

Ascension Island and St Helena

MPG member Shelley O'Berg writes here about a trip she made this year. Although these islands are tropical rather than Mediterranean they face some of the same problems as Mediterranean zones, especially overgrazing by introduced fauna and the introduction of exotic plant species leading to a loss of endemic flora and fauna.

Thanks to a bursary from the Blaxall Valentine Fund via the RHS, I was able to visit Ascension Island and St Helena in September 2017 to study their endemic plant populations.

My interest in Ascension Island was sparked when listening to a Radio 4 programme, 'Costing The Earth', entitled 'The Mars of the Mid Atlantic' (still available). I was intrigued by the thought of a man-made cloud forest named Green Mountain which is home to populations of endemic plants that are propagating themselves on the introduced cloud forest trees.

Green Mountain was planted to create water on Ascension Island. Joseph Hooker was responsible for introducing over 220 exotic plant species from diverse parts of the world to increase mist interception, soil development, water storage capacity and reduce erosion. The result is a man-made cloud forest with many species that have become invasive.

Whilst on Ascension I was fortunate enough to work with the Ascension Island Conservation Department where Jolene Sim heads the endemic plant restoration team. Green Mountain National Park rangers also make a big contribution to clearing the introduced cloud forest plants that have become a threat to some of the endemic plants.

Efforts for conservation are not just focused on Green Mountain. *Euphorbia organoides*, a dry land endemic is being maintained at restoration sites. Irrigating these sites was taking place on a weekly basis during my visit to aid plant stability and seed germination.



Euphorbia organoides – restoration site



Euphorbia organoides – Two Boats Nursery

I was able to support restoration work taking place with the *Euphorbia*, *Pteris adscensionis* and *Sporobolus caespitosus*. *Pteris* is growing on volcanic clinker banks in moist areas of the Island, it is easily propagated from spores. Children from the local Two Boats School have been involved in planting *Pteris* back into its natural habitat.

Ascension Island has 10 endemic plants, six of which are considered 'Critically Endangered' on the IUCN Red list, one is considered 'Vulnerable' and three are thought to be extinct. Efforts by the conservation department aim to propagate and return endemics back to their known habitats or to increase populations by encouraging them to grow on host plants.



Pteris adscensionis growing on a clinker bank



Sporobolus caespitosus propagated from seed at Green Mountain endemic plant nursery.

A highlight of the trip for me was seeing the endemic fern *Stenogrammitis ascensionensis* propagating and populating on the introduced cloud forest trees and bamboo. The atmosphere at the top of Green Mountain is very thick with moisture; algae forms on the bamboo which is soon populated with moss and then the *Stenogrammitis* spores germinate on the moss.



Stenogrammitis ascensionensis growing on the introduced cloud forest trees.



Ficus trees covered in moss on Green Mountain.

I had to travel to Ascension by ship on the RMS St Helena, which makes a stop over at St Helena on its voyage to and from Cape Town.

I was able to visit two endemic plant nurseries on St Helena. Both are working in different ways to protect endemic plants. A Millennium Forest is being planted with native Gumwoods and Scrubwoods, *Commidendrum* sp. Living gene banks of the native cloud forest trees are being propagated, grown and planted back into the Peaks Reserve including St Helena's endemic tree fern *Dicksonia arborescens*, He Cabbage *pladaroxylon leucadendron* and Black Cabbage.

It was fascinating and moving to be able to witness the last remaining fragments of endemic cloud forest on St Helena.



Endemic plant nursery on St Helena



Commidendrum rugosum St Helena endemic Scrubwood.

I have been writing a blog to support the bursary trip and other horticulture-related travels for 2017-2018: <https://horttravelsblog.wordpress.com>. Please take a look for more images of the trip.

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