



Environmental Management Division Newsletter

Highlights of 2015



This has been a very busy and interesting year for EMD and 2016 promises even more of the same. We are looking forward to the challenge and wish you all a Merry Christmas and a happy, healthy and successful New Year!

A SELECTION OF CORE WORK AREAS THIS YEAR

- ◆ Development of and public consultation on the Environmental Protection Ordinance
- ◆ Policy development & consultation
- ◆ Seabird ringing, tracking & nest monitoring
- ◆ Dive & oceanographic surveys
- ◆ Successful tagging of whale sharks
- ◆ Marine temperature tolerance experiment
- ◆ Environmental assessments & planning applications
- ◆ Input/ support to Airport project
- ◆ Input into re-interment project
- ◆ Tutor/support for A/S & A level Environment Studies
- ◆ Met Office Global Upper Atmosphere Project
- ◆ IUCN Red List accounts
- ◆ Waste Wheel
- ◆ Horse Point Landfill Site Pigeon monitoring
- ◆ Pollution incident response
- ◆ Habitat restoration & maintenance
- ◆ Endemic seed collection & propagation
- ◆ Endemic fern propagation project
- ◆ NCA development management plans
- ◆ Environmental Data & GIS management
- ◆ Successful integration of Waste Management Services into EMD
- ◆ Free Bulky Waste Collection & Disposal service developed and implemented
- ◆ Green alternatives to fast food packaging showcased
- ◆ Waste Collection & Management service
- ◆ Public Recycling Facility developed and opened
- ◆ Publicity, promotion and advice

STAFF ACHIEVEMENTS

- In May, Mike Durnford (Environmental Risk Manager) completed an Institute of Leadership & Management 'Strategic Leadership & Executive Management' Level 7 Diploma
- Shayla Ellick (Species Conservation & Environmental Research Officer) successfully completed an MSc by Research in Environment from the University of York, which was funded by Darwin Plus
- Debby Parkinson (Climate Change & Pollution Officer) completed a UNCC Introductory e-course on Climate Change.

In addition, different members of EMD successfully completed several courses including:

- Emergency First Response
- Fire Safety at sea
- Basic life support & seas survival skills
- BTO ringing permit renewals

ST HELENA RINGING SCHEME

This year has been a bumper year for the St Helena Ringing Scheme thanks to various seabird projects on going on the island. Up till October there have been 1,972 seabirds processed, this includes newly ringed, re-trapped and observations of ringed birds. The most productive data has come from the Masked Booby colony at the Lots Wife area of Sandy Bay. We have had over 600 re-sightings of colour ringed birds on the colony. Astonishingly one of the masked booby chicks that was ringed in January this year turned up on Letterbox at Ascension approximately 697 nautical miles (1291km) from its natal colony. This is the first long distance recovery of a ringed bird from St Helena and proves a link between the two islands. Time will tell if this Masked Booby will return to St Helena to breed once it has matured. Another fascinating finding from the ringing scheme is the re-trapping of a White-faced Storm Petrel last month. The bird in question was originally ringed on Egg Island on the 27th November 2014 and re-caught 362 days later in the same location. This suggested there may be a small remnant population present on the island. If any members of the public come across a ringed bird please remember to **report it to the Marine Section** of St Helena Government. Try to remember when, where and what you saw. Pictures can also be useful for identification.



ENVIRONMENTAL PROTECTION ORDINANCE

The Environmental Protection Ordinance (EPO) is St Helena's first piece of comprehensive environmental legislation, providing a legislative framework for the conservation of biodiversity; control of pollution, hazardous substances, waste and litter; consideration of environmental impacts in decision making and environmental monitoring.

The need for a comprehensive piece of environmental legislation was identified and agreed as part of the institutional review of environmental management that was done in 2011 as part of the MoU reform process.

Prior to legal drafting, the EPO was initially developed with the input of stakeholders both on and off island. The final draft of the EPO was put out for public consultation for the period 15th September to 9th October. Whilst there wasn't a huge response to the consultation, generally comments were positive and supportive of the EPO being enacted. We thank those individuals and organisations who submitted comments and these were carefully considered and are reflected (as was felt appropriate) in the final version of the EPO.

The EPO was passed by Legislative Council in the formal sitting on 13th November and will be enacted shortly.

The EPO provides the statutory basis for the Environmental Management Division's (EMD) role, responsibilities and operations and staff are now working on developing the accompanying regulations, policies and guidelines. These will be available for public consultation in due course.

