

## The Kinabalu Birdwing Butterfly *Troidesandromache*: A Short Introduction

The third project involves improving the chances of avoiding extinction for the mysterious Kinabalu Birdwing Butterfly. This insect giant (up to 19cm wingspan) is the equal largest butterfly in Borneo (with Rajah Brooke's Birdwing) and is one of the biggest anywhere. Unlike the Rajah it occurs nowhere else in the world.

The only big population we know of is in Kinabalu National Park and the remaining (and threatened) forest just outside the Park. There are relict populations on Mt Trus Madi and in the Crocker Range at Gunung Alab (stretching down to the Mahua Waterfall near Tambunan - this is a good place to see it). Old specimens in museums show it was much more widely distributed in Sabah formerly. It is absolutely dependent on a foodplant which only grows in dense old-growth forest, mostly between 1,000 and 2,000m altitude.

This butterfly is famous around the world as one of the legendary birdwing butterflies of SE Asia. These created great excitement amongst the first Western explorers. Curiously, it has been completely 'under the radar' in Sabah, its only home. It is an unvalued gem of Sabah's natural heritage and deserves to be made an icon to save it. Naturalists travel from afar to see Birdwings in Australia and Papua New Guinea. They would do so here if they knew about it and could guarantee to see it.

Andromache (pronounce it 'anDROMacky') is not just mysterious but should perhaps be known as 'The Mourning Birdwing'. White was the colour of mourning in ancient Greece. The white colour of the adult female likely led to Dr Staudinger of Berlin in 1892 to name it 'andromache' after the tragic Princess Andromache of the city of Troy, whose baby son was killed by Achilles's staff at the sack of the city.

There possibly still exists a relict population of a close relation in Sarawak, but no one knows. If anyone wants to do a bit of 'Citizen Science' and go look for it that would be a real step forward.

### Threats to the Kinabalu Birdwing

Dr Stephen and his team are currently looking at how endangered this butterfly is and how to increase its population, funded through RCKK by the Ministry of Tourism. This is also part of the Homestay Operators training (Project 2 above) because they are growing the foodplant so they can put it in the shady parts of the their kebuns to provide more food for the larvae and bring this ghost of a species down into the kampong for Homestay visitors to see and photograph. Sabahan Paul Foronda of RCKK is supervising the training and UK based Dr Terry Whitaker is advising. Support internationally is provided by the Swallowtail & Birdwing Butterfly Trust ([www.sbbt.org.uk/kinabalu-birdwing-project/](http://www.sbbt.org.uk/kinabalu-birdwing-project/))

Destruction of the habitat of *Troidesandromache* is occurring on an alarming scale. The primary threats are deforestation caused by the pressure from the increasing human population and climate change. It is

saddening to see this graceful butterfly slowly disappearing from some of its localities surrounding Mount Kinabalu. Conservation is held up because there is no information on its ecology and breeding biology. For example, the host plant, thought to be an *Aristolochia* species, has not been properly confirmed to this day.

The same goes for its exact distribution, since many mountainous areas in Sabah remain unsampled for this species. The Kinabalu Birdwing is 'sexually dimorphic', meaning male and female can be easily distinguished by their differing size and colouration.

Unlike the four other Borneo Birdwings, the females have white forewings with a black band on the edge of their wing. The males possess black forewings and on the underside a number of white "arrowheads". Both sexes have yellow and black hind wings. The hind wings of the male a glorious golden colour with black dots along the border. The female hindwings are predominantly black with a patch of yellow at the base.

This birdwing is difficult to observe in its natural environment, as a result of its precipitous lower montane forest habitat and its canopy flying habits. Most sightings are in gardens where it wanders in search of nectar from flower like Poinsettia, Hibiscus and Balsam. Even where it is well established it is rare to see more than three or four in a day.

