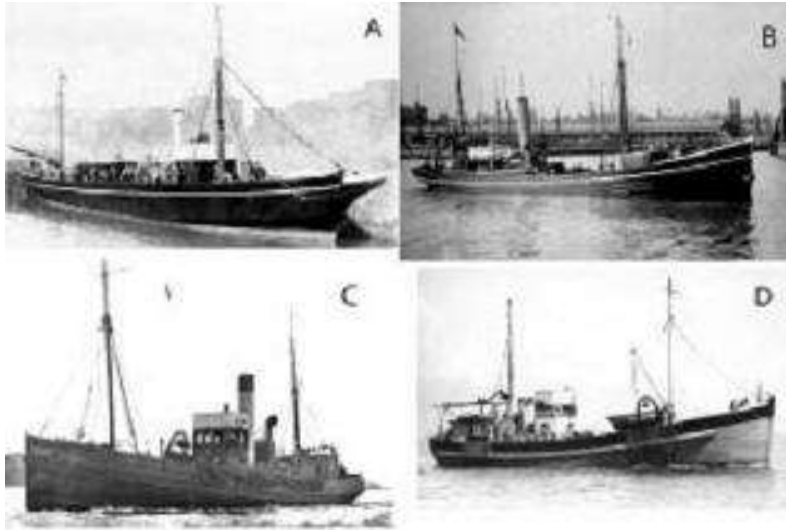




Long-term monitoring and surveillance (1902 – onwards)



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Long-term monitoring and surveillance activities.

- Ca 36 separate long-term data series spanning 1902 to present, 18 ongoing.

Examples:

- MBA Standard Haul – demersal fish and cephalopods 1911 – onwards
- Zooplankton and fish larvae (occ. 1924-1981, regular since 2001)
- Rocky intertidal time-series – 1950s, 1980s, 1990s
- Marine Biodiversity and Climate Change (MarClim) surveys – 2002-2009
- Long-term monitoring of fish space use around marine renewables sites (tagging Whitsand Bay, Wave Hub site)
- Shore Thing – citizen science 2006 onwards
- BIOBLITZ (Mt Edgecombe, Kingsand / Cawsand, 2013)

Full listing here: <http://www.mba.ac.uk/long-term-change/>

See: Southward *et al.*, 2005. Long-Term Oceanographic and Ecological Research in the Western English Channel”. *Advances in Marine Biology*, **47**, 1-105.

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- National data centre for marine species and habitats
- Ca. 2,000,000 records
- Accredited MEDIN Data Archive Centre (DAC)
- Publishes to UK National Biodiversity Network, GBIF, OBIS, EMODNet Biology
- Generates INSPIRE compliant metadata
- Data support for MSFD, WFD and other regional, national and international monitoring and reporting frameworks



MarLIN - biology and sensitivity information pages

Use of information on these Web pages are subject to [MarLIN's terms and conditions](#).

Species information list

-  [Sponges](#)
-  [Sea fans \(Ctenophora\)](#)
-  [Ribwortia](#)
-  [Segmented tube](#)
-  [Spider](#)
-  [Snails \(Mollusca\)](#)
-  [Sea corals](#)
-  [Starfish](#)
-  [Red seaweeds](#)
-  [Green seaweeds \(Chlorophyta\)](#)
-  [Flowers](#)

Basic Information | Taxonomy and Identification | General Biology | Habitat preferences

Norway lobster
Nephrops

Basic information

Key Information
Marisa Sabatini & ...
Referred by: Dr S...

