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# Callophrys [Mitoura] johnsoni Johnson's Hairstreak

Family: Lycaenidae Family Description:

Alternate Common Names: Mistletoe Hairstreak, Brown Mistletoe Hairstreak.

### **Description:**

Caterpillar: The caterpillar is yellowish green to dark green, and is marked with a row of red, yellow, and white diagonal dashes along each side. Its average, full-grown length is 3/4 inch.

Adult: This is a fairly small butterfly, with a wingspan of 1 to 1 1/8 inches. There is a small, thin <u>tail</u> extending from the rear of each hindwing. The male is dark brown on the upperside, clouded with orange at the rear of the hindwing, while the female is reddish brown on the upperside. Underneath, both sexes are golden brown to grayish brown. There is a curved line of white spanning across both the foreand hindwing. The line may be edged towards the inside with black on the hindwing. The underside of the hindwing is additionally marked with several black dots and possibly a small patch of bluish gray at the rear, near from where the tail originates.

## Range:

This species ranges from southern British Columbia south to central California, and an isolated population occurs from northeastern Oregon into central <u>Idaho</u>.

#### **Habitat:**

It occurs most commonly in thick coniferous forests and occasionally in other woodlands.

#### Diet:

**Caterpillar:** Caterpillars feed on the external parts of dwarf mistletoes (*Arceuthobium* spp.), a <u>parasitic</u> plant that lives on a variety of conifers.

Adult: Butterflies drink flower nectar and may obtain additional moisture and salts from mud.

## **Ecology:**

There is one generation of caterpillars each summer in most of its range, but there may be two in parts of California. Each caterpillar undergoes five stages of growth, called <u>instars</u>. The caterpillar is equipped with a honey gland, also known as a <u>dorsal nectary organ</u>, which emits a sugary solution agreeable to ants. The ants feed on the solution and in turn protect the caterpillar from predators. <u>Pupae</u> overwinter in a physiological state called <u>diapause</u>. Adults generally <u>fly</u> from February through August. Butterflies tend to fly high up in the forest canopy. The thin "tail" on each of the hindwings of adults is thought to mimic insect antennae and thus misleads bird predators into biting at the wrong end and only getting a mouthful of wing, while the butterfly escapes in the other direction. This species has undergone large fluctuations in its numbers since the mid-1900s, from being very rare to very common to currently being quite rare again.

### Reproduction:

Males <u>perch</u> to wait for receptive females. Eggs are laid on mistletoes.

#### Conservation:

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Idaho Status: Unprotected nongame species.

Global Rank: vulnerable to population decline and extinction.

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