



### Cornwall Seal Group Research Trust

Evidence based conservation charity (no.1162936)

- Passionately protecting Cornwall's precious marine environment
- Identifying and monitoring local seals
- Researching; communicating; engaging and conserving
- Giving seals a voice in policy, planning and management

- The UK has 38-44% World's population (on the basis of pup production)
- Less grey seals in the UK than red squirrels
- Grey seals are a UK special responsibility species (JNCC)

### Volunteer driven

### 2016 alone

- 2867 seal records
- 190 volunteers including
   24 individual systematic surveyors
- 4 systematic team surveys
- 195 locations across Cornwall, Devon and the Isles of Scilly

### CSGRT personnel

Trustees: Sue Sayer, Kate Hockley Dan Jarvis, Phil Knight, Richard Morton

Steering Group: Sue Sayer (Chair), Kate Hockley (Treasurer), Dan Jarvis (Secretary)

Scientific Advisors: Bex Allen, Dr Lucy Hawkes and Dr Matthew Witt

Veterinary Advisors: James Barnett, Katie Lewis and Darryl Thorpe

Senior Surveyors: Kate Hockley and Sue Sayer Bird Advisor: Dave Williams

Ghost Gear Data Manager: Kate Williams

Rope Safety Advisors: Chris Howell and Phil Knight BDMLR Liaison: Dan Jarvis and Dave Jarvis

Cornwall Seal Sanctuary Liaison: Claire Fraser RSPCA West Hatch Liaison: Kirsten Larcombe

Cornwall Wildlife Trust Liaison: Abby Crosby and Claire Lewis (Looe Island)

National Trust Liaison: Cat Lee (Lizard) Richard Pope (West Cornwall) and Steve Sudworth (West Cornwall)

Post Mortem Liaison: Kelly Astley, James Barnett and Dan Jarvis

### Personal and Professional Assistants:

Marion Beaulieu

Charlotte Bell

Katie Drake

Leyla Woodfine

#### Affiliated seal friendly boat operators:

Atlantic Diver

Tiburon Boating

#### PIP Survey Coordinators:

Bex Allen (STAPIP)

Martin Gregory (LISPIP)

Sarah Millward (POLPIP)

Tina Robinson (POLPIP)

Derek Spooner (LISPIP)

Sue Sayer (CASPIP)

Mike Taylor (STAPIP)

Dave Williams (All boat PIPS)

### PIP Report Writers

- Jasmin Gregory (LISPIP)
- Martin Gregory (LISPIP)
- Sarah Millward (POLPIP)
- Sue Sayer (all)
- Mike Taylor (STAPIP)
- Ross Wheeler (CASPIP)

Survey Team: Numerous amazing volunteers around Devon and Cornwall who systematically survey their local patch at least once a month

### IT and Data Consultant: Dan Murphy

### Photography Consultant:

Web Manager: Edd Hurst

- Adrian Langdon
- Dan Murphy

#### ID Area Coordinators

- Katie Drake (Pentire)
- · Jean Lawman (Coastwatch Gwennap)

Research

Rob Wells (St Austell Bay and Roseland)

#### **ID** Team

- Marion Beaulieu: West Penwith North
- Katie Drake: West Pentire
- Alec and Enid Farr: Lizard
- Jes Hirons: Mounts Bay
- Dave Jenkins: North Devon
- · Marine Discovery: Mounts Bay
- Newguay Sea Safaris: Newguay Harbour
- · Wendy Sargeant: North Cornwall West
- Jenny Simpson: Padstow Bay
- Terry Thirlaway: Lizard
- Rob Wells: St Austell Bay and Roseland
- · Kate Williams: North Devon

#### Student Team:

- Ellie Bearcroft (Falmouth University)
- Fleur Brochut (University of Neuchatel)
- Billy Heaney (University of Exeter)





# Population appears stable despite healthy pup numbers

**CSGRT Cornwall census** 

NE IOS special Area of Conservation condition Assessment Monitoring CWT Marine Strandings Network data

(high mortality – bycatch, entanglement, strandings; entanglement, pollution and disturbance reducing survivorship; emigration from habitat loss, prey depletion or sub optimal conditions?????)

