

Revised March 2003, with updated recommendations for feeder sanitation.

Keeping Your Yard Safe for Birds Bulletin #7145

any of us enjoy attracting birds to our yards. We do it to help the birds and because we take pleasure in their presence. There are

responsibilities, obligations really, we accept when we do this. When we attract birds to our yards, we want to offer an environment free of dangers from human practices.

An essential responsibility is proper sanitation and upkeep of feeding stations so that we don't undermine our good intentions. The National Wildlife Health Center of the U.S. Geological Survey conducts research on diseases in wildlife. In recent years, they have reported unprecedented songbird mortality events and have identified backyard feeding stations as playing a significant role in the situation.

Diseases Associated with Birds Using Feeders

There are five diseases associated with bird feeders, all of which can lead to death directly or indirectly because the birds are more vulnerable to weather, poor nutrition and concurrent infections. These diseases are: salmonellosis, trichomoniasis, aspergillosis, avian pox and



mycoplasmosis. The causes of the diseases are food and water contaminated by mold, fungus and infected feces, and surfaces contaminated by viruses from other sick birds. We can recognize sick birds by their unkempt feathers, or they may appear fat or puffed up. Sick birds are less alert, less active, feed less and are often reluctant to fly away as you approach them.



Maintaining Feeders and Bird Baths

You can prevent or reduce disease problems at your feeders by taking these measures. Prevent disease by taking these steps. Don't wait until you notice sick birds.

- Clean and disinfect feeders once or twice a month; and more often if you observe sick birds. Immerse an empty, cleaned feeder for two or three minutes in a solution of one part liquid chlorine household bleach and nine parts warm water, a 10 percent solution. Allow the feeder to air dry. Do not use vinegar as a substitute for bleach because it does not destroy bacteria, mold or yeast.
- Every few days, clean up waste food and droppings from the ground. A shovel and broom work well for this, or use a rake. Discard the seed waste with the household trash.



- If you suspect a disease problem, rake the area under the feeder and cover the ground with a tarp for one to two weeks to prevent further contact between the contaminated site and unaffected birds. You can continue to use your feeder once it is clean, but it is recommended that you regularly relocate it a short distance away from the previous location to prevent the build-up of contaminated seeds and droppings.
- Avoid crowding by providing an ample number of feeders. If you notice sick birds, you might stop feeding altogether until the epidemic is over, or until the next season.
- Use feeders that don't have sharp points or edges. Bacteria and viruses on contaminated surfaces infect healthy birds through even small scratches.
- Use only good food. Discard food that smells musty, is wet, looks moldy or has fungus growing on it. Discard any food that has had rodents in it. Disinfect the storage container and food scoop that have come in contact with spoiled food.
- Every day, rinse birdbaths and replace the water. Twice a week, scrub them with a plastic bristle brush and mild dish detergent, and rinse thoroughly before refilling. Once every two weeks, scrub the bath with dish detergent, rinse, then fill with a 10 percent bleach and water solution. Let it stand for two to three minutes. Pour it out and allow to air dry, then rinse it well and air dry again. Refill the bath with water. What infected birds need most is water, which must be kept extremely clean and fresh to stop the spread of disease.
- When cleaning your feeders and bird baths, wear gloves and wash your hands afterwards. Avian salmonellosis, one of the diseases

common among birds using feeders, is a strain of bacteria that can potentially affect humans and pets. Dispose of dead birds by tightly wrapping them, then place in outdoor garbage containers with tight lids.

Tell your neighbors who feed birds about these precautions. Birds move among feeders and spread diseases as they go.

Nectar Feeders^{*}

In the very early and very late periods of the breeding season when flowering plants are scarce, nectar feeders may be helpful, but only if kept perfectly clean and filled with fresh nectar. *Improper maintenance can kill birds.*

Good reasons to avoid artificial nectar feeders:

- Artificial nectar ferments quickly, in one to two days. Fermented nectar ingested by birds enlarges their livers.
- Mold and bacteria grow quickly in artificial nectar and can harm the birds.
- Artificial nectar does not provide the nutrients that are in floral nectar. Natural food sources are far superior to artificial nectar and provide a balanced diet.
- Because hummingbirds are aggressively territorial, experts suspect that competition at feeders may be extreme and very stressful.

If you decide to offer artificial nectar, consider doing so only during May, September and early October, when natural nectar sources are scarce. The risk to the birds will be less, and the work of keeping the feeders clean is limited to just a few months.



Maintenance and sanitation of nectar feeders:

- Make artificial nectar by mixing one part table sugar in four parts boiling water. Stir to dissolve the sugar. Cool before filling feeders. Refrigerate any remaining nectar; dispose of unused nectar after one week.
- Do not add food coloring: it may cause health problems in birds.
- Do not use honey or artificial sweeteners, as these may also cause health problems.
- Use feeders that come apart so that all surfaces can be scrubbed.
- Place feeders in the shade in areas safe from cats.
- Clean and sanitize nectar feeders every two days, and more often in hot weather.

a) Instructions for using a dishwasher:

 Cleaning nectar feeders in the dishwasher at the regular setting, with a water temperature of 130 degrees F, will wash and sanitize the feeders.

^{*}Special thanks to Mahmoud El-Begearmi, Extension professor, nutrition and food safety, for his assistance on maintenance and sanitation of nectar feeders.



