## BUTTERFLY CONSERVATION UPPER THAMES BRANCH Chalkhill Blue Report 2012

## **Nick Bowles**





Chalkhill Blue m. Photo © Dave Miller

Chalkhill Blue f. Photo © Dave Miller

At first the year seems a conundrum: a poor year at all approximately north-facing sites, yet steep south facing slopes (especially to the south of the region) had excellent numbers. The flight period lasted from July 12th until September 11th, which is slightly shorter than average. This flight period was typified by largely unsettled weather which greatly restricted dispersal and no individuals were reported as having moved away from known breeding sites to new areas. Wet and generally warm weather led to increased grass growth. Shading of the foodplant (lowering ground temperatures and leaving vetch wet) was evidently a great obstacle to development at north-facing sites and conditions here evidently (largely) failed to exceed some value critical to larval, or pupal, development.

Turf height measurements at the very productive Yoesden Bank showed that turf heights there were in excess of those at other poorly performing sites (like Aston Clinton Ragpits - ACR). Based on measurement at 8 UTB sites (ACR, Chiltern Forest GC, Coombe Hill (Wendover), Holtspur Bottom, Ivinghoe Beacon, Stepps Hill and Yoesden Bank, it was obvious that simply providing short turf isn't going to deliver the colonies' needs. There was no correlation between turf height and butterfly abundance/population density. ACR had shortest turf (3-5 cm.) but very small numbers. Yoesden had equal longest, with Coombe Hill, (13-20 cm.) but high numbers. Yoesden also has a larger area of Horseshoe Vetch than most other weaker sites but its population density is probably ten times that of these other sites. A late season visit to Sharpenhoe Clappers (where very large numbers flew for longer than the UTB Chiltern sites), returned some very long turf heights (25cm.) from NW facing, ant hill covered slopes. However, apparently this area of the site supports what is described as a satellite of an unvisited, much warmer key area within the complex.

Horseshoe Vetch plug plants continue to spread across the scrapes at Holtspur Bottom. Recently introduced Horseshoe Vetch plants on flatter and richer soil were badly overshadowed and out-competed by strong growth of existing turf components.

## **Egg laying and Ova** Despite six hours of following females only one egg was actually seen laid onto foodplant. Many, many egg laying movements were watched and all seemed to be equally positive but on close inspection no egg could be seen. It was noted that females seemed able to detect Horseshoe Vetch presence from a distance of perhaps 15cm as they rarely landed in turf without HV. However, once landed they were equally likely to crawl away from the plant's rosette centre and away from the plant as into the centre. Females always climbed down towards the ground after detecting Horseshoe Vetch and often under vegetation to lay eggs and a strong suspicion formed that eggs might not be adhered to vetch but simply dropped in proximity to it.