

Monthly Update
August 2012

I. Overview

1. Key achievements: August 2012

- DST National Science Week Public Presentations in Port Elizabeth
- Episodic sampling of a large flood event in the Kromme Estuary
- Manuscript published on the effectiveness of SAs MPAs
- Monthly plankton run and productivity field work completed
- ACEP Phuhlisa Programme field work for 4 students completed
- Algoa Bay Pelagic Ecosystem workshop at NMMU: progress and the way forward

2. Key activities proposed: September 2012

- St Lucia LTERMP service and maintenance field trip
- Algoa Bay PE-LTERMP and productivity field trip
- St Francis Bay CMP maintenance field trip
- Algoa Bay CMP maintenance and moored Seabird deployment field trip
- Grade 11 Educational Outreach Camp in Port Elizabeth

II. Achievements: August 2012

1. Management, Student and Staff Relations

- 2 August: Tommy presented a SAEON presentation at the DST National Science Week Public Presentations at BayWorld, Port Elizabeth; titled: Long Term Ecological Research (LTER) in Algoa Bay and associated estuaries.
- 6 August: Tommy attended a meeting with Prof Martin Hill to expand the paratonomy laboratory and finalise the SAEON / RU MoU.
- 7 August: Tommy attended the Ocean Acidification meeting with ASCLME and CSIR in Grahamstown.
- 8 August: Tommy held a meeting with Prof Sheona Shackleton from the Department of Environmental Science, RU, regarding a proposal to conduct social studies and the impact of climate change on communities in the Transkei.
- 9-10: Shaun Deyzel hosted Tim Vink (NMMU, Botany Department) to assist with surf zone zooplankton identification.
- 10 August: Tommy held a research meeting at NMMU with Prof Eileen Campbell.
- 16 August: Tommy held a meeting with Mr Gerhard Cilliers and Me Nolusindiso Jafta from the Department of Water Affairs, Directorate Resource Quality Services, to discuss the estuarine LTERMP.
- 21 August: Tommy participated in the ACEP Research Advisor candidate interviews at SAIAB.

- 21 August: Tommy attended the ASCLME technical meeting.
- 24 August: Tommy and Shaun attended the Algoa Bay Pelagic Ecosystem workshop at NMMU, Port Elizabeth.
- 31 August: Tommy attended a research meeting at NMMU to discuss 10 year DEA, Oceans and Coasts, research application.
- 31 August: Tommy attended a meeting with AEON (Prof Maarten de Wit) to discuss 1) sedimentology projects in Algoa Bay and 2) aerial platform for geophysical surveys.

2. Monitoring Platforms

a. Algoa Bay LTMRP

- 14 August: Monthly PE-LTEMRP plankton sampling conducted successfully.
- 22-23 August: NMMU collaborators (PE-LTEMRP) conducted Primary Productivity experiments in Algoa Bay.
- 23 August: UTR's CEN, Bay Mo, BI Inner & Outer serviced. SAEON dive team assisted with final retrieval of Primary Productivity experimental arrays at 5 locations in Algoa Bay.
- 23 August: ADCP CR was removed & ADCP BI serviced. The ADCP CR mooring was badly damaged, preventing the re-deployment of the ADCP at this site. A dedicated dive operation will determine the extent of the damage, during which time repairs will be made before deployment of the ADCP.
- 24 August: Annual PE-LTEMRP workshop held at NMMU with Tommy and Shaun in attendance. Progress for sampling year 2012 was presented and the way forward discussed. Action points and deliverables were circulated to participants on 28 August.

b. St Francis Bay LTMRP

- No activity during August.

c. Estuaries LTMRP

- 2-3 August: Episodic sampling in the Kromme Estuary including hydrology, zooplankton and nutrients.
- 19-24 August: Me Alexis Olds participated in the RDM assessment of the Orange Estuary with Professor Tris Wooldridge.

3. Marine Protected Areas

- 7-14 August: Denham Parker attended an ecological modelling course titled "Numerical ecology" held by Dr David Kaplan at the Department of Ichthyology and Fisheries Science, Rhodes University.
- Anthony Bernard produced a proposal for his Post-doctoral research programme which focuses on employing novel stereo-BRUV techniques for long term monitoring in five MPA's.
- Progress has been made in data exploration for Denham Parker's PhD.

- 30 – August: Nick Riddin accompanied Jean Du Plessis of Cape Nature in Stilbaai on a fieldtrip to the Stilbaai MPA with the objective of assessing the effectiveness of “shark pods” to repel sharks using BRUV techniques.
- Publication: Sofía Solano-Fernández, Colin G. Attwood, Russell Chalmers, Barry M. Clark, Paul D. Cowley, Tracey Fairweather, Sean T. Fennessy, Albrecht Götz, Trevor D. Harrison, Sven E. Kerwath, Stephen J. Lamberth, Bruce Q. Mann, Malcolm J. Smale and Lieze Swart (2012). Assessment of the effectiveness of South Africa's marine protected areas at representing ichthyofaunal communities. *Environmental Conservation*, **39**, pp 259-270.

