

Future of monitoring using conventional RV platforms

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cefas

Survey design and analysis



CEFAS ENDEVOUR
LOWESTOFT

Known Pro's and Con's

- Expensive (acquisition, running and staffing)
- Rare asset (spatial temporal coverage poor)
- Susceptible (human, mechanical, environmental)
- Most flexible in terms of gear / sensor deployment (low tech)
- Adaptive design possible at sea
- Existing timeseries for some ecosystem components
- Here to stay at least for fisheries surveys
- Not bound by national boundaries plus already internationally coordinated

Fisheries RV surveys to ecosystem surveys?

- Different times, types, designs and spatial coverage, **make it work for you... rather than work against it.**
- Maximise useful data collection by having specific aims, **don't just dangle... use the ecosystem understanding not the indicator.**

Fisheries RV surveys to ecosystem surveys?

- Prioritise the linkage with components already collected to maximise the ability to extend timeseries ... **look for what is already there and not just in surveys.**
- Integrate data collection to help in understanding ecosystem processes ... **Integration is much more valuable than coordination.**

What the future might look like

- Fisheries surveys into ecosystem monitoring surveys: Celtic Sea Region ecosystem monitoring program. (Cefas, IFREMER, JNCC and the Marine Institute on a defra / cefas funded 2-year project)
- Follows a conceptual ecosystem model as a framework in the design
- It must fulfil UK, France and Ireland's MSFD statutory obligations efficiently
- ... but must also provide ecosystem process / hypothesis testing
- We are interested in receiving input from experts in the Celtic Sea particularly where there is an opportunity to collaborate on ships time, to collect additional ecosystem components

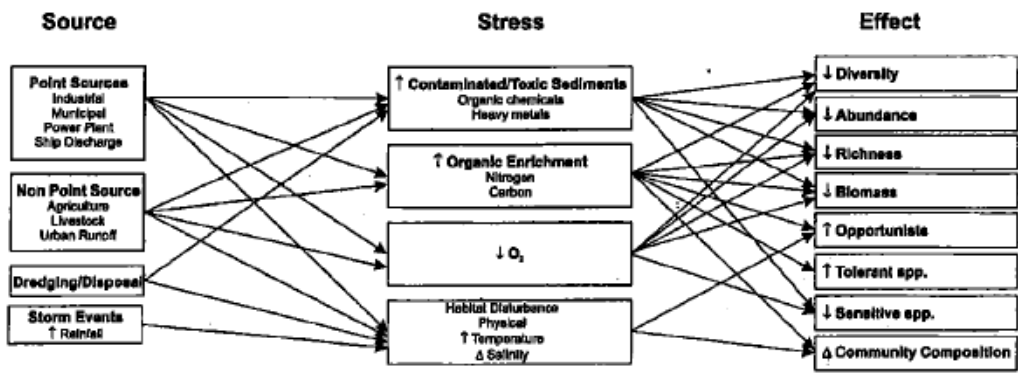
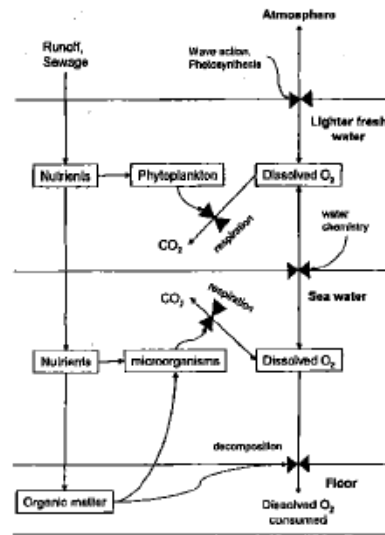
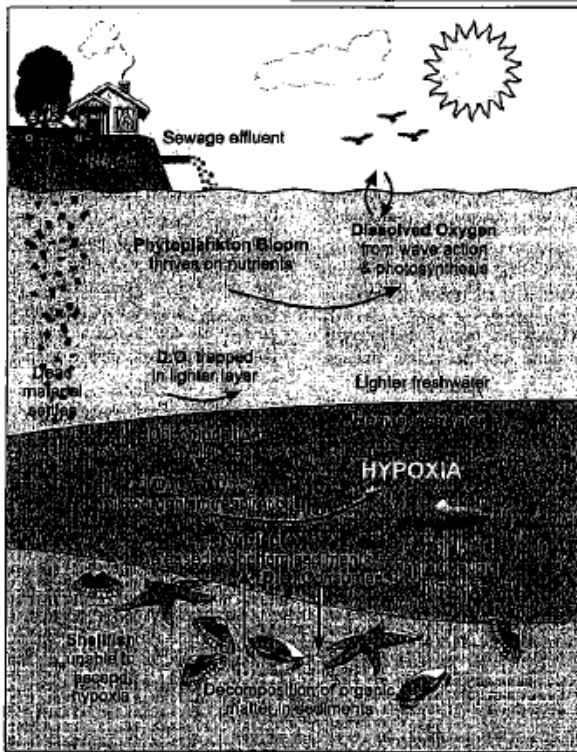


Figure 3. Three representations of the same system (modified from Kurtz et al. 2001). The top figures are control models, with feedbacks and elementary mechanistic connections between system components. The bottom model is a stressor model, which more clearly communicates the links between stressors and effects.

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