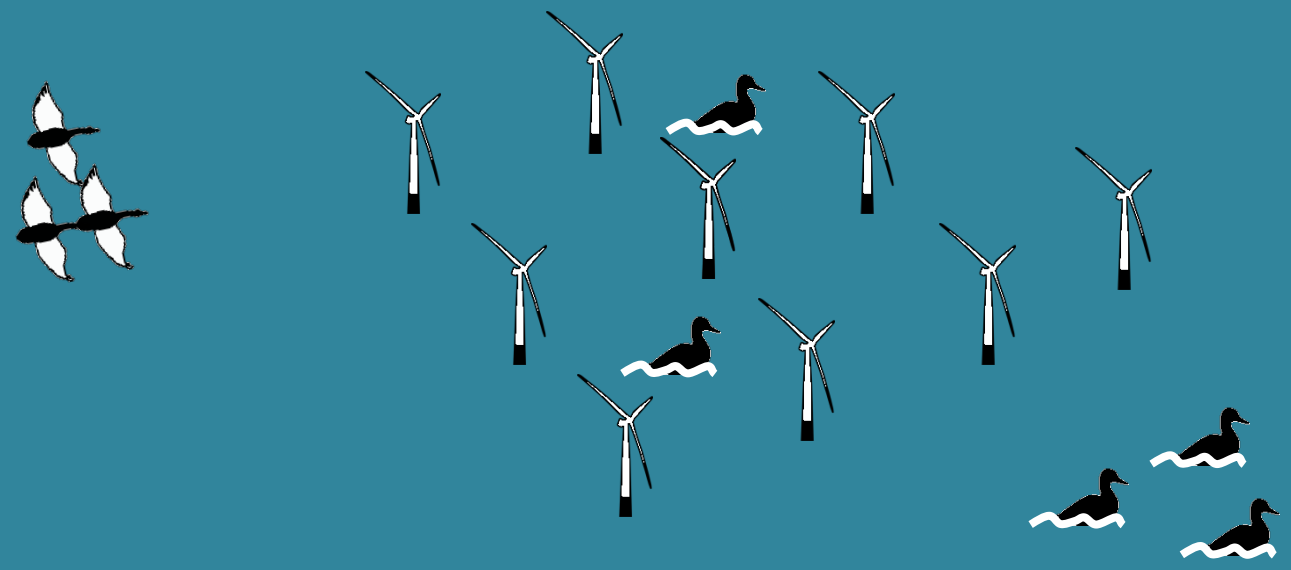
JNCC
Joint Nature Conservation Committee

Seabird Displacement Impacts from Offshore Wind Farms



MROG Workshop

6-7th May 2015

marine scotland science

NATURAL ENGLAND

rspb

Scottish Natural Heritage
Dualchas Nàdair na h-Alba
All of nature for all of Scotland
Nàdar air fad airson Alba air fad

NIEA Northern Ireland Environment Agency
www.ni-environment.gov.uk

Cyfoeth Naturiol Cymru
Natural Resources Wales

Concept Note 2: Use of Furness and Wade Sensitivity Score as a Proxy for Displacement Level

JNCC

Furness & Wade Sensitivity Score

Sensitivity to Disturbance[1]	Score (Scale 1-5)	Example Species
High	5	divers, scoters
	4	golden eye, greater scaup, great cormorant
	3	common guillemot, razorbill, shag, common eider, long-tail duck, black guillemot, grebes
	2	terns, gulls, puffin, little auk, northern gannet
Low	1	skuas, petrels, shearwaters , fulmar, white-tailed eagle

[1] To date ranking primarily based on sensitivity to disturbance from ship and helicopter traffic with smaller representation of wind farm evidence.

Proxy: What and Why?

- What do we mean by a proxy?
  - Interpretation of displacement levels from ‘Sensitivity Score’
  - Score is a categorical ranking that provides 5 different metrics
  - Results in each score being converted into a range (%)
- Why would we use one?
  - Lack of empirical data around likely displacement levels (%)
  - Suitable for use with current NE/JNCC matrix approach
- Is it Appropriate?

How Has the Proxy Been Used?

Proxy Score	Displacement Rate Range (%) as used in Hornsea 1	Displacement Rate Range (%) as used in Rhiannon
5	90-100	80-100
4	70-90	60-80
3	30-70	40-60
2	10-30	20-40
1	0-10	0-20

Any Issues?

- ‘Sensitivity Score’ primarily based on disturbance to ship and helicopter traffic results in some contrary scores for OWF sensitivity i.e.
  - great cormorant: high sensitivity (4) but evidence for attraction
  - northern gannet: low sensitivity (2) but evidence for displacement
- However, there is an update
- Any species where proxy not appropriate as sufficient empirical data?

Use of Other Scores from Furness & Wade (2012)

- Is it appropriate to use other aspects of the sensitivity score(s) to:
  - Assess mortality rates i.e. habitat flexibility?
  - Rule in/out a species from displacement assessment?

To consider/discuss:

- Should we use a proxy for identifying a displacement rate for assessment purposes?
  - **Yes:** OK for all species or do we need to define species where there is sufficient data
  - **No:** alternate methods

Thank you