



Great Purple Hairstreak; Great Blue Hairstreak, *Atlides halesus* (Cramer) (Insecta: Lepidoptera: Lycaenidae)¹

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Introduction

The great purple hairstreak is one of our most beautiful southern butterflies. Although it is most commonly known as the great purple hairstreak, it has no purple on it. The brilliant iridescent scales on the upper surface of the wings from which it gets its name are blue not purple.

Distribution

The great purple hairstreak is found throughout the southern United States where its host plant is found. It extends farther north along the eastern coast to New York. In the West, its southern distribution extends into Mexico.

Description

The wingspread of the adult is 14 to 24 mm. The upper sides of the wings are iridescent blue with black borders. Each hind wing has two black tails (hairstreaks). The undersides of the wings are brown with a series of white and yellow spots on the margin of the hind wings at the bases of the tails. The undersides of the wings have three basal, bright red

spots (one on the front and two on the hind wings). The underside of the abdomen is bright red.



Figure 1. Adult great purple hairstreak, *Atlides halesus* (Cramer) . Credits: Jerry F. Butler, University of Florida

Mature larvae are green with a dense covering of short, fine light orange hairs.

Pupae are dark brown mottled with black.

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Figure 2. Adult great purple hairstreak, *Atlides halesus* (Cramer); dorsal view (left), ventral view (right). Credits: James Castner, University of Florida



Figure 3. Larva of the great purple hairstreak, *Atlides halesus* (Cramer), on mistletoe. Credits: Jerry F. Butler, University of Florida

Life Cycle

There are many flights from March to November in the northern part of the range and year round in Florida and south Texas. Males perch on treetops during the afternoon to await the arrival of females for mating. As with the other hairstreak butterflies, perching adults move their hind wings up and down. The tails on the hind wings with their associated spots resemble a head. The movement of the tails is believed to attract a potential predator's attention to that part of the wings which then is torn away allowing the butterfly to escape.

Larvae feed only on plants of the parasitic mistletoe genus *Phoradendron* (Viscaceae [=Loranthaceae]). When full-grown, larvae migrate from the mistletoe and pupate in crevices at the base

of the tree, under bark, or may wander onto adjacent buildings for pupation. Frequently, pupae are parasitized by parasitoid wasp larvae or by tachinid fly larvae, and adult wasps or flies emerge from the pupal case instead of the butterfly.



Figure 4. Oak mistletoe, *Phoradendron leucarpum* (Raf.) Reveal & M.C. Johnst. (=serotinum [Raf.] M.C. Johnst.) in oak tree. Credits: Donald W. Hall, University of Florida

Selected References

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