

# Quarterly Newsletter

## Issue 3 - March 2013

Environmental &  
Natural Resources Directorate



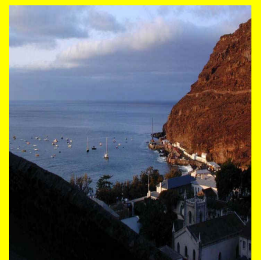
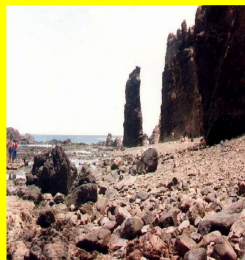
### FROM THE DIRECTOR

It has been a great 3 months, with lots of activity and outputs at lots of levels. The environmental legislation is of course a key piece of work that will bring together environmental law and fill current gaps in legislation – it is very exciting that we are now at the stage where the law will be drafted. Input into the background to the law has come from a wide range of stakeholders within and outside of SHG, and the collaboration, ideas and thoughts have been great.

Marine awareness week was an outstanding success, with a great range of participatory activities throughout the week. The launch of Pilling Schools very own marine story book was one of the highlights.

Have a great read, enjoy the information and updates, and let us know any thoughts/ideas/feedback that you have.

**Tara Pelembe**



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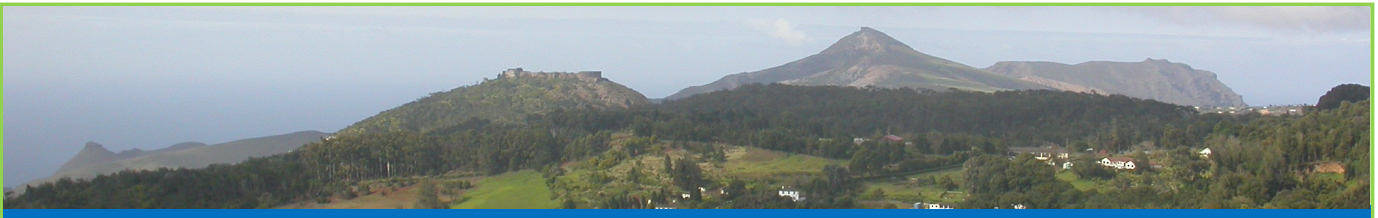
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## DARWIN MARINE BIODIVERSITY AND MAPPING PROJECT UPDATE

It's been a busy start to the year and the Darwin Marine Biodiversity and Mapping project is now getting into full swing. The first four months have been spent with Judith (project manager) and the marine team familiarising themselves with St Helena waters in particular the marine invertebrates. This has been a great excuse to get out diving and, as well as being highly enjoyable, it has been very productive with every opportunity taken to gather pictures of all the underwater creatures and to collect species for identification. The photos are for production of guides for training of divers for the island wide habitat and species surveys. Much time has also been spent wading through pages of literature from as far back as 1890 to see which marine species have previously been recorded from around the island. On locating information about a species, the validity of the nomenclature is checked, images of the species gathered (either from our own underwater or laboratory images of specimens we have found, from searching on the web or from drawings from the historic literature) and the species entered onto a database (with data on the geographical position of the find if available). To date 168 different molluscs have been entered onto the St Helena marine species database – the range and variety of molluscs is huge with some very tiny animals (4mm) only found by sifting through sand to other larger animals which are common around the shoreline. Already from the collection dives several of the animals haven't been recorded from St Helena before and some even appear to be new species. These will now be sent to taxonomic experts for further examination.

New equipment for the project has also been ordered including dive equipment, cameras and underwater housings, computer software, laboratory equipment and two new high precision microscopes (to help in the identification of all the species we find). Dive survey forms and habitat forms have also been produced and training on how to complete these has begun.

Raising marine awareness has also been high on the agenda with a community talk given at the museum, talks at the schools and Marine Awareness Week (which included posters, videos and displays, a saltwater tank, a touch tank, marine survey game, marine crafts and a marine themed reading corner as well as several community litter clear-ups).

