

Monthly Update

May 2013

I. Overview

1. Key achievements: May 2013

- Dr Phethiwe Matutu from DST visits Elwandle Node
- Attendance of the St Lucia Estuary Natural Science Symposium
- Successfully completed six LTER and CMP maintenance field trips to Algoa Bay and the estuaries
- Conducted bathymetric mapping of Cape Recife and Riy Banks, Algoa Bay
- Johan Pauw visits Elwandle Node for performance reviews and to discuss Node Hosting arrangements with SAIAB
- Ports and Maritime Conference in Port Elizabeth.
- Attended or assisted on several Phuhlisa Programme field trips

2. Key activities proposed: June 2013

- Monthly LTER field trips to sample the Pelagic Ecosystem in Algoa Bay and Kromme Estuary.
- Monthly maintenance of estuarine CMP Network
- SANCOR Forum in Port Elizabeth
- SRIG application and sourcing of quotes for capital equipment

II. Achievements: April 2013

1. Management, Student and Staff Relations

- 2 May: Tommy met with Dr Werner Illenberger regarding the availability of coastal geomorphology data for SAEIS. Tommy also met with Dr Eckhart Schumann to inspect his Seabird CTD and took it to SAEON for testing.
- 3 May: Staff meeting
- 7 May: Tommy, Ali, Ant and Shaun passed the Port of PE Pilots Exemption exam.
- 9 May and 14 May: Tommy participated in a teleconference with IUCN and ASCLME regarding the final term audit of the Seamounts Project.
- 10 May: Tommy met with Dr Phethiwe Matutu from DST (Chief Director: Human Capital and Science Platforms).
- 13 May: Tommy and Shaun met with Herman Oosthuizen from DEA regarding the Great White Shark database.
- 15 – 17 May: Tommy attended and presented at the St Lucia Estuary Natural Science Symposium.
- 17 May: Conference call with all Node Managers and Head Office regarding funding opportunities.
- 20 May: Tommy met with SAIAB staff to discuss the SAEON / SAIAB stall at the Ports and Maritime Conference.

- 21 – 23 May: Tommy attended the NMDP course in Johannesburg and briefly met with Amani and Johan in Pretoria to discuss SAEON matters.
- 27 – 28 May: Performance Review visit to Elwandle by Johan Pauw.
- 27 May: Tommy and Johan met with Angus (SAIAB) to discuss Node hosting arrangement and collaboration.
- 29 – 30 May: Tommy attended the Ports and Maritime Conference in Port Elizabeth.

2. Monitoring Platforms

a. *Algoa Bay LTMRP*

- 2 May: Port Alfred UTR (80m) and GTP serviced by Sean Bailey and Shaun Deyzel.
- 13 May: UTR's CR and St Croix were serviced by Nick and Koos.
- 14 May: PE-LTEMRP monthly plankton sampling conducted successfully. Shaun, Mfundo (SAIAB DST/NRF Intern) and Nick (DST/NRF Intern) participated.
- 24 May: UTR's 80m BI, Woody Cape, Dune & Sundays serviced by Sean and Nick.

b. *St Francis Bay Estuaries LTMRP*

- Kromme Estuary sampled and upper reaches logger retrieved for the first time in 8 months. Unable to retrieve the logger in the past due to poor visibility related to the floods and subsequent phytoplankton blooms. Logger was still logging and had collected valuable data.

c. *Kariega Estuaries LTMRP*

- 2 May: CT logger launched in upper reaches of Kariega Estuary by Sean and Shaun.

3. Marine Protected Areas

Referee of journals (Ali): May 2013 Marine Ecology Progress Series

Publications in preparations:

Bernard et al.: A first application of stereo baited remote underwater video to survey fish in Africa. To be submitted to *South African Journal of Science*.

Edgar et al. with Anthony Bernard as co-author: Five critical attributes maximize the conservation potential of marine protected areas. To be submitted to *SCIENCE* (but probably published somewhere else).

Abstracts accepted

Heyns, E.R., Götz, A., Bernard, A.T.F. and A.W. Paterson. Depth related changes of the benthic invertebrate community structure in the Tsitsikamma Marine Protected Area, South Africa. *Southern African Society of Aquatic Scientist 2013 Conference*, 30th June – 4th July 2013, Arniston, Western Cape.

Funding granted/received:

NRF - Incentive Funding May 2013 (ZAR20,000)

NRF – Innovation Bursary Programme for Y-rated researchers May 2013 (ZAR70,000)

BES – Ecologist in Africa, second instalment processed by BES and potentially received by SAEON (ZAR75,000). National Office to confirm receipt of funds.

Outstanding: WIOMSA MARG I application (ZAR55,000)

Development of a collaborative research agreement between SAEON and SAIAB/ACEP with ACEP contributing roughly ZAR235,000.

Fieldtrips:

- 13th May 2013: Riy Banks bathymetric mapping on R/V *Honkenii*
- 14th May 2013: Cape Recife bathymetric mapping on R/V *Honkenii*
- 20th – 22nd May 2013: Riy Banks and Cape Recife bathymetric mapping on R/V *Honkenii*.

4. Data Management

- 13 May: Tommy and Shaun met with Herman Oosthuizen (DEA) at NMMU, to discuss data management options for the National White Shark Photo Identification Database
- 15 May: The first of a series of project registration documents was submitted to SANParks to apply for research permits within the Bird Island MPA, Algoa Bay
- 27 May: Shaun updated PE-LTEMRP zooplankton database
- 29 May: Shaun updated PE-LTEMRP CTD and metadata files and started with the development of a management database file for the Estuaries LTMRP.

