



## Bird Action Pledge Card

### BIRD ACTION PLEDGE CARD

I, \_\_\_\_\_, pledge to take the following action(s) to help bird conservation: (Check as many actions as you will be able to do. Add additional actions you choose.)

- Hang bird silhouettes or strips of materials on windows to help prevent birds from striking windows
- Plant sunflower seeds or native plants and shrubs that provide food for birds
- Become familiar with the bird species in my neighborhood and observe whether their numbers or habits change over time
- Keep bird feeders and bird baths clean to help prevent the spread of disease among birds
- Enhance home or school habitat for birds by growing a variety of plants that provide food and shelter for birds through all four seasons
- Keep cats indoors or limit their time outdoors
- Not to harm native birds, their nests, eggs, or nestlings
- Not to buy a caged bird unless it was born and raised in captivity
- Spread the word to at least one other person as to the actions they can take to help bird conservation
- Develop an educational display or poster that teaches others some of the actions they can take to help bird conservation (For example, keeping cats indoors, reducing pesticide use to protect birds, or showing the connection between shade-grown coffee and bird habitat)
- Encourage coffee-drinkers I know to purchase shade-grown coffee
- Avoid littering and support outdoor clean-up efforts
- Reduce, reuse, and recycle
- Other \_\_\_\_\_

# Bird Conservation Information



## CREATE BIRD-FRIENDLY HABITAT

**C**reating *habitat* that provides food, water, and shelter for birds is important in helping to protect both migratory and resident birds. Habitat enhancement projects can be small or large, and can be done in urban, suburban, or rural settings. In addition, students can get involved in creating bird-friendly habitats at home, at school, or by cooperating with workers at office complexes or public facilities. Students should realize that even small steps, such as planting sunflower seeds or maintaining a bird feeder or bird bath, are important for bird conservation.

Diversity is the key to providing a good habitat for birds. Planting a variety of native plants provides the fruits, berries, seeds, nuts, and nectar that different bird species need throughout the entire year. In addition, many native plants are easy to grow because they are adapted to the region and beautify backyards, school sites, or public grounds without requiring much water or pesticides. Local landscape architects and botanists from universities, county extension offices, arboretums, or plant nurseries can provide help in selecting plantings.

A few basic steps are helpful in developing and implementing a habitat enhancement project:

- establish goals and a budget for the project;
- seek necessary permissions;
- try to enlist volunteers, such as master naturalists and master gardeners, who have an expertise in landscape architecture, gardening, and birding botany to assist with the project;
- conduct an inventory of what is currently at the site—plants, trees, benches, sidewalks, buildings, buried cables, etc.;
- plan the new habitat on paper, including a list of needed items such as plants, bird feeders, and a water source;
- seek funding or donations of materials and plants for the project;

- once the necessary items are secured, plan a series of work days to implement the plan;
- recruit adult volunteers to help guide the work;
- once the project is complete, set up a plan to maintain the habitat;
- celebrate the completion of the project and thank volunteers; and
- go birdwatching (so you can evaluate bird use of your project)!

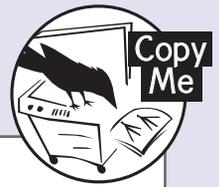
Keep in mind that many species of trees, shrubs, grasses, and vines provide excellent shelter and nesting sites for birds. In addition, a brush pile can protect birds from bad weather, as well as from predators. Old hollow trees provide habitat for cavity-nesting birds such as woodpeckers and bluebirds. Dead trees and fallen branches can host many insects, providing a valuable food source for insect-eating birds. If the dead trees and fallen branches do not pose a hazard, consider leaving them where they are to provide shelter and food.

A clean water source is important to birds and all wildlife. This can be as simple as providing a birdbath, or can be more involved, such as developing a small pond with running water. To avoid spreading disease among birds, plan to keep the water clean and fresh. Stagnant water can be a breeding ground for mosquitoes, so changing the water every day or every other day prevents this problem. Cleaning is also important for bird feeders, so plan to keep them filled and to disinfect them periodically.

## CLEAN UP TRASH

**M**any species of birds get tangled up and die when caught in fishing line, six-pack rings, and other trash. This can be avoided by disposing of trash in its proper place. Also, by reducing, reusing, and recycling, people can help conserve natural resources, preserve bird habitat, and clean up the environment—a winning plan for both people and animals!

