

EASTME Thematic Topics

Bob Earll Revised Version 17th January 2024:
Please send comments to bob@bobearll.co.uk

Introduction

The thematic topics will be at the centre of the work done on EASTME, in particular being the topics covered at the conference and by the communities of practice. This version of the document is product of two regional and one national steering group meetings. At the Regional SG meeting on January 9th, 2024, discussions focussed on whether or not to include or lump particular thematic topics; this note reflects those decisions. We will use this as the starting point for contacting people involved in these thematic topics. EASTME will have the freedom to experiment with these topics in the future.

In developing the communities of practice will allow much fuller discussions of these thematic topics and how annual change might best reported.

Fuller texts will emerge from consideration of the individual topics.

This text is an overview of the topics selected.

Thematic Topic List

1. Oceanography

- Key - Overarching - affects all the other themes
- Includes climatology/ meteorology
- Includes: Temperature, nutrients (Alison Miles EA), sediment, pH, oxygen, etc
- In particular storms and storm surges and their impact on the coastal environment - storm metrics (Cefas)
- To include the 2023 temperature anomaly

2. Plankton and productivity

- Key and overarching – affect all other natural systems
- EA have data on P & P.
- Reporting periods – time series from the past ... rolling five year tables ... Is 2023 likely to be very different?
- Key changes observed e.g. the temperature anomaly re planktonic species
- Major plankton blooms – including toxic blooms

3. Seabed and seashore – Benthic Ecology

- Inputs from benthic and seashore ecologists
- Current survey/monitoring work ... EIA, MPA, routine monitoring EA/Cefas
- Keith Cooper (Cefas) [OneBenthic](#)

4. Birds

- The east coast is notable for its important bird populations
- This applies both to the diversity of species and their numbers
- Important in the southern North Sea context
- Major events e.g. avian flu or storm wash outs can affect numbers

- Organisations: Coastal observatories, BTO, RSPB, NE etc.
- There is a long tradition of annual reporting in the bird community.
- How best to cover birds ... what categories?
 - Marine – cliff nesters e.g. gannets and migration e.g. sea ducks
 - Estuarine, coastal dune habitats, e.g. waders
 - Breeding - productivity
 - Migrating (watch stats)

The discussion of this topic mirrored the more detailed discussion we will have when we set up the communities of practice.

5. Marine mammals: seals and cetaceans

The decision was made to group seals and cetaceans together; time will tell whether this will work.

Seals

- There are lots of site specific seal groups in the region
- Common and grey seals
- Category might include other marine mammals e.g. walrus and otters
- Pup mortality storm surges autumn 2023

Cetaceans

- Is there an active community of research on southern North Sea cetaceans?
- Apart from harbour porpoises, no other species were mentioned.
- JNCC input – Nikki Clear
- Yorkshire Wildlife trust developing its interests
- Include because it is developing area?
- Or merge with seals in a marine mammal topic.

6. Fish, Fisheries, Shell fisheries

- This category integrates two SWME topics, fish and fisheries.
- The 'fish' element of this would include species that are new and novel in the region, the equivalent of blue fin tuna in the south-west. Sunfish and John Dory records for 2023 were mentioned.
- It would also include shellfisheries – major interests in the Wash (IFCA) re mussels, cockles, brown shrimp. Coastal populations of crabs and lobsters
- To include aquaculture (mussel rafts) and seaweed culture
- Restoration: Oysters

7. Marine Planning & Development in the EAST Region

- Planning & development are two sides of the same coin
- Marine planning provides the overall spatial context to sea use
- Major MMO Planning programme underway in the EAST Region
- This planning is involving other projects e.g. mNCEA assessment of the SEA ... which could be reported on in this topic
- Would ideally include report on *trends* in development

8. Coastal & Estuarine Habitats: Measures to Protect, Restore and Recover

- The framing of this thematic topic title places the emphasis on two aspects of this. The status of these natural systems of this coast and estuarine habitats and their management measures being directed to its protection and recovery.
- The topic of flood coast and erosion risk management (FCERM) was initially highlighted but the drivers for this are predominantly economic, social and to a lesser extent natural – environmental systems.
- The East coast is a predominantly sedimentary and highly dynamic in nature.
- Not least of the impacts on this coast is flooding from storms and storm surges
- There are extensive coastal nature reserves down the entire regional coast, e.g. the new Lincolnshire Coronation Coast reserves in 2023.
- Projects on restoration and recovery, managed realignment and beneficial use of dredge sediments have all figured within this region
- New management measures such as Local Nature Recovery into the marine (via mNCEA) are being introduced
- It would seem valuable to report on this annually since this will impact many other natural systems thematic topics, in particular birds and shell fisheries
- The management – governance of these areas is predominantly land based, unlike the MPAs – see below.

9. Marine Protected Areas

- The ‘salty’- no land involved – marine protected areas.
- The different agency management involved, IFCAs, MMO & NE
- Nearshore and offshore e.g. Dogger Bank
- Extent and development - MPA reality check
- Management measures programmes in place
- The benefits of existing MPAs

10. Anthropogenic inputs: Water Pollution, plastics and marine litter, air quality and noise

- In the south-west this has been about river and coastal performance against water regs measures for sewage and chemical pollution
- Set in the regulatory framework of WFD
- Sewage still huge issue - storm overflows
- Flows of freshwater into the estuaries ... re climate change

Plastic Pollution & Marine Litter

- In the south-west this is huge because of a large >50+ citizen science groups actively undertaking beach cleans. Is this the case in the EAST region?
- Micro-plastics

11. Energy in the marine environment => into coastal environment

- There is an established, major offshore wind sector in the East Region, and it is planned that this will develop significantly, with more inter-connectors etc.
- Strategic planning in relation this ... interconnectors and land fall
- The new nuclear build and proposed Wash Barrage are also on this agenda
- The interaction with natural systems is a key issue positive and negative.
- Alex Banks (NE) Poseidon information systems

Some generic points

General points

'Catch-all's': So topics will cover loosely associated topics – because this a convenient way of including them. For example we will include the mNCEA work in the region with marine planning. The process of setting up EASTME highlight a variety of other issues, and gaps, which may need to be considered in the future.

Cross cutting issues

At the SWME meetings we have asked speakers to include at least one slide on:

- Conclusions
- Interactions between their thematic topic and others
- Climate change is the biggest concern - we know it is happening, but can we measure it? Probably best dealt with by every thematic topic using the 'one slide' approach.
- Horizon scanning: It would be possible to ask thematic topic speakers for one slide that looked to issues that that are of concern

Development, evolution and change

SWME continues to develop and change year on year. EASTME will no doubt do the same – we have to start somewhere – the freedom to experiment - try things (topics) and see how they work out.

Emphasis → Natural Systems

If we are stuck for time then the emphasis for the conference will be on reporting on natural systems.

UKMS – read across

The current thematic topic listing has a good read across to the UKMS, and other regulatory programmes and what they report.