

Brown Argus butterfly sees positive effects of climate change

June 2 2008

The Brown Argus butterfly *Aricia agestis* has expanded northwards in Britain during the last 30 years. It is thought that the recent expansion of the species is due to the increasing summer temperatures caused by global warming.

Research carried out by scientists in the UK and Spain reveals that by moving into new areas, the Brown Argus may be escaping from some of its 'natural enemies' (parasitoids).

This is not because natural enemies are absent from the new areas, but that the parasitoids are not able to locate the Brown Argus. Instead, the parasitoids rely on the common blue butterfly *Polyommatus icarus* in these northern habitats. This species has a long-established range throughout Britain and suffers a larger amount of parasitism than the Brown Argus in these northern habitats.

Although the researchers cannot yet say for certain why the Brown Argus has fewer parasites in its new range, they suggest it could be due to the differences between the plants that the caterpillars eat. The common blue and brown argus feed on different plants and therefore the parasitoids are used to looking for caterpillars on the common blue's favourite plants.

Dr Rosa Menendez said: "Climate change can have unpredicted consequences by altering the interaction between species and their enemies, whilst in this case the butterfly may be a welcome addition in

other cases the release from enemies might favour pests or other unwanted species".

Full details of the *Aricia agestis* research is published in the June issue of *Ecological Entomology*, a journal published by Wiley-Blackwell on behalf of the Royal Entomological Society.

Source: Wiley

Citation: Brown Argus butterfly sees positive effects of climate change (2008, June 2) retrieved 26 April 2024 from <https://phys.org/news/2008-06-brown-butterfly-positive-effects-climate.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.