Natural England Commissioned Report NECR173

Review and analysis of changes in waterbird use of the Mersey Estuary SPA, Mersey Narrows & North Wirral Foreshore pSPA and Ribble & Alt Estuaries SPA

Annex 5 - Maps of five year mean densities

First published 27 May 2015



Each figure shows the mapped 5-year mean densities for selected species across the WeBS sectors in the Liverpool City Region SPAs. Here, peak winter density means are calculated across the following years:

- 1997/98 2001/02
- 2002/03 2006/07
- 2007/08 2011/12

Note, only species with available count data could be mapped.

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Figure A.5.1 5-year mean densities of Great Crested Grebe (1997/98 – 2001/02) in the Liverpool City Region

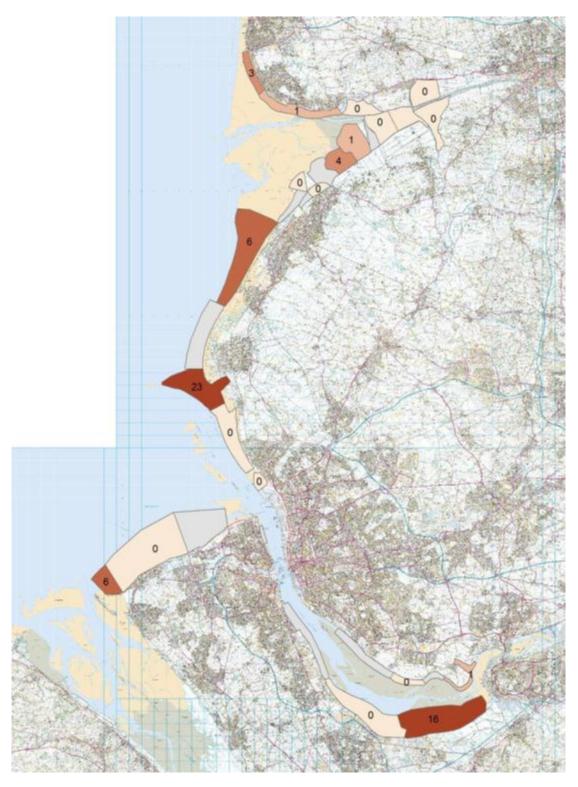


Figure A.5.2 5-year mean densities of Great Crested Grebe (2002/03 – 2006/07) in the Liverpool City Region



Figure A.5.3 5-year mean densities of Great Crested Grebe (2007/08 – 2011/12) in the Liverpool City Region

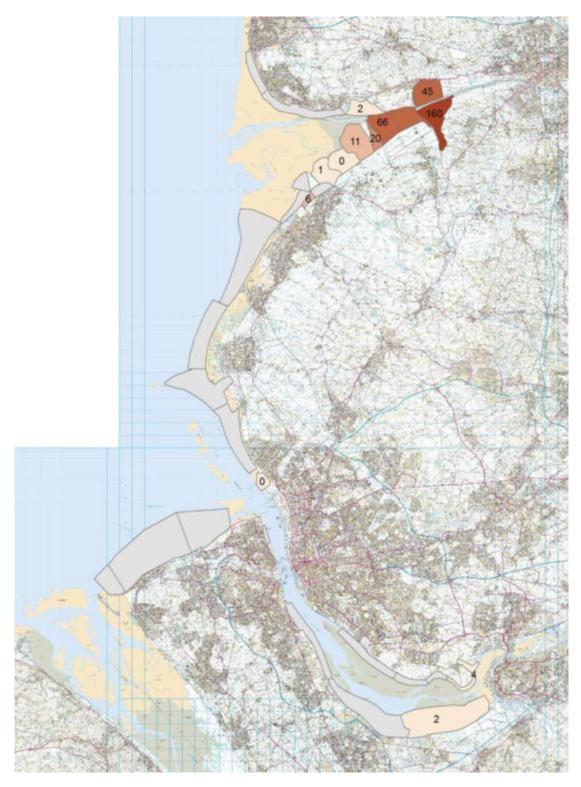


Figure A.5.4 5-year mean densities of Bewick's Swan (1997/98 – 2001/02) in the Liverpool City Region

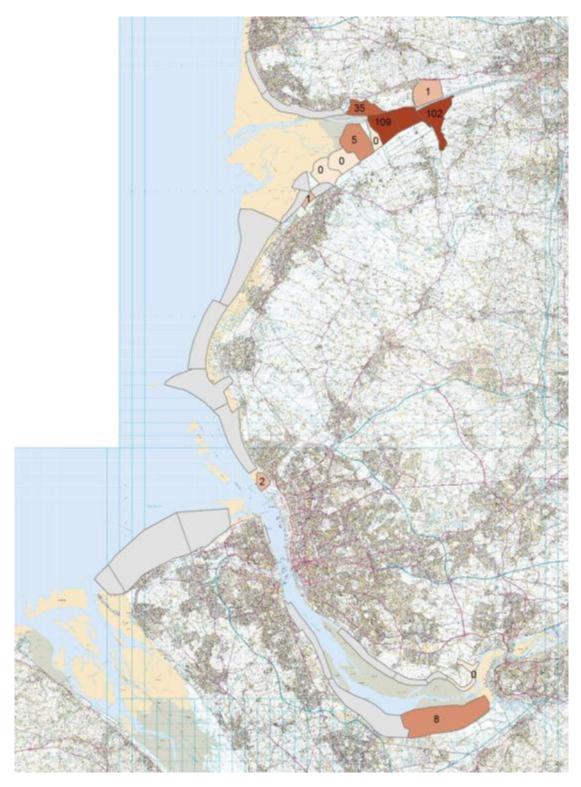


Figure A.5.5 5-year mean densities of Bewick's Swan (2002/03 – 2006/07) in the Liverpool City Region

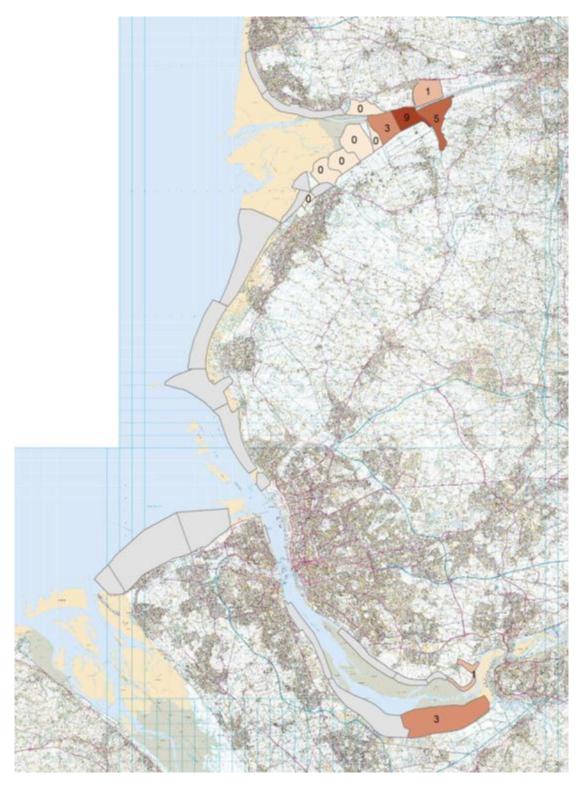


Figure A.5.6 5-year mean densities of Bewick's Swan (2007/08 – 2011/12) in the Liverpool City Region

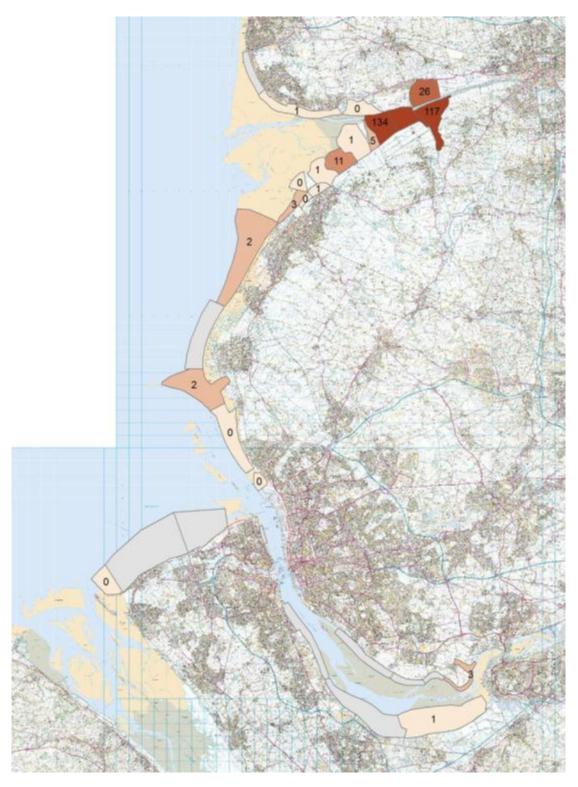


Figure A.5.7 5-year mean densities of Whooper Swan (1997/98 - 2001/02) in the Liverpool City Region

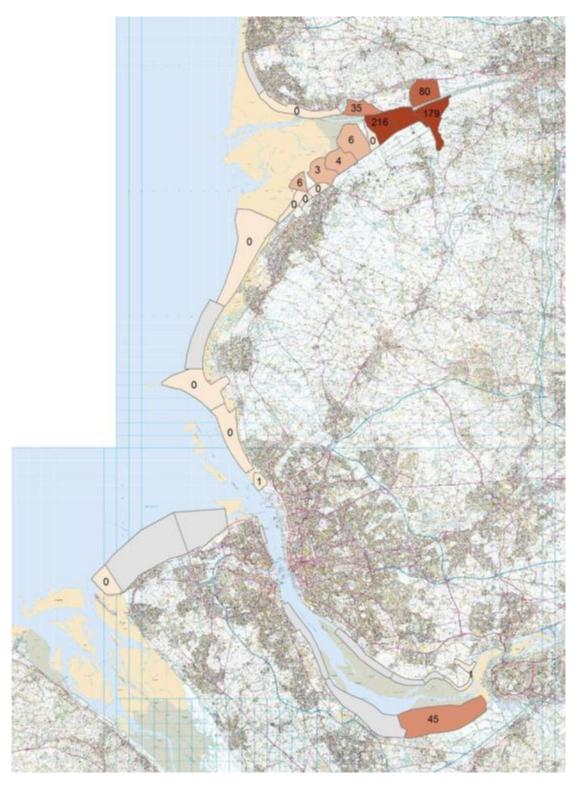


Figure A.5.8 5-year mean densities of Whooper Swan (2002/03 - 2006/07) in the Liverpool City Region