# Bird Conservation Information



## KEEP PETS FROM BEING PREDATORS

**D**omestic cats that are allowed outdoors are a significant threat to songbirds. Cats are estimated to kill hundreds of millions of birds each year in America. Cats also kill other animals, such as rabbits, chipmunks, skinks, geckos, lizards, and butterflies. In addition, allowing cats outdoors exposes them to many harmful bacteria, parasites, viruses, and other diseases such as rabies, Lyme disease, feline leukemia, and hookworm. (Some of these illnesses can be transmitted to humans and may be especially harmful to children and pregnant women.) Outdoor cats also are vulnerable to being hit by cars, exposed to pesticides, and being attacked by other animals.

Dogs can especially be a source of danger to nestlings and fledglings in the spring and summer, so they should not run loose during nesting time. Loose dogs can frighten birds and interfere with their feeding and nesting. Dogs that run loose can contract a variety of diseases, may be hit by a car, and may be exposed to chemicals or other hazards. Keeping cats indoors and dogs on a leash not only protects birds, but also protects your pet and yourself.

## REDUCE PESTICIDE USE

**P**esticides are chemicals used to control, destroy, or repel pests. Insecticides control insects, rodenticides target rodents, herbicides kill weeds, and fungicides target fungus. Pesticides can be valuable aids in producing food by controlling pests and diseases, but they also may harm things that they were not intended to harm, such as people and animals. Depending upon the exposure or dose of the pesticide, it may cause a range of harm, such as cancer, acute or chronic injury to the lungs, or damage to the nervous, reproductive, endocrine, and immune systems. Children are at a greater risk of pesticide exposure because of their rapid metabolism and because they often

play on the floor or lawn where pesticides are commonly used.

Tens of millions of birds die annually due to pesticides. Pesticide use on U.S. agricultural lands is estimated to kill 72 million birds each year. This estimate only takes into account birds that inhabit farmlands or birds that are killed outright by ingestion of pesticides; it doesn't include indirect poisoning or *bioaccumulation* (which refers to the accumulation of pesticides in a bird's system due to eating smaller organisms that have digested pesticides). Because of these critical issues, non-profit organizations, such as the American Bird Conservancy and the National Audubon Society, have developed campaigns to reduce the risk of wild birds being exposed to lethal or sub-lethal pesticides, even when these substances are used according to law and accepted practice.

There are many actions that students and their parents can do to help reduce the harmful effects of pesticides to birds, humans, and other animals:

- Do not use pesticides unless there is no safe alternative
- Plant native plant landscapes to use less water and avoid pesticides
- Do not feed birds contaminated seed
- Research and try safe alternative pest control methods
- Buy organically grown products
- Support organizations that are working to reduce dependence on pesticides
- If you use pesticides, always read the label and follow directions
- Remove garbage and food crumbs that attract pests
- Wash fruits and vegetables thoroughly under running water before eating
- Keep children, toys, and pets away from areas where pesticides have been used

# Bird Conservation Information



## COFFEE AND CHOCOLATE

**D**id you ever think that the type of coffee or chocolate you bought could help the birds? Well, it can! According to biologists from the Smithsonian Migratory Bird Center, of all the agricultural systems in the tropics, shade coffee plantations have some of the highest numbers of both migratory birds and species of migratory birds. In addition, biologists found that such traditionally managed coffee and cacao (chocolate) plantations in eastern Chiapas, Mexico, supported over 150 species of birds—a greater number than in other agricultural habitats, exceeded only in undisturbed tropical forests. Other researchers have confirmed the significance of shade-grown coffee and cacao plantations in providing important habitat for many species of plants, amphibians, and invertebrates, in addition to being critical for migratory birds.

*Shade-grown* means that the coffee or cacao is grown under a mixed canopy of taller trees where they naturally occur. The shade trees protect the understory coffee and cacao plants from sun and rain, help maintain soil quality, aid in pest control, and reduce the need for weeding.

Unfortunately, there has been a push since the 1970s to replace shade-grown coffee plantations with new varieties of coffee that grow in full sun. This push for coffee that grows in sun came about to help avoid fungal coffee blights and to increase short-term yields. This shift comes at a large economic and environmental price. To sustain yields, heavy applications of fertilizers, herbicides, and fungicides must be used. This can have negative effects on the workers, as well as on wildlife.

