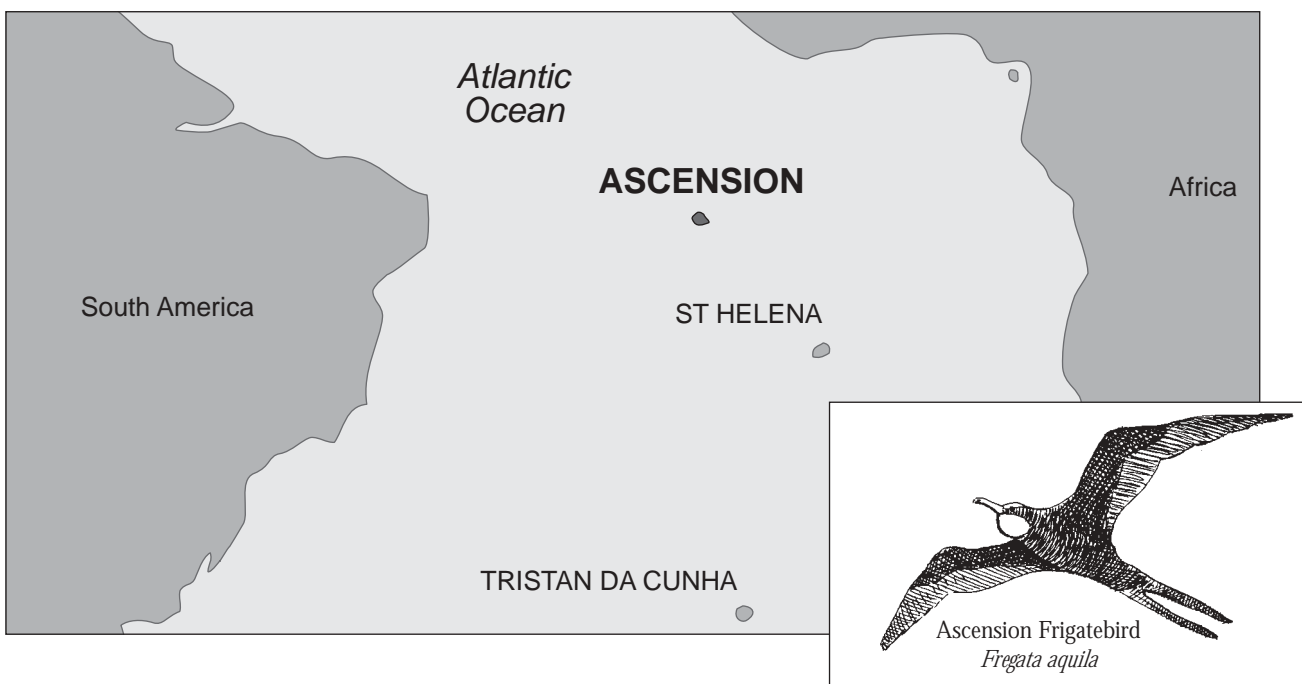


3: Ascension



Introduction

Ascension is a volcanic island situated in the central equatorial Atlantic Ocean, midway between Brazil and Africa, at $7^{\circ} 57' S$, $14^{\circ} 22' W$. The land area of Ascension is 88 km². Ascension has no permanent human population. Contract workers from St Helena, the UK and the USA make up the resident population some of who have been on the island for 30 years or more. The island is an important communications centre. Whilst it is a Dependency of St Helena, it is a separate UK Overseas Territory.

International obligations relevant to nature conservation

- Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)
- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention)

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)
- Convention on Biological Diversity (CBD)
- International Convention on the Regulation of Whaling
- Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa

Protected areas

- **Green Mountain (Natural Resources) Protection Ordinance No. 14 1955:** protects the forests and water supplies of Green Mountain.

Boatswainbird Island was designated as a Site of Special Scientific Interest in 1989.

By the Governor's Declaration of 25 September 1997, two nature reserves have been established at Mars Bay and Hummock Point respectively.

- **Ascension Land Ordinance, 1967:** Section 3 states that "All lands and all rights over the same in Ascension are hereby declared to be under the control and subject to the disposition of the Governor and no title to the occupation and use of any such lands shall be valid without the consent of the Governor." Under this section the Governor may withhold consent for the use of certain tracks or in order to protect nesting sea turtles. Consent may be withheld at all times or for short periods. No sand mining is permitted at any of the beaches. There is a code of procedure for visitors to the beaches during the turtle nesting season.

The World Conference of the International Council for Bird Preservation (ICBP), passed a resolution in 1990 recommending that the UK Government designate Ascension a "protected natural area", and prepare and implement a management plan to include the eradication of introduced animals as soon as possible. The UK Government funded the drafting of the island's conservation management plan. It also funded studies for the eradication of feral cats and rats and, together with NGOs, is seeking funds to implement the report's findings.

