

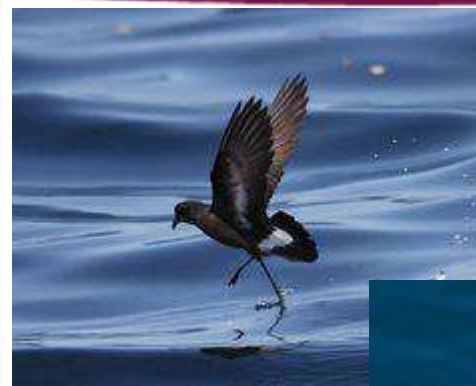
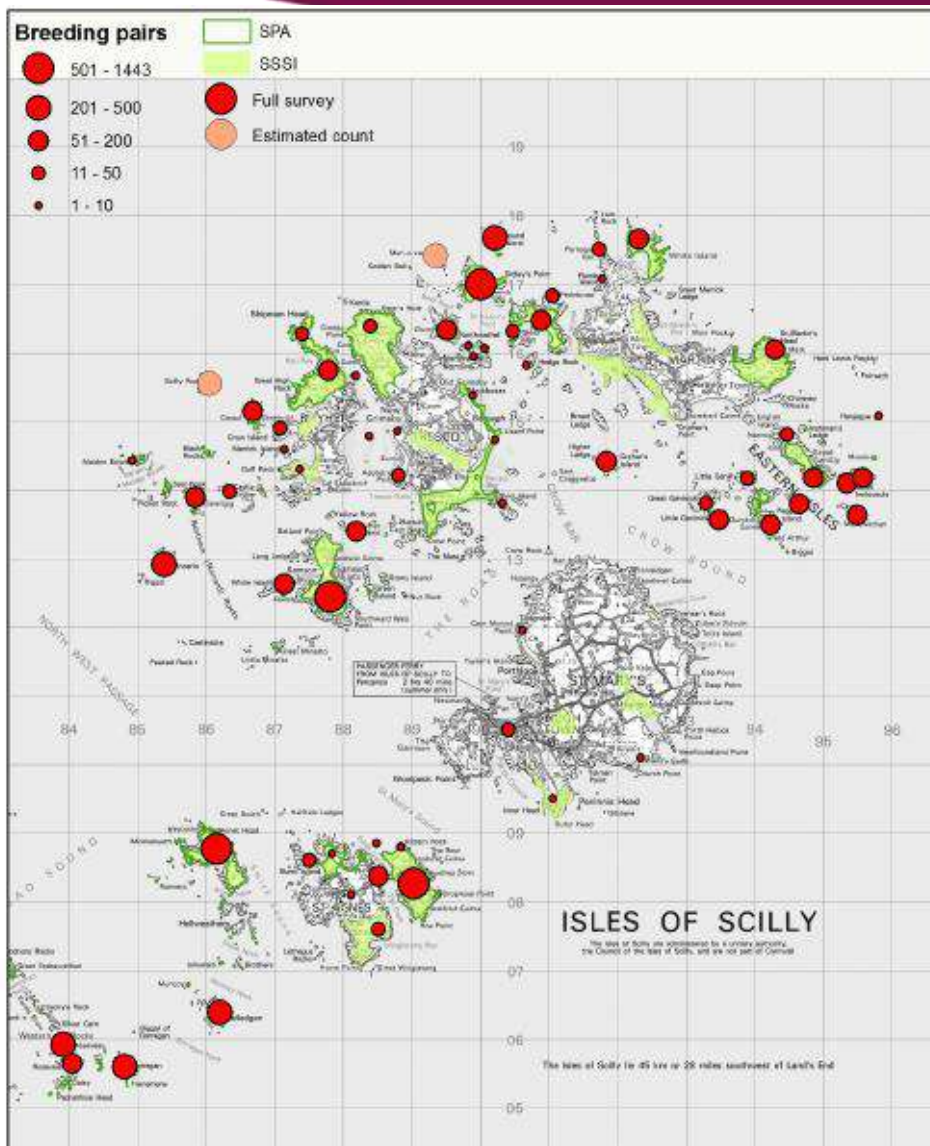
Isles of Scilly SPA marine extension

Alex Banks, Natural England

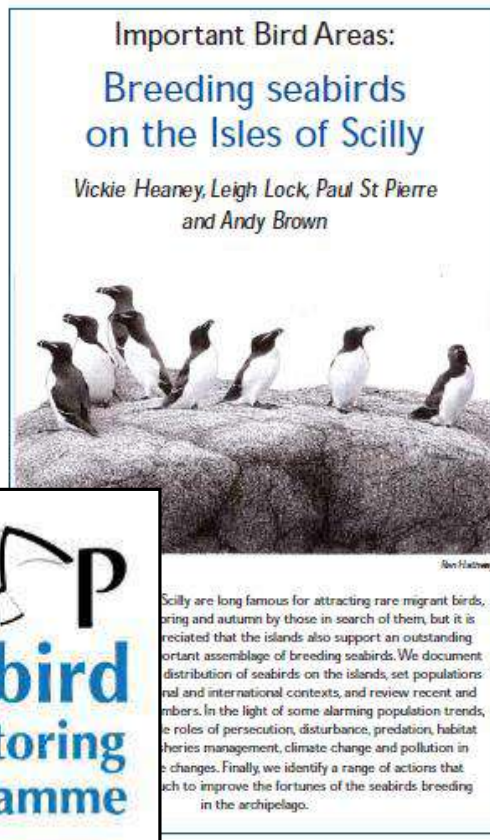
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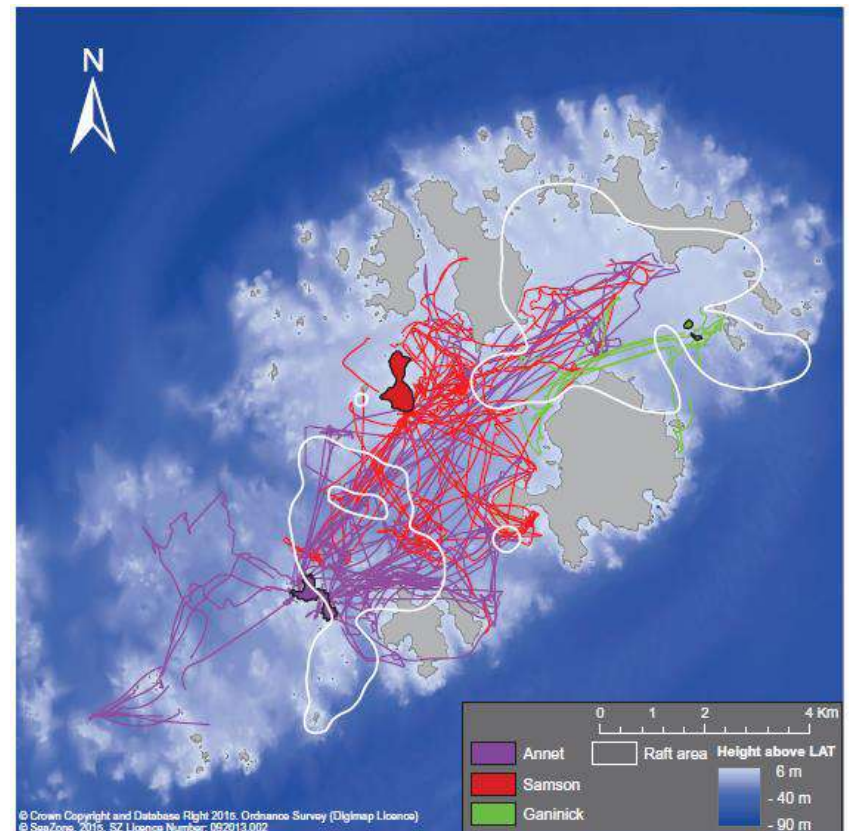
Isles of Scilly SPA



Abundance



Distribution



Focal species

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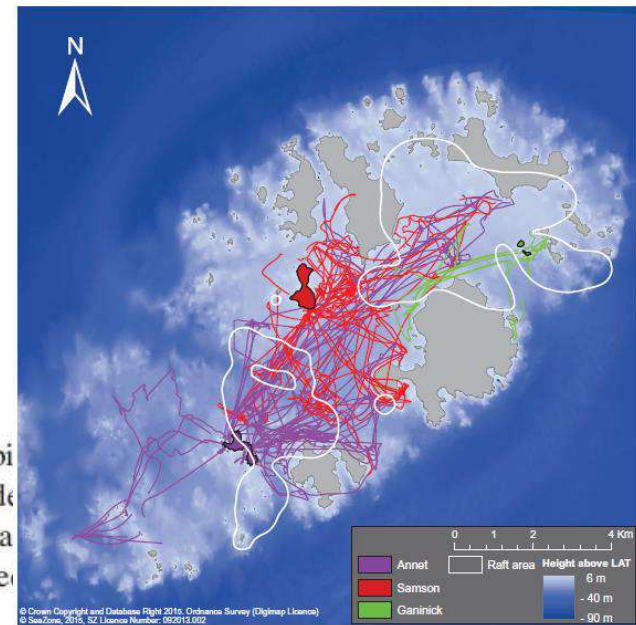
Social foraging European shags: GPS tracking reveals birds from neighbouring colonies have shared foraging grounds

