



ASCENSION ISLAND

CODE OF CONDUCT

Many of our species and habitats are protected by the Wildlife Protection Ordinance and Protected Areas legislation – it is an offence to deliberately harm or remove them without written authorisation.

- Only park vehicles in designated areas
- Leave gates and property as you find them
- Do not create fire hazards
- Place all litter in bins provided or take it home
- Keep dogs under close control

Image Credits

Ascension Island Conservation Department; Marcella Corcoran and Martin Hamilton (Royal Botanic Gardens, Kew)

For more information contact:

Ascension Island Conservation Department/Tourist Office

Conservation Centre, Georgetown,
Ascension Island, ASCN 1ZZ

Tel (+247) 66359

Email conservationenquiries@ascension.gov.ac

Web www.ascension-island.gov.ac



ASCENSION ISLAND

FLORA OF ASCENSION ISLAND



ENDEMIC HIGHER PLANTS

FLORA

OF ASCENSION ISLAND

The vegetation of Ascension Island has undergone vast ecological change that mostly resulted from plant introductions in the 19th century.

Changes continue to the present. At the suggestion of Sir Joseph Hooker, and with encouragement from Charles Darwin, the Island now boasts over 400 introduced plants ranging from large trees to shrubs and annual herbaceous plants. There are at least 25 plants that are native to Ascension – this includes ten endemic species, of which seven are still alive.

Bryophytes (lower plants comprising mosses, liverworts and hornworts) have been less well studied, but are now receiving more attention. There are 77 recorded species of bryophytes on Ascension, of which 15 are believed to be endemic to the island. Green Mountain is the centre of diversity for both the higher and lower plants and boasts the only man-made cloud forest in the world. Hooker's greening experiment has not been an unqualified success with most of the native and endemic plants being severely outcompeted by those that were introduced. However, the Ascension Island Conservation Department is working to find a balance between the native and endemic flora, the introduced species that are beneficial and those that are just invasive weeds.



Anogramma ascensionis

Conservation status
Critically Endangered

Description

Commonly known as the Parsley fern, it was believed to be extinct until 2009, when during an annual plant census it was rediscovered by local and visiting botanists. Most recently observed plants are very small, lime green in colour and reaching no more than 4cm in length, although historical records show ferns of up to 10cm. The number of individuals in the wild fluctuates seasonally, but thanks to restoration efforts by the Royal Botanic Gardens at Kew and the AIG Conservation Team, the end of 2014 saw over 150 plants growing in the wild.

Habitat and Location

Individuals occur on sparsely vegetated, vertical cinder banks along Phil's Folly Ridge, Elliot's Pass, and Breakneck Valley. These plants are exposed to the prevailing winds and regular moisture and are at heights that are difficult for sheep and rabbits to access.

Asplenium ascensionis

Conservation status
Vulnerable

Description

This is a small, glossy, dark green fern that can grow to 40cm in length and is the most widespread of the endemic plant species. The fern grows in tufts with fronds that arch out against the rock face and cinder bank walls, often spreading and forming carpets along hard surfaces.

Habitat and Location

It can be found growing in dark crevices, shaded sheltered banks, old stone walls and cliff faces. The main populations are found in moist areas, between 550m and 770m in the Green Mountain National Park. *A. ascensionis* is commonly found at the Old Marine Barracks, Breakneck Valley, Elliot's Pass on clinker banks and tunnels and several of the other valleys draining the south side of Green Mountain.



Euphorbia origanoides

Conservation status
Critically Endangered

Description

Euphorbia origanoides is the only dry land endemic species growing on Ascension. It has red stems and small, oval blue/green tooth-edged leaves, which form in pairs at regular intervals along the stems. A few also have dark red leaves. Blossoms are yellowish flowers, which are often paired in clusters. Mature plants grow into dome-shaped tufts, or are spindly, depending on habitat. If the stems are snapped, a poisonous milky white sap flows.

Habitat and Location

It grows in sparsely vegetated areas, including lava flow plains, fine red scorias and chalky hillsides, or on dry ash substrate and fine dust lowlands. The majority grow from sea level to 310m inland. The largest colonies can be found at South Gannet Hill, Cotar, Round Hill, Mars Bay, Letterbox and Hummock Point, with smaller groupings at Comfortless Cove and Sisters Peak.



Pteris adscensionis

Conservation status
Critically Endangered

Description

This is the second largest endemic fern growing on Ascension. It has wing-like linear frond segments and can grow up to 80cm high. Depending on climate and location this fern can vary in colour from light to dark green.

