St Helena is a tiny island, 17 km by 10 km, in the South Atlantic Ocean northwest of Cape Town at a latitude 15°56'S and longitude 5°42'W. As there is no airport, the usual way of getting there is on the RMS St Helena, which does the round trip from Cape Town (some 2 700 km away) several times a year. The island was discovered on 21 May 1502, the feast day of St Helena, by the Portuguese explorer João da Nova Castella. In his journal, he wrote of the island's fair air and water. This 'fairness' could also be applied to the contrasting beauty of its emerald hills, grassy pastures and wind-eroded desert, with multicoloured valleys and ridges, as well as to the hospitality of its people.

St Helena is a volcanic island that rose above the Atlantic over fourteen million years ago. It has a complex topography of ridges and deep gorges, plains and hills, and its main feature is a high central ridge surrounded by radiating valleys. The highest point on the island is Diana's Peak (820 m above sea level). Its near neighbour, Mount Actaeon, is only slightly lower. The geographical position of St Helena and the timing of its emergence have given rise to an endemic flora and fauna of exceptional taxonomic isolation and scientific interest. Their ancestors colonized St Helena from prehistoric forests that have long disappeared from the world's continents - hence the description by Hooker, over a century ago, of the plants of St Helena as 'fragments from the wreck of an ancient world'.

Unfortunately, St Helena has a legacy of ecological destruction typical of oceanic islands and today, most of the endemic species seek refuge in the dense tree fern thicket covering the highest peaks. After its discovery, goats and pigs were established there for victualling purposes, while human settlement began in 1659. This
led to the almost total destruction in the 1700s of the woodland of endemic cabbage trees on the lower slopes around the tree fern thicket. Lemons were introduced in 1718 and thrived at first, but later pests and diseases became established and uncontrollable (partly because there are so few natural predators on the island). Although the names Lemon Grove, Lemon Valley and Lemon Tree Gut all appear on the large-scale map, there are now no lemon trees to be found. William John Burchell, who lived on St Helena from 1805 to 1810 as schoolmaster and acting botanist, introduced plants from all parts of the world, but was oblivious to the danger they posed to the endemic species. Species of *Cinchona* introduced from South America in the 1860s were even planted on Diana's Peak in an attempt to establish a quinine industry.

In 1907, the islanders were rescued from semi-starvation by the development of a new industry, which for the next sixty years practically provided the whole of the colony's local income. It was a second attempt, successful this time, at growing New Zealand flax (*Phormium tenax*) on a commercial scale and manufacturing its derivatives, fibre and tow. During World Wars I and II, flax fibre commanded such a high price that every available acre was planted to keep the mills supplied continuously. In December 1965, the flax industry finally collapsed - even the British Post Office, which for so long had used only string made from St Helena flax had turned to synthetic fibre.

In 1875, J.C. Mellis listed 907 different plants to be found on the island. Today, however, only half that number is recorded.

Anyone going to St Helena and who is particularly interested in the endemic flora will, most certainly, meet George Benjamin. He grew up driving donkeys for the flax industry before becoming a forest guard for the island's Agriculture and Forestry Department in the 1970s and 1980s. Over the years, he has built up a knowledge of the endemic plants that is matched by no one. Although he retired in 1995, I was fortunate to accompany him on a climb up High Peak, an area which has the second richest concentration of endemic flora after Diana's Peak. There are black cabbage trees, he- (but not she-) cabbage trees, a smaller cabbage tree known as whitewood, dogwood (a different natural order from the island's other endemics), tree ferns, the St Helena lobelia and the creeping plants known as small and large bellflowers. High Peak is frequently shrouded in mist, which can close in and reduce visibility to a few metres within minutes. This is the damp misty environment that is favoured by so much of the endemic flora.

