

Monthly Update
December 2012 / January 2013

I. Overview

1. Key achievements: December 2012 /January 2013

- 2 x PE-LTERMP research trips successfully completed
- 2 x Estuarine LTERMP research trips successfully completed
- 1 x Productivity experiment trip to Algoa Bay and Port Alfred
- Continuous Monitoring Platform maintenance schedule reasonably up to date
- 2 x disabled parataxonomists employed
- Visit to Grahamstown and marine platforms in PE by the NRF Executive and Board

2. Key activities proposed: February 2013

- 4 – 28 February: Tsitsikamma MPA research field trip
- PE-LTERMP field trip in Algoa Bay
- Estuarine LTERMP field trips
- Gully Probe servicing in Algoa Bay and St Francis Bay
- CMP maintenance field trips in Algoa Bay and St Francis Bay
- Data management meeting with Wim Hugo at Elwandle Node

II. Achievements: December 2012 /January 2013

1. Management, Student and Staff Relations

- 5 December: Tommy met with Prof Andrew Leitch, Dean of Science at NMMU, regarding SAEON Research Associates at the University.
- 10 December: Interviews conducted with shortlisted candidates for the 2 Parataxonomy posts.
- 10 December: Shaun Deyzel submitted his PhD thesis entitled: Deyzel SHP (2012): *Mesozooplankton dynamics in a biogeographical transition zone estuary*. PhD thesis. Zoology Department. Nelson Mandela Metropolitan University: 291pp
- 12 December: SANCOR Eastern Cape Regional Meeting, Grahamstown.
- 17 January: Angus and Tommy met with SANParks in Addo to discuss taking over the management and maintenance of their vessel Kadouw for a 3 year period. The vessel will be run by ACEP but benefit SAEON in that more vessels will be available for use.
- 17 January: Tommy met with Mr Tim Vink and Prof Eileen Campbell regarding research plans for the phytoplankton of Algoa Bay in 2013.
- 17 January: Shaun Deyzel attended meeting at SAIAB to discussion DST Internship mentorship options with Dr Angus Paterson and the applicant, Mr Mfundo Bizana.
- 18 January: Tommy, Shaun, Sean, Ali and Anthony met with SAIAB to discuss logistics and vessel requirements for the first 3 months of 2013.
- 29 January: Tommy presented a 15 minute talk to the NRF Board and Executive at SAIAB on the activities of Elwandle Node followed by a tour of the R/V uKwabelana and scientific instrumentation in Port Elizabeth.

- 2 BSc Honours, 2 MSc and 2 PhD students handed in their treatises, theses and dissertations for marking in December and January.

2. Monitoring Platforms

a. Algoa Bay LTMRP

- 8 December: Monthly PE-LTEMRP Plankton sampling trip conducted successfully.
- 14 December: Shaun Deyzel had a meeting with Dr Charles Von der Meden of Egagasini Node at Elwandle Node in connection with the Algoa Bay Offshore Benthic Monitoring Programme.
- Co-authored publication: WS Goschen , EH Schumann , KS Bernard , SE Bailey & SHP Deyzel (2012): Upwelling and ocean structures off Algoa Bay and the south-east coast of South Africa, *African Journal of Marine Science*, **34**:4, 525-536
- 21 January: Shaun Deyzel hosted an information sharing meeting with Dr Francesca Porri (RU/SAIAB), Dr Nicolas Weidberg (RU) and Mr Ryan Wasserman (RU), regarding zooplankton sampling protocols and data sharing options.
- 22 January: Monthly PE-LTEMRP Plankton sampling trip conducted successfully and in conjunction with Mr Tim Vink (MSc student, Botany Dept, NMMU) primary productivity *in situ* experiments outing.
- 23 January: Tommy Bornman and Shaun Deyzel conducted the monthly primary productivity experiments at Port Alfred
- On 23rd January an attempt was made at servicing the two Bird Island strings as well as those at 60m Central and 80m Bay Mouth but the interrogator unit was found to be faulty and in need of repair. These thermistors will be serviced at the next earliest opportunity by Sean and Nick.
- The Noordhoek Gully probe was serviced on 1st February by Tommy.

b. St Francis Bay LTMRP

- Oyster Bay Gully Probe serviced on 16 December 2012. Three other Gully Probes overdue for servicing due to inaccessibility of sites and rough sea conditions. Servicing planned for February 2013.
- St Francis Bay thermistor strings only due in March 2013.

c. Estuaries LTMRP

- The CT loggers were serviced in the Swartkops and Gamtoos Estuaries on January 16th followed by a full sampling of the Kromme Estuary on January 17th by Sean and Nick.
- 13 December: Kromme Estuary monthly monitoring field trip conducted successfully by Nick and Shaun.
- Co-authored publication: TH Wooldridge & SHP Deyzel (2012): Variability in estuarine water temperature gradients and influence on the distribution of zooplankton: a bio-geographical perspective, *African Journal of Marine Science*, **34**:4, 465-477.
- 15 January: Shaun Deyzel held a meeting with Dr Francesca Porri (RU/SAIAB) regarding potential data exchange options between existing PhD research programmes run in estuaries in the Transkei region.
- 16 January: Monthly ELTMRP sampling in Gamtoos and Swartkops estuaries by Sean Nick.
- 17 January: Monthly ELTMRP sampling in Kromme Estuary by Tommy Nick.
- 24-30 January: Shaun Deyzel (in collaboration with NMMU) partook in the Transkei Estuaries Programme, biannual field trip to the Mgazi and Ngqusi/Inxaxo estuaries (Wavecrest).

