BACKYARD

The Winter Banquet

Is backyard bird feeding helping or hurting? New research answers this and many other questions. Plus, five feeders every yard should have.

By Stephen W. Kress

A few decades ago, most of the birds that fed in North America's backyards ate weed seeds and insects gleaned from crevices in tree bark. Now they're presented with other feeding options. Nearly one-third of the adult population of North America dispenses about a billion pounds of birdseed each year as well as tons of suet and gourmet "seed cakes." What changes does this largesse impose on our native birds?

There is surprisingly little research on the effects of feeders on individual species, but the limited studies so far suggest that backyard feeders are not creating a population of dependent wintering birds. For example, researchers Margaret Brittingham and Stanley Temple from the University of Wisconsin compared winter flocks of black-capped chickadees in two similar woodlands in Wisconsin-one left natural and one equipped with feeders stocked with sunflower seeds. After three years of study, they found that winter survival rates were highest in the woods with the feeders -but only during winters with prolonged periods of extreme cold. This suggests that in milder climates, feeders may have little effect on the winter survival of chickadees. The study also found that nesting populations in both woods were similar the following spring.

Other research by Brittingham and Temple allays the concern that birds may lose their natural talent for finding food and become dependent on the easy life of taking food at feeders. To test the ability of chickadees to switch back to natural food, they removed the feeders from a woodland where birds had been fed for the previous 25 years and compared survival rates with those of chickadees in a nearby woodland where there had been no feeders. They documented that chickadees familiar with feeders were able to switch back immediately to foraging for natural foods and survived the winter as well as chickadees that lived where no feeders had been placed. This was not surprising, since food from feeders had made up only 21 percent of the birds' daily energy requirement in the previous two years. Clearly, much more work needs to be conducted with many feederfrequenting species throughout their ranges. These studies, however, suggest that winter feeding does not promote

dependency.

Will birds suffer if feeders go empty in the winter? In most instances, "your" backyard birds have a feeding tour that includes many neighborhood feeders as well as natural foods. Unless you provide enormous amounts of food and live in an isolated location, it is likely the birds that visit your feeders will not suffer if you leave your feeders empty for a few weeks of winter vacation.

What feeders should I use? Several feeders offering different kinds of foods reduce waste and minimize congestion. Having multiple feeders in different places will also attract a variety of species, since birds typically feed at different levels. Woodpeckers, jays, nuthatches, chickadees, and finches readily feed in trees, so these will visit higher-set feeders. Likewise, cardinals, towhees, sparrows, and juncos usually feed near the ground. Place feeders close to windows so that you can enjoy the action, but beware of large picture windows that may result in collisions. Avoid ground feeders if there is a risk that house cats will pounce from nearby shrubs.

Can birds catch diseases at feeders? Diseases such as salmonella can spread at feeders, especially where seeds and droppings mix. Ground-feeding birds, such as doves and finches, are especially vulnerable. To reduce the risk of disease, clean your feeders at least once a year with a 10 percent bleach solution-one part bleach to nine parts water.

How can I keep squirrels out of feeders? Avoid hanging feeders from trees and eaves. Place them on isolated poles at least five feet off the ground and as far as possible from your house and nearby trees and tall shrubs, keeping in mind that squirrels can leap as far as six feet. Attach to the feeder pole either an inverted cone with at least a 13-inch diameter, a special squirrel-deterring dish with a 15-inch diameter, or a PVC pipe or stovepipe that's 6 inches in diameter and 18 inches long. Protect feeders suspended from a horizontal wire by threading old records, compact discs, or plastic soda bottles on the wire on each side.

Is it okay to leave my cat outside as long as I put a bell on its collar? There are about 100 million domestic and feral cats in North America, and these kill about several hundred million birds each year. Cats account for about 30 percent of birds killed at feeders. Cats are such stealthy hunters that they can stalk and pounce on prey without jingling the bell on their collar. By keeping your cat indoors, you'll not only protect birds but also keep the cat safe from disease, traffic, and fights with neighborhood pets and wildlife.

What do I do if a hawk starts killing birds at my feeder? It is important to discourage hawks from dining on feeder birds, because both predator and prey are vulnerable to accidental deaths resulting from window collisions. If a hawk sets up a regular feeding routine at your feeders, stop feeding long enough to let the smaller birds disperse. Soon the hawk will leave to feed elsewhere

How can I stop birds from crashing into my windows? A recent study found this to be the most common cause of death associated with feeders (about 1 to 10 deaths per building each year). Falcon silhouettes attached to windows seem to have little effect. Fruit-tree netting stretched taut several inches in front of the glass is the best approach.

