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Movements of grey seals (*Halichoerus grypus*) in South West England using photo-identification.

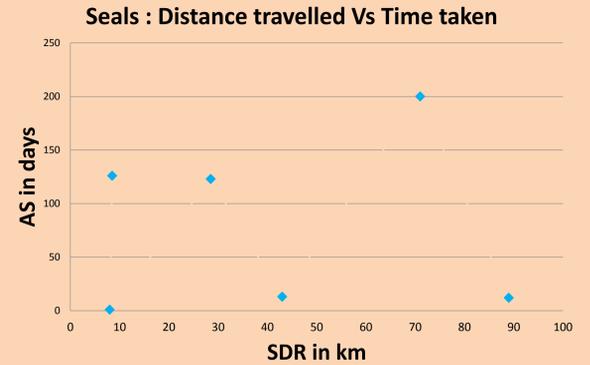
Method

Long term photo-identification is being used to learn about the complex grey seal movements around the South West of England (Cornwall, Devon and Isles of Scilly). A database of left and right seal neck and body profiles has been collected since 2000 from Godrevy on the north coast in west Cornwall. Smaller scale photo identification projects at other sites around the southwest coast, over more limited periods of time, have been visually compared to the Godrevy seal photo identification database, as well as photographs taken more opportunistically by locals and visitors. At least 5 marker patterns are required to confirm a positive identification of an individual seal.

