



Tracking the Solent's Seals

Jolyon Chesworth
Marine Conservation Manager
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Hampshire & Isle of Wight
Wildlife Trust

Protecting wildlife. Inspiring people.



Solent Seals Project

- Two resident species



Grey seal

- Up to 2.3m in length
- Roman nose with parallel nostrils
- Pup in Sept to Dec
- More frequent in rocky areas
- 45% of global population



Harbour (common) seal

- Up to 1.8m in length
- Dog like nose with 'V' nostrils
- Pup in June / July
- More frequent on sand / mud flats
- 35% global population

Population Trends and conservation

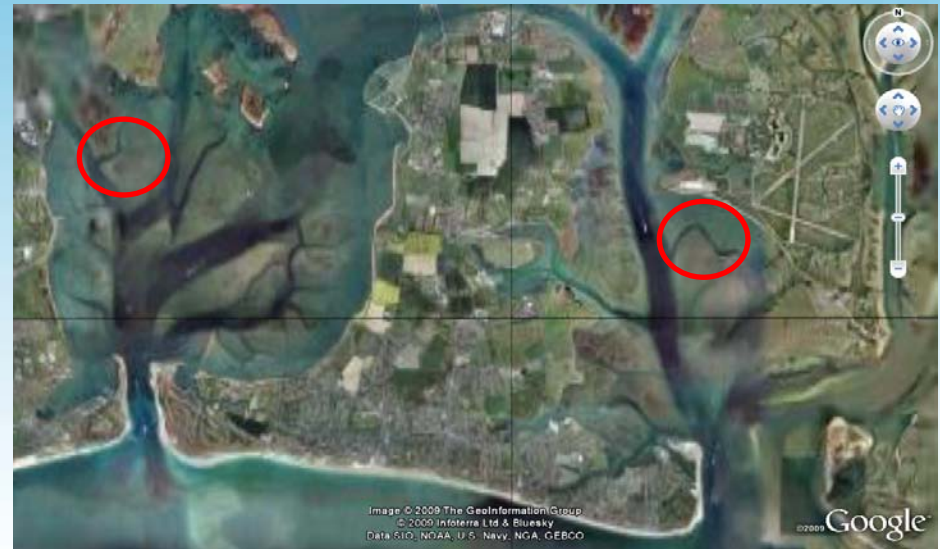
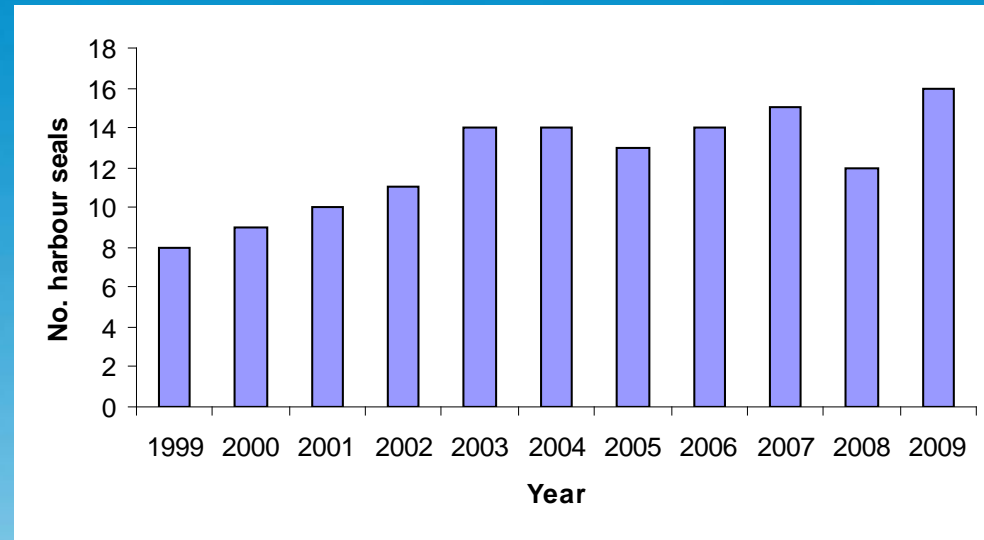
- Grey seal increasing
- Harbour seal declining
- Causes unknown
 - Phocine Distemper Virus
 - Competition
 - Predation
- Both Priority BAP species
- Both Annex II species



Solent and SE Seals

- What we do know

- Uncommon in the Eastern English Channel
- Resident population of harbour seals in the Solent
- Established in approx 1994
- 2 main haul-outs



Seals in unusual places



Grey seal on
Lymington Bridge



River Ouse near Hamsey



Harbour seal up River
Itchen, St Denys

Solent and SE Seals

- What we don't know
 - How many seals
 - foraging and breeding areas
 - Ages and sex
 - Migrations – PDV transmission
- Not accounted for in local management and conservation plans