Over the forthcoming months the project will be starting on its marine surveys, recording both the abundance and distribution of different fish and invertebrate species found in the inshore waters all around St Helena. Information will also be collected on the different marine habitats with the use of a side-scan sonar to compliment the dive surveys and gather seabed information over larger areas. Here's hoping for calm seas.....

**Judith Brown**  
Darwin Marine Biodiversity and Mapping Project Manager



**Limaria Hinans**



**Unknown Cyphoma**





## MARINE STAFF TRAINING ON ASCENSION

Between the 25th of November and the 7th of December 2012, Annalea Beard and Leeann Henry from the Marine Section undertook seabird ringing training on Ascension Island. The training was funded by the Joint Nature Conservation Committee (JNCC) and training was facilitated by Mr Colin Wearn a British Trust for Ornithology (BTO) ringer from the Army Ornithology Society (AOS). The training has now enabled all of the Marine Section staff to safely handle and ring seabirds in future works. Leeann has since returned to the island and tells us about her experience on Ascension. "The training was practically based and involved handling a variety of birds of different sizes and a lot of walking in very hot weather. We visited Mars Bays, Waterside and Letterbox for the training, time was then spent recapturing birds that had previously been ringed and details relating to each of these birds were recorded and added to the BTO record of the bird's life. Catching the birds required a sharp eye and quick hands with a net as the birds liked to fly off when they were approached. In addition, care had to be taken not to crush the birds or its many neighbours' eggs. Once caught the ring number and location would be accurately recorded. Work was also done to measure egg densities, a process was used to calculate how many eggs were laid during the Sooty Tern (Widewake) nesting season.

Quadrats were also monitored for hatching success at different areas of the colony. To do this, eggs in close proximity to each other are given a number and monitored regularly to see if they hatch. Egg size and hatching success can vary from year to year depending on food availability. The use of muscle scores to check the health of fledglings was also taught as this relates to food availability. We were also able to watch members of the AOS attach tracking devices to Sooty Terns to see where they go when they leave Ascension as very little is known about this.

Most importantly we were trained in the different techniques used to fit rings to the different sized birds. Smaller seabirds like the Sooty Tern can be safely ringed by one person. The larger seabirds like Masked Boobies (Gannetts) require two people, one person to hold the bird and another to fit the ring. Two people are used both for the birds and ringers safety. The point was effectively driven home as various people acquired cuts requiring various degrees of first aid as training progressed. Despite this, we fully enjoyed the training and the experience of working with a group of people who have a very varied skillset. A lot of the skills taught will improve with continuous practice."

Leeann has been advised that she has attained her seabird ringing "T" permits verbally from her instructor and will receive her official permit in due course.

The Environmental Management Directorate would like to thank the Ascension Island Conservation team and other sectors of the Ascension Island Government for supporting this training. Also thanks to JNCC and the trainer Mr Colin Wearn.

### Marine Conservation Section



## UPDATE ON ENVIRONMENTAL LEGISLATION

There are elements of environmental protection clauses spread across over 20 Ordinances but no single piece of guiding legislation to cover protection of arguably the Island's most precious resource - the environment.

A set of outline clauses (on pollution, litter, waste and protected species) has been created from research, existing legislation elsewhere and from known gaps in current Ordinances. These clauses were proposed following internal discussions and a technical workshop.

We are currently in the process of recruiting a Legal Draughtsperson who will write the Ordinance, remotely from the UK.

EMD are developing a series of workshops for specific sectors and for the public in general, to discuss the draft legislation in detail before the Draftsperson starts work. Workshops will likely begin the week commencing 25th March.

A draft Ordinance will then be written and sent for comment across SHG and to wider stakeholders. These comments will then be incorporated and a final draft presented to SHG. EMD will then begin the process for the formal legal public consultation of the Ordinance and approval through LegCo.

