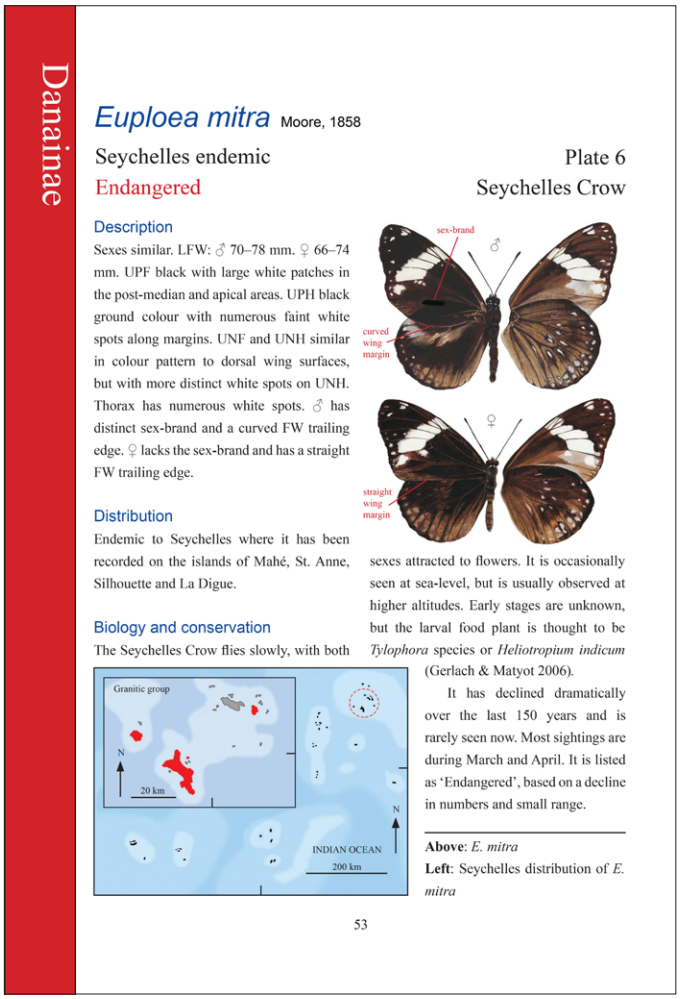
Field Guide to the Butterflies of Seychelles. Their Natural History and Conservation, by James M. Lawrence, with paintings by Malinda Crafford-Venter (2016).

Manchester, Siri Scientific Press. 125 pp, 14 pl, figs., maps. https://siriscientificpress.co.uk/

The 115 islands of the Seychelles lie scattered across the Indian Ocean to the north of Madagascar, comprising both granitic fragments of the former continent Pangaea, as well as more recent corralline islands. While much better known for their spectacular beaches and diverse marine life, the terrestrial fauna is also fascinating. Despite having only 36 species of butterflies, these insects display all the classical dramatic elements of island biogeography, from long-distance dispersal to enigmatic endemism, tramp species to recent extinctions, along with some intriguing taxonomic mysteries thrown into the mix.

This field guide covers all 36 species of butterflies (including Papilionidae, Pieridae, Lycaenidae, Nymphalidae, and Hesperiidae) and three subspecies known from the islands. Short introductory sections on the geology, habitats and climate of the islands are followed by butterfly biology, morphology, mimicry, biogeography and conservation. The fauna shows affinities mainly with Africa and Madagascar, although the relationships of the three Seychelles-endemic species (a pierid, a danaine and a heliconiine) are more obscure. Like most oceanic island archipelagos, the loss of habitats has caused several extinctions. These include the endemic species *Phalanta philiberti*, which was abundant in the early 1900s but hasn't been seen since 1960, and the endemic taxon *Papilio phorbanta nana*, not seen for 100 years. The latter might have been introduced from the island of Réunion on *Citrus* trees, if so, it's not clear how it differs taxonomically from the supposedly distinct Réunion subspecies. Another taxonomic puzzle surrounds *Euploea rogeri*, known only from the original illustration of a female by Geyer in 1837, whose Seychellois provenance itself is based only on supposition. The somewhat similar, endemic danaine species *Euploea mitra* is confined to the granitic islands and is in steep decline, for reasons that are poorly understood, and it is now classified as Endangered. With its immature stages unknown and relationships uncertain, there are clear opportunities for research into this and most of the other Seychellois species.


Danainae

Euploea mitra Moore, 1858

Seychelles endemic — Plate 6

Endangered — Seychelles Crow

Description

Sexes similar. LFW: ♂ 70–78 mm. ♀ 66–74 mm. UPF black with large white patches in the post-median and apical areas. UPH black ground colour with numerous faint white spots along margins. UNF and UNH similar in colour pattern to dorsal wing surfaces, but with more distinct white spots on UNH. Thorax has numerous white spots. ♂ has distinct sex-brand and a curved FW trailing edge. ♀ lacks the sex-brand and has a straight FW trailing edge.

sex-brand
curved wing margin
straight wing margin

Distribution

Endemic to Seychelles where it has been recorded on the islands of Mahé, St. Anne, Silhouette and La Digue.

Biology and conservation

The Seychelles Crow flies slowly, with both sexes attracted to flowers. It is occasionally seen at sea-level, but is usually observed at higher altitudes. Early stages are unknown, but the larval food plant is thought to be *Tylophora* species or *Heliotropium indicum* (Gerlach & Matyot 2006).

It has declined dramatically over the last 150 years and is rarely seen now. Most sightings are during March and April. It is listed as 'Endangered', based on a decline in numbers and small range.

Granitic group
N
20 km
INDIAN OCEAN
200 km

Above: *E. mitra*
Left: Seychelles distribution of *E. mitra*

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Each species in the book is treated to its own page with a painting, distribution map, text on identification, distribution, biology and conservation, and photos of live individuals in some cases. While I am usually not a great fan of paintings in field guides, these are exceptionally well done, beautifully detailed and life-like, almost indistinguishable from a perfectly prepared fresh specimen, which were presumably not available for many taxa. Diagnostic characters are helpfully indicated on these paintings, which are also grouped into plates at the end of the book.

As the author states in the Introduction, "knowledge of Seychelles butterflies is poor and fragmentary at best". This field guide sets out what is known of this small but intriguing island fauna and challenges us to find out more. Whether it is hunting for supposedly extinct taxa or documenting new life histories, finding new distributional and phenological data or making simple observations of behavior, there evidently remains much to be learned of the butterflies of this beautiful nation.

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