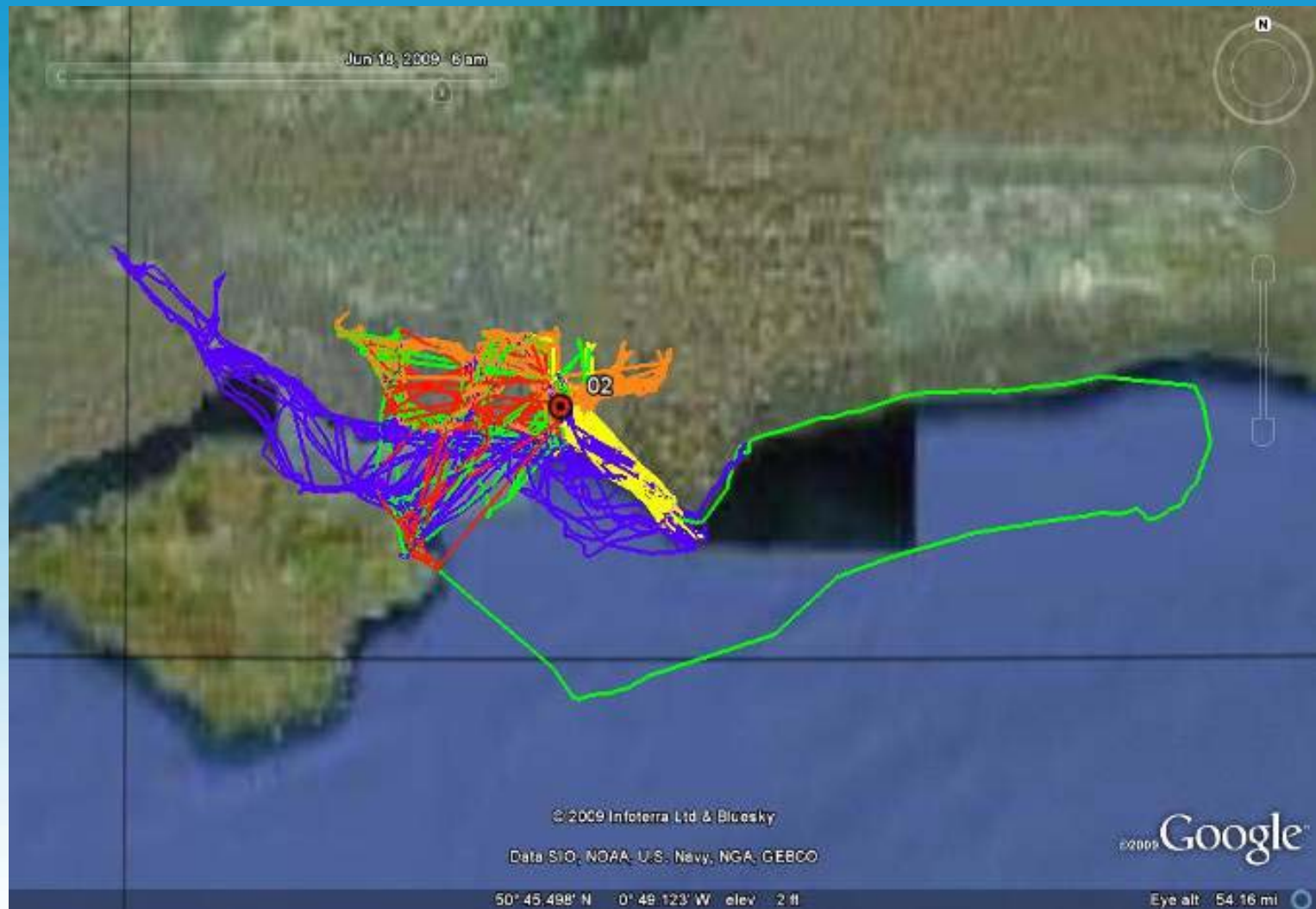


GPS Tagging

- Developed by SMRU
- Last approx 5-6 months, or until seal moults
- Collects GPS and dive data
- Transmits on mobile phone network
- Tagging process

