

Butterfly 10 year report

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For the past ten years we have been recording butterflies at Medina Valley Centre for the 26 weeks from April to September along a set transect walk. This transect goes around the Nature Reserve and takes in a variety of different habitats including unimproved grassland, mown lawns, hedgerows, a pond, an area of saltmarsh and the butterfly garden. The butterfly garden has been planted up with species attractive to butterflies such as lilac, buddleia, hebe and lavender. The grassland is described as unimproved because no fertilisers or pesticides have ever been applied. It contains a large variety of species, many of which are attractive to butterflies such as agrimony, bramble and common fleabane. Some of the grassland undergoes rotational cutting. The hedgerows are mainly hawthorn or dog rose and trees include English oak, apple, Monterey cypress and Monterey pine.

Weather is a very dependent factor for butterflies. Warm, dry and sunny weather produces good numbers whereas dull, wet and cold weather can reduce populations greatly. In particular, the end of May through June to early July are crucial times and if conditions are not ideal this can have great effects on the butterflies seen that year and a knock-on effect over several years.

Over the last ten years the lowest count was in 1993, when the weather was especially poor for butterflies. There was low sunshine and high rainfall and below average temperatures, causing many species to fare badly. Numbers of *small heath*, *painted lady*, *small tortoiseshell*, *small copper* and *holly blue* crashed and *large whites* and *small whites* did not fare much better. Most species were down in number on the previous years and *gatekeepers*, *meadow browns*, *small skippers*, *small tortoiseshells* and *small whites* all had their worst count for the ten year period.

The next three years produced average counts, some species taking longer than others to recover from 1993. 1994 saw the *painted lady*, *small tortoiseshell* and *small copper* recovering reasonably well and there was also an increase in both *large whites* and *small whites*, although the *small heath* and *holly blue* numbers remained low. In 1995 *small coppers* and *small whites* thrived, but *painted ladies*, *small tortoiseshells*, *large whites*, *holly blues* and *small heaths* were still only seen in relatively low numbers. 1996 saw the recovery of the *holly blue* leaving only the *small heath* numbers still down following the weather of 1993. A remarkable event of this year was the huge invasion of *painted ladies* and *red admirals* seen around the beginning of June across Hampshire and the Isle of Wight. These species were swept in on a south-east wind across the English Channel from their European breeding grounds. Vast numbers were recorded, accounting for nearly 20% of the total number of butterflies seen that year.

1997 produced our best ever count with a total of 1067 butterflies recorded on the transect walks. April, July, August and September had ideal weather although, interestingly, the weather in May and June was variable. *Gatekeepers*, *marbled whites*, *common blues* and *small skippers* thrived and the numbers of *large white*, *small white* and *small tortoiseshell* were also high. In fact, only *painted ladies* and *red admirals* were down on their exceptional performance of 1996.

1998 produced another high count although the weather was unexceptional in June and July. *Meadow browns* and *marbled whites* did particularly well, but numbers of *common blue* and *small tortoiseshell* were back to normal following the high 1997 figures.

There have been some unusual records during the 10 year period, particularly in 1997 when a *ringlet* was recorded resting on brambles, a *silver washed fritillary* - normally a woodland butterfly - was seen on the buddleia, and a *green hairstreak* was observed flying over the Centre car park. Also single *purple hairstreaks* have been recorded in 1992, 1996, 1997, 1998 and 1999 on the oak trees; these elusive butterflies may well be overlooked on occasions as they remain among the oak leaves and only emerge if the weather conditions are just right.

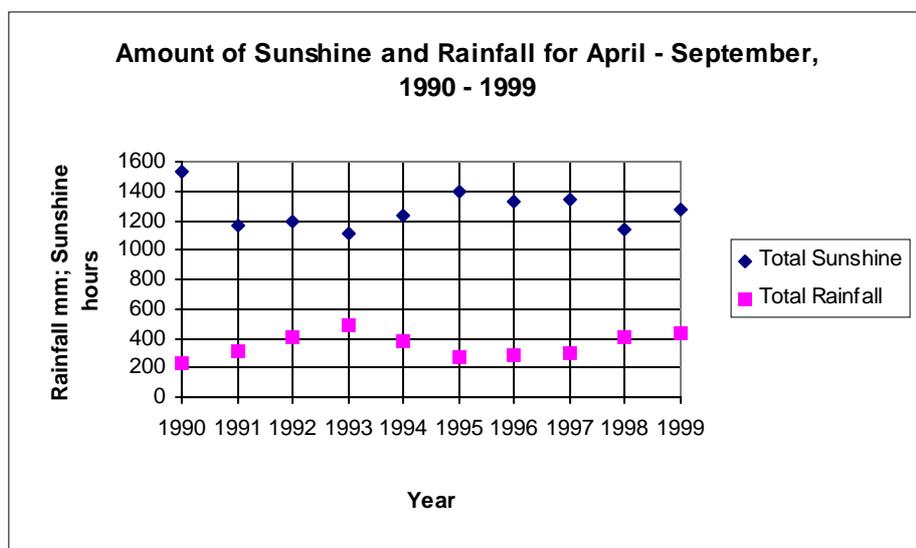


Fig. 1. Graph showing total hours sunshine and total mm rainfall for April to September inclusive for the years 1990 - 1999.

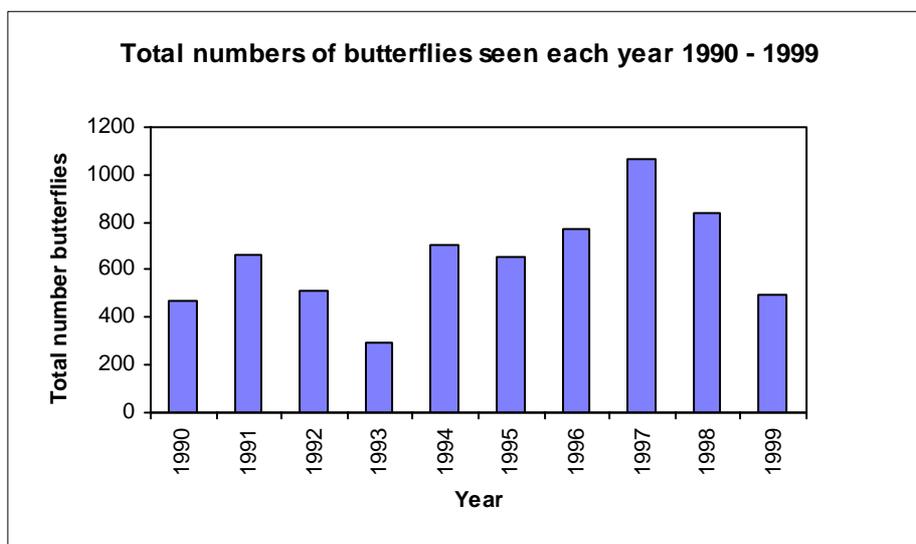


Fig. 2. Bar chart showing total number of butterflies seen during April to September inclusive for the years 1990 - 1999.