

YELLOW-RUMPED WARBLER - DENDROICA CORONATA

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Passeriformes Family: Parulidae Genus: Setophaga
Species: *S. coronata*

Habitat:

Biomes: Yellow-rumped Warblers spend the breeding season in mature coniferous and mixed coniferous-deciduous woodlands (such as in patches of aspen, birch, or willow). In the western U.S. and in the central Appalachian mountains, they are found mostly in mountainous areas. In the Pacific Northwest and the Northeast, they occur all the way down to sea level wherever conifers are present. During winter, Yellow-rumped Warblers find open areas with fruiting shrubs or scattered trees, such as parks, streamside woodlands, open pine and pine-oak forest, dunes (where bayberries are common), and residential areas. On their tropical wintering grounds they live in mangroves, thorn scrub, pine-oak-fir forests, and shade coffee plantations.

Distribution:

In US: The yellow-rumped warbler breeds from eastern North America west to the Pacific, and southward from there into Western Mexico. "Goldman's" yellow-rumped warbler is a non-migratory endemic within the highlands of Guatemala and the black-fronted warbler is also a non-migratory Mexican endemic. The myrtle and Audubon's forms are migratory, traveling to the southern U.S., Mexico, Central America, and the Caribbean for winters. Among warblers Audubon's is by far the most widespread in North America in winter, and in the northern and central parts of the continent, it is among the last to leave in the fall and among the first to return and is an occasional vagrant to the British Isles and Iceland.

In Other Countries: ^^^^^^^^^

Holistic Description: Yellow-rumped Warblers are impressive in the sheer numbers with which they flood the continent each fall. Shrubs and trees fill with the streaky brown-and-yellow birds and their distinctive, sharp chips. Though the color palette is subdued all winter, you owe it to yourself to seek these birds out on their spring migration or on their breeding grounds. Spring molt brings a transformation, leaving them a dazzling mix of bright yellow, charcoal gray and black, and bold white.

Species Richness: 5 SUBSPECIES INTO [CHECK SYSTEMATICS] GROUPS. (2)

Population Dynamic: CHECK THREATS

Evolution and Systematics:

Evolution: The myrtle form was apparently separated from the others by glaciation during the Pleistocene, and the Audubon's form may have originated more recently through hybridization between the myrtle warbler and the Mexican nigrifrons form.

Systematics: Includes 2 distinctive groups formerly considered separate species: Myrtle Warbler (*coronata* group) of n. and e. North America and Audubon's Warbler (*auduboni* group) of the West and of Mexican coniferous forests. Ranges of these 2 groups overlap from nw. British Columbia to sw. Alberta, and they interbreed along a narrow band through n. British Columbia and along the border between British Columbia and Alberta

Number of Species: 5 SUBSPECIES INTO [CHECK SYSTEMATICS] GROUPS. (2)

Number of Genera: 5 SUBSPECIES INTO [CHECK SYSTEMATICS] GROUPS. (2)

Physical Characteristics:

Size and Length: Length: 4.7-5.5 in (12-14 cm) Weight: 0.4-0.5 oz (12-13 g)

Wingspan: 7.5-9.1 in (19-23 cm)

Coloration: In summer, both sexes are a smart gray with flashes of white in the wings and yellow on the face, sides, and rump. Males are very strikingly shaded; females are duller and may show some brown. Winter birds are paler brown, with bright yellow rump and usually some yellow on the sides.

General Body Features: Yellow-rumped Warblers are fairly large, full-bodied warblers with a large head, sturdy bill, and long, narrow tail.

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: NONE

Any Special Internal Anatomy: NONE

Sexual Dimorphisms: In summers, males of both forms have streaked backs of black on slate blue, white wing patches, a streaked breast, and conspicuous yellow patches on the crown, flank, and rump. Audubon's warbler also sports a yellow throat patch, while the myrtle warbler has a white throat and eye stripe, and a contrasting black cheek patch. Females of both forms are more dull, with brown streaking front and back, but still have noticeable yellow rumps.