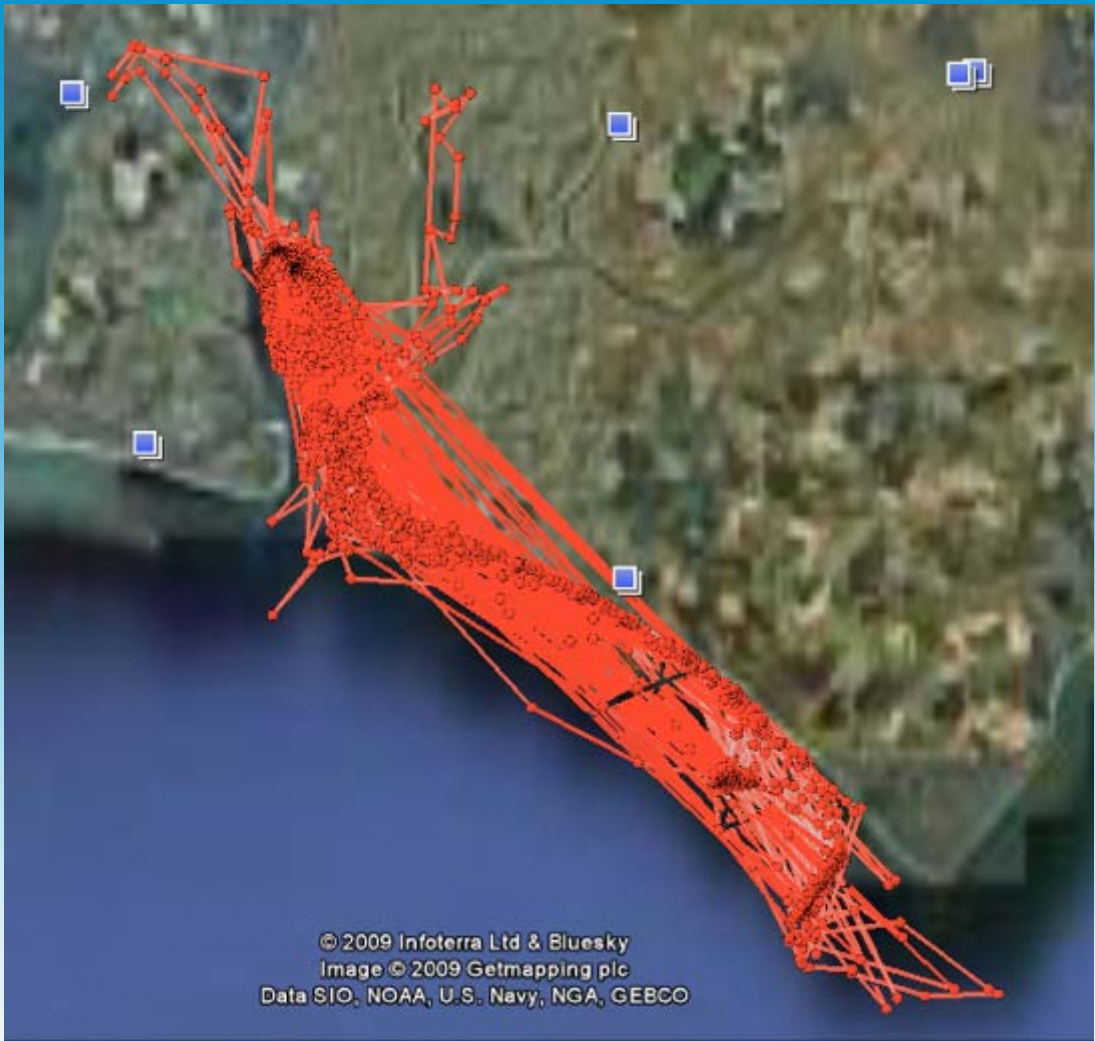


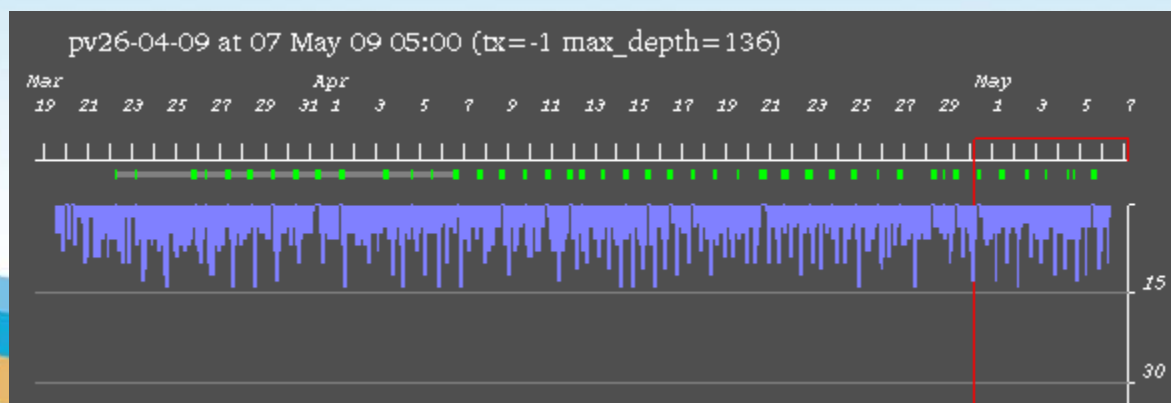
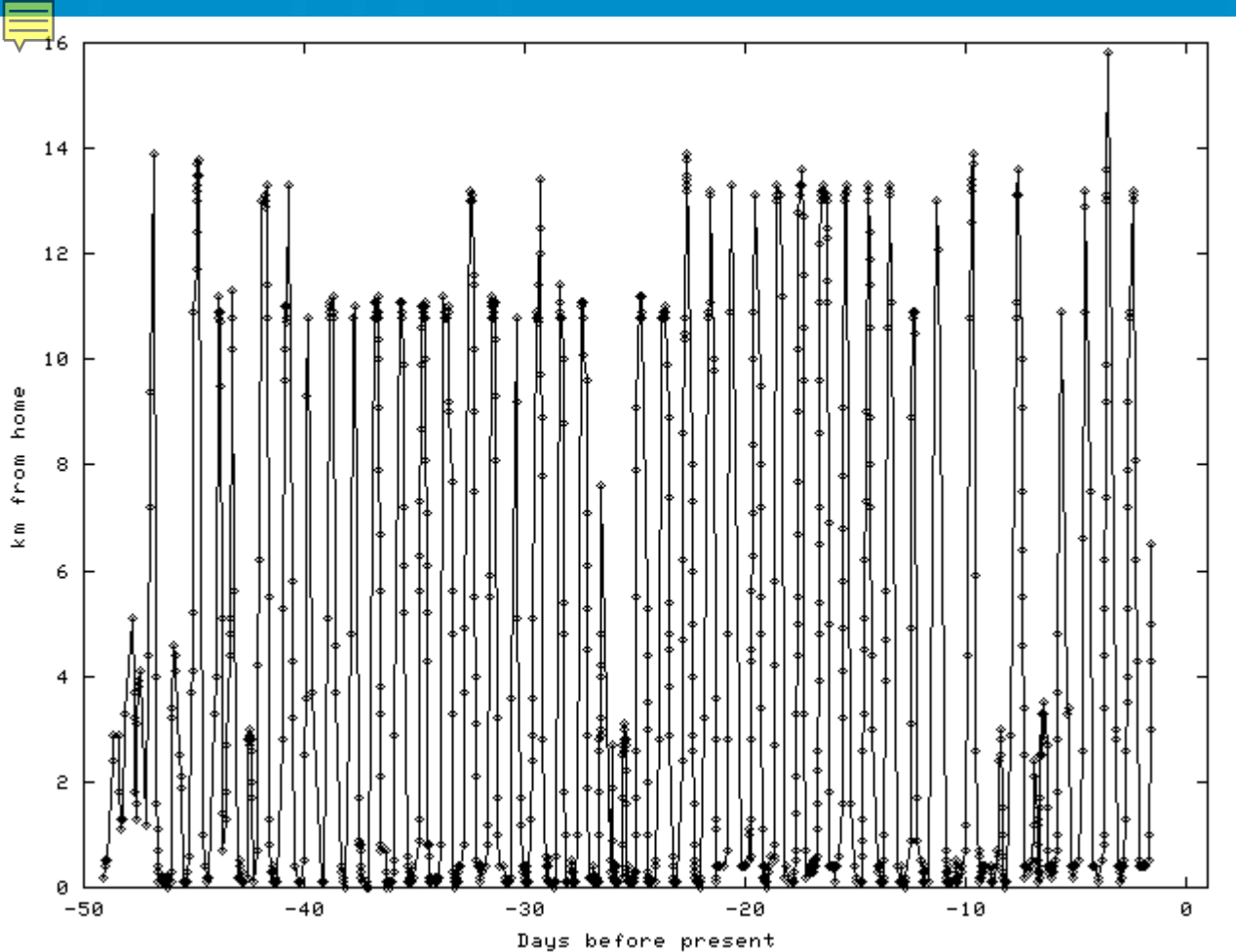
Tagging results





- Seal 4 – Caught in Chichester, juvenile female
- Localised foraging, very specific