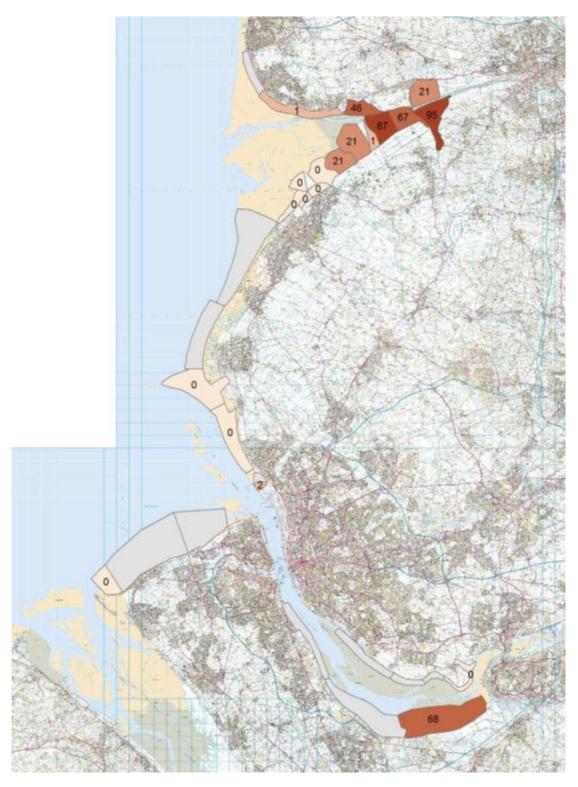


Figure A.5.9 5-year mean densities of Whooper Swan (2007/08 - 2011/12) in the Liverpool City Region



Figure A.5.10 5-year mean densities of Shelduck (1997/98 – 2001/02) in the Liverpool City Region

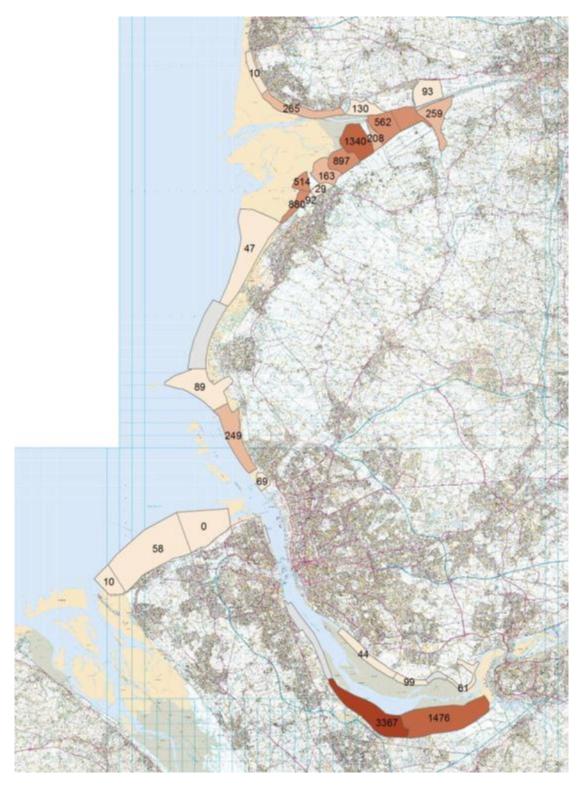


Figure A.5.11 5-year mean densities of Shelduck (2002/03 – 2006/07) in the Liverpool City Region

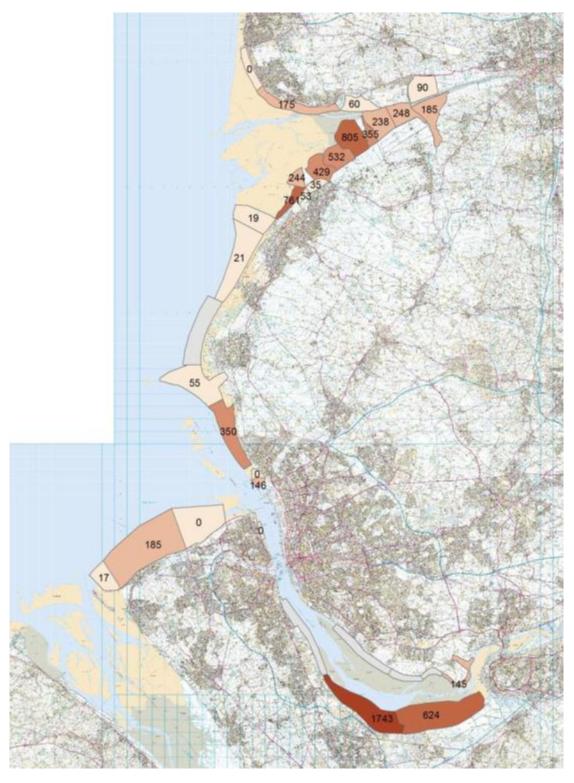


Figure A.5.12 5-year mean densities of Shelduck (2007/08 – 2011/12) in the Liverpool City Region



Figure A.5.13 5-year mean densities of Wigeon (1997/98 - 2001/02) in the Liverpool City Region



Figure A.5.14 5-year mean densities of Wigeon (2002/03 - 2006/07) in the Liverpool City Region



Figure A.5.15 5-year mean densities of Wigeon (2007/08 - 2011/12) in the Liverpool City Region

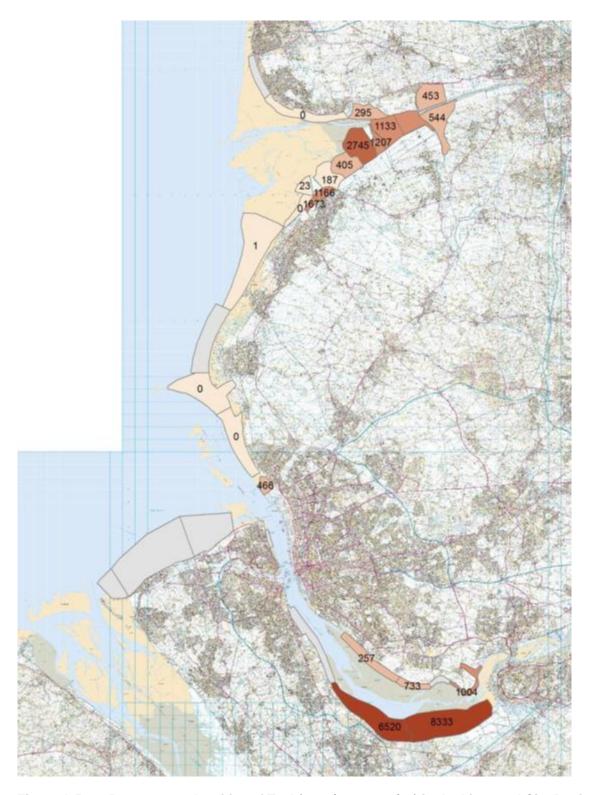


Figure A.5.16 5-year mean densities of Teal (1997/98 – 2001/02) in the Liverpool City Region

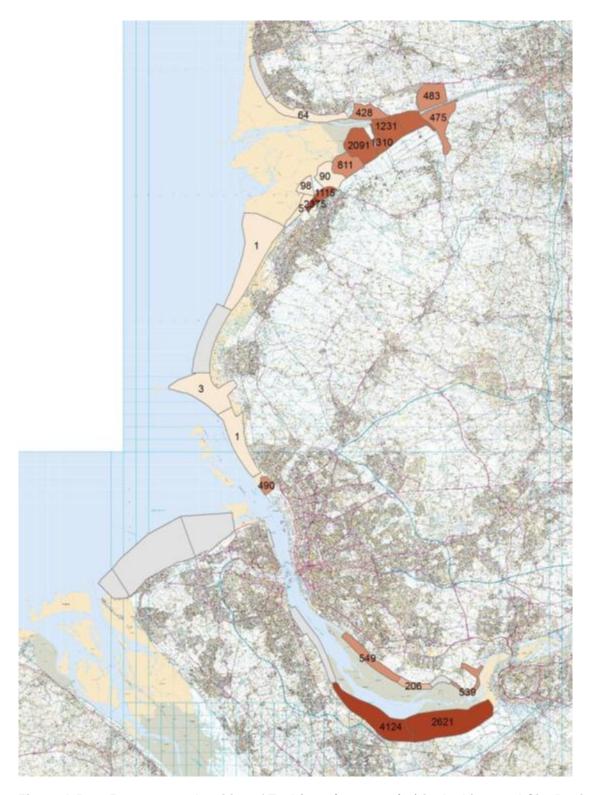


Figure A.5.17 5-year mean densities of Teal (2002/03 – 2006/07) in the Liverpool City Region

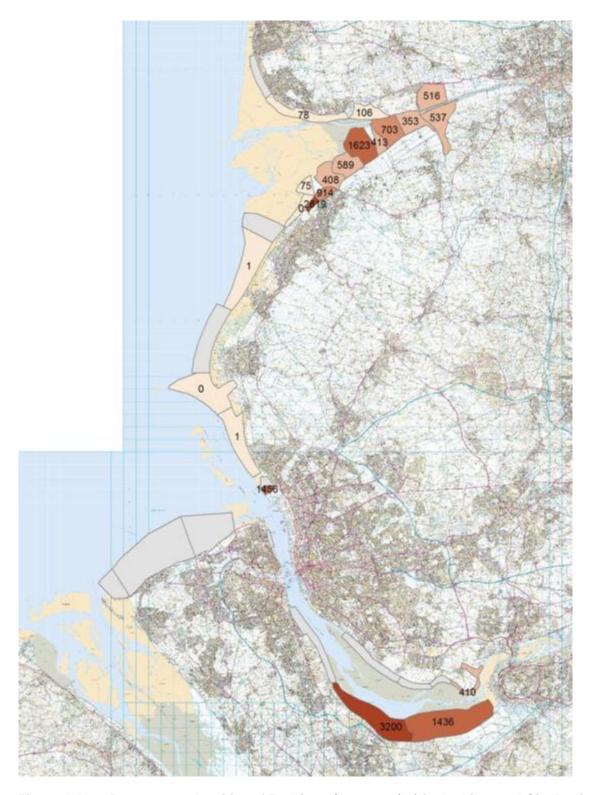


Figure A.5.18 5-year mean densities of Teal (2007/08 – 2011/12) in the Liverpool City Region

