

Butterfly Habitats

Prelims: Current events of national and international importance | Environment

Why in News?

A comprehensive study reveals that about 1 in every 10 butterfly species has altered its geographic range or moved to different elevations in response to changing environmental conditions.

Key Impacts on Habitats

- **Temperature Shifts-** Warmer weather pushes butterflies toward cooler high-altitude or high-latitude regions.
- **Timing Mismatches-** Plants flower earlier, leaving caterpillars without food when they hatch.
- **Drought and Heat-** Severe dry spells kill host plants and dry up essential water sources.
- **Habitat Loss -** Extreme weather destroys fragile local ecosystems and native vegetation.

Effects on Survival

- **Shorter Migration-** Some species alter long-standing seasonal migration paths.
- **Lower Numbers -** Populations drop as reproduction rates fall and stress increases.
- **Range Reduction-** Habitats shrink, isolating different groups from each other.
- Shrinking ranges were most heavily documented in **Europe and North America**.
- **Elevation Shifts -** Many species are migrating higher up mountains (and occasionally lower) to track tolerable micro-climates, primarily observed in the Northern Hemisphere.
- Some species exhibit complex dual patterns expanding in one direction while simultaneously dying out in another, creating long-term survival uncertainty.

Notable Species Examples

Species	Location	Trend / Impact
Tawny Coster	Native to India, Sri Lanka, Bangladesh	Spreading across Australia at ~135 km/year since first recorded in 2012.
Godartiana byses (Blue Butterfly)	Brazil	Expanded south from Rio de Janeiro and Bahia into São Paulo.
Small Blue (<i>Cupido minimus</i>)	United Kingdom	Experiencing severe range contraction.
Cranberry Fritillary	Germany	Losing habitat rapidly due to the draining of peat bogs.
Danube Clouded Yellow	Romania	Range shrinking due to intensive agricultural practices.

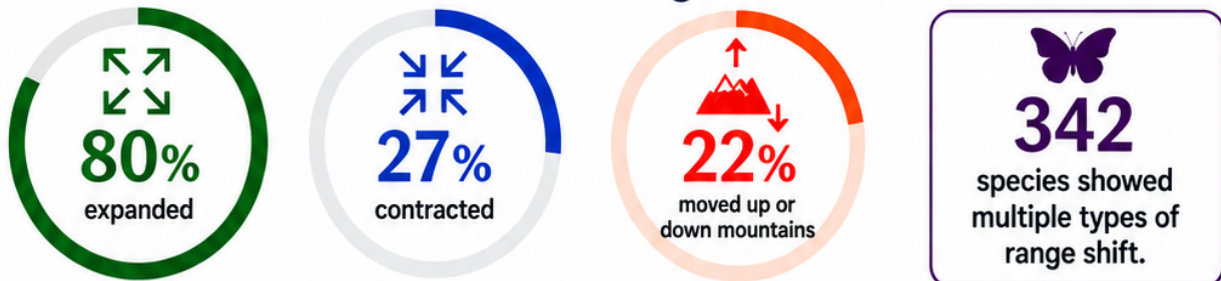


Butterflies are moving

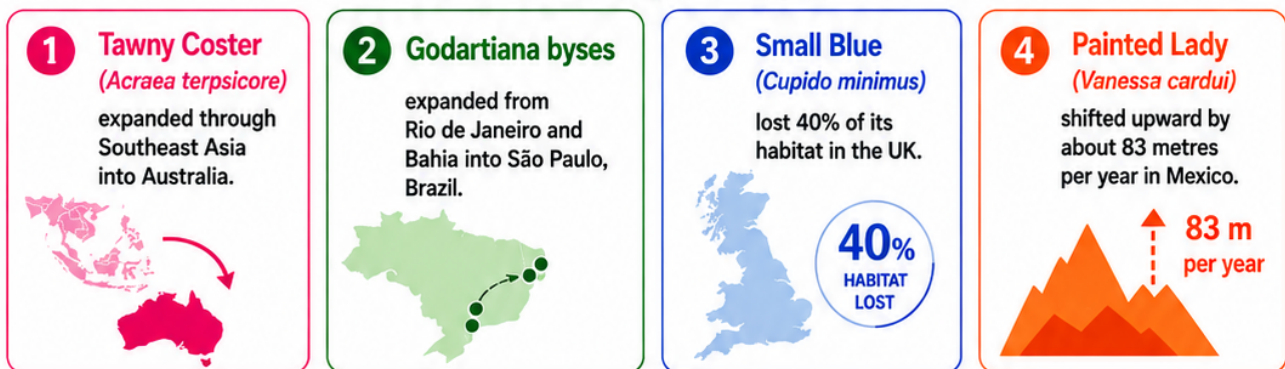
Climate change is reshaping where they live.



What changed?



Real butterfly examples



Primary threats



Big data gaps



Protecting butterflies means protecting where they are going, not just where they used to live.

Reference

[Times of India | Butterflies are changing across the planet](#)



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