Habitats of major significance

The vegetation of Ascension has been substantially modified, mainly through effects resulting from introduced plant and animal species: over 300 species of plant have been introduced. The main ecological zones of Ascension are briefly described in Royal Botanic Gardens, Kew (1993).

The highest point of Ascension is the peak on Green Mountain Ridge at 860 m. The lower slopes of Green Mountain are covered by thick scrub of

introduced bushes and cacti *Opuntia* spp. A gently sloping plain lies to the north of Green Mountain.

Low altitude areas of Ascension are barren with occasional grass clumps and the endemic small shrub *Euphorbia origanoides* (Euphorbiaceae), although there is concern at the rapid encroachment by an exotic tree, the Mexican thorn *Prosopis juliflora*. The UK Government funded a biological control programme to limit the further spread of this tree.

Along the north, west and north-east coasts of the island there are 32 crescent-shaped sandy beaches. Ascension has deep inshore waters and no coral reefs.

Species of major significance

Biodiversity assessment

The terrestrial ecology of Ascension, with a checklist of the flora, is described by Duffey (1964). The status of endemic plants is described by Cronk (1980). The land fauna of Ascension is described by Ashmole and Ashmole (1997). Some 311 species of land animals (including a few now extinct) are known to have established themselves on the island. About 95 species are considered to be native, including two species of marine turtles, 12 seabird species and two extinct landbirds. At least 138 species were probably introduced and 78 are of doubtful status.

Plants

There are 25 native vascular plants of which six ferns and six flowering plants are endemic (Table 3.1).

While most of the endemic plant species are threatened with extinction, at present they survive mainly on exposed rock faces and walls in the highest altitude vegetation zones. These open habitats are associated with farm buildings and path construction around the peaks (Royal Botanic Gardens, Kew 1993).

Table 3.1 Endemic plant species

Family	Species	IUCN threat category
Asiantaceae	<i>Anogramma ascensionis</i>	Extinct or Endangered
Aspleniaceae	<i>Asplenium ascensionis</i>	Rare
Cyperaceae	<i>Cyperus appendiculatus</i>	Rare
Dryopteridaceae	<i>Dryopteris ascensionis</i>	Extinct or Endangered
Euphorbiaceae	<i>Euphorbia origanoides</i>	Rare
Gramineae	<i>Sporobolus caespitosus</i>	Endangered
Gramineae	<i>Sporobolus durus</i>	Extinct or Endangered
Grammitidaceae	<i>Xiphopteris ascensionensis</i>	Rare
Lycopodiaceae	<i>Lycopodium axillare</i>	Indeterminate
Marattiaceae	<i>Marrattia purpurascens</i>	Rare
Pteridaceae	<i>Pteris adscensionis</i>	Endangered
Rubiaceae	<i>Oldenlandia adscensionis</i>	Extinct

Source: Walter & Gillett (1998)

Invertebrates

There are about 29 endemic animals, including species in three new genera of terrestrial arthropods discovered in the past decade (Ashmole & Ashmole 1997); some of these are given in Table 3.2.

Amphibians and reptiles

There are no native species of terrestrial reptiles or amphibians. The green turtle *Chelonia mydas* breeds on the island, but there is no record that the other turtle regularly seen around Ascension's shores, the hawksbill *Eretmochelys imbricata*, breeds there. The island has one of the world's major breeding colonies for the endangered green turtle with around 2,000 nesting each year. An intensive 16-month study carried out during 1976-1978 means that the green turtle colony on Ascension was at that time the best-documented insular sea turtle population in the world (Mortimer & Carr 1984). There are 32 nesting beaches which can be grouped into four clusters: South West Bay, Long Beach, English Bay, and the North East Bay clusters. With Darwin Initiative financing, on 1 December 1998 a resident team from Swansea University began a two-year study of Ascension's green turtles, the first such comprehensive study since the early 1980s.

Birds

The main biodiversity interest of Ascension is the seabird breeding colonies, with up to a million birds consisting of four species of tern, three boobies, two tropicbirds, one storm petrel, and the globally threatened endemic Ascension frigatebird *Fregata aquila* (CR) which breeds only on Boatswainbird Island. Ascension, and its associated stacks, is regarded as one of the most important seabird breeding localities in the South Atlantic. Information on the status of resident bird species can be found in Nash *et al.* (1991).

There has been a recorded decline in numbers of the Ascension frigatebird since the huge colonies that occurred when breeding took place on Ascension itself. Up to 10,000 breeding adults were recorded in the late 1950s, declining to 5,000 birds visible in 1976 (Collar & Stuart 1985), and to 2,500 birds and 1,000 nests in 1988 (Blair 1989). It is, however, possible that recent counts reflect differences in counting efficiency (Ashmole, Ashmole & Simmons 1994).

