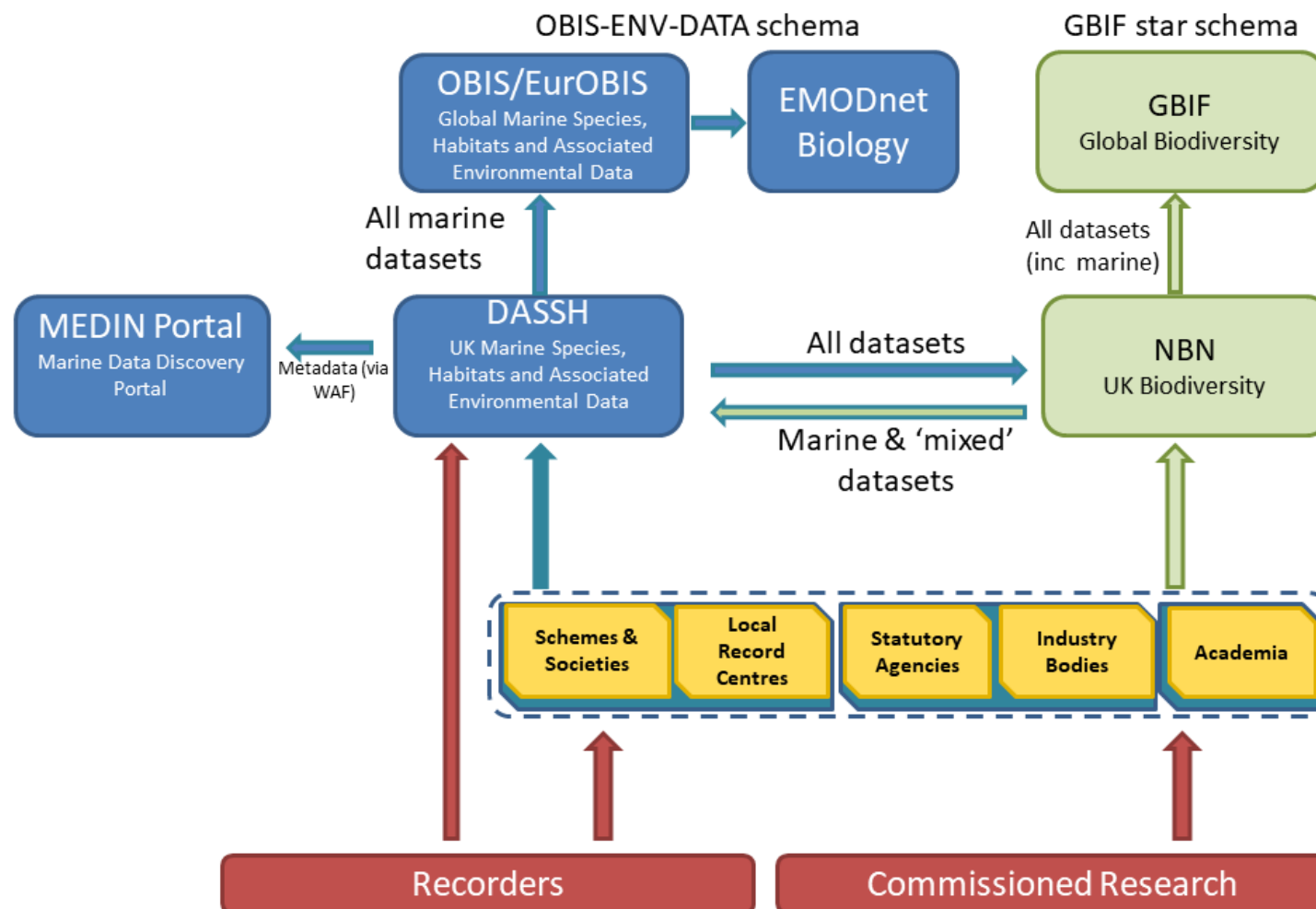
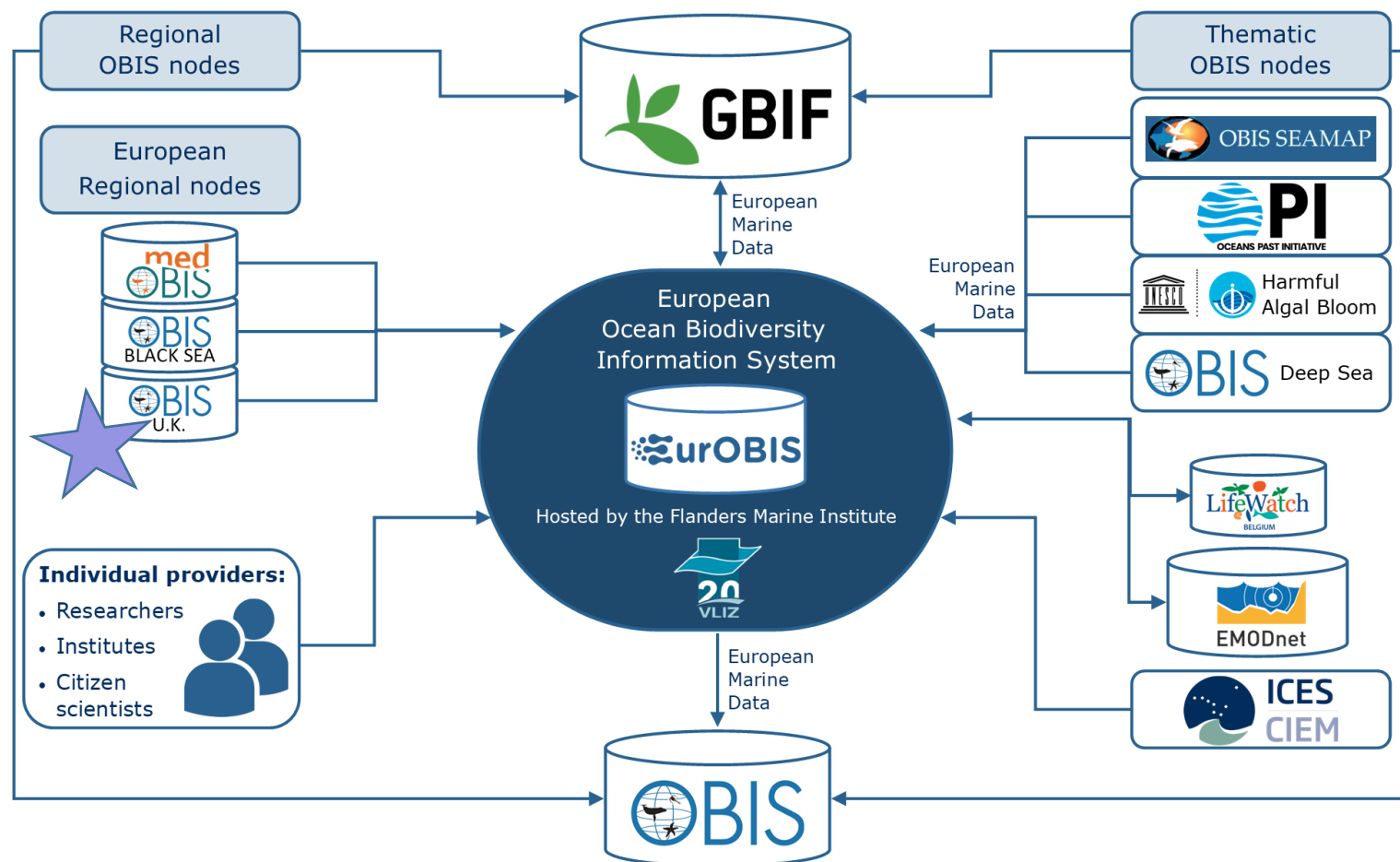
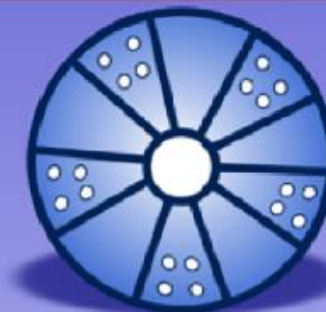


