# **OLIVE-SIDED FLYCATCHER - CONTOPUS COOPERI**

**Taxonomy**: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Passeriformes Family: Tyrannidae Genus: Contopus Species: C. cooperi

## Habitat:

<u>Biomes</u>: Olive-sided Flycatchers breed mostly in the boreal forest and in western coniferous forests, from sea level to over 10,000 feet elevation in some parts of the Rockies. Here they are found in forests of spruce, fir, Douglas-fir, hemlock, western redcedar, and tamarack or larch. In southern California and northern Baja California (home to subspecies majorinus), they inhabit mostly pine forest. In all nesting areas, they use openings or edges in the forest and are rarely found in deep, closed forest—look for them in meadows, rivers and streams, partially logged areas, recent burns, beaver ponds, bogs, and muskegs. These areas often have dead or dying trees, which provide exposed perches for singing, foraging, and watching for predators and rivals.

## **Distribution**:

<u>In US</u>: Their breeding habitat is coniferous woods across Canada, Alaska and the northeastern and western United States, and other types of wooded area in California. Olive-sided flycatchers are abundant in early postfire landscapes that have burned at high severity. These birds migrate to Central America and the Andes region of South America.

In Other Countries: NONE

<u>Holistic Description</u>: The Olive-sided Flycatcher whistles an instantly recognizable quick, three beers! across its rugged habitat of coniferous mountain forests, bogs, and muskeg. This husky, barrel-chested flycatcher is the largest of the pewees, with heavy grayish markings on the sides as if the bird is wearing a waistcoat. Olive-sided Flycatchers are vigorous defenders of their territory and nest, chasing rivals and predators with the fervor of a kingbird. Look for them singing from open perches in the highest parts of live or dead trees. These birds are also fairly common in recently burned forests.

**Species Richness**: 2 SUBSPECIES

*Population Dynamic*: The numbers of this bird are declining, probably due to loss of habitat in its winter range. CHECK THREATS.

#### **Evolution and Systematics:**

Evolution: NONE

<u>Systematics</u>: Plumage color and pattern are relatively constant across the species' vast breeding range, but populations that breed in the West average larger overall than populations that breed east of the Rocky Mts., although birds that breed disjunctly in s. California and n. Baja California have the wing and tail distinctly longer.

<u>Number of Species</u>: 2 SUBSPECIES <u>Number of Genera</u>: 2 SUBSPECIES

# **Physical Characteristics:**

Size and Length: 7.1-7.9 in (18-20 cm) Weight: 1.0-1.4 oz (28-40.4 g)

*Wingspan*: 12.4-13.6 in (31.5-34.5 cm)

<u>Coloration</u>: Sooty gray-brown above (with olive tones only in optimal light and fresh plumage), paler below. The dark gray sides of the breast contrast with white in the center, making it look as if the bird is wearing a vest. From the rear, large white tufts at the sides of the back are sometimes visible.

<u>General Body Features</u>: A stocky, barrel-chested flycatcher, with a large head and a heavy, long bill for its size. It has rather long wings that can make the tail look short.

<u>Special Features of the Body</u>: The dappled coloration of the Olive-Sided Flycatchers, especially on the chest and belly, helps them create a visual paradox to those looking at an individual on the treetop from the ground level, thus helping them stay concealed among the colorful canopies of the deciduous forests.

<u>Special Features of the Head and Sensory Organs</u>: The sharp, pointed beaks assist them in catching the insects with an accurate target and breaking the shells before consuming.

**Dentition**: BEAK/LAMELLAE/GIZZARD

<u>Special Features of the Limbs and Digits</u>: Their wings and small size make them excellent fliers, being able to maneuver in flight without much effort. They can also hover and fly backward.

Any Special Internal Anatomy: NONE

<u>Sexual Dimorphisms</u>: Sexes alike in appearance; best distinguished in the hand by wing length, which is longer in males (103–117 mm) than females (96–109 mm). Males generally larger than females.

<u>Differences Between Juvenile Stage and Adult</u>: Juvenile plumage similar to that of adult, except upperparts more brownish, and wing-bars and tertial edges washed buff.