Coffee is the third most common import in the United States. Hence, the type of coffee Americans choose to drink can have a big impact on temperate and tropical ecosystems. Producing shade-grown coffee can be a win-win situation. The successful marketing of shade-grown coffee is good for everyone involved—growers, roasters, consumers, and the birds!

How can students get involved? They can encourage others to buy shade-grown, organic coffee and cacao. They can talk to buyers at grocery stores to encourage them to provide such products at their stores. Once these products are available, students could ask grocery store managers to be allowed to set up an educational display about the connection between birds and coffee and shade-grown cacao. (The Smithsonian Migratory Bird Center's web site: [www.si.edu/smbc](http://www.si.edu/smbc) is one place to obtain information on where to buy shade-grown, organic coffee.)

## PREVENT WINDOW STRIKES

**E**ach year, more than 100 million North American birds die from flying into windows on homes and buildings. Because glass is transparent and reflective, birds either do not see the glass or see trees and plants reflected in it.

Window strikes to birds can easily be prevented. Hanging strips of material, such as ribbons, string, or yarn, on the outside of windows alert birds about a window. To hang strips, place them about two inches (five centimeters) apart for the entire length of the window, and secure them at the top and the bottom. Choose a material that withstands inclement weather so the strips last a long time.

Another way to reduce window strikes is to hang an object (some people use silhouettes of a bird of prey, such as a falcon) on windows. (The Bird Silhouettes page provides instructions.) Any object can help to break up the transparent and reflective expanse of windows.

Another threat to birds is the lighting of buildings and towers at night. Many songbirds migrate at night and at low altitudes. Sometimes birds are attracted to and disoriented by artificial lights, and collide with buildings during their nocturnal migration. To reduce window strikes due to lights, homeowners and office workers should turn off building lights at night, especially during migration season.



## Bird Silhouettes



Peregrine Falcon – Wingspan 40”

Each year, more than 365 million North American birds die from flying into windows on homes and buildings. Because glass is transparent and reflective, birds either do not see the glass or see trees and plants reflected in it. They may also see plants on a window sill, but they do not see the glass.

To help alert birds to the presence of windows, you can hang objects on the window. Some people hang silhouettes of a bird of prey, such as a Peregrine Falcon, on the outside of windows (although any object will work as well). Here's how to make your home or school windows safer for birds:

1. Make silhouettes of a bird of prey. You can use the sample above as a template to create your own life-size bird silhouettes (actual wingspan size is listed). To provide the greatest contrast, use black paper, or paint the silhouettes black. The silhouettes can be decorated with stickers, ribbon, or other items to make them more attractive.
2. The bird silhouettes are more effective if they are hung on the outside of windows. To protect them from inclement weather, the silhouettes can be laminated.
3. The silhouettes may be more effective if they can move. To achieve this, you can hang them by string or attach them to the window with a large suction cup.
4. For maximum benefit, place at least one silhouette in each window.

## Sunflowers Are For The Birds

**S**unflowers are fun and easy to grow. Sunflower plants tolerate a wide range of soil types and can be planted almost anywhere that full sun is available. The ripe sunflower seeds provide food for seed-eating birds. In addition, sunflower plants can attract a variety of insects which will in turn provide food for insect-eating birds.

Sunflower seeds can be planted in the spring once the threat of frost has passed. For best results, follow the directions on the seed packets.

You can start the seeds indoors, but you do not have to. If you want to see the magic of the seeds sprouting indoors, just follow these simple steps:

1. Gather the items needed: sunflower seed packets, potting soil, and containers such as paper cups, egg carton bottoms, or milk cartons cut in half.
2. Put a few inches of soil in each container.
3. Place a few sunflower seeds in each container, gently pushing them just below the soil line.
4. Moisten the soil. Too much water will make the soil soggy. Soggy soil promotes fungus and root rot.
5. Place the containers in a warm, sunny spot and wait for the seeds to germinate.
6. Do not let the seedlings grow too large before you transplant them. Their roots will become entwined, making it difficult to separate them without damage.
7. When the seeds have sprouted, transplant them outside to a location with full sun. Follow the directions on the seed packet for proper spacing. Plants are typically placed about 12 inches apart since they grow very large.
8. In September and October when the sunflower seeds ripen, leave the seed on the stalk and the birds will appreciate your efforts!