So seals need our help more than ever!

## Natural England contracts

Isles of Scilly Special Area of Conservation
Condition Assessment Monitoring

Sea Cave Research Protect and Cornwall pup count

## Isles of Scilly







## Cornwall





### Seal census

2016

### **Effort**

Census 7<sup>th</sup> to 11 April 2016 – preferred survey day 7th April (4 surveys completed on 6<sup>th</sup>). 25 survey teams, one land based LISPIP survey and one POLPIP boat transect survey 51 sites in 38 areas surveyed (23 sites had no seals)

## Cornwall Seal Group Research Trust

### Census

7<sup>th</sup>-11<sup>th</sup> April 2016

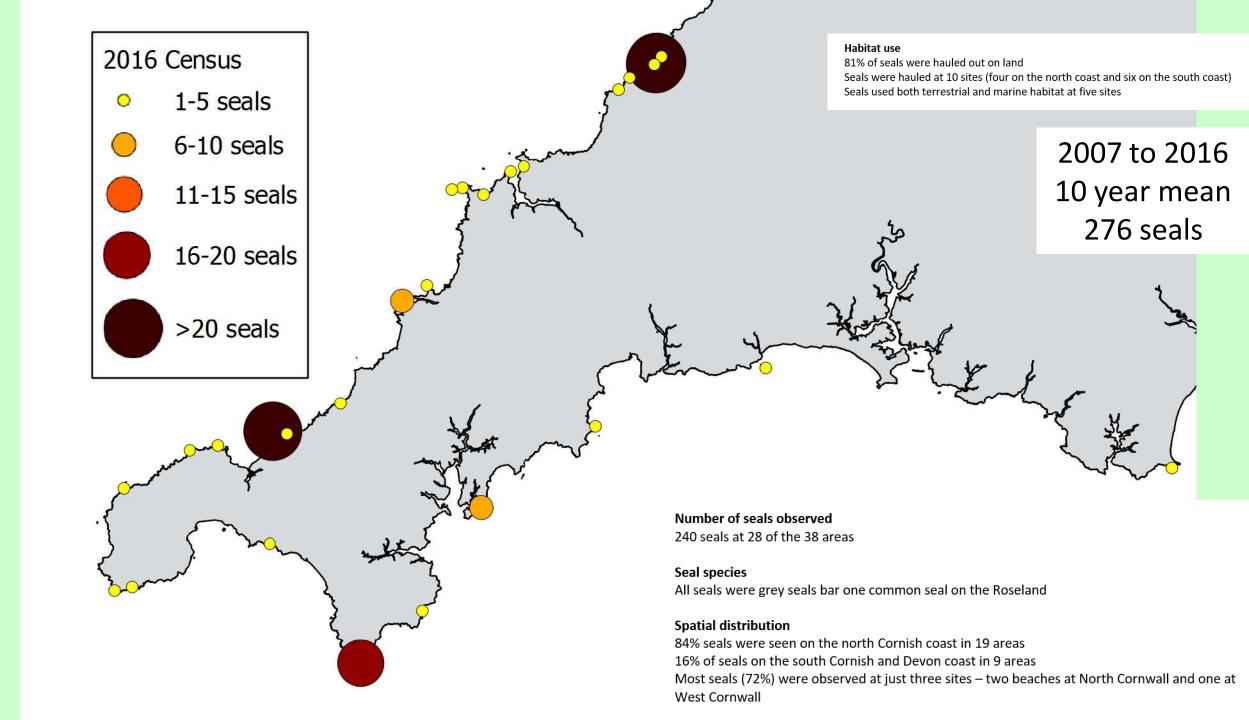


Data collected for CSGRT by volunteers Report written by Sue Sayer









### Acknowledgements

A huge 'thank you' to all the individual volunteer surveyors, teams of recorders, boat operators (Atlantic Diver), local Marine Conservation Groups and Cornwall Wildlife Trust. Your efforts are hugely appreciated.



