

BLACK-BILLED CUCKOO - COCCYZUS ERYTHROPTALMUS

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Cuculiformes Family: Cuculidae Genus: Coccyzus
Species: C. erythrophthalmus

Habitat:

Biomes: Black-billed Cuckoos are birds of woodlands and thickets, including aspen, poplar, birch, sugar maple, hickory, hawthorn, and willow. They tend to occur more frequently in larger and denser woodlands than the Yellow-billed Cuckoo. On their wintering grounds, they live in forest, woodlands, and scrub.

Distribution:

In US: When breeding, the species is distributed in wooded areas across much of the United States, east of the Rockies. Their range just barely extends into North Carolina, Arkansas, Oklahoma and Tennessee. They are not present to the south of those states when breeding. They can also be found in southern regions of Alberta, Saskatchewan, Manitoba, Ontario and Quebec. They're also present in the maritime provinces of Prince Edward Island, eastern New Brunswick and western Nova Scotia. When migrating in spring and fall, they can also be seen in southern United States as well as all of Central America. They migrate to northwestern South America in the fall, where they will spend the winter. Although they are mainly an eastern North American species, there have been confirmed reports of them in British Columbia, Washington and California. The species is also a rare vagrant to western Europe and Greenland.

In Other Countries: ^^^^

Holistic Description: Uncommon and elusive, the Black-billed Cuckoo skulks around densely wooded eastern forests and thickets. Its staccato can be heard day and night, but getting a look at its slender brown body and namesake black bill may take a bit of patience. If it pops into view, notice its red eye ring and small white tips on the underside of its tail feathers. On the breeding grounds, this ardent caterpillar-eater makes quick work of tent caterpillars and webworms.

Species Richness: NO SUBSPECIES

Population Dynamic: Although the black-billed cuckoo is classified as Least Concern (LN) on the IUCN red list, its population is still on the decline. It faces many of the same challenges as many other North American songbirds. Pesticides are having a large effect on them because the chemicals are depleting their food resources. Other threats include the loss of habitat, especially in their wintering tropical habitats, as well as urbanization. As with other migratory birds, they frequently encounter large buildings on their migratory routes which they may collide with, resulting in death.

Evolution and Systematics:

Evolution: Distal portion of left humerus of Black-billed Cuckoo found in pre-Columbian (< 2,000 yr) cave in the Dominican Republic. Also, complete left femur from undetermined Coccyzus species shows similarities to Black-billed Cuckoo.

Systematics: Monophyly of the traditional order Cuculiformes, defined by zygodactylous feet and various skeletal and bill features, has been questioned repeatedly if the families Musophagidae (turacos) and, especially, Opisthocomidae (the Hoatzin, Opisthocomus hoazin) are included.

Number of Species: NO SUBSPECIES

Number of Genera: NO SUBSPECIES

Physical Characteristics:

Size and Length: Length: 11.0-12.2 in (28-31 cm) Weight: 1.4-2.3 oz (40-65 g)

Wingspan: 13.4-15.8 in (34-40 cm)

Coloration: Black-billed Cuckoos are plain brown above without cinnamon tones and white below with a red ring around the eye and a black bill. From below, note the small white tips on the tail feathers.

General Body Features: Cuckoos are slender, dove-sized birds with a longer slightly curved bill and a very long tail. When perched it often has a hunchbacked posture.

Special Features of the Body: NONE

Special Features of the Head and Sensory Organs: NONE

Dentition: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: Cuckoo has zygodactyl feet: 2 inner toes point forward; 2 outer toes are reversed.

Any Special Internal Anatomy: NONE

Sexual Dimorphisms: Otherwise sexually and seasonally monomorphic in plumage; female slightly larger than male.

Differences Between Juvenile Stage and Adult: Juveniles generally resemble adults, but somewhat more brownish, with less distinct undertail pattern; primaries tinged with richer cinnamon; orbital ring yellowish.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: Black-billed Cuckoos move slyly through thickets and often don't budge at all. When they do fly they have a graceful flight, flying on long and pointed wings. They catch prey by sitting motionless for long periods, then running or hopping out to grab caterpillars. They often shake and hammer caterpillars against a branch to remove their spines before swallowing, but sometimes they swallow them spines and all. They tend to forage lower to the ground than Yellow-billed Cuckoos, occasionally even foraging on the ground. Males court females with food prior to mating and form monogamous bonds for the breeding season. Black-billed Cuckoos occasionally lay eggs in nests of other birds, though they do this far less often than the Common Cuckoo (of Europe) or the Brown-headed Cowbird. Among their hosts are other Black-billed Cuckoos, Yellow-billed Cuckoos, Chipping Sparrows, American Robins, Gray Catbirds, Wood Thrushes, and six other species. Males and females incubate the eggs continuously until they hatch. Young leave the nest at 6–7 days old, about two weeks before they can fly.

