

# NOTE ON LOCAL MITIGATION MEASURES FOR CURLEW AND BLACK GROUSE FOR THE TORFICHEN WIND FARM

## Introduction

The proposed Torfichen wind farm site holds a range of breeding upland birds including regionally important numbers of curlew and black grouse. As well as providing funding for wider regional conservation management schemes for these species, mitigation for these species will also include local measures to reduce the effects of the wind farm on the local populations. NatureScot (NS) has specifically requested in its response of 30 May 2025 that this should include:

- Predator Control (curlew and black grouse)
- Marking the turbine bases in contrasting colour (black grouse)
- Specific broadleaf species and planting densities (black grouse)

This note sets out how these measures will be delivered.

## Predator Control

NS stated in its response to the ES that “*predator control would potentially make the single biggest difference to curlew populations, particularly as the introduction of linear features into a landscape has been shown to improve the efficiency of predator foraging.*” A predator control programme will be implemented, to include crow traps, trapping of stoats and weasels and fox control. This would be enhanced from current levels but would be informed by the wind farm monitoring programme. If the programme indicates that increased ground-nesting nests are being lost to predation, then further predator control measures will be implemented (to be agreed with the conservation management group).

All predator control will be recorded and that information made available to the conservation management group to inform future management.

## Turbine Base Marking

In order to reduce collision risk to black grouse in particular, the wind turbine bases will be painted black to increase their visibility to flying birds. A study in Norway (Stokke et al. 2020) showed that painting the lower 10 m of turbine bases reduced grouse (ptarmigan) collision risk by 48%, so the same approach will be used here,

## Broad-leaved Tree Planting

Broad-leaved trees will be planted that will enhance black grouse habitats, as part of the Biodiversity Enhancement Management Plan (BEMP). This will include a mix of birch, rowan, willow, alder and aspen, designed as open, irregular woodland (Forestry Commission Scotland 2019, GWCT 2025 and Cole et al. 2013). It will create year-round food and cover, and support invertebrate-rich ground vegetation for chicks. The species mix will comprise:

- Birch (*Betula pubescens*) 25%;

- Rowan (*Sorbus aucuparia*) 15%;
- Hawthorn (*Crataegus monogyna*) 10%;
- Willows (*Salix cinerea*, *S caprea*, and/or *S aurita*) 15%;
- Alder (*Alnus glutinosa*) 10%;
- Aspen (*Populus tremula*) 5%; and
- Open ground (not planted) 20%.

Planting density will be 100-200 stems per ha. Deer fencing will be removed as soon as it is no longer required and fence marking options for 'High Exposure Sites' will be selected, as defined by Trout and Kortland (2012), to reduce grouse collision risk.

### **Additional Construction Phase Mitigation**

NS advised in its response of 30 May 2025 that buffer zones around the proximity of Turbines 7 and 9 would be appropriate to reduce indirect habitat loss through displacement from nesting/brood-rearing habitat at Yorkston Moss, particularly during construction. A 500 m caution zone will be established around these two turbines, with no potentially disturbing construction activities to take place within that zone during the black grouse breeding season (15 March-31 July).

### **Off-site Mitigation**

The developer is also still committed to delivering off-site measures for these species to ensure that the scheme overall delivers a clear net benefit to each. This will include provisions of an appropriate level of funds (to be agreed with NatureScot and RSPB) for the regional conservation of both species, working collaboratively, where possible, with other interested parties. There would be three components:

1. **Conservation Planning** – to develop a strategy for the optimal delivery of conservation measures across the region.
2. **Conservation Action** – to implement direct measures that benefit the regional curlew population, such as wetland habitat creation, peatland restoration, upland grazing management and predator control/management. This will follow the recommendations in the RSPB's UK Action Plan for Curlew, including measures to improve productivity by tackling key pressures: habitat management (wet grassland/rough pasture mosaics; water and sward structure), timed farming operations, and predator management and/or nest protection to raise fledging success. The Torfichen scheme also has the potential to work with a similar scheme being developed for the Glenburnie wind farm to benefit the regional curlew population.
3. **Monitoring** – to determine baseline curlew distribution and abundance, which will be used to identify suitable areas for conservation management, set targets and assess management progress.

### **References**

Cole, A., Bailey, C.M., Hawkes, R.W., Gordon, J., Fraser, A., Boles, Y., O'Brien, M & Grant, M 2013. Review of Management Prescriptions for Black Grouse Tetrao tetrix in Britain: An update

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Trout, R. and Kortland, K. (2012). Fence marking to reduce grouse collisions. Forestry Commission Technical Note.

*Steve Percival*

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