Phylum

Class
Recorded distribution in Britain and Ireland
Habitat information

Basic Information | Taxonomy and Identification

Norway lobster
Nephrops

Habitat preferences

Adult
[Larva](#)

Distribution

Recorded distribution in Britain and Ireland
[\(click for map\)](#)

Global distribution

Basic Information | Taxonomy and Identification | General biology | Habitat preferences and distribution | Reproduction and longevity | Sensitivity | Importance

Norway lobster
Nephrops norvegicus

Sensitivity

Adult

[Larval sensitivity](#)



Nephrops norvegicus. Image width ca 20 cm.
Image: Sue Scott [Image copyright information](#)

Biotope sensitivity assessment

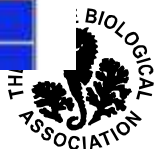
[Sensitivity assessment rationale](#) | [Interpretation guide READ ME](#)

Sensitivity assessment benchmarks

Physical Factors

Click factor name to view rationale	Intolerance	Recoverability	Sensitivity	Evidence / Confidence
Substratum Loss	High	Moderate	Moderate	High
Smothering	Tolerant	Not Relevant	Not sensitive	High
Increase in suspended sediment	Tolerant	Not Relevant	Not sensitive	Low
Decrease in suspended sediment	Tolerant	Not Relevant	Not sensitive	Low
Desiccation	Not Relevant	Not Relevant	Not relevant	High
Increase in emergence				

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Example - Rocky intertidal time-series

25 sites in SW England

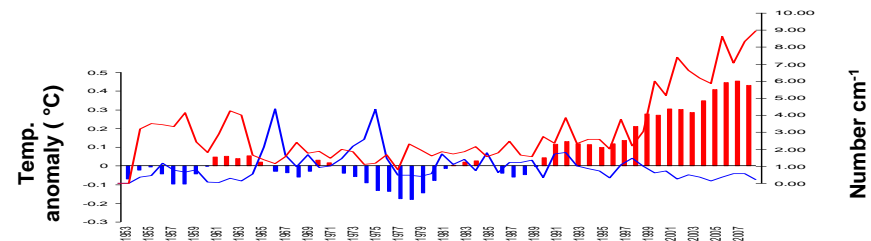
part of a UK wide network of 150+ sites

- Historical data from 1950s, 1980s, 1990s
- Current data from 2002-2009 annual resurveys for 60+ species
- 55 year time-series Cellar Beach
- span major biogeographic boundary
- show climate-driven changes to coastal ecosystems
- ecological forecast models developed for future predictions



Mieszkowska et al. 2005,2006,2007,

Poloczanska et al. 2008, Burrows et al. 2009



Density of *Chthamalus* spp. (—) and *S. balanoides* (—), against a 4 year running mean SST anomaly, Cellar Beach (1953-2008)

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Example - Long-term monitoring of fish space use around marine renewables sites

Monitoring

20 receiver array (seabed landers)

