

Monthly Update

April 2012

I. Overview

1. Key achievements: April 2012

- Alexis Olds commences her internship at Elwandle Node
- 3 successful field trips (CMP, Plankton and Productivity) completed
- St Francis Bay CMP Network installed
- 3 staff members attend 4th Line Fish Symposium

2. Key activities proposed: May 2012

- First Estuarine LTERMP field trip to the Kromme Estuary
- ACEP III panel meeting
- St Lucia / Umfolozi CMP deployment field trip
- 4 Algoa Bay field trips (CMP, Plankton, Productivity and 48-hour sampling)

II. Achievements: April 2012

1. Management, Student and Staff Relations

- 2 April: DST/NRF intern, Alexis Olds, started her internship to establish an estuarine long term monitoring programme in the following selected Eastern Cape estuaries: Kromme, Swartkops, Sundays, Bushmans, East Kleinemonde and Mbashe.
- 5 April: Tommy Bornman attended an Algoa Bay phytoplankton research meeting at NMMU
- 16 – 20 April: Tommy Bornman prepared three presentations for the WMO IOC Data Buoy Cooperation Panel meeting in Mombasa, Kenya, i.e.
 - Update on the latest ASCLME Regional Alliance Cruise
 - Priorities for long term monitoring at the national and regional levels
 - Requirement for expanding Atlas and other WIO mooring systems to capture more biogeochemical data

2. Monitoring Platforms

a. *Algoa Bay LTERMP*

- 16 April: Servicing of UTR CR (30m), UTR St Croix (30m) and UTR Sundays (30m). Functionality of Niskin Rosette sequenced trigger mechanism was tested on the same day. Trigger depths were monitored on SCUBA during several simulation casts.
- 18 April: PE-LTERMP monthly plankton sampling. We are still experiencing technical issues with trigger sequences of the Niskin Rosette. SAEON and SAIAB Technicians are continuing to work on the problem. The SeaBird CTD mounted on the Niskin Rosette is fortunately producing data of top quality. Data gathered using the SeaBird CTD will from now on be

the preferred method to collect physico-chemical data during the monthly plankton sampling sessions.

- 28-30 April: Monthly Primary Productivity sampling was conducted in Algoa Bay and Port Alfred by the Nelson Mandela Metropolitan team

b. St Francis Bay LTMRP

- 3 April: Deployed 5 new thermistor strings in St Francis Bay

c. Estuaries LTMRP

- 2 April: Alexis Olds (DST/NRF intern) started internship and will be driving the Estuaries LTMRP
- 4 April: Estuaries LTMRP concept and planning meeting held at Elwandle Node with Tommy Bornman, Shaun Deyzel and Alexis Olds in attendance.
- 23 April: Shaun Deyzel presented Elwandle Node's Estuaries LTMRP strategy attendees of SAIAB/ACEP operations planning meeting held in Grahamstown.

3. Marine Protected Areas

- 16-20 April: Albrecht Gotz, Elodie Heyns (SAEON/SAIAB PhD student) and Bruce Donovan (SAEON intern) attended 4th Line-fish Symposium, Geelbek, Langebaan. Presentations presented:
 - DE VOS, L., GÖTZ, A. and C.G. ATTWOOD. Baited remote underwater video in the Still Bay Marine Protected Area: a survey of reef fish with an assessment of monitoring requirements. 4th Line-fish Symposium, Geelbek, Langebaan, 16th - 20th April 2012.
 - WILKE, C.G., KERWATH, S.E. and A. GÖTZ. The effect of barotraumas on five species of South African Linefish. 4th Line-fish Symposium, Geelbek, Langebaan, 16th- 20th April 2012.
- Popular articles published:
 - GÖTZ, A. and E. HEYNS (2012) Studying shallow and deep marine food-webs in temperate South Africa.
(<http://www.saeon.ac.za/enewsletter/archives/2012/april2012/doc01/>)

