UK Overseas Territories and Crown Dependencies: 2011 Biodiversity snapshot.

Ascension: Appendices. Author: Olivia Renshaw Assistant Conservation Officer Ascension Island Government

More information available at - www.ascension-island.gov.ac

This section includes a series of appendices that provide additional information relating to that provided in the Ascension chapter of the publication: UK Overseas Territories and Crown Dependencies: 2011 Biodiversity snapshot.

All information relating to Ascension is available at http://jncc.defra.gov.uk/page-5744

The entire publication is available for download at <u>http://jncc.defra.gov.uk/page-5759</u>

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APPENDIX 1: NATIONAL ENVIRONMENTAL LEGISLATION

- 1. Bird Protection Ordinance
- 2. Dogs and Cats Ordinance
- 3. Endangered Species Control (1976) controls exports and imports of endangered species
- 4. Fish and Fish Products Ordinance
- 5. Fishery Limits Ordinance
- 6. Green Mountain Protection Ordinance
- 7. Harbours Ordinance
- 8. National Protected Areas Ordinance (2003) provides for the designation of protected areas. Areas can be designated Sanctuaries, Nature Reserves or National Parks.
- 9. Plants Protection Ordinance
- **10. Protection of Animals Ordinance**
- **11. Wild Life Protection Ordinance (1944) and Regulations (1967)** prohibits the killing or capture of any wildlife within Ascension.

APPENDIX 2: NATIONAL ENVIRONMENTAL AND BIODIVERSITY RELATED STRATEGIES

Ascension is currently developing a proposal to develop a Biodiversity Action Plan with support from the Royal Society for the Protection of Birds (RSPB), Royal Botanic Gardens, Kew, Exeter University, and the Centre for Ecology and Hydrology (UK). If funding is obtained, development of the plan will begin in 2011.

Other important biodiversity related strategies include:

- The 2001 Environment Charter.
 <u>http://www.ukotcf.org/pdf/charters/ascension.pdf</u>
- An **Ascension Island Management Plan** was developed in 1999¹, setting out major priorities for the island including the eradication of feral cats, and control of exotic plants.
- The Management Plan for the Marine Turtles of Ascension Island http://www.seaturtle.org/mtrg/projects/ascension/mplan.shtml
- 2005 2010 Green Mountain Action Plan and its related lists of flora and fauna of Green Mountain is an important document outlining biodiversity conservation priorities of Ascension Island. <u>http://www.ascensionconservation.org.ac/pdf/2-E-Green-Mountain-Action-Plan-2005-2010.pdf</u> <u>http://www.ascensionconservation.org.ac/protected.htm</u>
- In 2009 a plan for the conservation of endemic and native flora of Ascension Island was developed. This document gives a comprehensive outline of the flora of Ascension and clear priorities for conservation. This plan takes a 'site-lead approach' to native and endemic flora conservation due to the level of threat of many flora species and the need to restore areas where functional communities of flora can coexist.

www.ascensionconservation.org.ac/pdf/Ascension%20endemic%20plant%20manag ement%20plan.pdf

 Following enactment of the 2003 National Protected Areas Ordinance a document outlining 14 proposed areas for designation was submitted to the island Council, however to date, only the Green Mountain National Park has been established. <u>http://www.ascensionconservation.org.ac/pdf/8-E-Proposed-Protected-areas-for-Ascension.pdf</u>

¹ AR Pickup. 1999. Ascension Island Management Plan. Royal Society for the Protection of Birds, Sandy, Bedfordshire, UK.

