



BIANNUAL ACHIEVEMENTS REPORT January 2015 **MARINE ECOSYSTEMS RESEARCH PROGRAMME**

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Date: 27/01/2015

Key achievements over the last 6 months:

1. Research staff and dedicated PDRAs to work with MERP scientists and researchers have been identified or appointed at CEH, PML, SAMS, Sheffield, Glasgow, Queens University Belfast and Queen Mary University London. Others will be appointed in the coming year at QUB and Bangor. While each of these individuals has their own research focus (such as seabird spatial ecology, benthic processes, trophic relationships, gelatinous organisms, model development and testing, macroalgal ecology, data tools and macroecology, ensemble modelling, ecosystem services, etc.) they will be working together as a team to provide input into the programme as a whole. A series of face-to-face and virtual meetings have taken place across the consortium to progress planning of work and integration, focusing on higher trophic level data and tools, the field programme, modelling and ecosystem services.
2. The ERSEM code has been reformulated in terms of generalized organisms, which are used to recreate a variety of ERSEM's original functional types. For instance, a new "phytoplankton" module is used to describe diatoms, picophytoplankton, flagellates and macrophytoplankton. This lays the foundation for future experiments with large numbers of types, representing biodiversity. The new code will serve as reference for future work within the shelf seas biogeochemistry (SSB) program: MERP and SSB will share the same code base from the next SSB code release onward. A joint SSB/MERP workshop on ERSEM development was held at Cefas in November 2014, enabling partners from both SSB and MERP to become familiar with the new code structure.
3. To assist us in maximising impact and the utility of the programme's research we have assembled a Stakeholder Group. Chaired by Dr Matt Frost from the Marine Biological Association of the UK, it includes representatives from ICES, MMO, JNCC, NFFO, Natural Resources Wales, Marine Scotland, Scottish Natural Heritage, the Celtic Seas Partnership, and the UK seabed users group. A workshop was held in London in December 2014 that brought together members of the Programme Scientific Steering Committee with the Stakeholder Group for wide-ranging discussions about the proposed research and activities, and how these could best be developed to be useful to the stakeholders. As part of this meeting MERP Ecosystem Services researchers held a workshop with the stakeholders to initiate the dialogue which is necessary to deliver ES work within the consortium. Feedback was generally positive, and it is clear that the MERP work plan is timely in terms of policy implementation.

Overall progress: The programme is progressing according to the original plans and activity is steadily increasing. Work is underway primarily within the areas relating to data collation and analysis and modelling. The major fieldwork and experimental activities will be commencing shortly and will run until the end of 2016. Ecosystem Services work is now well underway following the publication of key documents which guide the approaches to be developed. A dedicated session on ecosystem services was held at the Stakeholder Advisory Group meeting to ensure their input as included at the earliest stages. Further integration workshops are being planned to bring together the different communities of researchers in the programme.

Issues and remedial actions: The programme is progressing well. Our main issue thus far has been in scheduling annual meetings close to the project's kick off date. Due to the diverse nature of the programme which includes a broad fieldwork programme and many university academics, finding a date so that everyone can meet has proved challenging. To resolve this issue we have negotiated with the Programme Manager to shift the annual meeting to an alternate time of year where the majority of people should be available.