

## **Monthly Update**

August 2013

### **I. Overview**

---

#### **1. Key achievements: August 2013**

- Successfully completed four LTER and CMP maintenance field trips to Algoa Bay and the estuaries
- Tsitsikamma MPA Winter Field Trip
- Manuscripts: 2 published; 1 submitted
- Newspaper and popular articles: 5
- Signing ceremony of MoU between SAEON/SAIAB and NMMU
- NRF Awards Ceremony in Port Elizabeth
- SANParks Addo Marine Research Symposium

#### **2. Key activities proposed: September 2013**

- Monthly LTER field trips to sample the Pelagic Ecosystem in Algoa Bay and Kromme Estuary.
- Monthly maintenance of estuarine CMP Network
- CMP deployment and maintenance field trips in Algoa Bay and St Francis Bay
- RSET Fieldtrip to Kromme and Knysna estuaries
- Tsitsikamma MPA Winter Field Trip
- Grade 11 Science camp in Port Elizabeth
- Eskom National Expo finals in Gauteng

### **II. Achievements: August 2013**

---

#### **1. Management, Student and Staff Relations**

- 1 August: Tommy interviewed on the Algoa Bay Sentinel Site by Kingfisher FM's Environmental Programme.
- 2 August: Tommy attended a meeting at NMMU to discuss the upgrade of the Coastal and Marine Research Unit to an Institute. Tommy was chosen to lead the Southern Agulhas Research Group within the CMR at NMMU.
- 8 August: Tommy and Wayne met at NMMU with Dr AJ Smit (UKZN) and Dr Matt Dicken (KZN Sharks Board) to discuss a National Coastal Temperature Network.
- 13 August: Tommy, Sean and Shaun met with Brian Womack (NRF Finance) to discuss procurement and supply chain management related to SRIG.
- 15 August: Tommy met with Qurban Rouhani from the Department of Ichthyology and Fisheries Science, Rhodes University, to discuss SAEON's involvement in a Rural Fisheries Programme

- 15 August: Tommy and Shaun participated in the SAEON SRIG Bid Specification ClearSea Conference Call.
- 16 August: Tommy and Nozi met with Hugh van Niekerk at SAWS, PE, to discuss citizen science and the collection of rainfall data across the Eastern Cape. See Education section.
- 23 August: Tommy, Sean and Ant met to discuss Elwandle Node space requirements for SAMSA's proposed maritime institute in PE Harbour.
- 26 August: Tommy, Juliet, Wayne and Johan attend the signing ceremony of the MoU between SAEON, SAIAB and NMMU. Tommy gave a presentation on: "Long-Term Ecological Research (LTER) in the coastal and offshore environment: platforms for research". The following newspaper articles were published reporting the event:
  - a. The Herald, 27 August 2013, pg 6. "NMMU teams up with the big fish in research"
  - b. Die Burger, 27 August 2013, pg 6. "Algoabaai gaan baat by nuwe navorsings-venootskap"
  - c. Financial Mail Essentials. "Start Of A New Era Of Coastal And Marine Research In The Eastern Cape And South Africa"  
[http://www.fmessentials.com/newsletters/gb/2013/september/articles/aquatic\\_biodiversity.html?utm\\_source=Mail%20Blaze&utm\\_medium=Email&utm\\_content=Subscriber%2325800&utm\\_campaign=Green%20Business%20September%202013](http://www.fmessentials.com/newsletters/gb/2013/september/articles/aquatic_biodiversity.html?utm_source=Mail%20Blaze&utm_medium=Email&utm_content=Subscriber%2325800&utm_campaign=Green%20Business%20September%202013)
- 26 August: Tommy, Johan, Wayne and Juliet met with Prof Andrew Leitch, Dean of Science, NMMU to discuss collaboration.
- 27 August: Tommy and Johan met with Prof Maarten de Wit (AEON, NMMU) to discuss collaboration on various projects.
- 27 August: Tommy and Johan attends the NRF Awards Ceremony in Port Elizabeth.
- 29 August: Tommy, Shaun and Ant attend and present at the SANParks Addo Marine Research Symposium at the Addo National Park Main Camp. Tommy's presentation: "Long-Term Ecological Research (LTER) in Algoa Bay: past, present and the future" by Bornman, T.G., Deyzel, S., Goschen, W. and Hermes, J. Shaun and Ant's presentations are listed below.

