



## **Darwin Plus DPLUS065: Mapping the Falklands and South Georgia coastal margins for spatial planning (Coastal Mapping).**

Project Management Group (PMG) – Summary Minutes  
Wednesday 12<sup>th</sup> December 2018 – JNCC Office / SAERI Office / Skype  
12:30hrs UTC-3 / 15:30 hrs GMT

### **Attendees (TBC):**

Tara Pelembe (Chair) (SAERI)  
Neil Golding (Secretariat) (SAERI)  
Denise Blake (FIG)  
Michael Harte (OSU)  
Gwawr Jones (JNCC)  
Sue Gregory (GSGSSI)

### **Apologies:**

Ross James (GSGSSI)  
Paul Brickle (SAERI)  
Helen Havercroft (GSGSSI)  
Paul Brewin (SMSG Ltd)

### **Summary of Actions:**

***ACTION 2018-12-01: OSU, JNCC & SMSG to submit invoices for FY 18/19 of the project by Friday 1<sup>st</sup> February 2019 to NG.***

***ACTION 2018-12-02: NG to add OSU building fire to issues log, flagged by MH with reference to subtidal data from the November 2018 field trip which Chris Goldfinger participated on, and who was processing data back at OSU following the trip. Potential risk around date of delivery of subtidal data from OSU, which will feed into the fine-scale models.***

***ACTION 2018-12-03: SG to follow up with HH regarding GSGSSI decision on broad-scale map peer review.***

***ACTION 2018-12-04: GJ to consider ideas for an outreach article following her project visit in March 2019.***

***ACTION 2018-12-05: NG to submit South Georgia fieldwork RAP to Jen Lee & ASSI***

***ACTION 2018-12-06: SG to contact BAS GIS team about publishing South Georgia broad-scale habitat maps on the GSGSSI webGIS.***

***ACTION 2018-12-07: TP and NG to meet with iLaria to discuss her concerns over Google Earth***

***ACTION 2018-12-08: NG to discuss with iLaria about a feedback system in the webGIS system***

## Agenda:

### 1. Approve agenda & AOB & sign-off minutes from PMG (10<sup>th</sup> Sept 2018)

The agenda was approved by the PMG members and **ALL** were content to sign-off the minutes of the previous PMG meeting (10<sup>th</sup> September 2018). The minutes from the 10<sup>th</sup> Sept meeting will be available on the Coastal Habitat Mapping project website: <https://www.south-atlantic-research.org/research/terrestrial-science/coastal-mapping-project/coastal-mapping-project-download-area/>

*Actions from 10<sup>th</sup> Sept 2018 meeting*

- *ACTION 2018-09-01: NG to follow up with GJ regarding staff changes at JNCC in relation to the project budgets. **COMPLETED***
- *ACTION 2018-09-02: NG to disseminate details of the 1956 geo-referenced imagery to PMG members. **COMPLETED***
- *ACTION 2018-09-03: NG to revise Risk Register and place update on Trello. **COMPLETED***
- *ACTION 2018-09-04: NG to include currency conversion on Issues Log and place update on Trello. **COMPLETED***
- *ACTION 2018-09-05: NG & TP requested that ALL members review the M&E plan ahead of next meeting. **COMPLETED***
- *ACTION 2018-09-06: NG to follow up with GJ after meeting about SD bathy models. **COMPLETED***
- *ACTION 2018-09-07: NG to follow up with HH regarding SG broad scale map peer review. **COMPLETED***
- *ACTION 2018-09-08: NG to follow up with DB regarding peer review of Falkland's broad scale map peer review. **COMPLETED***

### 2. Review project plan and budgets (NG)

- Key deliverables review

*NG noted that the timeline for the Falklands broad-scale map deliverable had been extended, following agreement by the PMG intersessionally after the last PMG. This was to allow inclusion of new, opportunistic data being collected as part of some salmon work being undertaken by SAERI. This data was integrated within the Falklands broad-scale map, and the map has now been delivered to FIG.*

*The next big deliverable for the project will be the fine-scale models, due at end of June 2019. A small workshop has been arranged for Monday 17<sup>th</sup> December with JNCC and OSU staff working on this Work Package. This will focus on the process and methodology for the fine-scale modelling phase of the project.*

- Budget overview

*Budget forecasting is due in January 2019 for Darwin.*

*Contracts in place with Environment Systems for the Satellite-Derived Bathymetry work, as well as the South Georgia field expedition, and the projects contribution to this.*

*NG flagged that Feb/March 2019 will be a busy period, so requested that all invoices from **JNCC, OSU & SMSG** are submitted earlier than normal. NG will be out of the office from 22<sup>nd</sup> February until 25<sup>th</sup> March 2019.*