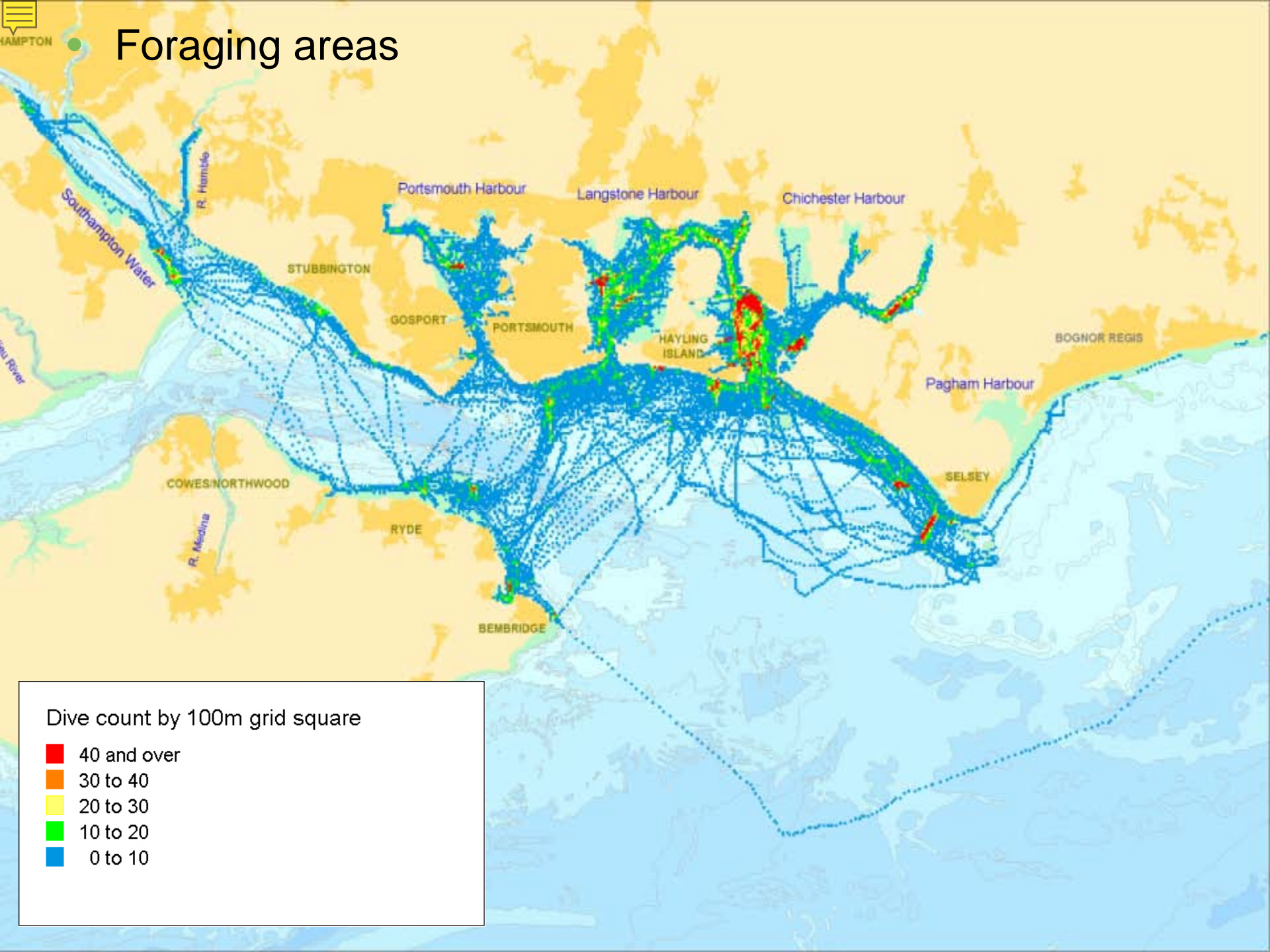




- Seal 5 – Caught in Chichester Harbour
- Adult male
- Most wide ranging
- Uses all harbours and IoW