3. Marine Protected Areas

- PADI proposal for funding has been submitted.
- Preparations and equipment purchase for February Tsitsikamma National Park fieldtrip.

4. Data Management

- 11 December: Shaun Deyzel, James Stapley and Andrew Grant (SAIAB IT) held further discussions on way forward with upgrade of SAIAB-SAEON IT framework and connectivity.
- 16 January: Shaun Deyzel provided Algoa Bay CMP data to registered MSc student Ms Paige Potter (Zoology Dept. NMMU).
- 17 January: Shaun Deyzel held a Skype call meeting with Wim Hugo to discuss data management tasks and particulars around Wim's visit to Elwandle in February.

5. Education

- Nothing to report for December due to school closure during this time.
- 13 - 18 January Nozi attended and presented at the Marine and Coastal Educators Network (MCEN) conference held in Mosselbay.
- Weather stations were set up at schools with only one school experiencing technical problems.

6. Parataxonomy Laboratory

- Two new parataxonomists employed as of January 2013, i.e. Siyanda Ntamo and Zamuxolo Nqebeya. They are on short term contracts funded by Rhodes University and the Working for Water Programme.
- Mr Lulama Poni is busy training the new employees in their various tasks.

7. Technical: CMP Maintenance/SCUBA Diving/Boating

- The acoustic interrogator unit is to be sent back to Subsea Sonics for repair. They have agreed to repair at no charge. A demand valve returned by Anthony was fully serviced before the Tsitsikamma trip on February 4th.
- The problems with the profiling CTD and auto fire mechanism comm's continue. The unit is being worked on by an IT specialist at NMMU.

8. Stakeholder Relations

a. Joint ACEP Marine Platform Operations

- The marine platform has had a good start to the year, despite some technical issues with the boat in early January. Platform provision to 4 projects took place including:
 - SAEON Monthly Plankton Run
 - 2 x SAEON Productivity experiments
 - SAEON CMP equipment servicing
 - ACEP/OTN fish tagging trip
- A second 13m vessel is in the process of being brought onto the list of ACEP marine platforms. The boat, Kadouw, is from SANParks and will be available for use as soon as some technical issues with it have been sorted out. This will allow us to maximise the amount of work we do during the good weather and service more projects.

- uKwabelana, complete with the ROV setup received a visit from the NRF advisory board during January. Unfortunately weather did not permit for a trip to sea.

b. SAIAB-ACEP/SAEON/UFH/WSU Collaboration

- Mfundo Bizani started on the 1 February as an intern with Shaun in preparation for his PhD in 2014.
- Francesca started at ACEP Phuhlisa as a research advisor.

9. Challenges and corrective measures

- The DWA estuarine boat trailer has not been licenced yet due to issues at DWA and we have been using the trailer illegally. DWA is busy finalising the licence.
- One trip to service CMP network aborted due to release unit failure. Release unit were sent to the USA to be serviced. In the meantime we are using SAIAB's release unit.
- Seabird CTD and Niskin rosette were taken to NMMU in an attempt to fix the communications problem. Problem was found and fixed with the aid of Seabird technicians in the USA.
- Lack of funding to conduct and maintain basic monitoring and research. Core Grant funding will be supplemented by applying to Murray & Roberts for educational outreach and Angus Paterson funded equipment infrastructure for MPA research from his own research account.

10. Risks description, impacts and mitigation

- Lost four inshore 30m depth moorings due to release link failure. 2 were retrieved, 2 remain missing. Impact = loss of data and loss of equipment valued at R60,000. Mitigation = stronger nickel release links sent from the US free of charge. Flyers sent out to regular beach users to keep a look out for the lost instruments. An insurance claim has been submitted for the lost acoustic releases.

III. Proposed Activities: February 2013

1. Scheduled appointments

- 1 February: Meeting between Tommy, Nozi and Berny Snow to discuss the Murray and Roberts funding application.
- 4 February: South African National Consultation Workshop on the ASCLME's Strategic Action Programme, Cape Town.
- 5 – 6 February: Shaun and Tommy meeting with Mr Wim Hugo regarding data management, Grahamstown.
- 11 – 12 February: ACEP Projects Meetings, Grahamstown.
- 20 – 21 February: ASCLME Steering Committee Meeting, Birchwood, Johannesburg.
- 25 February: NMMU Research Associates Function

2. Monitoring Platforms and CMP Maintenance

- PE-LTEMRP monthly sampling
- Estuarine LTEMRP monthly sampling: Kromme, Swartkops, Gamtoos, Kariega

3. Marine Protected Areas

- 5th February – 5th March: TNP fieldtrip with stereo-BRUVs.

4. Data Management

- 5-6 Feb: Wim's visit to Elwandle Node to workshop Elwandle data management strategies
- 22 Feb: Shaun Deyzel and Wim Hugo will attend the Great White Shark Researchers working group meeting in Mossel Bay

5. Education

- Planning to run aqua quiz in collaboration with DAFF.
- Scifest preparations are ongoing.