To replicate this protocol in other seal seasons – July (summer) and October (pupping)

To compile a comparative report from 10 years of seal census.

POLPIP surveyors 11/04/16 by Sue Sayer

### Seal class of 2016

## Vagrant seals

Common- 4 pups Ringed



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ABOUT SEALS

Find out more about the globally rare seals that you see around the Cornish coastline.



**SEAL GROUP** 

Seal Group has been carrying out pioneering research since 2000. Find out what we do.



YOUR HELP

With your help we can make our seas a safer place for seals, other marine life and ourselves!



**OUR PARTNERS** 

We work with a range of marine related organisations interested in seals and the sea.

### Welcome to Cornwall Seal Group (Research Trust)

Comwall Seal Group (CSG) is an evidence based conservation charity supporting a large network of active citizen scientists who routinely survey seals on their local patch in order to learn more about grey seals, a globally rare marine mammal for which the UK has a special legal responsibility to protect (JNCC).

CSG encourage everyone to send in their seal sightings (even just one seal in the sea or on land) with a date and location from anywhere around the southwest – photos are a bonus as they help us to confirm if it is a grey seal, whether it is male or female and perhaps even reveal its name and life history! Please email sue@cornwallsealgroup.co.uk with your sightings.

Each seal has a unique fur pattern that enables it to be photo identified throughout its life. Learn the pattern and you can recognise the seal! CSG hold identification catalogues for numerous sites from north Devon round to Dorset. Photo ID is one of the most powerful research tools for studying seals. It is a non invasive technique revealing information about lots of different aspects of their biology and ecology and ultimately enabling the life stories of individual seals to be built up over time.

Some key learning outcomes from this work have shown that most of the seals seen at sites in Cornwall just appear to be moving through – stopping off to rest on their way to somewhere else. A small proportion of seals seen at a site will remain there for several months, using the site as their base from which to forage. Very few seals (if any) spend all year in one place. Each seal seems to take a unique pathway and seals seen in Cornwall have also been photo identified in north and south Devon, Wales and France.

So if you see a seal in the southwest, please remember to tell us!