4. Data Management

- Shaun Deyzel is currently negotiating and facilitating registration of Mr Dylan Irion's MSc project (UCT, Oceanography Department) with Dr David Delaney (Director of Research, Oceans Research, Mossel Bay)
- Project registration of two projects coordinated by Albrecht Gotz is ongoing.
- Project registration with Anchor Consultants CC is ongoing.
- The designated month period for final comments of the *South African Estuarine Information System (SAEIS – Phase I)* went smoothly. The response was positive with some good suggestions being brought to light. There were a number of additions we considered essential. These were classified into primary tasks and secondary tasks:

- Primary: Create a sheet to facilitate importing metadata/data into the database (either as downloadable form or a page built into the site).
- Secondary (to be completed within a month of the site being live): Include a synonym field to account to name changes to species and organisations etc. (At this point our plan is to incorporate this into the backend so that the searches automatically account for name changes). Secondly, to rework the user interface on the literature search page.
- The SAEIS database is a dynamic project and we expect to have continuous changes and upgrades to the usability and functioning as our user-base increases. We expect to have the current version of the site live before the middle of May 2012.

5. Education

- 19-20 April: Ms Nozipiwo Hambaze held a data handling workshop with grade 10's at T.E.M Mrweteyana
- Weather data was downloaded from all school's weather stations except Nombulelo Secondary which was giving slight problems. The problem at Nombulelo was solved and will be closely monitored.

6. Parataxonomy Laboratory

- The Vleesbaai Benthic Sample Analysis contract with Egagasini Node is now complete. The Parataxonomy Interns are progressing satisfactorily with benthic sample analysis for Ms Fiona Mackay (ORI)

7. Technical: CMP Maintenance/SCUBA Diving/Boating

- 3 April: Mr Sean Bailey prepared five UTR arrays for deployment in St Francis Bay (St Francis LTEMRP) and coordinated a field trip to the deployment sites.
- 16 April: The strop-anchor system on three UTRs (see section 2a) were replaced with Subsea Sonic Acoustic Releaser systems
- 24 April: Mr Sean Bailey and Mr Shaun Deyzel participated in the annual RV uKwabelana operations meeting held at Elwandle Node. Monthly operations conducted off this vessel will from now on be jointly managed by Mr Ryan Palmer (SAIAB/ACEP), Mr Shaun Deyzel acting as SAEON coordinator.

8. Stakeholder Relations

a. *Joint ACEP Marine Platform Operations*

- New Skipper for uKwabelana, Koos Smith, started work in April and has skippered the trips since the beginning of the month. Koos will be liaising directly with the boat users to convey weather and trip requirements in order to maximise the number of sea-days each month.
- Garth van Heerden has started working as Human Capital Development Coordinator for ACEP and will be working closely with the University of Fort Hare and Walter Sisulu University.

- ACEP III proposals are busy being assessed and decisions will be made in May as to which projects are awarded funding and logistical support.
- ACEP Platform use for April: uKwabelana: Three trips for SAEON (PE-LTEMRP monthly plankton and CMP trips)
- 24 April: New booking schedule drawn up for uKwabelana. This will be managed by Ryan Palmer, however, a monthly meeting with the users will take place to prioritize work and draw up a projection three months into the future.

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

- 20 April: Shaun Deyzel and Alexis Olds held a meeting with Mr Lukhanyiso Vumazonke (Fort Hare University, Zoology Department) and two potential BSc (Hon) students to discuss research projects. Ms Tumeka Mbobo's project will be focusing on the "Reproduction and fecundity estimates of the hyperbenthic caridean shrimp *Palaemon perinugueyi* MacPherson 1990 in the Swartkops Estuary, South Africa", and will be supervised by Lukhanyiso Vumazonke and Shaun Deyzel. Ms Oyama Siqwepu's project title is "The ichthyofauna of the Sundays Estuary with particular emphasis on the temporal changes in marine migratory species", and will be supervised by Lukhanyiso Vumazonke and Alexis Olds. Shaun Deyzel will act as SAEON liaison and coordinator.
- 20 April: Tommy Bornman held a meeting with Caryll Tyson from the GIS Department at the UFH to discuss potential BSc (Hons) GIS projects.