● Foraging areas



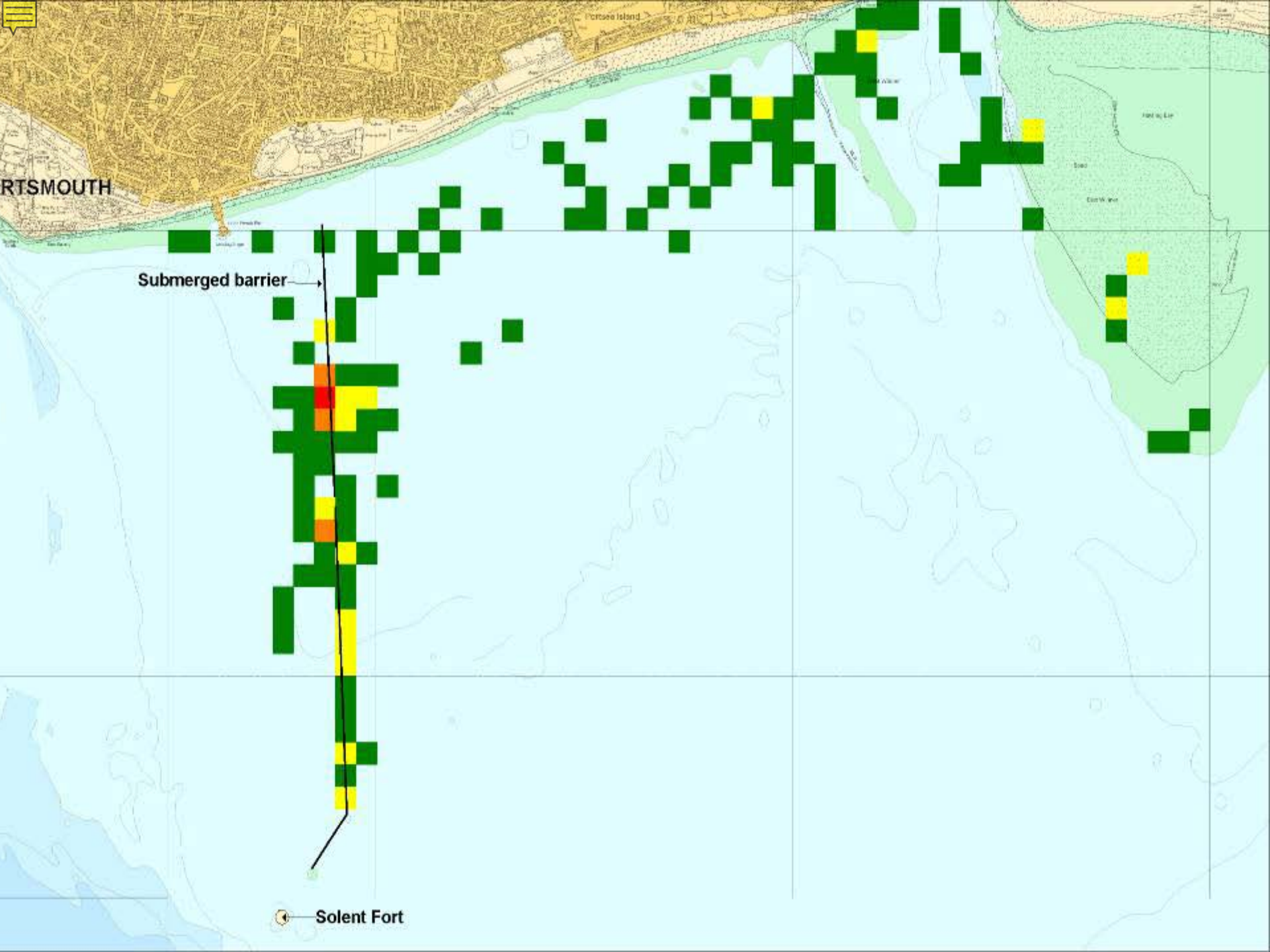
Dive count by 100m grid square

- 40 and over
- 30 to 40
- 20 to 30
- 10 to 20
- 0 to 10

PORTSMOUTH

Submerged barrier

Solent Fort





The Hounds Rocky Reef

The Streets Rocky Reef

The Mixon Rocky Reef

SELSEY

Backbeem Bay