# Changing perceptions - one seal at a time

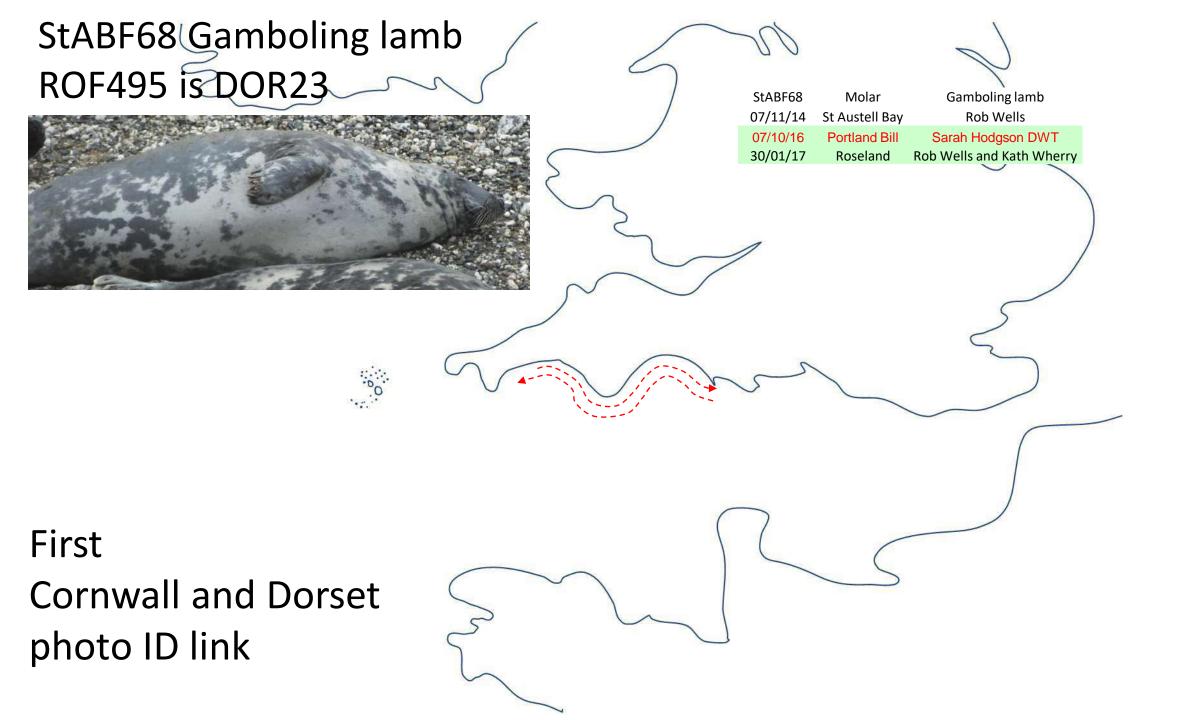
From homogeneous species behaviour

to

Individual heterogeneous seal level

to

Effective species level conservation



Pinnipeds, people and policy: the implications of grey seal movements for the management of mobile marine species

SUE SAYER<sup>1</sup>, REBECCA ALLEN<sup>2</sup>, LUCY A. HAWKES<sup>3</sup>, KATE HOCKLEY<sup>1</sup>, DAN JARVIS<sup>1</sup>, MATTH

<sup>1</sup>Cornwall Seal Group Research Trust, Copperleaf Cottage, Phillack Hill, Phillack, Hayle, C

<sup>2</sup>Centre of Applied Zoology, Cornwall College Newquay, Trenance Gardens, Newquay, Co

<sup>3</sup>Centre for Ecology and Conservation, University of Exeter, Penryn Campus, Cornwall. Ti

<sup>4</sup>Environment and Sustainability Institute, University of Exeter, Penryn Campus, Cornwall

Corresponding author: sue@cornwallsealgroup.co.uk

Keywords: grey seals, mobile marine species, conservation status, European Marine Site Scientific Interest, Marine Protected Areas, site fidelity, citizen science, policy, managen

### Potential reviewers:

- · Cecile Vincent cecile.vincent@univ-lr.fr,
- Michelle Cronin Michelle.Cronin@ucc.ie
- Paul Thompson lighthouse@abdn.ac.uk;
- Tom Stringell Tom.Stringell@cyfoethnaturiolcymru.gov.uk,
- Callan Duck c.duck@st-andrews.ac.uk

#### ACKNOWLEDGEMENTS

CSGRT sincerely thank those who have shared photos for seal identification (they know who they are) and to those whose online photos have been used (user IDs not listed) including: T Adams, T Bain, S Beadle, A Bicknell, J Barry, C Bollen, S Bone, G Blundell, P Borecki, D Boyle, K Brown, B Buche, L Butters, C Caseldine, H Caseldine, R Castillo, D Chapman, R Chittenden, L Clarke, G Clegg, J Clegg, R Collins, C Cornishlight, C Curtis, R Daddow, M Dawton, D Drake, K Drake, S Duffield, R Durrant, J Dwyker, B Earll, D Faith, A Farr, E Farr, C Farran, M Fenwick, J Foster, K Francis, P Gillard, M Gregory, R Grey, D Groves, Sarah G, V Hall, D Haines, T Hardman, R Hartley, S Hassani, L Hawkes, G Hawkins, B Heaney, J Hirons, K Hiscock, T Hocking, K Hockley, C Hood, D Jarvis, D Jarvis, L Jarvis, D Jenkins, D Johnson, K Johnson, N Jones, C Jose, R Jutsum, C Keast, J Keast, C Keiser, J Kent, P King, C Lewis, I Lewis, Lizzie and John, K Lock, J Loveridge, J Loveridge, A Lowe, B Lowe, C Lowe, D McBride, B MacDonald, A Mills, C Mills, L Morgan, S Needham, F North, L Nutley, F Parrott, I Parrott, L Payne, B Phillips, N Ponting, S Pow, E Priestley, D Murphy, M Orman, T Pharic, J Rainbow, D Rail, L Rogers, J Ross, T Russell, L Sargeant, W Sargeant, G Savage, H Selley, P Semmens, C Spooner, D Spooner, E Stubbings, M Stephens, A Steele, S Stewart, M Taylor, S Taylor, T Thirlaway, M Thorne, N Tomalin, L Tozer, S Van Trijfel, C Waddell, P Walker, D Warmsley, G Waters, R Wells, P Welsh, K Wheston, P White, C Wilding, B Williams, Will, J Williams. We are extremely grateful to all of you and could not have undertaken this research without you whether your interest is passing one, or an obsessive passion!

