



Feeding Wild Birds

Authors: Peter T. Bromley and Aelred D. Geis

Publication Number 420-006, posted April, 1998

Feeding Wild Birds

To the responsible person, the decision to feed wild birds is not a casual one. The dedicated bird feeder buys hundreds of pounds of feed each winter and at least a bird book and binoculars to identify and study the birds. Additionally, several times each week the food needs to be replenished, which over several months and years amounts to a substantial investment of time. Such a commitment carries with it the expectation of attracting a handsome, interesting variety of birds. Furthermore, most of us want to get the most for our time and money.

Selecting Bird Feed

There are many kinds of feeds available to attract birds. You can buy mixes or single types of feeds at supermarkets, livestock feed stores, garden supply stores, or through catalogs. The particular type of mix you put out influences the number and variety of birds that will use feeding places. Until recently, there has been little scientific information to guide the selection of bird feeds. Now we know much better what feeds attract or fail to attract different kinds of birds to feeders.

This information on relative attractiveness of bird feeds is based on 710,450 observations of birds choosing between two or more feeds at experimental feeders in Maryland, California, Ohio, and Maine. In these studies, black-striped sunflower and white prove millet (s and p following the bird names in Table 1) were used as standards. All other feeds were presented at experimental feeding tables along with one or both of these standards to measure relative attractiveness. The work was done under the direction of the Urban Wildlife Research Program of the United States Fish and Wildlife Service. However, the bulk of observations were made by volunteers.

The 21 kinds of seeds commonly used to feed birds are pictured and named in table 1. <http://www.ext.vt.edu/pubs/wildlife/420-006/seed.html>

The scientific basis for assigning ratings is explained in a footnote to the table. From the other viewpoint, Table 2 lists 18 kinds of birds that frequently visit feeders across the country, and their preferred foods. Many birds are generalists and will eat a variety of foods. However, even generalists have preferred foods. By presenting foods known to attract the birds you want to see, you will attract desired species and your feeders may be less attractive to unwanted birds, such as starlings.

Table 2. Preferred Foods of Common Birds.

American goldfinch	hulled sunflower seeds, niger seeds, and oil-type sunflower seeds.
Blue Jay	peanut kernels, black-stripe, gray-stripe, and oil-type sunflower seeds.
Brown-headed cowbird	white proso, red proso, German millet, and canary seed.
Cardinal	sunflower seeds of all types.
Chickadees	oil-type and black-striped sunflower seeds, peanut kernels.
Dark-eyed junco	red proso, white proso millet, canary seed, and fine-cracked corn.
Common grackle	hulled sunflower seeds and cracked corn.
Evening grosbeak	sunflower seeds and cracked corn.
House finch	In Maryland, oil-type and black-striped sunflower seeds, sunflower kernels and pieces, and niger. In California, white prove millet and flax also readily taken.
House sparrow	white proso millet, canary seed, and German ("golden") millet.
Mourning dove	oil-type sunflower seeds, white prove millet, niger, and German ("golden") millet.
Purple finch	sunflower seeds and kernels.
Starling	peanut hearts and hulled oats.
Song sparrow	white and red prove millet.
Tufted titmouse	peanut kernels, black-striped and oil-type sunflower seeds.
White-crowned sparrow	oil-type sunflower seed, sunflower kernels and pieces, white and red prove millet, peanut kernels and hearts, niger seed.
White-throated sparrow	oil and black-striped sunflower seeds, sunflower kernels and pieces, white and red prove millet, and peanut kernels.

Sunflower seeds attract most seed-eating birds. The most attractive sunflower seed is the black, oil-type. Another outstanding food is a type of millet, known as white prove or white millet. White millet attracts house sparrows and brown-headed cowbirds. However, when there are small sparrow-like birds around, such as juncos and song sparrows, white prove millet is needed. The common cereal grains- sorghum, wheat, cracked corn, oats,

and rice-rates significantly below black oil-type sunflower seed or white proso millet in feeding tests. Other relatively unattractive seeds are flax, canary, and rape. A common ingredient in mixes, peanut hearts, strongly attracts starlings. You can discourage house sparrows, brown-headed cowbirds, blue jays, and grackles while at the same time offering a moderately attractive food to cardinals and mourning doves by feeding safflower seeds. Safflower is of little interest to other bird species, however.

