

Isles of Scilly SPA marine extension

Alex Banks, Natural England

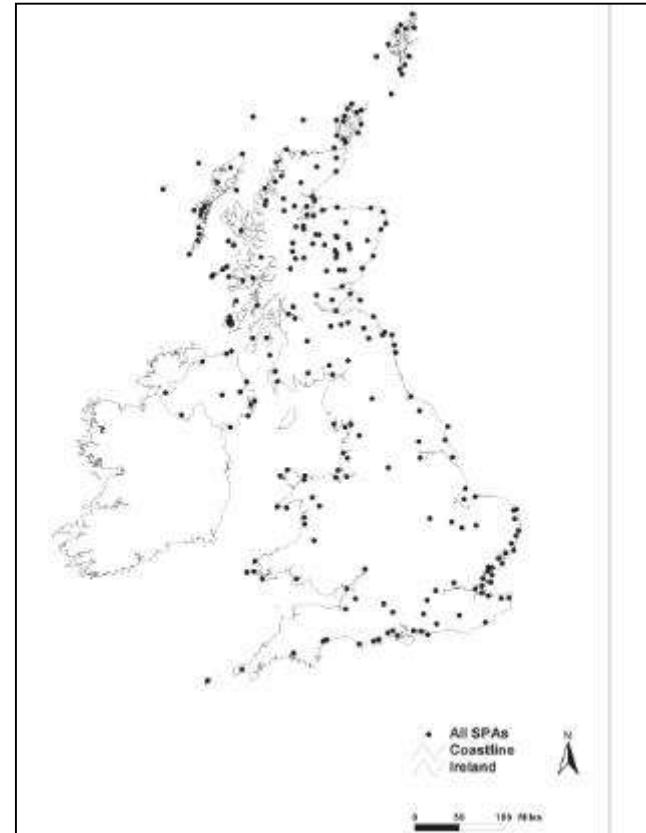
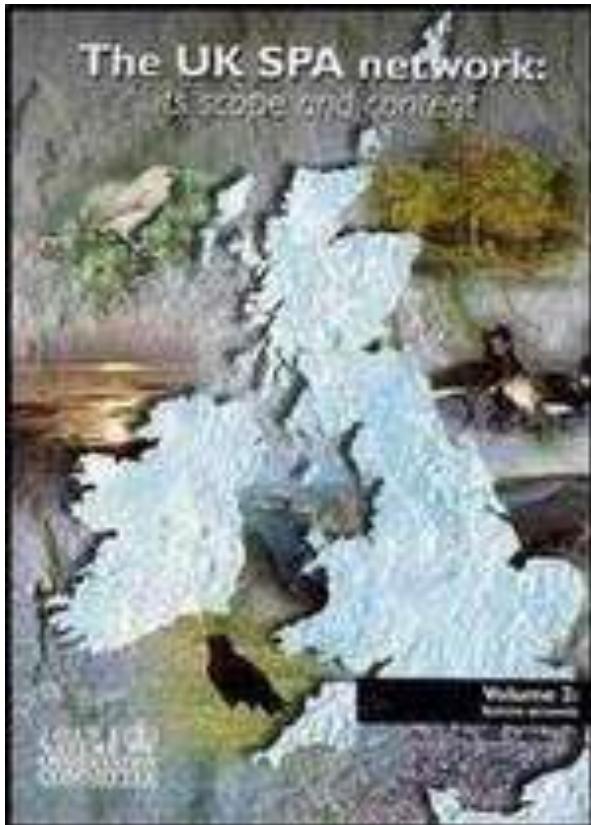
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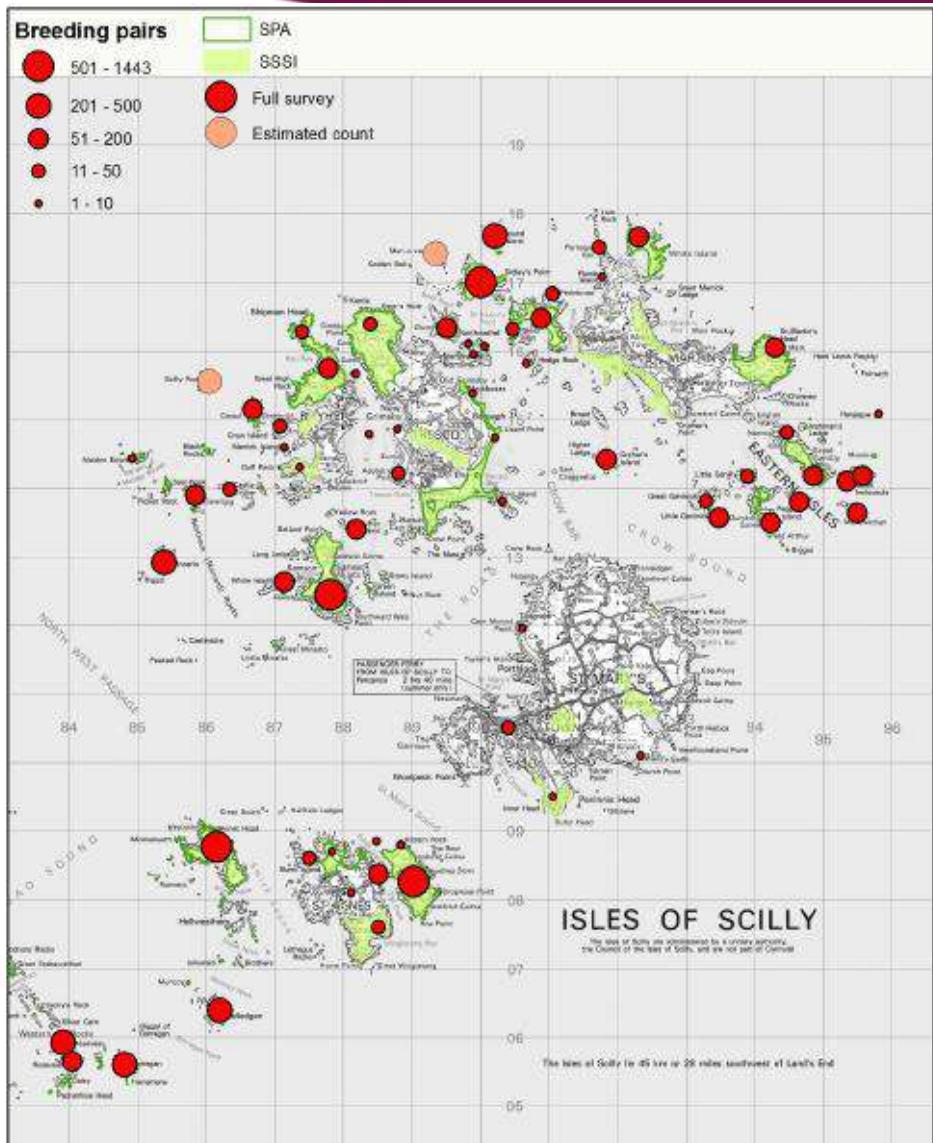
Special Protection Areas



The “most suitable territories” for birds on land **and at sea**



Isles of Scilly SPA



Evidence requirements



Abundance

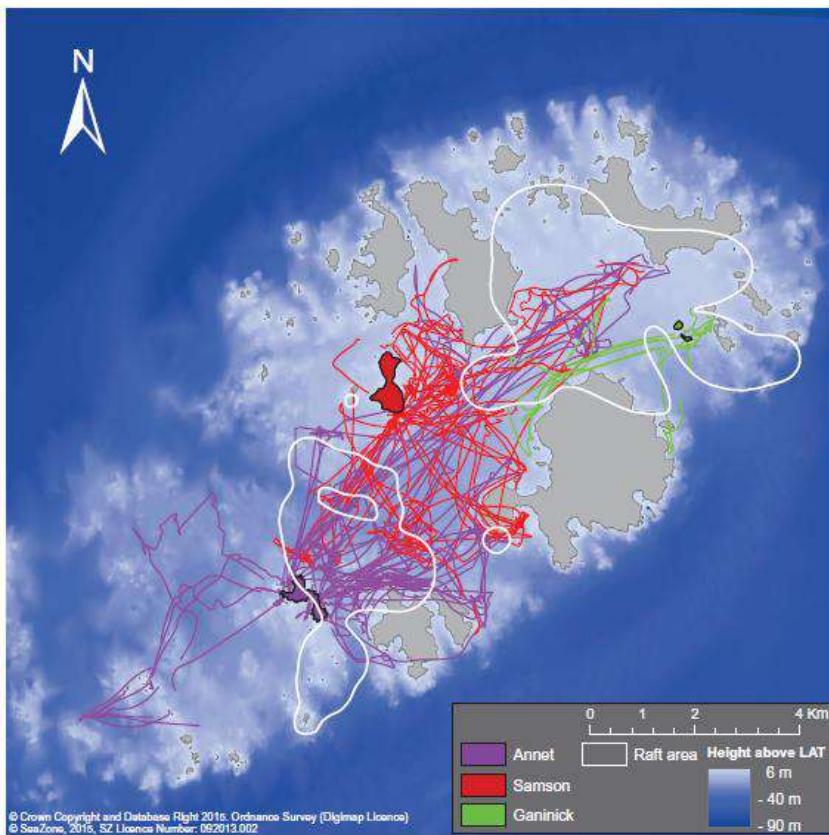
Important Bird Areas:
Breeding seabirds
on the Isles of Scilly

Vickie Heaney, Leigh Lock, Paul St Pierre
and Andy Brown



Scilly are long famous for attracting rare migrant birds, spring and autumn by those in search of them, but it is reckoned that the islands also support an outstandingly important assemblage of breeding seabirds. We document distribution of seabirds on the islands, set populations in national and international contexts, and review recent trends. In the light of some alarming population trends, we explore the roles of persecution, disturbance, predation, habitat loss, fisheries management, climate change and pollution in these changes. Finally we identify a range of actions that might help to improve the fortunes of the seabirds breeding in the archipelago.