# DASSH



- The Archive for Marine Species and Habitats Data
- UK DAC- data archive centre
- DASSH initiative of the Marine Biological Association (MBA) and ran by MBA staff.
- In collaboration with, and is accredited by, the Marine Environmental Data and Information Network (MEDIN) and is a key data provider for the UK National Biodiversity Network
- Contributes to data portals including the NBN, Atlas, EMODnet, EurOBIS and GBIF in partnership with other UK and European data centres
- UK OBIS node





# Data Challenges...



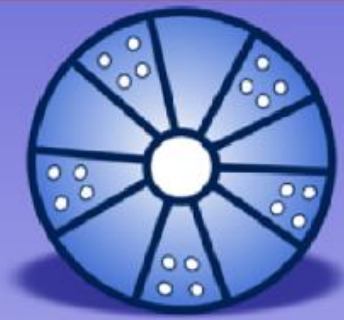
## Marine and Coastal

- Challenge 1: Bridging the gap between our experiences and the science

Time series datasets:

- present information through space and time
- Species distributions through time

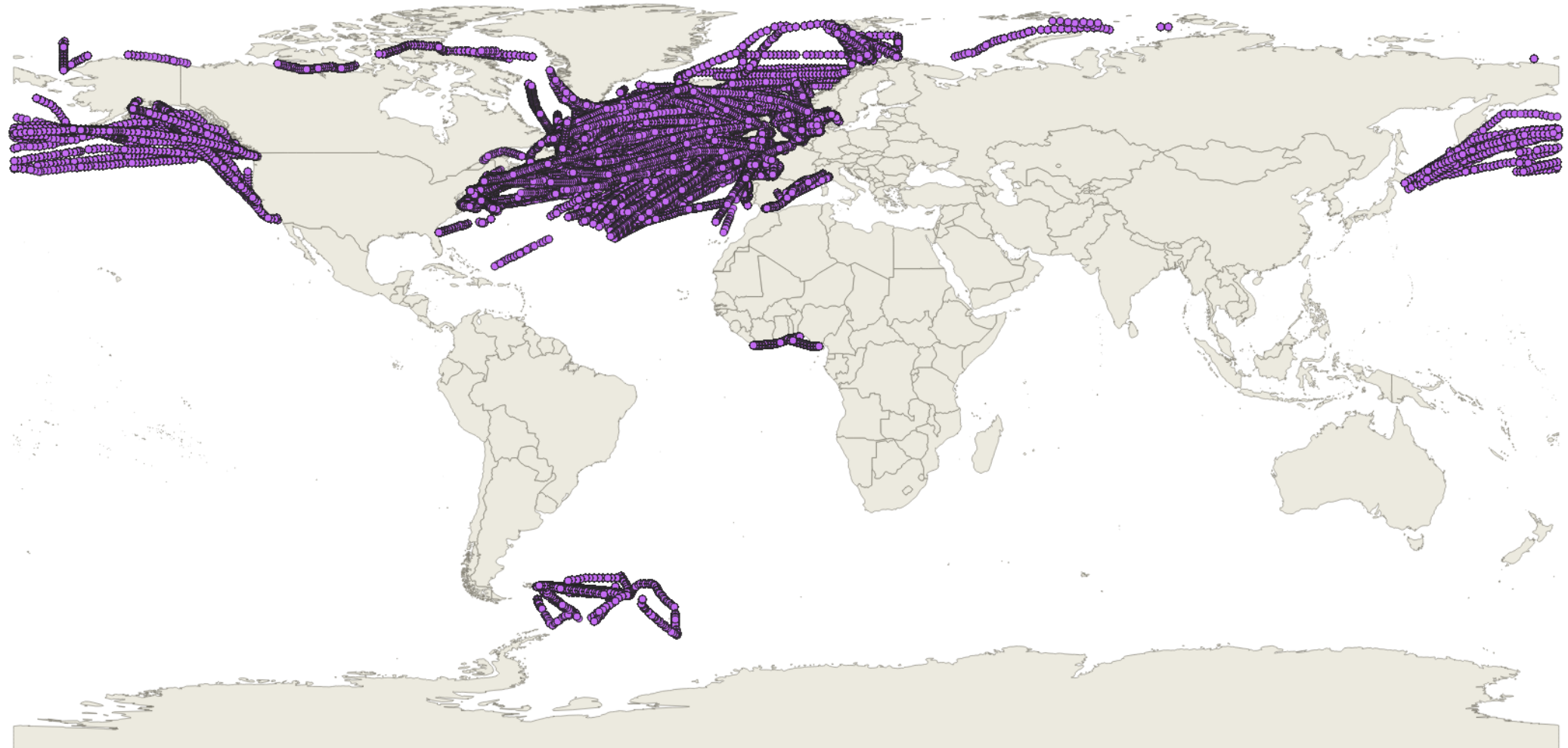
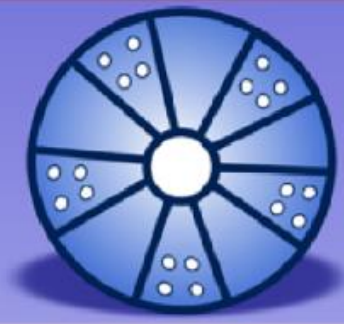
# CPR data