Julian C. Evans¹ · Sasha R. X. Dall¹ · Mark Bolton² · Ellie Owen³ · Stephen C. Votier⁴

Received: 10 February 2015 / Revised: 30 April 2015 / Accepted: 20 May 2015
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Abstract Developments in tracking technologies have enhanced our understanding of the behaviours of many seabird species. However few studies have examined the social aspects of seabird foraging behaviour, despite the effect this might have on the distribution of foraging areas

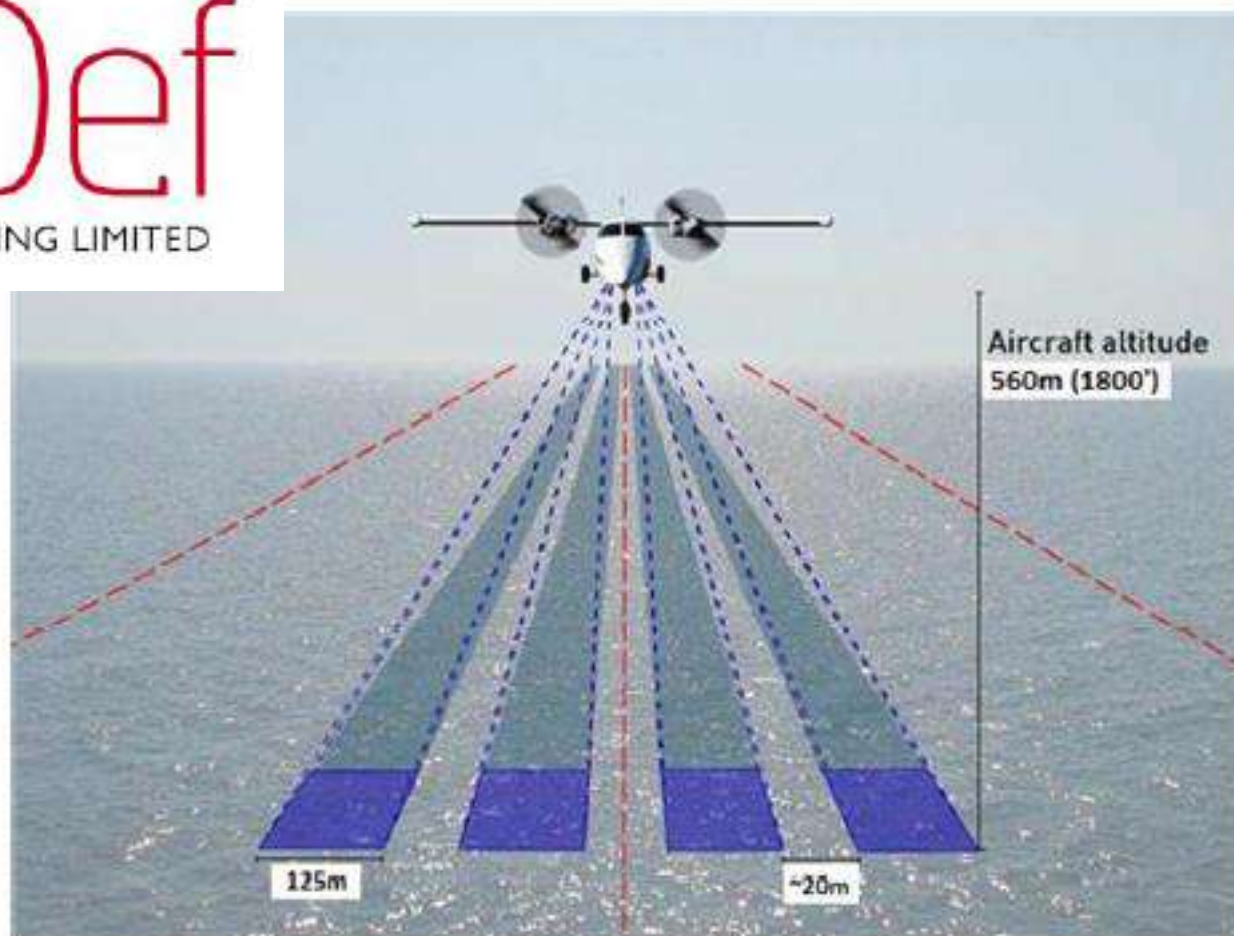
among colonies—bi Our finding provide social information a may lead to share partitioning.



