

Living with Wildlife

Winter Bird Feeding

Winter can be a difficult time for wildlife. Most wild birds rely primarily on wild food sources for their survival. However, many species come to feeders to supplement their wild diet, especially during severe and extreme weather. Some of the hardships wildlife faces today come from changes in habitat brought about by human activities. Cities and towns have removed trees and shrubs where wildlife used to find food and shelter.

These changes have made survival more difficult for many birds. Although feeders can benefit individuals during weather extremes, they do not usually affect population numbers of birds. Nor can supplemental feeding compensate for the loss of habitat. But a feeding program at home, school, a hospital, or retirement home can add to personal enjoyment and sense of well-being, and foster an appreciation for nature and learning. You can also participate in feeder research (see Project FeederWatch at <http://www.birds.cornell.edu/pfw>).

This pamphlet describes ways to feed birds, avoid problems, and enhance your enjoyment of some of Washington's most beautiful creatures.



Mourning dove

Photo credit: North Fork Audubon Society

Birds At Your Feeder

Birds, like people, have preferences for different foods. These foods can be offered individually or in combination to help attract or discourage certain bird species. Black-oil sunflower seeds appeal to the greatest number of species (Table 1).



Table 1. Preferred foods of some of Washington's most common winter birds.

Species	White millet	Red millet	Black-oil sunflower	Hulled sunflower	Peanut kernel	Thistle (nyjers' seed)	Cracked corn	Suet
California Quail	♦	♦					♦	
Mourning Dove	♦	♦	♦				♦	
Band-tailed Pigeon			♦				♦	
Woodpeckers			♦					♦
Northern Flicker			♦					♦
Steller's Jay			♦		♦			♦
Chickadees			♦					♦
Bushtit								♦
Nuthatches			♦					♦
Wrens								♦
Evening Grosbeak			♦					
Finches	♦		♦	♦				
Pine Siskin			♦			♦		
American Goldfinch	♦	♦	♦	♦		♦		
Spotted Towhee	♦		♦			♦		
Dark-eyed Junco	♦		♦					
Sparrows	♦		♦					
Red-winged Blackbird	♦		♦					

Kinds Of Food

Seed

Seeds are the most common food provided at feeding stations. They are rich in carbohydrates and calories and supply valuable energy during cold weather. The black oil-type sunflower seed is a favorite at feeders. It is high in energy and easy to crack. Thistle seed, also called nyjer, is highly favored by siskins and goldfinches.

Commercial seed mixes contain mostly cheap filler seeds and grains, such as red millet, oats, flax, and wheat, which are ignored and scattered on the ground by most birds while searching for seeds they like. This creates a mess, increases your feeding costs, and attracts rats and mice. Avoid mixes with these unattractive seeds and grains. Commercially bagged seed mixes in stores not specializing in bird care or feeding may also have been sitting on the shelf for a long time and lost nutritional value or become rancid.

We recommend you buy seed varieties separately. You can put each seed type in different feeders so the birds can choose their favorite and experiment with your own seed mixes. Mixes generally attract birds that use platforms or ground feed. You can find seeds at feed stores and stores catering to bird enthusiasts. Your local Audubon Society Chapter may also supply seed or know where to find it.

Suet – Supply only during cool to cold weather

Most suet is beef kidney fat. It provides an alternate source of high energy food when insect eaters must switch to seeds and fruits in winter. Suet can be obtained at grocery stores and meat markets often free of charge. Prepared and packaged suet cake is fairly inexpensive and available in many stores. Suet, either “straight” or mixed with other ingredients, can be put in wire mesh feeders or smeared into suet logs and crevices of pine cones.

Do not put suet out in warm to hot weather. It can turn rancid or melt. The liquid fat coats beaks and can damage feather water proofing during preening.

Peanut Butter

Kids aren't the only ones who love peanut butter. When mixed with other foods, it provides a less expensive meal than nuts. In winter when protein

and fat are scarce, peanut butter is a valuable addition to a bird's diet. Try mixing crunchy peanut butter, crumbs, and raisins with melted suet for a meal-in-one “bird cake” which appeals to a variety of birds. Avoid peanut butter high in sugar and salt.

Fruits

This specialty item can often attract birds that otherwise aren't interested in your feeders. Waxwings, robins, and thrushes may visit a feeding station if fruit or berries are offered. Fresh or dried apples, blueberries, cherries, cranberries, currants, dates, oranges, grapes and raisins are popular fruits.

