NOTES & OBSERVATIONS

Two records of *Danaus chrysippus* (Linnaeus, 1758) (Lepidoptera: Danaidae) from Mallorca, Balearic Islands

I spent the latter part of August and the beginning of September 2014 on the island of Mallorca, combining a family holiday with entomology. On 31 August, I was exploring an area of scrubby wasteland very close to a large holiday complex in Alcudia. I had just netted a small lycaenid when I caught a flash of red out of the corner of my eye and was surprised by the sight of what I initially thought was Danaus plexippus. My net being already engaged, there was little I could do but look on. I returned to the same location on several occasions in the hope of confirming my identification and saw another individual fleetingly on 1 September. On 2 September I returned again and was able to net a specimen which, on closer examination, proved to be D. chrysippus. As soon as I had placed this specimen in a pill box, I saw another flying further along the path, which I was also able to net and positively identify as D. chrysippus. Despite revisiting this location on several occasions no more individuals were recorded. I am led to conclude that these were likely the same individuals that I had spotted over the previous few days

Considering the great migratory tendency of its ally *D. plexippus*, it is curious that the specimens of *D. chrysippus* recorded here remained day after day within the same very restricted area. This is even more remarkable given the noticeable paucity of nectar sources at this time, compared with earlier in the year. At the height of summer on the island, many flowers which occur in abundance during May and June have died back and this no doubt plays a part in the decrease in butterfly abundance which I have noticed between these times. The individuals I observed flew relatively low to the ground and even alighted on the small, lowlying flowers of trefoil. For the most part they remained in open areas, although the two I finally managed to net were passing through a shady patch with a tall hedge on one side and trees, perhaps 6 m tall, on the other. The first individual came over the top of the trees and glided to a lower level, the second flew straight in from the sunlit area along the path into the shade.

Examining the specimens in greater detail I found that one had especially chipped wings (in particular, the posterior wings), despite being relatively fresh in colouration. Smith (1979. Nature 281: 215–16) discusses the distasteful nature of this butterfly and suggests that, as in D. plexippus, this can be discerned by a potentially predatory bird as it attempts to remove the insect's wings after capture. Smith gives a figure of 7.3% of adults in Tanzania as possessing beakmarked wings, indicative of previous attack-and-release. It is possible that this specimen was particularly tattered due to repeated attack-and-release by the naïve, local birds, unaware of the distasteful nature of this species, having never encountered it previously.

Both Higgins and Riley (1980. A Field Guide to the Butterflies of Britain and Europe, 384 pp. London) – the guide I possessed at the time – and Tolman (1997. Collins Field Guide to the Butterflies of Britain and Europe, 320 pp. London) do not recognise this species as occurring on the island. This is despite the latter being released after the publication of Alomar, Jurado, & Ñuñez (1990. Boll. Soc. Hist. Nat. Balears 33: 275–278), which consists of a series of sightings of this species in



Fig. 1. The habitat of *Danaus chrysippus* in Alcudia, Mallorca (39°49′35.2″N 3°06′26.7″E). Individuals were repeatedly sighted flying above the low vegetation in the foreground and along the edges of the path, alighting on whatever flowers were available as a nectar source.

Mallorca in 1990, and Gibson (1995. 1995 Mallorca Bird Report 6: 6–7) who also details several records from the island, including one from s'Albufera, which is near the location of my own observations. Interestingly, Gibson, like myself, initially mistook this species for D. plexippus. Oviposition by female D. chrysippus, and the subsequent early larval stages, have been recorded on the island by Alomar et al. and it is possible that the individuals I recorded, rather than being two chance migrants, are the offspring of a female which laid eggs earlier in the year. Given that these appear to be among the only published records of this species occurring in Mallorca, I felt it important that the two sightings detailed here were also placed on record.

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