

Blue Jay



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Probably every reader of the Thornton W. Burgess storybooks remembers the noisy, aggressive, and handsome Sammy Jay, a literary characterization of the Blue Jay *Cyanocitta cristata*, who can now be seen on the television program "Tales of the Green Forest." It was Sammy Jay who flew across the Green Meadows and into the Green Forest screaming "Thief! Thief! Thief!" whenever Reddy Fox appeared. In reality, the Blue Jay frequently does play this role, its loud cries warning other birds and mammals of an approaching predator, whether fox or person. The Blue Jay's scientific name is derived from Greek and Latin words and means, in reverse, "crested, blue chattering bird," an apt designation.

This bird's call is a familiar woodland sound in eastern North America. According to W.M. Tyler, "It is the Blue Jay's voice, more than his gay colour, that makes him conspicuous. We cannot be long in the open air before we hear him — in woodland, in open country, in the suburbs of our large cities. At the least alarm he begins to shout, and often, with no apparent cause, even a lone bird will break out, like a schoolboy, it seems, out of pure joy in making a noise. Especially in autumn the Jays shout so loudly that they fill all outdoors with sound." Their most characteristic sound is an "unrelenting steel-cold scream," as Thoreau expressed it, variously rendered "thief," "jay," and "peer." They have a wide variety of other calls, particularly a mellow whistle, "kloo-loo-loo," quite musical in form, and also a softly delivered song, a continuous sweet warbling heard during courtship.

Distribution

The Blue Jay, which occurs from southern Canada south to Texas and Florida, is only a straggler on the open plains. It breeds in the mixed-wood forests of central Alberta, Saskatchewan, and southern Manitoba, and from there east through central and southern Ontario to southern Quebec, Newfoundland, New Brunswick, Prince Edward Island, and Nova Scotia. In the northernmost part of its range it may be seen with the Gray Jay *Perisoreus canadensis*, a bird that breeds much

farther north to the tree line. In central Florida the Blue Jay coexists with the Scrub Jay *Aphelocoma coerulescens*. The Steller's Jay *Cyanocitta stelleri* replaces the Blue Jay west of the Rockies and is fairly similar in general habits; it is the "blue jay" to the people of British Columbia. Prince Edward Island and British Columbia have selected the Blue Jay and the Steller's Jay, respectively, as their provincial birds.

Relatives

The Blue Jay belongs to the crow family, or Corvidae, a group of 100 related species including ravens, rooks, jackdaws, crows, magpies, and jays. Some of these species are the largest members of the order Passeriformes, or perching songbirds. The family, of world-wide distribution, is best represented in the northern hemisphere. These birds are of ancient lineage; fossil remains of corvids have been identified from Miocene deposits 25 million years old.

Description and general behaviour

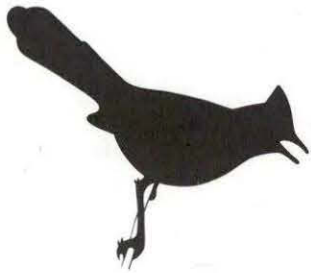
Male and female corvids are nearly alike in appearance, and both sexes help build the nest and care for the young. Most corvids are non-migratory, but some wander about, often in small bands, after the breeding season. In keeping with their omnivorous habits, all corvids are bold and aggressive and often prey on the eggs and young of other kinds of birds. Because of these habits, some of them are unprotected by laws, although the Blue Jay is generally protected by provincial legislation.

The Blue Jay is a little larger than an American Robin, about 30 cm in length from the tip of its bill to the tip of its tail. A white-faced bird with a blue crest, back, wings, and tail, it is strongly marked with black and white. Its crest, the elongated crown feathers found in many jays, is raised or lowered according to the bird's mood. In moments of high excitement and aggression the blue crest may be fully erected, forming a prominent peak. However, when the bird is feeding close together with other jays, when it is ready to flee, or when it is quietly resting, the crest is laid flat on top of the head, giving the bird a quite different and somewhat dishevelled appearance. W.J. Long noted: "When well pleased with what he sees or hears or does his crest is straight up and down, and all its feathers are as one feather. When he is greatly surprised or excited the crest points forward of the perpendicular, or if he is frightened it bristles out like a bottle brush." The position of the crest feathers thus indicates the bird's behavioural state. The Blue Jay's crest position, when erected, is emphasized by a black band that crosses over the back of the head, a continuation of the broad band or necklace across the chest.

