

**Grey Seal Numbers**

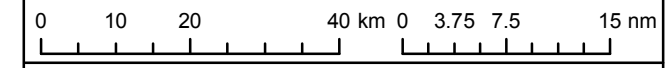
○ (smallest)	1 - 5	○ (medium)	201 - 300
○	6 - 10	○ (large)	301 - 500
○	11 - 20	○ (largest)	501 - 1,000
○	21 - 30		
○	31 - 50		
○	51 - 100		
○	101 - 200		



**Legend**

- Beatrice Offshore Wind Farm Site
- Pile Positions
- Area of Permanent Physical Injury / Death**
  - 220 dB<sub>(re.1)</sub> - Unweighted (Inset Only)
- Area of Permanent Threshold Shift (PTS)**
  - 198 dB re. 1 µPa<sup>2</sup>/s - Fleeing (Inset Only)
  - 198 dB re. 1 µPa<sup>2</sup>/s - Stationary
- Area of Behavioural Effect**
  - 50 dB<sub>(re.1)</sub>
  - 55 dB<sub>(re.1)</sub>
  - 60 dB<sub>(re.1)</sub>
  - 65 dB<sub>(re.1)</sub>
  - 70 dB<sub>(re.1)</sub>
  - 75 dB<sub>(re.1)</sub>
  - 80 dB<sub>(re.1)</sub>
  - 85 dB<sub>(re.1)</sub>
  - 90 dB<sub>(re.1)</sub>
  - 100 dB<sub>(re.1)</sub>
  - 110 dB<sub>(re.1)</sub> (Inset Only)
  - 120 dB<sub>(re.1)</sub> (Inset Only)
  - 130 dB<sub>(re.1)</sub> (Inset Only)
- Grey Seal Density (At-Sea Usage)**
  - Proportion per 4 x 4 km Grid Square
  - 0 -< 1
  - 1 -< 5
  - 5 -< 10
  - 10 -< 50
  - >50

Data Source: Cheney et al 2011  
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UK Offshore Development  
Figure 12.10  
**BOWL Simultaneous Piling Scenario for Grey Seal**

Drawn: SC	Checked: LHu	Approved: VR
Date: 26/01/2012	Scale: 1:1,000,000 @ A3	
Drawing Number: BEA-MAP-EWF-BOWL-193	Revision: 01	
Datum: WGS84	Projection: UTM30N	



**Scenario Description:**  
 Hammer Size = 2300 kJ  
 Pile Size = 2.4 m  
 No. of Simultaneous Pile Driving Events = 2