Bakery Goods–Avoid

Avoid bakery goods such as breads, crackers, cookies, and donuts. They often attract starlings, house sparrows, and pigeons which can become nuisances and out-compete our native birds. Bakery goods can spoil, mold, draw rats and mice, and are not a healthy food for our native birds .



Northern flicker on winter apple tree

Favorite Suet Recipes

Basic formula

- Heat to boiling 1 part suet and 6 parts water.
- Add 2 parts cornmeal, 1/2 part flour, 1 part brown sugar.
- Cool, pour into cupcake molds, and allow to harden.

A standard mix

- Twice melt 2 parts suet, allowing it to harden between melts.
- Blend in 1 part yellow cornmeal and 1 part peanut butter.
- Allow to thicken, pour into molds, allow to harden.
- The relative proportions of these ingredients may vary depending on your preferences.

Refrigerate all leftover mixtures.

Bird Feeders

Seeds can be put in a variety of feeders and placed in different parts of the yard. Birds such as towhees, juncos, and sparrows prefer to feed on the ground. Scattering seeds amid leaves and ground litter will cater to their preferences. When hanging feeders, don't hang them so high that refilling it is too much trouble. Do not overcrowd or have too many feeders in your yard as this can facilitate the spread of disease.

Types of Feeders

You can control what kinds of birds come to your bird feeders by the type of feeders you use. To discourage starlings, crows, pigeons, and house sparrows, use selective feeders. These feeders are small and have short or no perches at all. They support smaller, more agile birds such as chickadees, finches, and nuthatches. Nonselective feeders are larger and have ample perching on flat surfaces. They invite all birds regardless of their size and dexterity.

Hopper Feeders

Non-selective feeder. Hoppers release food as it is eaten and attract many species of birds. Seed is funneled to a bottom tray which provides a stable perch. They can be mounted on posts, windowsills, or hung from branches and eaves. Sometimes a hopper feeder is mounted on a pulley strung between a tree and a window, allowing the feeder to be "reeled in" for refills or to get shy birds to come closer to the house. Hoppers store and release seed as it's used and offer a consistent food source. However, be sure the seed is not getting moldy in wet weather or rancid in hot weather. Inspect seed frequently and clean regularly. Excrement can build up on the ledges and cause disease. Many birds can gather at these feeders which can be messy as they kick seed off of the ledge.

Tube Feeders

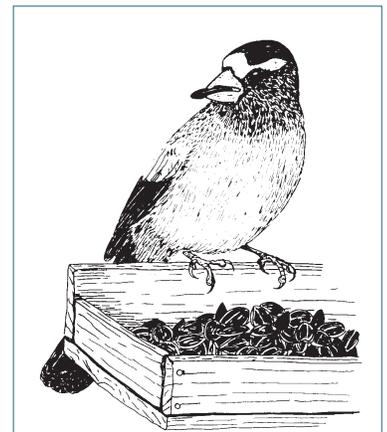
Selective feeder. Tube feeders are hollow cylinders that release seed at several feeding outlets. They may or may not have perches depending upon which species you want to attract. The larger types hold enough seed to last for several days, and the clear plastic makes it easy to see when a refill is needed. Because they hang freely from branches and house eaves, tube feeders are well suited for small birds such as chickadees and finches. The unsteadiness and limited perching discourage larger, more aggressive birds. Goldfinches, siskins, and other finches are attracted to special tube feeders with slit-like openings allowing thistle seeds to be taken one at a time.

Platform Feeders

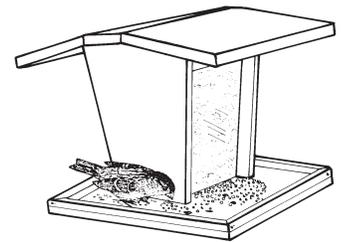
Non-selective feeder. Platform feeders provide a spacious, stable perch where food can be spread out on a tray for many birds at once. A rim around the edge sometimes reduces spilling and prevents food from being blown off the feeder; nevertheless, seed tends to collect under these feeders so keep this area clean. These feeders can be mounted at various heights on posts, windowsills, decks, and other structures. Anything can be put in a platform feeder—seeds, suet, and fruits. Because of their size, platform feeders invite any and all birds. Platform feeders accumulate bird excreta, which spreads disease, and should be cleaned often.

Suet Feeders

Selective feeder. Suet feeders hold bricks of suet in a metal or mesh basket. Commercial suet feeders are available and inexpensive. Softened suet can be pressed into pine cones or holes drilled in small logs. Hang at least 5 feet off the ground so squirrels and other mammals can't get to them.



