

WORLD HERITAGE NOMINATION -- IUCN SUMMARY

487: HENDERSON ISLAND (UNITED KINGDOM)

Summary prepared by IUCN (April 1988) based on the original nomination and summary submitted by the Government of the United Kingdom. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the committee.

1. LOCATION:

Henderson Island is a raised coral atoll which together with Pitcairn, Ducie and Oeno forms part of the Pitcairn Island Group, a Dependent Territory of the United Kingdom. Situated at 24°22'S, 128°20'W, it is one of the most remote islands in the South Pacific, with only Ducie and the Chilean Easter Island and Sala y Gomez lying further to the east in Polynesia.

2. JURIDICIAL DATA:

Henderson is Crown Land, and a licence issued by the Governor, following approval by the Pitcairn Island Council, is required for access.

3. IDENTIFICATION:

Henderson is a raised limestone atoll, and as such is relatively rich in endemic species compared with lower-lying coral islands. The island is arid with only one fresh water spring known on the island. It has a very rugged topography, with limestone pinnacles and steep-sided pits, beneath the dense tangled vegetation. The coastline is one of steep cliffs with fringing reefs on the north and north-west sides.

Henderson has a rich endemic flora for its small size (37 sq km) with ten endemic flowering plants. Of these the two endemic varieties of the tree Bidens hendersonensis are of particular botanic interest, and the endemic sandalwood Santalum hendersonense is of value to the Pitcairn islanders for carving.

Henderson supports at least 24 species and subspecies of birds, including four endemic landbirds, the Henderson crake Nesophylax (Porzana) ater, Henderson fruit dove Ptilinopus (purpuratus) insularis, Henderson lorikeet Vini stephensi and Henderson warbler Acrocephalus vaughani taiti. Very little is yet known about the ecology and conservation status of these species. As a result of low disturbance, the landbirds and abundant seabirds occurring on the island are still remarkably tame.

The island's invertebrate fauna is also little known, but about one-third of the insects and gastropods so far collected are endemic. It is therefore highly likely that further endemics await discovery in the lesser-known groups. For example, a distinctive and as yet unnamed endemic species of hawk-moth was discovered in 1986, which is remarkably different from any other described hawk-moth species.

4. STATE OF PRESERVATION/CONSERVATION:

Of the Pitcairn group, only Pitcairn Island itself is permanently inhabited today. Henderson was colonised by Polynesians between the 12th and 15th

centuries, but this period of settlement had little ecological impact and the island has remained uninhabited in modern times. A major recent threat was a proposal to build a house, landing facilities and airstrip on the island, which would have led to clearance of the vegetation, disturbance and possible loss of endemic species and to the very real threat of pest species being introduced. The proposal provoked widespread concern from the international scientific community and was turned down by the UK Government.

