

The importance of habitat mapping for fisheries resource management (WP2)





Main goals

- Improve knowledge about the spatial extent of current **stocks** and **associated habitats**
- Increase knowledge about the location of **potentially suitable habitats** for target species (e.g. for stock rebuilding programs)
- Assessment over the presence or absence of **habitats** and **species** of conservation concern within fishing grounds (e.g. Cardigan Bay closure – conflict resolution)
- Assessment of the **susceptibility / vulnerability of habitats** and species to specific fishing activities.

Main building blocks for spatial management and
MSC accreditation process





How to achieve these goals ?

Survey areas will be prioritised after consultation with the industry through the Science User Advisory Group (SUAG)

Resulting scientific survey data will be combined with data collected by other sister projects and already existing data (e.g. held by CCW)

All data will be analysed applying the same scientific methodologies and standards to ensure comparability

All information will be collated as maps within a Geographic Information System (GIS)

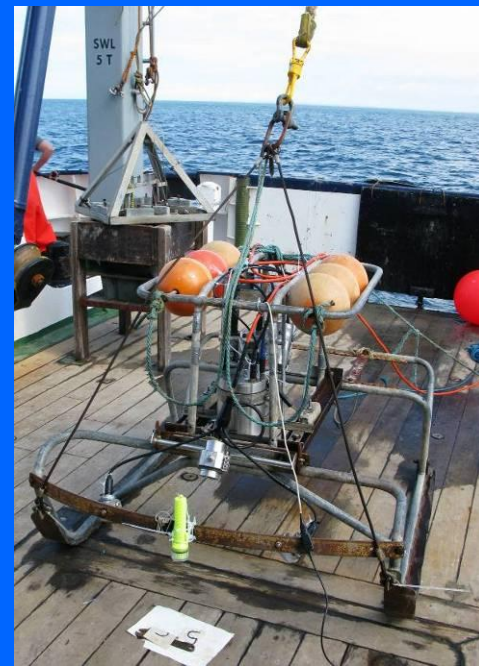


Methodology - Sampling

Video and stills images –
substrate, topography, epifauna

Grab and beam trawl samples –
infauna and epifauna, sediment
grain size analysis

Water samples – hydrography
plankton production



Sample processing

- Some of the samples can be processed during research surveys
- The main bulk of samples will be processed in the laboratory involving extensive effort and expertise
- Data will be analysed with appropriate statistical tools and entered into a GIS

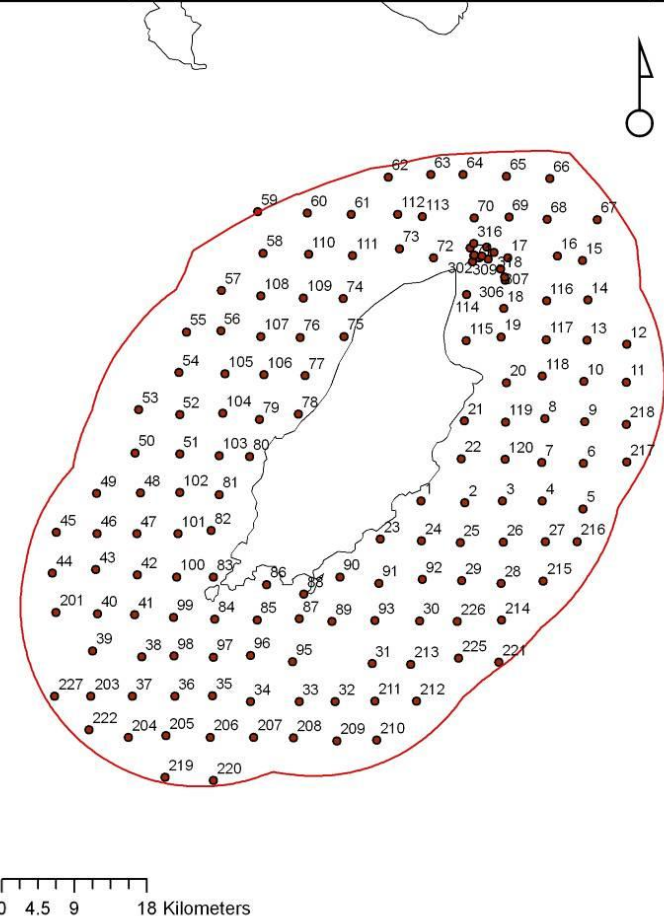


Output (Isle of Man example)