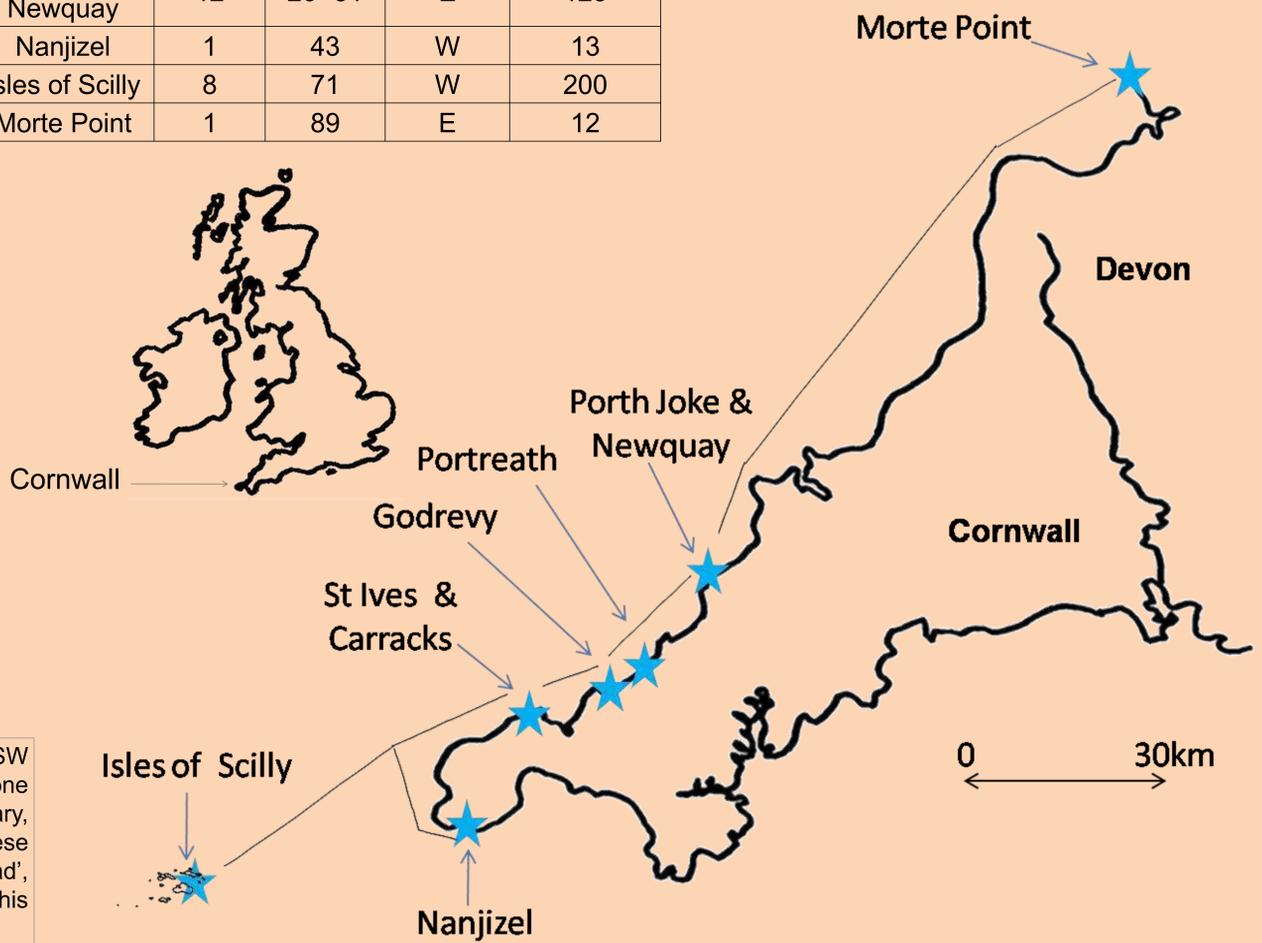
Results

So far, 29 different Grey seals from Godrevy have been identified at six other locations. 6 seals (3 male, 3 female) were seen at St Ives/Carracks, which is 6-11km west by the shortest sea distance route (SDR) with the average number of days between sightings at the two different sites (AS) being 126 days. 1 seal (male) was seen at Portreath, 8km east by SDR and was re-sighted at Godrevy 1 day later. 12 seals (8 male, 4 female) were seen at Porth Joke/Newquay 26-31km east by SDR with an AS of 123 days. 1 seal (male) was seen at Nanjizel, 43km west by SDR and was recaptured at Godrevy 13 days later. 8 seals (4 male, 4 female) were seen at the Isles of Scilly, 71km west by SDR with an AS of 200 days. 1 seal (female) was seen at Morte Point, Devon, 89km east by SDR and was recaptured at Godrevy 12 days later.

Second site of seal identification	Number of seals	Shortest sea distance route in km (SDR)	Direction from Godrevy	Average No. of days between sightings at 2 different sites (AS)
St Ives & Carracks	6	6 - 11	W	126
Portreath	1	8	E	1
Porth Joke & Newquay	12	26 -31	E	123
Nanjizel	1	43	W	13
Isles of Scilly	8	71	W	200
Morte Point	1	89	E	12



Credits for photos contributing to the identification of seals at sites in SW England, in addition to the authors' : Gary Blundell, Simon Bone (www.cornishseals.co.uk), Lisa Clarke, DBRC, Gweek Seal Sanctuary, Rob Jutsum, Mike Orman, Clive from www.cornishlight.co.uk, Genese Savage, NHS website and 'Richard and Gill', 'dyfski', 'long_tongue_toad', 'lindanutley' and 'w4v3crest' from Flickr website. Seal photos on this poster by Sue Sayer (DP41, DP143, S262) & Dave McBride (S163.)



Several notable movements were recorded, including DP41 'Seahorse' (male) at Godrevy on 01/09/03, Porth Joke 09/09/03 and Godrevy 13/09/03, swimming at least 50 km in 12 days; DP143 '3 Pearls' (male) at Godrevy on 15/03/08, Scillies 25/03/08 and Godrevy 27/03/08, swimming at least 140 km in 12 days and S262 'Ghost 2' at Morte Point on 08/09/08, Godrevy 20/09/08 - pupping on 23/09/08, having swum at least 89 km in 12 days. Whilst seals are known to swim considerable distances, our understanding of the connections seals make between these sites is important and informative to conservationists. As research continues and expands to other sites, a much greater understanding of individual seal (and age/gender group) seasonal movement patterns can be learned.



DP143 : 3 Pearls (Adult male)



S262 : Ghost 2 (Adult female, 3 days before pupping)



S163 : Wriggle (Adult female, 32 days before pupping)

Future seals surveys will develop our understanding of seal links across the Celtic Fringe.

For more information about the work of Cornwall Seal Group, visit www.cornwallsealgroup.co.uk or email sue@cornwallsealgroup.co.uk