

December, the Doorway to Winter: Feeding Birds, A Brief History

One of the most intimate, rewarding interactions with nature that we can experience is to feed birds. People have been tossing crumbs and scraps to wild birds throughout the ages to attract them. Sometimes it was to ensnare them, but many times it was out of concern for their welfare, especially in winter. If you enjoy birds, then there's no better way to get a close-up look at these winged messengers of joy.

In North America, many Indigenous people fed dried corn to turkeys. Thoreau tossed old corn out his back door in the mid-1800s to attract and feed birds at Walden Pond. By the late 1880's, intentionally feeding birds became more widespread with the conservation movement to save birds from ending up as decorations on ladies' hats. A woman named Florence Merriam Bailey was very influential activist and published *Birds Through an Opera Glass*, one of the first field guides to common birds. She enthusiastically promoted the use of bird feeders to attract birds to our homes.



By the end of the 19th century, open platform feeders came into vogue, then window-feeding trays in the early 1900's when bird feeding was encouraged by the popular Audubon Society. By 1910, more sophisticated bird feeders that minimized waste were invented and by the 1920's commercial bird feeders of every sort were for sale. Once Roger Tory Peterson revolutionized bird identification with his monumental *Field Guide to the Birds* in 1934, bird watching along with bird feeding spread like wildfire throughout the nation. Today feeders that cater to specific species and deter unwanted visitors like squirrels continue to be developed and sold by the millions. Recent figures estimate that \$4 billion a year is spent on feeders and seed in the United States alone. More than 55 million people put out more than a billion pounds of seed each winter.

Does Feeding Actually Benefit Birds?

[Project Feederwatch](#) is a citizen science bird watching project that is directed by the Cornell University Lab of Ornithology in Ithaca, New York. The program has been collecting standardized data about birds that visit feeders for 34 years! It's a program that any bird watcher (including you) can participate in by counting birds that come to feeders for science.



Data from Project Feederwatch shows that birds, especially urban species do [benefit](#) from the seed provided in backyard feeders. There is no question that birds are more likely to survive winter if they get enough food. Based on conditions and habitat, some species may have a harder time than others finding enough natural sources of food, especially in an urban environments. Scientists have determined that in the dead of winter when its bitterly cold and with thick ice and [snow cover](#), the numbers of birds that survived increased from being able to come to feeders. But they also found that even in the worst conditions the birds don't become solely dependent upon the feeders. Birds continue to seek multiple sources of food no matter what the conditions, so the best way to think about feeders is that they supplement diets. And that's a good thing for birds.

The most serious downside of feeders is the spread of disease. If a bird is infectious, then they spread disease to other birds at feeders. This risk can be minimized with proper maintenance and cleaning. It takes commitment on our part to provide food safely. Learn about [best practices](#) for keeping feeders clean.

Common Feeder Birds

Birds that stay in the northeast year-round have to adapt to a winter diet that consists primarily of seeds and dried fruits. By understanding what they need to eat in winter, backyard birders can supplement wild bird diets during the coldest months of the year. The most [common winter birds](#) that visit feeders in the northeast include seedeaters like finches, sparrows, titmice, blue jays, woodpeckers, chickadees, cardinals, juncos, crows, and nuthatches. Birders in more northern regions may have pine siskins, grosbeaks and red crossbills visit their feeders in winter. Because natural food sources can be unpredictable, there is always the possibility of unexpected visitors showing up. The Lab of Ornithology has a fantastic [online tool](#) for learning about the birds that visit feeders and what they eat.



Types of Food

If you only have one bird feeder and want to know what the best possible seed is to fill it with, the answer is black-oil sunflower seed. Black-oil sunflower seeds attract the greatest number of species as these seeds are packed with nutrition and are tasty! They are composed of about 30% fat and 15% protein, both essential nutrients for surviving long periods of freezing temperatures. Their small size and thin shells make them easy for small birds to manipulate and crack open with their beaks. Striped sunflower seeds are good for the larger birds like blue jays as they are big seeds and have a thicker seed coat that bigger birds can handle. Smaller birds have a hard time accessing the nutmeat.

