

If you feed birds, you're in good company. Birding is one of North America's favorite pastimes. A 2006 report from the U.S. Fish and Wildlife Service estimates that about 55.5 million Americans provide food for wild birds.

	Chickadees Titmice Nuthatches	Finches	Cardinals Grosbeaks	Sparrows Blackbirds	Jays	Wood- peckers	Orioles Tanagers	Pigeons Doves
Sunflower	•	•	•	•	•	\langle		♦
Safflower	♦	\Diamond	\Diamond					
Corn				♦	•			•
Millet		♦		♦				♦
Milo					♦			♦
Nyjer		•						
Suet	•				♦	•	♦	
◆ Preferred ◇ Readily Eaten								

Wintertime—and the Living's Not Easy

In much of North America, winter is a difficult time for birds. Days are often windy and cold; nights are long and even colder. Lush vegetation has withered or been consumed, and most insects have died or become dormant. Finding food can be especially challenging for birds after a heavy snowfall.

Setting up a backyard feeder makes their lives easier and ours more enjoyable. To observe birds at a feeder, you don't need to brave the elements—you can watch from the comfort of your own home. Participants in the Cornell Lab of Ornithology's Project FeederWatch help scientists track changes in the abundance and distribution of winter bird populations, by

counting birds at their feeders during this winterlong survey. Great Backyard Bird Count participants provide valuable data with a much shorter time commitment—as little as fifteen minutes in mid-February!

Types of Bird Food

uring spring and summer, most songbirds eat insects and spiders, which are highly nutritious, abundant, and for the most part, easily captured. During fall and winter, nonmigratory songbirds shift their diets to fruits and seeds to survive. This is the time of year when bird-feeding enthusiasts roll out the welcome mat and set the table. The question is, what to serve? Most supermarkets and bird-feeding stores are stocked with bags, buckets, and cakes of many food types. You may find the task of

selecting the best foods daunting. To attract a diversity of birds, provide a variety of food types. But that doesn't mean you need to purchase one of everything on the shelf.

Which Seed Types Should I Provide?

Black-oil sunflower seeds attract the greatest number of species. These seeds have a high meat-to-shell ratio, they are nutritious and high in fat, and their small size and thin shells make them easy for small birds to handle and crack. (Striped sunflower seeds are larger and have a thicker seed coat.) Several studies, including our own Seed Preference Test, show that this high-energy food is the favorite of most birds that visit feeders. In fact, it is often wasteful to use a standard mix of sunflower.





milo, millet, oats, wheat, flax, and buckwheat seeds, since birds may eat the prized sunflower seeds and leave the rest. Uneaten seeds may foster growth of mold and bacteria.

The table shown in this BirdNote is based on studies conducted by the Cornell Lab of Ornithology and the U.S. Fish and Wildlife Service. Birds' feeding habits vary based on weather patterns, geographic region, season, and individual taste, so you may find exceptions to these guidelines.

In the table, "corn" refers to dried, whole-kernel corn, favored by jays, pigeons, doves, quail, and pheasants. Cracked corn, however, is easier to eat for blackbirds, finches, and sparrows. "Millet" comes in red and white varieties; most birds prefer white proso millet over red. "Nyjer," or thistle seed, is a delicacy for small

finches such as goldfinches, siskins, and redpolls. Nyjer seeds are small and expensive. Offer them in special nyjer feeders, with small mesh or tiny ports that prevent the seeds from spilling out. Some birds, most notably cardinals, appreciate safflower, which has limited appeal for starlings and House Sparrows (nonnative species), and squirrels. Many backyard birds (and squirrels) enjoy peanuts.

Although sunflower seeds are the overall favorite of tree-feeding species, most ground-feeding bird species prefer white millet or red milo to black-oil sunflower seed. Experiment to see what your birds like best!