Differences Between Juvenile Stage and Adult: Crown and upperparts buff brown, streaked with blackish brown. Sides of head brown and unstreaked, with faint white eye-crescents. Underparts gray white, sometimes lightly tinged yellow, and streaked with dark brown. Upperwing coverts brownish, with pale tawny or buff tips.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: Yellow-rumped Warblers flit through the canopies of coniferous trees as they forage. They cling to the bark surface to look for hidden insects more than many warblers do, but they also frequently sit on exposed branches and catch passing insects like a flycatcher does. In winter, Yellow-rumped Warblers join flocks and switch to eating berries from fruiting shrubs. Sometimes the flocks are enormous groups consisting entirely of Yellow-rumped Warblers. If another bird gets too close, Yellow-rumped Warblers indicate the infraction by holding the body horizontally, fanning the tail, and raising it to form a right angle with its body. When males court females, they fluff their feathers, raise their wings and the feathers of the crown, and hop from perch to perch, chipping. They may also make display flights in which they glide back and forth or fly slowly with exaggerated wingbeats. The Yellow-rumped Warbler's flight is agile and swift, and the birds often call as they change direction.

Locomotion: Hops predominantly on arboreal vegetation and ground. Often climbs vertical trunk of trees while foraging. Most flight, other than during migration, is within or between trees, although individuals will fly above canopy while foraging for food for nestlings. Performs vertical flights in addition to horizontal flights that sometimes extend width of territory. Will fly across open spaces in forest and out of forest into openings.

Communication and Perception: Males sing a slow, soft, sweetly whistled warble or trill. The pitch is mostly even but may rise or fall slightly, speeding up as it ends. Songs last 1-3 seconds and consist of up to 21 individual notes.

Home Range: Maintains exclusive intraspecific breeding territories. Average size 0.45 ha. Yellow-rumped Warbler has largest territories and is widely dispersed through spruce forests at low density. On islands, however, with some congeners absent, territory size is up to 2.5 times smaller than on adjacent mainland. Often displays yellow rump-patch while foraging and hawking; may act as passive display (perhaps territorial). Wing- and tail-flicking of white and yellow patches are also likely close-range signals.

Degree of Sociality: During breeding season, consorts only with mate, until young are cared for, then may join single- and mixed-species flocks (see Breeding: immature stage, below). At northern edge of range, often joins single-species flocks, possibly to improve foraging efficiency for bayberries.

Level of Aggression: When individual distance is violated, holds body horizontal and spreads tail and holds it at right angle to body. Crown-raising reported. Hostile intraspecific interactions peak in early breeding season, followed by rapid decline and another smaller peak corresponding to period of dispersal of adults and newly fledged young. Males initiated encounters more often than females.

Migration: Short to long-distance migrant. Some western Yellow-rumped Warblers move to the nearby Pacific Coast to spend the winter. Other populations migrate to wintering grounds in Mexico and throughout Central America.

Predators:

Predators: Accipiter Hawks, American Kestrel, Short-eared Owl, Barn Owl, Shrikes, Gulls, Blue Jay, Red Squirrel, Common Raven, American Crow, other Corvids.

Anti-Predator Defenses: While part of mixed-species flock, individuals scatter and give outbursts of sharp chip -like calls in response to avian predator or alarm calls of Carolina Chickadees. Female near her nest responded to alarm chips of Least Flycatcher by giving regular, high-pitched chips at even rate of 1/s, slowing as alarm appeared to decrease. Both parents perform Distraction Display when fledglings are threatened on the ground. In display by female, she holds both wings three-fourths extended and trembling, and drags them along ground and through leaf litter, making considerable noise. Fans out tail and holds it more to one side than the other.

Diet and Nutrition:

Adult Diet: Yellow-rumped Warblers eat mainly insects in the summer, including caterpillars and other larvae, leaf beetles, bark beetles, weevils, ants, scale insects, aphids, grasshoppers, caddisflies, craneflies, and gnats, as well as spiders. They also eat spruce budworm, a serious forest pest, during outbreaks. On migration and in winter they eat great numbers of fruits, particularly bayberry and wax myrtle, which their digestive systems are uniquely suited among warblers to digest. The habit is one reason why Yellow-rumped Warblers winter so much farther north than other warbler species. Other commonly eaten fruits include juniper berries, poison ivy, poison oak, greenbrier, grapes, Virginia creeper, and dogwood. They eat wild seeds such as from beach grasses and goldenrod, and they may come to feeders, where they'll take sunflower seeds, raisins, peanut butter, and suet. On their wintering grounds in Mexico they've been seen sipping the sweet honeydew liquid excreted by aphids.

Juvenile Diet: ^^^^^^

Special Adaptations for Getting Prey: Primarily gleans insects from leaves and branches. Commonly hawks and sallies for mosquitoes, gnats, flying ants, and the like. In Maine, foraging males hovered significantly more than females did; females foraged more rapidly than males, and pairs on islands foraged more slowly than those on mainland. Primarily gleans fruit or insects from leaves or branches, rarely using dead leaves.