Species protection

- **Wild Life (Protection) (Ascension) Ordinance Cap 129 1944:** under this Ordinance the

Table 3.2 Some endemic animal species

Family	Species	Comments
Crustacea	<i>Procaris ascensionis</i>	An endemic genus and species of shrimp, this species occurs in coastal rock pools
	<i>Typhlatya rogersi</i>	A shrimp which is confined to coastal rock pools
Pseudoscorpiones	<i>Allochernes ascensionis</i>	A very distinct cave adapted species discovered in 1990
	<i>Stenowitzius duffeyi</i>	
	<i>Garypus titenius</i>	
	<i>Apocheiridium sp. nov</i>	
Araneae	<i>Opopaea euphorbicola</i>	A new genus and therefore species discovered in 1990
	<i>Catonetria gen. and sp. nov</i>	
Coleoptera	<i>Neopactus ornatus</i>	

Source: Ashmole & Ashmole (1997)

Governor-in-Council may make regulations prohibiting or controlling the killing, capturing, or taking of any wildlife within the Dependency.

- **Wild Life (Protection) (Ascension) Regulations 1967:** all birds and eggs (except domestic fowls), turtles and eggs, are protected under this legislation, together with frogs, lizards, donkeys and goats which are all introduced. Donkeys are, in fact, damaging the native flora and control measures are needed. The Regulations license the killing, capture or take of any of the specified wildlife.
- **Endangered Species Control Ordinance 1976:** this Ordinance is the means by which Ascension implements CITES.

Ascension also has Ordinances relating to the export of fish, fish products and crayfish.

Ascension is a member of the South Atlantic Islands Plant Specialist Group; part of the IUCN Species Survival Commission.

Acknowledgements

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IUCN/SSC South Atlantic Plants Specialist Group c/o the Administrator.

Ascension has a resident Administrator, who is responsible to the Governor of St Helena and who is assisted by the Island Management Group. The Administrator has local responsibility for conservation affairs.

The Ascension Historical Society at Fort Hayes Museum has an interest in Ascension's natural history and conservation. It advises the Administrator on all matters concerning both the natural and man-made environment.

Bibliography

- Anon. 1991. Ascension. *Forum News*, 5: 4.
- Ashmole, N.P., Ashmole, M.J. & Simmons, K.E.L. 1994. Seabirds conservation and feral cats on Ascension Island, south Atlantic. In: *Seabirds on islands, threats, case studies and action plans*, ed. by D.N. Nettleship, J. Burger & M. Gochfield, 94-121. Cambridge, BirdLife International. (BirdLife Conservation Series no. 1).
- Ashmole, N.P., & Ashmole, M.J. 1997. The land fauna of Ascension Island: new data from caves and lava flows, and a reconstruction of the prehistoric ecosystem. *Journal of Biogeography*, 24: 549–589.
- Blair, M. 1989. The RAFOS expedition to Ascension Island, 1987. *Journal of the Royal Air Force Ornithological Society*, 19: 1-35.
- Cadenat, J., & Marchal, E. 1963. Résultats des campagnes océanographiques de la Reine-Pokou aux Iles Sainte-Halane et Ascension. *Bulletin de l'Institut Français d'Afrique Noire*, 25A: 1235–1315.
- Collar, N.J., & Stuart, S.N. 1985. *Threatened birds of Africa and related islands: The ICBP/IUCN red data book. Part 1*. Cambridge, International Council for Bird Preservation.
- Cronk, Q.C.B. 1980. Extinction and survival in the endemic vascular flora of Ascension island. *Biological Conservation*, 17: 207–219.
- Davis, S.D., Droop, S.J.M., Gregerson, P., Henson, L., Leon, C.J., Lamlein Villa-Lobos, J., Synge, H., & Zantovska, J. 1986. *Plants in danger: what do we know?* Gland, IUCN.
- Duffey, E. 1964. The terrestrial ecology of Ascension Island. *Journal of Applied Ecology*, 1: 219–251.
- Hunter, B., ed. 1991. *The statesman's year book 1991-92*. London, Macmillan.
- Huxley, R.C. 1997. *Ascension Island and Turtles: a monograph*. Fort Hayes, Ascension Island Heritage.
- ICBP-British Section. 1991. *Project proposal: feasibility study for the eradication of feral cats and rats on Ascension Island, South Atlantic*. Unpublished report.
- Mortimer, J.A., & Carr, A. 1984. Reproductive behaviour of the Green Turtle (*Chelonia mydas*) at Ascension Island. *National Geographic Society Research Report*, 17: 257–270.
- Nash, R.H.J., Hughes, B.J., & Walmsley, J.G. 1991. ABWS Expedition to Ascension Island, March 1990. *The Adjutant*, 21: 4–25.
- Price, J.H., & John, D.M. 1980. Ascension Island, South Atlantic: a survey of inshore benthic macroorganisms, communities and interactions. *Aquatic Botany*, 9: 251–278.
- Royal Botanic Gardens Kew. 1993. *Report on the sustainable environment and development strategy and action plan for St Helena*. Unpublished report to the Overseas Development Administration for the Government of St Helena.
- Walter, K.S., & Gillett, H.J., eds. 1998. *1997 IUCN red list of threatened plants*. Gland, IUCN.