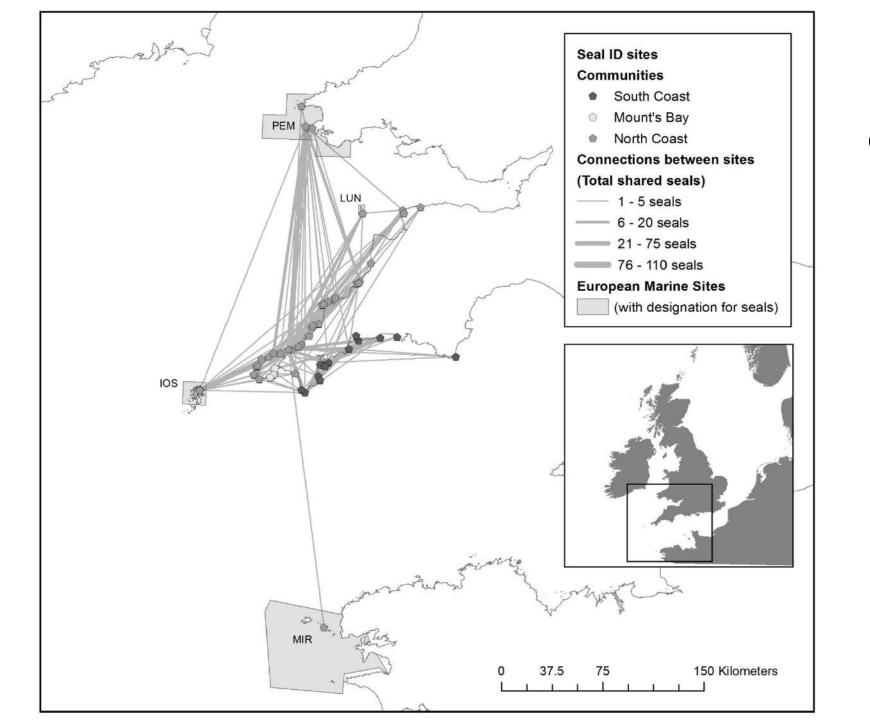
CSGRT are grateful to collaborate with so many amazing organisations including British Divers Marine Life Rescue; Cardigan Bay Marine Wildlife Centre; the Cornish Seal Sanctuary; Cornwall Wildlife Trust's Marine Team, Seaquest SW and Marine Strandings Network; the Landmark Trust and Lundy wardens; Morte Wildlife Group; National Coastwatch Institute; the National Trust; Natural England; Natural Resources Wales; Oceanopolis; Parc Natural Marine Iroise; RSPB; RSPCA Wildlife Hospitals; Wildlife Trusts from Devon and South and West Wales with Skomer wardens.

Thank you to all the operators who make a living in the marine environment and contribute to our work: Atlantic Diving, AK Wildlife Cruises, Charles Hood, Coastline Ecocoasteers, Cornish Sea Tors, Dive Scilly, Elemental Tours, Koru Kayaking, Marine Discovery, Orca Sea Safaris and Scilly Seal Snorkelling.