Backbeem Bay

Selsey Bay



ST HELENS CP

BEMBRIDGE HARBOUR

St Helena Fort
GIS OF WIGHT
SOUTH EAST ISLE
ISLE OF WIGHT CO LONEST
ST HELENS CP

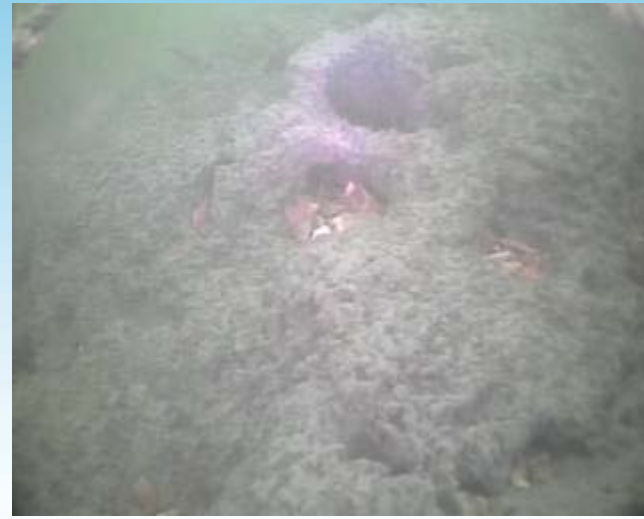
Bembridge

BEMBRIDGE

Rocky Ledge

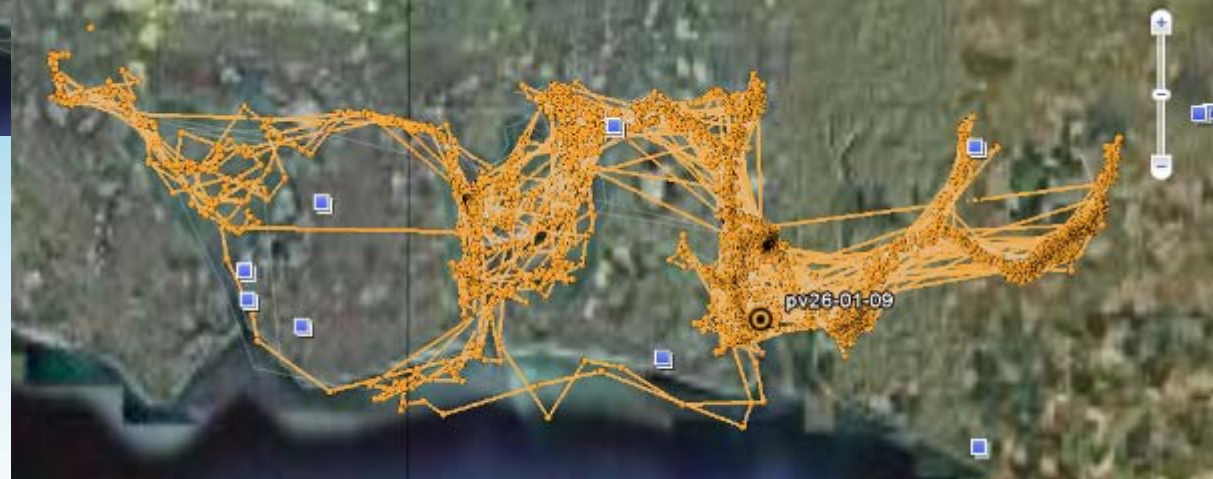
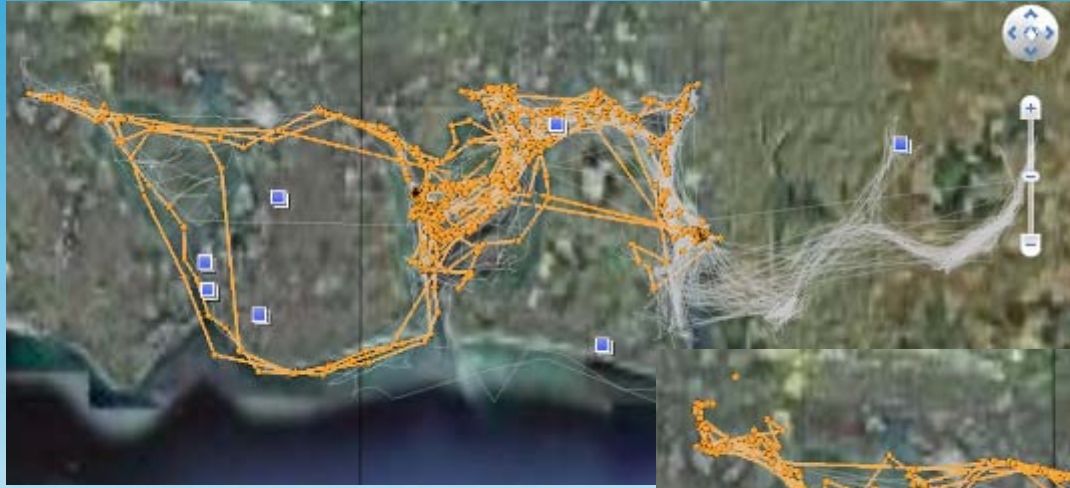


