

Non chemical control of birds

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Because of the large number of bird species that can pose problems for organic farmers, this article will deal with bird control in general. Detailed information about the habitat and biology of specific bird groups or species can be seen at <http://www.extension.org/pages/9035/wildlife-species-information>.

Before removing birds, it is important to check with local wildlife officials to determine if targeted bird species are protected. Even if the birds are protected, permits for removal can generally be obtained if significant damage is occurring or if human health is a concern.

Most bird damage occurs when large numbers of birds feed on crop or garden products. Removal and damage to grain, fruits, seedlings and other produce can be significant, especially when large numbers of birds attack a garden. In some situations bird droppings pose a health hazard. Diseases associated with bird feces can be a human health concern.

Prevention and Control of Damage

As with other wildlife species, prevention and control of bird damage requires looking at a variety of tools. Organic farmers have restrictions on the tools they can use so they must use persistence and creativity more often.

Before going to the effort and expense of controlling the birds, try to determine if the damage the birds are causing is really significant. Excluding the birds from a small section of the crop with netting will allow you to inexpensively determine if the damage outside the netting, when compared to the damage inside the netting, is really worth controlling.

Habitat Modification

Consider eliminating habitat that might attract birds. Often a nearby hedge providing cover, a dense tree providing a roosting site, spilled grain or some other attraction may be luring birds to the area.

Exclusion

Protect crops with bird netting. This approach can be economical if netting is used for several years to protect the site. Leave no openings at the bottom of netted crop areas. Birds that get into fields through such openings and are unable to find their way out can cause considerable damage.

Although more expensive, livestock panels covered with poultry wire can be arranged so they can be folded open to allow easy access for harvesting berries or other bedded crops.

If the problem is a continuous one, it is often worth the investment to implement permanent solutions rather than stopgap measures. For example if sparrows can be expected to be a problem in your garden continuously, it may be worth the investment to construct supports so

poultry wire can be used to cover the entire garden area rather than draping nylon netting after the problems start.

Repellents and Frightening Devices

Because chemical repellants are not appropriate for organic farmers the only recommended repellent is monofilament line.

Research has shown many species of birds are repelled by the presence of clear monofilament fishing line when it is stretched between 2 points. Apparently the appearing and disappearing of the line is what repels the birds. The line is not a barrier because it is still effective when used with large spaces between strands.



Line with 20 lb. breaking strength provides the best combination of visibility, resistance to UV damage and durability. The line should be spaced 12 inches and placed directly over berry patches. Line can be stretched above a row of vegetable sprouts and raised as they emerge from the soil. A pole can be placed along the trunk of fruit trees and monofilament line can be stretched from the top of the pole to the ground in a “maypole” fashion.

Frightening is effective in dispersing birds from roosts, fruit crops, and some other troublesome sites. Frightening devices include recorded distress or alarm calls, gas-operated exploders, battery-operated alarms, pyrotechnics (shell crackers, bird bombs), lights (for roosting sites at night), bright objects, and various other stimuli. Some novel visual frightening devices with potential effectiveness are eye-spot balloons, hawk kites, and Mylar® reflective tape. However birds usually get used to these novel devices and they lose their effectiveness.

Ultrasonic (high frequency, above 20 kHz) sounds have not proven to be effective in research trials because, like humans, birds do not hear these sounds.

Harassing birds throughout the evening as they land can be effective in dispersing bird roosts if done for three to four consecutive evenings or until birds no longer return. Spraying birds with water from a hose or from sprinklers mounted in the roost trees has helped in some situations.

Some motion activated water sprayers have been developed that spray birds when they break the motion detecting barriers. These work well because they activate only when the bird is in close proximity which prevents the birds from getting used to the scare device.



Beating on tin sheets or barrels with clubs also scares birds.

Green lasers have proven to be good scare devices for many species of birds. When birds are scared repeatedly from an area they tend to avoid that area.

A combination of several scare techniques used together works better than a single technique used alone. Vary the location, intensity, and types of scare devices to increase their effectiveness. Two additional tips for successful frightening efforts: 1) begin early before birds form a strong attachment to the site, and 2) be persistent until the problem is solved.

Trapping

When unprotected birds are causing damage, trapping can often be the best solution. Trapping is probably the most widely used method in attempting to reduce problem bird populations. Most bird traps are live traps so nontarget species can be released unharmed. There are many types of traps available but some are suitable only for certain species.

Funnel traps are the most commonly used traps. Small, portable funnel traps can be easily constructed and deployed using poultry wire supported by a wood frame. The principle is similar to minnow traps. Birds are baited through an opening which leads them to the center of the trap. When they attempt to escape they go to the edges rather than back to the center opening.

The best locations for traps are major loafing areas. Consider prebaiting areas for several days before beginning the actual trapping. To prebait, place attractive baits, such as corn or milo, around the outside of the traps. Then place the bait inside but with the funnel removed so the birds can easily go in and out. After 3 to 4 days, the funnel can be replaced with the baits inside the trap.

Visit traps at least every other day. If “trap-shyness” develops, traps can be left open for 2 to 3 days and then reset again for 4 to 5 days. Select another site if traps fail to catch a sufficient number of birds.

The disposal of trapped birds should be quick and humane. The act of inducing painless death is called euthanasia. Options to select from include inhalant agents and physical methods. For large-scale control projects, the most cost-effective and humane method is to use a carbon monoxide (CO) or carbon dioxide (CO₂) gas chamber.

Releasing birds back to the “wild” is impractical. They are likely to return even when released 50 or more miles from the problem site, or become pests in other communities.

Automatic traps are counter-balanced multicatch traps usually designed for sparrows. Birds enter a compartment alone to feed on bait that is placed on a shelf in the trap. Their weight causes an “elevator” to drop to the lower level where the bird “escapes” into a closed cage. Without the bird’s weight, the counterbalanced “elevator” springs back into the original position ready for another passenger.

Other methods

Shooting with air guns or low-powered firearms can be used with some success where state laws and local ordinances permit. Birds quickly become wary of a human holding anything resembling a firearm, so shooting from a blind is recommended whenever possible. Even then birds quickly become wary and shooting seldom reduces a population but may make them avoid the area.

Nest Destruction. Where legal, birds can be discouraged from using an area by removing nests and destroying the eggs. This operation must often be repeated at 2-week intervals throughout the breeding season. Use a long insulated pole with a hook attached to one end to remove nests that are located in high places. The nesting materials should be collected and removed to make it harder for the birds to find materials for new nests.

Predators. Encouraging predators is often attempted but will not control bird populations.

Acknowledgments

Much of the information presented here was adapted from S.E. Hygnstrom (1994) in *Prevention and Control of Wildlife Damage*, University of Nebraska, Lincoln, NE.

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