Locomotion: Skulky behavior when perched. Slips quietly through thickets; otherwise, rarely moves from branch to branch. Deliberately avoids movement when observers are present, particularly when nesting. Seldom perches in the open, difficult to locate visually unless calling. Wings long and pointed. Flight graceful, headlong, hurtling on deep wing beats; glides then jumps into cover.

Communication and Perception: Males and females sing a staccato series of 3 to 5 toots on the same pitch. They take a brief pause between sets, but can go on repeating sets for several minutes. They sing during, day, night and often while flying overhead.

Home Range: Little information. Probably territorial, as is Yellow-billed Cuckoo.

Degree of Sociality: Solitary during breeding season; observed alone or in breeding pairs. May associate with other species or on overwintering grounds.

Level of Aggression: NONE

Migration: Long-distance migrant. Migrates at night and frequently calls in flight.

Predators:

Predators: Hawks, Aplomado Falcon, Common Grackle, Snakes, Mammals.

Anti-Predator Defenses: Escapes detection by skulky, inconspicuous behavior and drab plumage. Adult on nest will flush when predator > 1 m from nest, and will give Mew or Cucucu Call. If call does not frighten intruder away, cuckoo will adopt Aggressive Posture with shoulders humped, tail fanned, and wings spread and resting on tail; wings and tail lifted with every Coo-oo Call. Later in nestling period, adult becomes more aggressive to intruders, particularly when disturbed chicks give Bark Call. Adult will fly at intruder with open bill, tail spread, and drooping wings, emitting loud Alarm Call (cuck-a-ruck), repeatedly landing on ends of branches. Attacks quickly decrease in intensity, until adult returns to nearby perch and watches intruder quietly. In presence of predator, young (1–3 wk old) assumes erect, almost perpendicular position with neck outstretched, bill pointed straight up, and eyes open.

Diet and Nutrition:

Adult Diet: Black-billed Cuckoos eat large insects such as caterpillars, katydids, cicadas, and grasshoppers. They seem to have a particular appetite for caterpillars such as fall webworms, tent caterpillars, and gypsy moths. Individuals have often been found with more than 100 caterpillars in their stomach at once. On their wintering grounds they also eat fruit and seeds.

Juvenile Diet: ^^^^

Special Adaptations for Getting Prey: Generally waits motionlessly for long periods, cocks head watching for prey to reveal itself. Scans surrounding vegetation; makes running, hopping dashes to snatch slow-moving caterpillars and katydids. Catches grasshoppers on ground. Feeds with little interruption during insect outbreaks. When feeding on caterpillars clustered on tips of branches, cuckoo may hop to branch located below cluster and feed while perched. May also fly to cluster and flutter near it until caterpillar can be plucked from cluster. Sometimes walks out along branch and reaches cluster by stretching. Will tear open caterpillar tents to procure prey, but also picks them off tree trunks and from ground.

Reproduction:

Mode of Reproduction: Monogamous

Mating System: Little information. Probably monogamous.

Mating Season: April to June

Courtship (NOT REALLY - PRECOPULATORY BEHAVIOR): In precopulatory behavior, male lands on branch in nest vicinity carrying food item in bill; gives loud Cucucu Call. Female arrives and flicks widespread tail up and down while perched (Tail Flick); gives Mew Call. Tail Flick may continue intermittently for ≥ 15 min, while male remains silent and motionless. Finally, male hops to branch on which female is perched and mounts her while still holding larva in bill.

Territoriality: Little information. Probably territorial, as is Yellow-billed Cuckoo.

Mating: Copulation usually occurs on branch 1–1.5 m above ground. May be performed at irregular intervals over 4- to 5-min period. After dismount, male eats larva or flies away carrying it. May feed prey items to female (e.g., caterpillars). Precopulatory and copulatory behavior continues through incubation period on branches adjacent to nest. Occasionally, copulation does not follow precopulatory behavior.

Nesting: Black-billed Cuckoos hide their nests among leaves or tangles in deciduous trees, shrubs, or brambles (occasionally evergreen trees such as hemlock). Nests are usually less than 7 feet above the ground, but can be up to 50 feet high. Both adults help build the nest, but the female often lays eggs in the nest before it's completed. The nest is flimsy—a shallow cup made of twigs and grasses and lined with dead or green leaves, pine needles, stalks, plant fibers, rootlets, mosses, and spiderwebs. The finished nest is about 6 inches across and less than an inch deep.

