



MASTS MEF Small Grant Report

Introduction

Scotland is becoming a major international hub of activity and expertise for marine renewable energy including offshore wind, wave, and tidal-stream energy as well as seaweed cultivation for algal biofuels. In parallel, a growing community of early career researchers (ECRs) are now working in this field in Scotland. However, a key difficulty experienced by ECRs in working in renewable energy is devoting sufficient time to producing high-quality manuscripts for peer-reviewed journals, particularly given that research in this field is often governed by commercial timeframes.

We applied for a small grant (£1000) from the MASTS Marine Renewable Energy Forum, in order to host an ECR writing retreat. We invited 10 ECRs to spend one week at a remote location (Balgy Lodge in the Scottish Highlands) to focus on writing marine energy themed manuscripts in order to 'fast-track' production of these manuscripts. A key requirement was that a draft manuscript would be completed at the end of the retreat.

This report details the attendees of the retreat along with the manuscripts developed, feedback from participants and organisers and a 'how to' guide for organising an ECR writing retreat.

Attendees and manuscripts

Raeanne Miller (SAMS, co-organiser): "Ontogenetic variation in larval sinking velocity and mass density of two common biofouling species", *Journal of Experimental Marine Biology and Ecology*

Karen Alexander (SAMS, co-organiser): "Modelling the potential benefits of marine renewable energy installations", *Ecopath 30 years Special Issue in Ecosystem Modelling*

Tom Adams (SAMS): "Sticking together: simulating movement of marine mammals and response to underwater noise", *Journal of Applied Ecology*

Zoe Hutchison (SAMS): "Buried alive: the behavioural response of two mussels, *Modiolus modiolus* and *Mytilus edulis* to sudden burial by sediment", *PLOS One*

Sally Rouse (SAMS): "Commercial fisheries use of oil and gas pipelines on the UK continental shelf: impacts of the North Sea decommissioning plans on fisheries", *Journal of Environmental Management*

Iona Campbell (SAMS): "Potential environmental impacts of large-scale macro-algae cultivation", journal TBD.

Denise Risch (SAMS): "Variation in acoustic propagation across a tidal flow and its relevance for estimating acoustic footprints of marine energy devices" *JASA (Journal of the Acoustical Society of America) Express Letters*

Andrew Want (ICIT Orkney): “Settlement patterns of Cthamaloid barnacles at their northerly distribution range”, journal TBD, and “50 years after Powell: distribution of *Fucus distichus anceps* on Mainland, Orkney”, European Journal of Phycology.

James Morrison (Lews Castle College): “Time series analysis tools for Wave Data”, Journal of Open Research Software

Charlie Greenwood (Lews Castle College): “The simulation of oscillating wave surge converters using a Boussinesq model: wave disturbances around an array”, Renewable Energy

Feedback from attendees

What worked well

Nearly all participants felt that the group size of 10 was ideal: enough people for a good social atmosphere, but not enough to be distracting during working hours. Working space was also an important consideration and at this particular venue > 10 people working on laptops would have led to cramped conditions. Instead, focus was maintained and all participants felt they were more productive than if they had been at their normal place of work: *“Overall, I found it very productive and good to get away from the little meetings and other minor things that tend to fill up a day. It was perfect timing for me on my project and, without having the retreat in the diary, I would have been tempted to keep on analysing and analysing when I have plenty to write a paper with already.”*

Help, advice and feedback from other ECRs on research was also found to be valuable and a number of participants reviewed reciprocal manuscripts and took advantage of the group’s marine energy knowledge base. The retreat also provided an opportunity for increased awareness of other ongoing ECR research in marine energy across Scotland.

The social atmosphere at the writing retreat was extremely positive. Participants were cooperative and worked as a team throughout the week in cooking, cleaning, lunchtime walks, putting the world to rights over dinner and playing silly games in the evening. Highlights included a memorable Marilyn Monroe impression while playing charades and reciting Robert Burns’ ‘Ode to a Haggis’ one verse at a time as a group before a meal of haggis, neeps, and tatties.