***ACTION 2018-12-01: OSU, JNCC & SMSG to submit invoices for FY 18/19 of the project by Friday 1<sup>st</sup> February 2019 to NG.***

### 3. Review project management documents: (NG)

- Review project risk register

*No changes made by NG to the Risk Register. There were no further additions or changes requested by the PMG. MH highlighted the recent fire at OSU, and its impact on delivering subtidal data. NG to add this to the Issues Log.*

- Review project issues log

***ACTION 2018-12-02: NG to add OSU building fire to issues log, flagged by MH with reference to subtidal data from the November 2018 field trip which Chris Goldfinger participated on, and who was processing data back at OSU following the trip. Potential risk around date of delivery of subtidal data from OSU, which will feed into the fine-scale models.***

*Currency fluctuations as an issue, has been logged. SAERI took this up with Defra, and NG / Teresa Bowers has been liaising with MH.*

*GJ mentioned that JNCC had failed to recruit her replacement. While this will not impact the project (as if a new person is not recruited, then Gwawr will participate in the workshop), it should be noted that this is ongoing. GJ stated that this did not need to be included within the Issues Log.*

- Review M&E plan

*Noting that the M&E plan is owned by the PMG, there were no further comments on the M&E plan from the PMG members. However, GJ stated that the M&E plan was very thorough and that there are no obvious gaps.*

- Review project communications

*The project has been proactive on social media, sharing news and updates on Facebook & Twitter accounts, using the #SouthAtlanticCoastalMapping. NG encouraged all project partners to share and retweet activity to help build momentum behind the project.*

*Plan for an article in the Penguin News about the minefield mapping, in conjunction with the Foreign Office and SafeLaneGlobal. This article will need clearance from Guy Marot as well as the PMG.*

*Would be nice to get a project update on the South Georgia newsletter. This will be largely dependent on sign off/peer-review decision on South Georgia broad-scale habitat maps. SG stated that she would follow up with HH when returning to the GSGSSI office.*

***ACTION 2018-12-03: SG to follow up with HH regarding GSGSSI decision on broad-scale map peer review.***

*TP mentioned that herself, NG and SG were at a South Georgia workshop organised by British Antarctic Survey focussing on developing a research & monitoring plan for South Georgia. NG presented an update on the DPLUS065 Coastal Habitat Mapping project at this workshop.*

*MH updated the PMG on two items of interest. (1) OSU are very close to getting the go-ahead (just awaiting approval from the editorial board) to feature the DPLUS065 project in the OSU Research Magazine. (2) OSU are keen on making a documentary about South Georgia, the Falklands and the Peninsula, and the work that OSU has been involved in – this is still being scoped out as an idea.*

*GJ stated that she will be visiting the Falklands (and SAERI) in March 2019 to work on this project. Following this visit, GJ intends to write some form of outreach material (yet to be decided) promoting this Darwin project, and JNCCs role in it.*

***ACTION 2018-12-04: GJ to consider ideas for an outreach article following her project visit in March 2019.***

#### **4. Fieldwork update: (NG)**

- Subtidal fieldwork (Falklands)

*Chris Goldfinger was down in the Falklands working with SAERI and SMSG on the subtidal element of the project, gathering sidescan data from around Port William and drop camera imagery. It was a very successful trip, and gave Chris a flavour for some of the challenges around mapping the Falklands shallow subtidal habitats. Chris will be chatting to Bran about some of these challenges, such as Lessonia mapping. Chris is currently processing the sidescan data that was collected during those two weeks of fieldwork.*

*During his time down at SAERI, Chris also ran a sidescan sonar training workshop for project partners. Both SMSG and SAERI staff participated in the training course.*

- Terrestrial fieldwork (Falklands)

*Terrestrial fieldwork has been focussed on areas identified through the stakeholder prioritisation workshop.*

*Drone imagery has been collected over many of the minefields being cleared on Cape Pembroke, working in partnership with SafeLane Global and the FCO.*

*The project has also collaborated with Falklands Conservation, mapping a new private nature area set aside for habitat restoration in Port Howard.*

*A pilot of the fine-scale habitat modelling will be available for trial in February 2019, moving away from pixel-based analysis in Google Earth Engine to an object based analysis approach in Python. The drone imagery captured as part of the fieldwork will be fed into this fine-scale habitat modelling approach.*

*Work also commenced at Port Sussex mapping areas of Calafate with a new RedEdge-M multispectral camera; this camera was purchased by SAERI independently of the DPLUS project, but will be available for use as part of the projects work modelling invasive species such as Calafate – this was flagged as a priority as part of the Falklands stakeholder prioritisation process. Having used this camera in her fieldwork, Nicole (the Shackleton Scholar discussed later) was able to share her knowledge during this fieldwork excursion to Port Sussex.*