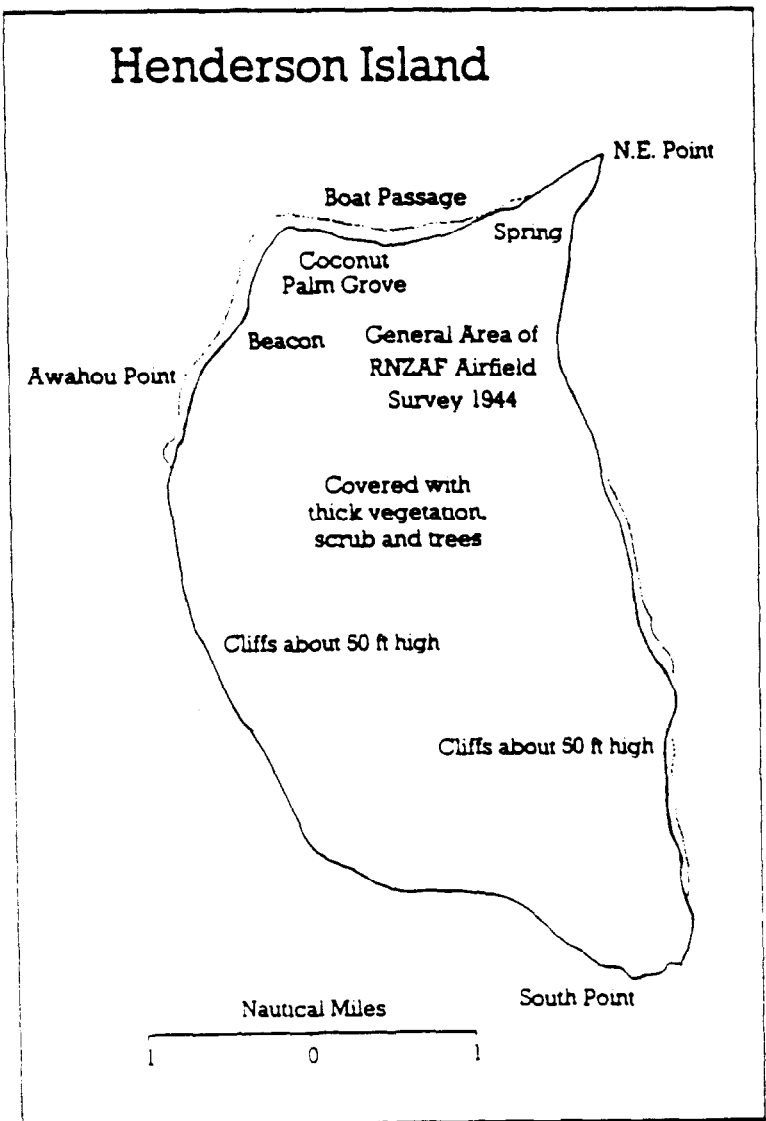
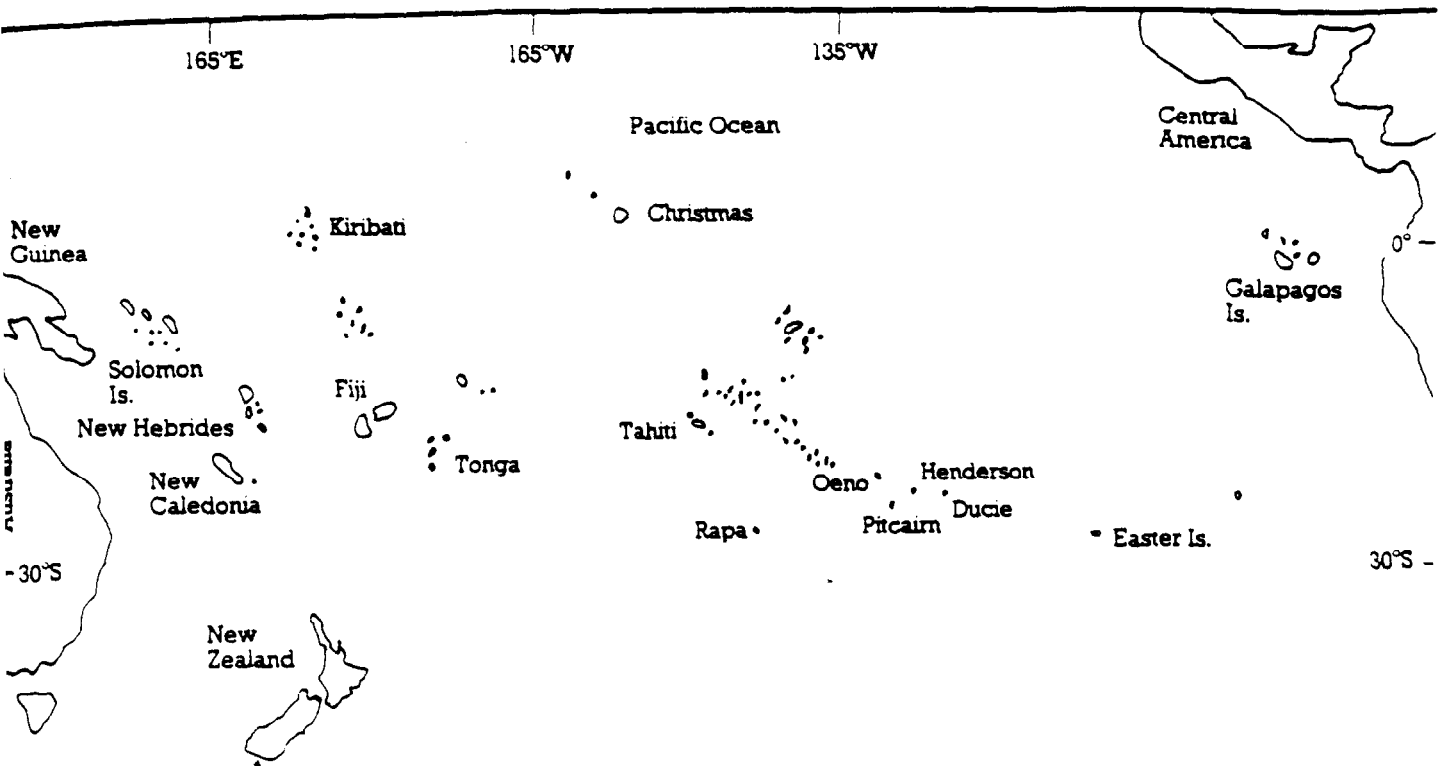
Henderson Island is the world's only raised atoll with its ecology virtually intact, and the island has remained remarkably free from exotic species. As a near pristine island ecosystem, it is of immense value for science, and was recognised as such by the International Biological Programme's survey of undisturbed oceanic islands carried out in the 1960s. The inhospitable nature of the island, together with its remoteness and inaccessibility, have so far effectively ensured its conservation.

