



Monthly Newsletter from The Environmental Management Division March 2015

ENDEMIC NURSERY OPEN DAY 2015

EMD's Endemic Nursery is holding an Open Day to celebrate 35 years of conservation on St Helena, from 1980 - 2015.

All are welcome to attend the Open Day at the **Endemic Nursery, Scotland** on **Saturday 28th March** from **2pm**.

Governor Mark Capes will give an opening speech and there will also be a presentation by Prof. Quentin Cronk.

Come along and learn about our island's globally unique flowering plants and ferns; see what's been happening in conservation for the past 35 years; get ideas for landscaping and garden design.

Light refreshments will be available. We hope to see you there.

STARTERS/LEAVERS

We would like to welcome **Tim Troman** our new Climate Change & Pollution Officer (Part time), who joined us in February.

Our Terrestrial Conservation Advisor/Trainer **Dr David Higgins** left us in February at the end of his contract. Dave did an excellent job and will be sorely missed within EMD. We all wish Dave good luck in all his future endeavours.

STAFF ACHIEVEMENTS

- Ceri Sansom completed a UN/Geneva University short course on Climate Change Adaptation and Mitigation for Small Island Developing States with a Distinction – well done Ceri!
- Mike Durnford will be returning shortly from a 7 week waste management exposure visit to Cape Town and the UK. The visit was sponsored by ESH and SHG and included a training course provided by the Chartered Institute of Waste Management.

WORK UNDERTAKEN BY EMD THIS MONTH

- ✓ Pigeon Monitoring at Horse Point
- ✓ Waste Management Project
- ✓ IUCN Red List accounts
- ✓ Environmental Assessments
- ✓ Darwin Projects
- ✓ NCA management plans
- ✓ Support to Airport Project
- ✓ Seabird monitoring and analysis
- ✓ Met Office Global Upper Atmosphere Project
- ✓ Endemic seed collecting
- ✓ Habitat restoration and maintenance

UPDATE: DARWIN PLUS FELLOWSHIP CARBON RESEARCH

The last update I gave on the project was in September when I was about to head off to complete some modules at the University of York. My time at the University was extremely useful and resulted in the project being refocused to two species, Gumwood and Dwarf Ebony, in order to give the research more scientific rigour.

I have just about completed the fieldwork, lab work, and started on the data analysis. Once this is done I will work on writing up the results and completing the thesis.

I will be leaving the island on 27th April to return to the University of York, via Tanzania where I will visit some of my university supervisor's projects and speak with organisations currently running carbon projects. Upon my arrival in the UK I will finish work on my thesis and hand it in, I will then have to complete a viva (an oral examination) in June before returning to the island.

Shayla Ellick, Species Conservation & Environmental Research Officer



NEW TERRESTRIAL CONSERVATION OFFICER ARRIVING IN APRIL

There will be a new face arriving on the 19th April to work in EMD. Michael (Mike) Jervois has taken on the post of Terrestrial Conservation Officer, a local post, which will run for two years to provide secondment cover. With Mike in post, we can now focus on the Cloud Forest Trees & Associated Invertebrates Darwin Plus funded project.

Mike has already started his long journey to get here and sent the following message before he caught his first flight:

"Hello. I am so excited to be given the privilege of working on St Helena in the role of Terrestrial Conservation Officer. When my friends and colleagues asked me why I wanted to travel halfway across our planet to work on the most remote island I answered: "adventure!" Of course they all thought I was crazy, but the opportunity was too good to pass up.

I come from Adelaide in southern Australia where we have no shortage of conservation issues. I've previously worked as a wetlands ecologist for the South Australian conservation group Wetlands and Wildlife. And more recently as an environmental consultant to the oil and gas industry in the central Australian desert.

I'm looking forward to working on St Helena and meeting the conservation team and others in the EMD. There are a lot of challenges for conservation but I'm confident we can make a difference. See you all in April! - Mike"



Lourens Malan, Terrestrial Conservation Officer

NEW MARINE DARWIN FUNDED PROJECT

EMD's Marine Section has been successful in securing a Darwin Initiative funded bid entitled "Sustainable development and management of St Helena's fisheries and marine tourism". The project aims to assess the ecological and socio-economic basis of St. Helena's fisheries and tourism industries, in order to identify appropriate management measures to ensure their sustainable future in the face of increased pressure related to economic growth. The project will establish protocols for baseline and long-term fisheries monitoring and stock assessments, marine fauna monitoring (whale sharks, marlin & cetaceans), tourism management and compliance. It will also assess and model the relationship between the management of the marine ecosystem and the social and economic benefits generated. Data gathered will be used for evidence based decision making and management.

This project will be in partnership with Ascension Island Conservation, Plymouth University, South Atlantic Environmental Research Group (SAERI), Georgia Aquarium and Mote Marine Laboratory.

Marine Section



UPDATE- DARWIN PLUS ENVIRONMENTAL BASELINE PROJECT

This environmental monitoring project is needed to allow us to assess the quality of the air, land and water that we use and enjoy on St Helena. The data we collect will be used to compile an annual State of the Environment Report, and the monitoring network we are setting up will support the new Environmental Protection Ordinance (which is hoped to be in place later this year after a period of consultation with the island community).