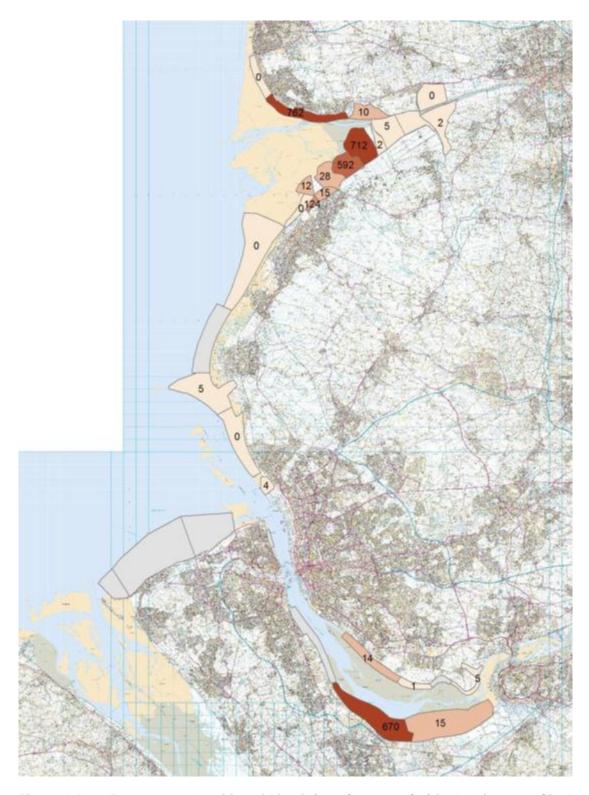


Figure A.5.19 5-year mean densities of Pintail (1997/98 – 2001/02) in the Liverpool City Region



Figure A.5.20 5-year mean densities of Pintail (2002/03 – 2006/07) in the Liverpool City Region

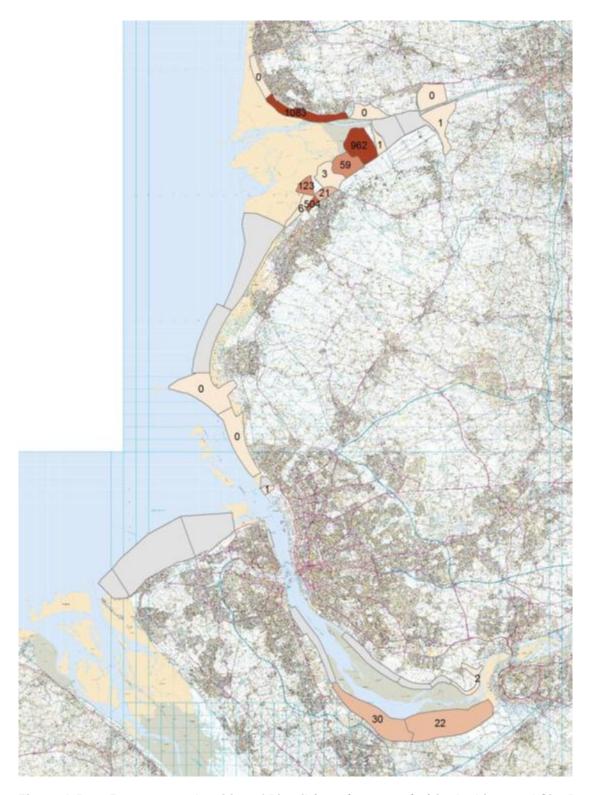


Figure A.5.21 5-year mean densities of Pintail (2007/08 – 2011/12) in the Liverpool City Region

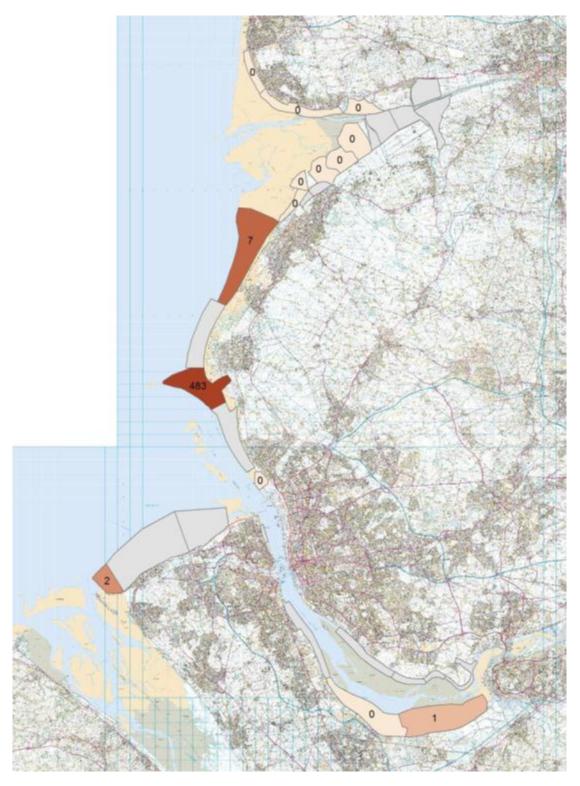


Figure A.5.22 5-year mean densities of Common Scoter (1997/98 - 2001/02) in the Liverpool City Region

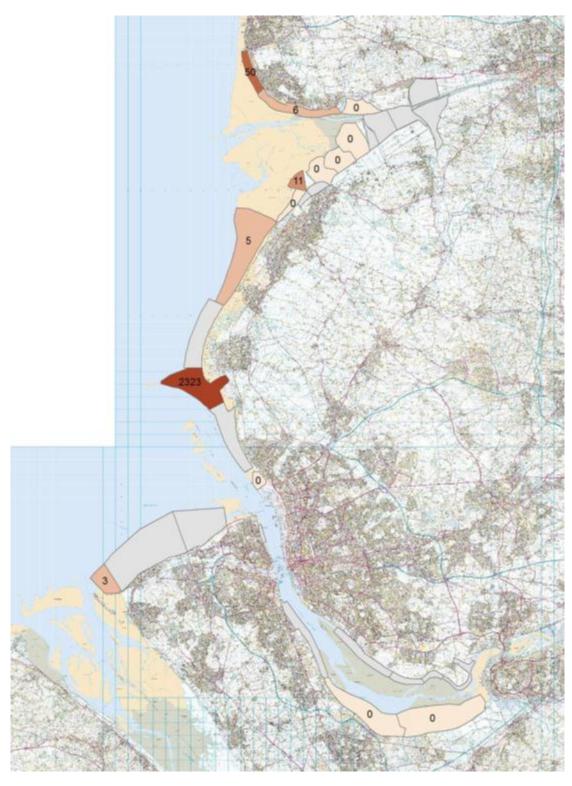


Figure A.5.23 5-year mean densities of Common Scoter (2002/03 - 2006/07) in the Liverpool City Region

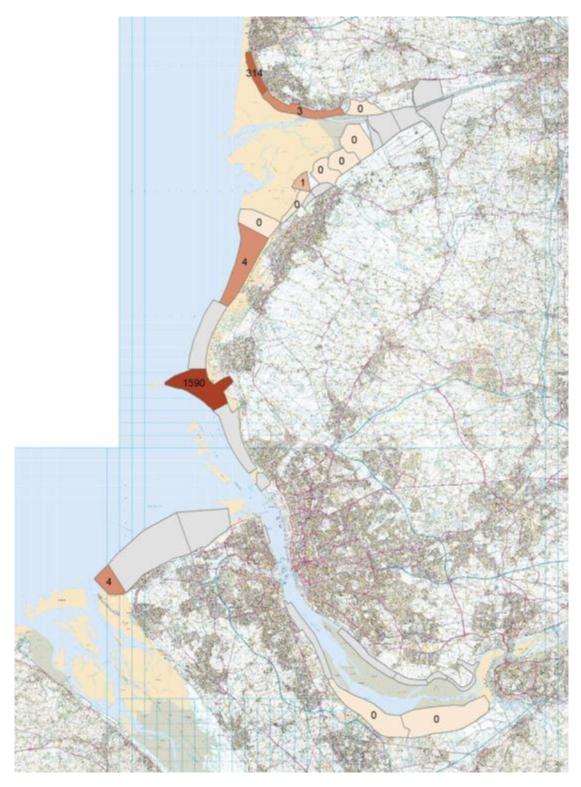


Figure A.5.24 5-year mean densities of Common Scoter (2007/08 - 2011/12) in the Liverpool City Region



Figure A.5.25 5-year mean densities of Cormorant (1997/98 - 2001/02) in the Liverpool City Region



Figure A.5.26 5-year mean densities of Cormorant (2002/03 - 2006/07) in the Liverpool City Region



Figure A.5.27 5-year mean densities of Cormorant (2007/08 - 2011/12) in the Liverpool City Region

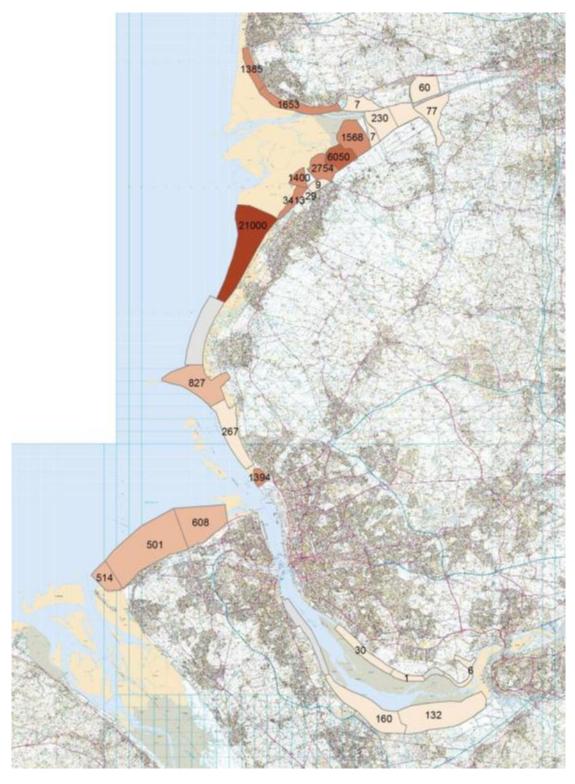


Figure A.5.28 5-year mean densities of Oystercatcher (1997/98 – 2001/02) in the Liverpool City Region



Figure A.5.29 5-year mean densities of Oystercatcher (2002/03 - 2006/07) in the Liverpool City Region



Figure A.5.30 5-year mean densities of Oystercatcher (2007/08 - 2011/12) in the Liverpool City Region

