



The Rotherfield Demonstration Project

The area of permanent habitat managed for partridges increased from 11% in 2010 to 15% by the end of 2018. © Markus Jenny

BACKGROUND

The project started in 2010 to demonstrate grey partridge recovery from zero, together with the benefits for other wild game and wildlife. It aims to be applicable to a wide range of landowners and other stakeholders wishing to recover grey partridges where they have gone extinct. Grey partridge reintroduction is based on GWCT guidelines, which follow international guidelines.

The Rotherfield Demonstration Project in east Hampshire demonstrates how to recover grey partridges in an area where they went extinct in the early 1990s and shows how management tailored to grey partridge conservation benefits farmland wildlife in general. The project began in 2010 with the Trust's gamekeeper working on c. 700 hectares (ha) (Trust side) and the estate's gamekeeper on an adjacent c. 700ha (Estate side). In 2011, the estate entered a 10-year Higher Level agri-environment Scheme contract with Natural England, which allowed for additional partridge habitat to be established (mainly wild bird seed mixes, cultivated uncropped margins, beetle banks, overwintered and extended stubbles). Additionally, a long-term partridge-friendly hedgerow management plan was implemented. This resulted in a general increase of wildlife-friendly habitat measures established on formerly arable land, particularly in the core recovery project area, where most of the re-established partridges are found. There, the area of permanent habitat managed for partridges increased from 11% in 2010 to 15% by the end of 2018.

On the Trust side, we counted a minimum of 101 wild grey partridges in autumn 2018 (20 males, 16 females and 65 young from 11 broods). Spring 2018 was unusually wet and June-August exceptionally dry. This resulted in bigger brood sizes (5.9 young/brood) than in 2017 (4.5 young/brood). It was also higher than the average for southern England (5.4 young/brood), but the same as the national average which was 6.0 young/brood. Only 11 of 24 spring pairs (45.8%) produced a brood, with 16 hens (67%) surviving into autumn (see Figure 1). It remains unclear what caused the high rate of failed broods at Rotherfield in 2018. However, availability of suitable spring cover was exceptionally poor because of failures in the establishment of rotational wild bird seed mixes and cultivated uncropped margins, which may have allowed additional spring predation by raptors and resulted in insufficient amounts of suitable insect-rich

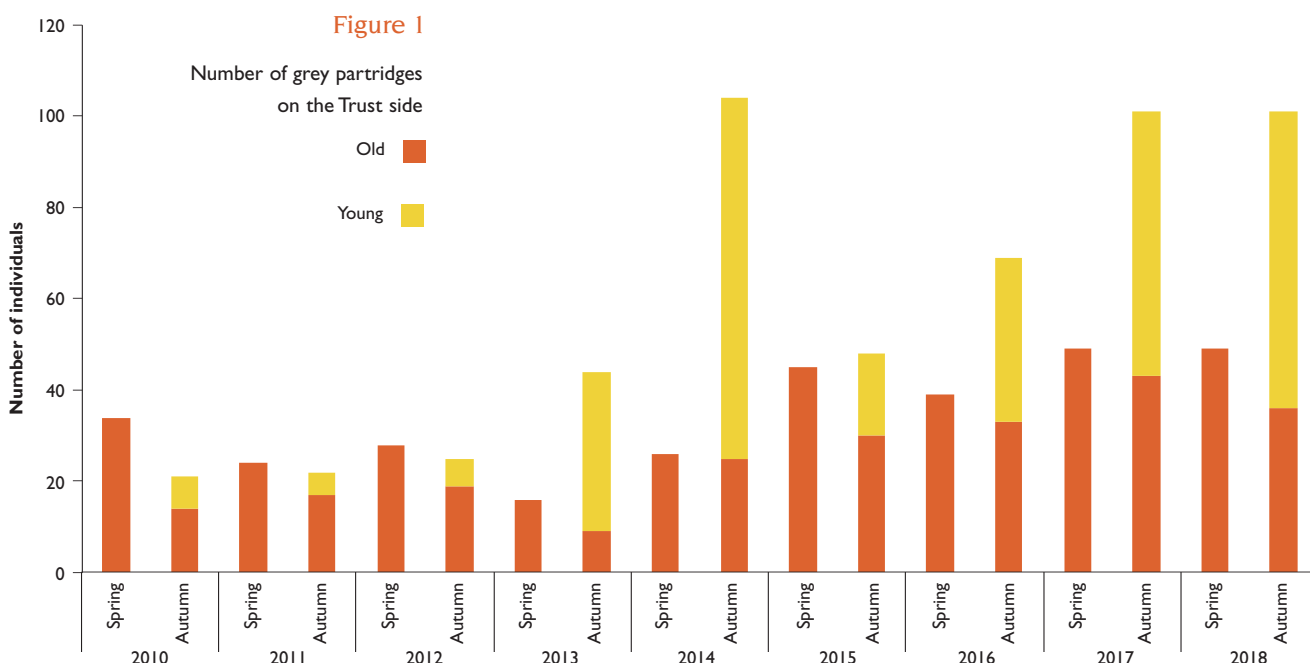


TABLE 1

Gamebird recovery at Rotherfield, split between the Trust and Estate side

Year	Spring pairs*			Autumn stock**		
	Trust	Estate	Total	Trust	Estate	Total
Grey partridge						
2018 (2017)	24 (23)	2 (1)	26 (24)	101 (101)	12 (2)	113 (103)
Red-legged partridge						
2018 (2017)	44 (44)	9 (18)	53 (62)	202 (138)	52 (35)	254 (173)
Pheasant						
2018 (2017)	Hens	207 (255)	96 (100)	303 (355)	347 (413)	145 (102)
	Cocks	170 (199)	92 (117)	262 (316)		492 (515)