Distribution



Focal species



Data available – tracking and rafting studies

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ORIGINAL ARTICLE

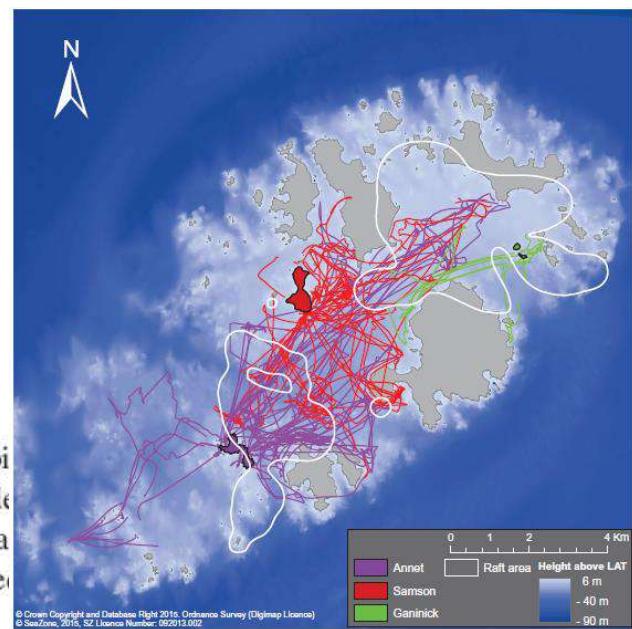
Social foraging European shags: GPS tracking reveals birds from neighbouring colonies have shared foraging grounds

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

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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

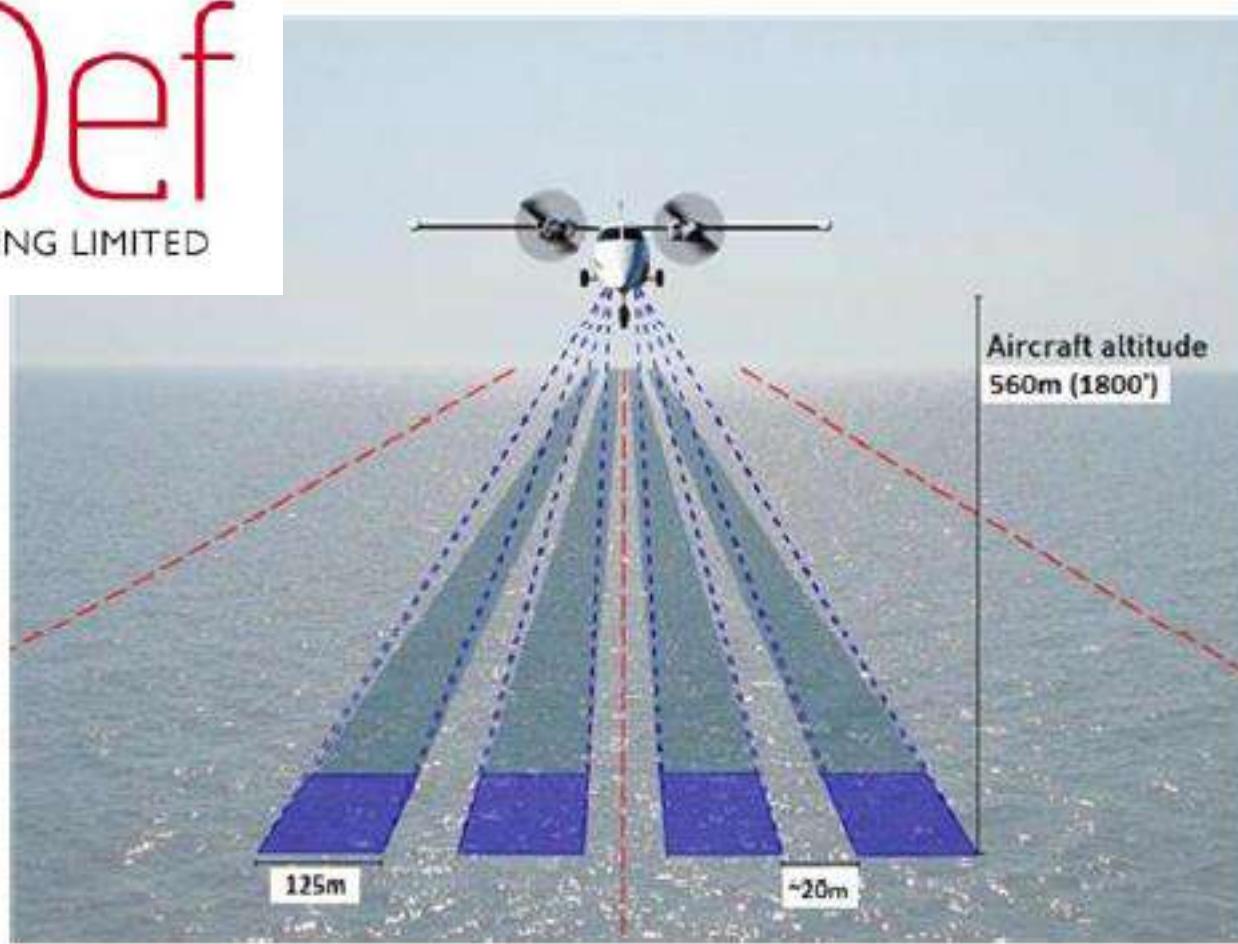
among colonies—birds from different colonies may share social information about foraging grounds and thus may lead to shared foraging grounds or partitioning.



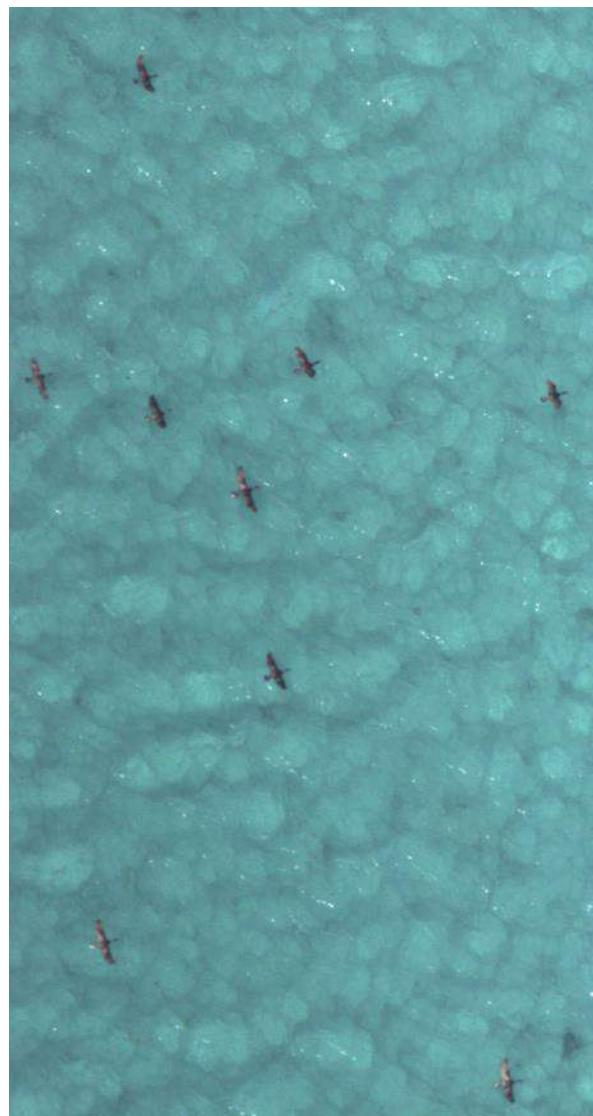
Collecting digital aerial survey data

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HiDef
AERIAL SURVEYING LIMITED