Few people finding an intense cobalt or azure-blue feather from the tail or wings of the Blue Jay can resist picking it up. The vivid colour makes an exotic contrast against brown leaves or green grass. However, blue pigment is unknown in birds. This bird's feather colour results from

Range of the Blue Jay





refraction of light by a peculiar inner structure of the feather substance and, if the feather is crushed, the blue colour disappears. Shed feathers may often be seen in late summer, for adults go through a complete change of plumage between June and September. During this moulting period Blue Jays may be seen *anting*, a term referring to a bird using ants or ant excretions for preening. Excited anting birds often trip over their own tail in frantic efforts to apply ants with their bill to the underside of their wings. A recent theory holds that this peculiar behaviour results from skin irritation caused by new feather growth. Possibly ant excretions have a soothing effect on the bird's skin. A wide variety of substitute materials such as fruits, tobacco, mustard, and vinegar may be used for anting. One observer who kept tame Blue Jays had a bird that anted with "various bitter, sour fruit juices and hair tonic"; a second jay anointed itself *only* with the hair tonic. Another person had a captive Blue Jay that applied burning cigarettes to its feathers! This strange behaviour requires further study. Observations of anting in any bird species are worth reporting to a local natural history journal or magazine.

That the Blue Jay is a favourite of many is shown by the long list of adjectives applied to it, including audacious, amusing, beautiful, boisterous, canny, clownish, determined, haughty, impudent, independent, inquisitive, jaunty, lawless, mischievous, obstreperous, resourceful, saucy, valiant, and wicked. Only a bird that lives close to people could have attracted so many epithets, many of which have been applied with a degree of admiration. The Blue Jay early adapted to settlement conditions; throughout its range it is generally more common in settled regions, provided there are a few trees, than in the wild. In woodland retreats it is usually more wary than we have come to expect, for in towns and cities it is almost tame. The jay that appears at a backyard feeding station year after year may be the same individual, for several banded jays have lived from 10 to 15 years. Such birds may be tamer than most of their kind.

Food habits

Audubon's famous painting of this species shows a group of three lively Blue Jays feasting on freshly laid eggs from some other bird's nest. The eggs and young of other birds are, at times, an important food source. The bulk of its diet, however, consists of vegetable material such as wild fruits, acorns, hazelnuts, beechnuts, corn, and other grains, and also insects of many kinds. Blue Jays can be important in the local control of the injurious tent caterpillar. One pair of Blue Jays may feed hundreds of tent caterpillar pupae to their nestlings in early summer. The parents extract the pupae from their tough, silken cocoons and carry several inside their mouths at one time to the young. The destruction of cocoons for this purpose eliminates thousands of moth eggs due to hatch in the following spring.

As is characteristic of a bird with a nearly omnivorous diet, the Blue Jay has a heavy bill

useful in pecking open cocoons as well as acorns and other hard-shelled nuts. It frequently carries off acorns and beechnuts and conceals them under leaves, in grass, and in hollow trees. In winter, Blue Jays commonly carry away food from a feeding station, especially bread and sunflower seeds, to be hidden under trees and shrubs and later found and eaten. A regular supply of peanuts, mixed grains, and especially sunflower seeds will attract Blue Jays to a feeding shelf. They seem to enjoy holding the hull of a seed or peanut beneath their feet while pecking it open to extract the kernel.

