Media report (1)

© BBC News Online 16/06/2009

Blue butterfly colonies thriving

The large blue butterfly has made an astonishing comeback following re-introduction efforts, scientists say.

The butterfly was declared extinct in Britain in 1979, but large blues were imported from Sweden in the 1980s by conservationists.

There are now more than 30 colonies, with a rough estimate putting the total number of large blues at about 20,000.

Scientists said the scheme showed it was possible to reverse the decline of threatened species.

They have been celebrating the 25th anniversary of the butterfly's re-introduction.

A research team led by Professor Jeremy Thomas at the Centre for Ecology & Hydrology will this week publish data in the journal Science outlining the successful conservation of this rare species.

Broadcaster Sir David Attenborough commented: "The restoration of the large blue butterfly to Britain is a remarkable success story, illustrating the power of ecological research to reverse damaging environmental changes.

"It is, moreover, a tribute to the dedication of many practical conservationists who have skilfully recreated its specialised habitat in our countryside."

Cunning plan

Crucial to the success of the re-introduction was a discovery that the life cycle of the large blue is completely dependent on a species of ant called *Myrmica sabuleti*.

Large blue caterpillars hatch on thyme buds and then trick *M. sabuleti* into thinking they are ant grubs.



Media report (2)

The ants then carry the caterpillars to their underground nests, where they feed on ant grubs for 10 months before pupating and emerging as butterflies.

However, the ants thrive in areas with short grass where sunlight is able to warm the soil.

Professor Thomas realised that farmers had been gradually shifting their livestock away from grazing, causing the grass to become overgrown. Another factor was the viral infection myxomatosis which, in the 1950s, killed off the wild rabbits that also grazed in these areas.

This in turn meant the soil was now too cool to support adequate numbers of *M. sabuleti* ants.

Without enough ants to raise their young, large blue populations dwindled.

Prior to this discovery, butterfly collectors were generally blamed for the decline of the insect.

As part of the reintroduction programme by the conservationists, grazing was re-established on the sites chosen for the insects.

There are now over 30 colonies across south-west England, with the largest supporting some 5,000 butterflies.

