

# Notes on the Tawny Coster *Acraea terpsicore* (Linnaeus, 1758) (Lepidoptera: Nymphalidae: Heliconiinae) from northern Queensland

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## Introduction

Much has been written recently on the travelling exploits of the Tawny Coster, *Acraea terpsicore* (Linnaeus, 1758), and its migratory ability to travel vast distances in relatively short time frames. It is a recent arrival to Australia (Sanderson *et al.* 2012; Braby *et al.* 2014; Ham 2020) and since has spread through much of tropical northern and eastern Australia, including semi-arid zones of Queensland (Ham 2020). Just recently, Denton (2021) recorded the species from Boondall in Brisbane, and Franzmann (2021) published an interesting report of an observed mating, also at Boondall, between the Tawny Coster and the native Glasswing, *Acraea andromacha* (Fabricius, 1775). More recently the Tawny Coster was recorded from New South Wales at Coffs Harbour in November, 2020 (Shakespeare 2021), with a second unpublished observation of the species in New South Wales at Byron Bay on 22 February, 2021 (C. G. Miller *pers. comm.*).

## Observations

Details of the biology and life history of the Tawny Coster in Australia were published by Braby *et al.* (2014), however little seems to have been observed about its natural enemies. Tawny Costers have been a regular feature of the north Queensland butterfly fauna since around 2017, with an observed preference for slightly drier habitats than much of the Wet Tropics region, with higher numbers seen in drier areas as compared to much wetter areas. Hilltopping is a regularly observed activity of Tawny Costers in areas west of Atherton, often in company with the native Glasswing butterfly – it is usually only males of both species seen on such hilltops. On hilltops in the Chillagoe area, due west of Mareeba, Tawny Costers and Glasswings often share the same hilltops, with Tawny Costers being the most regularly seen of the two butterflies. The occasional interaction of minor ‘dogfights’ between the two species does occur, suggesting defensive or territorial behaviour, but appears to be short in duration and not of critical consequence. Tawny Costers have a preference to roost on the very summit of the hilltop, often picking a stem of a low woody herb, grass stem or low shrub on which to perch. Glasswings seem to select slightly lower vegetation on the outer edge of the hilltop, usually perching on low shrubs. Both species will take frequent flights around the hill summit, so that any ‘dogfighting’ interaction occurs only in flight on the summit.

On one such hilltop, several web traps of the spider, *Phryganoporus candidus* (L. Koch) (Family Desidae) were noticed to contain multiple adults of entrapped Tawny Costers, along with a multitude of other trapped insects including flies, beetles, and bugs (Fig. 3). The web traps contained multiple spiders and entrance holes, which could explain the extensive insect entrapment using large volumes of silk, which included numbers of Tawny Costers and other insects. This spider is widespread throughout much of Australia (Gray 2002). Two traps closely observed, contained separately, eight males, (Fig. 1) and eleven males and a female (Fig. 2) Tawny Costers.



**Figs 1, 2.** Spider web traps showing entrapped Tawny Coster butterflies



**Fig. 3.** Detail showing adult spiders and multitude of entrapped insect species

The web traps were constructed on exposed stems of low woody herbs, right on the very hilltop summit, where the Tawny Costers usually selected to roost. The identification of the woody herbs was not confirmed, as the plants had died back due to the dry winter conditions at the time of the observations. Interestingly, no Glasswings or other butterfly species were found in the web traps. The lack of Glasswings in the traps is suspected to be because of their utilising different roosting locations on the hilltop. These observations are of interest as they identify a potential predator and natural enemy for the Tawny Coster butterfly in northern Queensland.

### **Acknowledgements**

Dr Helen Smith, Australian Museum, Sydney is sincerely thanked for identifying the spider and providing relevant literature and related information.

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