



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES  
2010

Sheringham Shoal Extension and Dudgeon Extension Offshore Wind Farms

**Appendix I1 to the Natural England's Deadline 1 Submission**

**Natural England's Best Practice Advice on North Norfolk Coast SPA Pink Footed Geese  
- February 2023**

For:

The construction and operation of the Sheringham Shoal Extension and Dudgeon Extension Offshore Wind Farms located approximately 16km and 27km respectively from the Norfolk Coast in the Southern North Sea.

Planning Inspectorate Reference: EN010109

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20th February 2023



## **Natural England's best practice advice on North Norfolk Coast SPA**

### **Pink Footed Geese - February 2023**

**North Norfolk Coast SPA pink-footed geese:** pink-footed geese (PFG) are attracted to Norfolk by the safe roosting locations within designated sites. Key roosting locations can be found at Snettisham, Scolt Head Island and Holkham. From these safe roost sites, geese move onto surrounding farmland where they preferentially feed on sugar beet. Individual fields can contain many thousands of feeding birds. Foraging occurs both diurnally and, when conditions allow, nocturnally (geese rely on eyesight to detect food on moonlit nights). Previously, their observed average foraging range was 10.4km from overnight roosts (Gill et al. 1996).

**Changes to agricultural practice:** As highlighted on BBC ONE Countryfile programme 'Holkham' which was aired on 20<sup>th</sup> February 2022, there has been a recent change in growing practices of Norfolk farmers away from sugar beet ['beet']. Traditionally, the tops of tubers were left in the field post-harvest, providing a highly nutritious foraging resource for the internationally important goose population. The geese did not cause any significant damage and merely recycled nutrients back into the soil.

However, in the last two years there have been significant changes to sugar beet production. Firstly, sugar beet production is less profitable, so the area of sugar beet production has declined. Secondly, changes to the way beets are processed has enabled sugar to be extracted from a greater proportion of the tuber. The cut height has been increased, consequently leaving a smaller top and less unharvested remains for foraging geese. Finally, drier winters have enabled seed drilling immediately post-harvest. Rather than sugar beet remains being left for several weeks, they are ploughed straight back into the soil and lost to foraging geese. Without sugar beet to feed on, geese are attracted to areas of autumn / winter sown crops. Unlike feeding on waste sugar beet, this results in agricultural damage

resulting in conflict with farmers.

**Changes in goose behaviour:** Anecdotally, there are fewer geese present in Norfolk for a shorter proportion of the winter and, whilst present, they are more mobile as flocks are repeatedly moved on whilst searching for undisturbed feeding sites. Geese from north Norfolk are now regularly observed making foraging flights to other parts of the county, more than 20km, and have been seen in other parts of GB where they would not typically be reported. These negative changes are of significant concern to local residents, farm and estate managers, reserve staff and nature conservationists.

**Degraded baseline:** Prior to these more recent changes in agricultural practice, herbivorous PFG foraging amongst farmland were considered relatively insensitive to habitat loss / displacement. However, Natural England now believes the energetic effects of a reduced foraging resource represent the baseline against which development effects must be considered. Natural England continues to encourage a standard approach for all Nationally Significant Infrastructure Projects (NSIPs) potentially impacting on the North Norfolk Coast PFGs in undertaking mitigation measures. Of the currently available mitigation measures we advise that the simplest and most effective measure would be supplementary feeding.

**Excluding impact:** To exclude adverse effect on site integrity, an assessment would need to identify areas of potential goose displacement. This requires cropping practices to be mapped in every field along the development route and a suitable buffer within the species' foraging range from the SPA boundary. As cropping practices rotate annually, this work would need to be repeated each year. A watching brief might then need to be present in advance of works commencing, to locate flocks of foraging geese within suitable locations along the route as crops are harvested. If avoidance is not possible, then to exclude adverse effect on site integrity complex modelling work might need to be undertaken to demonstrate birds were not energetically compromised, negatively affecting their fitness. If as suspected, this work was unable to reach a satisfactory conclusion, then some form of mitigation would still need to be delivered.

**Alternative strategic approach:** Independently of development-related issues, Natural England has already commissioned energetic modelling and started consulting with farmers about PFG management following changes to agricultural practice. Provisioning of grain and / or sugar beet at an undisturbed location elsewhere along the Norfolk coast could provide an alternative foraging resource, offsetting any effects of displacement due to development. It is anticipated such work could be delivered at a considerable cost-saving to developers;

removing the need for crop-mapping, goose surveys and complex energetic modelling which might, regardless, still lead to a requirement for some form of mitigation. Such an approach is likely to be quicker, with an increased likelihood of positive ecological benefits to geese.

**Precautionary principle:** Adverse effect must be excluded beyond reasonable scientific doubt. Given the relative sensitivity of pink-footed goose to the loss of foraging resource, Natural England believes that it would be acceptable for a mitigation scheme to be conditioned, with the precise detail to be developed post-consent. A mitigation scheme could be developed in parallel with Natural England’s own work in relation to this issue (including liaison with landowners) and based on an agreed principle that such a mitigation approach must remain more cost-effective than **Option 1** set out below. It is anticipated that this would facilitate a more beneficial approach for geese, while also providing comfort to regulators and developers that mitigation measures could be implemented which would avoid a shortfall in goose foraging opportunities resulting from development activities.

It also remains a possibility that by the time works need to commence, further work commissioned by Natural England might allow a simple contribution to be made to an existing scheme or, alternatively, modelling work might have removed uncertainty and the need for any form of mitigation.

**Avoidance and mitigation measures:** Natural England suggest (but not exclusively) consideration of the following options that could enable works to proceed, with a preference for **Option 2**:

Stage	Option 1	Option 2
1	Map all fields within the cable route and a suitable buffer. Continue mapping to the extent of the species’ foraging range beyond the site boundary (approximately 20km).	Provide an alternative foraging resource – conduct works irrespective of goose displacement.
2	Repeat annually with ground-truthing to account for inter-annual variations in cropping practice.	
3	Provide a watching brief along the cable route prior to works commencing, to monitor both crop harvest and goose activity.	
4	Delay works near goose foraging locations.	
5	Encourage farmers not to plough in beat tops post-harvest.	