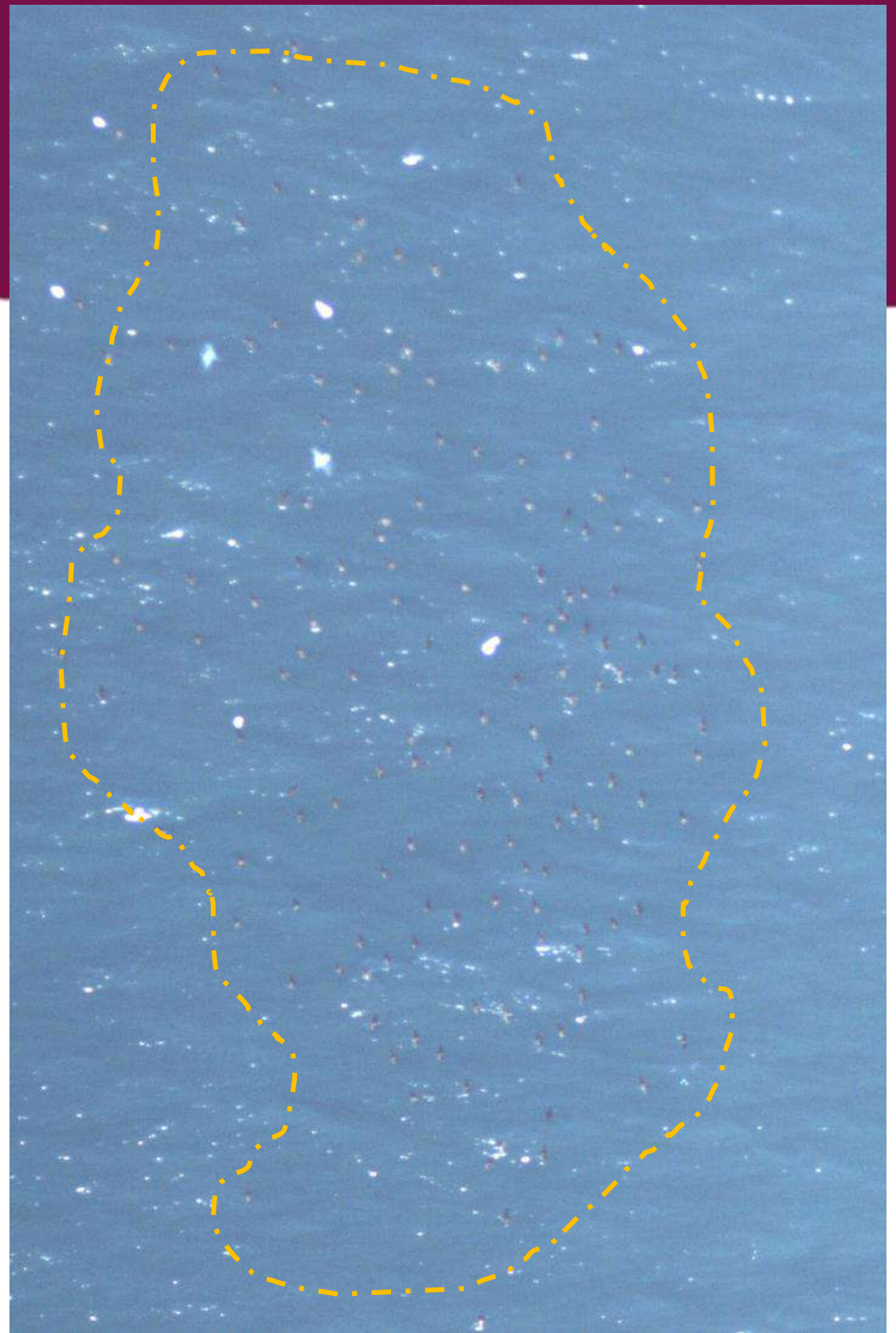
Collecting digital aerial survey data

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HiDef
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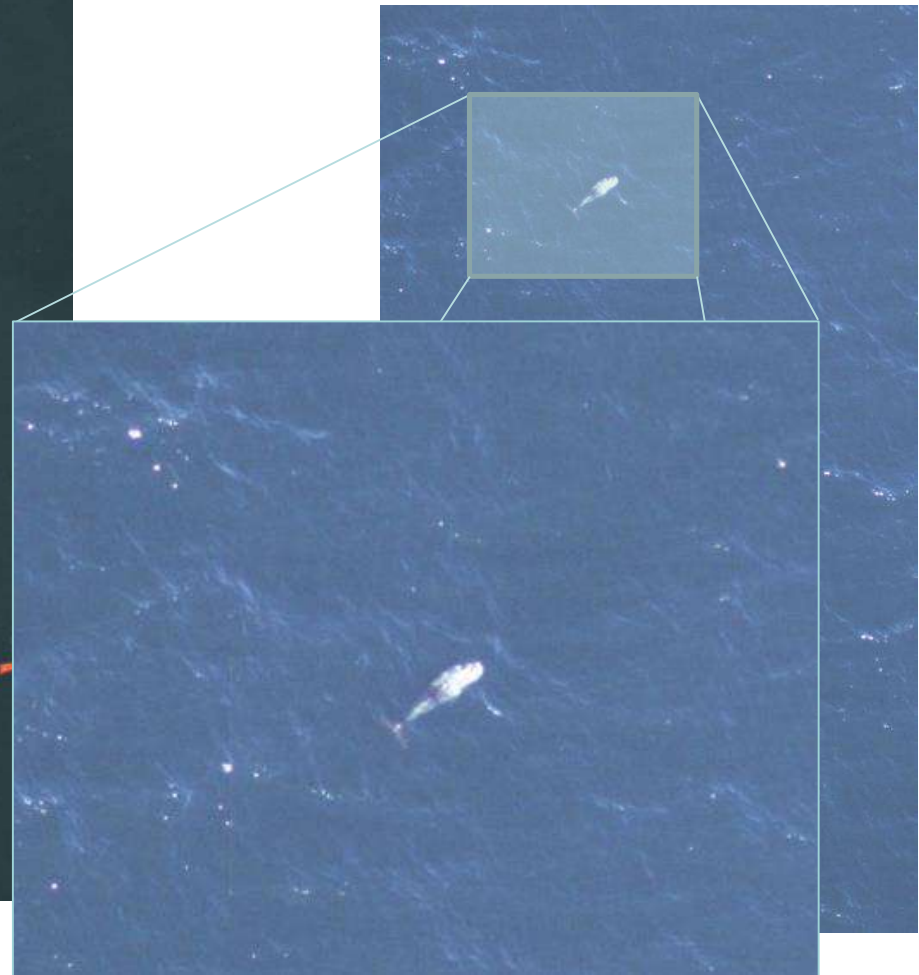