Tips and suggestions to improve ECR writing retreats:

While the information document provided before the event was generally perceived extensive, it was suggested that attendees could be encouraged to bring an external mouse and keyboard with their laptop to improve comfort. One participant even suggested a wireless printer for reviewing manuscript drafts in hard copy would have been useful. Additionally, a more formal introduction on the first night may have helped to set the tone for the week and ‘break the ice’ for participants.

The Wi-Fi provided at Balgy Lodge did not have the capacity for 10 ECRs to be online simultaneously. In future retreats, attendees should be advised that this may be the case and advised to print out or save necessary materials to an external hard drive. This would reduce internet traffic and may also increase working efficiency. However, some attendees suggested that decreased internet access actually increased their productivity and the limited bandwidth was a positive feature of the retreat.

Participants advised that sharing menus for group meals in advance of the retreat could be beneficial to prevent duplication (although we did not experience this problem). It was also noted that formal working hours (e.g. 9-5) don’t necessarily work for everyone and that flexibility would be preferred, provided that the overall goals are achieved by the end of the week. One participant also suggested

that next time she would be more realistic about what she could achieve in one week: *“I’d probably have downsized my agenda for the week so I didn’t feel like I wasn’t achieving what I had set out to do. I had intended to start planning another paper and get the framework down.”*

As organisers, in future we would request tentative paper titles and journals in advance of the event. This might serve to make the retreat more concrete in the minds of attendees, to help them to prepare for the event and to help the organisers to assess the commitment of those wanting to attend. Having organised and successfully run this writing retreat, we will certainly have more confidence in running a further writing week and would seek to be more definitive with regards to our expectations and organisation of a further event.

How to run a writing retreat for early career researchers

1. Finding a venue

We had several requirements for a venue for the ECR writing retreat: to sleep all 10 people in individual beds; to have sufficient space for 10 people to work for 5 days; to be somewhat remote; to have adequate cooking facilities for 10 people, with proximity to a local shop a bonus; and finally, internet access. The venue also needed to fit within our budget and still be somewhere attractive for people to visit. It is important to define requirements as a first step.

The cost of venue hire was most challenging and would have been a larger issue had the retreat occurred during summer. However, December is considered 'low season' with costs often reduced at this time. We would advise anyone considering a retreat to think about the time of year, particularly where cost may be an issue.

2. Inviting attendees

After gauging interest in the event internally at SAMS, we crafted both an invitation email and information document with details about the retreat. The information document explained the reason for the retreat, described what to expect during the retreat, what to bring and information about the venue. Finally, we included some basic ground rules about working hours, etc. and highlighted the requirement for attendees to commit to producing a draft manuscript by the end of the week, either ready for review by co-authors or ready for submission to the appropriate journal.

3. Organising food & transportation

Our funding allowed us to cover bed and breakfast costs for attendees; a daily basic breakfast consisted of toast, cereal, fruit, porridge, coffee, tea. Attendees provided their own lunch and in pairs took turns cooking dinner for the group. We decided to have an evening meal out at the local pub on the final night to celebrate the end of the week and would recommend this approach, as group meals meant that everyone sat down together each evening, reviewed the day, and socialised.

It was not possible for us to cover transportation costs and therefore attendees were required to source their own travel costs. Finding an alternative source of funding for transportation could, however, have encouraged more attendees out-with the Highlands and Islands region.

4. Running the retreat

While the retreat was generally informal in nature, participants tended to work between 8:30 am and 6 pm, taking ~1 hour lunch break.

While we had planned to have a daily 'round up' of attendee experiences, we found this happened naturally at mealtimes, where everyone discussed their work, difficulties they were having and how their writing was progressing. In future retreats this could be formalised, however we would caution against the week becoming too structured but rather to allow each individual the time and space to write in their own way.

5. Getting feedback

While we received informal feedback over the course of the retreat, we also prepared a short post-event questionnaire for all attendees. We asked:

- 1. What is the title of your manuscript and what journal would you like to submit it to?*
- 2. What information could you have had before the event that might have made it more productive for you?*
- 3. During the week, what one thing would you do differently?*
- 4. Do you have any other feedback for us?*

We hope that this information will be useful to anyone planning to run a similar event, and we would be happy to further share our experiences.