400+ fish tags

Record presence/absence

Acoustic data upload via ship

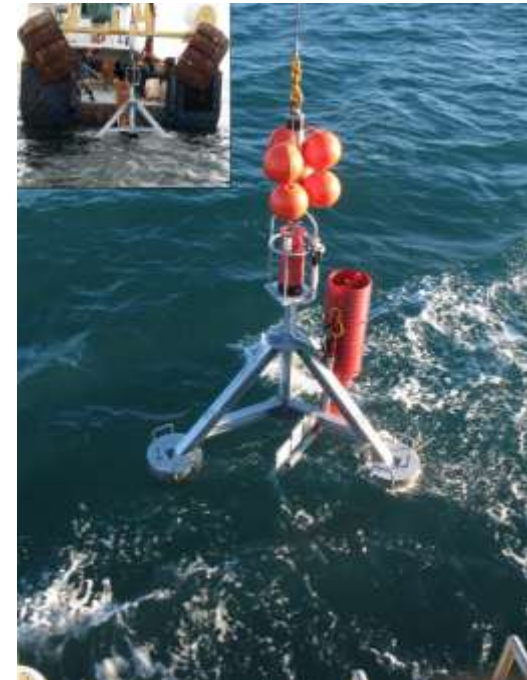
5 yr deployment time



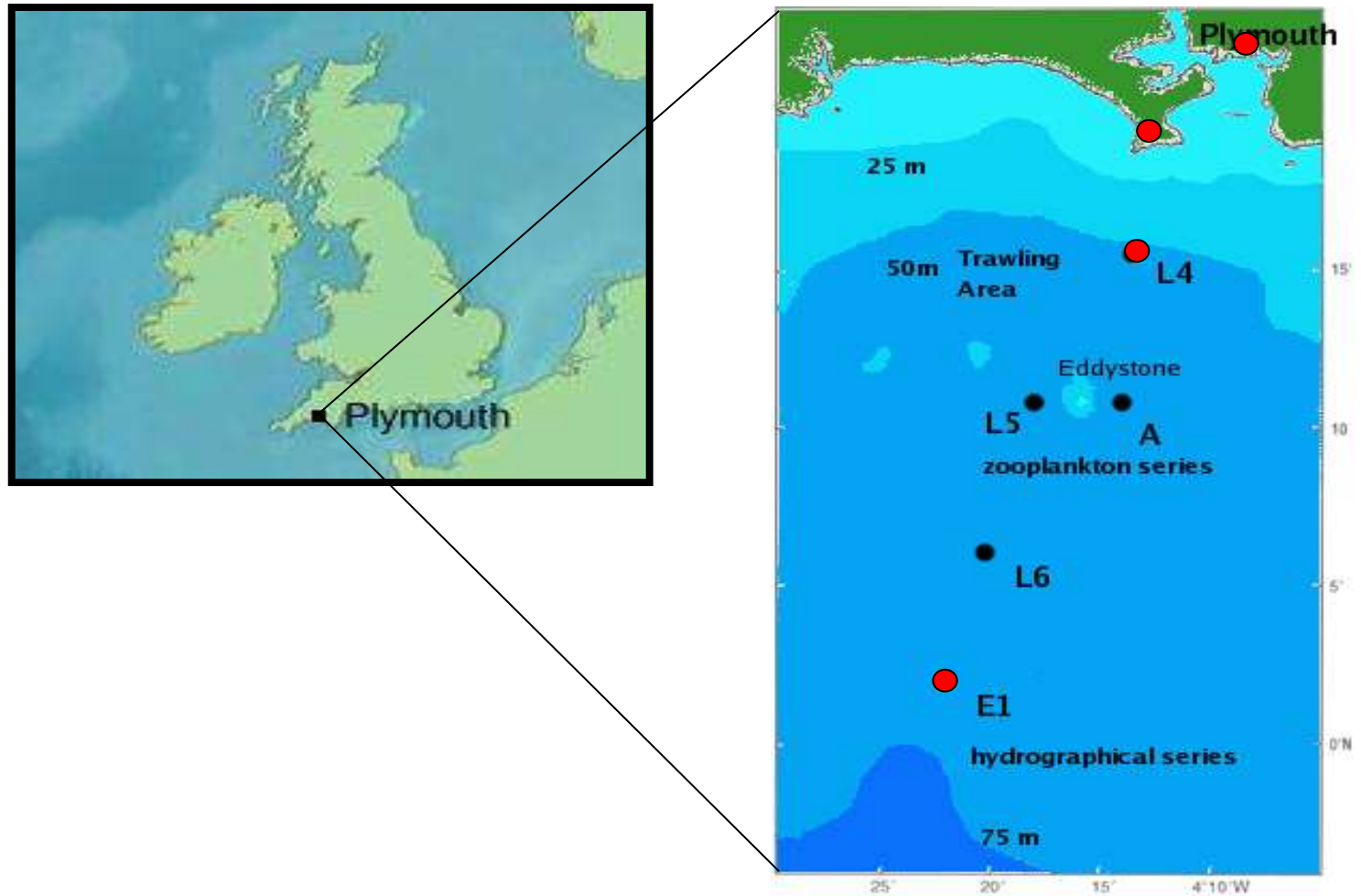
Deployments

Whitsand Bay, S Cornwall (2010)

Wave Hub site, N Cornwall (2011)



Western Channel Observatory



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