

UPDATE

Great Stag Hunt III

Thank you for your time spent helping our largest terrestrial beetle, the stag beetle. By taking part in the third *Great Stag Hunt* and sending in your sightings from 2006 and 2007 we have been able to find out more about how this enchanting beetle is faring in the UK.



In 1998 PTES launched the *Great Stag Hunt*, the first ever national UK stag beetle survey. This was a huge success, resulting in 3 600 people sending in almost 10 000 records. In 2002 we repeated the survey, *Great Stag Hunt II*, timed when it was hoped that the offspring of beetles

seen in 1998 would emerge. This resulted in another 3 000 sightings recorded. The third survey, *Great Stag Hunt III*, began in 2006, following the four year survey cycle. However, with additional funding we were able to extend the survey into 2007, collecting even more records.

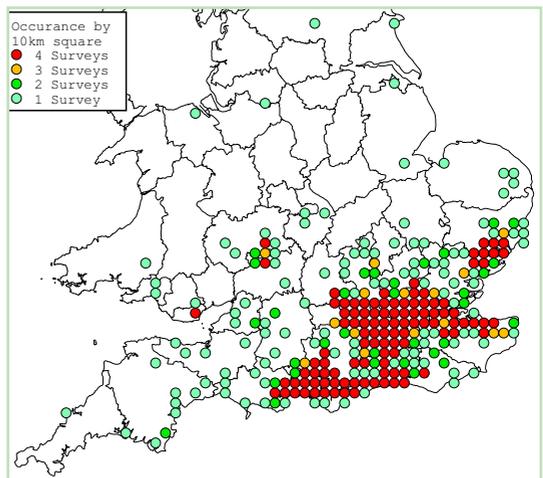
3 535 people sent in over 8 000 records. All the sightings were checked by our expert entomologist who confirmed 4 296 and 3 058 accurate sightings of stag beetles in 2006 and 2007 respectively. In addition people also told us where beetles hadn't been seen in their area. Records of this type are very useful when compiling distribution maps.

As the map shows, overall, the distribution of records for 2006 and 2007 is very similar to those of 1998 and 2002, with the majority of stag beetle records coming from southeast England. The small population around Upton-on-Severn on the Gloucester/Worcestershire border is still present, as is the population in Cardiff. The most northerly 2006 record came from Cheshire, where photographs were received of both male and female beetles in a garden in Stockport.

The core areas (i.e. those areas where stag beetles have been recorded during all four national surveys) are mostly to be found in southeast England. Outside of these areas, the species is patchily distributed across England

and south Wales. Within the south-east of England, three main areas of population can be identified as highlighted on the map below. The records suggest that the core areas have remained stable between 1998 and 2007 and there is little or no evidence to suggest their range has shrunk.

As in 1998 and 2002, the majority of records (83%) came from private gardens, with a further 16% coming from areas such as pavements, roads, town centres and urban greenspaces, suggesting that stag beetles are, in the UK at least, very much associated with urban areas. 'Hotspots', where large numbers of beetles have been recorded, include areas of south London, parts of Ipswich, Colchester, Brighton and Bournemouth.

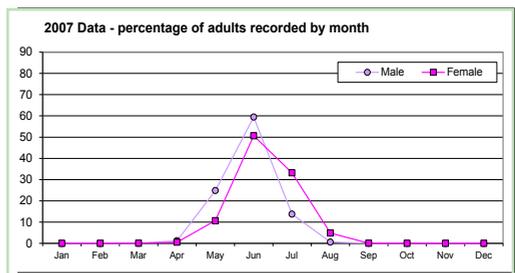
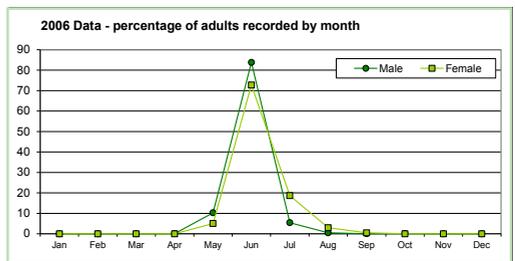
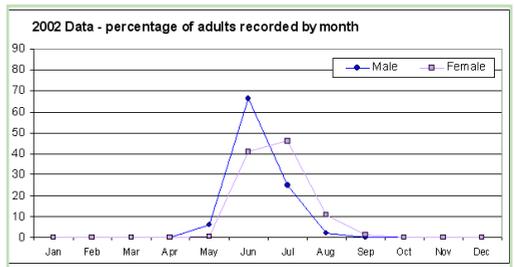
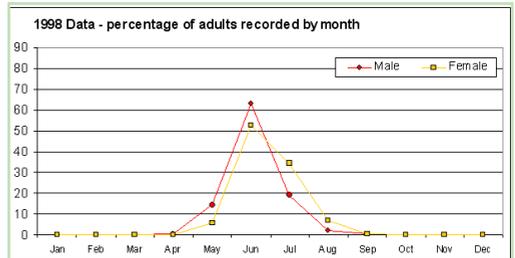


The overall pattern of sightings for 2006 and 2007 was similar to those seen in 1998 and 2002. Males began to emerge before the females in late April or early May, their numbers reached a peak in June when they outnumbered females, then they declined. Female numbers also peaked in June, but declined more slowly than the males.

Stag beetle activity in 2006 appeared to take place over a narrower period than in the other years with beetle sightings starting later and declining sooner. May 2006 was a month of two halves, the first half was the warmest since 1945 and the second half was the wettest May since 1979 receiving 177% of the expected monthly rainfall. This may explain why fewer stags emerged in May than normal and waited until the dryer conditions in June.

The 2006 sightings of stag beetles ended much more abruptly than in other years, plummeting in July instead of continuing steadily throughout July, falling substantially in August and dwindling out completely in September. In 2006 we had an unusually hot and dry July, the hottest in 300 years. This could have affected the stag beetles as the larvae require food with a

high moisture content, whilst the adults are known not to be active if the temperature is too high; adults also seem to be more active when the moisture content of the air is relatively high.



Thank you again for sending in your records. It is so important to know the whereabouts of species so that we can ensure we are directing our conservation efforts in the right places.

Stag beetles are very special and we would like to ensure they remain as widespread as they are now. However, as parks and gardens are becoming tidier, the deadwood that stag beetle larvae rely on for feeding is becoming scarcer. **So, we need your help!**

Having taken part in our *Great Stag Hunt* we hope you share our enthusiasm and would like to provide them with a much needed home. You can do this easily by creating a **Stepping Stone for Stags** - a partially buried vertical log or two in a quiet part of your garden. For more details please contact us for a leaflet or visit: www.ptes.org/stagbeetles.

If you are a youth leader/educator and would like more information or lesson ideas on stag beetles then please sign up to our free, fun, curriculum-linked **educational resources** at: www.ptes.org/education.



people's trust for
**endangered
species**