Platform feeder



Hopper



Tube feeder



Pileated woodpecker at suet feeder

Photo credit: Helen Engle

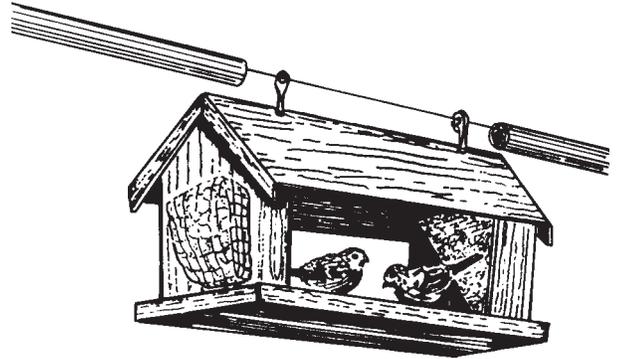
Maintenance

Diseases are easily passed along at feeders through droppings and moldy seed. To prevent disease, keep feeders clean, dry, and mold-free. About every other week remove all seed, fruit etc. and wash with warm soapy water, rinse in a solution of one part bleach to nine parts water, then rinse with fresh water and dry thoroughly.

Frequently remove all the seed from under the feeder to prevent bacteria and mold from growing, which can sicken the birds and attract rodents.

Good feeder management:

- Buy from sources that offer the proper varieties of fresh seed.
- Use feeders that can be easily cleaned and washed.
- Keep feeders (and birdbaths) clean.
- Put only one day's worth of food out on platform feeders.
- Keep stored seed dry.
- Use feeders that are covered or sheltered from the rain and snow, and types that don't allow birds to stand where their droppings will fall into the seed.
- Move the feeders periodically.



If too many birds are concentrated in a small area, they may suffer from stress and increased exposure to diseases. This can happen if too many feeders and an overabundance of food are placed in a single backyard. A large concentration of birds may also attract predators and cause problems with neighbors. Moderation is the key. Too much kindness may not be favorable to the welfare of the birds.

Food Storage

Store seed in secure, preferably metal, containers to prevent rodents from getting in and contaminating food. Keep in a cool, dry location. Seeds stored in too warm a place can decrease in nutritional value as seed goes rancid. Damp locations may cause seed to become moldy which can cause a fatal disease called aspergillosis. Discard seed after one year.

When To Feed

The two most vulnerable times for birds are during severe winter weather and when young are being fed. For winter feeding, put food out late October/early November when natural food is becoming hard to find. Continue feeding through February and March when food supplies are lowest. If you live in an area with black bear, or in or near greenbelts, put feeders up only in the winter months and discontinue feeding in February.

Risks of Bird Feeding – Dependency is not one of them

It is not true that birds using your feeder will starve if you take it down or do not fill it for awhile, such as during a holiday vacation. Birds do not depend on one feeder but rather visit a number of feeders in their daily search for food. It is a survival strategy not to depend upon just one food source. If your feeder is empty, they'll just go to their next stop.

House CATS injure and kill birds at feeders

Cats are the most significant non-native animal species affecting the decline of bird populations and are one of the most significant human-caused (by letting cats outside or supporting feral cat colonies) deaths of birds in the U.S. (*Wildlife Professional*). Do not feed birds on the ground or on platform feeders if you have an outdoor house cat or if cats frequent your yard. House cats can also successfully hunt at raised bird feeders so monitor the feeders and if you see cats around it remove the feeder. Bells on cats do not work for preventing cat kills of birds.

- Leave 15-20 feet between feeders and shrubs so birds can see lurking cats
- Surround the area immediately around the feeder with an 18” high chicken wire barrier where birds feed on the ground
- Responsible cat owners keep their cats indoors - it’s best for the birds and for the cats. See American Bird Conservancy Cats Indoors! <http://www.abcbirds.org/abcprograms/policy/cats/index.html>
- If cats frequent your yard, remove your feeders



Cat on bird feeder

Avoid Attracting RATS and MICE

- Provide only as much seed to ground-feeding and platform-feeding birds as can be eaten in one day
- Clean up all spilled and left over seed daily
- Avoid using seed mixtures (birds discard unwanted seed and fillers)
- Install barriers (see SQUIRRELS) to prevent rats from accessing feeders
- Do not use rodent poison; if a poisoned rodent is eaten by a raptor, it will poison the raptor (or any other predator); if ingested by songbirds or pets they will become ill or die

BEARS are attracted to bird feeders

If you live in an area with black bear or beside a greenbelt, putting a bird feeder in your yard can literally train bears to come onto your property. Placing feeders close to your house will not keep bears at bay; it will only bring them closer, or even on to your porch. Do not put pet food outside unless you can stay with your pet until he or she is finished, and take the bowl in immediately. Leaving feeders, food, or garbage out only during the day will make the bears adapt to that time of feeding. If you live by bears, put feeders up only during the winter when bears are asleep the majority of the time.