Collecting digital aerial survey data

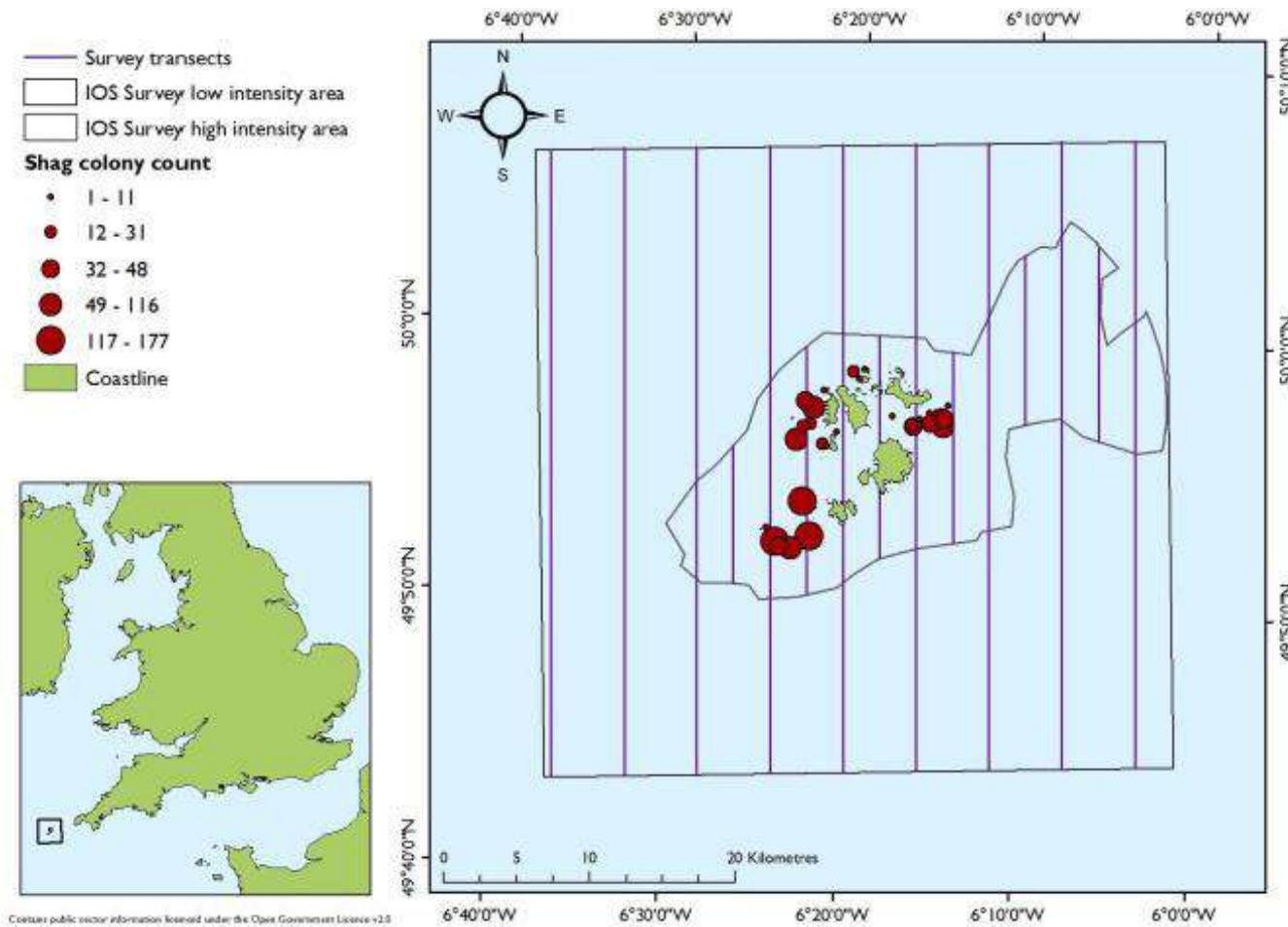


Collecting digital aerial survey data

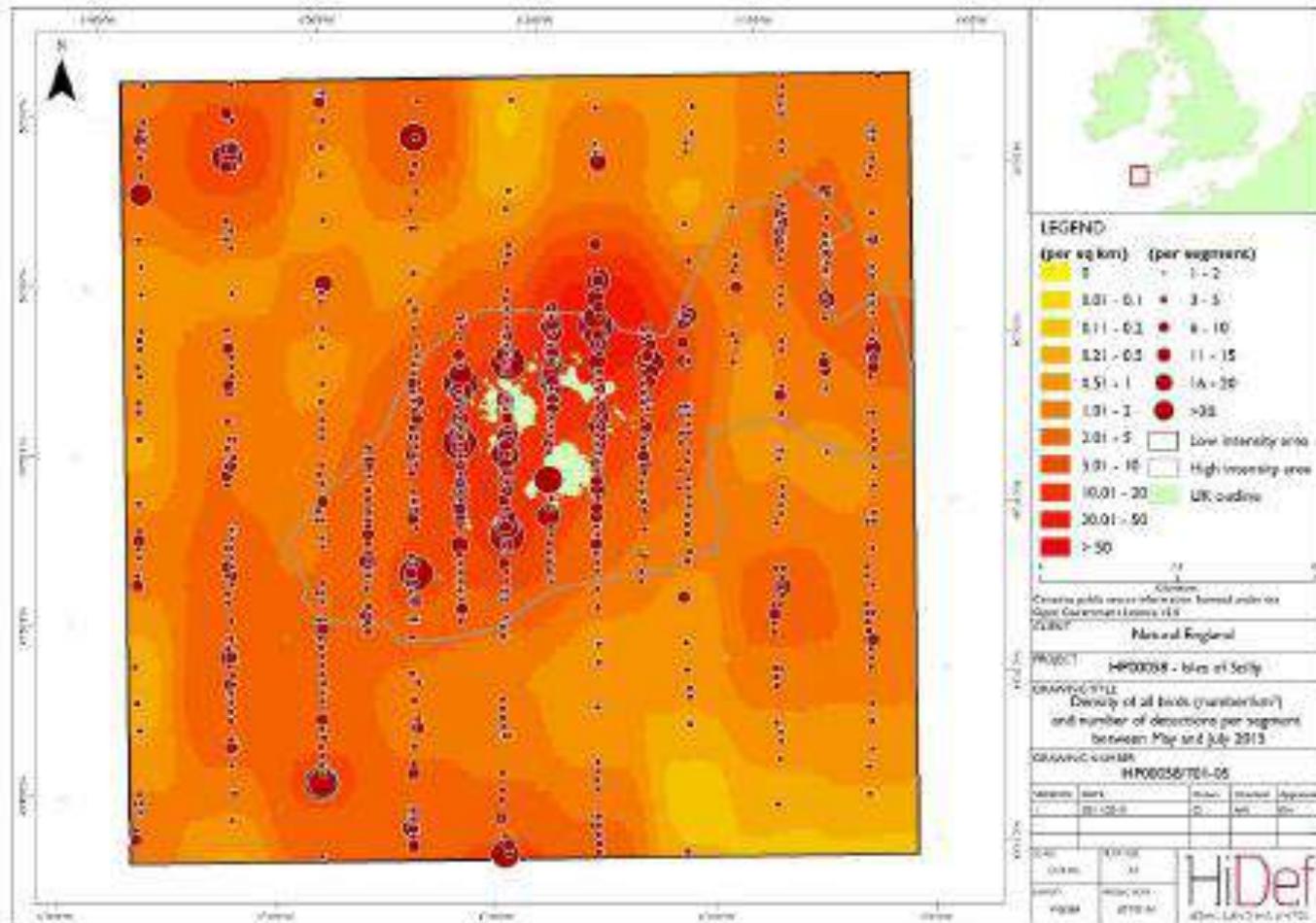


Survey design

