



Above: Platform feeders are easy to build and offer a place for larger birds to feed. Previous page: Tube feeders made from plastic and filled with sunflower seeds will draw various birds, including cardinals and the common house finch. Place thistle seed in a tube feeder, with smaller feeding holes, and you have the perfect American goldfinch feeder.

Safflower: harder to find in the stores; use ONLY safflower seeds, no others, if you want to discourage starlings and squirrels.

Thistle: very small, thin black seeds; because of their size and the additional labor required to harvest them, thistle seed tends to be very expensive; attractive to finches.

Cracked Corn, Peanut Hearts, Oats, Raisins, etc: there are many optional food sources that attract sparrows, juncos, mockingbirds and other species. Most of these foods also attract squirrels and other mammals like deer or raccoons, which can become a neighborhood nuisance. Therefore, use "gourmet" bird mixes sparingly.

Seed "Mix" or Blend: this is the cheapest generic mix that is easy to find at the average grocery store or mammoth mart. But you get what you pay for: these mixes usually contain mostly millet and scant sunflower and are therefore not the best bang for the buck, because most of the seed is not eaten. Better to place your dollar on the opposite proportions, that is—a big bag of black-oil sunflower seeds with a few handfuls of the millet mix thrown in.

Feeder Designs

Choose your feeder based on what type of birds you want to attract and what type of seeds they prefer. Pay attention to quality of construction and durability-a good feeder should last several years, especially if it's protected from squirrels and the weather. Metal is usually strongest and holds up best to the elements, but avoid feeders with sharp edges; PVC-grade plastic is fairly tough and works well if the seed openings are protected by a surrounding piece of metal; wood is okay but doesn't last as long unless periodically re-treated on the outside with preservative or hung beneath a sheltered area.

Platform feeder: holds millet and other seed in an uncovered screen tray, which allows precipitation to pass through. Feeder can be suspended from a tree or pole, or made to look like a table that sits on four legs about 10 inches off the ground; useful for mourning doves and juncos.

Hopper feeder: a covered box that dispenses seed from slots in the sides; it can be mounted on a pole or suspended from a tree; good for cardinals and other birds which prefer sunflowers or a seed mix.

Thistle (or "Niger") feeder: vertical tube, usually plastic, with tiny slits in the side to dispense the seed. Use one with short perches to attract finches. Plastic mesh bag feeders are also available.

Suet feeder: a screened square or plastic mesh bag that holds hardened, rendered fat that's relished by woodpeckers, nuthatches, chickadees, and many other species. Offer suet in winter, because it can become rancid in warm weather. Also, birds consume the fat and store it in their bodies as a source of energy for warmth. True suet-which is the fat from around the kidneys of a livestock animal may be available at a butcher shop; it can be rendered down (melted), poured onto a cookie sheet, refrigerated to harden, and then cut into squares. Or, you can purchase suet commercially in ready-made cakes. You can also put bacon grease (melted down and then chilled in fridge) or lard in mesh bags like the ones used for onions. Try the "Bird Mix Recipe" on the next page for another variation.

Hummingbird feeder: a glass or plastic bottle containing sugar water that mimics nectar. Hummingbirds rely primarily on flowers for nectar and tiny insects; sugar water is merely a temporary, quick source of supplemental energy. [Mix 1 part sugar to 4 parts water in a pan, boil on a stove to kill spores in the sugar, then allow to cool to room temperature. The sugar water does NOT need to be colored red-it's the plastic trim on the feeder that should be red to catch the birds' attention. NEVER USE HONEY in the feeder, this contains a fungus that can harm hummingbirds.] The bottle usually screws into a red base designed to look like flowers; each "flower" has an opening through which the hummingbird can sip the "nectar." Look for a design that includes bee guards (a type of screen that goes over the openings) to discourage wasps. An ant trap is also effective—this is a small cup that is hung on the wire above the feeder; you put water in the cup so that ants trying to get down to the feeder will fall in the water. Hummingbird feeders are sometimes visited by red-bellied woodpeckers and yellow-bellied sapsuckers. RE-PLACE the sugar solution once a week to avoid spoilage.



Bluebird feeder: purchase mealworms from a local pet store and place them in a small clay or ceramic dish on a porch railing, or attach to a stand. Once bluebirds find the mealworms, they'll keep coming back for more. You can easily "raise" more mealworms by keeping some in a plastic container filled with dry oatmeal and a piece of apple or lettuce for moisture; the container will need air holes on top for ventilation.

Keep Feeders Clean

Since birds that congregate at feeders can more easily transmit diseases to each other while in close contact, clean your feeders once a month with a solution of one part chlorine bleach and nine parts of water (do not use bleach only). Let the solution come in contact with all surfaces for a few minutes, rinse well, then allow to air dry. Also, avoid letting food waste accumulate on the ground—periodically rake and remove the excess.