Collecting digital aerial survey data

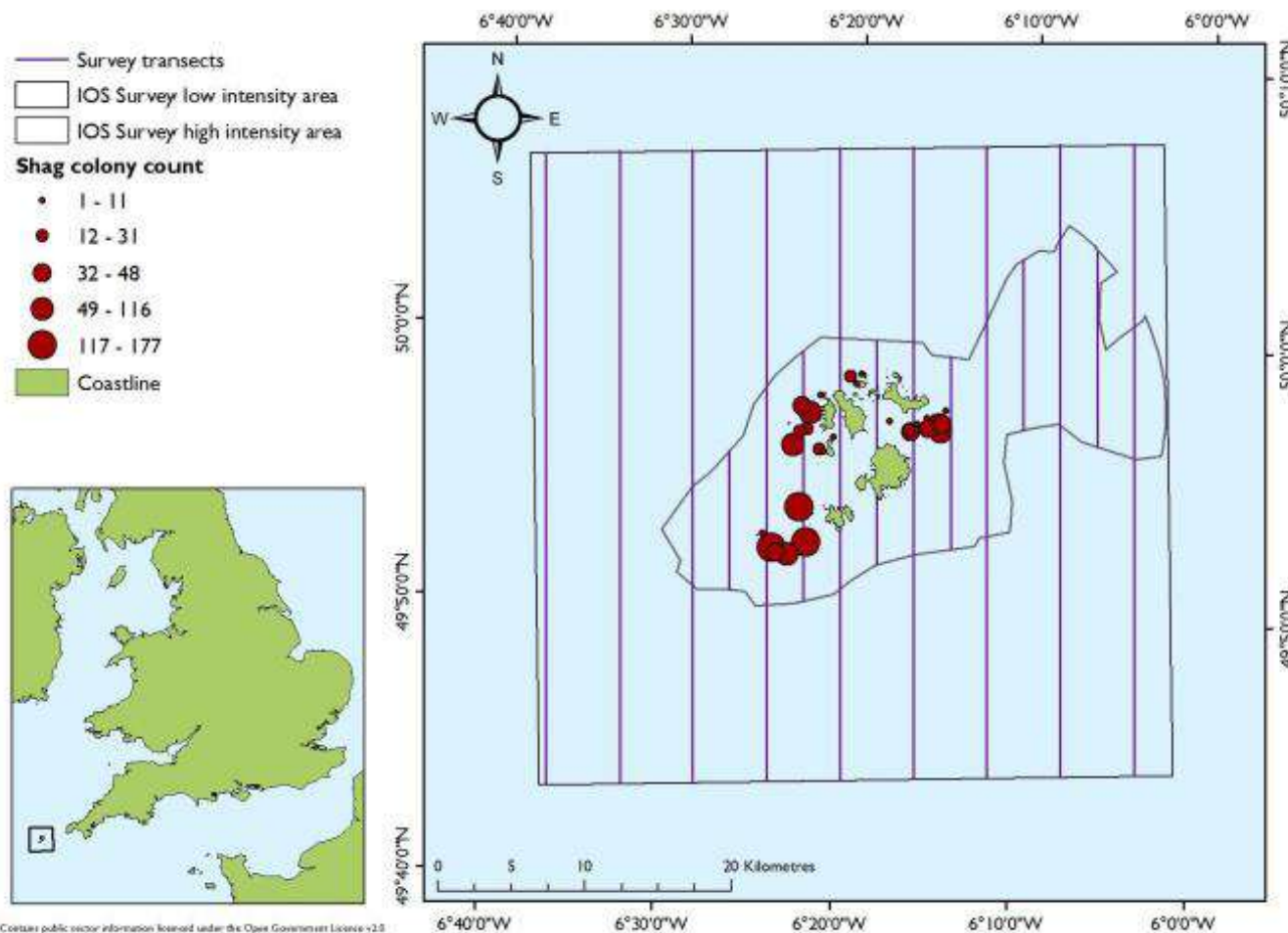


Collecting digital aerial survey data

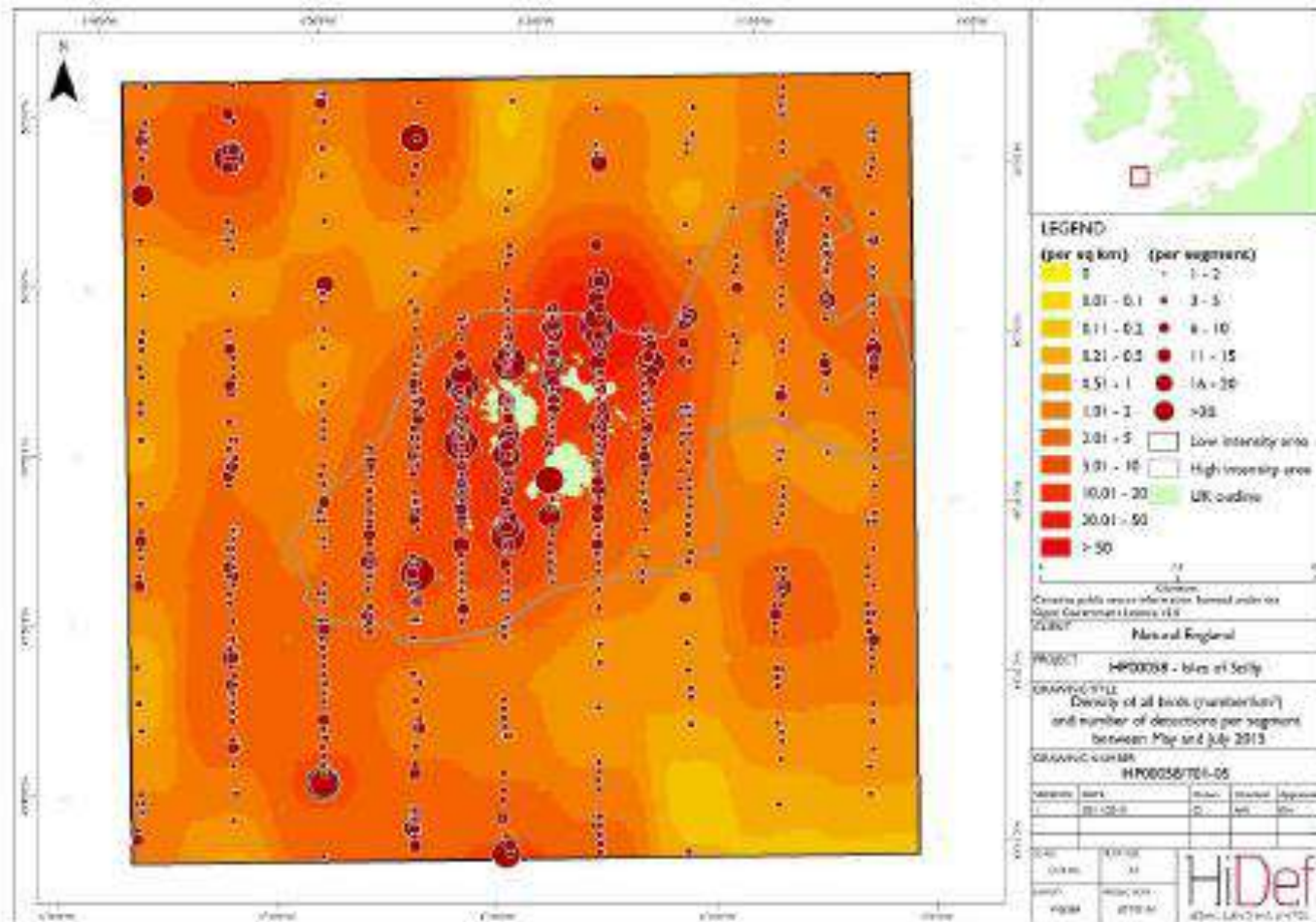
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