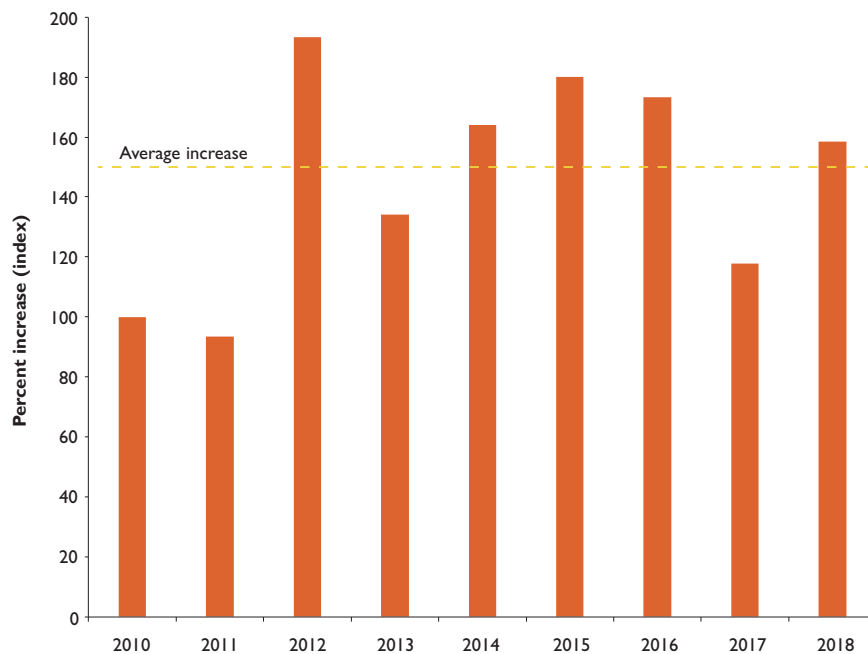
*For grey and red-legged partridges in spring, the numbers given are pairs; for pheasants, numbers of cocks (excluding released birds) and hens are tallied separately. ** Autumn stock is the number of cocks, hens and young combined. On the Trust side, 600 cock pheasants were released each year since 2011; they are excluded from the totals.

foraging cover during the breeding season. On the Estate side, two spring pairs were counted, of which one produced a brood.

2018 was the third year since the project began in which autumn grey partridge numbers reached just over 100 birds. Given the still fragile size of the isolated re-introduced population, and a bag of 12 birds during the 2017/18 shooting season, the stable population size indicates that suitable management practices are in place to allow for further recovery, especially if habitat management practices continue to improve.

The dry summer conditions clearly suited the red-legged partridges at Rotherfield. The Trust side saw 24 broods producing 100 young (in 2017 14 broods produced 49 young), the highest number since the project began. The Estate side had seven broods producing 19 young (three broods with four young in 2017).

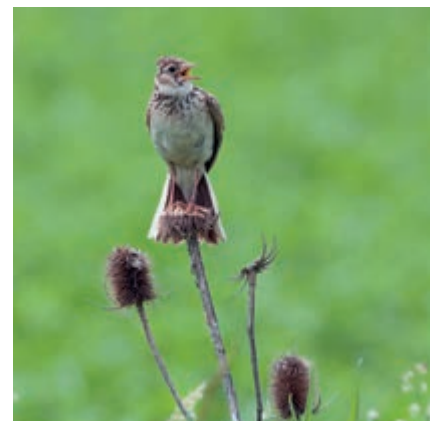
The habitat and predator management measures put in place for grey partridges since 2010 have also resulted in noticeable increases of farmland songbirds of conservation concern during the breeding season. On the Trust side, otherwise nationally declining farmland birds such as yellowhammer, skylark, linnet, dunnock, song thrush and white-throat, have increased by an average of 52% over the past eight years (based on April, May and June counts along a 10 kilometre transect). In 2018, we recorded 59% more birds than at the start of the project, with the highest increase recorded in 2012 (93%).



KEY FINDINGS

- In 2018, the number of grey partridge spring pairs on the Trust's demonstration area was 24 pairs, one more than in 2017, the highest since the project began.
- On the Trust's area, the grey partridge autumn stock was 101 birds, the same as the year before.
- Since the project began in 2010, farmland birds of conservation concern have increased by an average of 52% in the project area, while national numbers keep declining.

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Nationally declining birds such as the skylark have increased by an average of 52% over the past eight years. © Markus Jenny

Figure 2

Recovery of farmland songbirds of conservation concern during the breeding season (April-June) on the Trust side. The index of the baseline year 2010 is set at 100%. The index of 193 in 2012 for example, means that numbers have increased by 93% compared with the baseline year