**Glen Westmore**  
Environmental Risk Management Advisor



## INTRODUCING THE METEOROLOGICAL STATION

The operational work of the Met Station at Bottom Woods is primarily to collect and record weather related data. This is undertaken at surface level and in the upper atmosphere.

At surface level, various sensors are used with trained staff in observing practices to record basic weather data. Recorded data consists of air temperatures, humidity, rainfall, wind direction & speed, sunshine duration, cloud coverage and visibility conditions.

Data is also collected from the Upper Air, using an instrument called a Radiosonde which is carried into the atmosphere by a balloon filled with hydrogen. The Radiosonde records temperatures, humidity, air pressure, wind direction and speed. This real time data is transmitted back to a ground based processing system, where the data is automatically recorded and processed, with manual intervention for editing and further analytical requirement.

The resulting data messages from these operations are sent to the Met Office for distribution to their customers and researchers who require this type of data. Similarly, some data is used on island by organisations that need this type of data.

**Marcos Henry**  
**Meteorological Station Manager**

## SPECIES CONSERVATION & ENVIRONMENTAL RESEARCH OFFICER – AN INSIGHT INTO SHAYLA'S FIRST MONTH

Shayla Ellick joined the Directorate last month as the Species Conservation & Environmental Research Officer; here she gives us an insight into her first month:

'During my time at EMD so far I have been undergoing an extensive training period. This has included getting a feel for all the areas of work the Directorate undertakes, including shadowing members of the other Divisions. I've also undertaken a few courses at AVEC: 'Emergency First Response' and 'Assertiveness for Managers- Intermediate'.

My training has also involved becoming more knowledgeable about and gaining experience with the island's endemics. I've done a few days with the St Helena National Trust, seeing the work they do in their Endemic Nursery at the Millennium Forest and helping out with their restoration work at High Peak, planting endemics and weeding around endemics already planted. I've also completed two weeks of training at the Endemic Nursery at Scotland, this included:

- Endemic plant identification, from seed to fully grown.
- Sowing seed; pricking and potting out of seedlings; hardening out of young plants; taking and transplanting cuttings.
- Seed collecting, and through this getting out and exploring St Helena and updating my knowledge of where endemics are found on the island.
- Gaining general knowledge and invaluable tips from the guys who work with these plants on a daily basis.

In the near future I will be doing some training with the Habitats Team who work at the Peaks, getting a feel for the work they do and continuing to build up my knowledge of endemic species. I will also be gaining experience in identification, collection and monitoring of invertebrates and building up my knowledge of invertebrate conservation.'

Shayla Ellick  
Species Conservation & Environmental Research Officer

## ECONOMIC FORUM

On Thursday 7<sup>th</sup> March 2013 an Economic Forum was held in Prince Andrew Schools' hall. The forum, held by the Chamber of Commerce focused on the partnering of Government and the private sector in driving economic development on St Helena.

Several businesses took the opportunity to promote their business on the day: Bank of St Helena, Cable and Wireless PLC, Enterprise St Helena, Lupa Designs and Solomon & Co PLC. Each business displayed informative, eye catching stalls and there were opportunities to enquire about the businesses and their services and/or products that were available. Throughout the day various presentations and discussions were held; they were rather lively with participation from the guests.

Amongst the stalls the Environmental Management Directorate promoted 'Green Business Guidelines' the purpose was to raise awareness on how businesses could become more environmentally friendly on St Helena. Simple things such as monitoring and reducing water and energy consumption, recycling, storing or disposing of waste, can make a difference. It is proposed that over the next few months the Environmental Management Directorate will be working with Enterprise St Helena on developing the Green Business Guidelines.



## CONSERVATION WORKSHOP ON ASCENSION ISLAND

From the 31<sup>st</sup> January 2013 to the 6<sup>th</sup> February 2013 the conservation team on Ascension Island hosted a plant conservation workshop; Developing Ex-situ Conservation Collections. This was led by Marcella Corcoran, UK Overseas Territories Officer from the Royal Botanic Gardens, Kew. Also attending the workshop was Cynthia Williams from the Falkland Islands and staff and volunteers from the conservation team on Ascension.