It is often a waste of seed and money to buy a bag of mixed seeds from your grocery store shelves. These standard mixes contain sunflower, milo, millet, flax, and buckwheat seeds. Since birds favor the sunflower seeds, they often eat them and just leave the rest. Uneaten seeds may grow mold and bacteria and attract unwanted furry pests when they litter the ground and don't get eaten.

Dried corn is favorite of blue jays, pigeons, doves, quail, pheasants, and wild turkeys. Cracked corn is easier to eat for blackbirds, finches, and sparrows. Another winter bird favorite is the peanut. Again, cracked peanuts are easier to eat than whole.

A tiny seed that seed that attracts goldfinches, siskins, and redpolls is "thistle" which is really from a plant called nyjer. These seeds are small and expensive and should be offered in special nyjer feeders. Nyjer or thistle feeders are often made of mesh with tiny ports that prevent the seeds from spilling out.

Types of Bird Feeders

1. Tube feeder

To attract the greatest number of species in the winter, it is best to have a number of different [bird feeders](#) available. But if you hang just one kind of feeder, the tube feeder is it. Choose a model that is easy to fill and clean with a top that covers the seeds to keep them dry. One with metal ports around the seed dispensers will help keep squirrels from chewing through the tube. Hang it on a pole at least 5 feet off the ground with a squirrel guard around the pole to deter squirrels and 3 feet (or 30-plus feet) from a window to avoid bird collisions. It's best not to place feeder on a tree branch as squirrels will never leave. There are tube feeders that are spring loaded and the portals close when the weight of a squirrel is sensed. **Best seed type: black oil sunflower.**



2. Hopper feeder

With hopper feeders you can keep an abundant supply of seed available and dry for visiting birds. The weight of the arriving birds triggers the release of seeds. Position this feeder on a hook on a pole about 5 feet off the ground with a squirrel guard to help deter the furry friends.

Best seed types: black oil sunflower, peanut, cracked corn.

3. Suet feeder

Hang suet in mesh onion bags or purchase a metal or wooden cage feeder. You can make your own suet "pudding" by smashing seeds into suet. Create homemade suet feeders by packing the mixture into the crevices of large pinecones. Suet feeders are the best way to attract woodpeckers.

Best seed types: suet dipped in black-oil sunflower seed.



4. Thistle or nyjer feeder

Nyjer is not a kind of thistle. Nyjer is the seed of the African yellow daisy, *Guizotia abyssinica*. The birdseed was originally called Niger, referencing Nigeria, the plant's geographic origin. The seeds are tiny like those of thistle, hence the name. Nyjer feeders are made of mesh and make seed available only to small-beaked finches. Hang them from a tree or place on a 5-foot pole near other feeders. Goldfinches love these.

Best and only seed type: nyjer (aka thistle) seed.

5. Platform Feeder

These are basically trays that hold food. Sometimes there is a storage box of food that drops onto the tray as the birds use it up. Hang these from poles or connect onto a pole to make squirrel access more difficult. **Best seed types: sunflower seed, peanut, corn.**