- **Continuous Plankton Recorder Dataset (CPR Survey) - Phytoplankton**
- **Continuous Plankton Recorder Dataset (CPR Survey) – Zooplankton**
- **Continuous Plankton Recorder Dataset (Pacific CPR Survey) - Zooplankton**

The CPR Survey is unique in having comparable data on the geographical distribution, seasonal cycles and year-to-year changes in abundance of plankton over a large spatial area. There is no other survey in the world with 80 years of marine plankton data.

# CPR data coverage



# CPR data



These datasets can be downloaded through the DASSH IPT

<https://www.dassh.ac.uk/ipt/>

Darwin Core Archive format:

<https://www.gbif.org/darwin-core>



Home

About

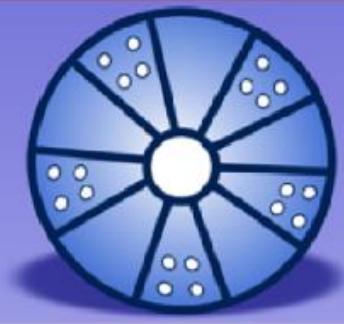
## Hosted resources available through this IPT

Filter:

Logo	Name	Organisation	Type	Subtype	Records	Last modified	Last publication	Next publication
--	<a href="#">1743-2010 National Marine Aquarium (NMA) United Kingdom Marine Fish Recording Scheme</a>	Not registered	Sampling event	--	<a href="#">2,072</a>	2019-10-16	2019-10-16	--
--	<a href="#">1776-1997 Paul F. Clark North East Atlantic Crab Atlas</a>	Not registered	Sampling event	--	<a href="#">10,989</a>	2019-04-23	2019-04-23	--
--	<a href="#">1778-1998 Ivor Rees North Wales Marine Fauna Ad-hoc sightings shore and ship-based surveys</a>	The Marine Biological Association of the United Kingdom	Sampling event	--	<a href="#">6,631</a>	2019-12-05	2019-12-05	--
--	<a href="#">1848-1982 Lundy Field Society The Marine Fauna of Lundy</a>	Not registered	Sampling event	--	<a href="#">2,591</a>	2019-12-20	2019-12-20	--
--	<a href="#">1915-2016 Department for Environment Food &amp; Rural Affairs (Defra), Marine Strategy Framework Directive (MSFD) Collation of invasive non-indigenous species</a>	The Marine Biological Association of the United Kingdom	Sampling event	--	<a href="#">9,147</a>	2019-08-02	2019-08-02	--
--	<a href="#">1938-1941 Cole, HA Essex Estuary, Urosalpinx cinerea records</a>	Not registered	Sampling event	--	<a href="#">239</a>	2019-07-08	2019-07-08	--
--	<a href="#">1949-1998 Great Britain Non-Native Species Information Portal</a>	Not registered	Sampling event	--	<a href="#">9</a>	2020-03-23	2020-03-23	--

