

**Monthly Update**  
April 2014

**I. Overview**

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**1. Key achievements: April 2014**

- Successfully completed four LTER and CMP maintenance field trips to Algoa Bay, St Francis Bay and Sentinel Site estuaries.
- Submitted eleven abstracts for the SAMSS in Stellenbosch in July 2014.
- Four media mentions / popular articles published
- Appointed a service provider to convert and migrate the South African Estuaries Information System (SAEIS) and Database (SAED).

**2. Key activities proposed: May 2014**

- Monthly LTER field trips to sample the Pelagic Ecosystem in Algoa Bay, Kromme Estuary and the Gamtoos Estuary.
- Monthly maintenance of estuarine CMP Network (4 trips) and Sentinel Site CMPs (1 trip)
- ACEP Walters Shoal Research cruise
- Fifth In-Region Western Indian Ocean (WIO-5) Capacity Building Workshop of the WMO/IOC Data Buoy Cooperation Panel (DBCP) in Port Elizabeth.

**II. Achievements: April 2014**

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

- 1 April: Tommy met with the DVC Research, Dr Peter Clayton, and the Dean of Science, Prof Rick Bernard, from Rhodes University to discuss the move of SAEON Elwandle from Grahamstown to Port Elizabeth and the establishment of a MoU between RU and SAEON.
- 2 April: Staff meeting
- 2 April: Tommy and Shaun attended the ACEP Phuhlisa Induction workshop. SAEON will be co-supervising up to four BSc Honours and one MSc student from UFH and/or WSU as part of the programme.
- 2 April: Tommy and Wayne met with CODAR and NMMU regarding a coastal radar system to be deployed within the Algoa Bay Sentinel Site.
- 8 April: Tommy and Shaun attended a seminar at DIFS, RU, on citizen science long term monitoring programmes in Australia.
- 9 April: Tommy met with Prof AJ Smit from UWC regarding the coastal temperature network and research activities in Algoa Bay.
- 10 April: Tommy attended the SANCOR Forum meeting in Durban.
- 10 April: Tommy met with Sue, Monique and Matt in Durban to discuss the St Lucia LTER Programme.

- 15 April: Tommy met with Prof Rosie Dorrington to discuss collaboration on the stromatolite project, estuarine projects and the upcoming SANAP symposium.
- SAMSS abstracts submitted:
  - S.H.P. Deyzel, T.G. Bornman, E.E. Campbell, W.S. Goschen. Lower trophic pelagic ecosystem of Algoa Bay, South Africa. Poster.
  - T.G. Bornman, W.S. Goschen, S.H.P. Deyzel, E.E. Campbell, P. Steyn, M.J. Smale, P. Pistorius and N. Hambaze. Environmental drivers, ecosystem response and socio-economic impact of the 2014 Harmful Algal Bloom in Algoa Bay. Oral.
  - A. Mfikili, J. Schmidt, T.G. Bornman and J.B. Adams. The impact of global and climate change on the salt marshes of the Swartkops Estuary. Poster.
  - W.S. Goschen, T.G. Bornman, S.H.P. Deyzel and T. Lamont. Seasonal variability and long-term trends in sea temperatures of Algoa Bay. Poster.
  - J.M. Hill, N. Mgoduka, S.H.P. Deyzel, M. Nakin, E. Plumstead and F. Porri. Microhabitat resource use by mangrove crabs in the Mgzana estuary, South Africa. Poster.
  - Z. Mjali, M Nakin, F. Porri, J. Hill and S.H.P. Deyzel. Climbing and homing behaviour of *Cerithidea decollata* at the southernmost limits of mangrove distribution. Poster.
- Mentions in the media:
  - Coastal Oceanography HF Radar article in the NMMU Faculty of Science Newsletter. Edition 22 (April 2014), Page 6. <http://science.nmmu.ac.za/Faculty-Newsletter>
  - Discovery of Stromatolites article in the NMMU Faculty of Science Newsletter. Edition 22 (April 2014), Page 7. <http://science.nmmu.ac.za/Faculty-Newsletter>
  - Bornman, T.G., Goschen, W. & Steyn, P. Large scale toxic red tides plague the eastern and southern coasts of South Africa. Partnership for Observation of the Global Oceans (POGO) Newsletter. Issue 16, April 2014, Page 4. <http://www.ocean-partners.org/component/content/category/53?layout=blog>

## **2. Monitoring Platforms**

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

- 9 April: Tommy participated in the monthly stromatolite survey south of Port Elizabeth.
- 11 April: Monthly PE-LTERP fieldwork conducted successfully. Those involved included Sean Bailey (skipper), Tommy, Shaun Deyzel, Mfundo, Athi and new DST intern Mr Reanetsie Pohlo.
- 16 April: Shaun Deyzel met with an engineer at Namit Engineering (Port Elizabeth) to discuss design and manufacturing of plankton poles.

**b. St Francis Bay LTMRP**

- Nothing to report

**c. Estuaries LTMRP**

- 16 April: Tommy, Athi, Reanetsi and Kerry-Anne participated in the annual Rod-Set Elevation Table field trip to the Swartkops Estuary to determine sediment elevation levels in the salt marsh.
- 17 April: Kariega CT loggers were serviced by Sean Bailey and Mfundo Bizani.
- 22 - 23 April: Kromme and Gamtoos estuaries Pelagic Ecosystem sampling trip had to be postponed due to a damaged pontoon on estuary boat DWA130 (sustained on an earlier sampling trip). Shaun Deyzel and Mfundo Bizani unsuccessfully attempted to have the pontoon repaired by a service provider on route to the sampling site. The sampling trip is now scheduled for 21 May.