4. Data Management

- Shaun Deyzel is currently facilitating registration of two NMMU projects: 1) Ms Karien Bezuidenhout (Student project, PhD, Zoology Department) and 2) Dr Pierre Pistorius (type to be determined, Zoology Department).
- Shaun Deyzel received application for the registration of a student project from Ms Elodie Heyns (PhD student, Zoology and Entomology Department, Rhodes University) on 31 August.
- Algoa Bay CMP data was provided to Ms Amber Childs (PhD student, RU/SAIAB).
- 24 August: PE-LTEMRP project registration and data management was discussed with collaborators of the programme. Shaun Deyzel will compile a proposal document wherein the strategy for effective management and dissemination of data as well as the structure of project registration will be outlined. Document will be ready for distribution by 28 September.
- 30 August: Tommy and Shaun discussed the potential of linking SAEON infrastructure with Elwandle and backup strategies, among other things, with Wim Hugo. A site visit by Wim and Louwrie is planned for 18-19 September. Options are in the meantime discussed by Wim, Louwrie, James Stapley (ASCLME IT) and Andrew Grant (SAIAB IT).

5. Education

- 27 August 2012: Nozi exhibited at the Imbizo Public participation at Willowvale, called for by the Department of Science & Technology.

6. Parataxonomy Laboratory

- Parataxonomy Laboratory staff members, Mr Mpako and Mr Poni are continuing with the analysis of ORI benthic samples. Analysis of these samples is nearing completion and we are very pleased with their continued support in the laboratory.

7. Technical: CMP Maintenance/SCUBA Diving/Boating

- DWA estuary boat arrived on the 2nd August.
- Diving took place to service ADCP's on the 23rd August.
- Navara was serviced during August.
- R/V Honckenii was seaworthied on the 28th August.

- Chain for estuary moorings was collected from Metalman in August.
- Anchors were drilled in August.
- CT logger housing fittings for St Lucia moorings were purchased and assembled during August.

8. Stakeholder Relations

a. Joint ACEP Marine Platform Operations

- August was a reasonably good month in terms of work done at sea in Algoa Bay. A total of six trips were undertaken during August:
 - Sediment coring – ACEP Phuhlisa/Fort Hare
 - Leery tagging – ACEP Paul Cowley’s project
 - Monthly Plankton run – SAEON
 - Shark tagging – ACEP Malcolm Smale/Matt Dicken project
 - Productivity experiment – SAEON
 - Continuous monitoring platform servicing – SAEON
- R/V uKwabelana will be out of the water for scheduled maintenance from the 27th August to the 9th September.

b. SAIAB-ACEP/SAEON/UFH/WSU Phuhlisa Programme

- 14-17 August: Shaun Deyzel lead the ACEP Phuhlisa Programme fieldtrip to the Mgazana Estuary (former Transkei) with three WSU Honours students, and two WSU staff members, Mr Emile Plumbstead and Dr Vincent Nakin.
- 28 – 29 August: Tommy and Nick Riddin conducted the ACEP Phuhlisa Programme fieldtrip with two GIS students from the University of Fort Hare to Sardinia Bay and Oyster Bay dunefields.
- 31 August: Shaun and Alexis attended the ACEP Phuhlisa Programme Supervisors meeting
- Report from Mr Garth van Heerden (Co-ordinator: ACEP Phuhlisa Programme):
 - 3 day field trip to Mgazana completed successfully despite ongoing riots at WSU campus.
 - 2 day Statistical Analysis course presented by Julie Coetzee to 14 WSU and UFH students
 - MOU meeting with Sandile Songca, Executive Dean of Engineering. He is unfortunately on suspension.
 - Outreach trip to Willowvale. Had a successful exhibition and was granted 2 minutes with Minister Naledi Pandor.

III. Proposed Activities: September 2012

1. Scheduled appointments

- Sundays Estuary sampling for the ACEP Phuhlisa programme.
- 17 September: ASCLME / SWIOFP Strategic Action Programme Panel meeting on Monitoring and Indicators in Johannesburg.
- 18 September: NRF Internship Programme visit to Elwandle Node in Grahamstown.
- 20 September: Meeting with DWA and SANParks re long term monitoring of the Knysna and Swartvlei estuarine systems.
- 27 September: Attend and present at the Gamtoos Estuary Forum meeting in Port Elizabeth.

2. Monitoring Platforms and CMP Maintenance

- 3-7 September: St Lucia LTMRP.
- 10 September: Kromme monthly sampling.
- St Lucia loggers to be deployed.
- Both PA strings and gully to be serviced.
- St Francis UTR's due end of September.
- PE-LTEMRP plankton sampling in Algoa Bay.

3. Marine Protected Areas

- Denham Parker will attend a statistical modelling course, with emphasis on using R, held by Prof. Anthony Booth at the Department of Ichthyology and Fisheries Science, Rhodes University.
- Development of a proposal for the long-term monitoring of marine invertebrates using fixed photographic transects in the Tsitsikamma MPA.

4. Data Management

- Finalise project registration with Ms Elodie Heyns and Dr Pierre Pistorius.
- Distribute PE-LTEMRP: Data Management and Project Registration document by the 28th September.

5. Education

- 2-4 September: Nozi will be attending the Education Experts meeting in Cape Town.
- 4-7 September: Nozi attending the NRF education outreach workshop in Pretoria.
- Preparations for grade 11 camp in September are on-going.