Make it Yourself

As an alternative to commercial mixtures, which may have a high percentage of "filler seeds," you can create a low-cost mixture yourself. Pour one 25-pound bag of black-oil sunflower seed, one 10-pound bag of white proso millet, and one 10-pound bag of cracked corn into a clean trash barrel. Mix it with a broomstick, and replace the lid tightly. Always store birdseed in tight, waterproof containers. Metal containers prevent rodents from gnawing their way into your food supply.

Leftovers: For the Birds?

You don't have to limit your offerings to commercial birdseed. Some people save the seeds from squash and melons. This is a great way to put the seeds from Halloween pumpkins to good use. Some birds relish these seeds even more than blackoil sunflower. Spread them out on trays to air dry before placing them in your feeders or on the ground. If the seeds are sufficiently dry and free of mold, you can save them to use when winter comes. Smaller birds may have a tough time breaking open vegetable seeds, but if you run the seeds through a food processor first, little birds will be able to eat them with ease.

Some people throw out scraps of stale bread, cake, or doughnuts for their feathered visitors. Be sure the food is not moldy or it may harm the birds. Another caveat: table scraps may attract less-welcome visitors such as European Starlings, House Sparrows, rats, or raccoons. Attracting nuisance species can be a real problem in urban and suburban areas, so be considerate of your neighbors before feeding leftovers.

High-Energy Foods

ou can attract insect-eating birds such as chickadees, woodpeckers, and nuthatches to your yard by offering peanut butter or suet (beef fat). Birds in cold climates especially appreciate these high-energy foods.

Some people worry that birds will choke on sticky peanut butter. There's



no evidence that they do, but you can eliminate any risk by mixing peanut butter with corn meal or oatmeal.

The plain beef suet available at most supermarket meat departments is an excellent high-energy food. Suet can quickly become rancid in warm weather, but some commercial suet cakes and doughs, available in most stores that sell bird-feeding supplies, can be used year-round. Suet cakes often contain a mix of birdseeds or other ingredients. They're useful to have on hand when your local supermarket is out of suet. Suet is most easily and safely offered in plastic-coated wire cages.

Fruity Favorites

Birds such as robins, thrushes, bluebirds, and waxwings don't usually show up at feeders because seeds are not a major component of their diet. But you can sometimes tempt them to dine at your feeder by offering fruit. Soften dried raisins and currents by soaking them in water first. Mockingbirds, catbirds, tanagers, and orioles may also enjoy sliced apples, oranges, and other fresh fruit, or frozen berries. You can offer fruit from a plate or shallow bowl set on a platform feeder or on the ground.

Water, Water Everywhere

Infrozen water can be as hard for birds to find in winter as food. A dependable supply of fresh water will attract many birds to your yard, including species that don't normally visit feeders. A shallow, easy-to-clean birdbath is best—an upside-down garbage can lid or large frying pan works well. An immersion-style water heater can keep your birdbath unfrozen in the winter. Clean your birdbath often and keep it filled with fresh water. For more information, see BirdNotes: *Providing Water for Birds*.

Types of Feeders

The ideal bird feeder is sturdy enough to withstand winter weather, tight enough to keep seeds dry, large enough that you don't have to refill it constantly, and easy to assemble and keep clean. In general, seed-feeders fall into three categories: tray feeders, hopper feeders, and tube feeders. Tray feeders are typically placed close to the ground and attract ground-feeding birds such as juncos, sparrows, and towhees. Tray feeders also work well when mounted on deck railings, stumps, or posts. Hopper feeders are often hung from trees or attached to decks or poles. These feeders are especially good for larger species such as cardinals, jays, and grosbeaks. Tube feeders are typically suspended from trees and posts. They are excellent for finches, titmice, and chickadees.

Feeder Placement

Birds visiting feeders are often killed in collisions with windows. Feeders attached to windows or window frames, or placed within 3 feet of a window, are safest because birds are more likely to notice the glass, and if they don't, aren't flying at top speed if





hopper feeder

they do collide. Window feeders are often the easiest for us to observe and maintain.