As part of the conservation team on St Helena I was invited to attend the workshop. The workshop was run over 5 days, with a programme of both theory and practical activities. The activities covered:

An explanation of the overseas territories ex-situ collections at RBG Kew; research on Ascension's priority species; a group review of Ascension's existing nursery facilities, and threats to plants in the wild and in the nursery.

Training was given in collecting DNA samples from plant material for genetic sampling. This was done in the field alongside a seed collection of the species being sampled; data was recorded for all samples. Training was also given in seed collecting, seed cleaning, drying, storage and record keeping.

Training for collecting Herbarium specimens was given and the group took specimens of *Aristida adscensionis*, *Cyperus appendiculatus* and *Ophioglossum vulgatum* which were sent to Kew for final mounting.

Marcella demonstrated Kew's online herbarium and how to access it. There were discussions on making compost using local material. A compost pit was identified, and the group prepared the first batch of local compost.

Protocols for setting up seed germination trials for cultivation, including seed treatment and sowing, watering and care of seed pots were explained.

The team also carried out fern propagation from spores on compost and agar, and transplanting seedling from agar to compost.

In the workshop the team decided that they should do a display garden outside of Red Lion on Green Mountain. The team worked hard removing invasive species, constructing a wire fence to keep out animals, then collecting endemic and native plant for display.

During the workshop I was able to support Marcella in the practical work sessions. I was pleased to be able to contribute ideas and techniques from our established systems for plant conservation on St Helena. The workshop was a valuable opportunity for me to learn more about Ascension Island's endemic species and the challenges we face in conserving them.

I helped Marcella to host an open day for the public, where presentations on Royal Botanic Garden Kew, composting, management and control of pests were given. Practical activities were held for growing vegetable seedlings and composting.

The RMS schedule meant that my stay on Ascension was extended beyond the workshop and for the remaining seven days I worked with the conservation team. I provided assistance where they needed help, shared experience and knowledge. With Conservation Officer Stedson Stroud, Conservation Assistant Natasha Williams, Catherine Supple OTEP project officer and Assistant Conservation Officer Jolene Sim I had several site visits to some of the restoration areas they maintain.

On a team day I also supported Charlie Dooley and Kenickie Andrews, to transport wooden posts to Elliot Pass, Green Mountain. The posts will be used for mounting interpretive information about the plants growing in the area to educate visitors to the national park. Charlie and Kenickie are working hard to conserve the *Marattia purpurascens* one of the Ascension's endemic ferns and maintaining the paths on Green Mountain.

The turtle egg laying season had started and staff at times get called out to rescue turtles stranded on rocks. I had the opportunity to help rescue a turtle and make sure that it got back to the sea. We also had the opportunity to go on a night time turtle tour, guided by Dr Nicola Weber and Dr Sam Weber.

Overall I enjoyed the experience of visiting Ascension and found it useful. I'd like to thank colleagues on Ascension Island, Marcella and Cynthia for their hospitality and support.