APPENDIX 3: PROTECTED AREAS - DESIGNATED AND PROPOSED

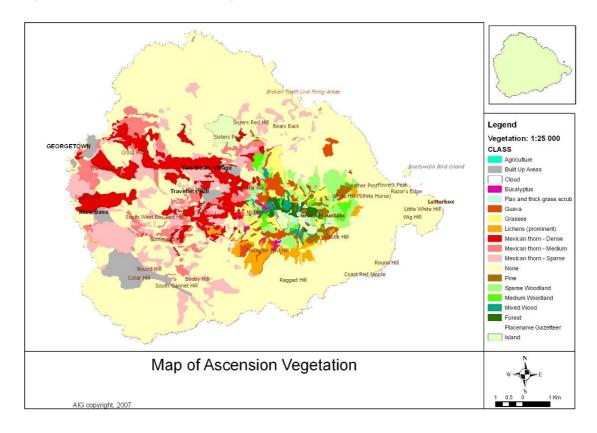
Table 1: Designated and Proposed	Protected Areas Ascension
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Name	Description	Туре	Status
Boatswainbird Island	Main seabird nesting area	Sanctuary	Proposed
Devils Riding School	Site of Geological Importance	Nature reserve	Proposed
Green Mountain	Endemic plant area and place of natural beauty	National Park	Designated
Long Beach	Important nesting beach	Nature reserve	Proposed
Marine Nature Reserve	A virtually unexploited marine environment	Nature reserve	Proposed
North East Bay	Important turtle nesting beach	Nature reserve	Proposed
Sisters Peak	Site of Geological Importance	Nature reserve	Proposed
Stack no 1	Seabird nesting site	Nature reserve	Proposed
Stack no 10	Seabird nesting site	Nature reserve	Proposed
Stack no 11	Seabird nesting site	Nature reserve	Proposed
Stack no 12	2 Seabird nesting site		Proposed
Stack no 13	13 Seabird nesting site		Proposed
Stack no 14	no 14 Seabird nesting site		Proposed
Stack no 2	tack no 2 Seabird nesting site		Proposed
Stack no 3	tack no 3 Seabird nesting site		Proposed
Stack no 4	Seabird nesting site	Nature reserve	Proposed
Stack no 5	Seabird nesting site		Proposed
Stack no 6	6 Seabird nesting site		Proposed
Stack no 7	Seabird nesting site	Nature reserve	Proposed
Stack no 8	Seabird nesting site	Nature reserve	Proposed
Stack no 9	Seabird nesting site	Nature reserve	Proposed
Wideawake fairs	Sooty tern nesting ground; endemic shrimp habitat; endemic plant area.	Nature reserve	Proposed

APPENDIX 4: TERRESTRIAL HABITATS

Vegetation classification - Ascension

Figure 1: Map of Ascension Vegetation



APPENDIX 5: NATIVE AND ENDEMIC SPECIES

This appendix includes species lists on the following native and endemic species:

Table 2: Plant species list.

Family	Species name	Common name	Nativity	Current status	Proposed status
Dryopteridaceae	Dryopteris ascensionis		Endemic	Extinct	
Poaceae	Sporobolus durus		Endemic	Extinct	
Rubiaceae	Oldenlandia adscensionis		Endemic	Extinct	
Aspleniaceae	Asplenium ascensionis	Ascension Island spleenwort	Endemic	Near Threatened	Vulnerable
Adiantaceae	Anogramma ascensionis	Ascension Island parsely fern	Endemic		Critically endangered
Grammitidaceae	Xiphopteris ascensionensis		Endemic	Near Threatened	Critically endangered
Marattiaceae	Marattia purpurascens		Endemic	Near Threatened	Critically endangered
Pteridaceae	Pteris adscensionis		Endemic	Near Threatened	Critically endangered
Euphorbiaceae	Euphorbia origanoides	Ascension Island spurge	Endemic	Critically endangered	Critically endangered
Poaceae	Sporobolus caespitosus		Endemic	Vulnerable	Critically endangered
Lycopodiaceae	Huperzia saururus	St. Helena buckshorn	Native	Extinct	
Lycopodiaceae	Lycopodium cernuum	buckshorn	Native		
Psilotaceae	Psilotum nudum	whisk-fern	Native		
Ophioglossaceae	Ophioglossum polyphyllum	Common adder's tongue fern	Native		
Convolvulaceae	Ipomoea pes-caprae	camel's-foot creeper	Native		
Poaceae	Digitaria ciliaris	tropical finger grass	Native		
Portulacaceae	Portulaca oleracea	purslane	Native		
Cyperaceae	Cyperus appendiculatus		Native		
Poaceae	Aristida adscensionis	triple-awn grass	Native		
Malvaceae	Hibiscus trionum	bladder ketmia	Native/Misident	Extinct	
Asteraceae	Hypochaeris glabra	smooth cat's-ear	Possibly native		
Poaceae	Enneapogon cenchroides	softfeather pappus	Possibly native		

		grass		
Nyctaginaceae	Boerhavia diffusa		Possibly native	
Poaceae	Polypogon tenuis	slender beard-grass	Probably native	
Oleandraceae	Nephrolepis hirsutula	sword fern	Probably native	
Dennstaedtiaceae	Histiopteris incisa		Probably native	

INVERTEBRATE SPECIES

Invertebrates: not Arthropoda

ANNELIDA: OLIGOCHAETA (earthworms)	1?	
Arthropoda: not Insecta		
PSEUDOSCORPIONES (pseudoscorpions) ARANEAE (spiders) ACARI (mites & ticks) CRUSTACEA (crustaceans) CHILOPODA (centipedes)	4 c.2 3 7	5
Arthropoda: Insecta (insects)		
COLLEMBOLA (springtails or collembolans)	3	

COLLEMBOLA (springtails or collembolans) 3	
ORTHOPTERA (grasshopper & crickets)	c.3
PSOCOPTERA (psocids)	1
HYMENOPTERA (parasitic wasps, ants bee & wasps)	1
LEPIDOPTERA (butterflies & moths) 2	

