

The effect of Ecological enhancements on breeding densities of Galliform farmland birds

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Although the Grey Partridge, *Perdix perdix*, has the status “least concern” on the European Red List, the population trend is decreasing, as is the case for many other farmland birds. In some countries population levels dropped so far that the Grey Partridge is listed as endangered or vulnerable on the national Red Lists. To reverse biodiversity decline, agri-environmental schemes (AES) have been introduced to restore suitable habitats for species where they can forage, nest, reproduce, and/or overwinter. In the scope of the European PARTRIDGE-project (<https://northsearegion.eu/partridge/>) the environment was enhanced with AES up to 7% or more of the area in ten 500 ha demo sites in Belgium, England, Germany, Scotland and The Netherlands (two in each region). This was supplemented by winter feeding and predation management where local circumstances allow. The aim was to improve biodiversity and ecosystem services by up to 30%. Each demo site was compared to a control site without extra measures. Here we report on the effects on the Galliform species Grey Partridge (*Perdix perdix*), the main target species, Common Pheasant (*Phasianus colchicus*) and Common Quail (*Coturnix coturnix*). Breeding birds were monitored by territory mapping from 2017 till 2021. Each area was visited at least 5 times during the breeding season. The results show that there are significantly more territories in the demo sites than in the control sites for Grey Partridge and Common Pheasant. Interesting to note is that also for some other threatened farmland species like Yellowhammer (*Emberiza citrinella*) and Skylark (*Alauda arvensis*) more territories are present in the demo sites than in the control sites.