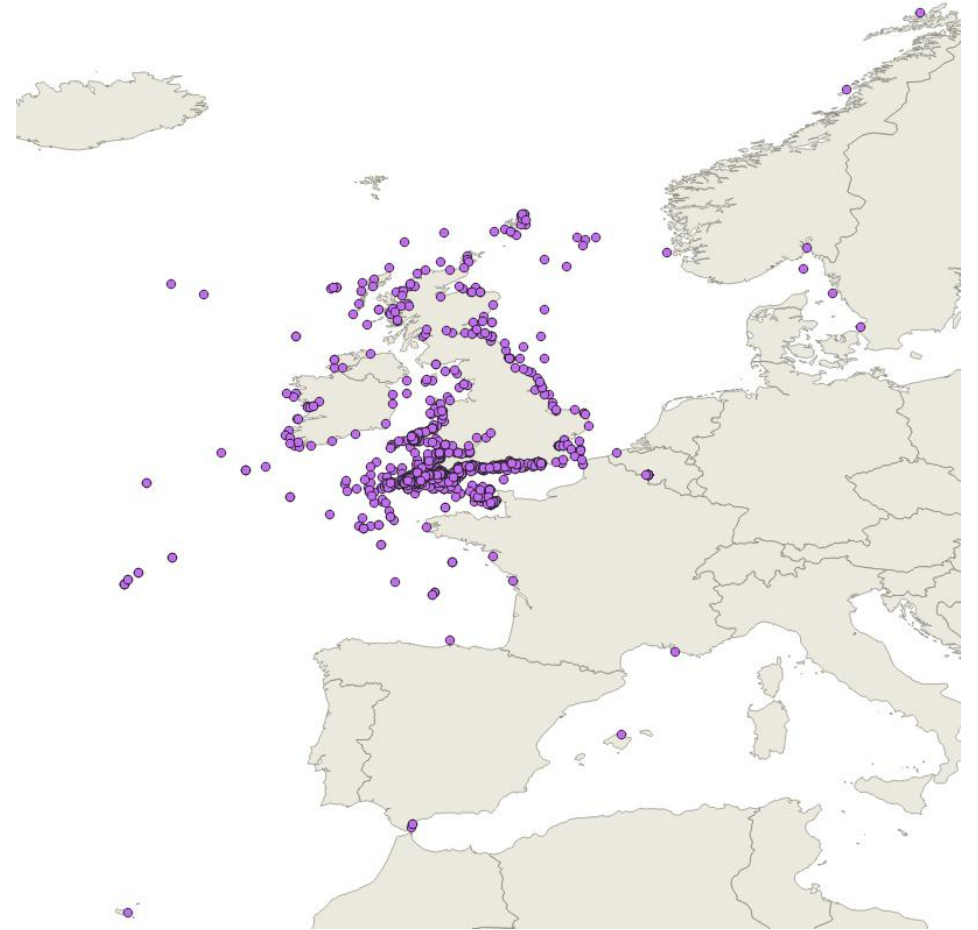


# Long term datasets



## **1743-2010 National Marine Aquarium (NMA) United Kingdom Marine Fish Recording Scheme**

Records of rare fish sightings and catches  
submitted to the National Marine Aquarium,  
Plymouth.