***DB*** confirmed that all was good from the Falklands Islands Government with respect to progress on the project.

- Terrestrial fieldwork (South Georgia)

*South Georgia Heritage Trust are leading an archaeological expedition to South Georgia – the DPLUS065 project is working with this expedition, to collect coastal aerial imagery of use to both projects, as well as collect ground validation information for development of the fine-scale habitat models around the coastal margin of South Georgia. A planning workshop was held on 10<sup>th</sup> December 2018 with Bob Burton (South Georgia Association) and Marcus Brittain (Cambridge University).*

***ACTION 2018-12-05: NG to submit South Georgia fieldwork RAP to Jen Lee & ASSI***

#### **5. Broad scale habitat maps on WebGIS – SG & Falklands (NG)**

***NG*** asked ***SG*** what the best mechanism was to ensure the South Georgia broad-scale habitat maps are displayed on the GSGSSI webGIS. ***SG*** stated that the webGIS is managed by BAS, and to contact Helen Peat.

***ACTION 2018-12-06: SG to contact BAS GIS team about publishing South Georgia broad-scale habitat maps on the GSGSSI webGIS.***

*NG will discuss with iLaria regarding the publication of the Falklands broad-scale habitat maps – the plan is for these to be online before the Darwin annual report is published in April 2019.*

***ACTION 2018-12-07: TP and NG to meet with iLaria to discuss her concerns over Google Earth Engine.***

6. Independent peer review of project outputs – update (DB & GSGSSI)

*NG provided some context around the peer review of broad-scale habitat maps. NG stressed that the methodology employed by Bran to develop the broad-scale habitat maps is a well-tested, reported and peer reviewed methodology. Because the habitat maps are effectively outputs from predictive models, it is important for end-users to be familiar with (and to understand) the error (confusion) matrix which has been created for each habitat map. The model predicts different habitats with different levels of confidence – for example the model is much better at predicting tussac than say wetlands.*

*When these broad-scale maps are viewed/downloaded from the webGIS, a warning will flag up that it is important that the confusion matrices are considered alongside the broad-scale maps. DB from FIG was content that this addressed her concerns. MH flagged that it is important to note that where there is uncertainty in some of these broad-scale classes, and they are being revisited as part of the fine-scale mapping – these broad-scale maps will effectively be superseded by the newer, more accurate products. GJ suggested implementing a feedback loop, so that where end users discovered errors with some of the predicted classes, feedback could be provided to improve the maps. ALL agreed that feedback loops such as this were an excellent idea. However, further consideration needs to be made as to who would review and implement changes from this feedback, as well the systems needed to allow this to happen.*

***ACTION 2018-12-08: NG to discuss with iLaria about a feedback system in the webGIS system.***

*From a peer review perspective for South Georgia, SG deferred the decision to HH.*

7. Shackleton Scholar update (NG)

*Nicole Durfee visited from Oregon State University for two weeks as a Shackleton Scholar focussing on using drones within the Falklands. This Shackleton programme was run in collaboration with the Coastal Mapping project. Nicole ran a series of workshops and activities across two weeks. Presentations both on drone use (by Nicole) and a DPLUS065 project update (by NG) were made at the Chamber of Commerce in Stanley (15 attendees), at the Hill Cove Social Club, West Falkland (7 attendees) and Fox Bay East, West Falkland (3 attendees).*

*Ahead of and during the two weeks, there was a collaboration between SAERI and the Falklands Conservation Watch Group – the first session was led by NG out on Hadassa Bay, while the second session was led by Nicole Durfee at the FIDF Hall (due to wet weather).*

*The PMG collectively thanked Nicole for her hard work in making the Shackleton drone fortnight such as success. TP also highlighted that the partnerships with the likes of OSU and JNCC have been critical to the project success.*

8. Darwin Terms & Conditions (TP)

*TP briefly mentioned the Darwin T&Cs, which were circulated by NG for information. These are the overarching layer (above Research Agreements etc) which are the binding terms and conditions for the project. NG stressed that this is important from a “data ownership” perspective, but also with respect to capital items, which should reside in the project territory following completion of the project.*

*NG mentioned that he has two hard drives with Darwin + DOKI project data – for JNCC to archive.*

*There is a request that these hard drives are sent on to Dundee (for the attention of iLaria) once the data has been archived by JNCC – Amanda Gregory is the data contact at JNCC.*

9. AOB

*There were no items under AoB*