Tristan da Cunha (STH)

37° 15' S, 12° 30' W
Tristan da Cunha (STH)

Author: Trevor Glass, Conservation Officer, Tristan da Cunha Government Conservation Department & Katrine Herian, RSPB Project Officer on Tristan da Cunha.

More information available at - www.tristandc.com

Basic facts and Figures

Note: Tristan da Cunha forms part a single UK Overseas Territory with St Helena and Ascension, the Governor of which resides in St Helena.

<table>
<thead>
<tr>
<th>Location</th>
<th>The Tristan da Cunha archipelago is a group of mountainous volcanic islands in the central South Atlantic Ocean. The main island Tristan lies approximately 2,800km from Cape Town at 37° 15’ S and 12° 30’ W.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>Tristan: 96km² roughly circular, 12km across; Nightingale: 4km² including two large islets, Stoltenhoff and Alex (or Middle); Inaccessible: 14km², rhomboidal 5 by 4km; Gough: 65km², 13km long and 5km across, with numerous sea-stacks.</td>
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<tr>
<td>Number of islands</td>
<td>Four main islands (Tristan, Nightingale, Inaccessible and Gough) and several smaller islands or islets including Alex/Middle and Stoltenhoff.</td>
</tr>
<tr>
<td>Population</td>
<td>c. 280 people</td>
</tr>
<tr>
<td>Topography</td>
<td>The Tristan group of islands are the summits of massive shield volcanoes rising up from depths over 3,000m deep. Tristan, an active volcano most recently erupting in 1961, has steep-sided gulleys radiating from the central peak (2,060m) and steep cliffs caused by marine erosion rising to a plateau.</td>
</tr>
<tr>
<td>Main economic sectors</td>
<td>Tristan’s economy is almost totally dependent upon revenue from a commercial fishery from Tristan rock lobster Jasus tristani.</td>
</tr>
</tbody>
</table>
Legislative and Policy Framework

Multilateral environmental agreements
Tristan has been included in the UK’s ratification of 16 MEAs. Status of the ratification of key MEAs:

<table>
<thead>
<tr>
<th>Multilateral Environmental Agreement</th>
<th>Included in ratification?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convention on Biological Diversity</td>
<td>✓</td>
</tr>
<tr>
<td>Convention on International Trade in Endangered Species</td>
<td>✓</td>
</tr>
<tr>
<td>Convention on Migratory Species</td>
<td>✓</td>
</tr>
<tr>
<td>Ramsar Convention on Wetlands</td>
<td>✓</td>
</tr>
<tr>
<td>World Heritage Convention</td>
<td>✓</td>
</tr>
</tbody>
</table>

Tristan da Cunha has ratified the Agreement on the Conservation of Albatrosses and Petrels.

National environmental legislation
Tristan has three Ordinances – the Conservation Ordinance, Fisheries Limits Ordinance, and Agricultural Ordinance that deal with environmental management, biodiversity conservation and protected areas. See Appendix 1 for further information.

National environmental strategies
Tristan has four important strategies concerned with environment and biodiversity conservation (see Appendix 1), including a Biodiversity Action Plan.

Protected Areas
Gough and Inaccessible Islands are a World Heritage Site. These two islands and all breeding colonies of the Northern Rockhopper Penguin *Eudyptes moseleyi* on the Main Island, Tristan, have been declared Nature Reserves under the Conservation Ordinance 2006. In total, some 44% of the land area of the Tristan da Cunha Territory has been set aside for conservation.

Protection of the birds of the Tristan group is provided for by the Tristan da Cunha Conservation Ordinance. Seabird harvesting is restricted to Nightingale and Alex islands. Penguin eggs are collected in September, and eggs, chicks and adults of the Great Shearwater are harvested throughout the summer on Nightingale. See also Appendix 2.

Research Priorities

- Monitor changes in native and invasive plant distribution, abundance and ecology due to the effects of grazing pressure and climate change across the main island of Tristan.
- Collect baseline information on invertebrate taxonomy, populations and ecology and impacts of introduced species and habitat change on invertebrate populations.
- Compile information on demography, population trends, at-sea ecology and feeding locations of key marine populations. In addition, fisheries based research is needed to understand the economics sustainability and bycatch rates of relevant fisheries.
Institutional Arrangements

Government: The Conservation Department is responsible for terrestrial and marine conservation, national protected areas and invasive alien species control etc. The Fisheries Department is responsible for providing the information necessary to manage the fisheries. The Tristan fishery is controlled by a fishery quota as well as by the amount of time boats are allowed to spend in the water on fishing days. Agriculture and stocking levels are managed by the Agriculture Department. See Appendix 3 for further information.

Ecosystems and Habitats

Terrestrial: Main habitats are: Tussock grassland; Fern bush – Phylica woodland *Phylica arborea* and Bog fern heath *Blechnum palmiforme*; Wet heath; Feldmark and Alpine; Bogs – Scirpus bog and Sphagnum bog. Inaccessible and Nightingale islands are almost pristine. The absence of human inhabitants means that there have been no human impacts on the vegetation, no introduced vertebrates, and relatively few impacts by invasive plants.

Marine: Despite low overall diversity, many marine species are endemic to the islands. Intertidal zone is small because of the small tidal range, steep shores and exposed coastline. Subtidal zone is characterised by forests of kelp and other seaweeds. Much less is known about the communities of the open ocean.

Species

The islands are well known for their birdlife. Seven species of breeding land-birds are all endemic, and there are millions of breeding seabirds. Four species of seabird are endemic, and the Tristan da Cunha group is internationally important for their breeding populations of some 18 other species.

At least 212 plant taxa have been recorded, including 35 native ferns and 58 native flowering plants. Of these, 20 fern and 34 flowering plant taxa are considered endemic. Lower plants are still poorly known and recorded. An invertebrate fauna includes weevils and snails of particular interest, but with a relatively low number of native species.

The only native breeding mammals are seals, Sub-Antarctic fur seal and Southern elephant seal, which have been exploited in the past. Five whales - Southern right whale, sperm whale, Humpback whale, Long-finned pilot whale and Shepherd’s beaked whale occur relatively frequently. Various species of dolphin, including Dusky dolphin, are common.

See also Appendix 4.

Threats

Invasive species: Invasive species have had a major impact on biodiversity. Rats and mice have been responsible for the disappearance of a large proportion of the indigenous bird life.
Climate change: Long-line fishing is a major threat to some of the Procellariiform seabirds on the island, most notably the Spectacled petrel, Tristan albatross, Atlantic yellow-nosed albatross and Sooty albatross. Large-scale mortality of the former two species has been recorded off the South American continental shelf near southern Brazil. Illegal fishing in the Tristan Exclusive Economic Zone (EEZ) may also contribute significant mortality.

Projects

In addition to its core work in environment, the Tristan da Cunha Conservation Department has undertaken a number of externally funded environmental projects over the last five years. These include the clearance of invasive Logan Berry plants at Sandy Point, development of the Tristan Biodiversity Action Plan, implementation of marine surveys, and invasive species control and survey work.
Contacts

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Project Partners
Tristan works closely with RSPB, JNCC, RBG Kew in the UK and University of Cape Town in South Africa.

Bibliography


Appendices

All Appendices referred to in this chapter are available at http://jncc.defra.gov.uk/page-5757