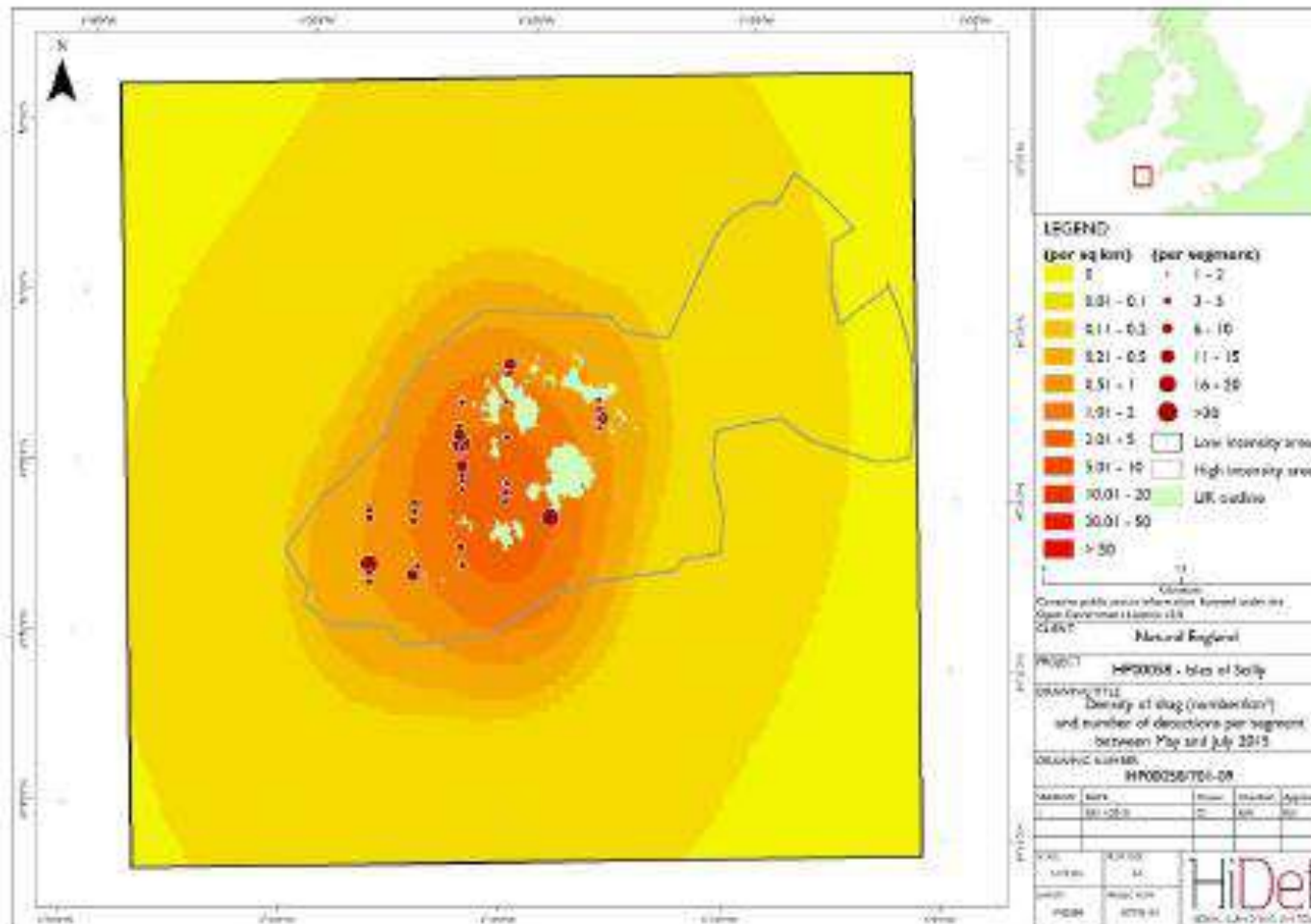
Survey design



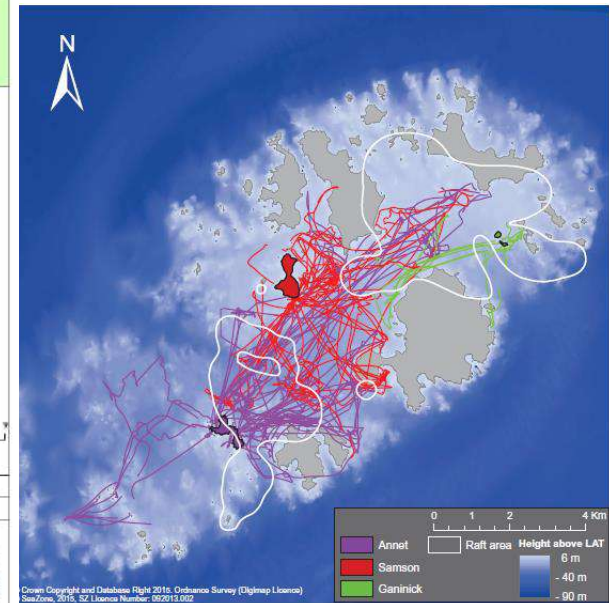
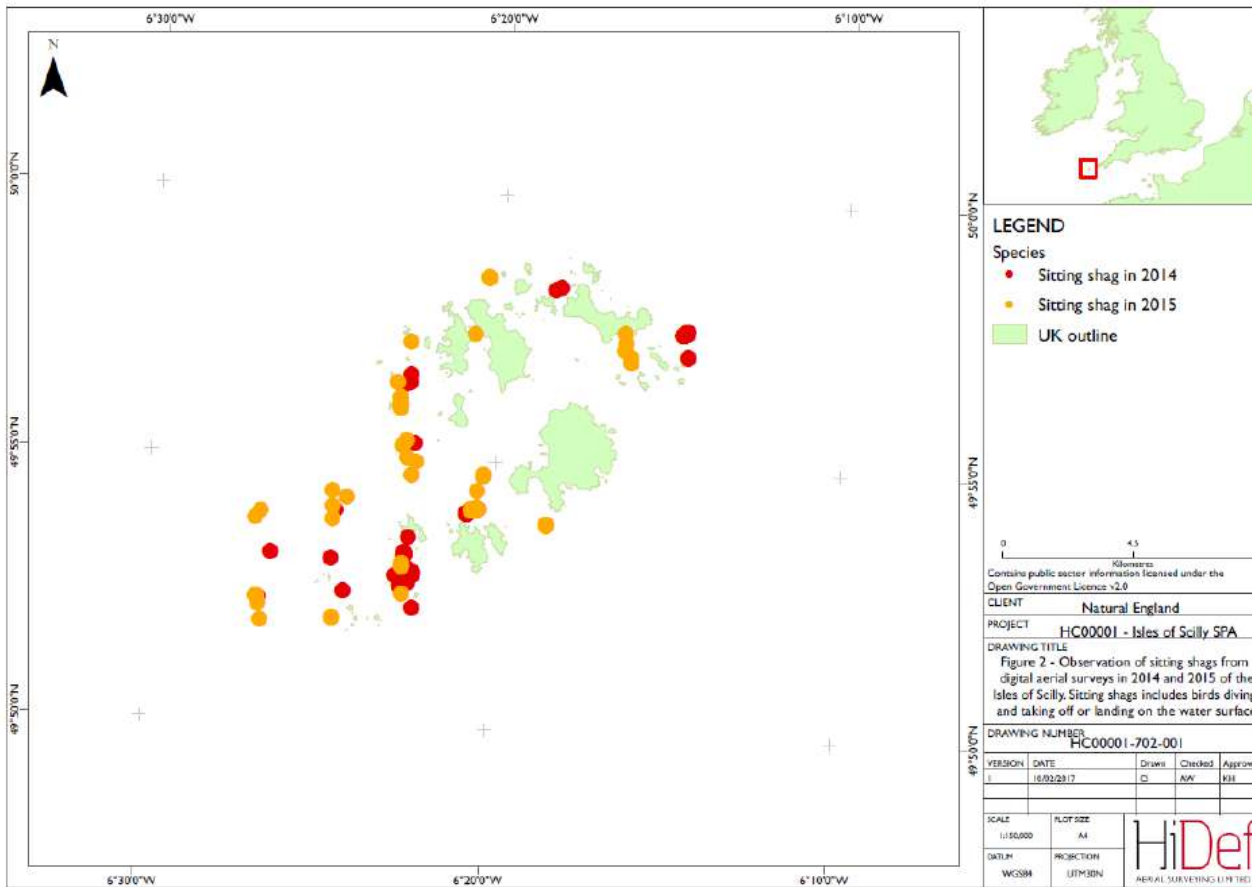
2015 results – all birds