# Long term datasets

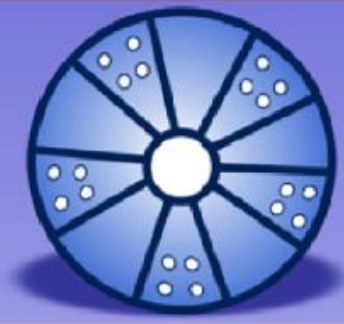


## Non native species datasets

**1915-2016 Department for Environment Food  
& Rural Affairs (Defra), Marine Strategy  
Framework Directive (MSFD) Collation of  
invasive non-indigenous species**

**1949-1998 Great Britain Non-Native Species  
Information Portal (GBNNSIP) United Kingdom  
Collated record of historic distributions of  
marine non-native species from literature**

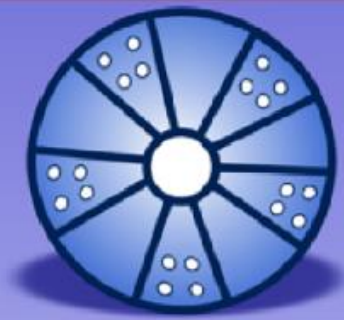
# Data Challenges...



## Marine and Coastal

- Challenge 2: Protecting our coastal communities
  - Habitat data map layers and information

# VALMER project data layers



<http://valmer.marinebiodiversity.org/case-studies-overview/>

VALMER Project examined case studies where techniques and methods for ecosystem services were tested. Please note these projects were carried out almost a decade ago.

More information about the layers can be found on the VALMER project website

North Devon

<http://valmer.marinebiodiversity.org/case-studies-overview/north-devon/>

Plymouth Sound

<http://valmer.marinebiodiversity.org/case-studies-overview/plymouth/>

# VALMER project data layers



Available through the DASSH Geoserver

<https://www.dassh.ac.uk/geoserver/web/>

The screenshot shows the GeoServer web interface. On the left is a sidebar with navigation links: 'About & Status', 'Data', and 'Demos'. The 'Data' section is active, showing 'Layer Preview'. The main content area is titled 'Layer Preview' and contains a list of layers. The list has columns for 'Type', 'Title', 'Name', 'Common Formats', and 'All Formats'. The layers listed are:

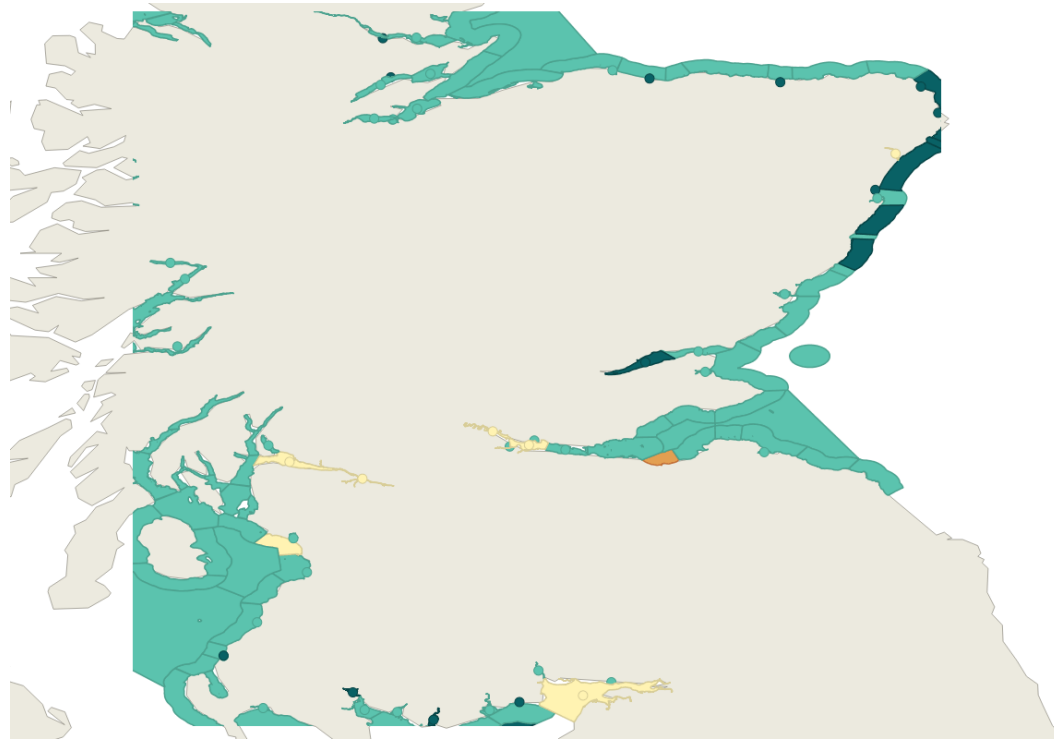
Type	Title	Name	Common Formats	All Formats
Area	CPR Standard Areas	CPR_Survey:CPRStdAreas	OpenLayers KML GML	Select one
Point	Gridded Sample Effort	CPR_Survey:Gridded_Sample_Effort	OpenLayers KML GML	Select one
Area	Gridded Sample Effort Detail	CPR_Survey:Gridded_Sample_Effort_Detail	OpenLayers KML GML	Select one
Point	Gridded Species Data	CPR_Survey:Gridded_Species_Data	OpenLayers KML GML	Select one
Area	Gridded Species Data Detail	CPR_Survey:Gridded_Species_Data_Detail	OpenLayers KML GML	Select one
Point	North Atlantic Samples	CPR_Survey:North Atlantic Samples	OpenLayers KML GML	Select one
Point	Sample locations	CPR_Survey:SampleLocations	OpenLayers KML GML	Select one
Point	Tow vs Sample positions	CPR_Survey:Tow vs Sample positions	OpenLayers KML GML	Select one
Point	TowEvents	CPR_Survey:TowEvents	OpenLayers KML GML	Select one
Line	TowTracks	CPR_Survey:TowTracks	OpenLayers KML GML	Select one
Area	Draft_DWT_Boundary	dassh:Draft_DWT_Boundary	OpenLayers KML GML	Select one