If possible, place your feeder close to natural shelters such as trees or shrubs. Evergreens are ideal, providing maximum cover from winter winds and predators. Trees and shrubs can also provide good jumping-off places for squirrels that may be eyeing the seeds, and hiding places for cats that may be eyeing the birds. A distance of about 10 feet seems to be a happy compromise. You can provide resting and escape cover for ground-dwelling birds, such as Song Sparrows, by placing a large, loosely stacked brush pile near your feeders.

Feeder Maintenance

lean your feeders about once every two weeks, and more often during warm weather and times of heavy use. Using a sturdy brush to scrub them with soap and water is usually enough; you may wish to rinse in a weak bleach solution if there is evidence of disease in your vard. Rinse feeders well and allow them to dry thoroughly before refilling them with birdseed. Make sure you also periodically rake up birdseed hulls beneath your feeders. Decomposing hulls may harbor bacteria or mold that could spread diseases to your birds.

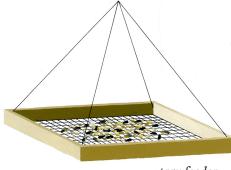
Bird-Feeding Concerns

Poorly maintained feeders may contribute to the spread of infectious diseases among birds. The feeders themselves can sometimes pose hazards too. Here are some helpful hints for successful bird feeding:

- Avoid overcrowding at feeders by placing numerous feeders several feet apart.
- Keep your feeding area and feeders clean.
- Keep food and food-storage containers dry and free of mold and insects.
- Check your feeders for safety.
 Sharp edges can scratch birds and lead to infections.

People wonder whether bird feeding causes birds to change their migratory behavior. Changing day length is the cue most birds use to begin migrating, not the availability of food. Peak migration time is late summer and fall, when many natural foods are most abundant. And so it is unlikely that feeding birds has any effect on migratory patterns. On the other hand, there is some evidence that a few nonmigratory species such as cardinals have expanded their ranges due in part to feeding.

Many people worry about what will happen to their backyard visitors if they go on vacation or suddenly cannot fill their feeders. Ideally, a neighbor or friend should stop by to restock your feeder. Otherwise, try to taper off gradually before you go. Don't fret if this isn't possible. In winter, natural food sources often disappear overnight when they are covered by snow or consumed by other animals. Birds have adapted accordingly-studies show that even birds with full access to feeders consume three-quarters of their diet elsewhere, and that when feeder birds are deprived of supplemental foods, they quickly revert to an all-natural diet. If your neighbors have feeders too, you can rest assured that your birds will not starve.



tray feeder

If You Build it, Will They Come?

It may take a while for birds to discover a new feeder. If you are not seeing birds within a few days of setting up your feeder, try sprinkling some seeds on the ground around the feeder to make the new feeding site more obvious. If seed in the feeder is blowing out or getting wet, there is a good chance that your birds are getting the same treatment. Your feeder may simply be too exposed. Moving it to a calmer, more sheltered spot may increase visits. In newly developed housing areas, birds may not feel sufficiently protected because trees and

shrubs may be small or few in number. Remember that bird populations fluctuate naturally from year to year. If you notice a scarcity of feeder birds this year, you may be surprised by an abundance of birds in another year or two

To join FeederWatch, call (800) 843– BIRD (United States only) or (607) 254–2473 or sign up online at www. FeederWatch.org

Visit www.birdcount.org to learn more about the Great Backyard Bird Count.

Other Resources

The FeederWatcher's Guide to Bird Feeding. Margaret Barker and Jack Griggs. New York: HarperCollins, 2000.

Audubon Society Guide to Attracting Birds. Stephen W. Kress. Ithaca, New York: Cornell University Press, 2006.

Wild About Birds. Carrol L. Henderson St. Paul, Minnesota: Minnesota Department of Natural Resources, 1995.



Hairy Woodpecker on suet feeder



To learn more about feeding birds in winter, visit

www.feederwatch.org www.allaboutbirds.org The Cornell Lab of Ornithology uses the best science and technology to discover more about birds and biodiversity.

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