Black bear raiding backyard bird feeder

Disease

There are many avian infectious diseases transmitted at bird feeders and infecting many birds at once (“epizootic”). This is the reason that feeders should be kept clean at all times, and too many feeders avoided. If you see diseased birds, remove your feeders immediately, clean and sterilize them, and replace them 2-3 weeks later. Some of the most common diseases are:

- Avian pox (viral)– usually seen as wart-like growths on the featherless portions of the head and feet.
- Salmonellosis (bacterial)– symptoms are often not seen but birds may be lethargic with feathers fluffed; outbreaks cause multiple deaths at feeders.
- Mycoplasmal conjunctivitis (finch eye disease - bacterial) – presents as red, swollen, and crusty eyes.
- Aspergillosis (mold) – a disease of the respiratory system usually causing death.

Window Collisions

In the U.S. it is estimated that approximately 1 billion birds die from window collisions annually. Window collisions are a common cause of death at feeders. Generally, birds see a reflection and a seemingly open passageway. Birds are especially prone to these collisions when fleeing from predators or when startled by loud noises. Problems with window collisions may increase after a bird has indulged in its annual binge of fermented berries. During breeding season, male birds including robins, swallows, woodpeckers, and hummingbirds may “fight” their own reflections in windows.

To prevent window collisions:

- Install screens or black plastic garden-protection netting mounted on frames or stapled below the eaves on the OUTSIDE of windows.
- Attach reflective streamers, or closely spaced adhesives strips on the OUTSIDE of the window.
- Rub soap over the OUTSIDE of the window to create a dull appearance.
- Either move the feeders farther (30 feet or more) from the window or place them next to the window (no more than 2 feet away) so birds don't get up to flight speed before hitting the window.

Closing curtains and shades does not help because the reflective surface of the window is still visible to the birds.

Solutions to Some Feeder Problems

Too many STARLINGS and HOUSE SPARROWS in your yard

- Use selective feeders such as tube feeders, and shorten or remove perches
- Hang feeders with string or wire so they twirl and sway
- Use unhulled sunflower seeds and avoid using seed mixes that contain millet.
- Avoid table scraps, bakery goods, and large amounts of bird seed
- Avoid platform feeders and ground feeding
- Use suet feeders where the only access to food is by hanging upside down or hanging on a wire

PIGEONS

- Cover all perch sites (especially under eaves), or make them unusable with commercial pigeon deterrents
- Tent platform feeders with a 1.5 inch wire mesh barrier which allows smaller birds through

SQUIRRELS raiding your feeders

- Hang several pie pans, metal lids, or phonograph records horizontally up and down the supporting wire of hanging feeders, spaced with short sections of garden hose or plastic tubing; these will tip when a squirrel steps on them
- Suspend hanging feeders from wire stretched between two trees; put plastic tubing around wire on either side of feeder (tubing will rotate around the wire when a squirrel steps on it)
- For feeders on poles, wrap a piece of rigid sheet metal, pie pan, or other such material around the pole to form a cone at least 5 feet from ground; grease the pole
- Make sure feeders atop poles are at least 5 feet above ground and 8 feet from nearest tree (squirrels are great jumpers!)
- Hang feeders with wire that squirrels can't chew through
- Look for special feeder designs at local bird feeding specialty stores or in mail-order catalogues



Eastern gray squirrel atop bird feeder

HAWKS – are a good thing

Many birds concentrated around a feeder may attract a small hawk, such as sharp-shinned or Cooper's hawks, especially in winter when they feel the sting of hunger or in late spring/early summer when juveniles are learning to hunt and desperate for food. The occasional foray of a sharp-shinned or Cooper's hawk into your yard should be seen as a gift rather than a problem. A hawk hunting in your yard indicates a healthy functioning system. Healthy songbirds will take cover in surrounding trees and shrubs. But, if you feel as if the hawk is taking too much advantage of the birds at your feeder or birds are no longer using your feeder, take it down for a week or two, the hawk should move on.



American crow and Sharp-shinned hawk

Photo credit: Tom Fredericks, Cornell Laboratory of Ornithology

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Phil Anderson, Director, Washington Department of Fish and Wildlife. Miranda Wecker, Chair, Washington Fish and Wildlife Commission.

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