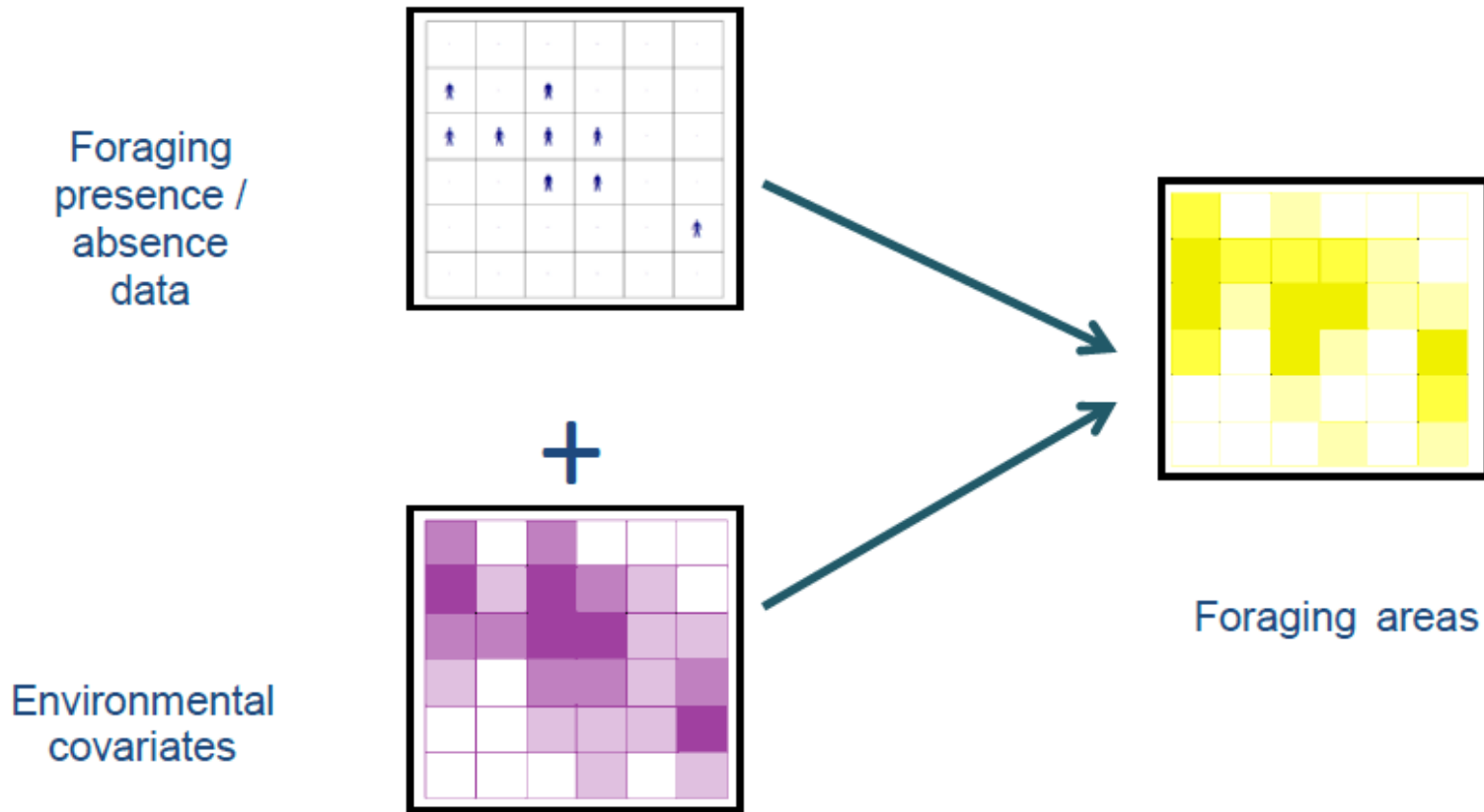
2015 results – shags



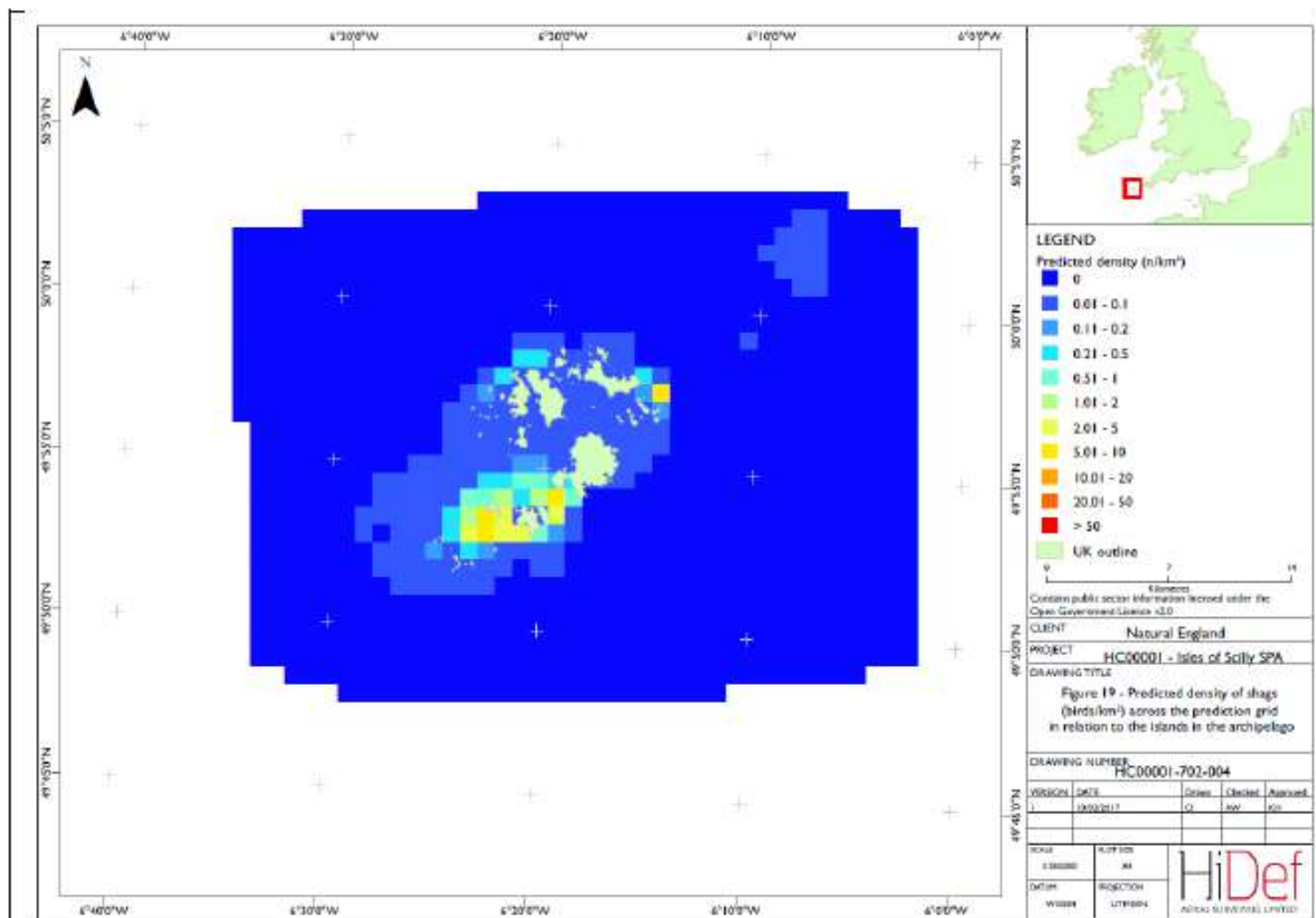
Digital aerial, tracking and rafting



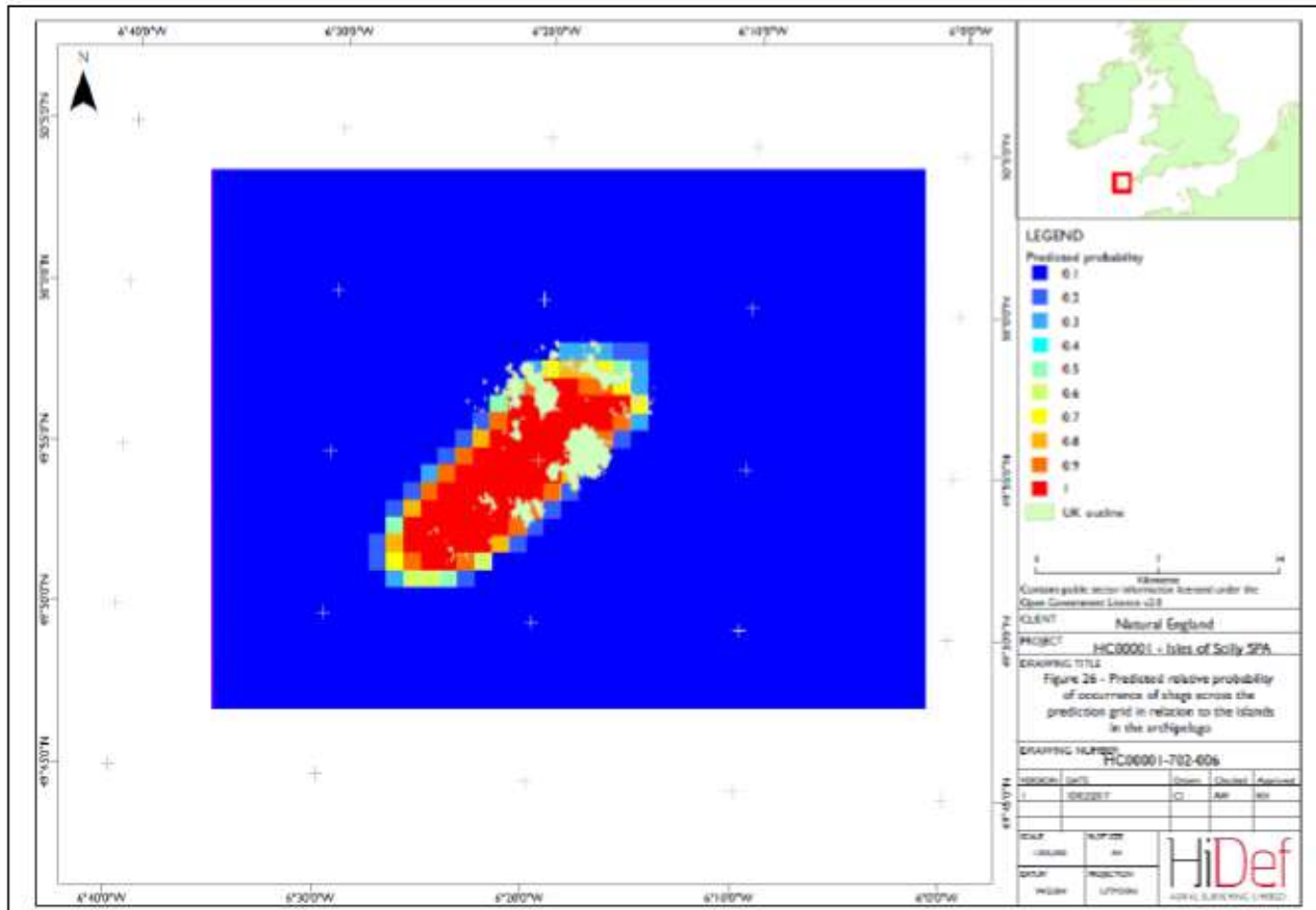
Density Surface Modelling



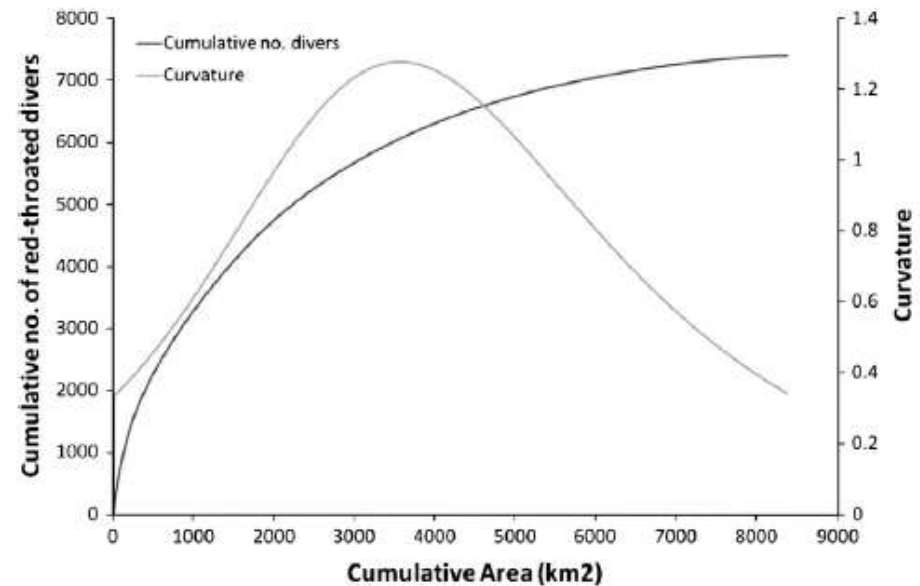
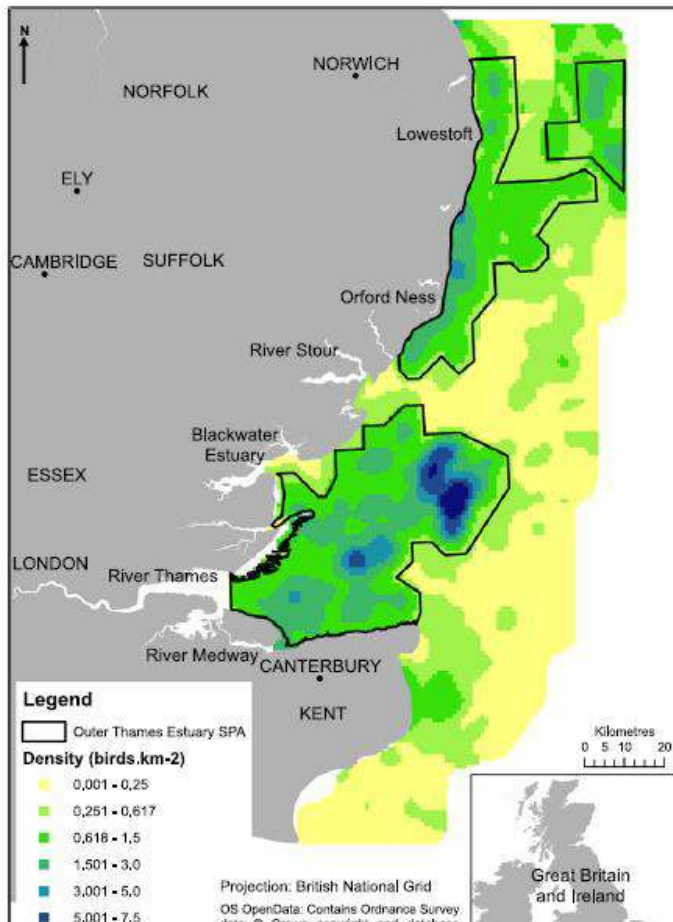
Models for Isles of Scilly – aerial