- If your feeder is a narrow-neck globe design, place the globe on the bottom shelf of the dishwasher with the **open side down**. Rising steam will fill the globe and kill any bacteria and mold. Other parts of the feeder with small openings should also be loaded, open side down, on the bottom shelf of the dishwasher. The upward spray of water is stronger on the bottom shelf of the dishwasher than on the top shelf. If your feeder design allows easy access to all surfaces, any location in the dishwasher is okay.

Do not open the dishwasher until it has completely finished the cycles. The final hot air cycle is when the sanitizing takes place.
Be sure your nectar feeders are dishwashersafe. If they are not, plastic feeders may melt or become misshapen; glass globes may break.

b) Instructions for washing by hand and bleaching:

– Scrub all feeder parts with a drop or two of dish detergent and **rinse well**. When feeder is cool, immerse it in a 10% bleach solution (one cup of household bleach to nine cups of water) for at least three minutes. **Rinse well and air dry** before filling with fresh nectar. If you have two nectar feeders, you can fill and hang one while the other is being cleaned and air-dried. Bleach will kill bacteria and mold: vinegar is not an adequate substitute for bleach. Be sure to rinse off all bleach and soap thoroughly and allow the feeder to air dry. Soap or bleach residue in the feeder will harm birds.

You can reuse the bleach solution for up to three weeks by keeping it in a large plastic storage container with a tight-fitting lid. This way, after washing the feeder you can immerse it in the container to sanitize it. Fecal matter and other organic materials, as well as air, heat and light, can spoil the bleach solution. Washing the feeder before bleaching it will assure that organic material does not enter the solution. After three weeks, dispose of the bleach solution by flushing it down the toilet.

Suet

Many people feed suet all year, but sun-warmed suet can cause infected follicles and loss of facial feathers. It can mat feathers, reducing insulation and water-proofing. Use suet only from October through April or May, depending on the temperatures.

Other Safety Concerns

There are several other things to think about when inviting birds into your yard.

- Irregular feeding may be a disadvantage for birds that establish habitual foraging patterns.
- Free-ranging cats prey on birds feeding on the ground and at feeders. Placing feeders 10 feet from cover, and birdbaths 15 feet from cover, helps to lessen this danger.
- Many birds die each year from landscape pesticides, when they eat pesticide granules or eat poisoned prey, such as insects. You can reduce or eliminate your use of chemical



fertilizers and pesticides by using disease- and pest-resistant plant varieties, cultivating native plant species, and reducing the lawn area. By managing your yard naturally, you can increase natural insect predators such as ladybugs, praying mantises, toads and birds. Leaf mulches and compost add nutrients to soil and eliminate the need for weed killers and fertilizers.

- Bird feeders and birdbaths located near traffic can cause unnecessary bird mortalities. They are also a potential danger to motorists who try to avoid birds flying low across the road. Trees and shrubs with attractive fruit near roads may also be a problem. If siting options are limited, a fence between the road and the area frequented by birds may help direct the flight of the birds above traffic.
- Potential problems can be avoided by good nest box design, placement and upkeep. Birds using the box will be less likely to become prey to other birds and mammals, and eggs will be less likely to overheat. Avoid poisonous vapors from pressure-treated lumber, paint or stain. Use nest boxes specifically designed for the species of bird you want to attract. Get good information before buying or building a nest box. (See UMCE bulletin #7117, *Birdhouse Basics*.)

Enhancing Your Backyard Habitat

Feeders should be thought of as a supplement to natural foods, not a replacement for them. Natural sources of food that we can plant in our yards include shrubs and trees that bear berries and fruits, evergreens with their seed cones, and plants that provide flower nectar and seeds. Plantings also offer cover, for shelter from the elements, nesting sites, hiding places from predators, perches and resting spots. (For more information on backyard habitats, see UMCE bulletin #7137, *Components of a Backyard Habitat*, bulletin #7133, *Planning the Backyard Habitat*, and #7132, *Principles for Creating a Backyard Habitat*, all fact sheets in the *Habitats* fact sheet series.)

We feed birds to help them and because we enjoy watching them. Plantings for wildlife increase the appeal of our yards, and so serve both purposes. Each of us doing our part to help wildlife makes a really big contribution overall.

For more information or to obtain other fact sheets in the Habitats series, contact your county office of the University of Maine Cooperative Extension.



Other Resources

Why a Backyard Wildlife Habitat? bulletin #7131

Principles for Creating a Backyard Habitat, bulletin #7132

Planning a Backyard Wildlife Habitat, bulletin #7133

Components of a Backyard Wildlife Habitat, bulletin #7137

Facts on Cats and Wildlife, bulletin #7148

Beneficial Insects and Spiders in Your Maine Backyard, bulletin #7150

Landscaping for Butterflies in Maine, bulletin #7151

Understanding Ruby-throated Hummingbirds and Enhancing Their Habitat in Maine, bulletin #7152

Gardening to Conserve Maine's Landscape: Plants to Use and Plants to Avoid, bulletin #2500

Native Plants: A 2002 Maine Source List, bulletin #2502

Flowering Crabapples in Maine, bulletin #2508

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Sources:

National Wildlife Health Center, U.S. Geological Survey

The Birder's Handbook, by Paul R. Ehrlich, David S. Dobkin and Darryl Wheye, Simon & Schuster, New York, NY, 1988

Maine Department of Inland Fisheries and Wildlife

Published and distributed in furtherance of Acts of Congress of May 8 and June 30, 1914, by the University of Maine Cooperative Extension, the Land Grant University of the State of Maine and the U.S. Department of Agriculture cooperating. Cooperative Extension and other agencies of the U.S.D.A. provide equal opportunities in programs and employment. 06/03