At least 53 species of North American birds drink nectar—the naturally occurring sweet liquid produced by plants. Hummingbirds and orioles are the main nectar drinkers, but mockingbirds, grosbeaks, tanagers, and several warblers also enjoy sweet drinks from flowers and tree sap. You can bring these nectar-loving birds to your home with a few easy steps. Once they start visiting your garden, it’s likely some will stay the entire season and even return the following year.

Small birds, big appetites

Hummingbirds and other nectar eaters are some of the most intrepid migrants—they can travel thousands of miles each year. To accomplish these remarkable feats, they rely on the abundant supply of nectar usually found within flowers that have co-evolved with nectar eaters over thousands of years. Although hummingbirds are the tiniest of vertebrates, they have the largest brain and greatest appetite of all birds their size. Hummingbirds must eat once every 10 to 15 minutes and visit between 1,000 and 2,000 flowers per day to sustain their supercharged metabolisms.

Like other migrants, nectar-drinking birds are also vulnerable to extreme weather, disease, and predators. In addition, climate change and development are causing habitat loss, and the birds are threatened by collisions with windows and cell towers.

Backyard gardens, large and small, provide sanctuary for resident and migrating nectar-eating birds. Sugar water feeders provide nourishment, but they are most helpful as a supplement to the natural nectar obtained from flowers. It’s best to create gardens that provide real flower nectar as part of a complete habitat that offers shelter, nesting places, and water.

It may take weeks after you’ve set out flowers and feeders before nectar-loving birds discover your new garden. But if you’re lucky, they’ll show up much faster—sometimes within moments!
Creating a hummingbird- and oriole-friendly yard

Flowers, feeders, perches, insects, and water are the key ingredients to a healthy yard that will attract these amazing jewels. Since hummingbirds and orioles naturally frequent openings in the forest and forest edges, they are readily drawn to suburban and rural gardens that offer a mix of tall trees, shrubs, meadow, and lawn. During migration, they frequent parks and urban yards planted with bright flowers.

Start with a sketch of your yard

Indicate the location of your home and outbuildings. Include trees, shrubs, flower beds, and other features that may benefit hummingbirds and orioles. Use your sketch to determine the best location for your nectar gardens. Hummingbird gardens need not be large—even a window box or hanging planter will do.

Think vertically

Grow a cascade of nectar-rich plants by securing a trellis to determine the best location for your nectar gardens. Hummingbird gardens need not be large—even a window box or hanging planter will do.

Provide trees and shrubs

Hummingbirds and orioles use trees for perching and nesting. Large tree trunks may also provide a source of lichens, which many hummingbirds attach to the outsides of their nests with spider silk for camouflage. Hummingbirds usually nest in the forks of small, stiff tree branches; orioles favor the drooping branches of maples, poplars, willows, and conifers. If your garden does not include trees or shrubs, a dead branch with small perching twigs makes a good substitute. Locate these perches near your garden or sugar water feeders.

Learn when to expect your local hummingbirds

This will help you select plants that bloom when hummingbirds are most likely to visit and determine when to put out hummingbird feeders. Don’t worry that leaving feeders up too long will prevent hummingbirds from returning. Migration is triggered mainly by day length rather than food availability. In regions where winter freezes are rare, some hummingbirds and orioles may return, exhausted from their long travels.

Select plants that bloom at different times

This provides nectar throughout the growing season. This is especially important in early spring when migrants first return, exhausted from their long travels.

Plant patches of three or more individual plants of the same species

This will provide larger quantities of nectar. Also, prune the tips of flowering plants to encourage more flowers.

Avoid pesticides

Nectar eaters also benefit from eating protein-rich insects. Birds can ingest poisons when they eat contaminated insects, and systemic herbicides can make their way into flower nectar. Let birds be your natural insect control.

Using feeders

This will help attract the birds until your garden flowers are flourishing and lure birds up close for better viewing. To prepare a sugar water solution, mix one part white sugar with four parts water. Store any unused mixture in a refrigerator. Clean feeders every two or three days under hot running tap water, scrubbing them with a bottlebrush to eliminate fungus. Likewise, do not use honey in feeders, as this can grow mold. Also avoid red food coloring—it is unnecessary.

To help attract hummingbirds to new feeders, tie a cluster of plastic red flowers over the feeder entrance. Lure orioles and tanagers up close by offering halved oranges on spikes or grape jelly in special feeders or small bowls.

Choose plants with red, pink, or orange flowers, and with a tubular shape

Tubular flowers contain nectar at the bottom, which encourages these long-beaked birds to probe for their sweet meal. In general, flowers that rely on fragrance to attract insect pollinators are not good nectar sources, as most birds have a poor sense of smell.