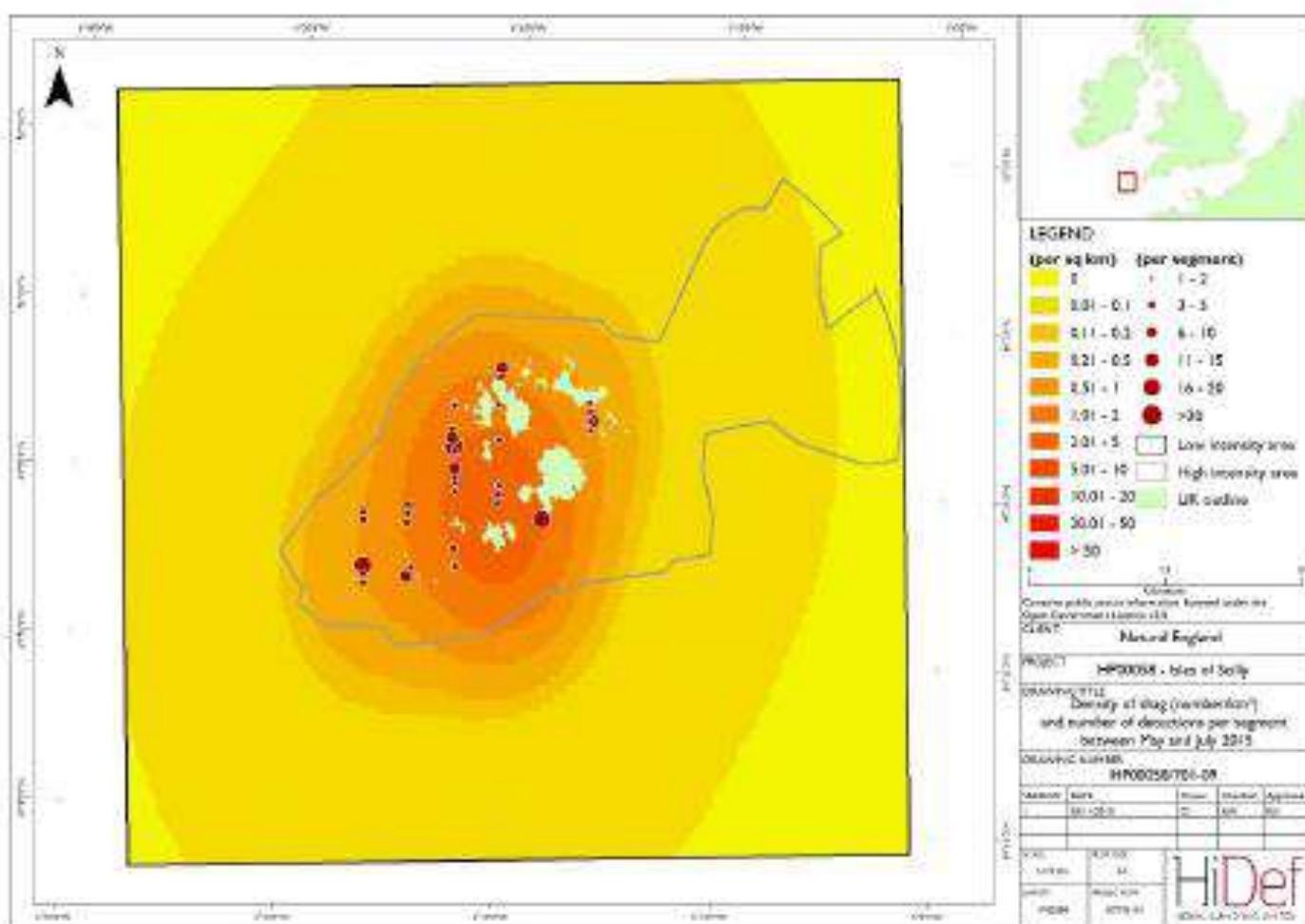
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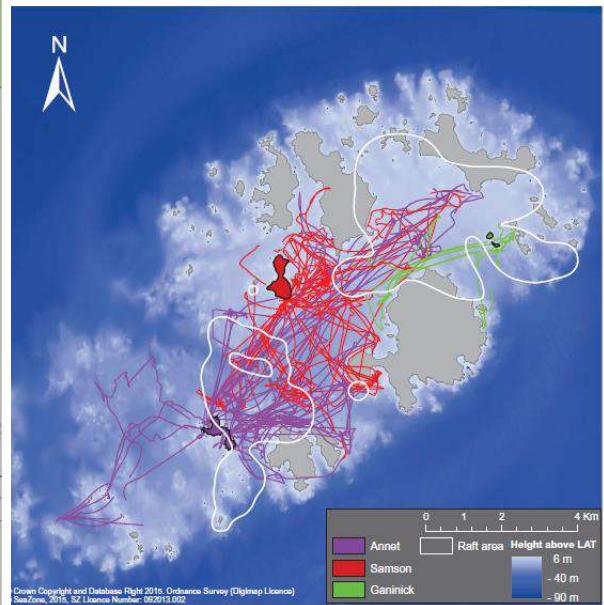
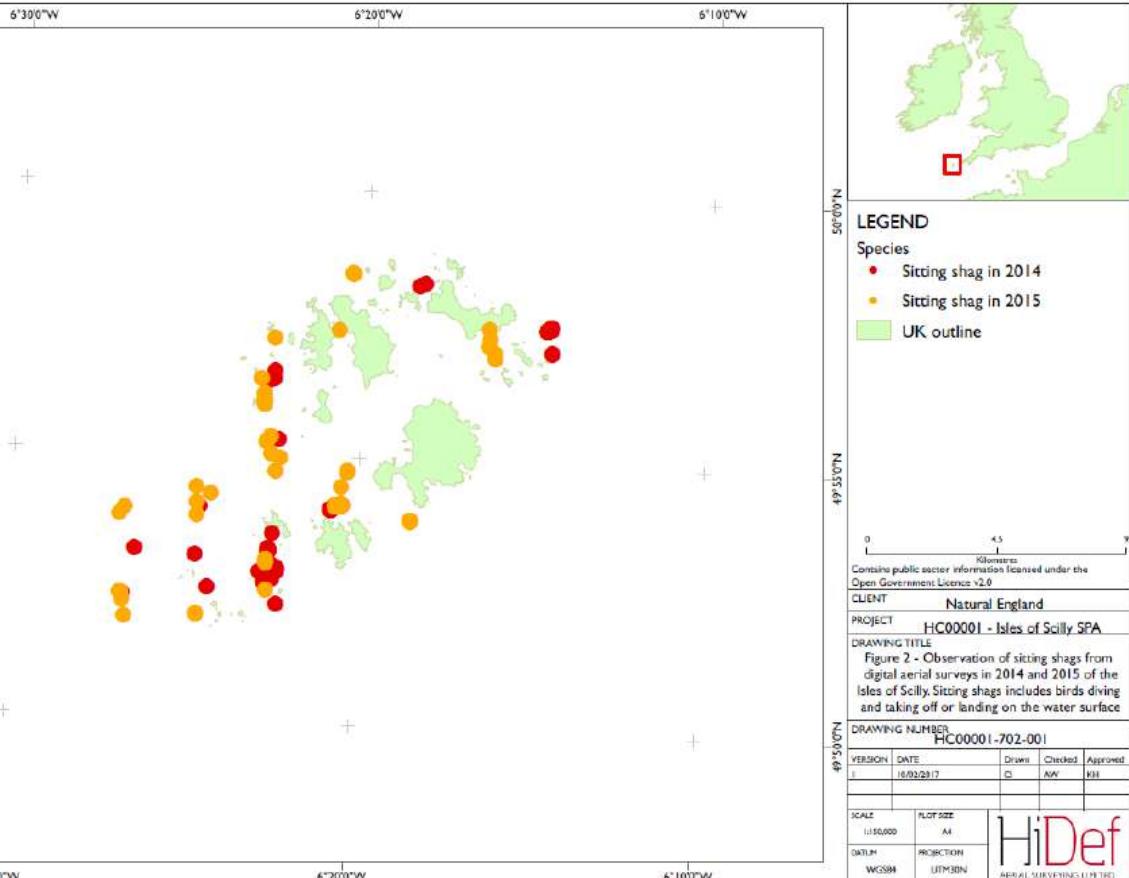
2015 results – all birds