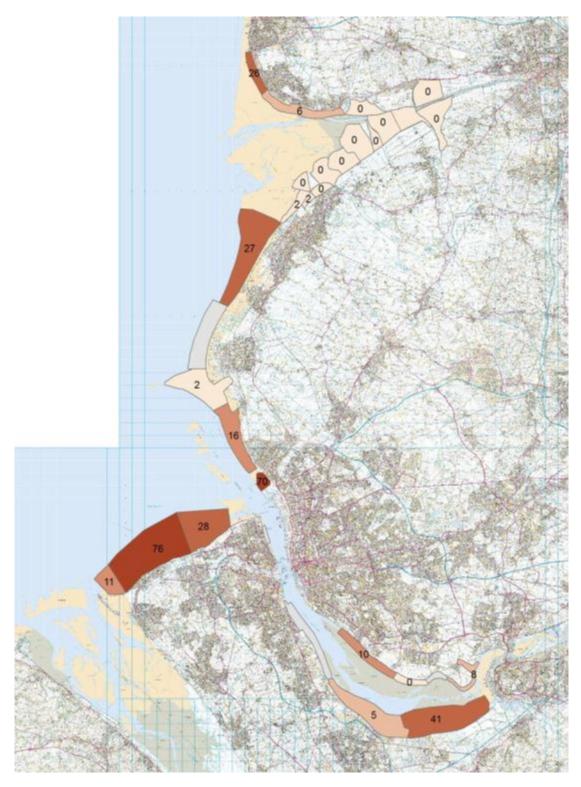


Figure A.5.31 5-year mean densities of Ringed Plover (1997/98 – 2001/02) in the Liverpool City Region

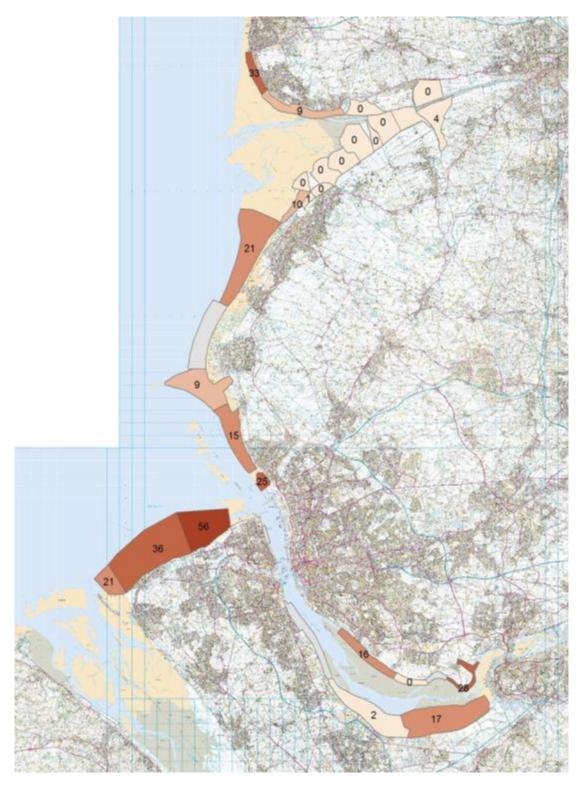


Figure A.5.32 5-year mean densities of Ringed Plover (2002/03 – 2006/07) in the Liverpool City Region



Figure A.5.33 5-year mean densities of Ringed Plover (2007/08 – 2011/12) in the Liverpool City Region

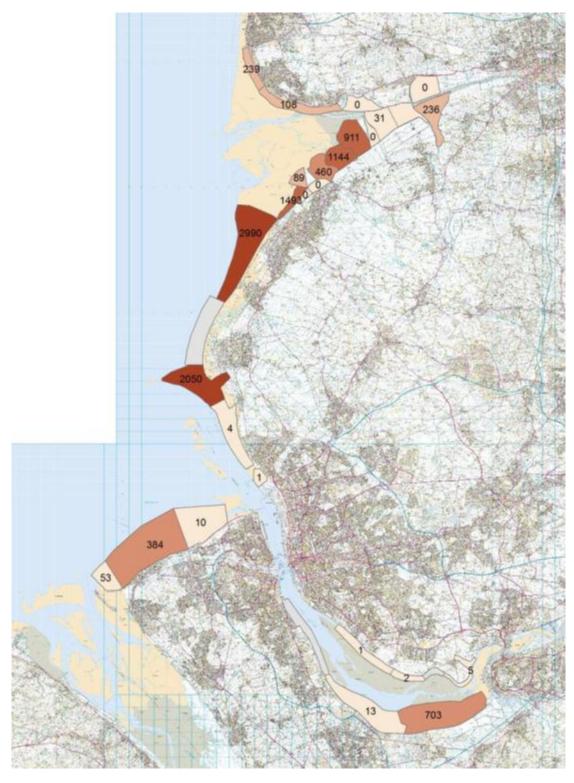


Figure A.5.34 5-year mean densities of Grey Plover (1997/98 – 2001/02) in the Liverpool City Region

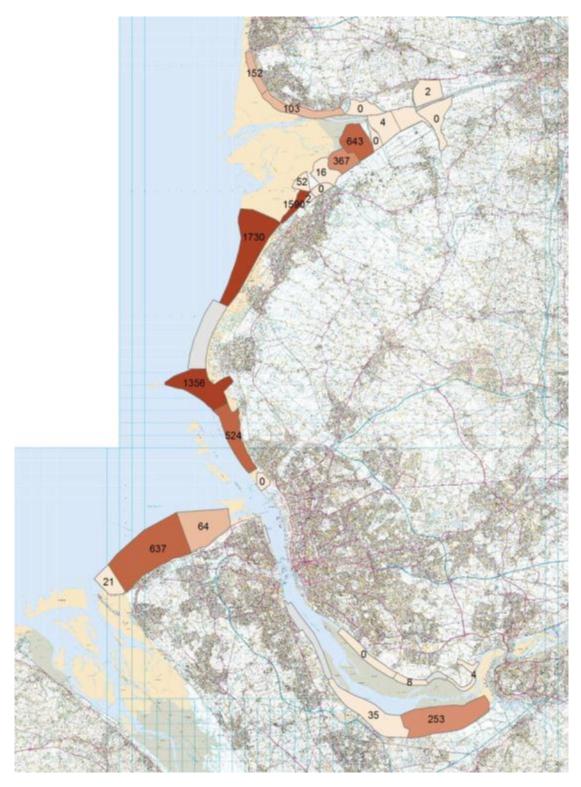


Figure A.5.35 5-year mean densities of Grey Plover (2002/03 - 2006/07) in the Liverpool City Region

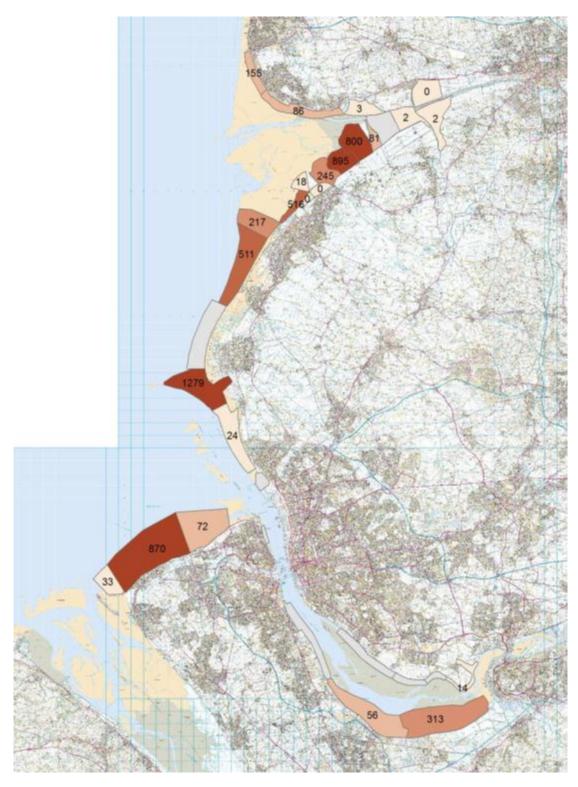


Figure A.5.36 5-year mean densities of Grey Plover (2007/08 - 2011/12) in the Liverpool City Region

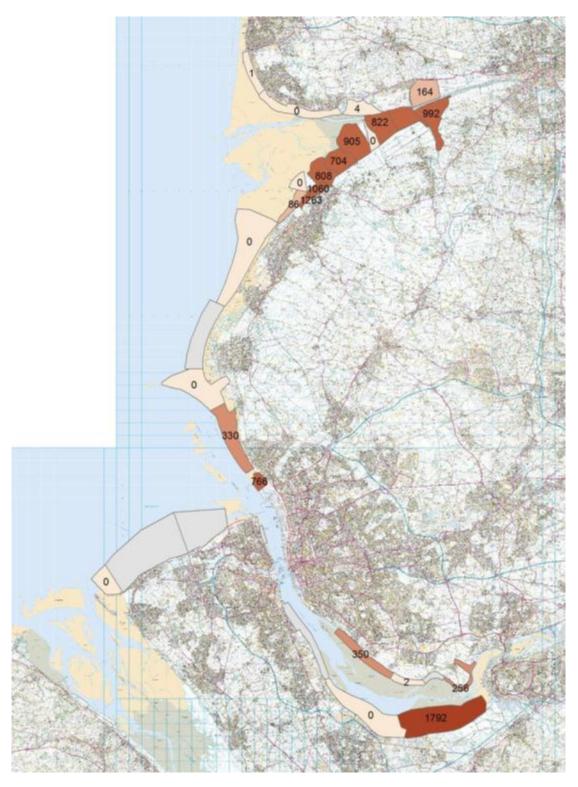


Figure A.5.37 5-year mean densities of Golden Plover (1997/98 – 2001/02) in the Liverpool City Region

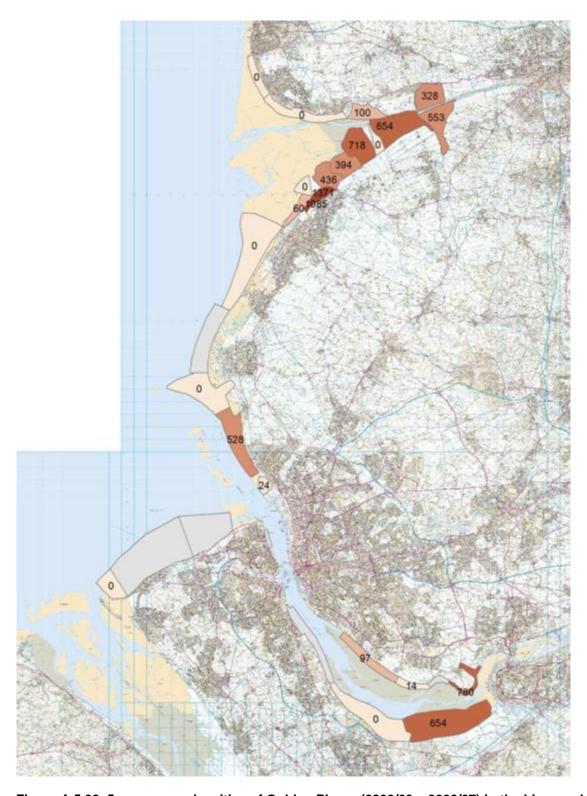


Figure A.5.38 5-year mean densities of Golden Plover (2002/03 - 2006/07) in the Liverpool City Region

