

Report on an L.J. Goodman Award for Insect Physiology and Behaviour

Corfu Butterfly Conservation: initiating a conservation project in a foreign territory

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British entomologists rarely make new discoveries daily but one way to rectify this is to work in a foreign territory. Today, most people know about the Ionian Island of Corfu because of the work of the late author Gerald Durrell. The account of his childhood as depicted in the idyll My Family and Other Animals (Durrell, 1956) had a considerable impact on the British public at the time of its publication. Ironically, for decades since, the study of Corfu's

natural heritage has remained Durrell's neglected realm.

Sutton (2012) published the first literature review of the Corfiot butterflies. This was followed by Ghinis et al. (2013) who aimed to raise the public's awareness of Corfiot biodiversity through the publication of a photographic booklet containing colour images of most of Corfu's butterfly species. The most recent literature review by Ghavalos & Coutsis (2018) included

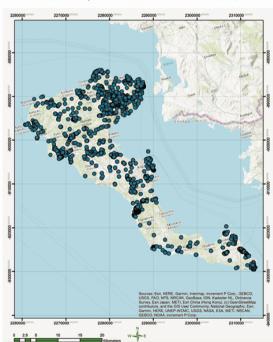
Corfu Butterfly Conservation

The logo of Corfu Butterfly Conservation

examinations of genitalia for some critical butterfly species, confirming their presence on the island.

Interest in the conservation status of Corfu's butterfly assemblages has its origins in a Facebook discussion page (Danahar, 2014), which led to the creation of Corfu Butterfly Conservation (CBC) – registered as a UK Community Interest Company (No. 138184) in 2021 (Danahar 2020; 2022a). CBC has now become a non-profit organisation working in partnership with both governmental and non-governmental partners in Greece, the UK and Europe. Its six core aims are:

- to encourage the continued growth of a responsible community of Corfu butterfly enthusiasts;
- to survey the butterflies of Corfu and determine the number of species present on the island, their distribution and their flight periods;
- to find out if the butterfly communities of Corfu could be used as indicators of habitat quality and, if so, help with the conservation of other Corfiot wildlife;



Distribution of locations with butterfly records (n = 3228) – a measure of the most recent recorder effort (all records received between 1 January 2021 and 20 July 2022).

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- to identify potential losses of species and habitats and inform the Greek authorities about which need protecting;
- 5. to publish the butterfly survey results and the conclusions drawn from these data in the first comprehensive Corfu Butterfly Atlas; and
- 6. to encourage eco-tourism outside the main tourist season, bringing extra revenue to Corfu.

The CBC Facebook Group currently has a membership of over 900 individuals. Through this platform, members support each other to enhance their identification skills as well as their understanding of the ecology and behaviour of the different Corfiot butterfly species. Furthermore, it is this dialogue that has definitively confirmed the existence of 76 butterfly species on the island.

CBC launched its Corfu Butterfly (citizens science) Survey (CBS) on 7th January 2020 (which would have been Gerald Durrell's 95th birthday). It aims to encourage the public (both residents and visitors) to collect data on the distribution of Corfu's various butterfly species. These data will be used to produce the first comprehensive Corfu



CBC provided 8,000 dual-language butterfly posters, one for every child, in each of Corfu's 54 primary schools. These posters are designed to aid the identification of the 76 known butterfly species observed on Corfu.

Green Hairstreak (Callophrys rubi) nectaring on Branched Asphodel (Asphodelus ramosus).

Butterfly Atlas. However, we came to view 2020 as a 'null' year for data collection because the Covid-19 pandemic made it difficult for residents to go out to survey butterflies and also led to a significant reduction in the number of overseas visitors to the island (Dandhar, 2021).

Obviously, Facebook is not designed to store sizable amounts of biological records, let alone retrieve every photographic sighting that is recorded on it. Ergo, we used the 2020 recording season to upgrade our independent website, to make this recording possible. Thankfully, CBC received a generous contribution of £3,000 from the Goodman Award (managed by the Royal Entomological Society) which supported our efforts towards this gool.

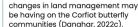
Our new website was designed and developed by Steven Cheshire, who had built the website for the Warwickshire branch of Butterfly Conservation – amongst many other sites. Our mapping code was written by Bob Foreman, the biodiversity data lead at the Sussex Biodiversity Record Centre.

Subsequently, the CBC website (corfubutterflyconservation.org) and the CBS were both relaunched on 1st January 2021.

Whilst our website is conventional in many ways, once sightings have been verified, they join a database from which a range of operations are performed, and the outcomes displayed. These include: 1) showing the latest records; 2) displaying first and last sightings; 3) revealing the species we expect to see monthly, based on data reported in previous years, and 4) generating graphs to show each butterfly species' monthly abundances, plotted over the course of the year.

The website generates distribution maps but these have yet to be made public, although examples of the first year's results have been published (Danahar, 2022b). The website continuously grows in functionality but there are still areas for improvement. At the time of writing the CBS has been running for just over 18 months and, although this is a relatively short period of time, the data we have collected have already made it possible to speculate about the impact that

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Thanks to the Goodman Award and the Royal Entomological Society, the CBC website increases our understanding daily of Corfiot butterfly assemblages.

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Hungarian Skipper (Spialia orbifer) basking to thermoregulate its body temperature.



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