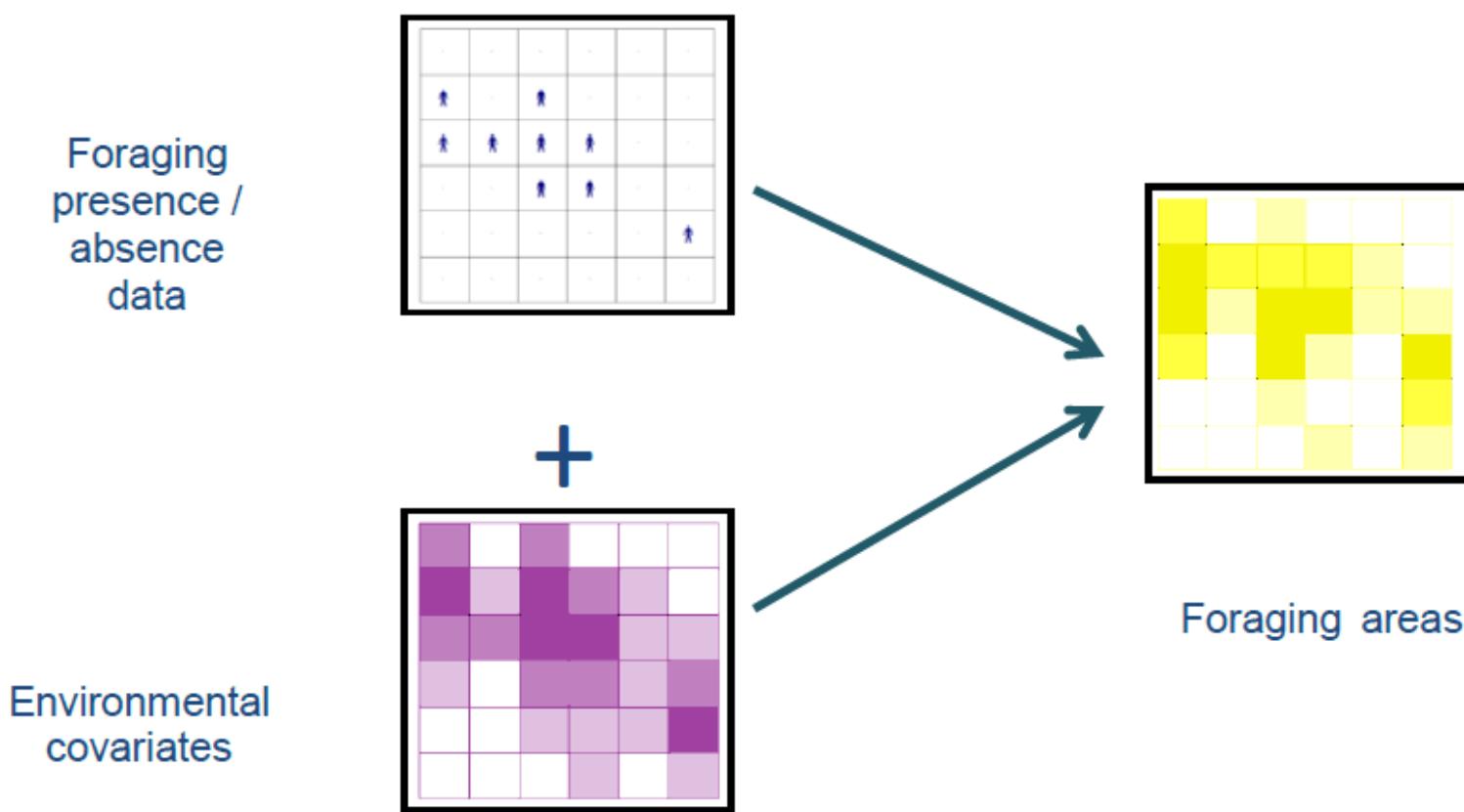
2015 results – shags



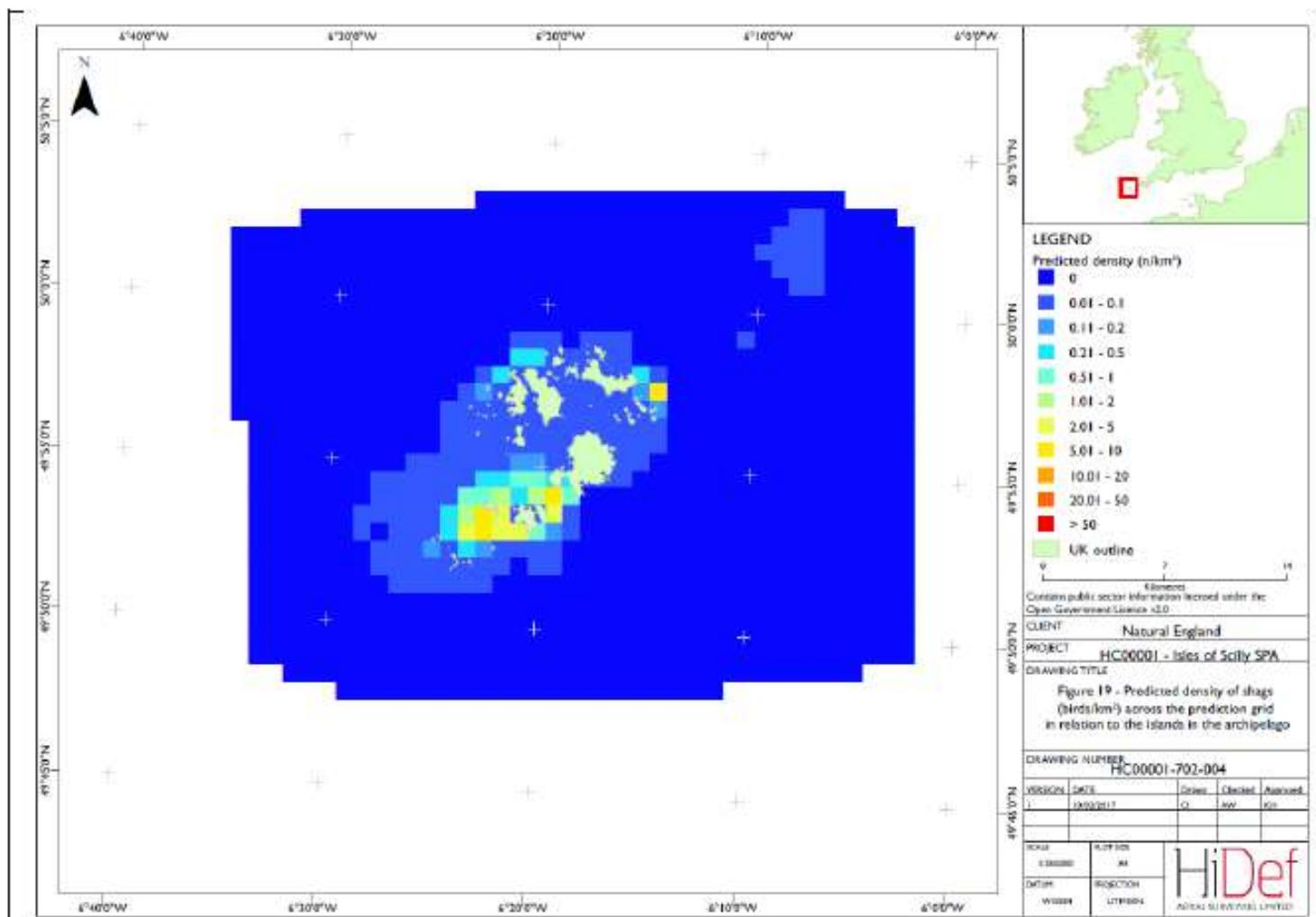
Digital aerial, tracking and rafting



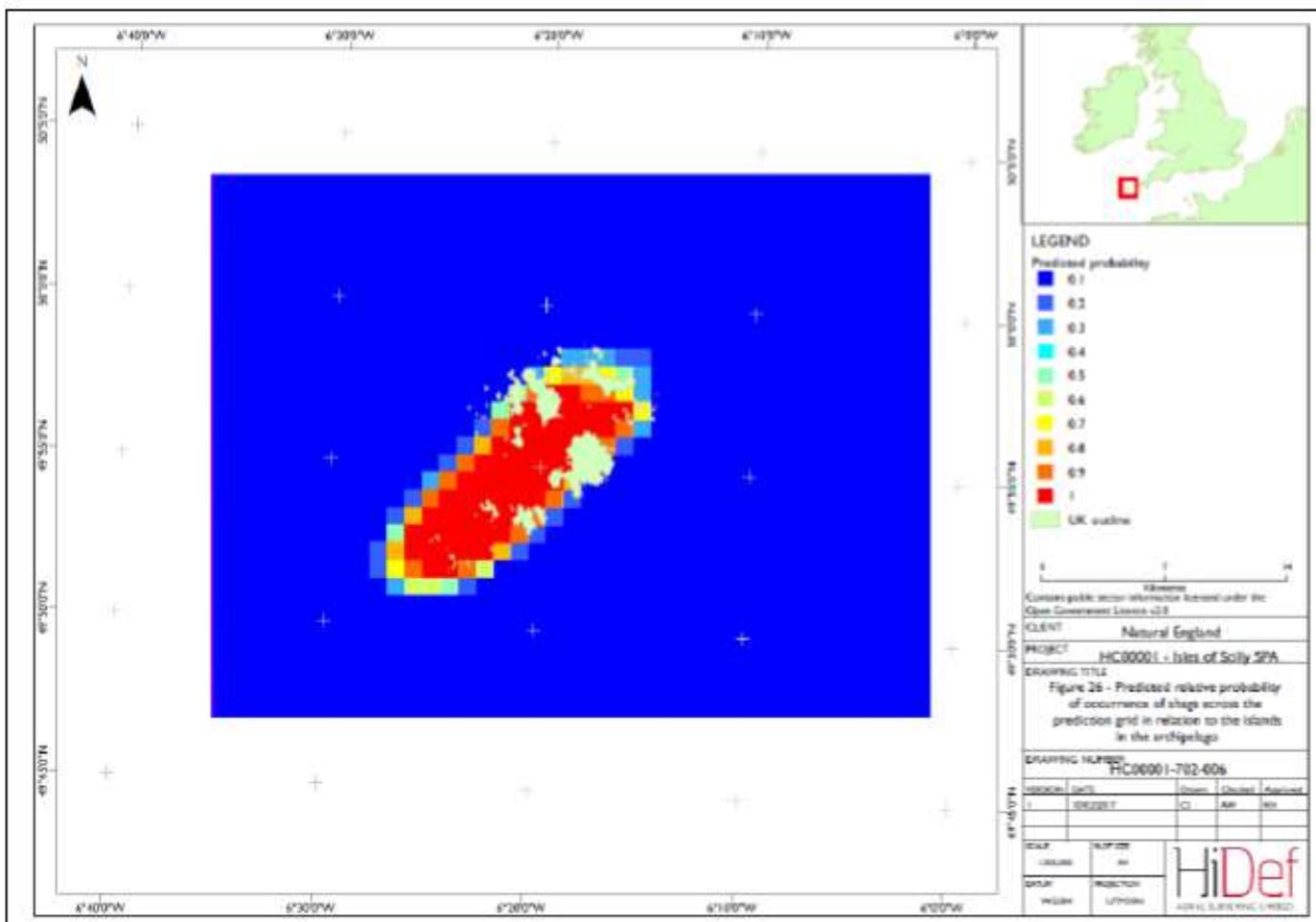
Density Surface Modelling



Models for Isles of Scilly – aerial

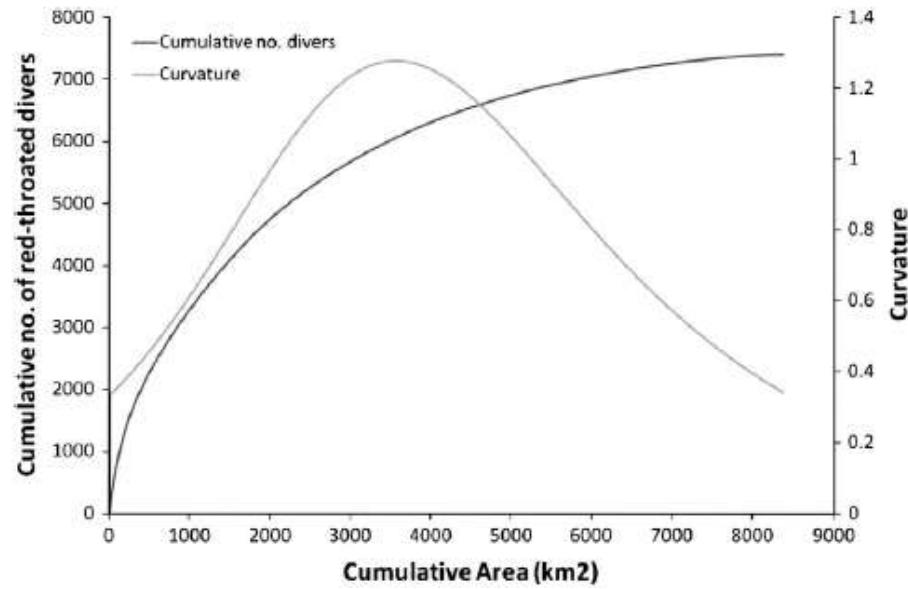