Habitat and nesting behaviour

The Blue Jay occupies a variety of habitats within its large range, from the pine woods of Florida to the spruce-fir forests of northern Ontario. It is less abundant in the heavier forests, preferring mixedwood and deciduous forest areas, especially where beech, hazel, and oak are found. It builds a bulky nest, about 18 cm in diameter, of small twigs and a variety of other materials such as lichens, moss, grass, and paper. The inner cup of the nest, about 10 cm in diameter, is shaped with mud and lined with fine rootlets and feathers. Before the final nest is made, the birds build several incomplete nests as part of their courtship ritual. The nests are 3–10 m from the ground, in a tree or shrub. The Blue Jay often nests in settled areas, sometimes close to buildings. During the nesting season, especially in the more remote parts of its range, it may be quiet and unobtrusive even near its nest.

As do many species in which the male feeds the incubating female, the Blue Jay practises courtship feeding. This begins prior to nest-building and continues through egg-laying and incubation. The incubating female is sometimes fed on the nest, but more often she joins her mate in a nearby tree, assumes the begging posture of a juvenile, and is then fed. There are also reports of some group displays in which several jays hop stiff-leggedly from branch to branch, but little else is known about their courtship habits.

Four or five eggs are laid in a clutch. From one clutch to another, the eggs vary in colour from buffy to greenish or bluish, spotted and blotched with brown. Incubation of the eggs lasts from 16 to 18 days. The young at the time of hatching are entirely naked and quite helpless, although on certain signals, particularly the thump of a bird landing on the edge of the nest, they raise their head with mouth open ready to receive food from the parent bird. Seventeen days later they are well feathered and ready to leave the nest. They are usually out of the nest and on the wing, or fledged, by 21 days of age. About three weeks later they begin searching for food for themselves, but they continue to follow their parents and are fed occasionally for one or two months longer, sometimes until they are four months old.

The Blue Jay is partially migratory, withdrawing several hundred kilometres in some winters from the extreme northern parts of its range. It migrates quietly by day, usually in loose flocks of 5–50 or more. Occasionally up to 3000

migrants have been seen in one day at Point Pelee National Park where Blue Jays congregate before crossing Lake Erie.

The Blue Jay can be recognized from a distance by its apparently effortless flight. It flies with the body and tail held level, with slow, easily discernible wing strokes, which nevertheless carry it along at a good speed.

The fact that the Blue Jay sometimes preys on the young of other birds is no cause for its condemnation, for this bird plays a role in keeping bird populations, as well as some insect pests, under control. Moreover, Blue Jays are an attractive addition to our forests, towns, and cities. In Audubon's words: "Their movements on the wing are exceedingly graceful. As they pass from one tree to another, their expanded wings and tail — so beautiful in tint and form — never fail to delight the observer."

Reading list

- Bent, A.C. 1964. Life histories of North American jays, crows, and titmice. Dover Publications, Inc. New York.
- Cruikshank, H. 1964. Thoreau on birds. McGraw-Hill. Toronto.
- Godfrey, W.E. 1986. The birds of Canada. Revised edition. National Museums of Canada. Ottawa.
- Lansdowne, J.F., and J.A. Livingston. 1970. Birds of the eastern forest. Volume II. McClelland and Stewart. Toronto.
- Long, W.J. 1957. Wings of the forest. Doubleday and Co. Garden City, N.Y.
- Potter, E.F. 1970. Anting in wild birds, its frequency and probable purpose. *Auk* 87:692-713.
- Salt, W.R., and A.L. Wilk. 1966. The birds of Alberta. Queen's Printer. Edmonton.
- Stokes, D.W. 1979. A guide to bird behaviour. Volume 1. Little, Brown and Company. Boston, Massachusetts.

The Canadian Wildlife Service

The Canadian Wildlife Service of Environment Canada handles wildlife matters that are the responsibility of the Canadian government. These include protection and management of migratory birds as well as nationally significant wildlife habitat. Other responsibilities are endangered species, control of international trade in endangered species, and research on wildlife issues of national importance. The service cooperates with the provinces, territories, Canadian Parks Service, and other federal agencies in wildlife research and management.

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