FARMLAND WADER SURVEY

LAND OFF LONG LANE, CHAPEL-EN-LE-FRITH, DERBYSHIRE

<u>2015</u>



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1.0 INTRODUCTION

- 1.1 Rachel Hacking Ecology Limited was commissioned in 2015 by Bank Hall Developments Limited to carry out a breeding bird survey (specifically farmland waders) at land off Long Lane, Chapel-en-le-Frith, Derbyshire (O.S. grid reference: SK052799). The land is the subject of a planning application for high density and low density housing with associated access and public green space and green networks (planning ref: HPK/2015/0058).
- 1.2 The site is situated to the south of the village of Chapel-en-le-Frith in the High Peak (see Figure 1 for site location). The site is bordered by a railway line to the east, by a lane to the south, by further pasture to the west and by a school and residential development to the north. The site currently comprises of permanent pasture, which is grazed by sheep and is damp in places. A small part of the site lies adjacent to Long Lane. This comprises of woodland and scrub.
- 1.3 Various species of farmland wader have been recorded from the land to the south-west of the site. Lapwing *Vanellus vanellus*, Curlew *Numenius arquata* and Snipe *Gallinago gallinago* have all been recorded. These three species of bird are listed as 'Red' (Lapwing) or 'Amber' (Snipe and Curlew) status under the 'Birds of Conservation Concern 2009' (BoCC, see Eaton et al, 2009), due to population declines in the UK.
- 1.4 Existing records for the farmland waders come from the Peak Wader Recovery Programme project (2012 - breeding Lapwing and 1 record of Curlew) and from a local resident (of Down Lee Farm) Peter Soden (2013 and 2014 - breeding Lapwing and feeding Curlew plus one potential record for Snipe). Down Lee Farm is listed as a Potential Local Wildlife Site for its bird interest. This lies 50 metres to the south-west of the proposed development site, at its closest point.
- 1.5 Due to the proximity of the proposed development site to the breeding and feeding grounds for the farmland waders, Derbyshire Wildlife Trust requested a farmland wader survey to be carried out on the site and immediately surrounding the site. In addition, the site was assessed for its botanical value and therefore, its value as feeding habitat.



Figure 1 - The site within the red line boundary

2.0 METHODOLOGY

- 2.1 The farmland wader survey followed the O'Brien and Smith (1992) method for censusing lowland breeding wader populations. This method is recommended for lowland farmland and enclosed areas (Gilbert *et al.* 1998).
- 2.2 Three visits were undertaken during late May and June 2015. The first two visits were undertaken within three hours after dawn. The final visit was undertaken within three hours before dusk.
- 2.3 Both of the fields within the proposed development site were counted as one site, given the small size of the land to be surveyed. Upon arriving at the site, the survey area was scanned using binoculars for approximately ten minutes. The entire site was then walked by two surveyors so that all areas were covered. During the walk along the boundaries of the site, the adjacent fields were also observed. In addition, the surveyors walked down the lane to the south of the site to observe adjacent fields.
- 2.4 Following the first survey, a second walkover took place, to record the botanical diversity of the site.
- 2.5 The surveys took place on 30th May 2015, 3rd Jun 2015 and 7th June 2015. The weather during the surveys was sunny, with a slight breeze and warm.
- 2.6 Andy Harmer, with assistance from Rachel Hacking, undertook the surveys. Andy has over fourteen years of experience of breeding bird surveys. He holds Schedule 1 bird licences from Natural England and he contributed records and time towards the publication of the Cheshire & Wirral Bird Atlas 2008. Rachel has assisted Andy on numerous occasions with breeding bird surveys, is an experienced ecologist and specialises in botany.

Constraints

2.7 The survey started in late May so the early survey period of April was missed. However, the fact that Lapwing were seen and heard alarm calling during one of the visits, indicates that the birds were still on the nest in late May and June.

