

Chapter 6

Additional comment on butterflies of the Upland Evergreen Forest of the Atewa Range Forest Reserve, Ghana

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INTRODUCTION

Chapter 5 of this report presents a good summary of the Atewa butterfly fauna based on the RAP survey and existing data and appears to be the first major review of butterflies in Ghana that has been written by Ghanaian researchers, which is promising for the future. The most important facts are well highlighted within that chapter: i) the uniqueness of the Upland Evergreen forest in Ghana (the small and damaged area in Tano Ofin aside), ii) the presence of three species of butterflies endemic to the Atewa Range, iii) the presence at Atewa of a significant number of species not found elsewhere in Ghana, and iv) the fact that with 700 species of butterflies certain to occur there, Atewa it is the most biodiverse locality in Ghana for that group. Aduse-Poku and Doku-Marfo thus leave little more to be said.

Mylothris atewa

However, some further notes on the endemic species *Mylothris atewa* (Atewa Dotted Border) are called for. The species seems first to have been collected in the 1960s by Father Theodor Maessen, a Roman Catholic priest who collected butterflies in Ghana for 32 years between 1950 and 1982, recording a total of more than 800 of the 930 species currently known from Ghana. However, only in 1980 was the species described by Dr. Lucien Berger, then curator for insects at the Royal Museum for Central Africa (MARC) in Tervuren, Belgium.

The species is quite different in both sexes from any other member of its genus, of which there are at least 60 species throughout Africa. Both sexes can be recognized at a glance from any of the eight *Mylothris* that fly in Atewa. The species flies only in the higher level forests where the Upland Evergreen vegetation is found, probably because it feeds on a species of mistletoe (Loranthaceae) that is similarly restricted in range. The potential range of this butterfly is certainly less than 100 km², but it occurs patchily and the actual inhabited area within the forest is much less than that. We can be almost certain that the species occurs nowhere else (should an overlooked population exist in Tano Ofin, it will be even smaller).

The small area of occurrence, the small population size, the encroachment on the forest, and the threat to the forest by mining has led to almost certain ranking of this species on the World Conservation Union (IUCN) Red List in the most threatened category of Critically Endangered (CR).

UPLAND EVERGREEN FOREST – A FOSSIL HABITAT

Mylothris atewa obviously evolved in the Upland Evergreen forest, probably during cooler periods when the extent of this forest was larger than it is today, since it could survive at lower elevations. The Atewa Forest has had a complex history. During the many dry periods of the past 20 million years the West African rainforests have been pushed into tiny refuge areas (one of which was centered on Ankasa and southwestern Côte d'Ivoire, another on Liberia and eastern Sierra Leone). The rest of the forest zones were covered with savannah. During such periods the Atewa Forest must have survived as a forest island inside the savannah. Dur-