- Habitat survey in August 2008
- 155 stations within the 12 nm limit (spacing between stations 2.7 nm) – 12 day survey with RV Prince Madog

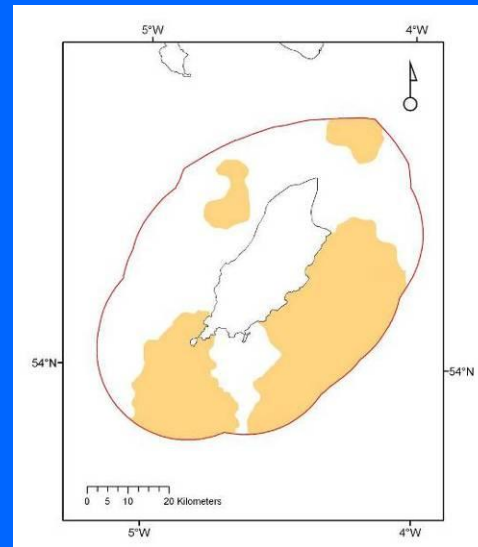
Why did we map habitats?

- **Extend** and **status** of fishing grounds up to the 12 nm limit
- Requirement for the **MSC accreditation** for Queen scallops to provide evidence about the health and environmental status of the fishing grounds

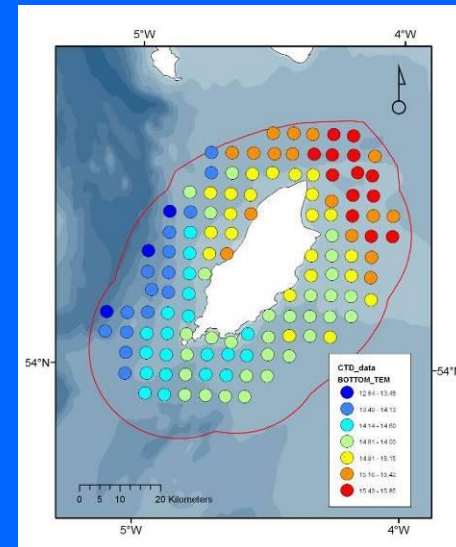




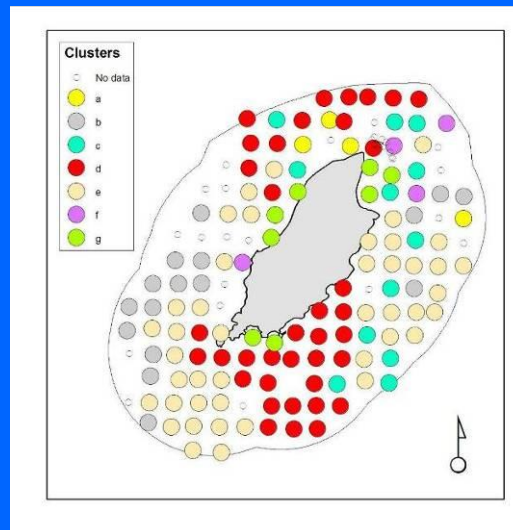
Output (Isle of Man example)



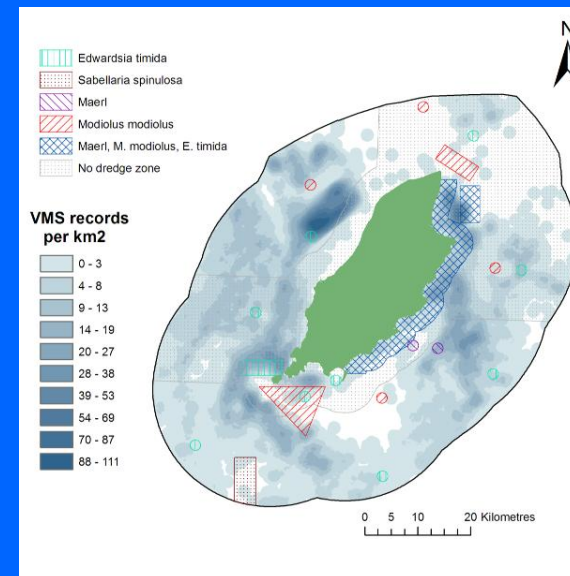
Extent of target habitats



Better hydrographic understanding



Benthic community structure



Location of sensitive habitats and species