ENDEMIC FISH

Table 3: Endemic Fish of Ascension

Common name	Scientific name	IUCN Red List status
Anglefish, Resplendent	Centropyge resplendens	Least concern
Blenny, Mottled.	Scartella nuchifilis	n/a
Crab, Ascension Island Sally- lightfoot.	Grapsus adscensionis	n/a
Damselfish, Apollo.	Chromis sp	n/a
Damselfish, Lubbock's Yellowtail.	Stegastes lubbocki	n/a
Goby, Ascension.	Priolepis ascensionis.	n/a
Hawkfish, White.	Amblycirrhitus earnshawi.	
Razorfish, Marmalade (native)	Xyrichtys blanchardi.	Least concern
Seabream.	Diplodus ascensionis	n/a
Wrasse, Ascension.	Thalassoma ascensionis	n/a

NATIVE AND ENDEMIC BIRDS

Ascension Frigate bird, Ascension Night Heron, Ascension Rail, Fregata aquila Nycticorax species – Extinct Atlantisia elpenor – Extinct

APPENDIX 6: THREATS: ADDITIONAL INFORMATION ON CLIMATE CHANGE RESEARCH

Regarding temperature changes, this has been relatively straight forward as the island's temperature closely correlates with sea temperature. We can be fairly sure that if global temperatures rise then so will Ascension's. Predicting changes in rainfall is more problematic as global circulation models do not predict this very well. The approach we are taking is to use Ascension's past meteorological data to parameterise a weather generating model with built in climate change scenarios. This part of the work is still ongoing but we hope that it will give some understanding of the likely outcomes for rainfall and as such could be incorporated into conservation management plans.

Contributed by Alan Gray, Centre for Ecology and Hydrology

APPENDIX 7: PROJECTS

Table 4: Projects on Ascension

Project date	Project name	Funded by	Main Outputs
2001-2004	Seabird Restoration Project	FCO	All feral cats eradicated
			Seabirds recolonise mainland
Dates: 2004 – Ongoing	Seabird Restoration Project	RSPB	Long term species monitoring
			Staff
			Increased nesting success of seabirds
April 2004 – End of April	Green Mountain National	OTEP	Green Mountain National Park Designated
2005	Park		Management plan developed and implemented
			Endemic plant nursery created
April 2005-December	AEIOU (Ascension	OTEP	A synthesis of existing information from land
2006	Environmental Information		jurisdiction, environmental mapping and monitoring,
	Operations Utility)		geological and cultural data into a single manageable
			system.
1 st April 2005 – 31 st	Environmental Education	OTEP	The production of environmental resources for schools
March 2007	Project		focusing on island issues and native wildlife for
			Ascension and the Falklands.
April 2006-March 2007	Improving Access to Green	OTEP	Removal of vegetation from many of the historical
	Mountain		paths, tunnels, buildings and structures in the Green
			Mountain National Park.
November 2007 –	Increasing regional capacity	EU,	Development of regional capacity in order to control the
December 2009	to reduce the impacts of		spread and proliferation of invasive alien species on
	invasive species on the South		UKOTs in the South Atlantic region.
	Atlantic United Kingdom		
	Overseas Territories – the		
	South Atlantic Invasive		
	Species Project.		
June 2008-May 2010	Ascension Island Endemic	OTEP	Horticulture protocols and Species Action Plans for
	Plants Conservation Project		endemic plant species produced.
			Herbarium voucher collections completed.
2009 – 2010	Green Mountain National	OTEP	Provision of an Education / Visitors centre in the middle
	Park Education and Visitors		of the National Park.
	Centre - Red Lion Project		
March 2010 – March	DEFRA/JNCC Invasive	Defra/JNCC	The construction of a track for improved access to the
2011	Species Project		South East coast allowing fieldworkers safe access to
			this eroding area

Feral Cat Eradication Programme Dates 2001-2004 Outcomes: Since March 2001, RSPB has been helping AIG to implement a FCO funded seabird restoration project on Ascension. This included:

Establishing a Conservation Officer post, funded initially by the project and subsequently by AIG; and

A feral cat eradication programme, delivered by Wildlife Management International Limited (WMIL) a New Zealand company specialised in island restoration including the removal of alien species, funded initially by the project and subsequently by RSPB.

In a short space of time and before complete feral cat eradication had been achieved, there were positive signs of seabirds recolonising the mainland. The project is of significant international importance. It was the first time that a cat eradication has been attempted on an island of this size and with a domestic population of cats. The last few feral cats were removed in 2004 when the external involvement of WMIL ended. Ascension Island was declared feral cat free in 2006.

