



*Championing UK's most special species:
the wildlife of UK's Overseas Territories (UKOTs) and
Crown Dependencies (CDs)*

FACT-SHEET ON:

**Key Example Endemic Plants: St Helena Gumwood
Commidendrum robustum and Dwarf Ebony *Trochetiopsis ebenus*
UK Overseas Territory: St Helena**

There are many endemic plant species on St Helena, whose vegetation has evolved over 14 million years, largely evolved from ancient African species which reached the island but now extinct on the continent. We have chosen just 2 examples.

Importance: Gumwood and Dwarf Ebony were historically two of the key components of the native forests of St Helena. Both species are endemic to the island and classified as Critically Endangered. Gumwood, which (although a tree) is in the daisy family, was once one of the most common trees on St Helena. Dwarf Ebony, in the mallow family, is closely related to St Helena Ebony *Trochetiopsis melanoxyton*, which is now extinct. These trees were integral components of the structure of native forest communities, and their decline has been associated with a wider loss of ecological complexity on the island.

Ecosystem: On St Helena, native forest vegetation provides a number of critical ecosystems services. The trees help to prevent soil erosion and act as a buffer in the island's hydrological system. Very little of the original forest cover remains intact;

the last remnant of well-preserved Gumwood forest can now be found at Peak Dale. Only two wild Dwarf Ebony trees are now known to persist on a remote cliff face. The species had been thought to be extinct until these individuals were discovered. Cuttings have been taken from these two trees and successfully propagated in living collections.

Threats: Timber of both Gumwood and Dwarf Ebony were cut extensively for fuel and construction, with the most intense pressure from logging occurring in the 18th century. In addition, many non-native plant species have been introduced to St Helena, and these have encroached on habitats formerly occupied by Gumwood and Dwarf Ebony, making re-establishment of the native trees difficult even when logging pressure was reduced. Soil degradation has also been a major issue, caused by trampling by feral goats and other livestock animals imported to the island. These animals have also overgrazed the native vegetation, reducing its vigour and capacity for natural regeneration.

Needs: Resources are needed to support restoration of native



Some of the last original Gumwood Trees near Peak Dale, St Helena.

© Stewart McPherson



Dwarf Ebony. CC-BY Michael Wolf (Wikimedia)



Part of Millennium Forest in February 2020, with new airport in background, St Helena. © St Helena National Trust

vegetation, with Gumwood and Dwarf Ebony as cornerstone species. Increasing local capacity for propagation of plants for reintroduction and for the preparation and management of sites, including ongoing work by the St Helena Nature Conservation Group at Peak Dale, will be a key part of future conservation efforts. Any sites to which trees are to be reintroduced will need to be adequately protected from goats and other browsing animals by in the installation of appropriate fencing.

For the last 20 years, Gumwoods have been at the heart of one of the most successful and legacy-producing Millennium projects anywhere. A locally led initiative by St Helena National Trust has led to the planting, so far, of tens of thousands of Gumwood trees, reared in a nursery on-site. The Millennium Forest is a project in the north-eastern corner of St Helena to recreate the Great Wood that existed before colonisation.

Mankind did not even know of St Helena's existence until the Portuguese discovered it in 1502. They did not establish any permanent settlements, but they did release pigs, goats (and, unintentionally but inevitably, rats) on to the island, thus disrupting an ecology that had developed over millions of years. The British colonised it in 1659, immediately creating a permanent settlement. In the process of colonisation, the Great Wood was entirely destroyed as settlers cut down the trees for firewood, used the bark for tanning, thereby unnecessarily killing the trees, and allowed goats and other introduced animals to graze on the saplings. On 7th March 1710, Governor John Roberts complained: "*The Great Wood, which used to extend from Deadwood Plain to Prosperous Bay Plain, is reported as not having one tree left.* A law is passed to encourage tree

planting. It is feared the island would be utterly ruined in 20 years if the tree planting law is not successful."

The Millennium Forest now extends to 250 hectares and the reforestation work now in hand is the toughest phase of the entire cycle of events. The project currently supports just two forestry workers who are constantly involved with watering and feeding trees as well as planting new areas. They have to combat problems caused by infestation and invasive growth of alien species which can overrun saplings. The failure rate in newly planted areas can be high and re-planting is another sizeable aspect of the workload. Currently there are 6,000 gumwood trees growing in the Millennium Forest. An estimated 55,000 further plantings are required to cover the entire area designated for forest. This is becoming a hugely successful project but lots of work remains. Tree-planting can be sponsored remotely as well as locally.



Composite of the development of the Millennium Forest, with views in 2002 and 2015, with some of the people involved in managing it, sponsors planting, the nursery and a school party. © UKOTCF