Appendix 1

Methods

Table A1. The conditions and reagents for sexing individual gannets (K. Griffiths Pers. Comm.)

| Primers | 2550F 5’ GTT ACT GAT TCG TCT ACG AGA -3’  
|         | 2757R 5’ AAT TCC CCT TTT ATT GAT CCA TC -3’ |
| PCR reagents | **For each 10ul**  
|             | 2ul DNA (10-100ng/ul)  
|             | 1ul Qiagen Buffer  
|             | 1ul Qiagen MgCl2  
|             | 0.2 ul Qiagen ready mixed dNTP  
|             | 0.1 ul Qiagen taq  
|             | 0.124 ul 2550F  
|             | 0.116 ul 2757R  
|             | water to make up to 10ul (5.46 ul) |
| PCR profile | 94°C for 2 mins  
|             | 53°C for 1 min  
|             | 72°C for 1 min x30 cycles  
|             | 94°C for 45 secs  
|             | 49°C for 1 min  
|             | 72°C for 5 mins  
|             | 12°C pause |
| Gel | 2% agarose with TDE, 1h30 mins, 110 volts, 110 A. |
Analysing the overlap between fisheries and gannet locations.

Table A2: GPS data excluded from the analysis as it was outside the study area.

<table>
<thead>
<tr>
<th>GPS tracking data</th>
<th>Females</th>
<th>Males</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of gannet locations</td>
<td>6961</td>
<td>15845</td>
<td>22806</td>
</tr>
<tr>
<td>Number of gannet locations outside study area (removed)</td>
<td>499 (7%)</td>
<td>1275 (8%)</td>
<td>1774 (8%)</td>
</tr>
</tbody>
</table>

Modelling the overlap between gannets and fisheries

Gannets = 20

Trips = 78

Total GPS Points (p) = 23988

Step 1

For every point, p → Measure distance to every fishing boat (m)

→ Compare timestamps (t)

→ if m < 30 km & t < 2 hours

overlap = 1

Else overlap = 0

Output = Overlap score for all 23,988 GPS positions

Step 2

For each of the 78 trips: → Total number of GPS positions

→ Total number of GPS positions with overlap = 1

Output = Summary statistics for each trip used in binomial models
These two steps were repeated on restricted data sets including only GPS positions where the residence time was in the upper quartile (p = 4279 positions) or exact dive locations (p = 957 positions).