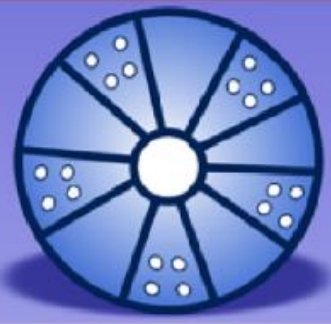
# A few examples of the layers available...

- Carbon storage habitat
- Areas of eutrophication
- Shipping intensity
- Juvenile salmon in tributaries, wild food and fish supply
- Areas where different types of fishing gear is used
- Flood risk management map layers- Areas contributing to wave reduction and flood water storage
- Priority habitats, beaches, rocky cliffs, woodland and rivers
- Areas of recreational and heritage value like wrecks, castles, trails, golf courses

# 2013 Water Framework Directive transitional waters status layer in Scotland





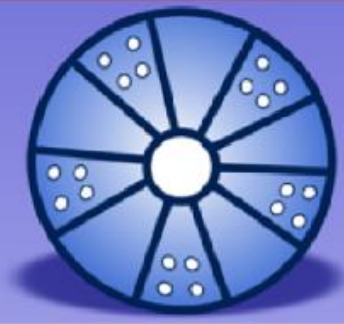


# Data Challenges...

## **Nature based solutions**

- Enhance biodiversity/ Ecosystem restoration
- Sustainable food production
- Net zero emissions
- Resilience to climate impacts and other shocks

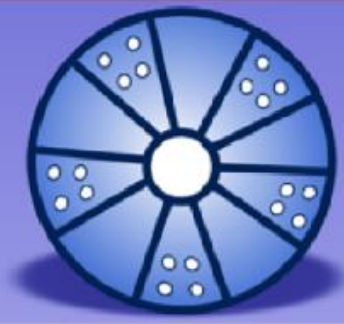
When addressing the Nature based solution challenges, try and also consider the marine environment and solutions it has to offer.



## Nature based solutions

- Blue carbon
  - Net carbon sinks in the marine environment
  - Seagrass and saltmarsh areas

These habitats can also offer natural coastal protection



## **Enhance biodiversity/ Ecosystem restoration**

2012-ongoing UK Offshore Marine Conservation Zone (MCZ) Survey  
Data

## **Sustainable food production**

Fisheries, habitats, plankton