

PMG meeting – 2 pm (Stanley, Falkland Islands) – 26/3/2024

Attending: Jesse van der Grient, Al Baylis, Andreas Winter, Simon Morley, James Bates, Michael Harte, Paul Brickle

1. Overview of:
  - a) Work package 1
  - b) Work package 2
  - c) Work package 3
  - d) Work package 4
  - e) Work package 5

2. Next steps

3. AOB

1. Overview of:

This is the last PMG meeting for this project, and therefore the meeting reviewed the achievements from the last two years within the project, going by work package.

a) Work package 1

Work package 1 related to the management of the project, with most indicators therefore relating to administration, including the hiring of the PM and signing of MoU. Further, the organisation of the PMG meetings and Darwin reports were included in this work package and were completed. Last, there was a reminder that the website and M&E plan were created, and the website continues to host PMG meeting notes and reports. Overall, this package is completed, and all indicators are met.

b) Work package 2

Work package related to the synthesis and generation of baseline observational data. This included a desk-top review on current knowledge of trophic interactions and ontogenetic migration patterns in the Falklands marine ecosystem. The aim was to synthesize at least 20 datasets, and in the end 49 datasets were synthesized. This work was published in the *Avances in Marine Biology*. In addition, zooplankton surveys were carried out, although this work is still being finalised by a PhD student. The aim was to conduct 20 surveys; 14 fieldwork days were conducted, totalling to 126 survey tracks, and 252 samples, achieving much higher than originally set out. The collected data also supported the successful application to two other funds for further work. Last in this work package was the aimed Loligo egg survey, where 10 surveys were aimed for. We conducted 15 transect surveys and found 2 egg masses in waters of 46 m depth. Overall, this package is completed, and all indicators are met.

### c) Work package 3

Work package 3 related to physiology, with a focus on how animals living in inshore environments may respond to ocean warming. Two large-scale experiments were conducted successfully, studying 8 species, including two life stages of one species and two cohorts of another. The aim was to test 7 species (without a clear experimental protocol set out in the beginning). One experiment was related to rates of warming, which provides an indication of responses to short- and long-term ocean warming. The second experiment related to respiration rate changes in response to steady rates of warming and developmental changes in squid embryos. The two studies are written up as manuscripts, with one almost ready for submission. Overall, this package is completed, and all indicators are met.

### d) Work package 4

Work package 4 related to ecosystem modelling, and included a successful workshop in Oregon hosted with Will. The ecosystem modelling work changed from building “a model” to building a historical model to investigate fishing and environmental impacts on the ecosystem. A manuscript is still being developed to capture the modelling results. The indicator for the training package was changed as a well established course is freely available online, with much more information than the PM could provide. Therefore, instead, the PM gave an introduction into ecosystem modelling with Ecopath with Ecosim and provided materials for participants to her talk to visit the course and other helpful resources. Overall, this package is completed, and all indicators are met.

### e) Work package 5

Work package 5 related to the policy side of this project, and included a review of ecosystem-based fisheries management, and climate change adaptation. A second workshop was held to investigate how EBFM applies to the Falkland Islands, and this information was shared as a recommendation with key partners in the Falkland Islands Government. Overall, this package is completed, and all indicators are met.

## 2. Next steps

Manuscripts are still being developed out of the work including physiology and ecosystem modelling manuscripts. The PM will continue to work on these. Further, she submitted an abstract to attend the Ecopath 40-year conference in Belgium in June. Last, the PM will work at the University of Essex to barcode her gelatinous zooplankton samples.

## 3. AOB

The effort of the project partners was recognised and thanked by Paul and AI, who rightfully stated that without their help this project would not have been possible and that each partner contributed in a significant and unique way.