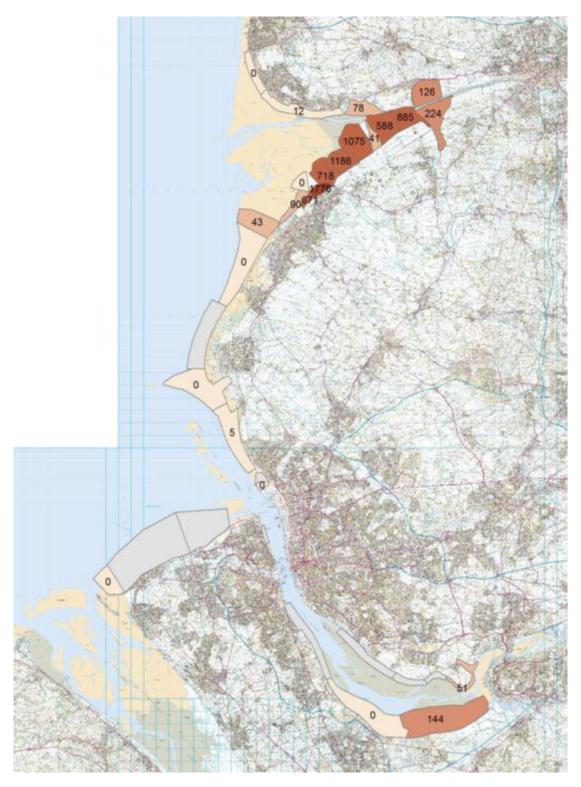


Figure A.5.39 5-year mean densities of Golden Plover (2007/08 – 2011/12) in the Liverpool City Region



Figure A.5.40 5-year mean densities of Lapwing (1997/98 - 2001/02) in the Liverpool City Region



Figure A.5.41 5-year mean densities of Lapwing (2002/03 - 2006/07) in the Liverpool City Region

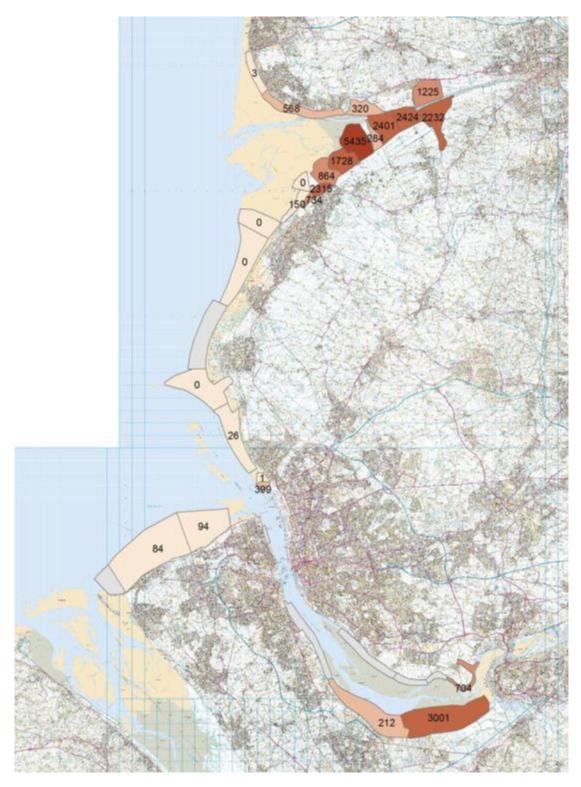


Figure A.5.42 5-year mean densities of Lapwing (2007/08 - 2011/12) in the Liverpool City Region



Figure A.5.43 5-year mean densities of Turnstone (1997/98 - 2001/02) in the Liverpool City Region

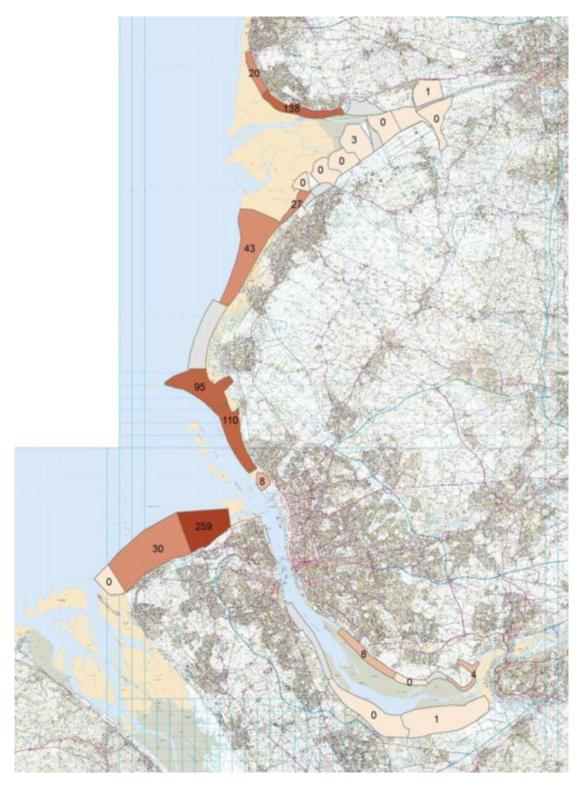


Figure A.5.44 5-year mean densities of Turnstone (2002/03 - 2006/07) in the Liverpool City Region

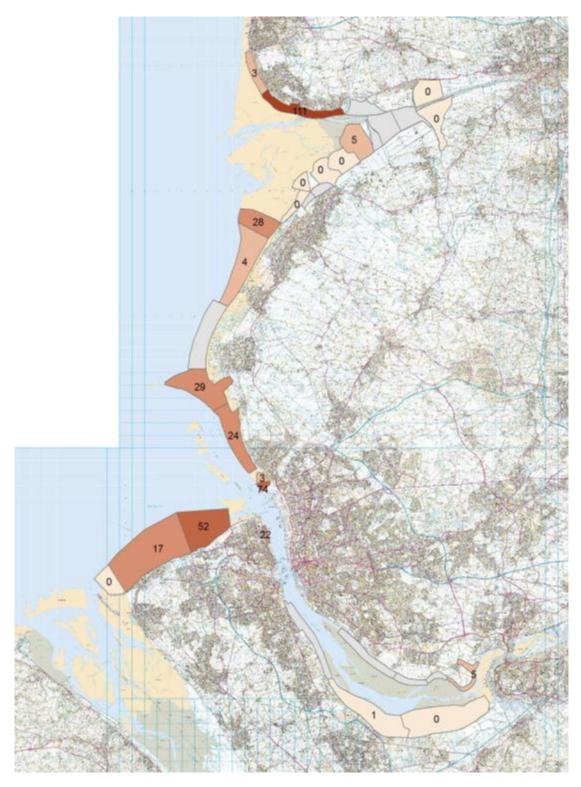


Figure A.5.45 5-year mean densities of Turnstone (2007/08 - 2011/12) in the Liverpool City Region



Figure A.5.46 5-year mean densities of Knot (1997/98 – 2001/02) in the Liverpool City Region

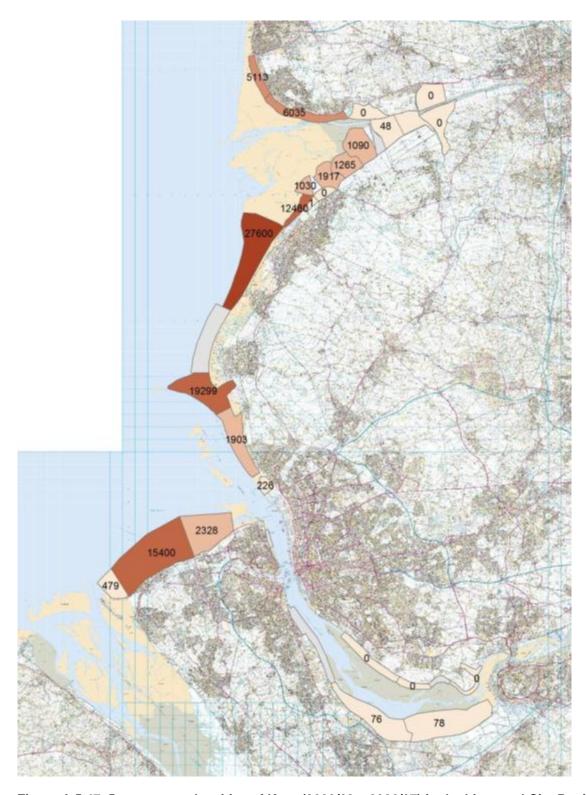


Figure A.5.47 5-year mean densities of Knot (2002/03 – 2006/07) in the Liverpool City Region

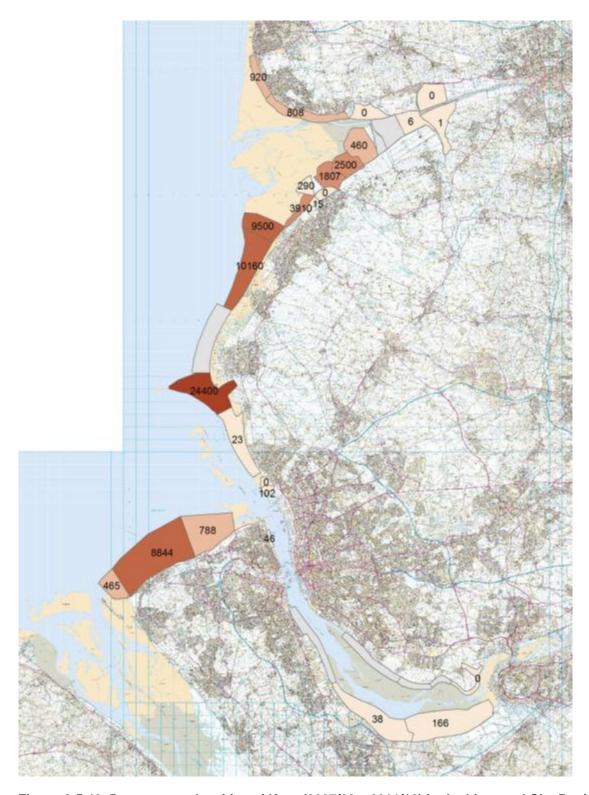


Figure A.5.48 5-year mean densities of Knot (2007/08 – 2011/12) in the Liverpool City Region