3.0 RESULTS

- 3.1 No farmland waders were recorded on the proposed development site during any of the survey visits. Lapwing were seen and heard alarm calling and flying up from the ground approximately 500 yards (at least 2 fields away) from the site to the west. This was on the 30th May visit.
- 3.2 The site, and the fields lying immediately adjacent, are heavily sheep-grazed. Many adult sheep and lambs were scattered across the whole site. No farmland waders were observed in immediately adjacent fields.
- 3.3 Many corvids were seen flying across the site, foraging on the site and using the scrub and trees on site as 'corvid perches', to observe the site and predate from. The corvids included Carrion Crow *Corvus corone*, Magpie *Pica pica* and Jackdaw *Corvus monedula*. Corvids are known to predate nests of farmland waders.
- 3.4 To the south of the site lies a camp site and caravan park. During each survey visit, many dog walkers were observed walking along the lane to the south of the site and through adjacent fields. This can cause disturbance to ground-nesting birds.
- 3.5 The botanical value of the site is poor. Table 1 gives the complete list of species taken during the walkover survey of the grassland across the entire site. This is a similar species list to that recorded during the Phase 1 Habitat Survey in November 2014.

Table 1. Species list taken at the site May 2015		
Lolium perenne	Perennial Rye-grass	
Cynosurus cristatus	Crested Dog's-tail	
Anthoxanthum odoratum	Sweet Vernal-grass	
Agrostis stolonifera	Creeping Bent	
Juncus effusus	Soft Rush	
Juncus inflexus	Hard Rush	
Cardamine pratensis	Cuckooflower	
Deschampsia cespitosa	Tufted Hair-grass	
Carex hirta	Hairy Sedge	
Festuca rubra	Red Fescue	
Ranunculus repens	Creeping Buttercup	
Trifolium repens	White Clover	
Cirsium vulgare	Spear Thistle	
Cirsium palustre	Marsh Thistle	
Veronica serpyllifolia	Thyme-leaved Speedwell	
Taraxacum officinale agg.	Dandelion	

3.6 The intensively managed and species-poor sward is likely to have a poor invertebrate fauna associated with it. Farmland waders rely on invertebrates for their food.

4.0 ASSESSMENT

- 4.1 The proposed development site is not considered to be an optimum breeding or feeding habitat for farmland waders. The grassland on site is species-poor and heavily grazed. Intensive sheep-grazing is known to reduce the attractiveness of the grassland to farmland waders for feeding by creating a short homogenous sward and therefore, a reduction in the diversity and abundance of invertebrates (Vickery *et al.*, 1999). Grazers can also trample nests and at high densities, chick mortality is high (Vickery *et al.* 1999).
- 4.2 Corvids were abundant on each of the survey visits. Corvids are considered to be the main predators, along with foxes, of wader nests (Gibbons *et al.*, 2007). The site supported scattered scrub and tall hummocks of rush. Corvids were seen flying to and from the scrub and rush tussocks frequently. It is likely that farmland waders select sites without habitat which predators could hide within, i.e. more open sites where the adult birds can observe the surrounding land.
- 4.3 The site is close to a camp site and many hikers and dog walkers use the lane which runs along the southern side of the site. The public also use adjacent fields to walk through. This level of disturbance is not ideal for farmland waders.
- 4.4 The site is on the edge of a built-up area (residential development and a large school). A new housing estate has just been completed on the eastern side of the railway line. Given the proximity to the housing, noise from the school and well-used public rights of way, the site is not considered to be an optimum nesting and feeding habitat for farmland waders. The records show that the waders prefer the fields to the south-west and beyond Combs Reservoir, further away from the urban fringe.
- 4.5 No records exist for the site from previous surveys. The 2012 Peak Wader Recovery Programme survey recorded Lapwing approximately 250 metres away from the site at the nearest point.

Mitigation and Compensation

- 4.6 The proposed development has been designed to provide habitat buffers along the northern, western and southern edges of the site. These will provide valuable wildlife corridors and help species dispersal to the land to the southwest. The habitat buffers will be a mixture of habitats, including species-rich wildflower grasslands, which will provide a better feeding environment for waders than the grassland currently available, by increasing the invertebrate diversity. In addition, wet scrapes and a pond are to be created within the south-western edge of the site. These will create extra feeding habitat for waders. Therefore, the site could be offered as an important feeding ground for waders close to their breeding sites.
- 4.7 The habitat areas and scrapes will be fenced off from the general public to avoid disturbance. The grassland will be managed by cutting once or twice a year.

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