

Monthly Update
November 2013

I. Overview

1. Key achievements: November 2013

- Successfully completed five LTER and CMP maintenance field trips to Algoa Bay, St Francis Bay and the estuaries
- WIOMSA Climate Change and MPA Training Course
- Node Liaison Committee meeting
- Celebrations of marine research at national facilities and the 75th anniversary of the discovery of the coelacanth

2. Key activities proposed: December 2013

- Monthly LTER field trips to sample the Pelagic Ecosystem in Algoa Bay and Kromme Estuary.
- Monthly maintenance of estuarine CMP Network (3 trips)
- SAEON Management Meeting
- Two research field trips planned

II. Achievements: November 2013

1. Management, Student and Staff Relations

- 5 November: Albrecht Gotz on NRF Review Panel for PDP Post-doc applications.
- 5 November: Tommy on NRF Review Panel for Free-standing Post-doc applications
- 6 November: Tommy attended the annual CoEs Directors Forum in Pretoria. Topic: Improving participation of black and women postgraduate students and emerging researchers within the CoEs.
- 7 November: Tommy, Sean and Shaun attended the SAEON / SAIAB integration meeting
- 8 November: Shaun met with Dr David Costalago Meruelo (Postdoctoral Fellow, NMMU) at NMMU to discuss his research project on fish larvae in Algoa Bay commencing January 2014 to explore potential synergies with Elwandle Node's PE-LTERP.
- 11 November: Tommy attend the NRF-USBEEd BDAL Feedback loop conference call
- 13 November: Athi and Tommy attended the Knysna Estuary meeting at Thesens Island, Knysna.
- 14 November: Tommy conducted field work on the stromatolite project
- 15 November: SRIG Conference call with other Node Managers and National Office.
- 18, 21, 25 November: Shaun and Tommy attended 75th Coelacanth Celebrations planning meetings.

- 19-20 November: DST Interns Yolanda Qhaji, Bomikazi Tsingana and Mfundo Bizani attend Scientific Writing course at University of Fort Hare.
- 20 November: Tommy, Sean and Shaun attended a conference call with the BAC to discuss BID documents.
- 21 November: Tommy presented a talk on “Long-Term Ecological Research (LTER) to determine the impact of climate and global change in Algoa Bay, South Africa” to the WIOMSA Climate Change and MPA Training Course in Grahamstown.
- 26 November: Elwandle Node Liaison Committee Meeting. Algoa Bay Yacht Club, Port Elizabeth.
- 26 November: Celebrations of marine research at national facilities and the 75th anniversary of the discovery of the coelacanth, Algoa Bay Yacht Club, Port Elizabeth.
- 28 November: Tommy and Shaun met with SAIAB staff to discuss Mail and Guardian articles to be published 20 December.
- 28 November: Tommy and Shaun met with Dr Julien Barde (Ecoscope project leader, IRD, CRH) to share information on SAEON’s data management infrastructure.
- 29 November: Tommy and Shaun met with Prof Hill and his team to discuss the future of the Parataxonomy laboratory
- 29 November: Tommy and Shaun met with Dr Anusha Rajkaran to discuss Elwandle Node’s LTER activities in estuaries of the former Transkei and how these may compliment projects she is planning to roll out in 2014.
- 29 November: Shaun and Tommy met with Dr Tony Ribbink (Director, Sustainable Seas Trust) to discuss SAEON’s potential contribution to their “Splendour of South African Seas” book to be published in 2014.

2. Monitoring Platforms

a. *Algoa Bay LTMRP*

- 11 November: Sean and Athi serviced UTR’s at Sundays River, St Croix and Cape.
- 12 November: Shaun, Tommy, Mfundo, Athi and Charles von der Meden conducted monthly PE-LTERP sampling in Algoa Bay. Subtidal sediment samples were collected on the same day (cone dredge) for SAEON Laboratory Technicians to practise extraction of invertebrates before analysing Vleesbaai samples.
- 14 November: UTR’s at Woody Cape, Dunes & 80m Bird Island serviced.
- 14 November: Bird Island ADCP serviced and mooring replaced.
- 21 November: Charles von der Meden, Ryan Palmer and Koos Smith conduct preliminary image capturing of Algoa Bay epifauna using SAIAB’s ROV off R/V uKwabelana.

b. *Estuaries LTMRP*

- 4-5 November: Shaun, Athi and Mfundo Bizani conducted the annual Pelagic Ecosystem and monthly CMP survey of the Kariega Estuary

- 5-8 November: Mfundo assisted Prof Alan Whitfield of SAIAB with fish sampling in the Kariega Estuary
- 19 November: Swartkops & Gamtoos loggers serviced.
- 29 November: Kromme serviced.

