## Chard Junction Quarry Nature Reserve Butterfly report 2012

The Chard Junction transect was walked for 20 weeks, as in 2011, but only recorded 792 butterflies (compared to 1289 in 2011 and 1581 in 2010) belonging to 19 species (22 in 2011). We did not see the brimstone, green hairstreak, silver-washed fritillary or holly blue this year, but did see a wall for the first time. So, the total diversity for the reserve is now 25 species. The wall is the second species of conservation concern to be recorded at the reserve. The other one, the dingy skipper declined significantly on previous years, largely due to the poor weather in April, which flooded the part of the reserve where we normally see most of the specimens.

Transect recording is intended to make comparisons of abundance valid both within years and from year to year. Among other things it interpolates values for weeks when no walk took place and this report includes these values. In 2012 the commonest five species were (commonest first): meadow brown (185), gatekeeper (166) and ringlet (116). All declined significantly and no other species had over 100 records. All three are 'brown' butterflies that are very common in grassland, hedgerows and open ground. The rarest five were: wall (1), small tortoiseshell (2), small copper (4) and small white, red admiral and comma (all 5).

Significant increases (greater than 50 %) were recorded for meadow brown compared with 2011. The small skipper was slightly up compared to last year and the average and the comma was the only other butterfly to increase in numbers compared with last year. In contrast, significant decreases (less than 50 %) were recorded for: dingy skipper, green-veined white and common blue, compared with both last year and the average. All other species were down on one or other of these comparisons, often significantly.

Finally, I have ranked the sections of the transect as to whether we recorded more or less than the expected number of butterflies. For the third year running section 8 was the best section, but in 2012 section 4 came second. Sections 1 and 2 were the worst. The biggest changes were in section1, which declined from 3<sup>rd</sup> best to 9<sup>th</sup> and section 4, which improved from 8<sup>th</sup> to second. This year four sections had above average values compared with only two in both previous years. However, it is still too soon to detect real trends.

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