

# Grey partridges on the Sussex Downs

The Sussex study area, where grey partridges are now making a recovery. © Dick Potts



## KEY FINDINGS

- Management for grey partridges on part of the Sussex study area has resulted in the highest chick survival we have yet observed and autumn densities near those at the start of the study.
- The management prescription included in-field measures such as beetle banks and low-input conservation headlands; the least favourite ELS/HLS options.
- We urge land managers on farmland throughout the country to use those ELS/HLS options most suited to increasing grey partridge numbers.

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Some farmers believe that the extinction of the grey partridge on the Sussex Downs is inevitable. However, successful breeding on the Duke of Norfolk's estate near Arundel suggests this need not be the case.

The basics of wild grey partridge management have been known for a generation. We have known the importance of controlling nest predators, providing nesting cover; having sufficient insect food for the chicks and appropriate rates of shooting. More recently, we have come to believe that we need to provide more food for adult birds and more protection from birds of prey. Following experiences in France, we advocated the use of grain hoppers for adults from autumn to summer and, from research in France, Sussex and Norfolk, including the work of Mark Watson (see *Review of 2003*, pages 64-67), we also think we need to create umbrella-like cover (eg. kale or thorns) as protection from harriers, buzzards and sparrowhawks, as well as bare areas for roosting (to avoid foxes).

Providing habitat such as beetle banks, hedges and conservation headlands is expensive, but fortunately costs can be recovered either through the Entry Level Stewardship or, preferably, Higher Level Stewardship operated by Natural England. However, the landowner still needs to pay for the essential gamekeeper.

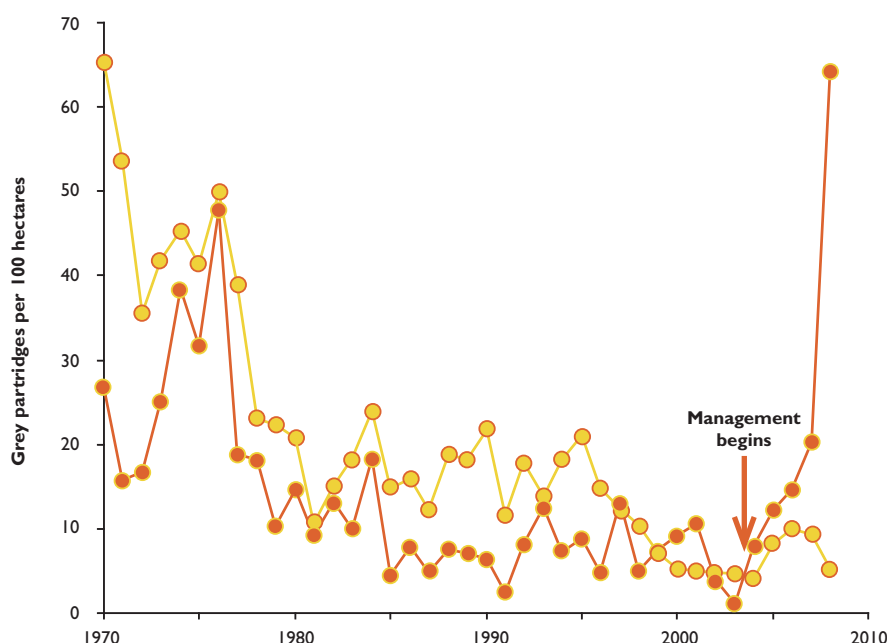
This is a formidable list of recommendations but, since the 2003/04 cropping season, one part of the Sussex study area, Norfolk Estate, has taken up the challenge with spectacular results (see Figure 1). Autumn densities of grey partridges on the area with new management have gone from 1.2 birds per 100 hectares in 2003 to 64.0 in

**Figure 1**

September densities of grey partridges on the Sussex Downs study area

Grey partridge management area —●—  
Rest of Sussex study area —●—

The red line indicates the situation in the 1,000-hectare area that began to be managed in 2003/04, the yellow is the remaining 2,200 hectares.





Local farmer, Christopher Passmore, Steve Moreby (with D-vac) and Julie Ewald sampling for insects on the Sussex study area. © Dick Potts

2008, whereas on the remaining area the densities were 4.6 per 100 hectares in 2003 and 5.2 in 2008.

In 2008, partridge breeding success on the managed area was the highest we have known with a young-to-old ratio of 4.5. It was 0.4 on the rest of the Sussex study area. Large grey partridge broods were found on the managed area, but not elsewhere (see Figure 2).

Low-input conservation headlands are key ingredients to this new management as they provide the invertebrate food for chicks in the summer months.

It is a sad fact that the precursors of conservation headlands were in place 40 years ago on the study area, but conservation headlands remain one of the least popular management options available in stewardship; fewer than 5% of farmers or landowners in Entry Level Stewardship have put them in.

**Figure 2**

Grey partridge coveys counted on the Sussex study area in autumn 2008

