## Counting butterflies reduces stress

Counting butterflies reduces anxiety, according to a new scientific study focusing on a popular annual citizen science project.

Those who took part in the annual Big Butterfly Count enjoyed a reduction in anxiety of almost 10% as well as a boost in mental wellbeing, according to the research.

Wildlife charity Butterfly Conservation and researchers at the University of Derby surveyed participants in the Big Butterfly Count in 2022.

They found that even briefly tuning into nature to count butterflies reduced anxiety by 9% on average, while also improving mental wellbeing.

Dr Richard Fox, Head of Science at Butterfly Conservation, the UK charity dedicated to saving butterflies, moths and our environment, said: "While we have long known that there is a link between nature and human wellbeing, this study is the first to prove that the simple act of looking for and counting butterflies leads to a measurable decrease in anxiety.

"The results suggest that citizen science projects such as the Big Butterfly Count can play a part in improving people's mental health, as well as gathering important data on how butterflies are faring to inform our conservation work."

The researchers found that spending just 15 minutes observing

and counting butterflies boosted participants' feeling of connectedness with nature.

Nature connectedness is directly correlated to how motivated people are to protect it. As such, the findings show that citizen science projects could play a vital role in nature's recovery.

Dr Fox added: "In order to save wildlife and ensure nature's recovery we need people to care, and we know that being connected to nature sparks these caring feelings and a desire to do something positive.

"This study indisputably shows that citizen science activities, such as spending just a few minutes counting butterflies, makes people feel more connected to nature — a vital step in the battle to save wildlife.

"We're at a tipping point, nature is in crisis, but we can all do something to help.

"Simple acts such as creating wild spaces to provide a haven for wildlife, or planting butterfly friendly plants in pots on a patio, terrace or balcony can have a positive impact."

The study, "Connection for Conservation: The impact of counting butterflies on nature connectedness and wellbeing in citizen scientists", is published in the journal Biological Conservation.

Dr Carly Butler, a Researcher in Nature Connectedness at the University of Derby and lead researcher on the study, said: "Our study showed that even small periods of time spent watching and counting butterflies are beneficial, with the benefits of reduced anxiety and stronger nature connectedness being the same whether people carried out just one 15-minute count or took part multiple times.

"This is key in proving that simple, small pockets of time

connecting with wildlife and nature have a profound and beneficial effect on how we feel."

The Big Butterfly Count is Butterfly Conservation's flagship citizen science activity.

Tens of thousands of participants across the UK spend 15 minutes in a sunny spot recording the number and type of common butterflies and day-flying moths they see.

This year's Big Butterfly Count will take place from 12 July - 4 August.