**3. Marine Protected Areas**

**Conference abstracts submitted for SAMSS:**

Lauren de Vos, Sarah Halse, Alexei Dyre, Elodie Heyns and Denham Parker.

**Reviews**

April 2014 – University of Cape Town – MSc thesis

**Popular articles published**

GÖTZ A, KERWATH SE, AUERSWALD, L. Diving under the ice: A first attempt at quantitative krill assessments in the Antarctic winter. *SAEON eNews* **April 2014**.

**Fieldtrips conducted**

9-12 April: Bird Island Marine Protected Area stereo-BRUVs sampling.

**4. Data Management**

- 3 April: Shaun Deyzel downloaded, cleaned and filed Kromme and Gamtoos Estuary data from YSI.
- 4 April: Shaun and Wim Hugo sent an example Community Portal interface to the White Shark Researchers Group for comments and suggestions. We are still awaiting feedback.
- 4 and 7 April: Shaun cleaned and archived all Gamtoos and Kromme YSI data.
- Good progress has been made with the conversion and migration of the South African Estuaries Information System (SAEIS) and Database (SAED). A service provider has been appointed by Wim Hugo to assist with the migration. We envisage starting testing of the new system by mid-May.
- Several positive discussions were held around SAEON's Data Policy and Projects Database via email with colleagues. These issues will formally be tabled at the next IMF meeting.

## **5. Education**

- 31 March – 4 April: Nozi Hambaze attended her honours course contact session at Rhodes University.
- 25 April: Nozi and SAIAB interns adjudicated a poster competition organised by the Department of Basic Education, Grahamstown district.

## **6. Laboratory: assets, consumables, activities**

- Vleesbaai benthic samples couriered to CSIR, Durban
- Biomass analysis of April PE-LTERP zooplankton samples completed by Mfundo Bizani.
- Biomass analysis of April PE Kromme Estuary chlorophyll-a samples completed by Mfundo Bizani.
- Particle size analysis of sediment samples from the Kariega and Fish River estuaries conducted by Ms. Pakama Nodo (Phuhlisa Programme, SAIAB) is ongoing.
- Particle size and conductivity analyses of Orange Estuary samples are ongoing.

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

- 2 April: DV's was serviced by Sean Bailey.
- 3 April: Navara License renewed by Sean Bailey.
- 4 April: DWAF boat was certified sea-worthy, again as Category E.
- 9 April: All previous CTD data was reconverted and burnt to disk by Sean Bailey. CD handed to Shaun Deyzel on same day.
- 10 April: Batteries were replaced in the AFM and CTD as well as the small 19-03 CTD by Sean Bailey.
- 16 April: 4 CT loggers received new battery replacements by Sean.

## **8. Research Support / Platform provision**

- 10-14 April: Plankton net lent to SAIAB for sampling in Kariega Estuary
- 15 April: Pop bottle and light meter lent to SAIAB for sampling in the Swartkops Estuary.
- 17 April: Dr Greg Hofmeyr (Bayworld) was assisted with transport to and from Bird Island during our monthly PE-LTERP field trip, to collect seal manure samples from Black Rocks.

## **9. Challenges and corrective measures**

- Research Vessel *uKwabelana* will not be available for sampling until late June (in KZN for ACEP). We have started making preparations to sample off R/V *Honchenii*. *Honchenii* is much smaller in size and entirely exposed to the elements. We will therefore aim to sample on good weather/sea days only to allow operation of electronic equipment on the open deck.

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

- Finalisation of the SRIG sole supplier contracts are taking much longer than anticipated. Several projects are on hold waiting for the delivery of the equipment.

### **III. Proposed Activities: April 2014**

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

- 5 May: Technical and Operations meeting planned
- 6 May: Tommy and Shaun Deyzel to meet with Neil Malan (PDP PhD fellow, Egagasini Node)
- 6 May: Staff meeting scheduled
- 6 May: Tommy to attend the AfriCOG meeting at SAIAB
- 12 -16 May: Sean, Ant, Shaun, Tommy and Ali to renew Pilot Exemption certificates.
- 12 - 15 May: 5th Regional Data Buoy Cooperation Panel Meeting in Port Elizabeth. Elwandle Coastal Node will be facilitating field visits to the Sentinel Site on Wednesday 14 May.
- 14 May: Tommy, Shaun and Sean to facilitate DBCP Algoa Bay LTER Sentinel Site Field Training
- 19/20 May: Shaun Swanepoel's visit to Elwandle Node
- 21 May: DEA-NRM meeting with Nicky, Sue and James in Pretoria
- 22 May: Tommy's Performance Review in Pretoria

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

- Port Alfred UTR's, Bird Island ADCP and Eastern sector Gully Probes to be serviced.
- 1-17 May: PE-LTERP monthly sampling
- 15 – 16 May: Kromme Estuary RSET sampling
- 21-23 May: Gamtoos/Kromme monthly sampling (Shaun Deyzel and Mfundo Bizani).
- 28 – 29 May: St Francis Bay Gully probe maintenance field trip

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

- 18 May–13 June: Walter's Shoal fieldtrip under the ACEP III programme. In attendance will be Anthony Bernard, Albrecht Gotz and Ameil Harikushin.

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

- CMP, PE-LTERP, E-LTERP monthly data management
- Continue working with Wim on SAED migration/upgrade
- Information Management Forum meeting.

#### **5. Education**

- 9 May: Expo workshops will be held at SAIAB in Grahamstown.
- Planning for National Science Week activities ongoing.