or roosts is not possible and trapping or scaring has proved ineffective, chemical control may be called for. First, determine what kind of bird is causing the problem. House sparrows (sometimes called English sparrows), starlings, and pigeons are the most common problem birds (see Fig. 1, page 2). On these three species, chemical controls can be used.

*Avitrol*<sup>TM</sup> is a chemical frightening agent. It is available for house sparrows, starlings, and pigeons in a corn or pelletized bait that is impregnated with the chemical *4-Aminopyridine*. The pelletized form of *Avitrol* is usually best for starlings, and the corn or wheat form is best for house sparrows and pigeons. *Avitrol* is also avail-



**Figure 5:** Live trapping with a funnel entrance trap baited with cracked corn can control problem birds, especially house sparrows.

able in a liquid and a powder form. Cubes of stale bread soaked in a mixture of the chemical and vegetable oil also have been effective on starlings in farm and industrial buildings.

For best results, pre-bait with untreated bait before setting out the toxic bait. For the pelletized form of Avitrol, pre-bait with untreated pellets. For several days, put untreated pre-bait where the birds feed or roost so they become accustomed to eating it. Make certain it cannot get into livestock feed or be consumed by livestock. After the birds are feeding readily on the pre-bait, switch to the toxic bait. Some birds will die displaying distress signals that frighten other birds away. Because chemical control often involves bird deaths in public places, public understanding and support should be secured prior to its use. Lacking support, public relation problems may arise. Be sure to collect all carcasses and dispose of them properly by burying or burning. Because Avitrol results in some bird deaths, it can only be used where house sparrows, starlings, and pigeons are causing the damage, and where no other species of birds will come in contact with the pesticide. **Federal and state laws protect all songbird species except house sparrows and starlings. Read and follow all label directions.** Avitrol is a restricted-use pesticide, and may be used only by a certified applicator or persons under the direct supervision of a certified applicator.

There are other chemical control methods available for population reduction of starlings and pigeons. For flocks of starlings in rural areas, Starlicide Complete™ can be used for population reduction. This pesticide is available from Purina in a pelletized bait; it causes a slow, non-violent death. **Read and follow all label directions.** The most effective time to use this bait is in cold weather when the starlings are stressed for food and concentrate in feedlots. Again, pre-bait before setting out the toxic bait by using untreated pellets or livestock feed. Make sure the bait is inaccessible to livestock. Use bait containers, like black rubber feed pans or feed bunkers for small to medium groups of starlings. Broadcast per label directions where there are several thousand birds. Put out the toxic bait after starlings are feeding readily on the pre-bait. Continue using the toxic bait for several days, then remove any remaining bait. If starlings return, allow them several days to begin feeding again and repeat the cycle of pre-baiting and baiting.

*Omitrol*™ is available for control of pigeons in a

corn bait. This chemical results in temporary sterility in female pigeons. Pre-bait the area with untreated corn for one to two weeks so that the birds become accustomed to feeding there. After pre-baiting, put out the chemically treated bait. The females must feed on the Ornitrol for ten days. This will cause them to be infertile for six months, so the process must be repeated twice a year. The best times to bait with Ornitrol are February or March and again in August or September. Since Ornitrol may affect other bird species, make certain that non-target birds are not feeding on the bait.

Some chemicals previously used to control problem birds are no longer available. Recently removed from the market were toxic perches impregnated with a lethal pesticide, *endrin*. These perches also killed non-target birds and other animals. Non-target birds and animals have been killed indirectly by eating birds that died from the pesticide (*secondary poisoning*). The perches containing toxic *fenthion* are still available, but until the EPA resolves disputes about secondary poisonings, we do not recommend them. *Strychnine* also was used for bird control; now it can be used only underground—above ground it poisoned nontarget animals, including protected and endangered species.

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Many of the products mentioned here can be found at garden centers and farm supply stores, with the exception of porcupine wires. To obtain porcupine wires, contact one of the following companies:

- Nixilite of America, 417 25th St., Moline, IL 61265, (309) 797-8771, (Nixilite™) or:
- Shaw Steeple Jacks Inc., 2710 Bedford St., Johnstown, PA 15904, (814) 266-8008, (Cat Claw™)

No endorsement of companies or their products mentioned is intended, nor is criticism implied of similar companies or products not mentioned.

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