Seal photo ID projects (PIPs - CASPIP, INTPIP, IOSPIP, LISPIP, MERIFIC, POLPIP, STAPIP) that have involved hundreds of volunteer surveyors have contribute hugely to our ID effort and have been organised by the following groups: CSGRT, Cornwall Wildlife Trust, Cornwall College, Looe Marine Conservation Group, National Trust, Polzeath Marine Conservation Group and the University of Exeter.

This work has relied on the inspriation, energy and enthusiasm of the CSGRT steering group, trustees, supporters, families (particularly Chris Howell) and friends underpinned by scientific capacity building provided by Cornwall College and the University of Exeter (particularly Dr. Brendan Godley.)

protected at periods. As a oraging and MS. There is limited remain one of the GRT) recruited, rticipants in photo nd spatial scales. gland for over a movement with nts. Four EMS were grey seals. The bly increase efforts ed Marine ed as a mobile ced application and uld be better art of their citations. analysis has shown ng marine protected



Designated habitat is dependant on multiple sites with no protection.

Sites with no protection are functionally linked to designated habitat.

Impacts at the unprotected sites can affect the favourable condition status of the protected sites!

## Interesting experiences

Learning about seal biology and ecology

Intelligence test – hauling out onto small boat repeatedly indicates learning process

Feeding strategy – zig zag herding sandeels up a narrow inlet to feed

## Key and pup Daily record

A Cornwall first

Not reading textbook

Staying at her 'home' site to have her pup three years running!

2016

All photos by and huge thanks to Terry Thirlaway

## Yogi

Injured 16/10/16
Wound development

PEG research – how marine mammal wounds heal!

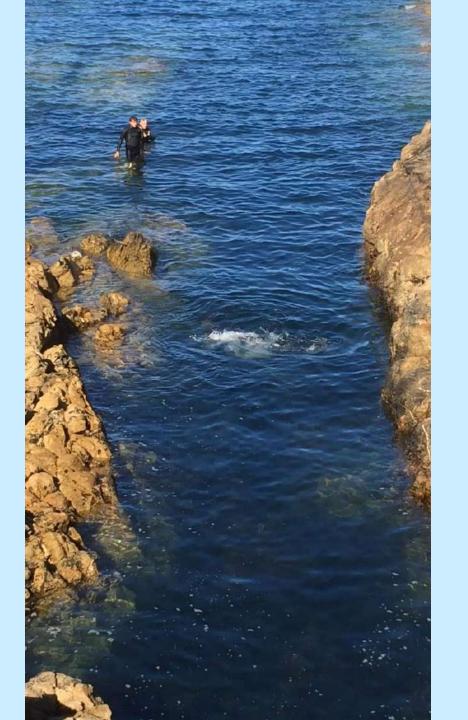
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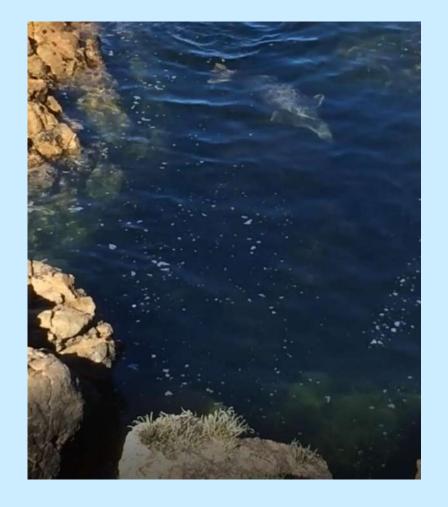
## Interesting behaviour



# Isles of Scilly

• Aug 2016





## Ghost gear

**Lucky Bunting** 

Rescued 12/07/16



55 days (<2 months)
later on the same beach
LP316
Lucky Bunting



### 2016 12 14 Falmouth Tamara Cooper

PME revealed Apple Tree to be a ground breaking grey seal and possibly a world first!

CSS, BDMLR and University of Exeter
In her stomach she had:

- a golf ball sized piece of monofilament net
  - pebbles and
  - 2 bits of sweetcorn!



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