Models for Isles of Scilly – tracking

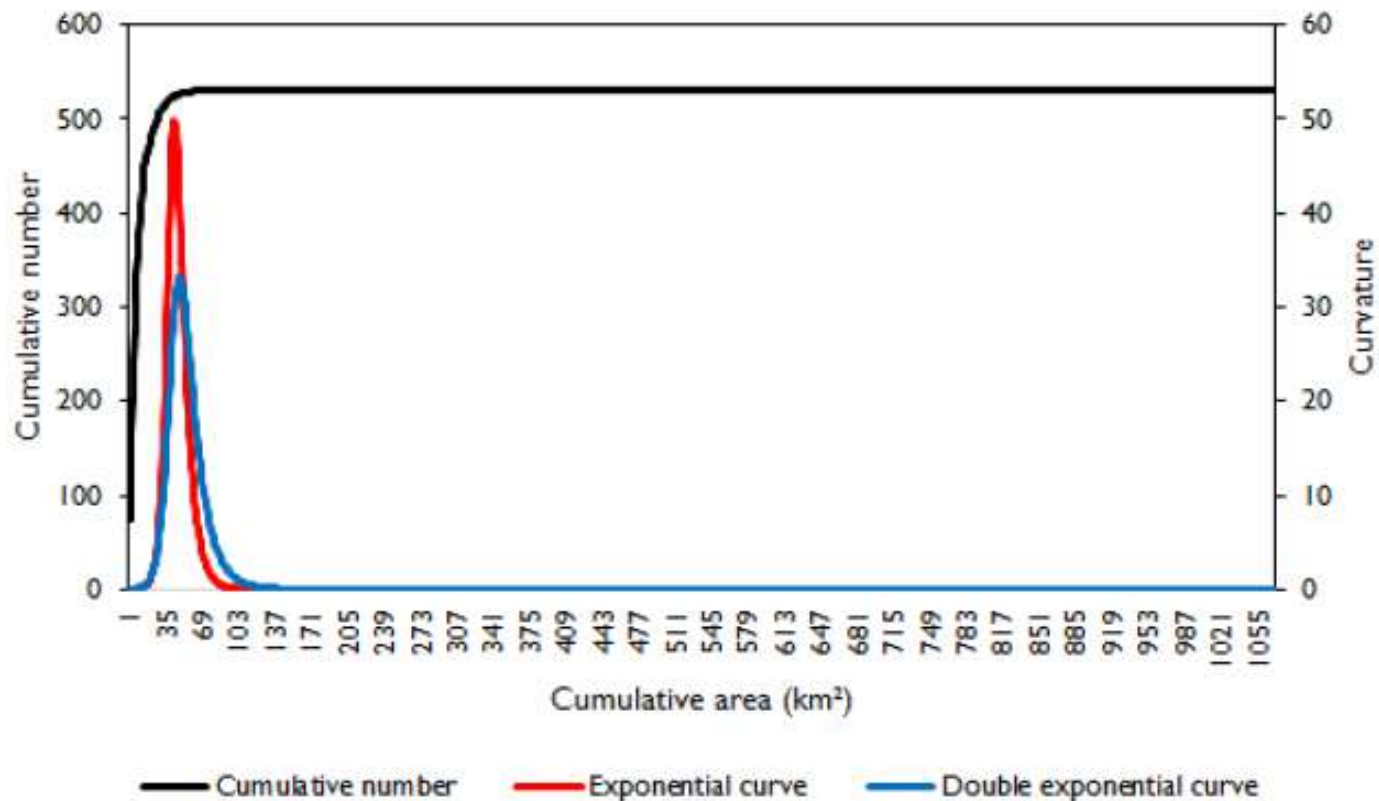


Defining a boundary – Maximum Curvature

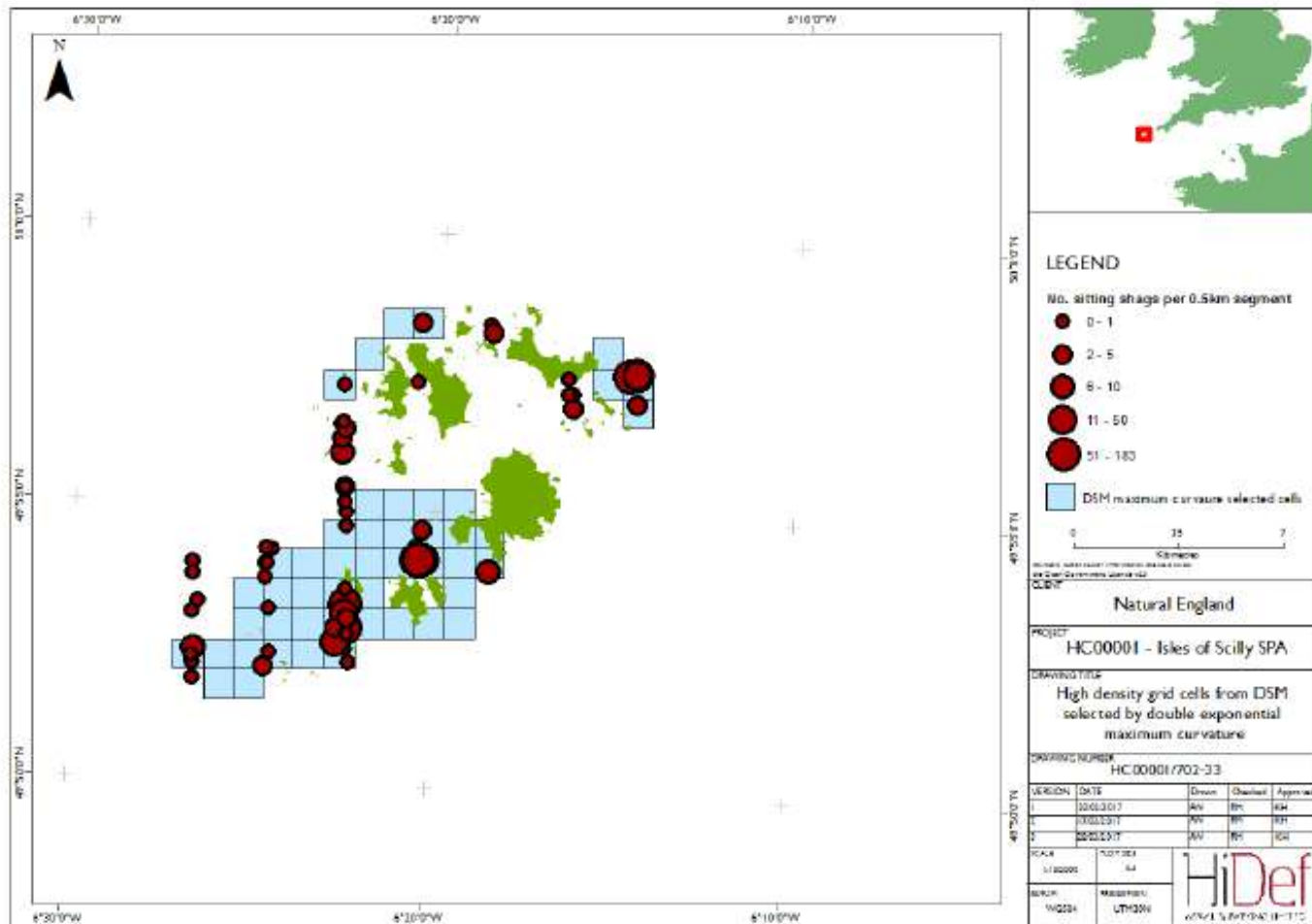


Applying Maximum Curvature to IoS

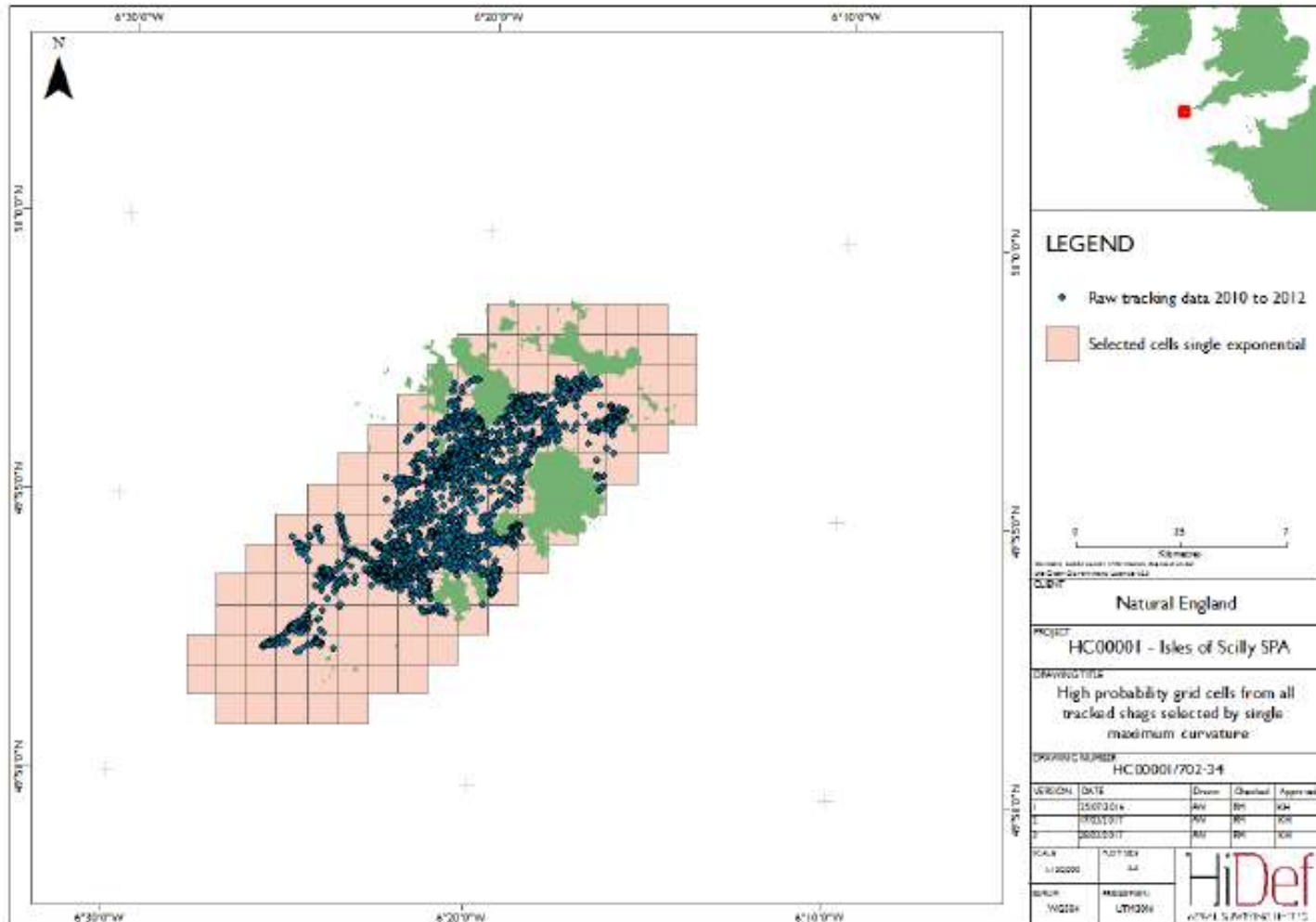
Figure 31 Cumulative number and maximum curvature in relation to cumulative area for sitting shags from DSM outputs using the point density estimate