Will birds stick to metal feeder parts during subfreezing temperatures? Our fingers may stick to metal ice cube trays because moisture freezes on contact with frigid metal. However, a bird's feet are covered with dry scales, so there is no surface moisture to freeze to metal perches.

Eyes, tongues, and beaks are usually safe from exposure to metal feeder parts. Rapid reflexes prevent the eye from coming in contact with foreign surfaces, and the beak is protected by a horny, dry surface.

Ornithologist Stephen W. Kress's latest book is The Audubon Backyard Birdwatcher: Bird Feeders and Bird Gardens (Thunder Bay; 1999). Award-winning illustrator Maryjo Koch recently published The Nest: An Artist's Sketchbook (Stewart, Tabori and Chang; 1999).

Feeders to have

1. Ground-feeding table

This screen-bottomed tray sits several inches off the ground and is useful for helping to keep grain and bird excrement from coming in contact with each other. Some designs have covers to prevent snow from accumulating over the seed; others are surrounded by wire mesh to keep out squirrels and large birds such as crows and grackles. Place the feeder in an open location, at least 10 feet from the nearest shrub, to give birds a chance to flee in the event of a cat attack. Ground feeders are especially favored by doves, juncos, sparrows, towhees, goldfinches, and cardinals.

2. Sunflower-seed tube feeders

If you are going to put out just one bird feeder, this is the best choice. Be sure to select a model with metal ports around the seed dispensers to protect the feeder from nibbling squirrels and house sparrows. Hang the feeder at least five feet off the ground and position it near a window, where you can enjoy the visitors. These feeders are especially attractive to small birds such as chickadees, titmice, nuthatches, goldfinches, siskins, and purple and house finches.

3. Suet Feeder

Suet is readily eaten by titmice, chickadees, nuthatches, and woodpeckers. In addition to the regular suet-feeder visitors, wrens, creepers, and warblers occasionally pick at these mixes. You can hang suet chunks from a tree in an onion bag or a half-inch hardware-cloth basket, or in a more durable cage feeder like the one shown here. You can also make your own suet pudding and feeder. Suet puddings are made by grinding and melting suet and adding seeds. Pack peanut butter-cornmeal blends (when you mix the peanut butter with cornmeal it not only stretches the expensive peanut butter but also makes this sticky treat easier to swallow) and suet puddings into the crevices of large pinecones or into one-inch-diameter holes drilled into logs. Hang the pinecones and the logs from poles near other feeders, from trees, or from a wire stretched between trees. Avoid feeding suet when temperatures climb into the 80-degree range; it turns rancid and drippy and may damage feathers.

4. Hopper Feeder

Hopper feeders provide dry storage for several pounds of mixed seed, which tumbles forward on demand. Position hopper feeders on a pole about five feet off the ground. Hopper feeders attract all of the species tube feeders attract, as well as such larger birds as jays, grackles, red-winged blackbirds, and cardinals.

5. Thistle Feeder

Especially designed to dispense niger seed, also known as thistle seed -different from the prickly garden weed-these feeders typically 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.

What's on the Menu

- 1. Sunflower seed: Black-oil seed is the preferred seed of many small feeder birds, especially in northern latitudes. Striped sunflower seed is also readily eaten, especially by large-beaked birds. Hulled sunflower seed is consumed by the greatest variety of birds; it attracts jays, red-bellied woodpeckers, finches, goldfinches, northern cardinals, evening grosbeaks, pine grosbeaks, chickadees, titmice, nuthatches, and grackles.
- 2. 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.
- 3. Cracked corn: Medium cracked corn is about as popular with ground-feeding birds as millet, but it is vulnerable 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 pheasants, quail, doves, crows, jays, sparrows, juncos, and towhees.
- 4. Milo, wheat, oats: These agricultural products are frequently mixed into low-priced birdseed blends. Most birds discard them in favor of other food, which leaves them to accumulate under feeders, where they attract rodents. Milo is more often eaten by ground-feeding birds in the Southwest. It attracts pheasants, quail, and doves.
- 5. Thistle (a.k.a. niger): A preferred food of American goldfinches, lesser goldfinches, house finches, and common redpolls, niger is sometimes called "black gold," because it costs about \$1.50 per pound. Do not confuse it with prickly thistle, a pink-flowered weed used by goldfinches to line their nests. Niger works best in special thistle-seed feeders with small holes that restrict the flow of the tiny black seeds. The best feeders have holes below the purchase to permit feeding by goldfinches, which can hang upside down (and thus excludes the more common house finch).
- 6. Suet and bird puddings (reconstituted suet and seed): Peanut butter-cornmeal mixes (one part peanut butter, four parts cornmeal, and one part vegetable shortening; good for winter and summer feeding) or 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.