Pseudolycaena marsyas (Cambridge Blue)

Order: Lepidoptera (Butterflies and Moths)

Class: Insecta (Insects)

Phylum: Arthropoda (Arthropods)



Fig. 1. Cambridge blue, *Pseudolycena marsyas*.

[https://upload.wikimedia.org/wikipedia/commons/thumb/7/75/Lycaenidae - Pseudolycaena marsyas.JPG/639px-Lycaenidae - Pseudolycaena marsyas.JPG downloaded 2 October 2016]

TRAITS. The Cambridge blue has a wingspan of 40-50mm, and as such is sometimes called the giant hairstreak as this falls high on the size range for the family Lycaenidae (Austin et al., 2007). The upper side of the wings ranges between a shimmering cobalt blue to turquoise (Fig. 1) whilst the underside appears grey with scattered black dots (Stiling, 1986). This species exhibits sexual dimorphism (where males and females differ in appearance); males are larger than females and are darker blue in colour whilst females can be as light as a pale green (Barcant, 1970). Unlike males, females have rounded wing apexes (tips), however both sexes have tailed hind wings with a black spot nearby on both upper and undersides (Austin et al., 2007) (Figs 1 and 2).

DISTRIBUTION. The range of this species spans from South and Central America as far Argentina and northwards up the Lesser Antilles (Brown, 1978), including Trinidad and Tobago (Barcant, 1970).

HABITAT AND ECOLOGY. The species is largely found in swampy regions (Barcant, 1970). The Cambridge blue flies at high speeds and in rapid bursts and is usually spotted flying singly, however it can be found in masses when feeding upon *Eupatorium* plants (Barcant, 1970). Males will drink from surfaces of leaves whilst females take nectar from flowers (Hoskins, 2012). In the process of feeding they have the ecological role of pollination as they move from flower to flower.

BEHAVIOUR. *Pseudolycaena marsyas* usually hold the wings in an upright position (Fig. 2), but they may be spotted as they crawl around the heads of flowerings plants in search of nectar with their wings in an open (spread) position (Miller, 1994). Due to the Cambridge blue's easily seen and distinctive bright blue colour, it is suggested that it only flies briefly to serve as a protective mechanism and reduce its visibility to predators (Miller, 1994).

Pseudolycena marsyas belongs to the subfamily Theclinae, a grouping that has a 'false head' from the shape and movement of the hind wings (Lopez, 2015). An experiment to see if these false heads were defence mechanisms against predators showed that in the presence of a threat Pseudolycena damo increased the rate at which it moved its wings, thus creating the false head appearance (Lopez, 2015). The genus Pseudolycena has only two species, damo and marsyas, both of which have similar false head outlines due to their tailed hind wings. It was therefore deduced that P. marsyas would also show this defensive behaviour when in the presence of predators.

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Fig. 2. Underside of Pseudolycena marsyas.

[http://www.gallery.ttnaturelink.com/Insects/Butterflies-of-Trinidad-Tobago/Lycaenidae/Theclinae/LLY-Pseudolycaena-marsyas-Butterflies-of-Trinidad-and-Tobago-Wildlife-Nature downloaded 2 October 2016]

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