3. Marine Protected Areas

Research reports and Science plans

- SOUTH AFRICAN ENVIRONMENTAL OBSERVATION NETWORK: *Elwandle MPA-Unit Annual Progress Report, Nov 2013*
- SOUTH AFRICAN ENVIRONMENTAL OBSERVATION NETWORK: *Elwandle MPA-Unit Annual Science Report, Nov 2013*
- SOUTH AFRICAN ENVIRONMENTAL OBSERVATION NETWORK: *Elwandle MPA-Unit Business Plan, Nov 2013*

Scientific presentations

- 26 November: SAMAAI T, GÖTZ A, KERWATH S. *Ascending from the abyss: the shallow seamount of Walter's Shoal in the Western Indian Ocean. The Coelacanth Legacy: A Celebration of Science in DST/NRF National Facilities, Port Elizabeth, South Africa.*
- 26 November: BERNARD ATF, PARKER D, GÖTZ A. The stereo baited remote underwater video system (stereo-BRUVs) technique. *The Coelacanth Legacy: A Celebration of Science in DST/NRF National Facilities, Port Elizabeth, South Africa.*
- 26 November: PALMER R, GÖTZ A. The use of a remotely operated vehicle (ROV) for subtidal ecosystem research. *The Coelacanth Legacy: A Celebration of Science in DST/NRF National Facilities, Port Elizabeth, South Africa.*

Workshops & meetings

- 5 November: NATIONAL RESEARCH FOUNDATION: Professional Development Program Review Panel, Pretoria, South Africa.
- 8 – 11 November: Denham Parker – DAAD/NRF Scholarship Holders Meeting 2013. Stellenbosch.
- 18 – 19 November: BRUVS LINEFISH MONITORING WORKSHOP: Potential of baited remote underwater video data for linefish monitoring and fishery assessments in South Africa, South African Institute for Aquatic Biodiversity, Grahamstown, South Africa. Workshop facilitated by Dr. Albrecht Gotz.
- 26 November: *The Coelacanth Legacy: A Celebration of Science in DST/NRF National Facilities, Port Elizabeth, South Africa.*

Courses and training

- 15 November – 15 December: Sarah Halse underwent Commercial Diver Class IV training in Cape Town.

4. Data Management

- 1 November: Shaun held Skype Call meeting with Bruce Donovan to discuss White Shark National Photo Identification Database and WSRG meeting.
- 15 November: Shaun attended WSRG meeting at *Save our Seas Shark Centre* in Kalk Bay to negotiate data provider agreements and other matters pertaining to the National Photo Identification Database.
- 19 November: Shaun and Tommy met with Dr Rhett Bennett to discuss his application for SAEON to host their EAMT data. Shaun started discussing these matters with Wim. We anticipate making space available on the SDP by early next year.
- 20 November: Final set of Mossel Bay UTR data was sent to Ms Renae Logston (MSc, UCT).
- 21 November: October and November PE-LTERP CTD data downloaded by Sean Bailey and sent to Shaun for filing and uploading to the SDP as backup.
- 22 November: Shaun designed an integrated Sentinel Site field work activities database to assist with reporting and coordination of Sentinel Site observations programmes (CMP, PE-LTERP, E-LTERP).
- 25 November: Wayne Goschen sent Algoa Bay ADCP data to Ms Nicole de Vega, Honours student of Prof Igor Litvine (Statistics Dept, NMMU). Ms de Vega's project registration details will be loaded onto the SPD as soon as the transfer of the database to the Head Office server has been completed.
- 27 November: Shaun and Sean met with Wayne Goschen to discuss Sentinel Site Data products, information projects and deployments.