Video survey of foraging sites



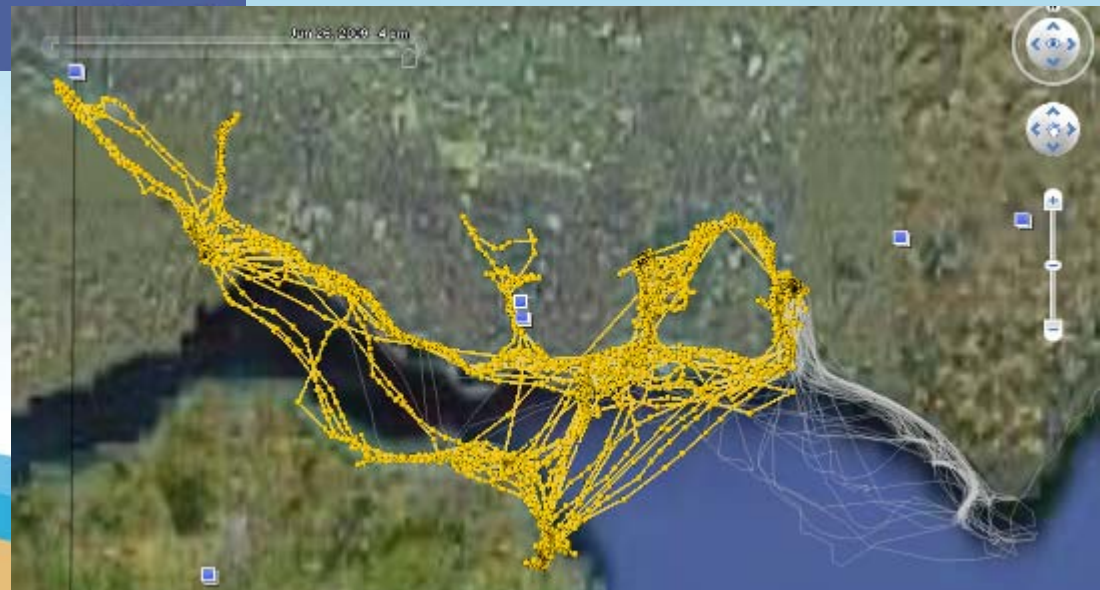
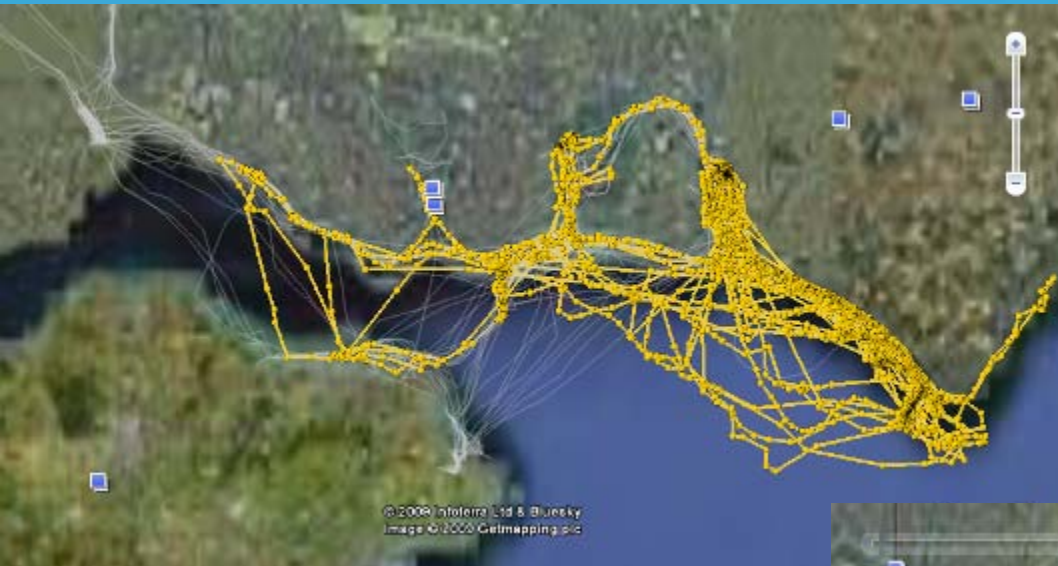
Temporal foraging behaviour