## **2. Monitoring Platforms**

### ***a. Algoa Bay LTMRP***

- We were not able to conduct the monthly PE-LTER sampling this month due to unfavourable weather conditions. Swell size averaged between 3 and 4 metres in height, at times reaching 6 m or more.
- 5 August: Elwandle Node in collaboration with NMMU submitted applications for sampling permits for the following projects to be run within the confines of the Addo Elephant National Park MPA:
  - Algoa Bay Sentinel Site Continuous Monitoring Platform (CMP) - active
  - Algoa Bay Pelagic Ecosystem LTERP (PE-LTERP) - active
  - Algoa Bay Rocky Shore and Subtidal Reef LTERP (RSSR-LTERP) - proposed

- Algoa Bay Sandy Beaches LTERP (SB-LTERP) – active
- 5 August: UTR's BI inner and outer, 60m Central & 80m Algoa Mouth were serviced by Sean Bailey and Athi Mfikili.
- 6 August: Tommy, Shaun Deyzel and Sean Bailey attended the inaugural Sentinel Site Operations meeting held at SAIAB. SAIAB participants included Dr Angus Paterson, Dr Paul Cowley (OTN/ATAP), Ryan Palmer (ACEP Technical Officer) and Koos Smith (Skipper)
- 7 August: Shaun met with Dr Charles von der Meden (Egagasini Node) and Ryan Palmer to discuss sampling logistics for a pilot study of the Offshore Benthic LTERP. Field work for this pilot study was initially planned for the period 26 August - 6 September, but had to be rescheduled due to a faulty outboard motor on R/V uKwabelana and the boat is reported to be unavailable for fieldwork until mid-September. The use of alternative vessels for all sea-based work during this time is being discussed in-house.
- 29 August: Shaun gave a presentation on zooplankton biomass trends at the 2<sup>nd</sup> Addo Marine Symposium entitled: SHP Deyzel and M Bizani - *Towards a long-term ecological research strategy for monitoring zooplankton dynamics in Algoa Bay with an overview of preliminary results.*
- on 5<sup>th</sup> Aug (Sean, Athi)

#### **b. St Francis Bay LTMRP**

- Continuous monitoring platform due for servicing in September.

#### **c. Estuaries LTMRP**

- 1 August: Swartkops & Gamtoos sampled by Sean, Tommy, Athi and Mfundo.
- 27 August: Kromme was sampled by Sean, Athi and Mfundo.
- 28 August: Kariega was serviced by Sean.

### **3. Marine Protected Areas**

- 30 July: On-going Tsitsikamma Winter 2013 field trip – Dr. Anthony Bernard, Elodie Heyns and students.
- 1 August: Dr. Gotz had a meeting with Egagasini staff on development of ID guide for sub-tidal invertebrates.
- 10 August: On-going Krill research cruise on FS Polarstern – Dr. Albrecht Gotz

#### ***Papers published:***

- KERWATH, S.E., WILKE, C.G. and A. GÖTZ (2013): The effects of barotrauma on five species of South African linecaught fish. *African Journal of Marine Science* 35: 243-252.
- KERWATH, S.E., H. WINKER, A. GÖTZ, and C.G. ATTWOOD (2013): Marine protected area improves yield without disadvantaging fishers. *Nature Communications* 4: #2347.

**Conferences symposiums:**

- 29th August 2013: Sarah Halse and Dr. Bernard co-presented a talk at the Addo Elephant National Park Marine Symposium: *Bernard A, Halse S, Heyns E, Parker D, Götz A (2013) Remote monitoring of subtidal reefs in the Agulhas Ecoregion of South Africa.*
- Denham Parker and Elodie Heyns received funding from WIOMSA to attend the WIOMSA conference in Maputo Mozambique.

**Students:**

- Miss Zoleka Filander provisionally awarded the PDP PhD position within the MPA group at Elwandle.

**4. Data Management**

- 12-13 August: Shaun held several telephonic meetings with Herman Oosthuizen (DEA) and Rabi'a Rijklied (NMMU PhD student, Oceans Research) to discuss data agreement terms of the Great White Shark National Photo Identification database SAEON hopes to develop on behalf of the White Shark Working Group.
- 15 August: Shaun held a Skype meeting with Bruce Donovan, who agreed to represent Elwandle Node at the quarterly White Shark Working Group meeting in Cape Town on the 16 August. A debriefing meeting was again held on 19 August via Skype.
- 20 August: Project details uploaded onto SAEON Project Database:
  - Collaborative: SAEON's Algoa Bay PE-LTERP
  - Student: The dynamics of anchovy and sardine in Algoa Bay and their influences on response variables in two threatened avian predators; Paige Potter (MSc, NMMU).
  - Student: Time-activity budgets of Cape gannets (*Morus capensis*) at Bird Island, Algoa Bay; Gavin Rishworth (MSc, NMMU).
- 23 August: Shaun met with Paula Patrick (PhD student, NMMU) to discuss data sharing agreement and project registration.