RSPB Seabird Restoration Project Dates: 2004 –Ongoing Funded by: RSPB Outcomes:

Feral cats, a dominant species on the Island, were eradicated to encourage nesting seabirds back to the mainland. In April 2004 a cat monitoring programme started, following on from the eradication programme. The last known feral cat was found in February 2004, just before the monitoring programme started.

The RSPB funds two seabird restoration fieldworkers to continue the monitoring of the seabirds nesting on the mainland of Ascension.

Since the eradication of the feral cats the nesting success rate of the nesting seabirds on Ascension has improved. There are now more birds nesting in an increasing number of locations.

Green Mountain National Park Funded by: OTEP Dates: April 2004 – End of April 2005 Outcomes:

The development and initiation of a management plan for the proposed Green Mountain National Park, focusing on public awareness and endemic plant protection and restoration.

A pilot project for the management of future protected areas on Ascension. Green Mountain, a site of natural beauty and an important habitat for Ascension's

endemic species of plants was made more accessible to the public.

The protection of wild endemic plant colonies.

The creation of an endemic plant nursery.

A complementary public awareness campaign.

ASC 201 AEIOU (Ascension Environmental Information Operations Utility) Funded by: OTEP Dates: April 2005-December 2006 Outcomes:

A synthesis of existing information from land jurisdiction, environmental mapping and monitoring, geological and cultural data into a single manageable system.

Protocols produced for updating, managing and applying information.

Portals made available to the school and library for the public to use as a learning and information resource.

The resulting maps provide Ascension with the means to implement their plan for Green Mountain National Park, which is home to many endemic and native species.

The integration of environmental monitoring information with other island data.

XOT 202 Environmental Education Project Funded by: OTEP

Dates: 1st April 2005 – 31st March 2007

Outcomes:

Raised environmental awareness in two Overseas Territories in the South Atlantic – the Falkland and Ascension Islands.

The production of environmental resources for schools focusing on island issues and native wildlife.

Initiatives launched for hands on involvement in conservation activities.

The opportunity provided for volunteers to take part in wildlife surveys and monitoring.

Improving Access to Green Mountain ASC 301

Funded by: OTEP

Dates: April 2006-March 2007

Outcomes:

Improved access to the Green Mountain National Park.

Removal of vegetation from many of the historical paths, tunnels, buildings and structures in the Green Mountain National Park.

Retention of the Mountain's historical paths assists with educational tours of the National Park and enhances the local environment by providing added interest value and recreational opportunities.

Increasing regional capacity to reduce the impacts of invasive species on the South Atlantic United Kingdom Overseas Territories – the South Atlantic Invasive Species Project.

Dates: November 2007 – December 2009

Funded by: EU, managed by the RSPB.

Outcomes:

Development of regional capacity in order to control the spread and proliferation of invasive alien species on UKOTs in the South Atlantic region.

An assessment of the existing status of invasive species and recommendations for action.

Strengthened local operational capacity to control the introduction and spread of invasive alien species.

The effective control and/or removal of key invasive alien species.

Increased awareness of the benefits of controlling and/or removing invasive alien species

Ascension Island Endemic Plants Conservation Project ASC 503 Dates: June 2008-May 2010

Funded by: OTEP

Outcomes:

A continuation of the work started during the OTEP-funded Green Mountain National Park projects.

Horticulture protocols and Species Action Plans for endemic plant species produced. Herbarium voucher collections completed.

DNA collections sent to RBG Kew.

A continuation of the invasive species clearance in priority conservation areas and the wild populations of endemics.

IUCN red listing assessment completed for all endemic plant species.

Green Mountain National Park Education and Visitors Centre - Red Lion Project Dates: 2009 – 2010

Outcomes:

Provision of an Education / Visitors centre in the middle of the National Park. The general public, visitors, students and school children and provided with the facility to learn about the preservation and monitoring of threatened and invasive plant species, the work carried out during the OTEP Endemic Plants Project and the EU Invasive Species Project.

A section of the ground floor utilised by the Heritage Society demonstrating the historic significance of the National Park.

The centre is available for use by researchers and students who visit Ascension to carry work on the endemic plants and birds.

DEFRA/JNCC Invasive Species Project

Dates: March 2010 - March 2011

Outcomes:

The construction of a track for improved access to the South East coast allowing fieldworkers safe access to this eroding area for the following activities: Rodent control.

The control of alien invasive plant species such as *Nicotiana*, Mexican thistle, guava, *Prosopis juliflora*, lantana, *Opuntia*.

Monitoring the return of new seabird colonies to the mainland after the feral cat eradication.

Endemic plant counts of the critically endangered Euphorbia origanoides.

More frequent monitoring of Boatswainbird Island and marine life, such as whale, dolphins, sharks and hawksbill turtles.

The construction of an enclosed locked up storage area for equipment and tools required for the control and monitoring of invasive species.

A suitable wash down area for the use of pesticides.