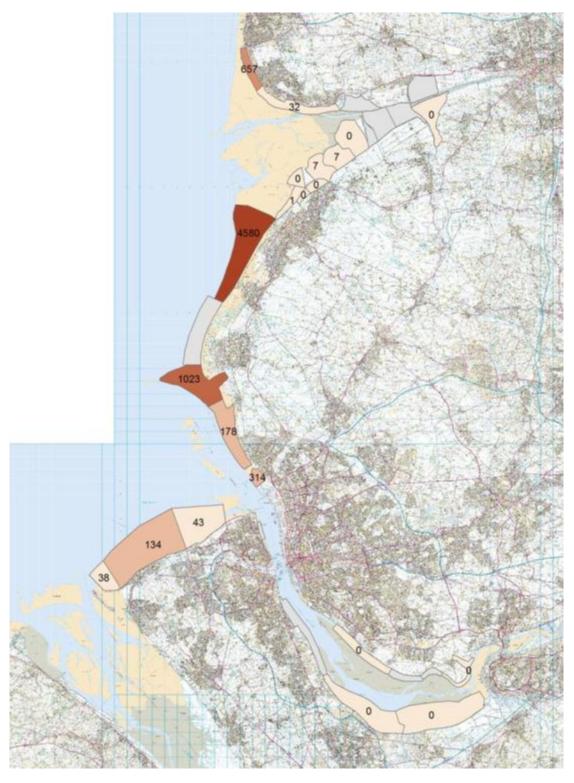


Figure A.5.49 5-year mean densities of Sanderling (1997/98 - 2001/02) in the Liverpool City Region

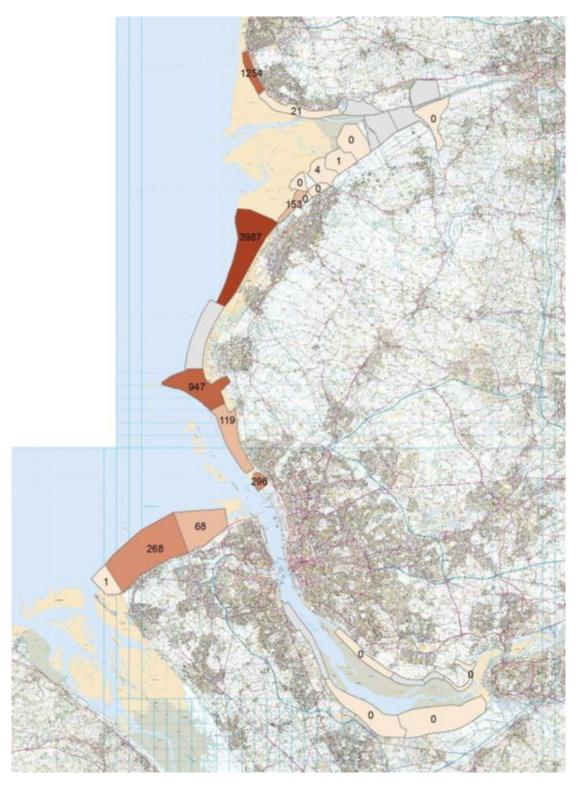


Figure A.5.50 5-year mean densities of Sanderling (2002/03 - 2006/07) in the Liverpool City Region



Figure A.5.51 5-year mean densities of Sanderling (2007/08 - 2011/12) in the Liverpool City Region

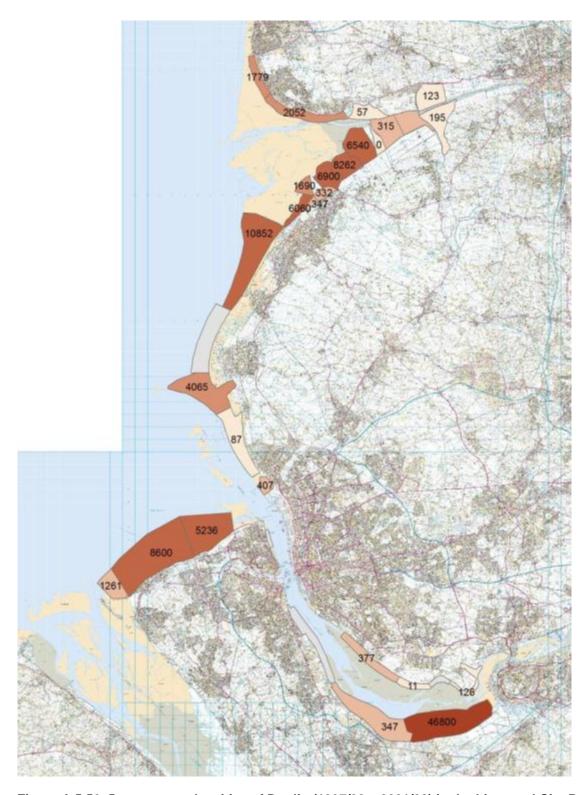


Figure A.5.52 5-year mean densities of Dunlin (1997/98 – 2001/02) in the Liverpool City Region

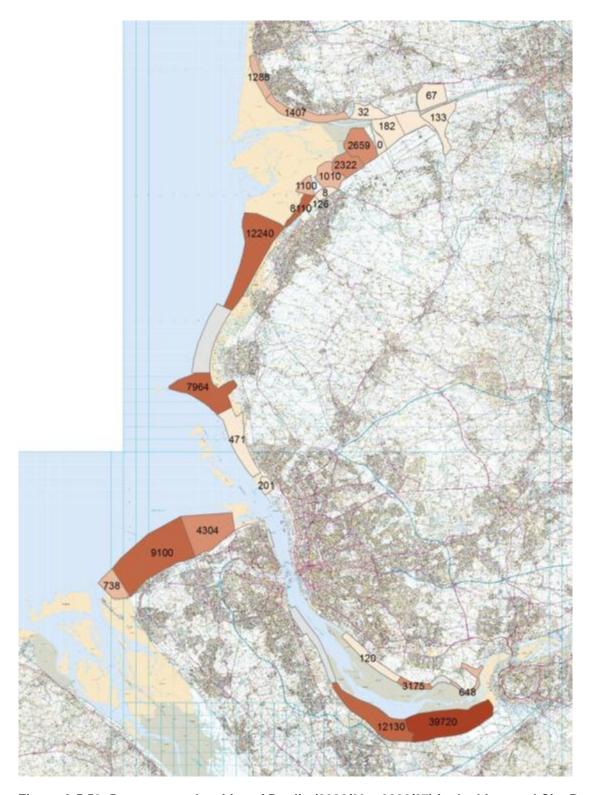


Figure A.5.53 5-year mean densities of Dunlin (2002/03 – 2006/07) in the Liverpool City Region

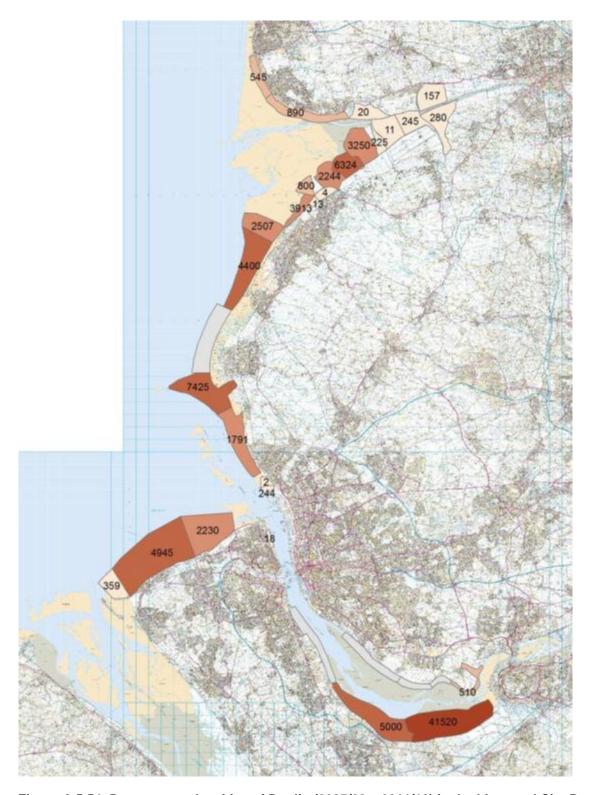


Figure A.5.54 5-year mean densities of Dunlin (2007/08 – 2011/12) in the Liverpool City Region



Figure A.5.55 5-year mean densities of Redshank (1997/98 - 2001/02) in the Liverpool City Region

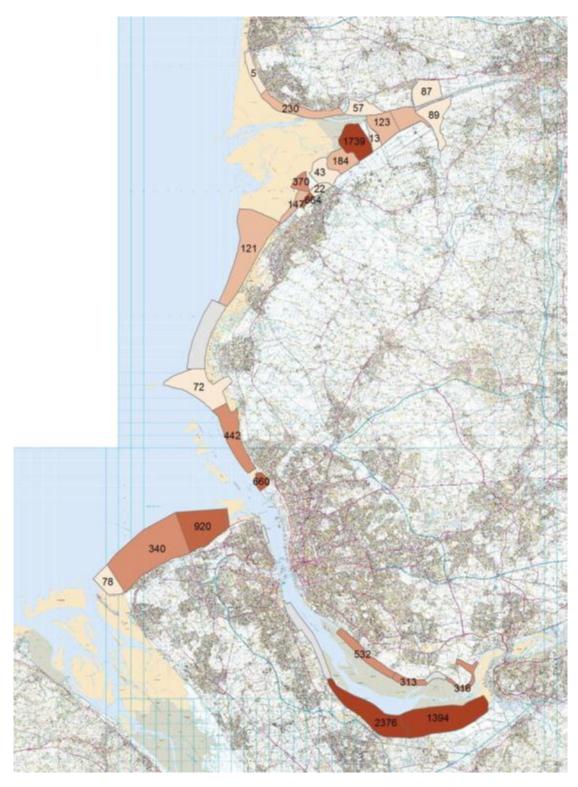


Figure A.5.56 5-year mean densities of Redshank (2002/03 - 2006/07) in the Liverpool City Region