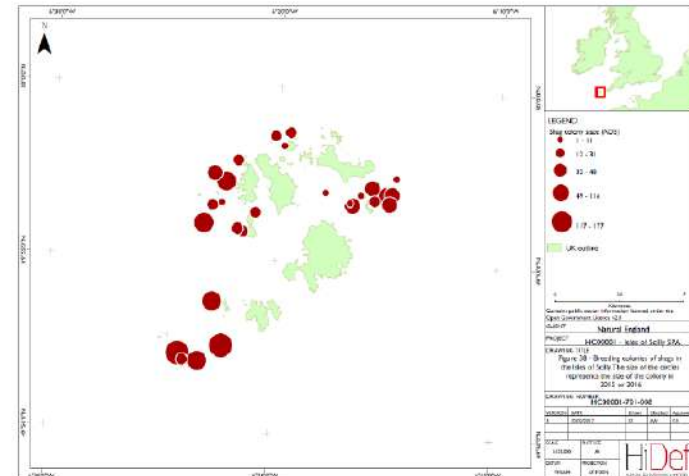
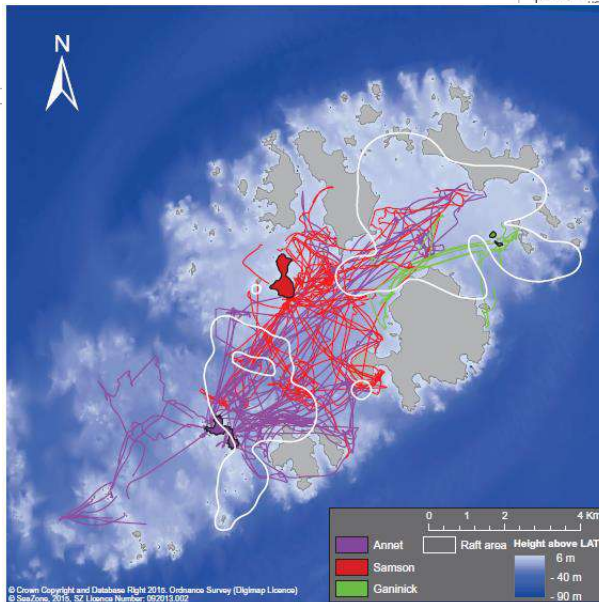
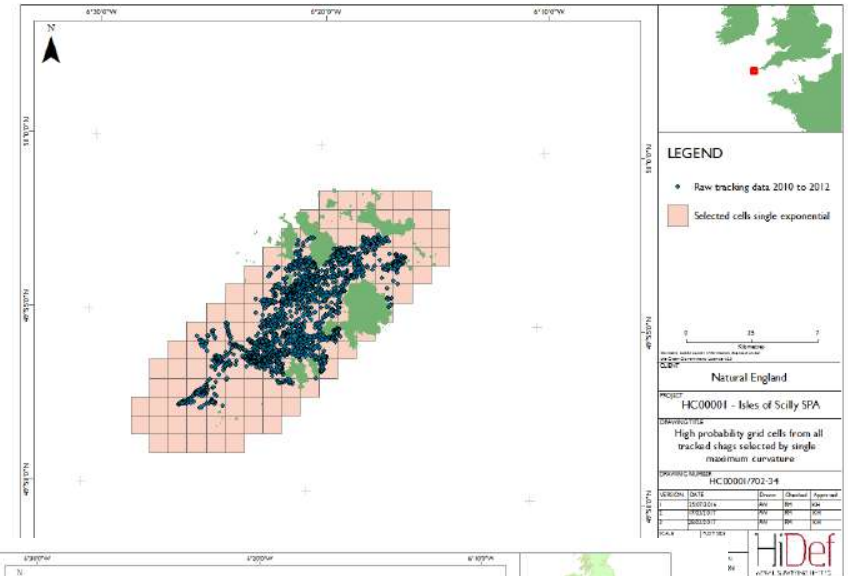
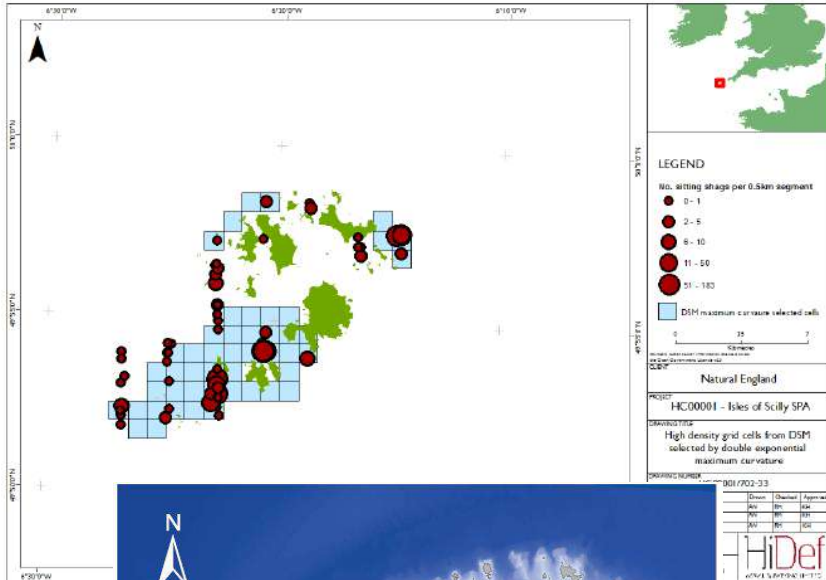
Applying Maximum Curvature – aerial



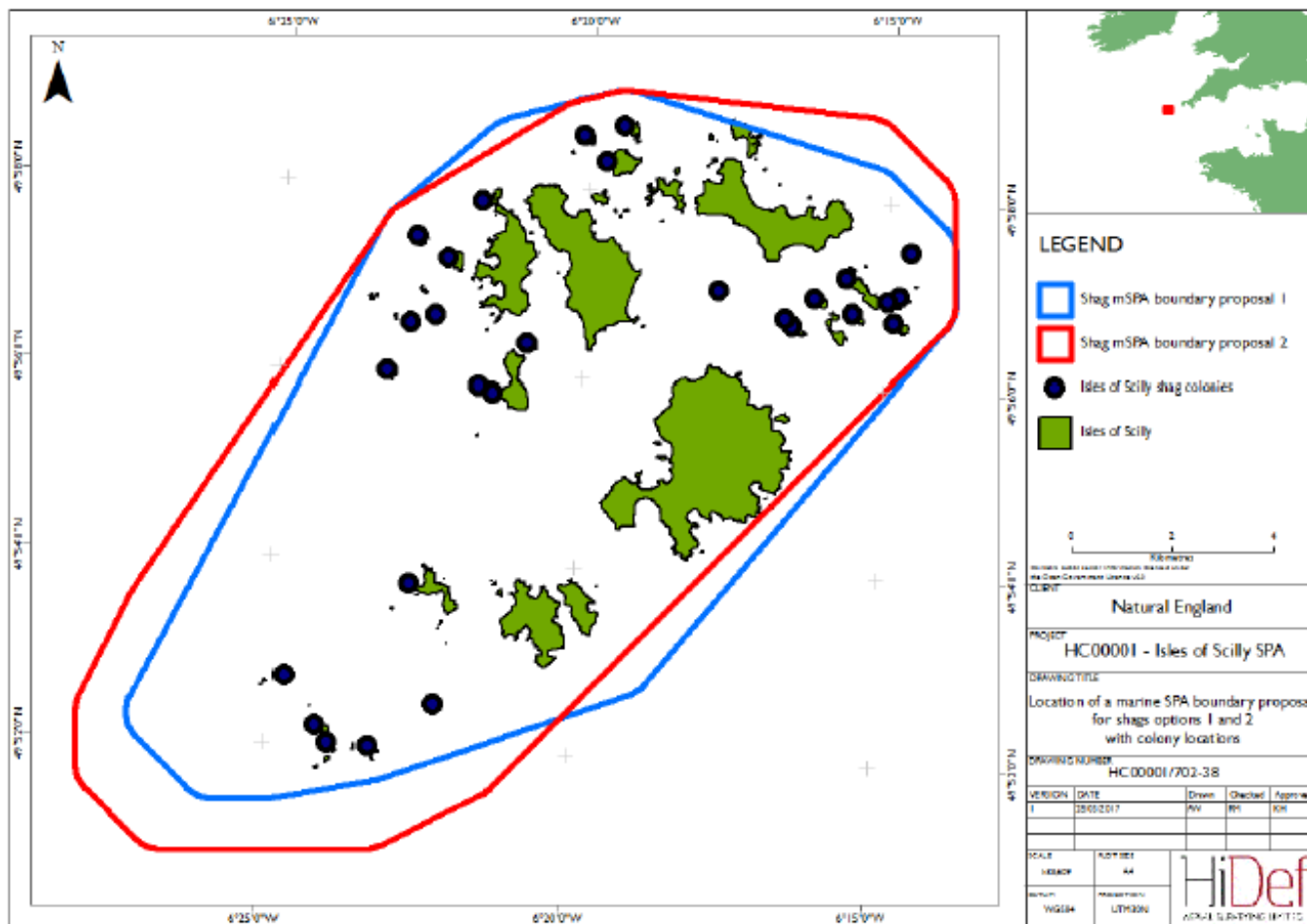
Applying Maximum Curvature – tracking



Boundary setting



Boundary options compared





alex.banks@naturalengland.org.uk