5. Education

- World ocean day competition has been advertised in Grahamstown Parents Network (GPN) Newsletter and Grocott's Mail newspaper. A copy of the competition was also faxed to various schools. To date no responses received.
- Sunday 2013 developmental Expo workshop was held at Seventh Day Adventist School.
- All weather stations have been serviced at schools.

6. Parataxonomy Laboratory

- 8 May: Shaun met with Lasec representative Ms Remi Barnard to discuss Microscope maintenance plans and purchasing options.
- A total of 55 PE-LTEMRP zooplankton samples were processed for biomass determination.

7. Technical: CMP Maintenance/SCUBA Diving/Boating

- 15 May: A lost acoustic release unit and VR2 unit (SAIAB) was found and returned to SAEON.
- 28 May: Nissan Navara was serviced.
- Spares for the moored CTD arrived but the wrong I/O cable was sent. This was returned to FRS and we are awaiting the exchange.
- R/V *Honckenii* is in for repairs after the port starter motor failed on CMP trip at sea.

8. Research support / platform provision

a. *Joint ACEP Marine Platform Operations*

Favourable weather during May allowed for all of the required work on R/V *uKwabelana* to be completed for the month. This included:

- SAEON Monthly Plankton Run
- SAEON CMP servicing

- ACEP Shark tagging trip (on which 7 great whites were tagged at Bird Island!)
- ACEP Leery tagging at the harbour wall
- ACEP Phuhlisa Microbiology project fish collection
- The ROV was also very active this month as it was used in Sodwana Bay as part of the Multi-National, Multi-institutional Gombessa Expedition which was comprised of researchers, divers and videographers from SAIAB, SANBI, the National History Museum in France and Andromede Oceanologie. The ROV did 21 dives in various canyons in the Isimangaliso Wetland Park off the M/V *Angra Pequena*.

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

- 16 & 29 May: Shaun met with Dr Francesca Porri for further discussion of two Phuhlisa research projects.
- 21-26 May: Shaun co-lead a fieldtrip to the Mgazana Estuary for data collection related to 2 Phuhlisa research projects. Team leaders included Dr Francesca Porri (SAIAB/ACEP Phuhlisa) and Dr Jackie Hill (Botany Department, Rhodes University).
- 24 May: YSI, Secchi disk, light meter and Niskin bottle lent to Mr Ryan Palmer (SAIAB/ACEP) for estuarine fieldtrip.
- 28 May: Shaun met with Mr Ryan Wasserman (PhD student, RU) to offer advice on an analytical framework for data from his PhD and assist with species identification of estuarine zooplankton.
- 29 May: Shaun initiated a Scientific Writing Skills course with three DST Interns hosted by SAEON. Weekly meetings will be held aimed at improving not only their writing skills, but also literature searches, synthesis of content and integration into written products. All three interns intend to pursue careers in science and have identified this as the area requiring significant improvement.
- 30 May: YSI lent to Dr Nikki James (SAIAB) for estuarine fieldtrip.
- 31 May: Shaun met with Dr Angus Paterson, Dr Francesca Porri and Mr Garth van Heerden (SAIAB/ACEP Phuhlisa) to design project submission policy for Phuhlisa Programme projects 2013/14.

9. Challenges and corrective measures

- Winter is approaching thus reducing the number of available sea days. Mitigation: Considerable use will be made of R/V *Honckenii* during the good sea days to relieve pressure on R/V *uKwabelana*.

10. Risks description, impacts and mitigation

- The loss of a 30 m thermistor string at Port Alfred is a concern because it is the second string lost in the area. Divers will be sent to the area to determine if the mooring is lost or if the acoustic release is faulty. If the mooring is no longer there then we attempts will be made to find the string and buoys washed up on the beaches upstream of the longshore drift. The original mooring site was deemed unsafe due to fishing activity.

1. Scheduled appointments

- 3 June: Conference call with Albert van Jaarsveld and Angus (SAIAB) to discuss SRIG strategy, ACEP, etc.
- 3 June: Shaun to meet with Penny Haworth (SAIAB) to discuss cleaning services at SAEON offices
- 5 June: Tommy to meet with Eileen to be trained on the use of the phytotam for monthly plankton field trips.
- 6 June: Staff meeting
- Tommy and Shaun to meet with Prof Eileen Campbell to discuss matters pertaining to the PE-LTEMRP
- 11 June: SANCOR Forum in Port Elizabeth.

2. Monitoring Platforms and CMP Maintenance

- 6-7 June: PE-LTEMRP monthly sampling.
- Sean to assist Anchor Consultants in servicing their ADCP's and UTR's in Algoa Bay

3. Marine Protected Areas

- 31 May–6 June: Ali attending a preparatory diving trip for Antarctica in Cape Town
- MPA: Preparation and purchasing of stereo-video systems for July fieldtrip
- Completion of SAJS publication
- Anthony and Denham Parker: submission of abstract for SAEON summit
- Elodie will be attending the SASAqS conference in Arniston, Western Cape.

4. Data Management

- Complete development of Estuaries LTEMRP management database
- Update and audit PE-LTEMRP Zooplankton database
- Schedule data management meeting with PE-LTEMRP stakeholders for the month of July 2013
- Shaun to meet with Angus Paterson regarding ACEP II/III project registration and data management
- Shaun to meet with Angus Paterson, Garth van Heerden and Francesca Porri to discuss project registration and data management of Phuhlisa Projects.

5. Education

- Plans are in place to have one last workshop before July.
- Schools are writing their June Examinations at present and no further interaction are planned with learners until July.