

**S7 Table. Individual species included in the onshore wind sensitivity map.** Details of individual species data used, resolution, buffer distances, sensitivity and data sources.

Species	Data used	Spatial resolution (km)	Buffer (km) <sup>a</sup>	Sensitivity <sup>b</sup>	Source <sup>c</sup>
Common scoter <i>Melanitta nigra</i>	Possible/probable/confirmed breeding records	0.1	1	high	National Survey 2007
Capercaillie <i>Tetrao urogallus</i>	Forest blocks	forest blocks	none	high	Upper survey strata from National Survey 2009-10
Black grouse <i>Lyrurus tetrix</i>	Calling males	0.01, 0.1, 1	1.5	medium	National Survey 2005, plus various regional datasets
Red-throated diver <i>Gavia stellata</i>	Possible/probable/confirmed breeding records	0.01, 0.1, 1	1	high	National Survey 2006
Black-throated diver <i>Gavia arctica</i>	Possible/probable/confirmed breeding records	0.01, 0.1, 1	1	high	National Survey 2006, plus additional records for northern Scotland
Slavonian grebe <i>Podiceps auritus</i>	Possible/probable/confirmed breeding records	0.1	1	high	Annual survey data 2003-2012
Slavonian grebe <i>Podiceps auritus</i>	Possible/probable/confirmed breeding records	0.1	1	medium	Annual survey data 1997-2002
Great Bittern <i>Botaurus stellaris</i>	Reedbeds containing nests and/or booming males	Reedbed survey polygons	none	high	Annual monitoring of nests and booming males
White-tailed eagle <i>Haliaeetus albicilla</i>	Unknown/possible/probable/confirmed breeding records	0.01, 0.1, 1	5	high	All data since reintroduction
Osprey <i>Pandion haliaetus</i>	Possible/probable/confirmed breeding records	0.1, 1, 2	2	high	RBBP records 2002-2011
Golden eagle <i>Aquila chrysaetos</i>	Unknown/possible/probable/confirmed breeding records	1	2.5	high	National Survey 2003
Golden eagle <i>Aquila chrysaetos</i>	Unknown/possible/probable/confirmed breeding records	1	2.5 to 6	medium	National Survey 2003
Golden eagle <i>Aquila chrysaetos</i>	Unknown/possible/probable/confirmed breeding records	0.1	6	medium	National Survey 1992
Red kite (Scotland) <i>Milvus milvus</i>	Nest locations	0.01, 0.1, 1	3	high	All data since reintroduction
Red kite (Scotland) <i>Milvus milvus</i>	Roost sites	0.1, 1	5	high	Annual roost counts
Hen harrier <i>Circus cyaneus</i>	Sightings	0.01, 0.1, 1	2	high	National Survey 2010
Hen harrier <i>Circus cyaneus</i>	Sightings	0.1, 1	2	medium	National Survey 2004

Marsh harrier <i>Circus aeruginosus</i>	Possible/probable/confirmed breeding records	0.1, 1	1	high	National Survey 2005
Marsh harrier <i>Circus aeruginosus</i>	Possible/probable/confirmed breeding records	0.1, 1	1-2	medium	National Survey 2006
Montagu's harrier <i>Circus pygargus</i>	Possible/probable/confirmed breeding records	0.1, 1, 2	3	high	RBBP records 2002-2011
Honey buzzard <i>Pernis aprivorus</i>	Possible/probable/confirmed breeding records	0.1, 1, 2	3	high	RBBP records 2002-2011
Honey buzzard <i>Pernis aprivorus</i>	Possible/probable/confirmed breeding records	0.1, 1, 2	3-5	medium	RBBP records 2002-2011
Peregrine falcon <i>Falco peregrinus</i>	Unknown/possible/probable/confirmed breeding records	0.1, 1	2	medium	National Survey 2002
Merlin <i>Falco columbianus</i>	Confirmed breeding records	0.1, 1	0.5	high	National Survey 2008
Corncrake <i>Crex crex</i>	Territory centres	0.01, 0.1, 1	0.85	high	Annual surveys 2003 onwards
Crane <i>Grus grus</i>	Possible/probable/confirmed breeding records	0.1, 1, 2	2	high	RBBP records 2002-2011
Stone curlew <i>Burhinus oedicanus</i>	Nest locations	0.01, 0.1	1	high	Annual monitoring 2008 onwards
Golden plover <i>Pluvialis apricaria</i>	10km squares with top 20% of mean counts	10	N/A	medium	1988-91 Breeding Bird Atlas
Dunlin <i>Calidris alpina</i>	10km squares with top 20% of mean counts	10	N/A	medium	1988-91 Breeding Bird Atlas
Arctic skua <i>Stercorarius parasiticus</i>	Colonies of 10 or more birds	1	none	high	Seabird 2000 (1998-2000)
Short-eared owl <i>Asio flammeus</i>	Possible/probable/confirmed breeding records	0.1, 1, 2	0.8	high	RBBP records 2002-2011
Nightjar <i>Caprimulgus europaeus</i>	Territory centres	0.01	1	high	National Survey 2004
Nightjar <i>Caprimulgus europaeus</i>	Territory centres	0.01	1-2.5	medium	National Survey 2004
Chough <i>Pyrrhocorax pyrrhocorax</i>	Confirmed breeding records	0.1, 1	1	high	National Survey 2002, plus additional records from Northern Ireland and Cornwall

<sup>a</sup> For full information on what buffers represent see [1, 2].

<sup>b</sup> Older datasets were allocated a medium sensitivity score.

<sup>c</sup> All data is archived and available through the RSPB Conservation Data Management Unit (CDMU); Joint Nature Conservation Committee (JNCC); Natural England (NE); Natural Resources Wales (NRW); Northern Ireland Environment Agency (NI); SNH – Scottish Natural Heritage and the British Trust for Ornithology (BTO).

[1] Bright JA, Langston RHW, Bullman R, Evans RJ, Gardner S, Pearce-Higgins J et al. Bird sensitivity map to provide locational guidance for onshore wind farms in Scotland. Edinburgh: RSPB; 2006. Available: [https://www.rspb.org.uk/Images/sensitivitymapreport\\_tcm9-157990.pdf](https://www.rspb.org.uk/Images/sensitivitymapreport_tcm9-157990.pdf). Accessed 2015 Oct 27.

[2] Bright JA, Langston RHW, Anthony S. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB; 2009. Available:

[http://www.rspb.org.uk/Images/EnglishSensitivityMap\\_tcm9-237359.pdf](http://www.rspb.org.uk/Images/EnglishSensitivityMap_tcm9-237359.pdf). Accessed 2015 Oct 27.