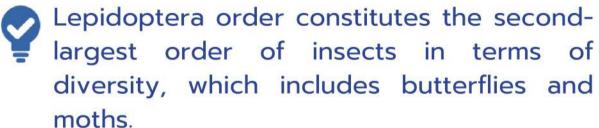


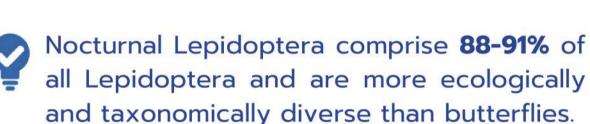
## Insects of Macaronesia

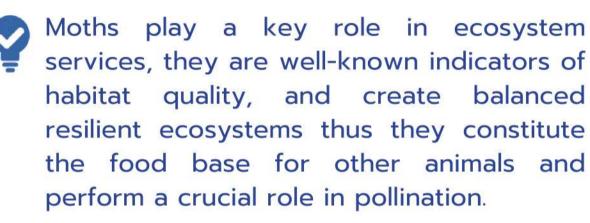
Effects of light pollution on nocturnal insects

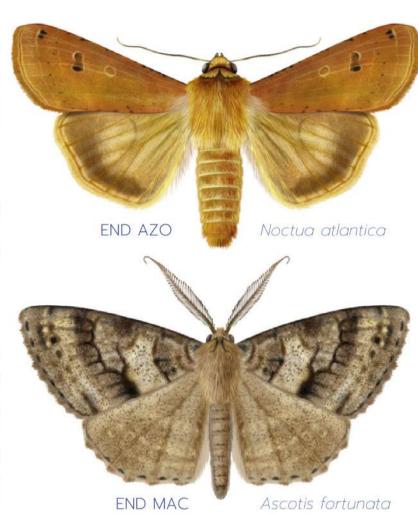


END MAD









## Light pollution vs nocturnal butterflies

In addition to facing many of the same pressures as their diurnal relatives, moths are also threatened by factors that are unique to nocturnal lifestyles such as light pollution.

Xenochlorodes nubigena

- Responses to ALAN are very taxon-specific due to the variability in spectral sensitivity among taxa and therefore, the species and/or genera may be affected on a different way.
- Moths are known to be highly attracted to ALAN and are particularly sensitive to light spectrum between 300 and 400 nm of wavelength.
- Certain families of moths are more attracted to short wavelengths than others. For example, Noctuids are more attracted to short-wavelength lights.

## **Effects of light pollution on insects**

The disruption or suppression of their nocturnal activity, some of them essential nocturnal behaviours for their survival, and death by exhaustion or colision, develop cascading effects on the population of plants and other animals.

## Moths mainly need darkness to thrive!

What mitigation measures can you do to dim the dangers of light pollution?

- Raising awareness, sharing the available information
- Promote habitat protection and restauration
- Support light pollution policies
- Make ALAN improvements at home

Moths are the major nocturnal pollinators of flowers, making it fundamental to support this cause by broadening knowledge for nightlife conservation. Better understanding of the impact of different light sources is needed as the importance of ecosystems at night has been long undervalued.



