Feeding Tips

- ❗ Feeders will be most [useful in the winter](#) if they have a wide cover over feeding ports, perches, and trays. The cover should extend several inches over the edge of the feeder to provide protection from most bad weather.
- ❗ Locate feeders to reduce bird/window collisions. In the United States an estimate of one billion birds die from flying into windows each year. You can reduce the risk by placing feeders just three feet away from windows. This seems counter-intuitive, but birds need time to build up speed after flying off a perch. If they hit a window within 3 feet, they can usually survive the impact. Either three feet or a safe distance of more than 30 feet away is best. Adding opaque decals onto windows and placing moving mobiles outside windows can also help prevent collisions.
- ❗ Discourage squirrels from eating all the food! Squirrels are best excluded by placing feeders on poles in an open area. Pole mounted feeders should be about 5 feet off the ground and protected by a cone-shaped guard at least 17 inches in diameter below the feeder. Locate pole-mounted feeders at least 10 feet from shrubs and trees. You can also make a squirrel feed in another location to deflect the furry visitors.
- ❗ Keep cats indoors! Cats kill hundreds of millions of birds every year. Outdoor cats are a super threat to birds in late spring when fledglings are on the ground.
- ❗ Provide habitat for birds around the borders of your yard or in islands of vegetation. Birds love to take seeds from a feeder and head to a protected location to enjoy their meal. Here is [guide](#) to creating a garden that will make your yard a haven for birds.

Activity: Observe and Count Birds at a Feeder via an online Bird Cam

The Cornell University Lab of Ornithology in Ithaca, New York is a world authority for all things bird. They are a premier research and education institution dedicated to ornithology. One of the resources available at the Lab are online [bird cams](#) that allow online bird watchers to follow various species in real-time around the world. The Lab has a great collection of bird feeders for common birds in the Northeast that are also available to watch online.

For this activity, visit [Cornell Lab's FeederWatch](#) during daylight hours and check out the types of feeders being used, seed available, and birds that visit the feeder.

Now choose a two-day period back-to-back when you can log on to watch the feeder cam and observe the bird feeders. During those two days choose at least a 10-minute period each day to observe and count all the birds that come to the feeders.

Use the species photos and information at the bottom of the page to identify the birds that visit the feeder. You can also use the online [tool](#) for common feeder birds to help identify the birds. Another bird identification tool that is available as a mobile App is [Merlin](#). This App provides all kinds of photos and sound identification assistance as well.

Make a tally of the species you see and the number of each species you see during the two ten-minute periods. Birds will come and go. Count the largest number of each species that are on or under the feeder or visible in the area at the same time within your counting period. That largest number is considered the accurate count of a species during the observation period. Taking the largest number at one time is the way to compensate for overcounting.

With this activity you have had an introduction on how to make observations for Project FeederWatch. Now read more about [Project FeederWatch](#). Consider adding a bird feeder to your yard or school so you can enroll in the program and make bird feeder observations for science.

Additional Resources

- [Guide to Winter Bird Feeding](#)
- [Why Feed Birds?](#)
- [Online Tool for Birds, Feeders, and Seeds](#)
- [Audubon Guide to Bird Feeding](#)
- [How to Choose the Right Feeder](#)
- [How to make a Bird-friendly Garden and Yard](#)

Extending the Learning with Language Arts Connections

Henry David Thoreau Resources

Walden Pond is the centerpiece of Thoreau’s Walden Woods and is the focus of Thoreau’s most famous piece: *Walden, (Life in the Woods.)* The writer, transcendentalist and philosopher, Henry David Thoreau, lived on the shores of Walden Pond in a rustic cabin for two years, two months and two days, beginning in 1845. His journals include observations of nature and what he learned while living there. It is considered an American classic and chronicles a voyage of self-discovery and self-reliance.

The piece is credited with helping to inspire awareness and respect for our natural environment and contains many passages that have been quoted by others. For example, this quote could be used in this article about feeding the birds, or in one that focuses on native plants: “Shall I not rejoice also at the abundance of the weeds whose seeds are the granary of the birds?” (Walden)

To visit Walden Pond, [the National Park Service provides information](#) about this Massachusetts location.

Learn more about Walden Pond [here](#).

Learn more about Henry David Thoreau [here](#).

The Stanford Encyclopedia of Philosophy organizes scholars from around the world in philosophy and related disciplines to create and maintain an up-to-date reference work.

For more ideas contact Kate Reilly, Manager of Education, Duke Farms. kreilly@dukefarms.org.

Photos

Bird photos courtesy of Cornell Lab of Ornithology Macaulay Library

Black-oil sunflower seeds courtesy of Google Free Images