#### Behavior:

# Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: Pewees (in the genus Contopus) are active, agile flycatchers; Olive-sided Flycatchers are the giants of this group, more than twice as heavy as Eastern and Western Wood-Pewees. When chasing a rival or a predator, in flying out to take an insect on the wing, their flight is strong, rapid, and direct, recalling the flight of larger kingbirds. The species is highly territorial, often with large territories—sometimes in excess of 100 acres. Territories often do not abut one another but instead are separated by areas of unsuitable habitat. When courting, males may chase females through the territory and perform a short display flight, which the female may join. Breeding males drive out rival males from the territory in swift aerial chases. Once the rival is expelled, the nesting pair reunites, raising crest feathers, clicking bills, and pumping tails and bodies. The pair bond in this species appears to be strong and can survive failed nestings and renesting attempts. At least two cases are known in which a pair nested in consecutive years. Unlike many Nearctic migrants, wintering Olive-sided Flycatchers in Central and South America also hold and defend territories from others of their species. They are rarely found among mixed-species flocks.

<u>Locomotion</u>: Flight usually direct, fast, and efficient with deep rapid wing beats and sharp turns when pursuing prey or chasing predators. Flight more fluttering, with short wing beats, when returning to perch. During multiple foraging attempts within one flight, flight becomes erratic as bird tries to follow prey. When flushed off nest during incubation, female often drops down toward the ground without beating wings. The flight of this bird is peculiar. It makes a kind of vertical free fall after climbing into the air ending in singing with the head lifted up.

<u>Communication and Perception</u>: The distinctive whistled song was famously rendered quick, three beers! by early field guide authors. Males give this song throughout the breeding season but most consistently and frequently early in the season. Some apparently unmated males give variations on the song, and females also sing occasionally when nesting commences, though their song is not as loud or ringing as the male's. Even fledglings sing weakly at times.

<u>Home Range</u>: Nesting pairs generally are well spaced and require relatively large territory. Bent estimated 1 pair/1.6 km of shoreline along Lake Washington near Seattle, WA, at turn of twentieth century. Territories often overlap with those of other flycatchers, particularly Western Wood-Pewees.

<u>Degree of Sociality</u>: Solitary and territorial on breeding and wintering grounds. In n. Colombia, where this species was the most common nonparulid (warbler) migrant species, it was part of mixed-species foraging flock in only 2% of observations. <u>Level of Aggression</u>: No detailed information. Intolerant of conspecifics during breeding season. In territorial encounters, both sexes display before, during, or shortly after agonistic encounters by raising crown feathers to appear crested, clicking bills, pumping tails, and bouncing bodies on perch. Male sometimes flies at and chases female when she is off nest during incubation.

<u>Migration</u>: Long-distance migrant (most populations); short-distance migrant (subspecies majorinus). Due to their long migration, Olive-sided Flycatchers arrive on breeding grounds late in spring and may depart again as early as August.

# **Predators**:

<u>Predators</u>: Gray Jay, Douglas Squirrel, Northern Flying Squirrel. Steller's Jay, Common Raven, Red Squirrels, Accipiters, Peregrine Falcon

<u>Anti-Predator Defenses</u>: Both members of pair aggressively defend nest area, including attacks directed toward human intruders and other bird or predator species approaching nest. Behavior includes dive-bombing flights, incessant vocalizations and bill-snapping, and occasional physical interactions with intruder. Tufts described a pair of Olive-sided Flycatchers knocking a red squirrel off a nest limb and dive-bombing it as it ran away.

## **Diet and Nutrition:**

<u>Adult Diet</u>: Olive-sided Flycatchers eat flying insects, most of which they capture in flight, including flying ants, wasps, bees, dragonflies, grasshoppers, beetles, moths, and flies. They may occasionally eat fruit (berries) during migration or during the nonbreeding season, as other large flycatchers do, but observations are lacking.

Juvenile Diet: ^^^^^

<u>Special Adaptations for Getting Prey</u>: Forages by sallying out to snatch flying insect and returning to same or another prominent perch. Unlike other flycatcher species that attack prey by hovering and striking or pouncing on and capturing prey on ground, Olive-sided Flycatcher is restricted almost entirely to sallying for prey. A passive sit-and-wait predator, remaining perched until prey is sighted; then actively purses prey, including insects that are often difficult to capture. sually consumes smaller prey in flight. Consumes larger prey upon return to perch, where it often beats insect parts that protrude from its bill by striking insect against branch-behavior that may ease the bird's ability to swallow large prey, or kill and/or debilitate stinging bees. Consumption of large prey often requires a couple of head thrusts backward, with bill and/or throat manipulations. After ingesting prey, usually wipes bill on perch.

