NOMINATION TO THE WORLD HERITAGE LIST

Convention concerning the Protection of the World Cultural and Natural Heritage

Name: GIANT'S CAUSEWAY

Identification No: 369 Date received by WH Secretariat: 10.12.85

Contracting State Party having submitted the nomination of the property in accordance with the Convention: UNITED KINGDOM

Summary prepared by IUCN (April 1986) based on the original nomination submitted by 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:

On the north coast of the County of Antrim, Northern Ireland. The site lies on the Causeway Coast between Causeway Head and Benbane Head and includes the foreshore, the cliffs, the clifftop path and the car park and visitor facilities at Causeway Head. 55°15'N, 6°31'W. Irish Grid Reference C947 447.

2. JURIDICAL DATA:

The majority of property is owned by the National Trust and in accordance with the National Trust Act 1907 and the National Trust Act (Northern Ireland) 1946, the area is preserved inalienably. The site lies entirely within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB) and is further protected in planning by its designation as an Area of Scientific Interest (ASI) and an Area of Special Control (ASC). Part of the site is scheduled for designation as a National Nature Reserve and negotiations with individual land owners concerning public access to parts of their properties is being or have been completed.

3. IDENTIFICATION:

The property nominated is the cliffs of the Causeway Coast extending for about 6 kilometres between Causeway Head and Benbane Head, including the foreshore, cliffs, clifftop path and the area at Causeway Head which accommodates the car park and visitor facilities. The Causeway Coast has an unparalleled display of geological formations representing the volcanic activity during the Tertiary Period some 50-60 million years ago. The geological and landscape interest is provided by the surface outcrops of the Tertiary Beds. This is structured by the cliff-like edge of the plateau, the varied structure and colour of the basalts and interbasaltic beds and their differential erosion patterns. The coastline is composed of a series of bays and headlands along a 6km stretch of coast, the headlands, consisting of resistant lavas. The average height of the cliffs is 100m, and have a stepped appearance due to the succession of five or six lava flows through geological time. The Giant's Causeway itself displays the columnar basalt structures for which the site is famous. Specific sites of note include the Giant's Causeway itself (a sea level promontary of almost entirely regular polygonal columns averaging 45cm in diameter and numbering 40,000 columns), the Giant's Organ (at Port Noffer, 60, 12m high regular columns and the three tier structured Middle Basalt), Chimney Tops (a number of columns separated by erosion from the cliffs), and Hamilton's Seat (a view point). The coastline is also cut through by olivine and theoleiite dykes (best example at Roveran Valley Head).

In addition to its geological features the site has a range of habitats covering seashore, cliff, scree, grassland, scrub, heathland and marsh. Local species of note include Red Broomrape, Sea Spleenwort and Frog Orchid. Some 80 bird species including peregrine falcon have been recorded.

4. STATE OF PRESERVATION/CONSERVATION:

The agencies involved in management and conservation are the National Trust, Moyle District Council (owners of the visitor centre built in 1982, the car park and the land where they are located), and the Department of the Environment for Northern Ireland (responsible for the provision of warden services) between whom there is a high level of cooperation. The National Trust manages the site in the context of its 'Strategy Plan for the North East' and the 'North Coast Linear Interpretive Plan'. These provide policy and guidelines for all aspects of environment and visitor management. A comprehensive Causeway Coast management plan is due for preparation within 5 years. The National Trust management aims are to maintain the natural quality of the site; maintain public access by means of purchase and lease of property; maintenance of public footpaths and the creation of new ones; the removal (after negotiations with leases and owners) of all unsightly buildings and intrusions in the landscape; the conservation of the fauna and flora and the education of the public. The work includes the maintenance of the 15km of footpaths (which are continuously eroded and need constant safety work) the provision of interpretative material, a minibus service for elderly/disabled visitors and general guidance services.

The Basalt formations are not easily damaged. In the 19th century the Causeway Stones were occasionally removed for ornamental use whilst the zeolite and calcite crystals in the Lower Basalt were removed in large quantities by visitors and also sold as souvenirs by guides prior to 1961.

The Causeway is Northern Ireland's most popular tourist attraction with more than 200,000 visitors annually, over half from overseas. The site figured frequently in 19th century guidebooks and up and till 1961 the area was heavily commercialized. The range of visitor facilities at present includes car parks and an extensive new visitor centre located at Causeway Head, however public access to the coast is now limited by a system of footpaths. The site is frequently visited by students of geology as part of field courses.

During the last 300 years the site has been the object of intense study as is evidenced by the wealth of scientific literature. It was first reported in 1693 and during the 18th century was central to the debate concerning the origins of igneous rocks. Research on the site has made major contributions to petrogenesis.

5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST:

The Giant's Causeway nomination, as presented by the Government of the UK provides the following justification for designation as a World Heritage property:

a) Cultural property. Criteria being examined by ICOMOS.

b) Natural property

(i) Earth's evolutionary history. The geological activity of the Tertiary era is clearly illustrated by the succession of lava flows and interbasaltic beds which are in evidence on the Causeway Coast. Interpretation of the succession has allowed a detailed analysis of Tertiary events in the North Atlantic. The extremely regular columnar jointing of the Theoleiitic basalts is a spectacular feature which is displayed in exemplary fashion at the Giant's Causeway. The Causeway itself is a unique formation and a superlative horizontal section through columnar basalt lavas.

