

Effect of vegetation structure on wader nest predation and the distribution of alternative small mammal prey

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Within lowland wet grasslands, habitat manipulation is one of the key management tools available for conserving breeding wader populations. While a lot of effort has been concentrated on creating the sward structures preferred by breeding waders, the possible ramifications on other aspects of the food web have been largely overlooked. For example, species such as Lapwing *Vanellus vanellus* prefer to nest on short swards, and habitat management for these species often involves the creation of large areas of short swards. However, their mammalian nest predators are typically generalist feeders that include small mammals in their diet, and small mammals prefer a vegetation structure which is both tall and dense. Increasing the abundance of small mammals within these landscapes may therefore influence the level of predation experienced by wading birds.

Habitat manipulations to increase the area of tall sward could alter levels of small mammal abundance in the landscape, and the potential impacts of such management on the dynamics between wader and predator species requires further investigation. In order to do this, a comparison of levels of small mammal activity was carried out across eight RSPB wet grassland reserves in England that differed in the connectivity and shape of tall swards present. In addition, artificial nests were used to explore rates of nest predation in relation to vegetation structure, in order to explore the potential impact of increased amounts of taller vegetation on nest survival.