5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST

The Henderson Island nomination, as presented by the Government of the United Kingdom, provides the following justification for designation as a World Heritage property:

b) Natural property

- (ii) Ongoing geological/biological processes. As the only raised and forested coral atoll with its ecology virtually intact, Henderson is a unique example of the World's natural heritage, demonstrating the dynamics of island evolution and natural selection.
- (iii) Exceptional natural beauty. Henderson is also an outstanding example of a raised and forested coral atoll ecosystem. There are only about 20 similar islands in the world, all of which have been much more extensively modified than Henderson.
- (iv) Rare or threatened species. Henderson provides habitats both for endemic species, and for more widespread species such as seabirds which are under intense threat at other island sites. Henderson is particularly noteworthy for its ten endemic plants and four endemic landbirds including the very distinct Henderson crane. As the island has never been intensively studied, it seems likely that other as yet unidentified endemics occur.



WORLD HERITAGE NOMINATION - IUCN TECHNICAL EVALUATION

487 HENDERSON ISLAND (UNITED KINGDOM)

1. DOCUMENTATION

- i) Nomination form and IUCN data sheet
- ii) Literature consulted: IUCN/UNEP, Review of the Protected Areas System in Oceania 1987
- iii) Consultations: A. Dahl, E. L. Towle, L. Hamilton, P. Eaton, P. Thomas, P. Dingwall, R. Fosberg, W. Sykes, J. Warham, J. Carew-Reid, C. Imboden, D. Elder

2. COMPARISON WITH OTHER AREAS

Henderson Island is at 22°S latitude, so is on the margin of the tropics. It is one of 25 raised coral atolls in the Pacific which is an unusual geological formation. Other Pacific islands with similar structure include Nuie, Makatea, Mangara, Ngaputoru and several of the Tuamotus. Guam and Rennel Islands are larger and better known raised coral atolls but these are very different from Henderson Island in that both are populated, Guam heavily so, and both are in the western Pacific. IUCN's Oceania Systems Review rates Henderson Island as the most important of all similar Pacific Islands for its nature conservation status. Its real distinction is its uninhabited natural state as compared to others which have been used for phosphate mining, bombing targets, and other human activities. Some of the other limestone islands, such as those of Palau and the Lau Group, show karst features but are not really elevated atolls.

In many respects, Henderson Island is similar to the Aldabra World Heritage site in the Indian Ocean which is also an island of this type. Henderson Island, however, has a greater relief, has been much less affected by human activities and has a much different species assemblage. Likewise the Lord Howe World Heritage site is quite different in that it is a volcanic plug, inhabited by people and has many introduced animals.