PEAKS NATIONAL PARK TRAIL UPGRADES

The Peaks team have been busy upgrading walking trails on Mt Actaeon in the Peaks National Park. During October, the team replaced a muddy, dangerous section of trail with boardwalks and stairs. The new 50-metre section of trail allows improved, safe access for park users to the Peaks National Park, in a way that minimises disturbance to the sensitive environment. The work complements the on-going conservation work which has been carried out at the Central Peaks for the past 20 years. The improvements are part of a long-term vision to upgrade all trails throughout the national park. The **Terrestrial Conservation Section** has applied for a BEST 2.0 grant to fund more trail improvements.



Peaks National Park trails before and after improvements.

WASTE MANAGEMENT SERVICES

‘working in partnership with stakeholders for a cleaner and greener St Helena’

The new free domestic bulky waste collection service is promising to be a very popular service after it was introduced at the end of October 2015. Many years ago a similar collection service was withdrawn and members of the public can still remember it, and have missed it in the intervening years. The reintroduction of the service under ENRD has meant that the public have been able to have an enormous amount of domestic waste removed in the first month including:

- 13 fridge freezers, 8 washing machines and 9 cookers
- 8 unwanted mattresses
- 40+ iron roofing sheets, 17 old drums and 10 tyres

Over 250 items have been removed from 28 different properties, all without charge, and without impacting the regular refuse collection service. The service has been well received and we are now fully booked until February 2016 for some areas of the island.

The public recycling facility at the landfill site has become more popular too, as most of the waste that we collect first goes to the public recycling facility for other members of the public to take whatever they can reuse. The items there are forever changing. Unwanted items can be a welcome resource to another person. Items that can be disposed of at the public recycling facility include

- Waste motor oil and cooking oil
- Clothing
- Vehicle and other batteries
- Wood and furniture
- Scrap metal
- Unfinished tins of paint
- Glass
- Electrical items and white goods
- Tyres
- Garden waste and hedge clippings (accepted at the green waste cell within the main site)

The Waste Management Services team have become a valued part of ENRD since joining the Directorate in April 2015. They consist of 11 members of staff; Patrick Crowie, Greg Lawrence, Jeffrey Lawrence, Robbie Joshua, Stephen Ellick, Anthony Henry, Barry Joshua, Derek Henry, Patrick Peters, Molly Connelly and Rodney O'dean, and a team supervisor Perry Yon.

Horse Point Landfill Site is open from Monday to Sunday – 0900hrs to 1500hrs. The site is closed on Public Holidays.

For more information about the free domestic bulky waste collection service please contact; **Debby Parkinson at EMD, Scotland on Tel; 24724 or E-mail debby.parkinson@enrd.gov.sh**

Conferences & Overseas Training

Various EMD staff have had amazing opportunities to represent the St Helena Government at conferences this year and to receive training overseas. Below are summaries of our staff's experiences.

Mike Durnford & Patrick Crowie: Waste & Resources exposure visit, UK

Between 6th and 19th March Environmental Risk Manager Mike Durnford, and Landfill Site Manager Patrick Crowe were part of an exposure visit organized by the Chartered Institute of Waste Management (CIWM). Training subjects included: Landfill Management, Hazardous Waste Regulations, Risk Assessments, Environmental Monitoring, Contaminated Land Management, Waste Resource and Recycling, and Carriage of Dangerous Goods. The training and exposures have contributed towards development and implementation of new waste management practices and services, enabling provision of more effective and sustainable waste management on St Helena. An interview with Mike and Patrick done by CIWM is available at the following link: https://www.youtube.com/watch?v=BhUEq_Zp_VI&feature=youtu.be

Leeann Henry: Fisheries exposure visit, Falkland Islands

The Marine Section's Leeann Henry travelled to the Falklands between 17th and 28th August 2015 for an exposure visit to the Falkland Island Government Fishery Department. This was part of the Darwin funded Sustainable Development and Management of St Helena Fisheries and Marine Tourism project.

The aim of the visit was to gain understanding of all elements of how Falkland fisheries operate including licencing, reporting, policing and collection of biological data. This was achieved by shadowing various members of the fisheries department when undertaking their day to day duties and discussing what works well, what has been developed over time and any areas which are still to be developed. It is hoped that contacts made and data collection processes used by the Falkland fisheries can be adjusted to suit the development of scientific data collection in St Helena fisheries, to encourage sustainable fishing now and into the future.

