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David Hayward
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BY EMAIL ONLY

Dear David

Havant Local Plan – SPA Supporting Habitat

I am writing to share some advice I recently received from the Natural England Ornithological Team in relation to the Havant Local Plan, with particular regards to Policy H40 Campdown and wintering curlew, and to a lesser extent Policies EX2 Warblington Farm and H27 Rook Farm. The advice includes a bird data review that considers wintering curlew population trends, potential impacts from development on supporting habitat and mitigation requirements for the species, followed by a concluding summary. Please find the Ornithological Team's advice and summary attached within Annex A of this letter.

I hope you find this information useful in preparation for the local plan examination in July. If you have any queries please do not hesitate to let me know.

Yours sincerely,

Becky Aziz

Senior Advisor Sustainable Development
Thames Solent Area Team
Natural England
[redacted]

SPA Supporting Habitat and Curlew - Havant Local Plan – Bird Data Review

Thomas Shanta - Specialist Ornithology, Natural England

The wintering Eurasian curlew *Numenius arquata* population in the UK is derived from British and Irish breeding birds along with those that have bred in north-west Europe. Generally, birds that have bred in the British uplands move to coastal south-west England and Ireland during the non-breeding season. A large proportion of wintering curlew that are found on the south, east coasts and occasional inland sites are typically Scandinavian in origin, though a small proportion may also be British breeding birds (Wernham et al. 2002).

The most recent BTO WeBs report (2019/20) of the non-breeding UK curlew population shows a continued strong decline in wintering numbers of the species, decreasing by -18% over a 10 year period (2008/09–2018/19) and -33% over 25 years (1993/94–2018/19 (Frost et al. 2021)). This decline means that the curlew is a high conservation priority species due to widespread national and international population declines (Eaton et al. 2015). At present the UK wintering curlew population is estimated to be c. 120,000 (Woodward et al. 2020), this is estimated to be around fifth of the global winter population (Wilson et al. 2020). Results from the most recent (2015/16) Non-Estuarine Waterbird Survey (NEWS-III) shows a steep decline for curlew (-31%) from the previous survey period (2006/07) with an estimated 44,344 (CI:38,324–50,613) individuals. This has been attributed in part to increased coastal development and other human activity (Humphreys et al 2021). Declines in the winter population correlates with a strong decline in the number of UK breeding pairs which currently is estimated to be 68,000 (Wilson et al. 2020), this is thought to be >30% of the west European population (WWT 2021). Data from NEWS-III indicates the non-estuarine wintering UK curlew population is in greater decline than estuarine populations which is thought to be because many of these individuals are from the UKs breeding population.

The majority of English curlew breed in the Northern Uplands. There has been a 31% decline in England since 1995 (48% in the UK (Wilson et al. 2020)). The Eurasian curlew is listed as vulnerable to extinction in Europe, and globally. The species is classified under the IUCN Red list as near threatened (BirdLife International 2021).

BTO WeBs report (2019/20) shows that Chichester and Langstone Harbours SPA supports c. 2119 (1246 and 873 respectively) non-breeding individuals (Frost et al. 2021). It has been stated that the present-functionally linked land at Campdown regularly supports over 5% of the combined SPAs (max count of 133 on the 24/02/2017) non-breeding population.

Over wintering birds are often found in large flocks on intertidal mudflats, coastal grasslands, farmland and some inland wetlands sites (Natural England & RSPB 2020). Suitable management of Semi-natural grasslands and farmland areas are likely to become more important to ensure food-rich coastal grazing pastures will be available to mitigate for the loss of intertidal foraging habitat due to rising Sea levels (Navedo et al. 2019).

Bird surveys state the both Rook and Campdown Farms are used predominantly as foraging habitat, though it is likely that they roost in the same locations. Non-breeding (wintering) birds take a wide variety of intertidal invertebrates, especially harbour ragworms *Hediste diversicolor* , as well as bivalves and crustaceans, such as shore crabs. Curlew often roost and forage for annelids on adjacent farmland at high tide and in adverse weather. Curlews are sexually dimorphic with males being smaller than females with reduced bill lengths. During cold weather, observations of males

foraging between tidal areas and on inland fields may be higher as cold weather drives their favoured prey species such ragworm deeper into their burrows making this prey species less accessible to the shorter billed males. As such there may be intraspecific variation in wintering movements with more solitary foraging female on intertidal mudflats, whilst flocks of males feed in adjacent fields during cold weather (Evans 1988). Appropriately grazed meadows, rough pasture, semi-and improved agricultural fields with good soil health and soft soils (for beak penetration) can provided important foraging during the winter where they will forage on seasonally abundant invertebrates, such as annelids (RSPB 2021).