Reproduction:

Mode of Reproduction: Monogamous

Mating System: Little information, assumed monogamous, but no information on polygamy or floating males. No information on sex ratios.

Mating Season: April to May

Courtship: Male performs courtship displays around female typical of those seen in other Dendroica: Hops from perch to perch, fluffs out feathers, raises wings, erects crown feathers, gives chips. Account of males remaining close to nest-building females may indicate guarding behavior seen in other Dendroica warblers. Flight-related displays resemble those given in male-male encounters and include gliding and mothlike flight.

Territoriality: HOME RANGE

Mating: No information on displays or extra-pair copulations. Female has sperm-storage gland where sperm is stored before fertilization.

Nest Placement: Yellow-rumped Warblers put their nests on the horizontal branch of a conifer, anywhere from 4 to about 50 feet high. Tree species include hemlock, spruce, white cedar, pine, Douglas-fir, and larch or tamarack. They may build their nests far out on a main branch or tuck it close to the trunk in a secure fork of two or more branches. Occasionally nest are built in a deciduous tree such as a maple, oak, or birch.

Nest Description: Females build the nest, sometimes using material the male carries to her. The nest is a cup of twigs, pine needles, grasses, and rootlets. She may also use moose, horse, and deer hair, moss, and lichens. She lines this cup with fine hair and feathers, sometimes woven into the nest in such a way that they curl up and over the eggs. The nest takes about 10 days to build. It's 3-4 inches across and about 2 inches tall when finished.

Egg-Laying: Clutch Size: 1-6 eggs Number of Broods: 1-2 broods Egg Length: 0.7-0.8 in (1.7-2.1 cm) Egg Width: 0.5-0.6 in (1.3-1.5 cm) Incubation Period: 12-13 days Nestling Period: 10-14 days Egg Description: White, speckled with brown, reddish-brown, gray, or purplish gray.

Hatching and Incubation/Gestation: Helpless and naked with sparse brown down. Eyelids have dull white spots

Development: Few detailed studies of nestling behavior and development. Altricial and naked, with sepia to dark brown down; eyes closed. Bill and feet dusky buff. Upper and lower eyelids, with dull white spots.

Parental Care: Both parents may bring food simultaneously, remaining at nest together for up to 20 s. During 14 h of observation in Massachusetts, male brought food once every 19 min, female once every 28 min; on 1 day, male brought food 60 times, female 48 times, so young were fed once every 10.9 min. Usually by female. Female occasionally chases male in vicinity of nest.

Lifespan: Up to 7 years old.

Conservation:

Official Federal Status: Least Concern

Special Statuses in Individual States: NONE

Threats: Yellow-rumped Warblers are common and widespread, and populations are generally stable though they experienced a small decline from 1966 to 2015, according to the North American Breeding Bird Survey. Partners in Flight estimates a global breeding population of 130 million with 58% spending some part of the year in the U.S., 71% in Canada, and 31% wintering in Mexico. The species rates a 6 out of 20 on the Continental Concern Score and are not on the 2016 State of North America's Birds' Watch List. Migrating Yellow-rumped Warblers, like many migrants, are frequently killed in collisions with radio towers, buildings, and other obstructions.

Conservation Efforts: ^^^^^^

Extra Facts:

1. The Yellow-rumped Warbler is the only warbler able to digest the waxes found in bayberries and wax myrtles. Its ability to use these fruits allows it to winter farther north than other warblers, sometimes as far north as Newfoundland.
2. Male Yellow-rumped Warblers tend to forage higher in trees than females do.
3. Yellow-rumped Warblers are perhaps the most versatile foragers of all warblers. They're the warbler you're most likely to see fluttering out from a tree to catch a flying insect, and they're also quick to switch over to eating berries

in fall. Other places Yellow-rumped Warblers have been spotted foraging include picking at insects on washed-up seaweed at the beach, skimming insects from the surface of rivers and the ocean, picking them out of spiderwebs, and grabbing them off piles of manure.

4. When Yellow-rumped Warblers find themselves foraging with other warbler species, they typically let Palm, Magnolia and Black-throated Green warblers do as they wish, but they assert themselves over Pine and Blackburnian warblers.
5. The oldest recorded Yellow-rumped Warbler was at least 7 years old.

Notable Species: NONE