III. Proposed Activities: May 2012

1. Scheduled appointments

- 1, 7 May: Tommy Bornman and Shaun Deyzel to attend meetings at SAIAB aimed at finalising ACEP Development Programme projects at UFH and WSU.
- 3 May: Shaun Deyzel, Angus Paterson and Garth Van Heerden to attend ACEP Development Programme proposal meeting with Prof SP Songca (Executive Dean, Faculty of Science, Engineering & Technology, WSU) at WSU, East London Campus
- 8 May: Tommy Bornman meeting with Me Pumla Goba, a forecaster at the SAWS in the PE Office.
- 8 – 9 May: Tommy Bornman is attending the ASCLME Transboundary Diagnostic Analyses meeting in Pretoria
- 9 May: Shaun Deyzel to attend meeting with Prof Tris Wooldridge (Zoology Department, NMMU) to discuss potential WSU BSc(Hon) projects and matters pertaining to the greater Transkei Estuaries Programme, of which Shaun Deyzel is a collaborator
- 9 May: Shaun Deyzel to meet with Dr Ane Oosthuizen (SANPARKS) to discuss future projects in the Sundays Estuaries.
- 10 May: Tommy Bornman, Shaun Deyzel, Alexis Olds and Sean Bailey to present proposal of Kromme LTMRP at the monthly Kromme/St Francis Trust Joint River Committee meeting, St Francis Bay.

- 21 May: Tommy Bornman Performance Review, Pretoria
- 22 – 23 May: Tommy Bornman to attend ACEP III Projects Panel Meeting
- 28 – 31 May (one day): Tommy Bornman, Shaun Deyzel and Albrecht Gotz to attend Elwandle and Egagasini joint operations meeting in Cape Town (proposed venue)

2. Monitoring Platforms and CMP Maintenance

- 8 May: Monthly PE-LTEMRP plankton sampling trip
- 3 May: Albrecht Gotz is delivering a lecture at DIFS, RU
- 10 May: Tommy Bornman, Shaun Deyzel, Sean Bailey and Alexis Olds to conduct reconnaissance field trip to Kromme Estuary for CT Logger deployment and possible deployment of instruments.
- 10 May: Albrecht Gotz is attending a Faculty Meeting, RU
- 14-18 May: Tommy Bornman, Shaun Deyzel, Sean Bailey to participate in a dedicated 48hr plankton sampling excursion conducted by Botany Department, NMMU as part of a MSc programme linked with the PE-LTEMRP
- 23 May: Alexis Olds and Shaun Deyzel to sample fish communities in the Sundays Estuary (UFH BSc(Hon) programme).
- 21 – 25 May: Deploy estuarine CT probes in the St Lucia / Mfolozi estuarine system
- Popular article in press: Bornman, T.G. & Schmidt, J. 2012. Monitoring impact of climate change on salt marsh biodiversity. The Water Wheel 11 (3) 28 – 29.
http://www.wrc.org.za/Pages/Preview.aspx?ItemID=9493&FromURL=%2fPages%2fDisplayItem.aspx%3fItemID%3d9493%26FromURL%3d%252fPages%252fKH_WaterWheel.aspx%253d%253d4%2526ms%253d55%25253b

3. Marine Protected Areas

No field work or meetings to report

4. Data Management

- 1-7 May: Shaun Deyzel aims to finalise project registration with Mr Dylan Irion (UCT/Oceans Research)
- Shaun Deyzel to follow up with progress on registration with Anchor Consultants CC and Albrecht Gotz (SAEON, Elwandle MPA team)
- Shaun Deyzel is aiming to host Beate Hölscher towards the end of May, aimed at discussions around Elwandle Node's project registration system to synergize efforts between Node and Head Office

5. Education

- Nozipiwo Hambaze attending Educator and Learner Workshop (date and venue to be confirmed)
- Planning for Grade 10 Science Camp to take place in either June or July