Soft linings are important

Hummingbirds usually line their nests with soft plant fibers, so grow cinnamon fern (Osmunda cinnamomea), which has fuzzy stems, and pussy willow (Salix discolor), which has fuzzy flowers. If your yard contains thistle (Cirsium spp.) and dandelion (Taraxacum officinale), allow some to remain—their fluffy seeds provide nesting material.

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Provide a water feature

Hamelia patens, provide growing places for a variety of nectar plants like Salvia spp. (sages), Hyssops (Hyssopus officinalis), Paintbrushes (Castilleja spp.), Impatiens spp. (busy lizzies), Fire Pink (Silene virginica), Coral Bean (Erythrina herbacea), Coral Bells (Heuchera sanguinea), Coral Bells (Heuchera sanguinea), Fire Pink (Silene virginica), and Coral Bean (Erythrina herbacea).

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Nectar plants for northern gardens

Bearded Tongue (Penstemon spp.): perennial
Bee Balm (Monarda fistulosa, Monarda didyma): perennial with purple, pink, or red flowers
Cardinal Flower (Lobelia cardinalis): perennial; requires moist soil, partial shade
Columbine (Aquilegia canadensis): perennial with orange-yellow flowers
Coral Bells (Heuchera sanguinea): compact perennial with small red flowers
Jewelweeds (Impatiens spp.): annual
Madronne (Arbutus menziesii): western tree
Manzanitas (Arctostaphylos spp.): low shrubs and groundcover
Paintbrushes (Castilleja spp.): annuals and perennials
Hysops (Agastache spp.): perennial herbaceous
Salvias (Salvia spp.): perennials and annuals
Solomon’s-seal (Polygonatum biforum): perennial
Trumpet Honeysuckle (Lonicera sempervirens): well-behaved vine with orange flowers
Trumpet Vine (Campsis radicans): orange or yellow flowers on large vine requiring substantial support
Twinberry (Lonicera involucrata): low-growing, shrubby vine

Nectar plants for southern gardens

Coral Bean (Erythrina herbacea): southern shrub or small tree
Fairy Dust (Calliandra eriophylla): southwestern shrub, blooms year-round
Fire Pink (Silene virginica): bright red flowered perennial
Indian Pink (Spigelia marilandica): bright red flowered perennial
Red Buckeye (Aesculus pavia): small southeastern native tree with bright red flowers
Standing Cypress (Ipomopsis rubra): southern biennial or perennial

*Check with local nurseries to determine tolerance for temperature extremes.
Bird feeders are an excellent way to attract a bevy of birds to your property. There are a variety of feeders to accommodate specific types of birds and their diets. Birds usually feed at different heights, and having multiple feeders will not only attract a variety of species, it will also help avoid feeder congestion. When placing feeders close to windows so that you can enjoy the action, be aware that large picture windows may result in collisions. Here are Audubon’s picks for six feeders, and a little advice on where to hang them.

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Visit Audubon online for more information and tips on creating a bird-friendly yard.

www.audubon.org
GROUND FEEDERS
These simple screen-bottomed trays typically sit several inches off the ground or your deck and help to keep grain or seeds and bird droppings from coming in contact with each other. Some feeders have covers to keep out snow; others have wire mesh to keep out squirrels and large birds like crows. Ground feeding tables should be placed in open areas at least 10 feet from the nearest tree or shrub to give birds a chance to flee predators. Doves, juncos, sparrows, towhees, goldfinches, and cardinals are all likely to visit ground feeders. Avoid using ground feeders if cats are apt to pounce from nearby shrubs.

SUNFLOWER SEED TUBE FEEDERS
If you are going to put out just one feeder, this is your best choice. Be sure to select a model with metal ports around the seed dispensers to protect the feeder from House Sparrows and nibbling squirrels. Hang the feeder at least five feet off the ground and try to position it near a window where you can enjoy the visitors, which are likely to include chickadees, titmice, nuthatches, goldfinches, siskins, and Purple and House Finches. Reduce the risk of bird collisions by placing the feeder less than three feet from a window or more than 30 feet away.

SUET FEEDERS
Suet is popular with titmice, chickadees, nuthatches, and woodpeckers. Wrens, creepers, and warblers will also occasionally peck at suet. While you can hang suet chunks in a mesh onion bag, you can also purchase cage feeders. Some people like to make their own suet “puddings” by grinding the suet and adding seeds, and create homemade suet feeders by packing the mixture into the crevices of large pine cones. Suet feeders can be hung from trees, from poles near other feeders, or from a wire stretched between trees. Also available for warm weather suet feeding are “no melt” suet cakes.