Egg-Laying: Clutch Size: 2-5 eggs Number of Broods: 1-2 broods Egg Length: 0.9-1.3 in (2.4-3.3 cm) Egg Width: 0.7-0.9 in (1.8-2.4 cm) Incubation Period: 10-11 days Nestling Period: 6-7 days Egg Description: Greenish-blue, unmarked. LOOK AT BOLD FOR PARASITISM.

Hatching and Incubation/Gestation: Helpless, but alert and active within minutes of hatching. Shiny black skin, no down.

Development: Altricial, but alert and active within minutes of hatching. Body mass about 7.4 g, length about 6–7 cm. Strong grasping reflex allows chick to cling to nest. Skin shiny black; unfeathered, except gray hairlike neossopiles on pteryiae; apteria bare. Legs, feet, and bill light slate gray; gape red with elaborate disc-like mouth-markings

Parental Care: Both parents usually feed young. However, only 1 adult will feed nestlings if mate is tending to others that have already left nest. Adult approaches nest by running along nest branch; resulting vibrations stimulate food response in young, nestling opens mouth wide, stretches neck, and flaps wings while emitting a buzzing Begging Call. If food response not given prior to adult reaching nest, adult gives low Mew Call to elicit it

Lifespan: More than 4 years old.

Conservation:

Official Federal Status: Least Concern

Special Statuses in Individual States: NONE

Threats: Black-billed Cuckoos are uncommon and their populations declined by 68% since 1970, according to Partners in Flight. The species is on the Yellow Watch List and has a Continental Concern Score of 13 out of 20. The estimated global breeding population is 890,000. In 2016, Partners in Flight estimated that if current rates of decline continue, Black-billed Cuckoos will lose another half of their remaining population by 2055. Black-billed Cuckoo numbers fluctuate annually with caterpillar and cicada outbreaks, but generally, the species appears to be declining across its range. Increases in pesticide use likely contribute to population declines in caterpillars and cuckoos. Habitat degradation and loss on both the breeding and wintering grounds may also be contributing to population declines.

Conservation Efforts: ^^^^^

Extra Facts:

1. Cuckoos eat lots of spiny caterpillars, and those spines end up sticking to the lining of their stomach. To get rid of the spines, they periodically shed the stomach lining, coughing it up in one giant pellet, similar to an owl.
2. Both Black-billed and Yellow-billed Cuckoos are sometimes called “rain crows” because, according to folklore, they tend to call just before rain starts to fall.
3. The Common Cuckoo of the Old World is famous for laying its eggs in other birds’ nests. Black-billed Cuckoos occasionally do this, but more often they build their own nest and raise their chicks themselves, as most birds do.
4. The time from egg laying to fledging is 17 days and is among the shortest for any bird. At 6 days old, nestlings look like little porcupines with long pointed feather sheaths (a thin tube of keratin that surrounds and protects a developing feather). When they are ready to leave the nest their feathers pop out of the sheaths like popcorn, turning the spiky nestling into a fully feathered bird.
5. When young birds are threatened they strike a pose similar to an American Bittern with their neck outstretched and bill pointed skywards.
6. Cuckoos have zygodactyl feet—2 toes point forward and 2 toes point backward. Owls, Osprey, and woodpeckers also have zygodactyl feet.
7. The oldest known Black-billed Cuckoo was at least 4 years old; it was banded in Ontario in 1965 and recovered in Connecticut in 1969.

Notable Species: NONE

Brood Parasitism: Black-billed cuckoos are known to lay their eggs in the nests of other birds. They can lay eggs in the nests of other black-billed cuckoos, called conspecific parasitism, or in the nests of other songbirds, known as interspecific

parasitism. The females will usually parasitize nests in the afternoon because the nests are often unguarded at this time. This cuckoo species is thought to have a laying interval of about a day so if two eggs show up in a nest on the same day, you can rightfully assume that one is a parasitic egg. Many cuckoos are obligate brood parasites, meaning they only lay eggs in other birds' nests and never take care of their own young. Birds that do this, such as the common cuckoo or the brown-headed cowbird, lay relatively small eggs because their expected hosts are usually smaller birds. Cuckoos in the genus *Coccyzus*, lay relatively large eggs even though they still parasitize smaller birds. Yellow warblers are the smallest birds recorded caring for black-billed cuckoo eggs. In experiments, these wood warblers were found to accept the cuckoo eggs 63% of the time even though their own eggs are only a quarter of the size. Even with the size difference, the warbler parent is often still able to raise the cuckoo as long as it can provide the chick with sufficient nutrition and incubation.