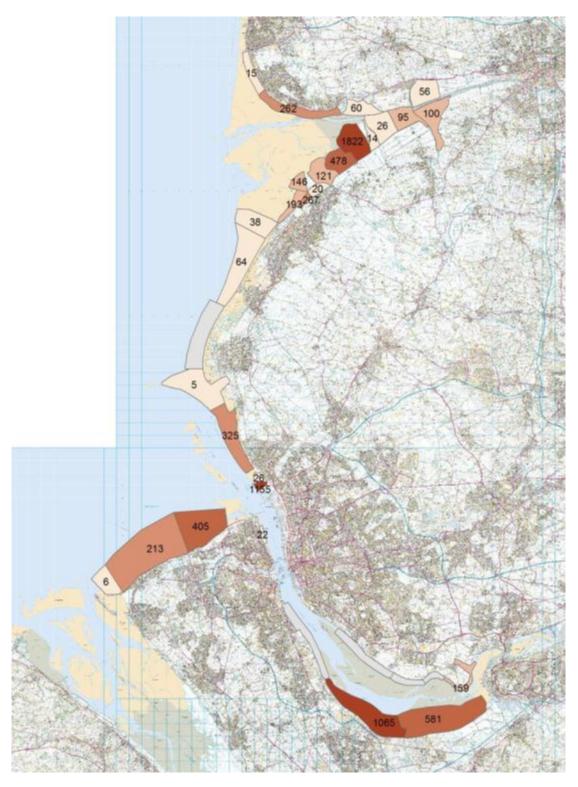


Figure A.5.57 5-year mean densities of Redshank (2007/08 - 2011/12) in the Liverpool City Region

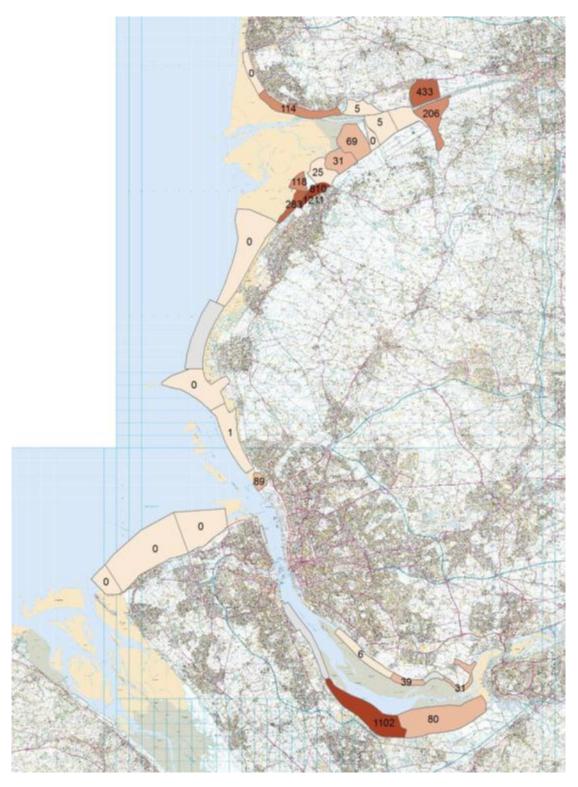


Figure A.5.58 5-year mean densities of Black-tailed Godwit (1997/98 - 2001/02) in the Liverpool City Region

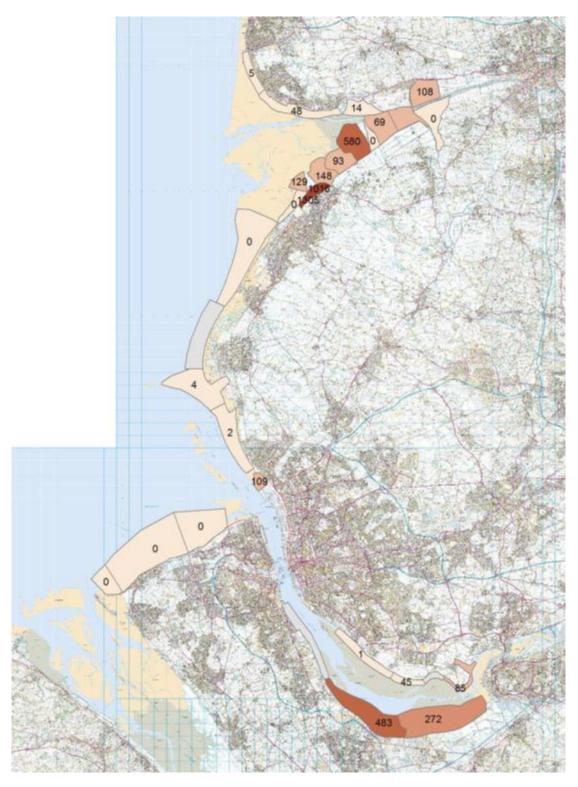


Figure A.5.59 5-year mean densities of Black-tailed Godwit (2002/03 - 2006/07) in the Liverpool City Region



Figure A.5.60 5-year mean densities of Black-tailed Godwit (2007/08 – 2011/12) in the Liverpool City Region

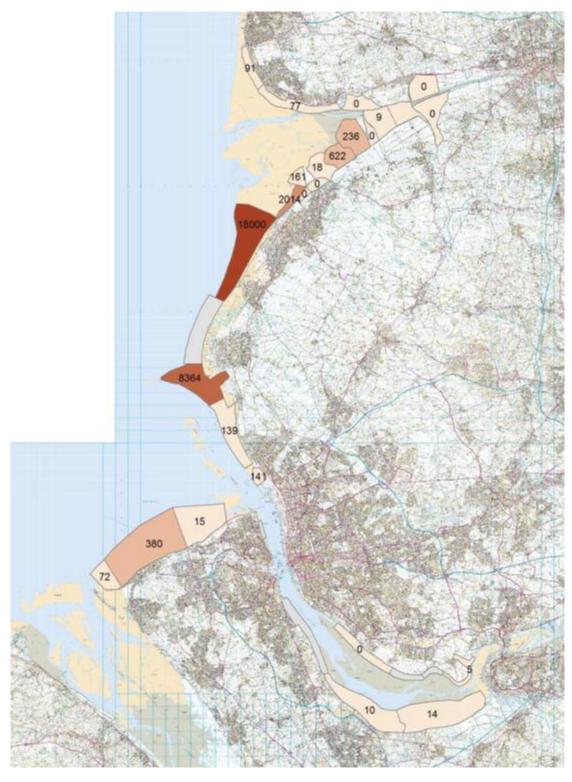


Figure A.5.61 5-year mean densities of Bar-tailed Godwit (1997/98 – 2001/02) in the Liverpool City Region



Figure A.5.62 5-year mean densities of Bar-tailed Godwit (2002/03 - 2006/07) in the Liverpool City Region

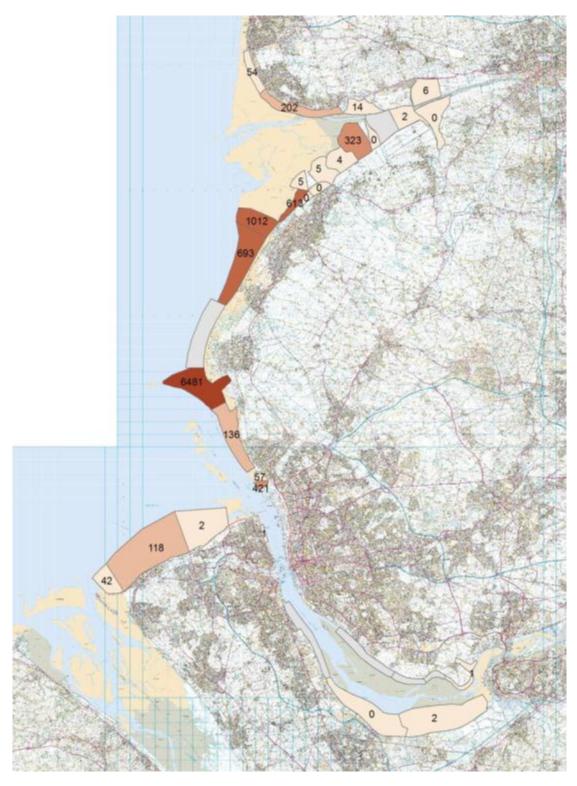


Figure A.5.63 5-year mean densities of Bar-tailed Godwit (2007/08 – 2011/12) in the Liverpool City Region

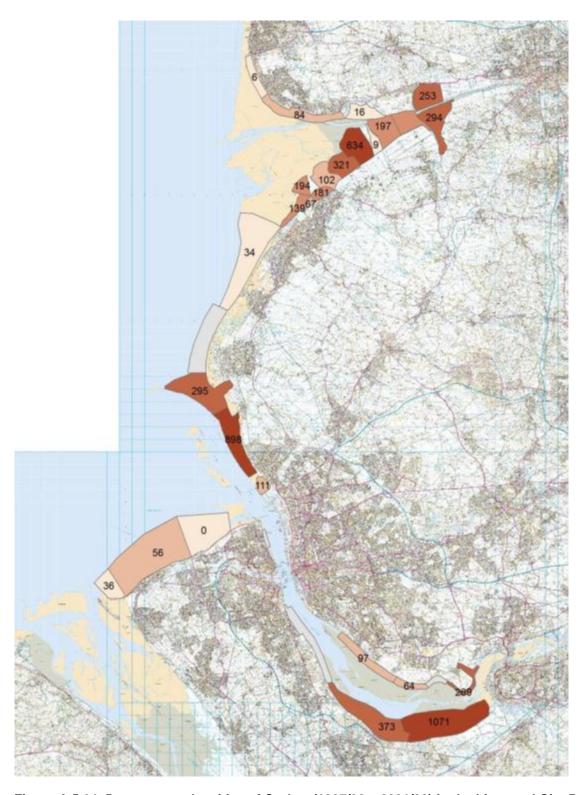


Figure A.5.64 5-year mean densities of Curlew (1997/98 – 2001/02) in the Liverpool City Region

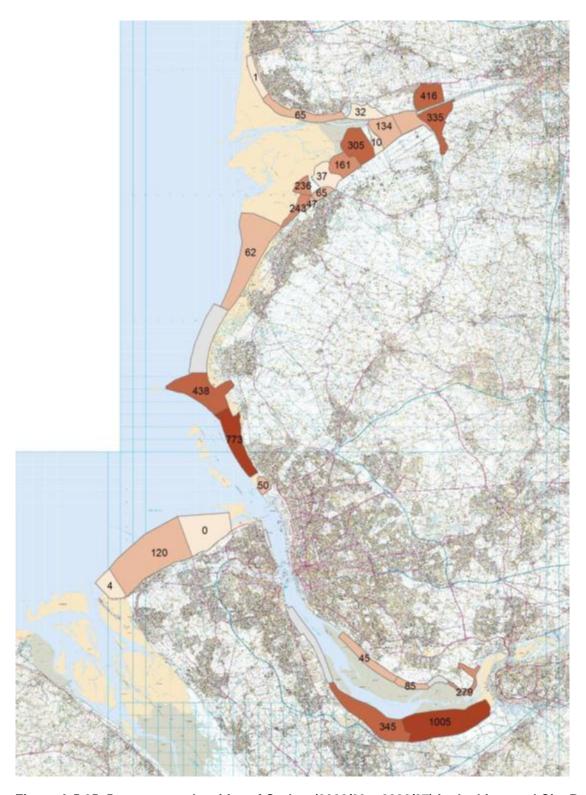


Figure A.5.65 5-year mean densities of Curlew (2002/03 – 2006/07) in the Liverpool City Region