HOPPER FEEDERS
Hopper feeders will keep several pounds of mixed seed dry and ready for hungry birds. Birds hopping on the feeder trigger the release of the seeds. Hopper feeders should be positioned on a pole about five feet off the ground, or hung from a tree branch. They will draw all the species that tube feeders attract, along with larger birds like jays, grackles, Red-winged Blackbirds, and cardinals.

NYJER® (THISTLE) FEEDERS
Especially designed to dispense Nyjer® seed, also known as thistle seed, these feeders have tiny holes that make the seed available only to small-beaked finches such as goldfinches, redpolls, and Pine Siskins. Thistle-seed-dispensing bags are not recommended, since squirrels can easily tear holes in them and waste this expensive seed. Hang your thistle feeder from a tree or place it on a five-foot pole near other feeders, taking care to protect it from squirrels with a special baffle.

NECTAR AND FRUIT FEEDERS
Nectar feeders will help attract hummingbirds, orioles, and other nectar-eating birds to your garden until your garden flowers are flourishing. To prepare a sugar water solution, mix one part white sugar with four parts water. Bring the mixture to a boil to sterilize it and dissolve all of the sugar. Clean feeders every two or three days under hot running tap water, scrubbing them with a bottlebrush to eliminate molds or fungus. Tie a cluster of plastic red flowers over the feeder entrance to help attract hummingbirds to new feeders. Lure orioles and tanagers by skewering halved oranges onto a spike.
While most wild birds rely on wild foods for the bulk of their meals, more than 100 North American species supplement natural foods with birdseed, suet, fruit, and nectar obtained from feeders. Bird feeding can benefit birds while also providing pleasure for people throughout the year. Feeders benefit birds most during the winter, when natural food supplies are scarce. However, additional species visit feeders during spring and fall migrations, and some nesting birds utilize feeders during the summer.

How to attract birds to your feeders

Like Us, Birds Need Food, Water, and Shelter
To keep birds coming back to your feeders, provide them with three essential elements: the right variety of quality seed, a source of fresh water for drinking and bathing, and ample cover, preferably provided by native plants. Native plants also provide potential nesting sites and a source of natural food. Bird feeders can present some risks, potentially increasing the chances of window collisions, predation, and exposure to disease.

Locate Feeders at Different Levels
Sparrows, juncos, and towhees usually feed on the ground, while finches and cardinals feed in shrubs, and chickadees, titmice, and woodpeckers feed in trees. To avoid crowding and to attract the greatest variety of species, provide table-like feeders for ground-feeding birds, hopper or tube feeders for shrub and treetop feeders, and suet feeders well off the ground for woodpeckers, nuthatches, and chickadees.

Offer Different Seeds in Different Feeders
A variety of seeds will attract the greatest variety of birds. To avoid waste, offer different seeds in different feeders. Black-oil sunflower seed appeals to the greatest number of birds. Offer sunflower seeds, Nyjer® (thistle) seeds, and peanuts in separate feeders. When using blends, choose mixtures containing sunflower seeds, millet, and cracked corn—the three most popular types of birdseed. Birds that are sunflower specialists will readily eat the sunflower seed and toss the millet and corn to the ground, to be eaten by ground-feeding birds such as sparrows and juncos. Mixtures of peanuts, nuts, and dried fruit are attractive to woodpeckers, nuthatches, and titmice. Relatively few species prefer milo, wheat, and oats, which are featured in less expensive blends.
Homemade recipes to add to your bird feeders

**Suet Feeding**
Suet (beef fat) attracts insect-eating birds such as woodpeckers, wrens, chickadees, nuthatches, and titmice. Place the suet in special feeders or net onion bags at least five feet above the ground to keep it out of the reach of dogs, squirrels, etc. Although suet is particularly helpful during cold weather and migration, when birds need extra fat reserves, “no melt” suet cakes are now available for use in warmer weather.

**Mix Peanut Butter and Cornmeal**
Peanut butter is a good substitute for suet in the summer. Mix one part peanut butter with five parts cornmeal and stuff the mixture into holes drilled in a hanging log or into the crevices of a large pine cone. This all-season mixture attracts woodpeckers, chickadees, titmice, and occasionally warblers.

**Provide Fruit for Berry-Eating Birds**
Fruit specialists such as robins, waxwings, bluebirds, and mockingbirds rarely eat birdseed. To attract these birds, soak raisins and currants in water overnight, then place them on a pole feeder, or purchase blends with a dried fruit mixture. To attract orioles and tanagers, skewer halved oranges onto a spike near other feeders, or provide nectar feeders.

