CEDAR WAXWING - BOMBYCILLA CEDRORUM

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Passeriformes Family: Bombycillidae Genus:

Bombycilla Species: B. cedrorum

Habitat:

<u>Biomes</u>: Cedar Waxwings inhabit deciduous, coniferous, and mixed woodlands, particularly areas along streams. You may also find them in old fields, grasslands, sagebrush, and even along desert washes. With the spread of ornamental berry trees in landscaping, Cedar Waxwings are increasingly common in towns and suburbs. In winter, Cedar Waxwings are most abundant around fruiting plants in open woodlands, parks, gardens, forest edges, and second-growth forests. Birds that winter in the tropics tend to inhabit highlands.

Distribution:

<u>In US</u>: It is a native of North and Central America, breeding in open wooded areas in southern Canada and wintering in the southern half of the United States, Central America, and the far northwest of South America. This species is nomadic and irruptive, with erratic winter movements, though most of the population migrates farther south into the United States and beyond, sometimes reaching as far as northern South America. They will move in huge numbers if berry supplies are low. Rare vagrants have reached western Europe, and there are two recorded occurrences of cedar waxwing sightings in Great Britain.

In Other Countries: ^^^^^

<u>Holistic Description</u>: A treat to find in your binocular viewfield, the Cedar Waxwing is a silky, shiny collection of brown, gray, and lemon-yellow, accented with a subdued crest, rakish black mask, and brilliant-red wax droplets on the wing feathers. In fall these birds gather by the hundreds to eat berries, filling the air with their high, thin, whistles. In summer you're as likely to find them flitting about over rivers in pursuit of flying insects, where they show off dazzling aeronautics for a forest bird.

<u>Species Richness</u>: NO SUBSPECIES <u>Population Dynamic</u>: CHECK THREATS

Evolution and Systematics:

Evolution: Reported from Pleistocene deposits in California and Holocene deposits in Illinois.

<u>Systematics</u>: Geographic variation in color and size is slight. Populations that breed inland in w. North America tend to be paler overall than populations farther east, whereas those in the north may average grayer.

<u>Number of Species</u>: NO SUBSPECIES <u>Number of Genera</u>: NO SUBSPECIES

Physical Characteristics:

Size and Length: Length: 5.5-6.7 in (14-17 cm) Weight: 1.1 oz (32 g)

Wingspan: 8.7-11.8 in (22-30 cm)

<u>Coloration</u>: Cedar Waxwings are pale brown on the head and chest fading to soft gray on the wings. The belly is pale yellow, and the tail is gray with a bright yellow tip. The face has a narrow black mask neatly outlined in white. The red waxy tips to the wing feathers are not always easy to see.

<u>General Body Features</u>: The Cedar Waxwing is a medium-sized, sleek bird with a large head, short neck, and short, wide bill. Waxwings have a crest that often lies flat and droops over the back of the head. The wings are broad and pointed, like a starling's. The tail is fairly short and square-tipped.

<u>Special Features of the Body</u>: And about those berries: Cedar Waxwings specialize in eating fruit, an interesting adaptation among North American birds. While we think of many birds as dining on berries, in reality berries are only ever a portion of their diets. Cedar Waxwings can exist solely on berries for months.

<u>Special Features of the Head and Sensory Organs</u>: The name "waxwing" comes from the waxy red secretions found on the tips of the secondaries of some birds. The exact function of these tips is not known, but they may help attract mates.

Dentition: BEAK/LAMELLAE/GIZZARD

<u>Special Features of the Limbs and Digits</u>: Because they live mainly in the woods and eat mostly fruits, these birds have the ability to sit both upright and hanging upside-down while feeding on fruits from branches.

Any Special Internal Anatomy: The cedar waxwings can consume fruits from the tree while hovering in the air.

<u>Sexual Dimorphisms</u>: Sexes differ little, but male can be distinguished by a more extensive, and darker, black chin-patch, although this is difficult to discern in the field. In the breeding season, female slightly heavier than male.

<u>Differences Between Juvenile Stage and Adult</u>: Present primarily Jul–Dec. Similar to Definitive Basic Plumage except grayer overall; crest feathers very short, similar to or just longer than other crown feathers; anterior frontal feathers, lores, and part of eye-ring duller black; rectrices with narrower yellow tips and wing with fewer waxy appendages, sex for sex.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

<u>Activity</u>: Cedar Waxwings are social birds that form large flocks and often nest in loose clusters of a dozen or so nests. When feeding on fruits, Cedar Waxwings pluck them one by one and swallow the entire thing at once. They typically feed while perched on a twig, but they're also good at grabbing berries while hovering briefly just below a bunch. When eating insects, waxwings either fly out from an exposed perch, or make long, zig-zagging flights over water. During courtship, males and females hop towards each other, alternating back and forth and sometimes touching their bills together. Males often pass a small item like a fruit, insect, or flower petal, to the female. After taking the fruit, the female usually hops away and then returns giving back the item to the male. They repeat this a few times until, typically, the female eats the gift. Cedar Waxwings have a strong, steady flight style with fairly constant wingbeats.