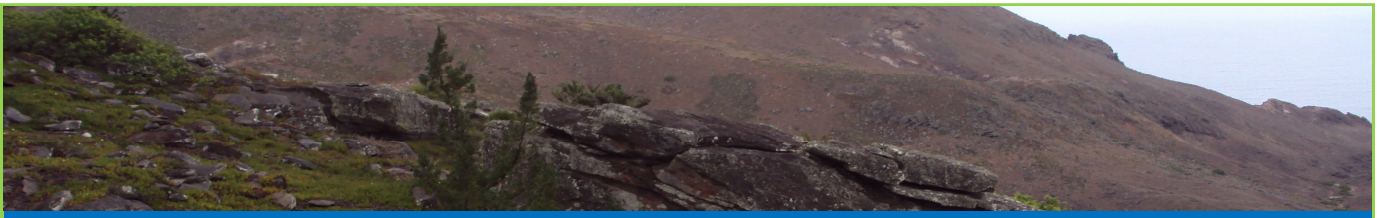
**Vanessa Thomas**

**Nurseries Officer**



**Workshop team, L to R:** Darren Fox , Vanessa Thomas , Cameron Stewart, Dr Nicola Weber, Dr Sam Weber, Marcella Corcoran, Liza White Jolene Sim, Nathan Fowler, Kenickie Andrews , Catherine Supple , Cynthia Williams, Charlie Dooley, Natasha Williams, Tyler Benjamin.





## WHALE SHARKS

There have been several sightings of Whale sharks around St Helena. Here are a few interesting fact about them:

- The Whale Shark is the worlds largest fish.
- It can grow to a length of 12-15m.
- They are filter feeders, feeding on plankton – tiny microscopic plants and animals.
- They are very solitary creatures spending most of their life alone.
- They are most likely to be seen around St. Helena from January – March/April.



## A NEW ENDEMIC SPECIES OF MOTH

A new endemic species of moth unique to St Helena has been described and was published at the end of last year.

This particular moth named *Agdistis marionae* is a plume moth in the Pterophoridae family. Plume moths are easily recognised by their T shaped resting posture and their lobed or divided wings.

*Agdistis marionae* is only 12mm in length so can easily be confused with a mosquito. It is thought to have a very restricted distribution on St Helena and has only been found on or around the endemic St Helena tea *Frankenia portulacifolia*.

**Annalea Beard**  
Marine Assistant



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## UNUSUAL BIRDS WHICH HAVE BEEN SEEN ON ST HELENA RECENTLY

Dark-backed Tern, Comb Duck, Swift, Moorhen (water hen), Roller, Grey Heron, Purple Heron, Squacco Heron, Cattle Egret, Dwarf Bittern and the White Stork.

EMD keeps records of any unusual bird sightings i.e. birds not normally seen on St Helena. So if you do spot any unusual birds, just remember the date, time, location of your sighting, what type of bird and how many, and if possible get a photograph and send this information to us at Essex House on Telephone No: 2270 or email on [env.assist1@environmentalmanagement.gov.sh](mailto:env.assist1@environmentalmanagement.gov.sh)



Moorhen



Dwarf Bittern



Cattle Egret



## MARINE AWARENESS WEEK 2013

Promoting the awareness of St Helena's unique marine environment was top of the agenda during Marine Awareness Week, which was held from Saturday, 22<sup>nd</sup> February to Friday, 1<sup>st</sup> March. With the theme "All things great and small" this year's event was aimed at making people aware of all of our marine creatures: big and small.

The Marine team worked hard to showcase the uniqueness, raise awareness and encourage the community to take action to prevent damaging the marine environment. It is important that everyone plays their part in ensuring that the marine environment is conserved and protected from the many risks including pollution and overfishing.

During Marine awareness week the Consulate Hotel Ballroom was completely transformed. Informative displays on our very own marine environment were showcased, including the wonderful discoveries that the Marine biodiversity habitat mapping Darwin project has given us to date. A touch and feel marine tank was set up with interesting sea creatures, and a reading corner was designated. The information was geared towards raising awareness of the different creatures, in our very own marine environment some of which are endemic to St Helena.

Pupils from all three schools attended sessions at the Consulate Hotel where they participated in discussions about the various things on display; the children were all very keen to learn about the marine environment and contributed well to discussions. There were opportunities to touch and feel some of the marine creatures in the touch and feel tank and this was very exciting. Pupils were also engaged in craft activities in which they created sea creatures.

Other activities during the week included boat trips and clean ups of the Jamestown run and Sandy Bay beach which proved to be very successful.

Also during the week was the launch of Pilling Primary School's Marine Awareness book. The book which is available for sale at just £3, contains several marine stories written and illustrated by Pupils.