The project team have been busy over the past few months. All the equipment needed to support air quality, noise, water level and water quality monitoring has been selected and ordered. The team have also identified environmental monitoring locations for air quality monitoring, marine monitoring and surface water monitoring. Candidate groundwater monitoring locations are currently being identified. The review of island environmental laboratory testing facilities has also finished. New equipment has been selected on the basis of desired chemical testing suites, suitability of existing laboratory equipment and sample transportation protocols.

The EMD team will start monitoring tasks during the middle of the year, once the new equipment arrives on island.

Ben Sansom, Head of EMD



AN INTRODUCTION TO TIM TROMAN: EMD'S CLIMATE CHANGE AND POLLUTION OFFICER

I've now been working with SHG for a month as climate change and pollution control officer. I applied for the job as I have a great passion to see if it would be possible to develop recycling on St Helena. In the UK I was a Director of a company that manufactured plant containers and litter bins out of recycled plastic; whilst on the island I wanted to see if there is anything that can be done within government to recycle more rather than sending it to the landfill site at Horse Point.

It is early days at the moment and I've spent a lot of time talking to people about what has already been tried and what success was there, plus I have also looked at using some of my old contacts in the UK to see if they can help in achieving recycling for St Helena. Everyone has been really positive so far and trying to help me out where they can. This will be a long project for the island but one which will need addressing, as with the arrival of an airport this will bring more pressure from tourism on the street cleansing and refuse capacity of the island.

It would appear initially that there are some fairly easy quick wins for recycling, compost being a particular target. Compost is very expensive by the time it is shipped to island and the quality is not always the best; to collect our waste and use it to make compost would be a great starter. Hopefully in a few months' time we can see some progress on this which would be a great benefit for the island, not only in a supply of good quality compost but a reduction in the amount of waste going to the landfill site.

Changing attitudes does take time but certainly for me it had become second nature to sort my waste at home and recycle whatever I could; hopefully in years to come this will also happen on St Helena.

Tim Troman,
Climate Change and Pollution Officer

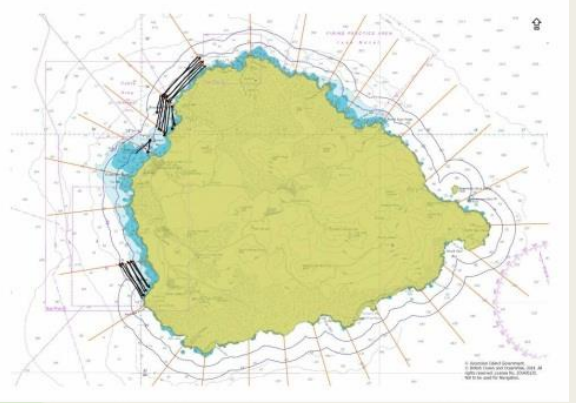


VISIT TO ASCENSION ISLAND – UPDATE ON THE SAERI PROJECT

In January 2015, I was fortunate enough to travel to Ascension to meet with the Ascension marine team and colleagues from the South Atlantic Environmental Research Institute (SAERI) in the Falklands.

The trip had two purposes; the first being that both Ascension and Falkland Islands are commencing marine habitat mapping using Side Scan Sonar (SSS), something that was completed for most of St Helena back in November 2012. SSS is a valuable technique for the investigation of the type of seabed and for the detection of different submarine features. Acoustic pings (pulses) sent by the sonar are reflected differently by sand, mud, bedrocks and artificial objects, such as metal (e.g. wrecks).

The SSS training took up the bulk of my time there, and focussed on the practical and operational aspects and techniques of survey planning, deployment of the side scan sonar (Starfish device and Scanline software) and processing of the images (Triton Perspective software). It was based on our experiences (good and bad) in St Helena and included things like weighting the tow line to try and minimise the effect of boat movement in swelly seas, 'bottom-tracking' of data in the processing software, and recognising when you've scanned a turtle! In addition to this, we looked at the survey design and efficient ground-truthing methods using a drop-down camera.



The second purpose of this trip was to liaise with SAERI's iLaria Marengo and AIG's Sam Weber about the progress and future of the IMS-GIS Data Centre Project, the aim of which is to make key and valuable data more accessible across the UK Overseas Territories and beyond. More details about this project can be found on SAERI's website: <http://south-atlantic-research.org/ims-gis>

In our Ascension meetings, iLaria introduced Sam and I to the world of spatial databases, including PostgreSQL, PostGIS and MySQL. These new software already makes managing the metadata easier and more efficient, and has great potential for making core GIS data easy to manage and be accessed by multiple users. It has been quite a steep learning curve, but rewarding when everything works!

In 2014 we'd all been working on cleaning, updating and sometimes re-projecting existing data as well as checking and expanding existing metadata and now the first batch of St Helena metadata, comprising datasets from the GIS department, marine department and National Trust should be accessible via the online search facility. In 2015, the focus shifts to finding more data that people have created and even making valuable new ones.

Working closely with the teams from Ascension and Falklands was a fantastic experience, and highly valuable for all of us; we are already sharing hints and tips.

If anyone has any data they wish to make available, or if you have any questions about the project, please get in touch!

Sam Cherrett
Environmental GIS Officer & Data Manager