<u>Locomotion</u>: Bipedal locomotion is usually by quick hops, usually along branches. Rarely ventures to ground (to bathe or feed on emergent insects). Short flights are direct, with steady wing beats. In longer flights, alternately flap and glide. <u>Communication and Perception</u>: Cedar Waxwings have two common calls: a high-pitched, trilled bzeee and a sighing whistle, about a half-second long, often rising in pitch at the beginning. Cedar Waxwings call often, especially in flight. <u>Home Range</u>: Appears to be non-territorial throughout the year. Little site fidelity on its wintering grounds in Mexico. Reported to nest in loose clusters—10 nests at density of 4.9 nests/ha in Connecticut. May show aggressive behavior near the nest, however, and this has been interpreted as territoriality. Aggression near the nest is probably mate-guarding or defense of nesting material, because most ejections of conspecifics occur during nest-building and egg-laying, and are usually performed by the male while the female is present.

<u>Degree of Sociality</u>: Very social species, flocking throughout the year. Although flocks are largest during winter, Cedar Waxwings are social throughout the year, even congregating in small groups at fruit crops during the breeding season. <u>Level of Aggression</u>: Neighboring breeding pairs may chase each other; both mates may participate in the attack. When both mates are present, however, most attacks are by the male alone against intruding individuals or pairs. Birds within flocks may joust with bill-jabs. A bird may fly toward another individual and displace it from its perch; usually observed when birds are engaged in Courtship-Hopping.

<u>Migration</u>: Short to long-distance migrant. Many eastern Cedar Waxwings winter in the southeastern U.S. Some birds travel as far south as Costa Rica and Panama.

Predators:

Predators: Sharp-shinned Hawk, Cooper's Hawk, Common Grackles, Bullfrogs, Blue Jay,

<u>Anti-Predator Defenses</u>: Often responds to threatening situations by assuming an erect posture, presumably to make itself more cryptic. A flock from which a Sharp-shinned Hawk killed 1 member immediately "froze" (presumably in erect posture), and then flew off rapidly in compact formation. A fleeing flock of about 25 birds being pursued from above and behind by a Cooper's Hawk would suddenly bunch together from an elongated flight formation and veer to one side as the hawk accelerated and made a pass at the rear of the flock.

Diet and Nutrition:

<u>Adult Diet</u>: Cedar Waxwings feed mainly on fruits year-round. In summer, they feed on fruits such as serviceberry, strawberry, mulberry, dogwood, and raspberries. The birds' name derives from their appetite for cedar berries in winter; they also eat mistletoe, madrone, juniper, mountain ash, honeysuckle, crabapple, hawthorn, and Russian olive fruits. In summer Cedar Waxwings supplement their fruit diet with protein-rich insects including mayflies, dragonflies, and stoneflies, often caught on the wing. They also pick items such as scale insects, spruce budworm, and leaf beetles directly from vegetation. <u>Juvenile Diet</u>: ^^^^^^

<u>Special Adaptations for Getting Prey</u>: Typically plucks fruit while grasping a branch, either upright or dangling; may also briefly hover to snatch fruits. Takes insect prey either by aerial sallies or by gleaning from vegetation. Often sallies over ponds or streams from adjacent vegetation to capture emergent insect prey. Typically forages from a prominent perch; sallies are slower and less agile than those of flycatchers.

Reproduction:

<u>Mode of Reproduction</u>: Monogamous

<u>Mating System</u>: Apparently monogamous within a breeding season. Mated pairs appear to remain together for second nestings; in 7 of 8 cases in which individually recognizable mates were together when young fledged from first nest, mates remained together for the second nesting.

Mating Season: EndSpring - LateSummer

<u>Courtship</u>: Typical courtship display in which mates alternately approach one another on a perch with hopping movements, sometimes touching bills. Usually initiated by the male; successful when the female reciprocates. This display is termed the Courtship Dance or Courtship-Hopping. Courtship-Hopping begins in migrant flocks, and has been noted as early as Apr in California and in Ohio. Courtship-Hopping often includes passing a small item (usually food item such as a fruit, insect, or flower petal, but sometimes inedible items, and occasionally object-passing may be merely simulated, with no object actually passed) between male and female, interspersed with short hops away from and back toward the mate.