**5. Education**

- 16 August: Nozi held a meeting with South Africa Weather Services (SAWS) in Port Elizabeth pertaining to the possible donation of rain gauges to monitor and record rainfall figures and SAWS generously donated 3.
- 23 and 26 August: Nozi and DST interns, Bomikazi Tshingana and Yolanda Qaji participated in the Bloukrans water quality test with "community environmental facilitators" of the Makana Municipality.

**6. Parataxonomy Laboratory**

- Biomass analysis of zooplankton samples collected for the PE-LTERP is now up to date. Biomass database was updated and a series of preliminary data analyses were performed for reporting of general spatio-temporal trends to the PE-LTERP research group.

- Parataxonomy Technicians have started with the analysis of sediment samples collected from the Orange River Estuary/Delta area. They will continue with this analysis for the remainder of the year until the next round of Vleesbaai benthic samples (SAEON Egagasini Node) arrive early December.
- Tommy submitted a 2 page brief of the Parataxonomy Laboratory to the Member of Parliament Hon Mocumi that will be read as a statement to the house.

#### **7. Technical: CMP Maintenance/SCUBA Diving/Boating**

- 20 August: New tyres purchased for Navara.
- 22 August: Land Rover serviced.
- 22 August: Honckenii had Seaworthy Inspection.

#### **8. Research support / platform provision**

- 27 August: Secchi disk, light meter and pop bottle water sampler lent to Ryan Palmer for field work in the Keiskama Estuary.
- 28 August: Shaun met with Prof Anthony Okoh (HOD, Department of Biochemistry and Microbiology, UFH) to discuss his application to SAEON for the collection of sediment from Algoa Bay for isolation of Actinomycetes and other microbes.

#### **9. Stakeholder Relations**

##### ***a. Joint ACEP Marine Platform Operations***

- uKwabelana only did one trip during August, the SAEON CMP service, during which engine problems were experienced. An engine upgrade is currently being done and we hope that the vessel will be back on the water shortly.
- The Kadouw refit is about to start in Port Alfred and we hope to have her up and running by November.

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

- 7 August: University of Fort Hare Zoo talk by Dr. Monica Mwale, Tumeka Mbobo and Oyama Siqwepu.
- 7 August: Garth van Heerden had a meeting with Caryl Tyson and Hamisai Hamandawana
- 23 and 24 August: Professional Communications course for Phuhlisa Students.

#### **10. Challenges and corrective measures**

- Bad weather resulted in the cancellation of the monthly plankton field trip. It is accepted that a month or two will be missed per annum due to unfavourable seas. First opportunity in September will be used to obtain samples as close to August as possible.

### **11. Risks description, impacts and mitigation**

- Engine failure on R/V uKwabelana meant that the vessel was out of commission for 3 weeks. Luckily the weather was also foul at the same time so no sea days were lost. SAIAB replaced the two motors with new ones, so this risk has been mitigated. The refurbishment of R/V Kadouw will also mitigate the risk of engine failure in one vessel impacting on LTER.

### **III. Proposed Activities: September 2013**

---

#### **1. Scheduled appointments**

- 3 September: SAEON/SAIAB Logistics meeting
- 9 September: Tommy and Juliet to attend the DEA workshop on the National Environmental Management of the Ocean White Paper in Cape Town.
- 10 September: Tommy, Sean, Shaun and Koos to attend a tour of the available port infrastructure and facilities in the Port of PE to potentially house a Maritime Institute including SAEON Elwandle and SAIAB Marine.
- 13 September: Monthly Algoa Bay Plankton field trip
- 19 September: Tommy and Sue to attend the iSimangaliso St Lucia Estuary workshop in Durban.
- 23 September: SAEON/DWA/NMMU meeting on the long term monitoring of the Swartkops Estuary at NMMU.
- Last week September: Sean undertaking research trip to the Mbashe Estuary in the Dwesa/Cwebe Marine Protected Area in collaboration with SAIAB, NMMU and ORI.

#### **2. Monitoring Platforms and CMP Maintenance**

- Servicing of St Francis Bay thermistors.

#### **3. Marine Protected Areas**

- Tsitsikamma MPA: winter 2013 field trip (continuation of work conducted in July)
- Aldabra MPA (Seychelles): First research cruise of the Pangaea Project
- Video analysis from the Tsitsikamma MPA winter fieldtrip
- Selection of suppliers for the SAIAB/SAEON stereo-BRUV platform.

#### **4. Data Management**

- Register Standalone project with Professor Igor Litvine.
- Register student projects with Mr Denham Parker (RU) and Mr Tim Vink (NMMU).
- Finalise data sharing agreement with Dr Nadine Strydom and PhD student Ms Paula Pattrick (NMMU).



## ELWANDLE NODE

### 5. Education

- 3-5 September: Education outreach symposium in Pretoria.
- 23-25 September: Grade 11 Science camp in Port Elizabeth.
- 27-28 September: National Expo finals in Gauteng.