#### Reproduction:

Mode of Reproduction: Monogamous

Mating System: Believed to be monogamous, but one instance of polygyny suspected in Alaska and one in Oregon.

*Mating Season*: April to July (SPRING AND SUMMER)

*Courtship*: Courtship behavior includes males pursuing females throughout territory, and making several short, looping display flights near perched female. Receptive female may fly with male; in these flights, the birds make shallow, synchronized downward swoops together with 1 bird approximately 1 m above the other. Female solicits copulation by landing on branch near male and rapidly fluttering half-open wings.

*Territoriality*: HOME RANGE

<u>Mating</u>: Copulation lasts only 2-4 s. Male also may reinforce pair bond during incubation by occasionally swooping at perched female to force her back on nest.

<u>Nest Placement</u>: As is true of many flycatchers, the female chooses the nest site, but males sometimes participate. Nests are usually on a horizontal branch, well away from the trunk and toward the tip. Nests in the northern and eastern parts of range tend to be lower, those in the West higher in the tree. The lowest nest on record was 5 feet off the ground, the highest 197 feet. Most nests are placed in coniferous trees (sometimes in burned, dead conifers), but nests in aspen, willow, oak, sycamore, alder, cottonwood, elm, and locust are also documented.

<u>Nest Description</u>: The nest is a loose, bulky but small cup with a foundation of twigs and rootlets, with a lining of grasses, finer rootlets, lichens, and conifer needles. The outside diameter of the nest is about 4.6 inches, the inside diameter 2.8 inches.

*Egg-Laying*: Clutch Size: 3-4 eggs Number of Broods: 1 brood Egg Length: 0.8-0.9 in (2-2.4 cm) Egg Width: 0.6-0.7 in (1.5-1.7 cm) Incubation Period: 15-19 days Nestling Period: 15-19 days Egg Description: Creamy white or buff with ring of brownish spots on large end.

Hatching and Incubation/Gestation: Hatch naked and helpless.

<u>Development</u>: Altricial young. No information. During late nestling stage, young spend considerable time flapping wings and strengthening flight muscles.

<u>Parental Care</u>: Female responsible for brooding nestlings. Most time spent brooding is early in the nestling period (first week) and during inclement weather. Both adults feed nestlings, although female most often. Male occasionally gives food to female, which feeds chicks, but male mostly feeds chicks directly.

*Lifespan*: Up to 11.1 years.

## **Conservation**:

<u>Official Federal Status</u>: Near Threatened <u>Special Statuses in Individual States</u>: NONE

<u>Threats</u>: Olive-sided Flycatcher populations are in decline. According to Partners in Flight, their numbers have fallen by 79% since 1970, with the remaining breeding population estimated at 1.9 million. The species rates a 13 out of 20 on the Continental Concern Score and is on the Yellow Watch List for declining populations. Declines may be due to a loss of wintering habitat. This species takes advantage of high insect numbers and good foraging conditions in recently burned forests, and may be adversely impacted by fire suppression and salvage logging.

Conservation Efforts: ^^^^

# Extra Facts:

- 1. Of all the flycatcher species that breed in the United States, Olive-sided Flycatcher has the longest migration, with some migrating between central Alaska and Bolivia, a distance of 7,000 miles.
- 2. Olive-sided Flycatchers are frequently found in burned forests. The opened area and many dead trees (for perches) may help it to catch flying insects, which can be abundant after forest fires.
- 3. Olive-sided Flycatchers defend their nests aggressively. A pair was observed to knock a red squirrel off a nest limb and chase it away.
- 4. The oldest recorded Olive-sided Flycatcher was at least 11 years, 1 month old when it was recaptured and re-released during banding operations in California.

# **Notable Species**:

- 1. C. c. cooperi Breeds across the boreal zone from w. Alaska east to Newfoundland south through the Cascades and Sierra Nevada to central California, through the Rocky Mts. to ne. Arizona and ne. New Mexico, and, sparingly, through the Appalachians to w. North Carolina.
- 2. C. c. majornius Breeds in mountains of s. California and n. Baja California.