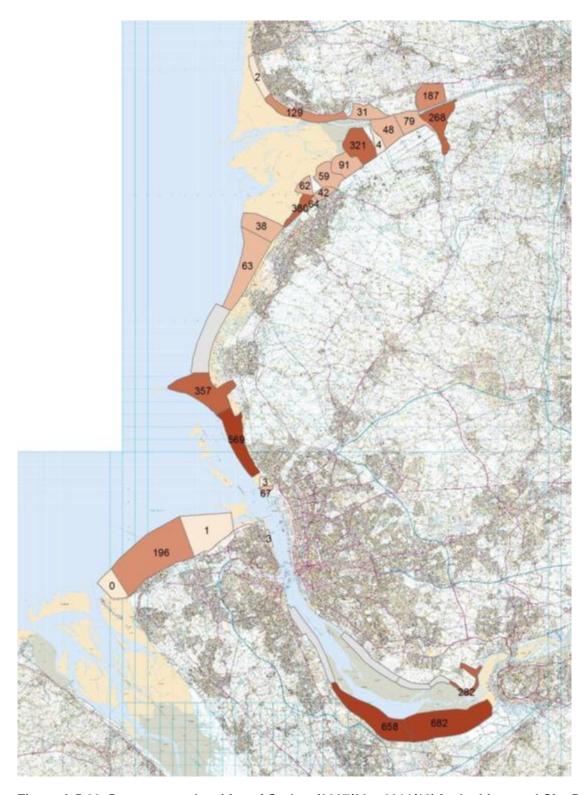


Figure A.5.66 5-year mean densities of Curlew (2007/08 – 2011/12) in the Liverpool City Region

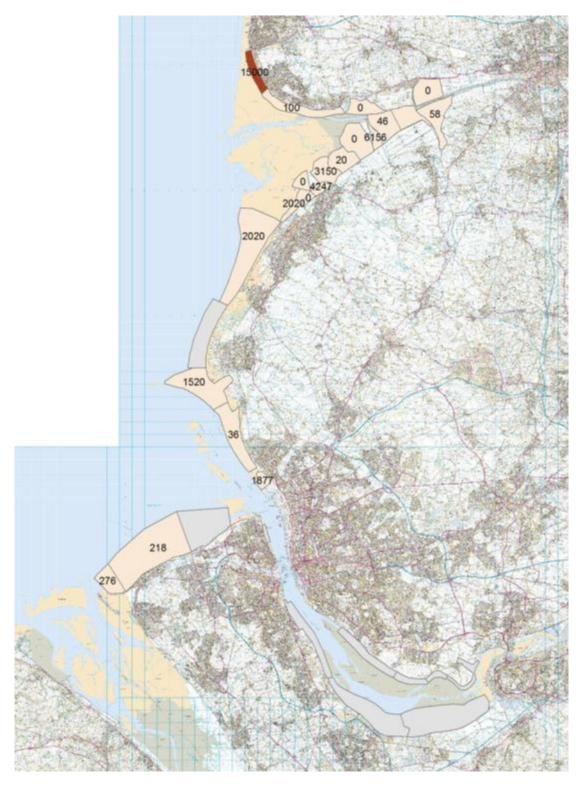


Figure A.5.67 5-year mean densities of Black-headed Gull (1997/98 - 2001/02) in the Liverpool City Region

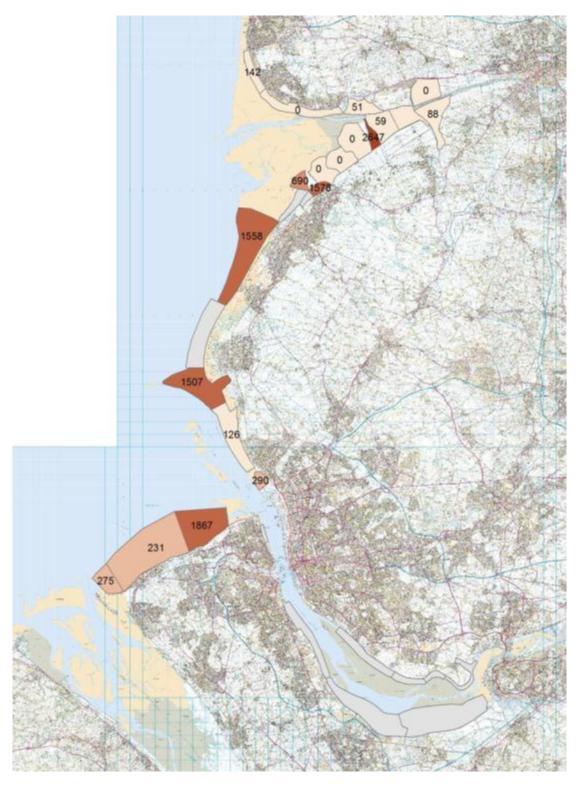


Figure A.5.68 5-year mean densities of Black-headed Gull (2002/03 - 2006/07) in the Liverpool City Region

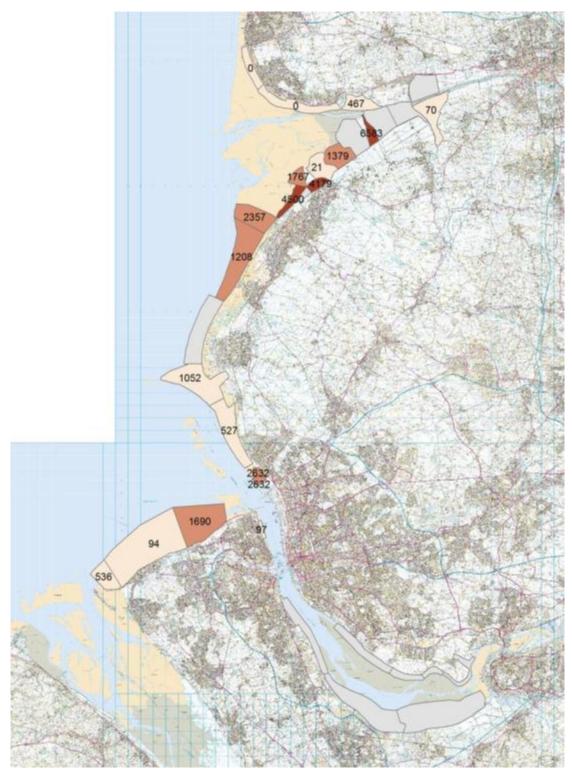


Figure A.5.69 5-year mean densities of Black-headed Gull (2007/08 - 2011/12) in the Liverpool City Region

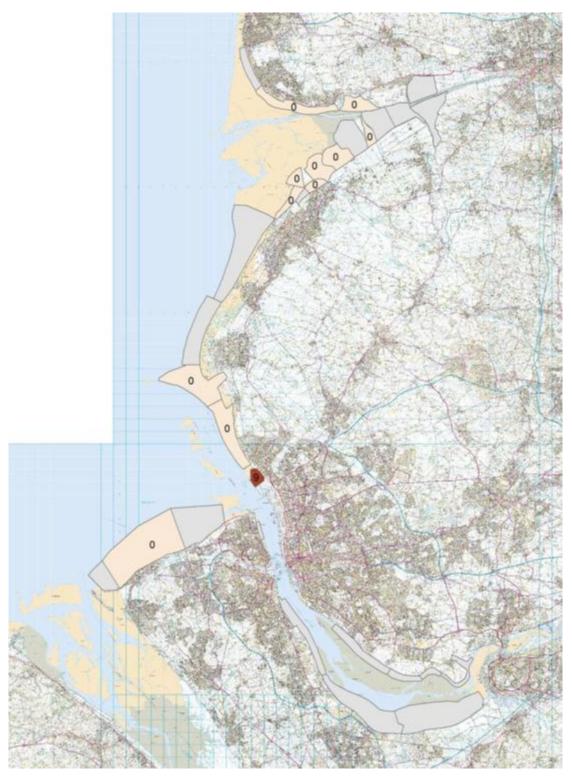


Figure A.5.70 5-year mean densities of Little Gull (1997/98 – 2001/02) in the Liverpool City Region



Figure A.5.71 5-year mean densities of Little Gull (2002/03 – 2006/07) in the Liverpool City Region

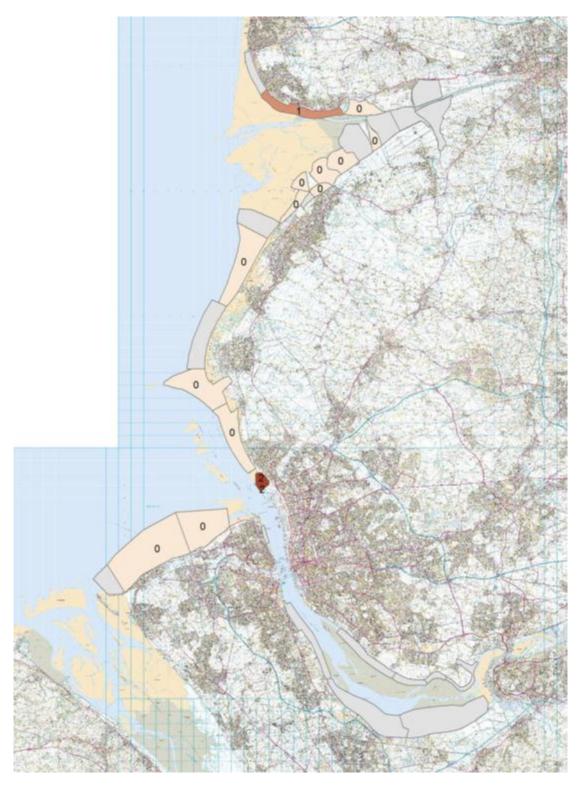


Figure A.5.72 5-year mean densities of Little Gull (2007/08 – 2011/12) in the Liverpool City Region