**Provide Nectar for Hummingbirds**
Make a sugar solution of one part white sugar to four parts water. Boil briefly to sterilize and dissolve sugar crystals (no need to add food coloring). Feeders must be washed every few days with very hot water and kept scrupulously clean to prevent the growth of mold.

**Storing Seed and Cleaning Your Feeders**

**Store Seed in Secure Metal Containers**
Store seed in metal garbage cans with secure lids to protect it from squirrels and mice. Keep the cans in a cool, dry location; avoid storing in the heat. Damp seeds may grow mold that can be fatal to birds. Overheating can destroy the nutrition and taste of sunflower seeds. For these reasons, it’s best not to keep seed from one winter to the next.

**Clean Feeders, Collect Spilled Grain and Hulls**
Unsated seed can become soggy and grow mold. Empty and clean feeders twice a year (spring and fall)—more often if they are used during humid summers. Using a long-handled bottlebrush, scrub them with dish detergent and rinse with a powerful hose; then soak them in a bucket of 10 percent non-chlorine bleach solution, rinse well, and dry in the sun. In early spring, rake up spilled grain and sunflower hulls.

Keep feathered visitors safe

**Locate Feeders to Reduce Window Collisions**
In the United States, approximately one billion birds die from flying into windows each year. Reduce the risk of bird collisions by placing feeders less than three feet from a window or more than 30 feet away. Mobiles, opaque decorations, and fruit tree netting outside windows also helps to deflect birds from the glass.

**Discourage Squirrels from Consuming Suet Foods**
Squirrels are best excluded by placing feeders on a pole in an open area. Pole-mounted feeders should be about five feet off the ground and protected by a cone-shaped baffle (at least 17 inches in diameter) or a similar obstacle below the feeder. Locate pole-mounted feeders at least 10 feet from the nearest shrub, tree, or other tall structure. Squirrel feeders stocked with blends that are especially attractive to squirrels and chipmunks can reduce competition for high-priced foods offered at bird feeders. Locate squirrel feeders far from bird feeders to further reduce competition.

**Keep Cats Indoors**
Cats kill hundreds of millions of birds annually in the United States, often pouncing on ground-feeding birds and those dazed by window collisions. Responsible and caring cat owners keep their cats indoors, where they are also safer from traffic, disease, and fights with other animals. Outdoor cats are especially dangerous to birds in the spring, when fledglings are on the ground. Bells on cat collars are usually ineffective for deterring predation.

**Keep Bird Feeders Full**
Birds visit feeders most often in the early morning, and again just before dusk. They use feeders less often in the afternoon and during rainy weather. In contrast, snow-covered ground forces sparrows and junco's to congregate at feeders as these species typically feed on bare ground.

**Does Feeding Birds Prevent Them From Migrating On Time?**
Seasonal changes in the length of days, rather than an abundance of food, determine when birds will begin to migrate. Migrations begin in the fall as days shorten (when natural food is still abundant) and commence again in the spring as days lengthen.

**Will Birds Suffer If Feeders Go Empty?**
Natural food supplies are typically exhausted during winter, as birds consume all the seeds and fruits at one location before moving on to the next. Similarly, if backyard feeders go empty while homeowners are on vacation, birds will look elsewhere for food. If your neighbors are also providing food, birds from your feeders will likely spend more time feeding at their feeders. Since feeders only supplement natural foods, most species will not suffer if feeders go empty for days or even weeks at a time.

**How Soon Will Birds Find New Feeders?**
It may be a matter of hours before birds discover new feeders—or a matter of weeks. The variation depends on the distance to bird habitat, the density of nearby feeders, and the kinds of birds that might chance on the new feeder (chickadees, titmice, and House Sparrows are especially quick to locate new feeders). If there are many feeders in your neighborhood, birds may find new feeders more readily, as they already associate feeders with an easy meal. If birds are slow to find your feeders, scatter sunflower seeds on top of the feeders and on nearby surfaces such as bare soil. Bird decoys may help to lure the first visitors, and other birds will soon notice the new food source.

**What Are The Best Times and Weather Conditions to Watch Feeders?**
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Audubon Guide to Birdseed

More than 100 North American bird species supplement their natural diets with birdseed, suet, fruit, and nectar obtained from feeders. Bird feeding can benefit birds and also provides great birdwatching in your own backyard. Different birds are attracted by different kinds of seed, so try offering a variety in separate feeders. Just make sure that the seed is compatible with both the feeder and the birds you hope to attract; homemade recipes offer even more options.

Offer a variety of seeds

A variety of seeds will attract the greatest variety of birds. To avoid waste, offer different seeds in different feeders. Black-oil sunflower seed appeals to the greatest number of birds. Offer sunflower seeds, Nyjer® (thistle) seeds, and peanuts in separate feeders.