- Seal 1 didn't enter the Chichester Channel for first month, then made many foraging trips there to Itchenor Reach and Bosham Channel



Temporal foraging behaviour

- Up to May seal 3 made regular foraging trips to Selsey, in May switched to Southampton Water

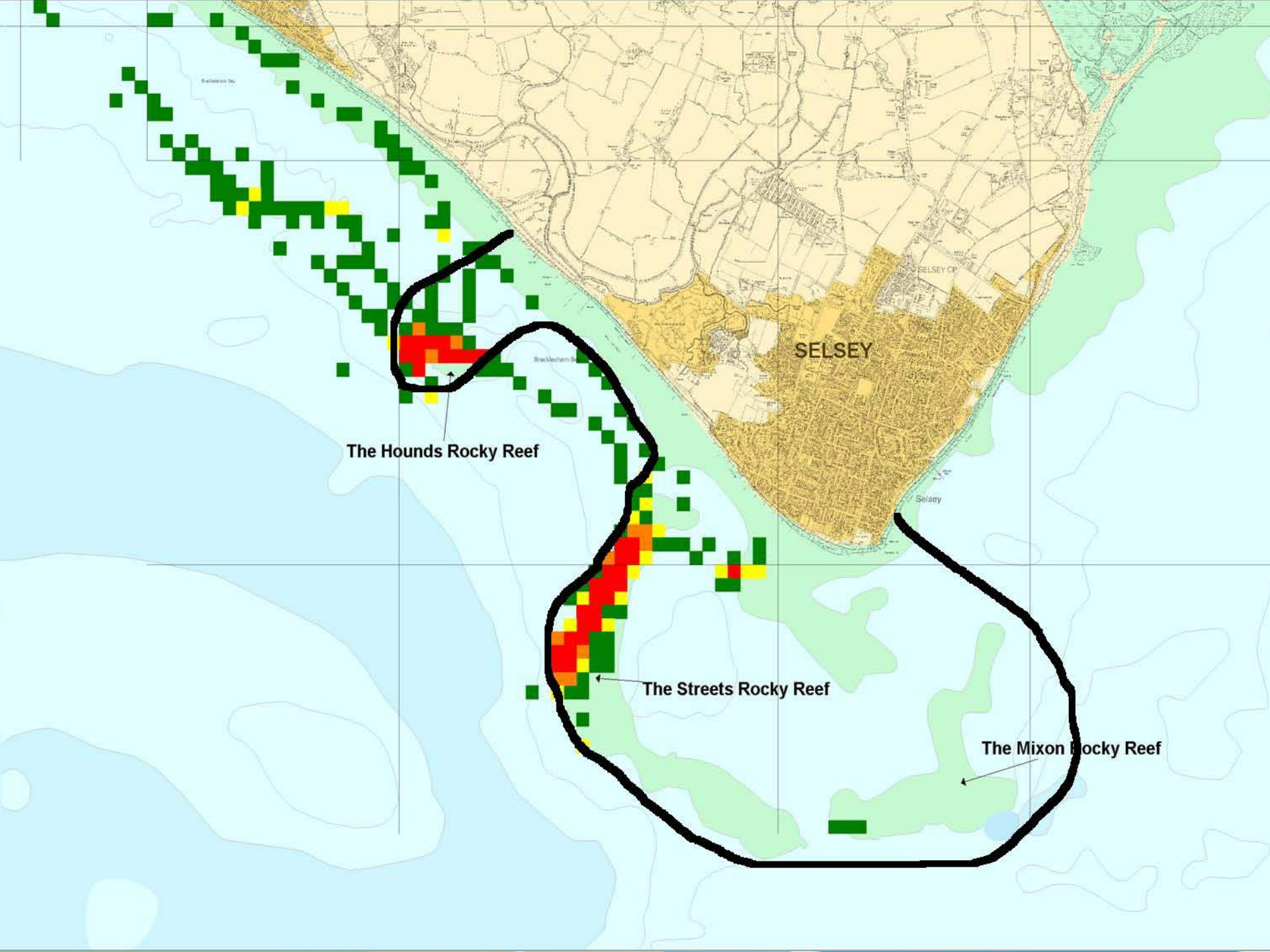






Conservation impact

- Data used in various development proposals
- Solent European Marine Site
 - Small population, not internationally significant
- Marine Conservation Zones
 - Not a Species Feature of Conservation Interest
 - Are a SE Feature
 - Areas of Additional Ecological Importance – feeding and loafing
- Selsey Bill



The Hounds Rocky Reef

The Streets Rocky Reef

The Mixon Rocky Reef

SELSEY

Selsey

Brackhampton

SELSEY CP



Image Alex Mustard