In conclusion, Henderson Island is unique among islands in that its isolation, hostile terrain and undisturbed status make it a rare and valuable natural resource. Only Rennel Island, in the western Pacific, could rank with Henderson for conservation importance and it faces problems with potential resource exploitation. Henderson Island is additionally important for conservation as an outstanding example of its island type with high endemism, yet easy to protect because of its discreetness and remoteness.

3. INTEGRITY

As mentioned in the above section, Henderson Island is one of the few of the world's oceanic islands that has largely escaped the ubiquitous weedy floras and faunas, aggressive introductions, pests and feral animals, found on other islands. In the past, effective management has been achieved mainly through the extreme isolation of the island. This may not be effective in future as World Heritage status may entice cruise ships, which visit nearby Easter Island, to also visit Henderson Island.

The principle management requirement is control of access and entry to the Island. Occasional transitory visitors, such as occur at present from Pitcairn, who collect sandalwood and green turtles, are of minor concern. Precautions to avoid introductions (eg. through rodent and weed-free boats and clothing), are necessary to prevent impacts that would be ecologically catastrophic.

This suggests that there may be a need for some on-site management in future. This could be negotiated with the Pitcairn Islanders who could carry out periodic inspections and who could be appointed honorary wardens for the Island. Monitoring by high resolution remote sensing is another option to observe possible changes in vegetation with no risk to the Island's undisturbed state.

It is doubtful that the existing legislation is sufficient to provide the island with long term protection. To better protect the island's pristine quality and that of the surrounding marine environment, it should have legal status equivalent to a strict nature reserve and be subject to a formal management plan. World Heritage status for the island will hopefully lead to assurances of stability rather than casual or unintentional depredations.

Related to this is the fact that the island countries in the South Pacific region have sought to cooperate on conservation matters with the former colonial powers of the Pacific through the South Pacific Regional Environment Programme (SPREP). SPREP provides the institutional structure within which appropriate protection and management of Henderson Island could be strengthened. The United Kingdom at this time, however, does not contribute to SPREP although it has recently signed the SPREP Convention on the Protection of Natural Resources in the South Pacific, which carries conservation and scientific cooperation obligations (Article 13). IUCN encourages the United Kingdom authorities to contribute to existing conservation structures and instruments to reinforce Henderson Island's integrity. This will also involve consideration of signing and supporting the Convention on Conservation of Nature in the South Pacific which, when in force, will provide added international protection to Henderson Island.

4. ADDITIONAL COMMENTS

The value of the Island is closely linked with its surrounding nearshore marine environment. The reefs are mentioned in the nomination but there is no firm indication about the extent to which the marine zone is included in the nominated site.

Several reviewers suggested that the Oeno and Ducie atolls also be included in the nominated site. These are some distance away (500 km) and do not appear to be functionally related to Henderson Island, so this suggestion was not furthered.

5. EVALUATION

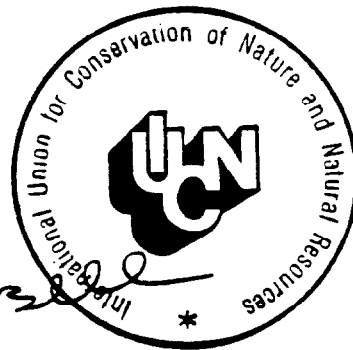
Although every oceanic island is "unique" in some way, Henderson Island is truly outstanding and merits inscription as a natural World Heritage property on two criteria: (iii) superlative natural phenomena, and (iv) significant natural habitat for threatened species. Henderson Island is one of the few raised oceanic coral atoll with its fundamental features intact. It is thus of immense value for biogeographical and biological research on the processes of island conservation. Henderson Island also has a high degree of plant endemism and a unique terrestrial fauna. The island is important for nesting seabirds and supports four endemic land birds. Its marine environment is little known but may be equally important.

The conditions for integrity are largely met except for the need for strengthened legal status and a management plan.

6. RECOMMENDATION

Henderson Island should be inscribed on the World Heritage list. The Government of the United Kingdom should be asked to clarify the marine boundaries of the site and be encouraged to:

- work with the Pitcairn Islanders to ensure on-site conservation;
- review the legal status of the island and consider up-grading it to a nature reserve;
- consider more involvement in the strengthening protection of the site within the framework of SPREP and the two international conventions as discussed above.



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