Territoriality: HOME RANGE

Mating: NONE

<u>Nest Placement</u>: Cedar Waxwing pairs look for nest sites together, but the female makes the decision. She typically chooses the fork of a horizontal branch, anywhere from 3 to 50 feet high. Many tree species are used, including maples, pines, red cedar, white cedar, apple, pear, hawthorn, and bur oak. Sometimes waxwings put their nests in vertical forks, vine tangles, or resting on a single horizontal branch.

<u>Nest Description</u>: Female waxwings do almost all the nest building; males may do some construction for the second nest of a season. The female weaves twigs, grasses, cattail down, blossoms, string, horsehair, and similar materials into a bulky cup about 5 inches across and 3 inches high. She lines this cup with fine roots, grasses, and pine needles and may decorate the outside with fruiting grasses or oak and hickory catkins. Construction takes 5 to 6 days and may require more than 2,500 individual trips to the nest. Waxwings occasionally save time by taking nest materials from other birds' nests, including Eastern Kingbirds, Yellow-throated Vireos, orioles, robins, and Yellow Warblers.

Egg-Laying: Clutch Size: 2-6 eggs Number of Broods: 1-2 broods Egg Length: 0.6-1.1 in (1.6-2.9 cm) Egg Width: 0.6-0.7 in (1.4-1.8 cm) Incubation Period: 11-13 days Nestling Period: 14-18 days Egg Description: Pale blue or blue gray sometimes spotted with black or gray.

<u>Hatching and Incubation/Gestation</u>: Naked, blind, helpless, weak, and quiet. Hatchlings weigh about 3.1 grams, or a little more than one-tenth of an ounce.

<u>Development</u>: Altricial, hatching completely naked and blind; weak and quiet. Newly hatched young weigh about 3.1g and have soft skin. Mouth is bright red, with yellow edges created by the bill.

<u>Parental Care</u>: Female may occasionally leave the nest to forage, but generally the male delivers food to the female during incubation. After eggs hatch, behavior of the male changes. He delivers food more often (feeding rates approximately double, to 3–4 deliveries/h), and he brings insects instead of fruit. Fly-catching activity is conspicuous near the nest.

Lifespan: eight years **Conservation**:

Official Federal Status: Least Concern

Special Statuses in Individual States: NONE

<u>Threats</u>: Cedar Waxwing populations were stable between 1966 and 2015, and in some areas showed increases, according to the North American Breeding Bird Survey. Partners in Flight estimates a global breeding population of 52 million, with 70% spending some part of the year in the U.S., 55% in Canada, and 18% wintering in Mexico. The species rates a 6 out of 20 on the Continental Concern Score. Cedar Waxwing s not on the 2016 State of North America's Birds' Watch List. The increases in Cedar Waxwing populations are probably in part because of reversion of fields to shrublands and forests and the use of berry trees such as mountain ash in landscaping. Cedar Waxwings are vulnerable to window collisions as well as being struck by cars as the birds feed on fruiting trees along roadsides.

Conservation Efforts: ^^^^^

Extra Facts:

- 1. The name "waxwing" comes from the waxy red secretions found on the tips of the secondaries of some birds. The exact function of these tips is not known, but they may help attract mates.
- 2. Cedar Waxwings with orange instead of yellow tail tips began appearing in the northeastern U.S. and southeastern Canada in the 1960s. The orange color is the result of a red pigment picked up from the berries of an introduced species of honeysuckle. If a waxwing eats enough of the berries while it is growing a tail feather, the tip of the feather will be orange.
- 3. The Cedar Waxwing is one of the few North American birds that specializes in eating fruit. It can survive on fruit alone for several months. Brown-headed Cowbirds that are raised in Cedar Waxwing nests typically don't survive, in part because the cowbird chicks can't develop on such a high-fruit diet.
- 4. Many birds that eat a lot of fruit separate out the seeds and regurgitate them, but the Cedar Waxwing lets them pass right through. Scientists have used this trait to estimate how fast waxwings can digest fruits.

- 5. Because they eat so much fruit, Cedar Waxwings occasionally become intoxicated or even die when they run across overripe berries that have started to ferment and produce alcohol.
- 6. Building a nest takes a female Cedar Waxwing 5 to 6 days and may require more than 2,500 individual trips to the nest. They occasionally save time by taking nest materials from other birds' nests, including nests of Eastern Kingbirds, Yellow-throated Vireos, orioles, robins, and Yellow Warblers.
- 7. The oldest recorded Cedar Waxwing was a male and at least 7 years, 1 month old when he was recaptured and rereleased during banding operations in Maryland in 2014. He had been banded in the same state in 2008.

Notable Species: NONE