

SPECIES PROFILE: LARGE MARSH GRASSHOPPER

Results have recently been published from a comprehensive survey of a large and colourful New Forest resident, the Large Marsh Grasshopper, *Stethophyma grossum*, on land managed by the Forestry Commission under the Higher Level Stewardship Scheme. This survey aimed to study all known and potential sites for this rare species and to assess the status of the populations and habitats found. The results were encouraging, with little evidence of decline since the 1990s.

The Large Marsh Grasshopper (LMG) is the largest of the UK's native grasshoppers, and one of the rarest, currently known in the UK only from the New Forest and a small area of Dorset. Populations have declined dramatically elsewhere in England over the past 50 years, largely due to the widespread drainage of wetlands.

It is a herbivorous insect, feeding on grasses, rushes and sedges. Eggs are laid in late summer at the bases of grass tufts, where they remain until hatching the following May or June. The preferred habitat is wet, *Sphagnum*-dominated mires (typically described as bogs or quaking bogs), and the



Large Marsh Grasshopper female. purple form. rarely



Good habitat for Large Marsh grasshopper, open with plenty of

The survey method involved direct searching in suitable habitats, and listening for calling males (the call is a distinctive 'ticking' sound. This is often several bursts at a rate of two or three a second, a sound quite unlike other British grasshoppers). LMG is most active in favourable weather conditions (sheltered, warm and sunny), when males are calling and both sexes will be visible in the vegetation and may fly.

Of the 50 sites surveyed in 2017, LMG was found at 25, four of which were judged to hold ‘strong’ populations, with a further 15 ‘moderate’ populations. Of the 30 sites that had been resurveyed since the 1990s, two had apparently lost their populations, and two had seemingly gained populations, lending weight to the idea that this species may exist in the New Forest as a dynamic metapopulation.



Good habitat for Large Marsh Grasshopper with wet mire in the centre, grading to drier heathland. Well-sheltered.

The report concludes that there is no sign of decline in the New Forest as a whole, and that current efforts to restore mire habitats through the HLS’s wetland restoration programme could in future help to strengthen populations of this species, which could be considered a flagship species for the conservation of its mire habitats.

To find out more about the work of the HLS scheme in the New Forest or to read the full Large Marsh Grasshopper report, visit www.hlsnewforest.org.uk. The 10-year HLS agreement with Natural England is held by the Verderers of the New Forest. The scheme is managed by them in partnership with the Forestry Commission and the New Forest National Park Authority.

Harvey, M.C., and Brock, P.D. 2017. New Forest Large Marsh Grasshopper (*Stethophyma grossum*) 2017 Survey Report. Higher Level Stewardship Agreement The Verderers of the New Forest AG00300016.

A brief summary of the above mentioned report was published in:

Sutton, P. & Beckman, B. 2018. Wildlife reports: Grasshoppers and relatives. British Wildlife 29(6): 440-441.



Large Marsh Grasshopper female, Crockford, 10th August

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