

# The Hobby in Kent – An Update

Rob Clements

First Atlas Period 1967-1973	0 Confirmed; 0 Possible
Second Atlas Period 1988-1994	15 Confirmed/Probable; 20 Possible
Third Atlas Period 2008-2012	39 Confirmed; 2 Probable; 2 Possible

Table 1. 10 Km Squares in Kent: Hobby Breeding Records during Atlas Periods

The above table illustrates the dramatic spread of the Hobby in Kent over the past fifty years. During the last Atlas period, ending in 2012, Hobbies were recorded breeding in 39 out of the 43 10km.squares (hectads) wholly or largely within Kent. This probably overstates the increase since the Second Atlas period; few observers were looking specifically for Hobby during that period, while most of the confirmed breeding records obtained in the Third Atlas period were the result of visits to known Hobby sites that have been occupied for decades. Even in those hectads where no Hobby sites were known, often all that was required for a confirmed breeding record was a brief visit to any suitable-looking area of farmland in August/September. Hobbies have become so widespread within the county that it was rare to visit any tetrad outside urban areas of Kent without seeing the species. This paper aims to record the timing of this increase in numbers, and attempts to calculate the current population.

## PREVIOUS HOBBY POPULATION ESTIMATES:

Although there is some evidence from the literature that Hobbies were numerous in Kent in earlier times (Balston et al 1907, Ticehurst 1907) there are few records from the first half of the 20<sup>th</sup> century. In the modern era, breeding was first confirmed in 1967, but numbers reported in Kent Bird Reports remained low (0-10 pairs) into the 1990's. Field-work for the Second Atlas gave the first indication of an increase, with Hobby recorded from 118 tetrads, and a conservative population estimate of 15-40 pairs (Henderson & Hodge 1996) in the Breeding Birds Atlas. A few years later, further specific survey-work recorded that Hobbies were present in all parts of Kent and suggested that the population was now as high as 120-145 breeding pairs (Clements & Rowlands 1999.)

## THE CURRENT SITUATION

The survey-work summarised in the 1999 Kent Bird Report suggested that Hobbies were present in almost every 10 km. square of Kent, but gave only a rough idea of the breeding density. Further work was needed, trying to find every pair within specified study areas of different habitat within Kent. During 2005-2007, I visited three study areas (each 100 sq.kms.) in different parts of Kent. Keen to widen the survey, and record Hobby breeding density in other Southern counties, I teamed up with Colin Everett, another Hobby field-worker based in Hertfordshire. Further study areas in Hertfordshire and Bedfordshire were visited during 2008-2010 (Clements & Everett 2012). A fuller account of the survey and results can be found in Bird Study (2012) 59: 74-82.

## SURVEY METHODS

Surveying took place in two main periods; May/June when displaying pairs were located, and August/September when successful breeding pairs were located. Observations were concentrated in periods of warm, sunny weather, between 8.00 am-5.00 pm, when Hobbies were most likely to be seen. Likely areas were slowly walked through, listening for Hobby contact or alarm calls; in the later period, juvenile food begging calls were often heard. Many hours were spent scanning from suitable vantage points. When two pairs were found in close proximity (1-1.5 sq. kms) much time was spent making sure there really were two pairs, not one mobile pair moving between two prospective nest-sites. In many cases, actual nests were found, but where nest location was difficult, as with woodland breeding pairs, the main centre of activity, especially by newly fledged young, was used for nearest known neighbour calculations.

## RESULTS

In the three 100 sq. kms Kent study areas, there were 9, 12 and 15 pairs of Hobby present. In the six study areas visited in southern England (including the Kent study-areas), the mean density was 12.0 pairs per 100sq.kms. The study areas included variable areas of developed habitat unsuitable for breeding Hobbies. Excluding these areas, Hobby density in non-developed habitat ranged from 10.1 to 17.3 pairs per 100 sq. kms, with a mean density of 14.6 pairs per 100 sq. kms.

## A KENT HOBBY POPULATION ESTIMATE

Of the c.3700 sq.kms in Kent, large urban areas (approx. 300 sq. kms) can be excluded from the calculations. The large areas of almost tree-less flat-lands on Sheppey, Hoo Peninsula and Walland/Romney Marshes do hold breeding pairs of Hobby, though the shortage of nest-sites restricts them to about twenty pairs in approx. 400 sq. kms. Over the remaining approx. 3000 sq.kms of Kent, assuming an average density of 10 breeding pairs per 100 sq. kms of suitable habitat, there are likely to be around 300 breeding pairs. In total, therefore there are probably around 320 breeding pairs of Hobby in Kent in recent years, with a likely range of between 250-350 pairs. If the breeding density over the whole county proves higher than the notional 10 pairs per 100 sq. kms, there may be as many as 400 pairs present in Kent during the breeding season.