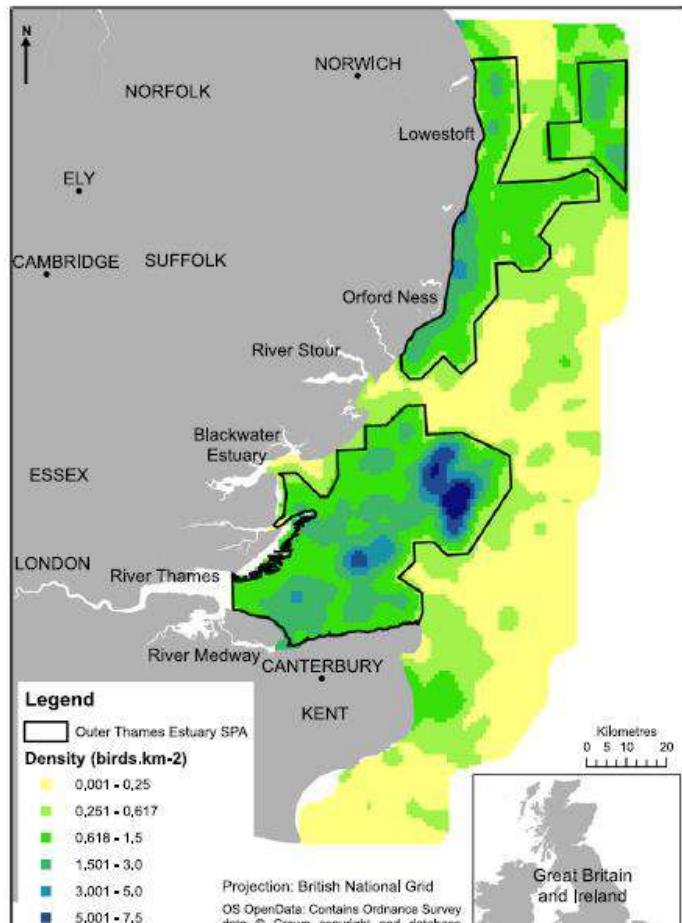


Models for Isles of Scilly – tracking



Defining a boundary – Maximum Curvature

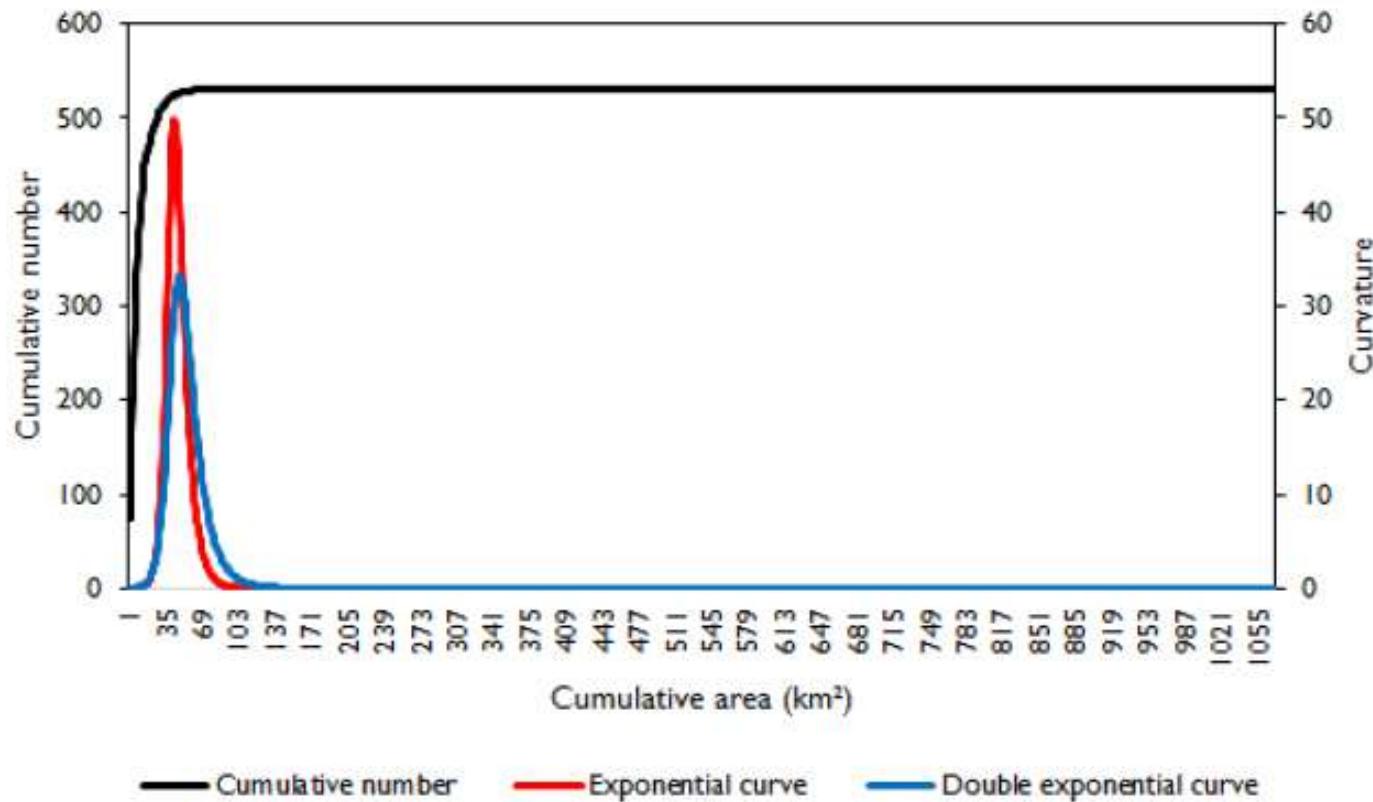
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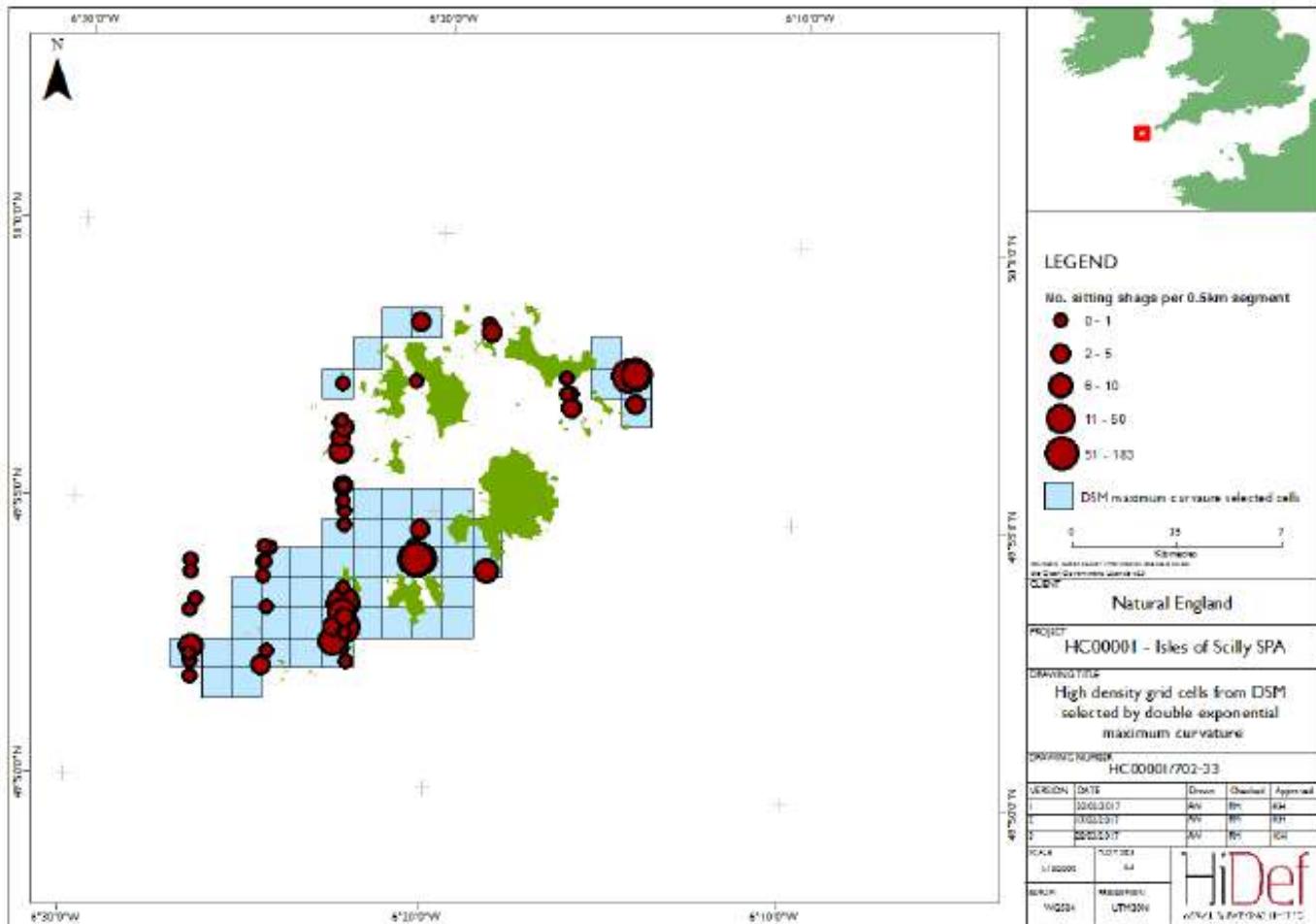
Applying Maximum Curvature to IoS

