

Minutes Marbef-RMP “Recruitment” Meeting

23 June 2005, Santiago de Compostella, 14:00-17:00 Hotel Tryp Lazaro

Present:

Francisco Arenas, Nando Boero, François Charles, Teresa Cruz, Alexandra Cunha, Jean-Claude Duchene, Luca van Duren (replacing Peter Herman), Celine Ellien, Aschwin Engelen (replacing Ester Serrao), Luis Gimenez, Katell Guizien, Olive Heffernan, Iris Hendriks (minutes), Piotr Kuklinski, Katja Philippart (chair), Enrique Quieroga, Koen Sabbe, Isabel Sousa Pinto, Eric Thiebault, Benni Winding Hansen, Maria Wlodarska.

1. Introduction

All participants got a few minutes to explain what they wanted from the project, concerning samples, and sampling frequency and what they could offer in return (sampling/frequency/expertise). It was soon clear that following this strategy, the project was getting very elaborate and split into many small sub-projects. Nando Boer remarked this would be too complex to handle within this project. This started a discussion on the original intentions of the project, where at the end all participants agreed to keep it simple and go back to the original plan, i.e. one frame design, and standardized sampling.

2. General plan

To aim of this project is to identify phase-changes (if present) in recruitment along latitudinal gradients. Is there a gradual gradient in recruitment or sudden shifts in recruitment patterns (possibly indicating bio-geographical boundaries)? This also has management applications. We have to identify the pattern before looking at the processes. The scale of observations has to be large, small-scale gradients require detailed measurements. We need to harmonize the sampling strategy and pick similar areas to put the frames. To which taxonomic level do we have to identify the species? Every institute should determine roughly what is on the plates. (Digital) photographs can give a more detailed overview, and make it possible to track succesional changes. Species that are difficult to identify or where other additional information is required (e.g. morphology, allometry) could be send to specialized labs.

Site selection

To standardize as much as possible, all recruitment frames need to be placed at a site which has the following features:

- subtidal (5 m average depth), always submerged
- low pollution
- sheltered area
- low river influence
- salinity and environmental parameters as **stable** as possible

Frame design

- possibly 3 frames per site, containing plates and traps.
- (small) loggers for monitoring environmental conditions are considered
- total size plates: 15 x 15 cm, sampling area 10 x 10 cm.
- material plates: black plexiglass (pvc?), roughed.
- preparation plates: submerged in water before experiments to extract chemical signal
- placement of plates in frame: horizontal, both sides investigated.
- attachment of plates to frames: fixed with cable ties attached to holes drilled in plates.
- larval traps following: Yund, P., Gaines, SD, and M. Bertness (1991) Cylindrical tube traps for larval sampling. *Limnol. Oceanogr.* 36, 1167-1177; Todd, C.D. (2003) Assessment of a trap for measuring larval supply of intertidal barnacles on wave-swept, semi-enclosed shores. *J. exp. mar. Biol. Ecol.* 290, 247-269.
- trap problem to solve: fixation fluid. Formaline is no option due to regulations in certain countries and unsuitability for genetic species determination. Alcohol is too light, salt may be an option.

Data collection

- per sampling event: 1 plate and 1 trap per frame (to avoid pseudoreplication)
- every two weeks or monthly (when sampling period is one year: monthly)
- period of sampling: depending on predictions from participants (please fill in the Questionnaire!) period of the year or whole year. Whole year is preferred, but may not be feasible for all participants and/or all sites.
- frame cannot be taken out of the water. Plates are replaced in the submerged frame
- one set of replicas is replaced with a new set to monitor (primary) settlement ("settlement" plates), one set is taken after longer periods to monitor seasonal succession ("succession" plates). Photos could also be taken for the succession plates.

Possible experts to include in the project:

Sponges	Marta Ribes?
Ascidians	Jens Kjerulf Petersen?

3. Outreach

Outcome of the project should be published to the scientific public, the public at large, stakeholders and end-users (communication with Theme 3). Public awareness could be raised by media/press releases. We can write these, Olive Heffernan could distribute them. We need to compile a list of minimal contributions like articles for the newsletter (after the research is done), a tutorial on the website, symposium session. In the outreach and education section there could be a topic on life-cycles.

In communicating this Pan-European project a map of Europe and photo's of the research sites would be good visual material. This way we can construct an interactive map.

4. Planning meetings

Kick-off meeting	Santiago 23 June 2005
Intercalibration meeting	Banyuls, spring 2006
First results meeting	Winter 2006/2007 (back to back with MarBEF activity?)
Results: future research	Winter 2007/2008
Final symposium	Dedicated session at ASLO 2009?

5. Closure & Communal dinner

Appendix A: Task list

1. Frame design	Katja Philippart
2. Sampling design	Peter Herman (will be approached by Katja)
3. Data loggers (temp)	Francisco Arenas (costs and possibilities)
4. Plates	Piotr Kuklinski
5. Media contact	Iris Hendriks (& Katja Philippart as back-up)

Representatives of all participating institutes are kindly requested to:

- Locate a suited area for the frames (see site selection)
- Send a (digital) photo of your research site/institute (to iris.hendriks@uib.es) in order to construct an interactive map (see outreach)
- Fill in and return the questionnaire with regard to your sampling site (see Appendix B as attached file). Sorry for any overlap with previous questionnaires (if so, just refer to previous answers), this is obviously “work in progress”