Bird Mix Recipe

1 part flour

3 parts yellow corn meal

2 parts bacon grease or lard (in solid form)

1. In a large bowl, mash the above together with a fork or your fingers until well-mixed into a paste.

2. To this mix you can add a variety of other, optional ingredients, such as the following: a few heaping tablespoons of peanut butter; a handful of raisins; a handful of shelled peanuts; a handful of bird seed; pieces of dried fruit; a handful of dry oatmeal; etc.

3. Smear the mix onto tree trunks or on the tops of fence posts; or, place in a mesh bag or commercial suet feeder and suspend from a tree limb.

Fruit in Summer

Fresh fruit can sometimes attract birds like tanagers and orioles which are only here for the breeding season in summer. Catbirds, robins, wrens and other bird species might visit fruit

> sources, too. Impale half an orange or apple on the twig of a tree or on a nail, or on the peg of a feeder designed for this purpose. Steam or soak raisins or currants, and offer them in shallow containers; waxwings and mockingbirds favor these. Discard uneaten fruit regularly to avoid attracting flies.

> > A hopper feeder al-

perfect feeder for larger birds like the northern cardinal.

lows seeds to fall,

as needed, from



Baffles and Squirrel-Proofing

To protect your feeders from squirrels that try to jump on top, install feeders at least 6 feet off the ground on a pole placed at least 10 feet away from trees, and cover the top of the pole with a large, upside-down, dome-like baffle. On the pole below the feeders install a conical or tubular-shaped baffle to keep snakes, raccoons and squirrels from climbing up. Another method is to suspend feeders from a long wire strung between two poles or trees, then slide lengths of PVC pipes or 2-liter bottles over the wire. Purchase feeders that are specially designed to deter squirrels. Examples include: hopper feeder with a specialized spring mechanism that closes the hopper when a squirrel alights; a feeder with a built-in electrical shocking device; or a feeder that is totally enclosed within a plastic-coated hardware cloth.





Above: The perfect draw for a hungry downy woodpecker is a small wire basket or screened piece of cloth filled with rendered fat, or suet mixed with various nuts and seeds.

Right: Growing sunflowers can help to brighten up a yard and offer a beneficial food source for hungry birds.

Discourage Mammals

Avoid feeding old bread and other kitchen scraps, as these items attract starlings and crows. Do not encourage mammals like deer and raccoons to feed on corn, apples, etc. in your yard—these species can become a neighborhood nuisance. Keep all bird seed stored in tightly covered containers out of the elements. Avoid leaving cat food and dog food outside. And one other important reminder: Keep Cats Indoors! Cats are non-native predators that yearly kill millions of birds, small mammals, reptiles, and many other wildlife species. Cats should not be allowed to roam free to wreak

such destruction; a bell around the neck does nothing to diminish a cat's predatory successes.

Learning More

Books

The Bird Feeder Book: How to Build Unique Bird Feeders from the Purely Practical to the Simply Outrageous, by Thom Boswell; c. 1995, Sterling Publishing; 144 pp.

The Bird Feeder Book: the Complete Guide to Attracting, Identifying and Understanding Your Feeder Birds, by Donald and Lillian Stokes; c. 1987, Little, Brown and Company, NY; 90 pp.

Bird Feeders: Step-by-Step Project Plans, by Ed Baldwin; c. 1996, Creative Homeowner Press; 104 pp.

Dick E. Bird's Birdfeeding 101: a Tongue-in-Beak Guide to Suet, Seed and Squirrelly Neighbors, by Richard E. Mallery, 1997, Bantam Doubleday Dell; 224 pp.

Enjoying Bird Feeding More, by Julie Zickefoose; c. 1995, Bird Watcher's Digest Press, Marietta, OH 45750; 32 pp.

The FeederWatcher's Guide to Bird Feeding, by Margaret A. Barker and Jack Griggs; c. 2002, HarperCollins Publishers.

How to Attract Birds, by John V. Dennis and Michael McKinley; c. 1995, The Scotts Company; published by Meridith Corporation-Ortho Books, Des Moines IA 50309; 96 pp.

My Recipes are for the Birds, by Irene Cosgrove; c. 1999, Doubleday; 80 pp.

Wild About Birds: The DNR Bird Feeding Guide, by Carrol L. Henderson; c. 1995, State of Minnesota, Department of Natural Resources, St. Paul MN (1-800-766-6000); 278 pp.

Web Sites

Bird Source (Audubon)—sponsors of the Great Backyard Bird Count, the national Christmas Bird Count, and e-Bird (a database for recording your observations), at www.birdsource.org/.

Bird Watcher's Digest—interesting FAQ's, articles, the how-to's of bird feeding, and much more about backyard birdwatching, at www.birdwatchersdigest.com/.

Project FeederWatch (Cornell Lab of Ornithology)—tons of good information "About Birds & Bird Feeding," at www.birds.cornell.edu/pfw/AboutBirdsandFeeding/abtbirds index.html.

Wild Birds Unlimited—click on "Education" for pages of tips and facts about bird feeding and bird behavior, at www.wbu.com/. □

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