



Avian Architecture

Spring is a very busy time for birds as they prepare to raise the next generation. For most birds, a key step will be building a nest. Most Ontarians have seen a bird nest, but the familiar woven cup placed in a tree is just the tip of avian ingenuity. Ontario is home to almost 500 bird species (from hummingbird to eagle) with an equal diversity of nest sizes and shapes. For simplicities sake, let's start with three simple nest types: tree nests, ground nests, and cavity nests.

The bird nest that most Ontarians are familiar with is the cup-shaped tree nest built by birds such as robins, cardinals, and ruby-throated hummingbirds. However, even within the same nest type, a wide variety of materials are used. Robins use a mixture of twigs, grass, moss, roots, and mud. The tiny ruby-throated hummingbird makes a thimble sized nest from the most delicate of materials: dandelion down, spider silk, lichen, and moss.

Ground nests are the most likely to be stepped upon. In Ontario they are built by species including the ring-billed gull, Canada goose, and the killdeer. The killdeer creates a depression in bare ground that is 8 or 9 cm across. The nests are so well camouflaged, they are often missed until the last moment. To protect their vulnerable eggs and young, killdeer display a broken-wing act to lure predators away.

Nesting boxes are ideal for cavity nesting birds including wrens, screech owls, and ducks. Woodpeckers excavate decayed trees each year and leaving previous holes for other cavity-nesting birds. As humans remove unsightly dead and dying trees, nest boxes can provide a needed alternative.

Now you Try:

Birds build these marvels of engineering using only their beaks. With your dextrous human hands, surely you are capable of building something better! Head outside and gather some natural materials. Using only your hands (no other tools allowed), build a nest with your gathered materials.

Feel like a challenge? Grab a partner and each build a nest. Hide your nest and see if your skills of camouflage are enough to keep it safe from your predatory partner. Who built it stronger? Fill your nest with rocks (acting as very heavy eggs) and see whose doesn't fall apart. Whose is waterproof? Nests can be exposed to the elements for weeks. Turn the hose on your nests. Whose lasted the longest? When you are done, leave your nest (or what remains of it) outside so that the materials are available for birds to build a real nest (and show you how it's done)!

References:

- <https://lfpres.com/2013/05/24/the-world-outdoors-nests-varied-as-the-birds-that-build-them/wcm/250810e5-a04c-96fd-f64a-004b5593e06d/>
- <https://www.hww.ca/en/issues-and-topics/nest-boxes-for-birds.html>