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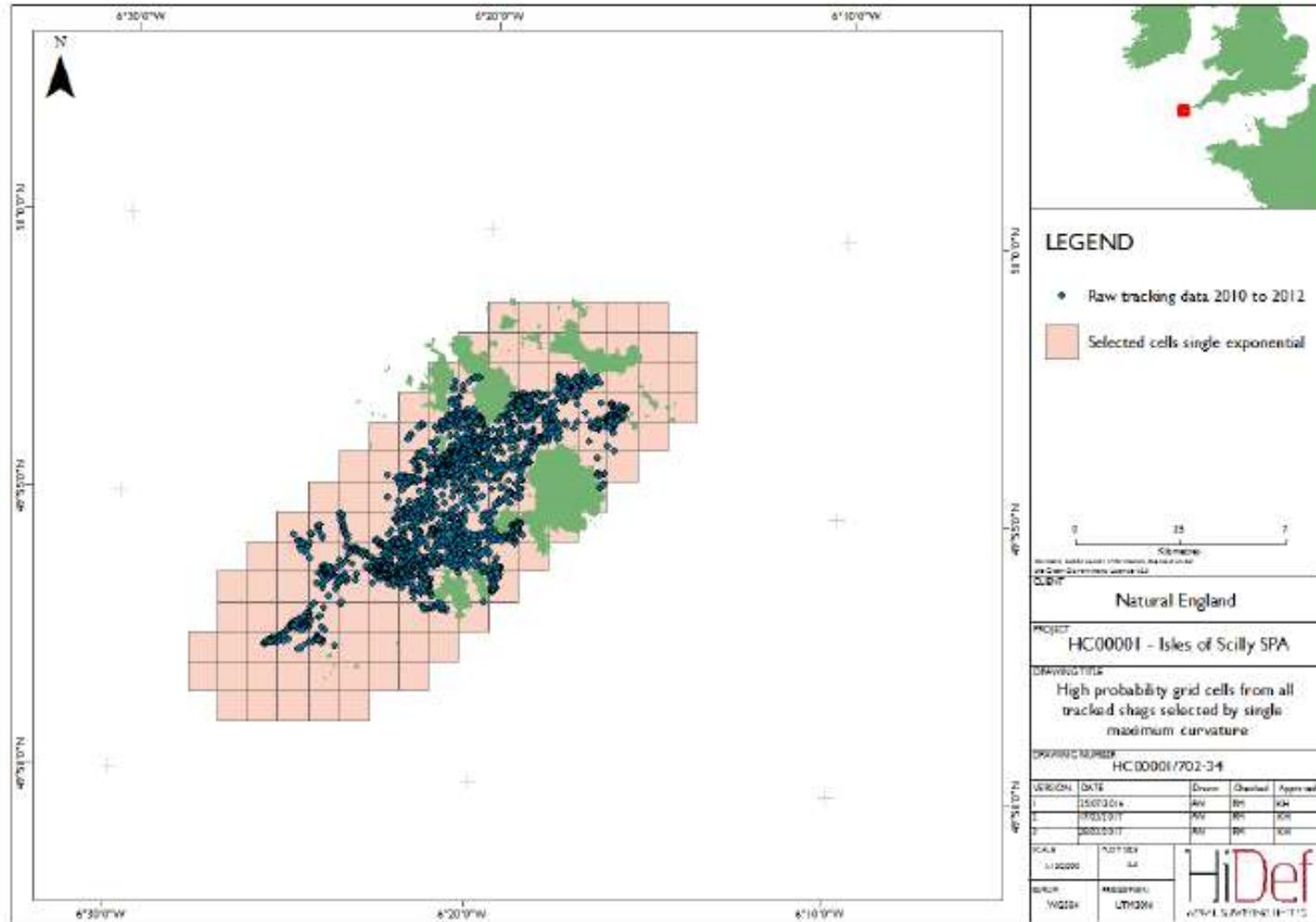
Figure 31 Cumulative number and maximum curvature in relation to cumulative area for sitting shags from DSM outputs using the point density estimate



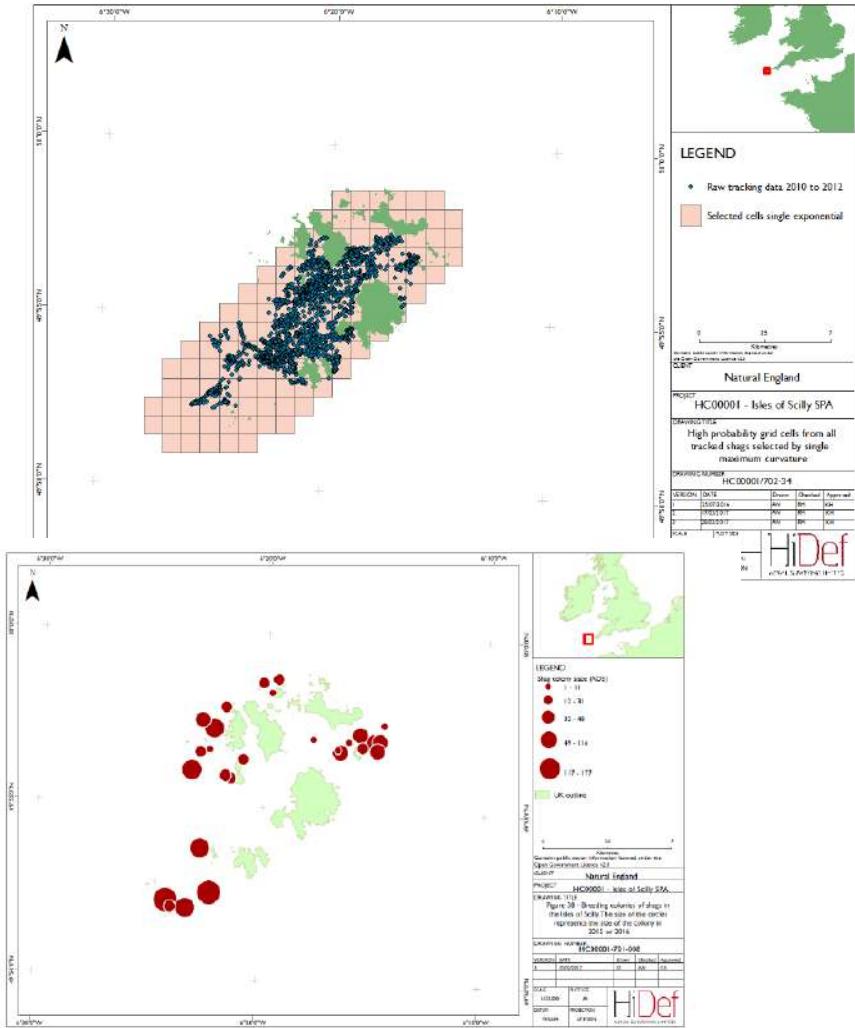
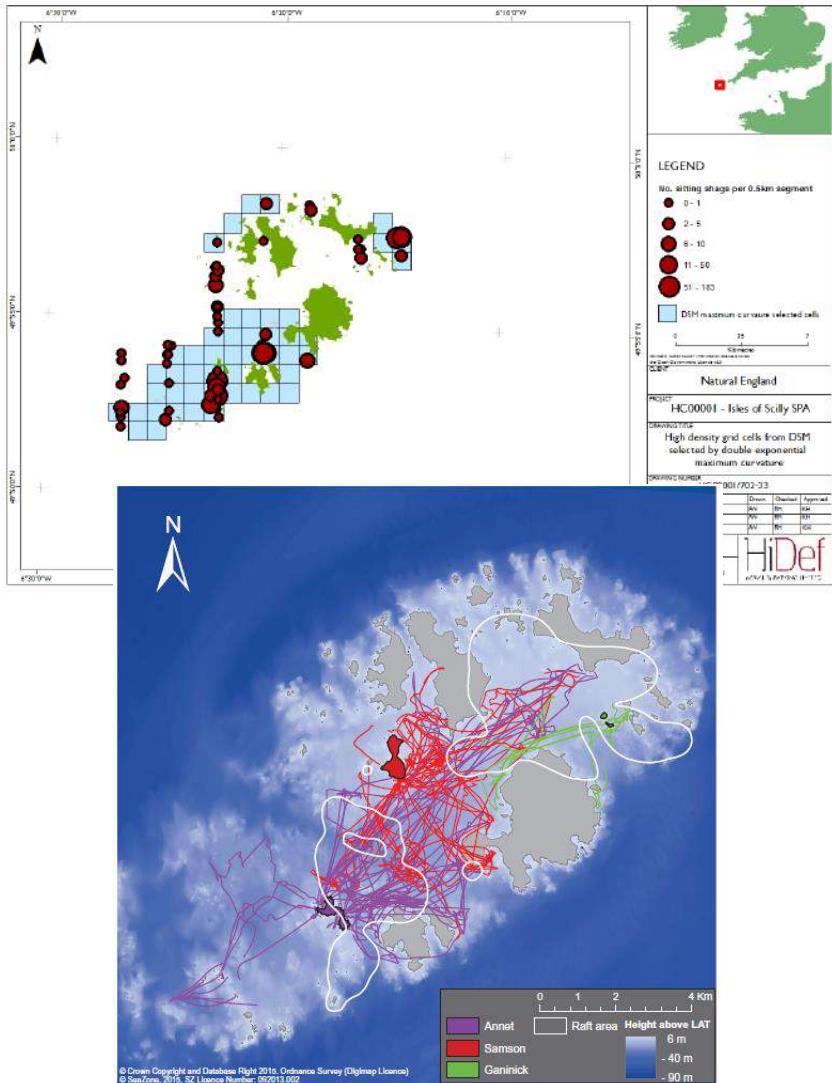
Applying Maximum Curvature – aerial