Rather than buying mixes, the bird feeder will spend his money more effectively by buying black, oil-type sunflower and white proso millet separately, in bulk from seed or animal feed dealers. Depending on the kinds of birds present, the amounts of these two best foods can be varied to attract the birds you want to see.

Presentation of Bird Foods

Having attractive bird feeds on hand is of course most important, but placement of those feeds is important too. Just as birds vary in size, shape, color, song, and preferred foods, so do birds differ in feeding behavior. Some feed almost exclusively in trees, others nearly always on the ground, and others are opportunists, feeding wherever they can find acceptable food. Using a variety of feeders, such as those shown on the cover illustration of this bulletin, makes sense.

Most common birds will visit platform feeders. They are simple to build, or you can buy hopper-style feeders that can be suspended by a wire or placed on a pole. Juncos, white-throated sparrows, fox sparrows, and towhees prefer to feed on the ground. These species will feed on seed kicked off platform feeders by other birds or on feed placed on the ground for them.

Hanging, tube-type feeders attract American goldfinches, chickadees, and a variety of other species. Tube feeders permit goldfinches to avoid competition with blue jays and grackles which take over platform feeders. Tube feeders will also attract pine siskins and red polls when they are in the area.

In general, ground feeders prefer white millet, whereas birds attracted to tube feeders prefer oil-type sunflower. Therefore, white millet and mixes rich in millet should not be used in tubes or other elevated feeders with small perching surfaces. Suet attached to tree trunks in wire baskets is attractive to woodpeckers and, unfortunately, starlings. In addition to food, birds readily use water placed near feeders.

Most people concentrate their feeding efforts during the winter months. Satisfaction comes not only from attracting good numbers of birds, but also because winter feeding helps birds survive the rigors of cold, icy, and snowy weather. Actually, feeding birds year-round is enjoyable. Because naturally produced seeds are uncommon in the spring and summer, flocks of gold finches and house finches visit tube feeders filled with oil-type sunflower seeds in the growing season. Cardinals, chickadees, and mourning doves

will visit daily. Young birds, often with clumps of down still attached, will come with their parents.

Many people believe once a feeding program is started that it must be maintained without interruption. However, birds in any locality visit several feeding sites daily and will waste little time at an empty feeder. Although abundant food at feeders during the winter helps birds, occasional periods of emptiness are unlikely to result in starvation.

Landscaping for Birds

The attractiveness of a feeding area is greatly enhanced by a landscape rich in trees and shrubs, both deciduous and evergreen. Bird feeders placed in areas with large lawns and few trees and shrubs attract few birds. Consider managing open areas as meadows rather than as lawns. A rich growth of grasses and flowering plants provides cover for nesting in the spring and summer and natural sources of seeds during the winter. These and other ideas on landscaping and specific information on tree and shrub varieties are presented in the following references.

Sources of Additional Information

Attracting Birds to Your Garden. 1975. S. Gellner, C. Russell, and P. Edinger. Sunset Books, Land Publishing Co., Menlo Park, CA.

Gardening with Wildlife. Published by the National Wildlife Federation, Washington, D.C. 20036.

Invite Birds to Your Home. Conservation Plantings for the Northeast, (PA-940). United States Department of Agriculture (USDA), Soil Conservation Service (SCS), Washington, D.C.

Invite Wildlife to Your Backyard. 1973. J. W. Thomas, R. O. Brush, and R. M. DeGraff. Reprinted from National Wildlife Magazine by the National Wildlife Federation, 1412 16th Street, N.W., Washington, D.C. 20036.

Landscaping for Birds. Audubon Naturalist Society, 8940 Jones Mill Road, Washington, D.C. 20015.

Planning for Wildlife in Cities and Suburbs. D. I. Leedy, R. M. Maestro, and T. M. Franklin. American Society of Planning Officials, 1313 East Sixtieth Street, Chicago, IL, and U.S. Fish and Wildlife Service, Washington, D.C.

Practical Wildlife Management. 1973. George V. Burger. Published by Winchester Press, N.Y.

Relative Attractiveness of Different Foods at Wild Bird Feeders. 1980. Aelred D. Geis. Special scientific report-wildlife; No. 233. U.S. Fish and Wildlife Service, Washington, D. C.

Songbirds in Your Garden. 1977. J. K. Terres. Hawthorn Books, N. Y.

Wildlife Habitat Improvement. National Audubon Society Nature Centers Division, 950 Third Avenue, New York, N. Y. 10022

For more information, contact the ORCC (@VRA 703/549-9263).