## RARE BREEDING BIRDS PANEL RECORDS

When the Rare Breeding Birds Panel was established in 1973, the Hobby was an obvious candidate for monitoring. Table 2 illustrates the growth in records, reflecting probably both a real increase in numbers and better reporting of the species. With the growth in numbers however came increasing difficulty in monitoring most or all breeding pairs in some counties, and also reduced interest by birders in the species as it lost its rarity value. In recent years, few breeding records are sent to the Kent Recorder or RBBP representative, so the KOS has had to send both the actual number of pairs found and an estimated total for breeding pairs within the county. The estimate provided started at 200 pairs in 2001, and has increased to 300 pairs in recent years.

Year	1973	1982	1993	2002	2009
Confirmed Pairs	24	97	152	277	297
Max. Total Pairs	65	203	493	590	1196

Table 2. UK: Hobby Breeding Pairs reported to Rare Breeding Birds Panel.

### NOTES ON THE 2012 SEASON

Unusually heavy rainfall during April- July restricted my survey-work during the early part of the Hobby breeding cycle. I intensively surveyed a 9 sq.kms (3 kms x 3kms.) study area in East Kent where 40% of the habitat was woodland, the remaining area a mixture of arable and permanent grassland. The small study area was part of a larger area (70 sq. km) where I had consistently recorded a high density of territorial and breeding Hobbies since 1999. In 2010, 19 territorial pairs were located, of which at least 14 bred successfully. I chose such a small study area because I wanted to be sure I had found all Hobby pairs within the area. With the larger study-areas (100 sq. kms or more) the number of breeding pairs is always a minimum, with an unknown percentage of pairs evading location by the field-worker. Over the period 1999-2011, Hobbies had been recorded breeding in six well-defined locations within the 9 sq.kms study area, though not all six sites were occupied each year. In 2012, during a brief spell of fine weather in late May/early June I located seven pairs of Hobby within the study area. Some occupied sites were very close; one nest in an isolated Corsican Pine was only 500 m. from a pair using an Oak tree, though the sites were to some extent separated by a ridge of high ground. More usual spacing was 1.0-1.5 kms apart. Field-workers in lower-density Hobby areas might express scepticism, suspecting that I was actually recording a lower number of pairs as they moved around the study-area, prospecting for suitable nest-sites. I'm certain that was not the case; I would leave one pair perched by a nest-site, move to the next likely territory and locate resident Hobbies almost instantly. Often the separate pairs were visible at the same time from my view-points.

Re-visiting in August/September it became clear that only three pairs had bred successfully (though three pairs in nine square kms is still a respectable density!) The other pairs were not present, though a few un-paired non-breeding birds were still using the area. In previous years within this high-density study-area, I had noted the presence of several pairs of adult Hobbies that co-existed peacefully in close proximity to successful breeding pairs. These pairs however had stayed into August, while in 2012 they appeared to have left the area at some point after early June. As no nest visits were made, I don't know whether these non-breeding pairs laid eggs and failed, perhaps due to the exceptional wet weather, or whether no breeding attempt was made. In a wider area, I found a high rate of successful breeding pairs when re-visiting sites that had been occupied in 2011, suggesting that few Hobbies had failed. Correspondence with other Hobby field-workers, suggested that the wet weather had had little effect on breeding success (A. Messenger /Derbyshire, C. Everett/Hertfordshire) My tentative conclusion was that most of these non-breeding pairs had not actually failed, but had departed earlier than usual, perhaps because of the unusual weather. It will be interesting to see what happens if we get a hot, dry summer next year.

The percentage of territorial but non-breeding pairs of birds of prey can be expected to increase as the population increases, so their presence in this historically high-density part of Kent should not be a surprise. To what extent this phenomenon occurs elsewhere, both in Kent and other counties is uncertain; if widespread it may mean that the true number of territorial Hobby pairs present in the UK is rather higher than the figure for breeding pairs alone.

Also notable in 2012 was the delayed breeding in the pairs found, with first fledging recorded on 20<sup>th</sup> August at two sites, almost three weeks later than has occurred in previous years. Again, the very wet weather and subsequent delay in breeding of Hobby avian/insect prey species may have caused this delay in their own breeding cycle. At two nests where close observations were possible, adult Hobbies were seen taking dragonflies to the nest from August 17<sup>th</sup> onwards, bringing single dragonflies at 30-60 second intervals. In previous years, the change from bird prey to insects has taken place after the juvenile Hobbies had left the nest. Most raptor species keep nest visits to a minimum to avoid arousing interest from potential predators. Taking in large prey items such as birds is one way of achieving this. Perhaps the abundance of insect prey over-rode their usual caution, persuading them to change to insect prey at an earlier point in the breeding cycle than usual.

### REFERENCES

- Balston, R.J., Shepherd, Rev. C.W & Bartlett, E. 1907 - Notes on the Birds of Kent R.H. Porter.  
Clements, R.J & Everett C.M. 2012 - Densities and dispersion of breeding Eurasian Hobbies *Falco Subbuteo* in southeast England. *Bird Study* 59; 74-82.

Clements, R. & Rowlands, J.A. 1999 - The Hobby in Kent. Kent Bird Report 1999: pp 167-175.

Henderson, A. & Hodge T. 1996 - The Kent Breeding Bird Atlas 1988-94. Kent Bird Report 1996 Ticehurst, N.F. 1909 A History of the Birds of Kent. Witherby & Co.