Annalea Beard: 2nd World Seabird Conference, Cape Town

The 2nd World Seabird Conference was held in Cape Town, South Africa in October this year at the Cape Town International Convention Centre. Hosted by the World Seabird Union and The African Seabird Group it saw just under 600 delegates from 52 countries attend the conference to participate in discussions, collaborations and networking over the general sessions, symposia sessions, workshops and poster presentations. Miss Annalea Beard from the Marine Section represented St Helena Government and presented the data on the storm petrel populations that has been collected over the last few years as part of a Darwin Plus funded project. The presentation received great interest especially from conservation staff in Hawaii and New Zealand where they have similar a situation with their storm petrel populations.

**Samantha Cherrett: Remote sensing training,
Ascension Island**

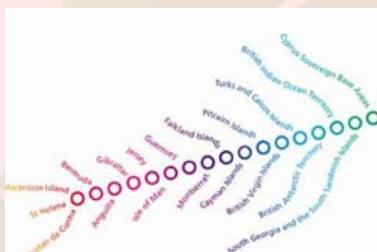
In November 2015, Samantha Cherrett and Simon Bennett (GIS) travelled to Ascension to attend a training course in remote sensing run by the Ascension Island Government Conservation Centre, as part of the capacity building supported by the Darwin Initiative project entitled "Mapping Ascension Island's Terrestrial Ecosystem". The course was run by Dr Johanna Breyer, who works at Environment Systems in Aberystwyth and representatives from the Falkland Islands and St Helena were invited to attend the course with the intention of becoming "intelligent consumers and users" of remote sensing tools. The aim of the course was to better understand the concepts behind remote sensing and apply them specifically to habitat classification, learn how the remote sensing analyst operates when carrying out the image segmentation and how the field surveyors proceed in determining and validating the classes of habitats. The goal is to transfer what has been achieved in Ascension to projects that will hopefully be run in St Helena and the Falklands in the future.

Isabel Peters: International Conservation & Sustainability Conference, Gibraltar

From the 11th – 15th July 2015 an International Conservation and Sustainability Conference was held in Gibraltar for the UK Overseas Territories, Crown Dependencies and other small island communities. The Conference was organised by the UK Overseas Territories Conservation Forum and the Gibraltar Government's Environment Department with support from the Gibraltar Ornithological & Natural History Society. The Conference was a fully packed programme covering biodiversity, conservation, renewable energy, environmental impact assessment and multi-lateral environmental agreements.

St Helena was represented by Isabel Peters (EMD) and Jeremy Harris (SHNT). During the Conference Isabel presented a paper on the *St Helena Airport: Environmental Lessons Learnt* and Jeremy presented a paper on *Why do we Red List?*

Further details on the Conference and the conference conclusions and recommendations can be found on the UKOTCF website at www.ukotcf.org



Isabel Peters: Exposure visit, Jersey

Whilst off-island to attend the Gibraltar Conference, Isabel Peters (Environmental Assessment & Advocacy Manager) also undertook two attachments as part of an exposure visit funded by the FCO's Jubilee Fund.

The first attachment was with the Jersey Island's Environmental and Planning Department where she got an insight into how the Jersey planning system works and how environmental and ecological issues are incorporated into the process; how protected areas are managed and how Jersey manages waste.

The second placement was with the global consultancy firm WYG. WYG has offices across the UK (and abroad) and Isabel was able to spend time with the ecologist in Cumbria's Lake District and the EIA teams in Leicester and Southampton. She also visited Leeds Bradford airport and met with their Environmental Manager.

Overall the visit was extremely interesting and useful and Isabel made a number of valuable contacts. She would like to thank the Governor's Office (Jubilee Fund) for funding the visit and the staff at Jersey's Environmental and Planning Department and WYG for arranging visit programmes and being so welcoming and accommodating.

Securing St Helena's rare cloud forest trees and associated invertebrates (ONGOING)

The Peaks National Conservation Area contains the majority of St Helena's small patches of remnant endemic cloud forest habitat. This important ecosystem is valuable not only for the range of unique plants and invertebrates it harbours but is also vital in maintaining St Helena's water table. The pressure from invasive species like whiteweed is continually fragmenting the remaining habitats of four endangered endemic tree species: whitewood, dogwood, he cabbage and false gumwood. In severe cases single trees are isolated from all others by surrounding invasive vegetation. This leads to a decline in reproductive capacity of individual trees and a genetic weakening of the species as a whole.

Removal of invasive species and restoration of native habitat is likely to take many decades even if resources are available. The Darwin Cloud Forest and Associated Invertebrates project is attempting to address this problem. To prevent the loss of important genetic material and community composition, this project has begun to take clonal material from the remaining natural trees at all known sites across the Peaks. Successful propagation of this material, mainly as cuttings, will allow the establishment of genetically diverse plantations that represent the majority of each species. This should allow the generation of a diverse seed bank with which large scale restoration work can be continued.



