



BIRDS



INTRODUCTION



Birds - from hummingbirds to hawks, woodpeckers to owls - are a very important part of their ecosystems. Many of them are the top predators, many are important spreaders of seeds, and many others keep insects in check which could decimate local flora. More than half of all birds are passerines that feed primarily on insects (during the nesting season) and seeds (during the winter). Raptors such as hawks and owls are the apex predators of the backyard, feeding on small mammals and songbirds. With 1 in 4 birds lost since 1970, it is more important then ever to help our avian companions.



Activity #1: Make your yard an inviting place for woodpeckers



There are 4 common species of woodpeckers where I live in Philadelphia: the downy woodpecker (6"), the hairy woodpecker (9"), the red-bellied woodpecker (9.5") - which oddly has a red head and a white belly as shown above - and the northern flicker (12"). The crow-sized pileated woodpecker (18") is a rare and remarkable sight - having a mostly black body and red crown. All except the flickers (who mainly hunt ants on the ground) forage for insects by climbing up trees.

The most important thing for woodpeckers is dead wood. Dead wood provides significantly more insects than live wood and is also necessary for nest building. Many people take down dead or dying trees in their backyards and trim dead branches off of trees. Instead, leave dead branches and appreciate your beautiful backyard woodpecker friends. If you are worried about safety and/or liability issues, trim the branches off of a dead tree, but leave the stable trunk.

Woodpeckers will readily come to suet feeders. Suet is a substance made of rendered beef or vegetable fat mixed with seeds, nuts, cracked corn, and/or other delicious treats.

Nuthatches, chickadees, and starlings will also come for suet.





Activity #2: Plant trees for birds



There is a common misconception that bird feeders will bring back bird populations. While many birds (like cardinals, sparrows, and chickadees) eat seeds in winter, they need insects to feed their young. Most baby songbirds cannot digest seeds. Instead, they need plump caterpillars. For lots of songbirds (like warblers, wrens, swallows, and flycatchers), insects are all they eat.

What will actually help bring back declining avian populations are native plants that support large numbers of insects, particularly caterpillars, which are high in crucial fats and proteins. Trees generally support more caterpillars than herbaceous plants. And unlike wildflowers and grasses, trees last for hundreds of years, providing food for many generations of birds. If you have the space in your yard (it is best to plant trees at least 12 feet apart), trees are an excellent natural food source, while also playing a crucial role in fighting climate change.

These are a few of the most ecologically productive tree genera:

- Oaks (*Quercus*): the most productive plant genus, supporting 557 species of caterpillars in the mid-Atlantic, and over 900 in the continental U.S.; acorns are also a valuable food source for ground birds and mammals
- Willows (*Salix*): hosts 456 butterfly and moth caterpillars, such as the large cecropia and polyphemus moths
- Cherries (*Prunus*): supports 448 caterpillars, including tiger swallowtail butterflies and luna moths; also provides fruit for fruit-eating birds like thrushes, waxwings, and mockingbirds
- Birches (*Betula*): hosts 413 species of caterpillars
- Maples (*Acer*): supports 285 caterpillar species, including the imperial moth

Activity #3: Install an owl box and learn about avian predators



Hawks and owls are the apex predators of the backyard. In Philly (and in the eastern U.S. region) there are four main species of hawks: the large red-tailed hawk (20"), the red-shouldered hawk (17"), the Cooper's hawk (16"), and the small sharp-shinned hawk (11"). And there are three main species of owls: the large great-horned owl (22"), the medium-sized barn owl (16"), and the small eastern screech owl (8.5"). Encouraging them into your yard is important - if it wasn't for these predators, the population of rabbits, mice, squirrels, and other small mammals would soar.

Some people have a fear of hawks and owls - thinking that they will eat their pets or livestock. The largest raptors occasionally attack pets and chickens, but most hawks and owls won't.

One of the best ways to attract owls to your backyard is by installing an owl nesting box. Be sure to place it 10-15 feet high on a tree. Though it may seem daunting to hang it that high, all you need is a (stable) ladder, a drill, and an electric screwdriver. You may never have seen an owl in your backyard, but chances are that one is hunting while you are asleep. All animals need water and bird baths are important for all birds in general, including owls.



Activity #4: Make a hummingbird garden

From the biggest birds to the smallest birds...

The world's smallest birds, hummingbirds, are a delightful summer spectacle. Attracting them to your garden is simple: they love feeders. Purchase a hummingbird feeder and fill it with sugar water - they will come. They also like the nectar from native red wildflowers such as bee balm and cardinal flowers.



Of the 15 species of hummingbirds that live in the U.S., the ruby-throated hummingbird (above, left) is the only one to live in the east. The males have iridescent red necks. They make a stunning migration to Central America that, for many, involves a nonstop 500-mile journey across the Gulf of Mexico. Hummingbirds need to eat constantly - this makes this journey nearly impossible and is also why they go into a state of nighttime torpor where their body dramatically slows down. In the day, they can beat their wings 53 times a second!



Activities 5 and 6: Preventing bird deaths



House cats kill billions of birds each year (and even more small mammals). They are the greatest cause of human-related bird deaths. Cat owners: there are two main ways to have cats without them harming birds. You can attach a bell to your cat's collar (so that birds will hear the cat coming) or simply keep your cat indoors. Declawing is also an option, though it is painful for the cat and so I and many animal rights advocates are against it.



Windows are also a great source of human-caused bird deaths. It is very upsetting when you walk outside and encounter a dead bird below your window, but preventing them is easy. Birds fly into windows, not knowing the glass is solid. If you have ever seen birds fly into your window, purchase bird stickers, which help avian friends know that the window is solid.