5. Education

- Nozi had a telephonic proposal discussion with DST Youth regarding a science team.
- 18 November: Nozi attended Ntsika High school's prize giving.
- No further interactions due to exams.

6. Parataxonomy Laboratory

- Vleesbaai samples were received and analysis will commence in the first week of December.
- Biomass analysis of PE-LTERP and Kariega zooplankton samples were completed by DST Interns Mfundo Bizani and Yolanda Qhaji.
- Laboratory Technicians assisted Tommy with sediment particle size analysis and organic content analysis of samples collected from the Orange River Estuary.

7. Technical: CMP Maintenance/SCUBA Diving/Boating/Vehicles

- 4 November: Wheel-bearings were replaced on the DWAF boat trailer.
- 20 November: Land Rover's head were skimmed to rectify a water leak.

8. Research support / platform provision

- 5-8 November: 90µm plankton net and hand sieves lent to SAIAB for sampling in the Kariega Estuary
- 12 November: Dr Greg Hofmyer of Bayworld was given an opportunity to sample on Black Rock near Bird Island during our monthly PE-LTERP sampling trip.
- 12 November: Subtidal sediment samples were collected near Alexandria dune fields (Site 4, PE-LTERP) in Algoa Bay on behalf of Prof Anthony Okoh, Department of Biochemistry and Microbiology, University of Fort Hare. Shaun handed samples over to Prof Okoh on 16 November.
- 18-22 November: Pop bottle and light meter lent to SAIAB for sampling in the Swartkops Estuary
- 20 November: Shaun met with Ryan Wasserman (PhD student, RU) to discuss and assist with publications from his PhD research.

9. Stakeholder Relations

a. *Joint ACEP Marine Platform Operations*

November was an extremely good month for the ACEP marine platform. The handover of Kadouw between SANParks and ACEP took place in Port Elizabeth on the 26th November. Although there is still some work to be done on Kadouw in order for her to be fit for purpose, this will relieve the workload on uKwabelana and allow for better use of weather windows, work further afield and the servicing of more projects.



- uKwabelana was used for 7 trips this month:
 - ACEP Open Call (Francesca Porri)
 - OTN - Bird Island

- SAEON Plankton run
- SAEON Continuous Monitoring Platform – equipment service
- SAEON Egagasini – ROV work in Algoa Bay
- 2 Outreach trips in Algoa Bay
- Kadouw was used for an OTN deployment at Bird Island on its way through from Port Alfred to Port Elizabeth.

10. Challenges and corrective measures

- Shortage of staff to attend field trips. Interns and short-term contract staff member assist with most field trips. A more permanent junior technician is urgently required to take on this role full time.
- Supply Chain Management for the SRIG orders took up considerable time of the staff. Workload was shared amongst all the staff members.

11. Risks description, impacts and mitigation

- Loss of moorings remains a risk, especially from trawlers and wilful removal of moorings by the public. All measures are in place (as discussed before) to mitigate loss of instruments and data.

III. Proposed Activities: December 2013

● **Scheduled appointments**

- 2-6 December: Meeting with Dr Lorien Pichegru to discuss Penguin LTER in Algoa Bay
- 9 – 11 December: Tommy to attend last NRF-USBed study block to present findings from the BDAL Project to the NRF
- 12 – 13 December: Tommy to attend the SAEON Managers meeting in Pretoria.

● **Monitoring Platforms and CMP Maintenance**

- 2 - 6 December: PE-LTERP monthly sampling in Algoa Bay
- 3 – 4 December: Tommy and Athi on a field trip to determine sediment accretion in the Kromme Estuary
- Kariega, Gamtoos & Swartkops estuaries loggers due for service.
- 13 December: Kromme sampling.

● **Marine Protected Areas**

- 4 day assessment with stereo-BRUVs of the Addo MPA and Riy Banks.

● **Data Management**

- Upload project registration information onto SAEON Projects Database, once transfer to National Office Server has been completed.



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- Update PE-LTERP metadata database
 - Update integrated Sentinel Site metadata database
 - Upload Sentinel Site observations files onto SDP folder for backup purposes
 - Sent draft data provider document to participating members of the WSRG for comments.
- **Education**
 - For security reasons, during the December break, all equipment will be removed from schools and stored in a more secure environment.