Marine Awareness week ended with a presentation session of key work areas undertaken by the Marine team, which was held at the Consulate Hotel Ballroom.

Thanks are extended to St Helena Nature Conservation Group, St Helena Dive Club, The Yacht Club, Sub-Tropic Scuba Adventures, Enterprise St Helena, Pink Lady, David Yon and The Consulate Hotel for their support.

For more information on marine awareness contact the Marine team at Essex House on 2270.



## Hannah Durnford – EMD Work Experience – 5<sup>th</sup> to 8<sup>th</sup> March 2013

*I have a keen interest in Marine related activities and would like to become a Marine Biologist.*

*Before, for the half term holidays I used my initiative and contacted EMD and asked if I could join the Marine Team for some work experience while I was off school, which they agreed.*

*Between Tuesday 5<sup>th</sup> and Friday 8<sup>th</sup> March I was involved with sea bird surveying at Blue Point followed by data entry in the office, snorkeling for invertebrate samples at Lot's Wife Pond's, diving for invertebrate samples near the Papanui followed by observing and identifying samples in the laboratory and more data entry.*

*This experience has broadened my horizons and given me a good insight into the types of work done by the Marine Team and confirmed my desire to study hard to fulfill my career aspirations.*

*I would like to thank all of the staff at EMD for their friendliness and support during my work experience, I thoroughly enjoyed everything I was involved in and hope to have further opportunities with EMD in the future.*

**Hannah Durnford**

**Work Experience**





## STAFF ACHIEVEMENTS

The following training courses were undertaken by EMD staff:

### Emergency First Aid Response:

- Judith Brown
- Nikki Chapman
- Shayla Ellick

### Assertiveness for Managers:

- Shayla Ellick

### Fundamentals of Minute taking:

- Cherilee Thomas

### Knowledge on Environmental Requirements, ISO 14001:

- Mike Durnford
- Isabel Peters
- Ian Rummery
- Gareth Johnson
- Cherilee Thomas

### Train the Trainer:

- Mike Durnford
- Isabel Peters
- Ian Rummery

### Hazchem:

- Mike Durnford

### Hazard Identification & Risk Assessment:

- Mike Durnford

## ENVIRONMENTAL NOTICE BOARD AT THE WHARF

The Environmental Management Directorate in partnership with the Fisheries Section of the Agriculture and Natural Resources Directorate has recently placed a public notice board near the Front Steps at the Wharf. This board is dedicated to issues relating to the marine environment and will be updated accordingly to allow all users of the sea to be as fully informed as possible.

## NEW STAFF

In January, EMD welcomed two new staff to the directorate.

### Cherilee Thomas –

Environmental Assistant (Policy and Administration) within the Environmental Assessment and Advocacy Division (EAAD)

### Shayla Ellick –

Species Conservation and Environmental Research Officer within the Nature Conservation Division (NCD)

In March, EMD welcomed two more staff to the directorate:

### David Higgins –

Terrestrial Conservation Advisor/Trainer within the Nature Conservation Division (NCD)

### Melvin Roberts –

Terrestrial Conservation Worker (Habitats), Melvin was transferred over from the Forestry Division, of ANRD.



## CLOSED SEASON FOR SPEAR FISHING

**DURING THE PERIOD FROM THE 1ST OF JANUARY 2013 TO THE 31<sup>ST</sup> OF MARCH 2013, SPEAR FISHING IS NOT ALLOWED AT ANY TIME OR PLACE IN ST HELENA'S WATERS.**

The Spear Guns (Control) Ordinance CAP 91 states that during a closed season, no person shall have a spear gun in his possession on or within twenty metres of any tidal water or upon any beach or foreshore or while swimming or while in any vessel.

During this time most fish are at the spawning stage and it is therefore necessary to put measures in place to allow marine life a chance to breed and to grow into sustainable resources. The aim of the controlled season is not to stop people from enjoying the sea, it is to respect our oceans and it's resources.

**Elizabeth Clingham - Marine Conservation Officer**





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