Habitat and Location

It occurs on relatively dry, sparsely vegetated areas including cinder banks, sheltered gullies, rock crevices and open soil. The largest of the wild populations grows at Breakneck Valley and neighbouring gullies, Mulberry Ravine and Cricket Valley. A small scattered quantity grows on the southwest side of Green Mountain, between 300–400m in altitude.



Ptisana purpurascens

Conservation status
Critically Endangered

Description

Ptisana purpurascens (formerly *Marattia purpurascens*) is the largest endemic fern on Ascension. It has broad, brittle fronds that can grow up to 2m in height, and has large, glossy pinnules with a pointed tip. Depending on location, this fern can vary in colour from light to dark green. It is a long-lived species, with mature plants living upwards of ten years.

Habitat and Location

The fern is found in two main habitats on the Island. In open grasslands where it forms dense undergrowth on the southeast side of the mountain above Elliot's Pass, it grows alongside populations of the native fern *Histiopteris incisa*. Here it grows tall and stout and has narrow pinnules of lighter green. Another smaller population grows amongst the bamboo thicket at the top of Green Mountain where the plants are smaller, with thin stems and broad, dark pinnules.



Sporobolus caespitosus

Conservation status
Critically Endangered

Description

Sporobolus caespitosus is a spiky, green/grey grass species and is the only mountain-growing endemic that flowers. In the wild, individual plants naturally form tussocks up to 20cm across and 10cm in height. However, in cultivation this grass can reach 50cm in diameter and approximately 30cm in height. The flowering spikes are hidden amongst the leaves.

Habitat and Location

This grass is confined to the cooler, misty northern and eastern sides of the Green Mountain National Park, usually found growing at around 600m. *Sporobolus caespitosus* grows in windy, exposed conditions, often on scrubby bare rock surrounded by an extensive mat of bryophytes. These areas include Windy Ridge, Phil's Folly and regions around Elliot's Pass.



Stenogrammatis ascensionensis

Conservation status
Critically Endangered

Description

Stenogrammatis ascensionensis (formerly *Xiphopteris ascensionensis*) is the smallest fern growing on Ascension. The fronds are arching and often hang down and the fern can reach up to 10cm in length. Depending on climate and location it can vary in colour from light to dark green. It grows scantily in drier, exposed areas and can appear dried-out.

Habitat and Location

This fern occurs in the dampest areas of Green Mountain. It is generally associated with the mosses *Calymperes* sp., *Campylolopis* sp., *Anastophillum pilligum* and *Mastigophora dicladus*. It is limited to small areas of sparsely-vegetated moss banks on the south and east side of Green Mountain, and more abundantly as an epiphyte (a plant that grows non-parasitically upon another plant) on moss covered trees, namely *Pandanus utilis*, *Eucalyptus camaldulensis*, *Juniperus bermudiana* and *Erythrina indica* at Coronation Peak, and the large *Ficus microcarpa* trees and bamboo thicket at the summit.

ENDEMIC LOWER PLANTS



In the most recent checklist, compiled in 2015, Ascension's bryophyte flora stands at four hornworts, 23 liverworts and around 50 mosses. This is small compared with the mainland continents of South America and tropical Africa and also the nearest (1300km to the southeast) island of St Helena that boasts about 110 species. However, the total number of endemics amongst these is remarkably high compared with other island bryophyte floras. Pending further morphological and molecular studies, the number of supposed endemics currently totals 15; two hornworts, two liverworts (plus a further liverwort endemic to Ascension and St Helena) and 11 mosses.

INTRODUCED PLANTS

Over 90% of plant species on Ascension Island have been introduced to the island. While a number appear to be growing in harmony and alongside the native and endemic flora (see leaflet: *Flora and Fauna of Green Mountain*), others are proving to be more problematic and are spreading at an alarming rate. This includes the Mexican thorn (*Prosopis juliflora*), whose presence was recorded in the 1960s and has since spread extensively across the drier lowlands of the island and is now the dominant plant species in these areas. Other introduced plants include the tree tobacco (*Nicotiana glauca*), which has exploded in numbers in the lowland areas in less than 20 years, the tropical heliotrope (*Heliotropium curussavicum*) that has advanced particularly quickly around the coasts and is now locally dominant, and mid-altitude plants such as the yellowboy (*Tectoma stans*), guava (*Psidium guajava*) and prickly pear (*Opuntia strcta*).