Humidity tent packed full of clonal material from 62 different sites across the Peaks

In addition to collecting plant material, the project team is surveying the sites at which the trees are found. Habitat characteristics likely to be important to the associated invertebrate communities are being recorded. This data will be used to inform future restoration work and allow an assessment of the proportion of suitable invertebrate habitats remaining in the Peaks NCA.

Since May the project team has collected plant material and information from over 60 discrete sites and has also been able to undertake some necessary control work to avoid further losses. Despite this, 3 old trees have died since the project commenced which illustrates, sadly, the necessity of this work. Longer term the project will benefit the island's conservation teams with a detailed and geo-referenced database of habitats across the Peaks, development and field testing of new techniques of propagation and invasive control. For further information on this project please contact the project manager, **Lourens Malan at EMD, Scotland**.

Taxonomic and Conservation Status of *Oceanodroma* Storm Petrels in the South Atlantic (COMPLETED)

This project ended in September after 18 months of research on the populations of storm petrels at St Helena & Ascension Island. Novel and innovative techniques were developed to gauge the distribution and population size between the two islands. It also focused on DNA analysis between the two populations and other storm petrel populations globally; these results of which are in the final stages of analysis and over the next year the findings will be published. **The Marine Section** would like to express thanks to everyone who helped with the research.

St Helena Baseline Assessment of Physical Environmental Parameters: ONGOING

This project is intended to establish an island-wide baseline monitoring system for physical environmental parameters. The project has procured kit to monitor the quality of air, surface and groundwater and soil. AECOM have been contracted to produce a Technical Field Manual and a trainer will be on island from 6th – 21st February to train EMD staff and others in using the equipment, selecting further monitoring sites and analysing data.

Darwin Fellowship – MRes Carbon Sequestration in Community Forests: COMPLETED

The Fellowship project was completed at the end of October and provided data to support the development of a carbon offsetting scheme for the Millennium Forest. For a relatively young restoration site, the Millennium Forest has a considerable quantity of carbon stored within it. A carbon offsetting scheme therefore has great promise and would provide a much needed form of sustainable funding for the Millennium Forest. The Master's thesis was co-supervised by the University of York and the Centre for Ecology and Hydrology. The thesis is accessible at: <http://etheses.whiterose.ac.uk/9337/>.

Sustainable development and management of St. Helena's fisheries and marine tourism (ONGOING)

The project commenced in April and the first six months have been utilised to plan project logistics. To that end we have formalised all of our project partner roles and responsibilities, training plans and we have procured various specialist equipment, PPE etc. Highlights of the project thus far include:

- ◆ **Ross Leo** (pictured) has been appointed as the **Marine Conservation (Fisheries) Worker** and has been in post since July. Ross has demonstrated competency in basic fisheries science skills and other work area competencies required to deliver this project and has recently embarked on his first fisheries observer work area at sea.
- ◆ **Leeann Henry** (Marine Conservation Assistant) has attended a **basic training/exposure visit** with the Falkland Island Fisheries Department (see Conferences & Overseas Training section of this newsletter).
- ◆ **Dr Martin Collins (Fisheries Scientist)** has been on island since October and continues to lead the marine conservation section's fisheries science work area. To date Dr Collins has reviewed various fisheries datasets and facilitated capacity building initiatives to up-skill local marine conservation staff. Dr Collins will be on island until January 2016 and will return periodically throughout the life of the project.



Ross Leo

- ◆ Seabird foraging through a **tracking program** has commenced which adds to the geospatial data. You can follow our progress through our EMD Facebook page.
- ◆ The **Marine Environmental Accreditation Scheme**, which includes marine tourism best practice guidelines and assessment criteria, has been formulated. Training of local tour operators and assessment will commence in by the end of 2015.
- ◆ Researchers led by Dr Al Dove from Georgia Aquarium will arrive in **January** to commence **whale shark tagging**, DNA and tagging initiatives.
- ◆ The final element of the project is to undertake a **ecosystem assessment of the marine environment**. The term 'ecosystem services' is used to describe those benefits that humans receive from nature. On St Helena such ecosystem services from the marine environment includes: fishing for commercial or recreational purposes, or cultural and spiritual ties with the ocean. **Dr Stephen Fletcher** was on island in September 2015 to lead on this area of work. He conducted a background literature review, held a workshop with various stakeholders and conducted interviews with key persons to obtain the necessary datasets.
- ◆ More information on this project can be sought from **Elizabeth Clingham at EMD, Essex House**