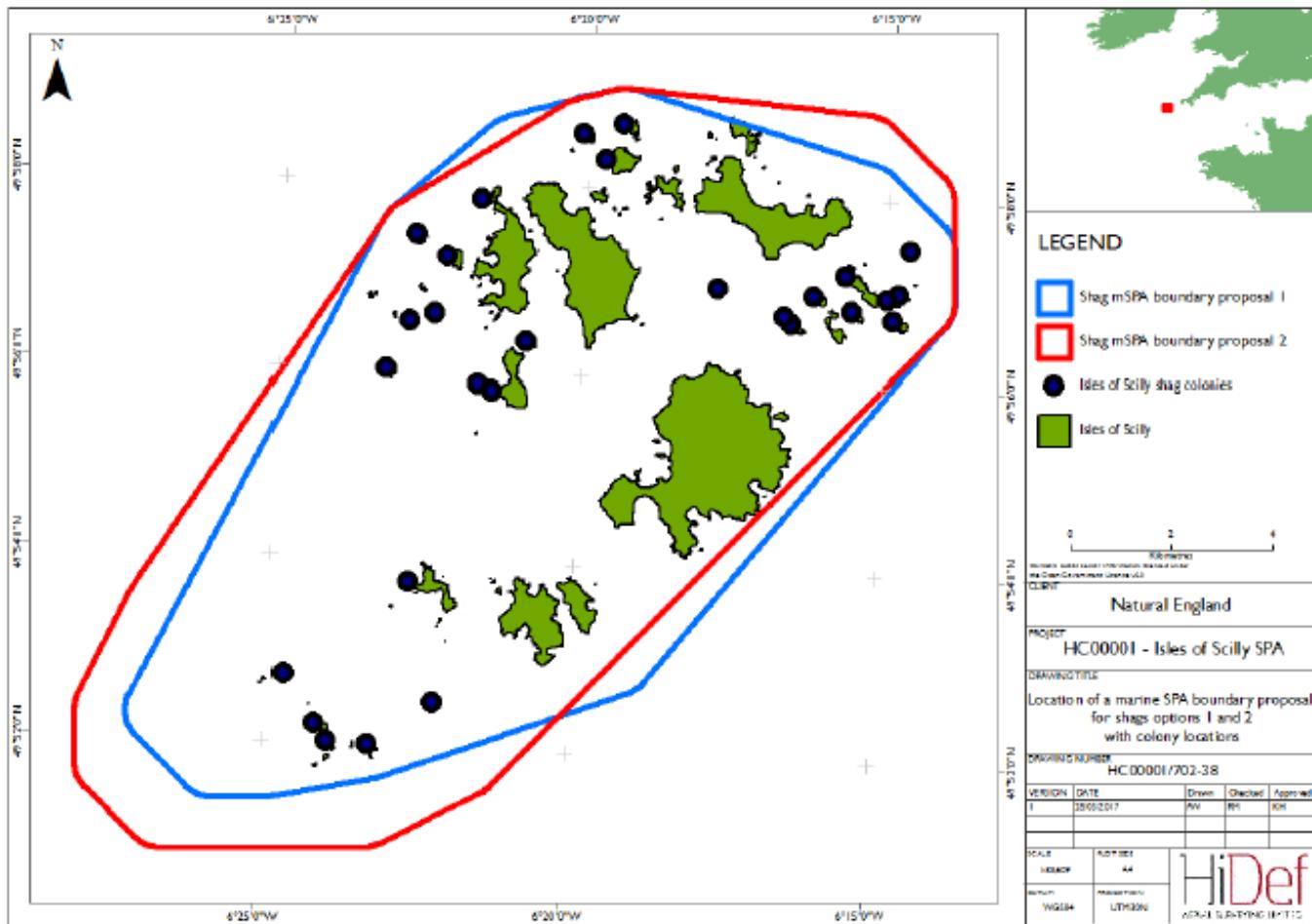
Applying Maximum Curvature – tracking



Boundary setting

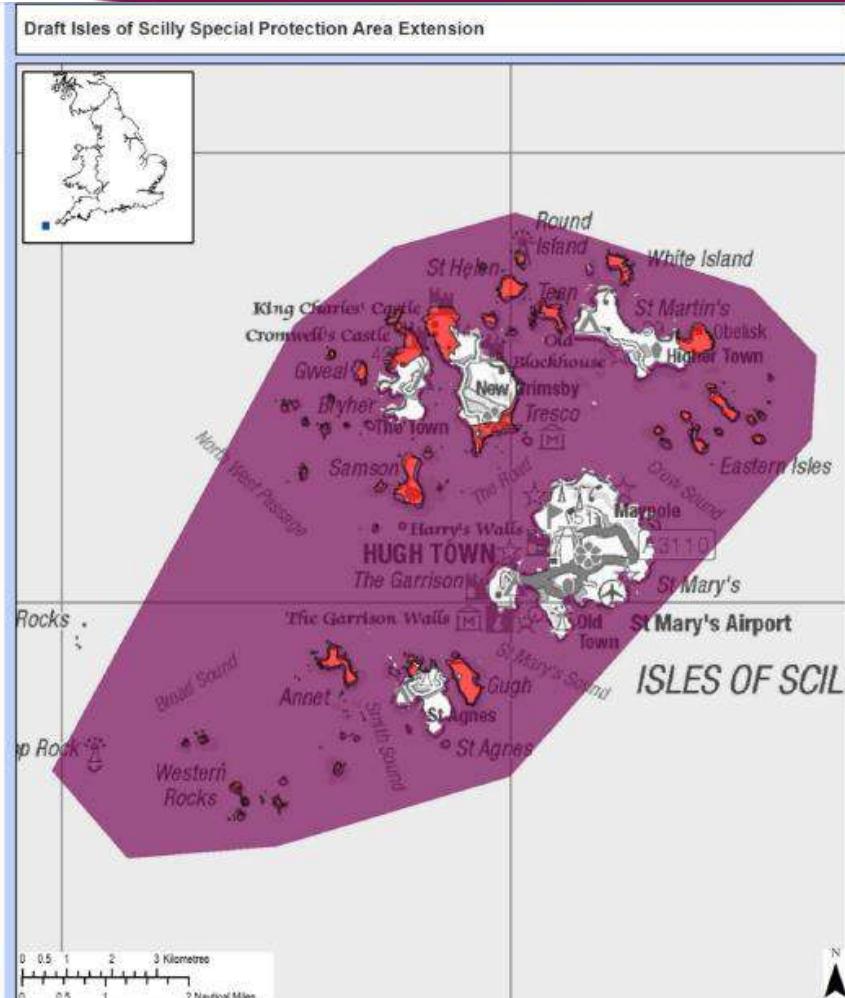


Boundary options compared



Proposed boundary

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<https://consult.defra.gov.uk/natural-england-marine/isles-of-scilly-potential-special-protection-area>



alex.banks@naturalengland.org.uk