The black cabbage tree (*Melanodendrum integrifolium*) is a large tree with bunched fleshy leaves resembling a cabbage. It is the most abundant of the endemic trees and has daisy-like flowers that appear in the spring. Nine million year old fossilized pollen from the common ancestor of the black cabbage and the St Helena gumwood has been discovered on St Helena. The he-cabbage tree (*Pladaroxylon leucaden- dron*) now only grows in a few isolated patches and has large leaves bunched at the end of each branch. It has small white flowers and, when in flower, the bunches of leaves resemble cauliflowers. Its ancestors arrived here more than ten million years ago. It is not closely related to the she-cabbage tree but, in both cases, remotely similar plants grow in parts of South America.
and Australasia. The she-cabbage tree (Lachanodes arborea) is very rare and was re-discovered by George Benjamin in 1976. Seedlings are now being planted across the peaks and elsewhere. The leaves are pale green, while the shoots and leaf veins are bright purple-red and the small flowers occur as sprays. Whitewood (Petrobium arboreum) has broad leaves and a small head of six to eight flowers, each about 13 mm long. It remotely resembles some plants from French Polynesia and South America. Dogwood (Nesoedgytis arborea) is a tall shrub, with lance-shaped, smooth leaves crowded at the end of the shoot and small bunches of green-white flowers that turn to black fruits with tiny seeds. Very few dogwood seedlings now grow naturally, perhaps because the destruction of habitats has isolated the male trees from the females. The tree fern (Dicksonia arborescens) is the most distinctive of St Helena's endemic flora and it grows up to 3 m high, with large fronds. These tree ferns and other Dicksonia species in the southern hemisphere are relicts of thickets from millions of years ago. The St Helena lobelia (Trimeris scaevolijolia) is a large herb, which likes to grow in the open. It has bright green, leathery leaves and white flowers (about 13 mm) in twos and threes. It is very different from the African lobelia, but distantly related plants grow on islands in the Pacific.

The small bellflower (Wahlenbergia angustifolia) is a small prostate plant which grows in crevices and between rocks. It has thin stems, narrow leaves and white bellflowers (about 13 mm). The large bellflower (Wahlenbergia linifolia) is now very rare and can only be found in the wild at High Peak. It grows more upright and has bigger white flowers than the small bellflower.

Historically, the gumwood (Commidendron robustum) covered 60% of the island, in the 300-450 m zone. In the early years of settlement, however, it was the major source of timber and firewood, although the tree reaches only about 6 m with a very crooked form. It is an umbrella-shaped tree, with hairy,
wrinkled leaves and hanging green-white flowers. Officially, two-thirds of the land on St Helena is classified as barren, with a sprinkling of agaves, prickly pear, enormous cacti and the ubiquitous lantana. A few endemics are to be found, however, such as baby's toes (*Hydrodea cryptantha*). These are low-growing succulents that exude water when crushed and are easily recognized; in hot weather they dry up, leaving grey skeletons on the ground.

Two other plants worth mentioning are the ebony and the olive. George Benjamin discovered two examples of the St Helena ebony (*Trochetiopsis ebenus*), clinging precariously to a cliff in the Blue Point area, in November 1980. This was a major find, as the ebony was nearly extinct by 1771 and was finally presumed to be extinct by about 1850. The plant has been successfully propagated since then and planted back into the wild in places such as Ebony Plain in Thompson's Valley. The ebony is at its best during the winter months (when there is more rainfall), but can flower at any time of the year. The last remaining wild specimen of the St Helena olive (*Nesiota elliptica*) was discovered by George Benjamin in August 1977 on the upper slopes of Mt. Actaeon - it, unfortunately, died in 1994. The total population of St Helena olives (in 1998) stood at four individuals (one vegetatively propagated from the last wild individual and three the offspring of self-pollination from that individual), but can produce no more than very occasional seeds due to a self-incompatibility mechanism.

In 1994, George Benjamin established a small section of staff at the Agriculture and Forestry Department to work on the propagation of the endemic plant species. He also ensured that much of the section's time was spent educating the public and schoolchildren about St Helena's flora. There are virtually no islanders who do not understand the meaning of the term 'endemic' or who cannot recognize a St Helena ebony. Endemic trees have been established within school grounds to provide informal and accessible seed orchards, while sales of endemic seedlings as garden plants to the public have become very popular. The implementation of a management plan to reverse the loss of the ancient tree fern thicket began in April 1995 and includes the removal of flax and other invasives, as well as the planting of seedlings such as the large bellflower and the dogwood.