When using blends, choose mixtures containing sunflower seeds, millet, and cracked corn—the three most popular types of birdseed. Birds that are sunflower specialists will readily eat the sunflower seed and toss the millet and corn to the ground, to be eaten by ground-feeding birds such as sparrows and juncos. Mixtures of peanuts, nuts, and dried fruit are appealing to woodpeckers, nuthatches, and titmice. Relatively few species prefer milo, wheat, and oats, which are featured in less expensive blends.

Quick Tip

About Audubon

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Best bird seed for backyard birds

**SUNFLOWER SEEDS**
Black-oil sunflower seed is preferred by many small feeder birds, especially in northern latitudes. Striped sunflower seed is also readily eaten, especially by large-beaked birds. Hulled sunflower seed is eaten by the greatest variety of birds; it attracts jays, Red-Bellied Woodpeckers, goldfinches, Northern Cardinals, Pine Grosbeaks, titmice, nuthatches, and grackles.

**MILLET**
White millet is the favorite food of most small-beaked ground-feeding birds; red millet is also readily eaten. Millet attracts quail, doves, juncos, sparrows, towhees, cowbirds, and Red-winged Blackbirds.

**CRACKED CORN**
Medium cracked corn attracts many kinds of ground-feeding birds, but it is prone to rot, since the interior of the kernel readily soaks up moisture. Feed small amounts, mixed with millet, on feeding tables or from watertight hopper feeders. Avoid fine cracked corn, since it quickly turns to mush; coarse cracked corn is too large for small-beaked birds. Cracked corn attracts quail, doves, juncos, and towhees.

**SAFFLOWER SEEDS**
Safflower seed is readily eaten by cardinals, grosbeaks, sparrows, and doves; starlings. House Sparrows, and squirrels usually find it less appealing than sunflower seed.

**NYJER® (THISTLE)**
A preferred food of American Goldfinches, Lesser Goldfinches, House Finches, and Common Redpolls. Nyjer® is sometimes called “black gold,” because it can be expensive compared with other birdseed. Do not confuse it with prickly thistle, a pink-flowered weed used by goldfinches to line their nests.

**SUET AND BIRD PUDDINGS (BEef FAT AND SEED)**
This mixture attracts insect-eating birds such as woodpeckers, wrens, chickadees, nuthatches, and titmice. Place the suet in special feeders or net onion bags at least five feet above the ground to keep it out of the reach of animals. Although suet is particularly helpful during cold weather and migration, when birds need extra fat reserves, “no melt” suet cakes are now available for use in warmer weather.

**PEANUTS**
Whole and crushed peanuts attract woodpeckers, jays, chickadees, titmice, bushtits, nuthatches, Brown creepers, wrens, kinglets, Northern Mockingbirds, Brown Thrashers, starlings, and Yellow-rumped and Pine Warblers. Provide these in tube-shaped, metal mesh feeders.

**MILO, WHEAT, OATS**
These agricultural products are frequently mixed into low-priced birdseed blends. Most birds discard the unpeeled seed in favor of other food, which leaves it to accumulate under feeders, where they may attract rodents. In the Southwest, however, milo attracts pheasants, quail, and doves.

Homemade recipes to add to your bird feeders

**PEANUT BUTTER PUDDING**
Peanut butter is a good substitute for suet in the summer. Mix one part peanut butter with five parts comminual and stuff the mixture into holes drilled in a hanging log or into the crevices of a large pine cone. This all-season mixture attracts woodpeckers, chickadees, titmice, and occasionally warblers.

**FRUIT FOR BERRY-EATING BIRDS**
Fruit specialists such as robins, waxwings, bluebirds, and mockingbirds rarely eat birdseed. To attract these birds, soak raisins and currants in water overnight, then place them on a table feeder, or purchase seed blends with a dried fruit mixture. To attract orioles and tanagers, skewer halved oranges onto a spike near other feeders, or provide nectar feeders.

**NECTAR FOR HUMMINGBIRDS**
Make a sugar solution of one part white sugar to four parts water. Boil briefly to sterilize the mixture and dissolve the sugar crystals (there’s no need to add red food coloring). Feeders must be washed every few days with very hot water and kept scrupulously clean to prevent the growth of mold.

Quick reference seed and food chart

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<th>SPECIES</th>
<th>Black-oil Sunflower</th>
<th>Striped Sunflower</th>
<th>Nyjer® (Thistle)</th>
<th>Peanuts</th>
<th>Tree Nuts</th>
<th>Fruit</th>
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