A Telemetry study conducted by Cook and others (2016) commissioned by the BTO on the curlew habitat use on the Humber Estuary SPA between January and March found their movements were largely influenced by diurnal cycles though more specifically tide. During the study period curlew home ranges were found to be between 4.4 and 9.6 km^2. This study found Curlew movements were greater during the day than at night, they hypothesised that this may be related to roosting patterns.

Habitat codes taken from Cheshire and Wirral Ornithological Society (2021). showed that 56% of wintering records of curlews were on tetrad assigned to farmland (36% on improved, 11% on unimproved and several on tilled land). The remainder of the sightings (34%) were on tidal sites and salt marshes. Curlews were found to be site faithful during the winter. Many individuals were found to occupy the same fields during the winter from week to week and returning from one year to another. As such it is important that existing areas of non-breeding habitat used by curlew is maintained not only in quality but in area coverage (Drewitt 2020). Coastal developments are a major threat to wintering/non-breeding curlew populations not only due to habitat loss but an increase in recreational disturbance (Drewitt 2020). The presence of dog walkers in particular has been shown to negatively impact the behaviour of waders and wildfowl.

Liley and others 2010 investigated recreational activity during the winter on the Solent SPAs between Hurst Spit (Hampshire) and Chichester Harbour (East Sussex). They concluded that dogs being walked on intertidal areas (>50% of observations) resulted in a disproportionally high 27% of major flight disturbance events. A similar study conducted by Liley and Fearnley 2011 on theThames Estuary and Marshes SPA, the Medway Estuary and Marshes SPA and the Swale SPA (all Ramsars) found curlew were a species that could be significantly impacted by human activities (specifically dog walking). They recorded that major flight events (indicating serve disturbance) in curlew at distances of <50m. Disturbance can impact wader species such as curlew in many ways, this includes though not limited to a loss of habitat through avoidance of areas, increased energy demands, loss of foraging time, increased adrenal stress levels, reductions in reproductive fitness, all of which may result in reduced populations at both a site and wider level (Fitzpatrick & Bouchez 1998; Catry et al. 2011; Lynn et al. 2010).

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NE Ornithological Team Summary

1) Based on the information provided in the bird report data, with records of observations including maximum counts of 133 curlews recorded on the **24/02/2017; 123- 07/02/2017; 106- 11/01/2017; 100- 27/01/2017** the ornithological team are in agreement that the land incorporated within H40 Campdown Farm is of value to wintering/non-breeding curlew and does form part of the functionally linked habitat to the adjacent SPA as the data available (**Chichester Harbour SPA supports: 2019-20=1,246 non-breeding individuals (fluctuating 5 yr average); Langstone Harbour SPA supports: 2019-20= 873 non-breeding individuals (declining 5 yr average** (Frost et al. 2021)) indicates the site is regularly used by **>5% of the SPA curlew non- breeding SPAs population**.

2) Comparisons of the bird observation reports and the location maps of H40 Campdown Farm indicate a valuable winter foraging location in mid- winter (January -February) when curlew are required to maintain and increase their energy demands due to cold weather and access to some favoured prey species such as ragworm become less accessible/abundant (Cheshire and Wirral Ornithological Society 2021; Evans 1988). This requires a proportion of the curlew population to become more reliant on earthworms (*Oligochaeta spp*.) in coastal pastures which highlights the importance of these agroecosystems during the winter for declining migratory species such as curlew (Nevado et al. 2019).

3) A minimum of two updated surveys, conducted in each month from November - March would be required to ascertain curlew site use for both the proposed development sites and the offset location of Warblington. This is to ascertain potential carrying capacities and site limitations.

4) More information would be required by the ornithological team to predict the suitability/practicality of Warblington becoming the main location/offset site of functionally linked habitat with the immediate area. This needs to include the actual size of the area that will be targeted for specific wintering curlew management/enhancement?

5) The Local Plan needs to have certainty regarding absence of adverse effects. Core and primary sites are the most important for the functioning of the SPA, due to their location and habitat management. The HRA of the Plan needs to be clear that if core or primary sites are lost, their function will be maintained. To do this, replacement land and/or other suitable mitigation will need to be secured at the Plan stage.