(iii) Superlative natural phenomena, formations, or features. The cliff exposures of columnar and massive basalt at the edge of the Antrim Plateau present a spectacle of exceptional natural beauty. The extent of visible rock sections and the quality of the exposed columns in the cliffs and on the Causeway combine to present an array of features of considerable significance.

WORLD HERITAGE NOMINATION -- IUCN TECHNICAL EVALUATION

369 GIANT'S CAUSEWAY (UNITED KINGDOM)

1. DOCUMENTATION:

(i) IUCN Data Sheets
(ii) Consultations: J. Foster, R.S.J. Sparks, G.P.L. Walker, A.J. Craig, D. Emeleus
(iii) Site visit: 24 March by D. Poore, IUCN Consultant.

2. COMPARISON WITH OTHER AREAS

The Tertiary lava flows found at Giant's Causeway are comparable to those that are situated in Western Scotland, specifically in Northern Skye, the isles of Canna, Eigg and Muck, the Isle of Mull and the nearby mainland of Morvern, and on Staffa off Western Mull. Staffa is famed for its columnar basaltic lavas (at Fingal's Cave) which are spectacular but not better than those of the Causeway and the locality lacks the clear development of a thick succession of flows. Of the others North Skye has extremely fine lava flows spread over a considerable area; one could probably find most of the features seen in the Giant's Causeway area here but they are very dispersed and not always readily accessible. Much the same could be said of Mull and Morvern, and Eigg. the only serious rival would be the Isle of Canna (owned by the National Trust for Scotland) where most of the Causeway's features may be seen together with evidence for explosive volcanism and for the presence of ancient river valleys with gravel infills. However Canna does not have the accessibility of the Causeway area either in terms of getting to the locality or of approaching the features once one has arrived at the island.

Outside of the British Isles Biogeographical Province there are a number of other columnar basalt localities as follows:

France: La Tour d'Auvergne in the Monte Dore, La Queuille, Central France, Murat, Dept. Cantal, Roche Sanadoire, Auvergne, Janjac, Ardeche, Mts. du Coiron, Montelimar, working quarry, Bourg Lastic, Auvergne, Le Puy to Georges Auriac, Espaly, near Le Puy, Bort les Orgues, Cantal, St. Flour, Auvergne, Quarry at Neussargues, Orcival, Tuliere and Sanadoire.

West Germany: Gross Weilberg, Siebengebirge, Rolandsech Hill, Eifel, Kase Keller, grotto, near Bertrich, Eifel, Bonn to Andernach on the Rhine, Nieder-Mendig near Laacher See, Eifel.

Italy: Motta S. Anastasia, Sicily, Torre del Greco, Naples.

Czechoslovakia: Radobyl Hill, near Litomerice, Devil's Wood Pile, Oschitz, Bohemia.

Faroes (Denmark): Korkadalur, Mykines, Old Quarry, Trongisvagur, Hor, Suduroy, Kulugjogv, East of Frodba, Suduroy.

Iceland: Head of Patreksfjordur, Vestifirdir, N.W. Iceland, Eastern Iceland.

USSR: Siberian Traps.

The balsatic columns of Giant's Causeway however, are considered unrivalled for the regularity of their columns, the high proportion that are 6-sided, and their exceptional ball-and-socket cross-jointing. In addition the cliffs of the Causeway coast display an exceptional example of lateritic soils (paleosol) attesting to the former tropical climate of the area.

Finally, no other area has the historic associations with the development of the geological sciences which began in 1693.

3. INTEGRITY

The whole of the nominated area, with the exception of the site of the visitor's centre, is in the ownership of the National Trust. This is legally inalienable and therefore has the highest degree of protection possible. It is an Area of Scientific Interest and is likely to become, in addition, a National Nature Reserve. This will not increase the degree of statutory protection, but will make it possible to devote further resources of money and manpower to the management of the scientific features.

Many of the eyesores of previous tourist development have already been removed, and the National Trust has plans to remove all those that remain, and to grass over the road where it comes near to the Giant's Causeway itself. There will then only remain a short length of road (with use restricted to authorized vehicles) which will enable visitors to approach the Causeway itself, and a path along the remainder of the coast. The path is generally unobtrusive but some action is needed (and planned) to make it safer and to ensure that it does not contribute to accelerated erosion.

4. ADDITIONAL COMMENTS

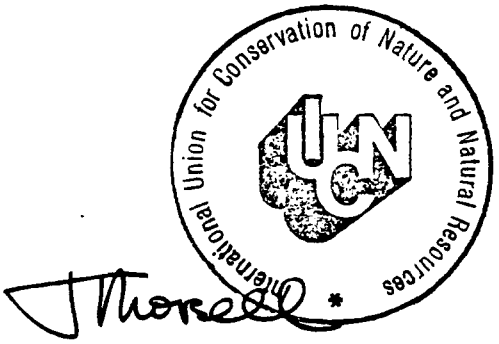
None.

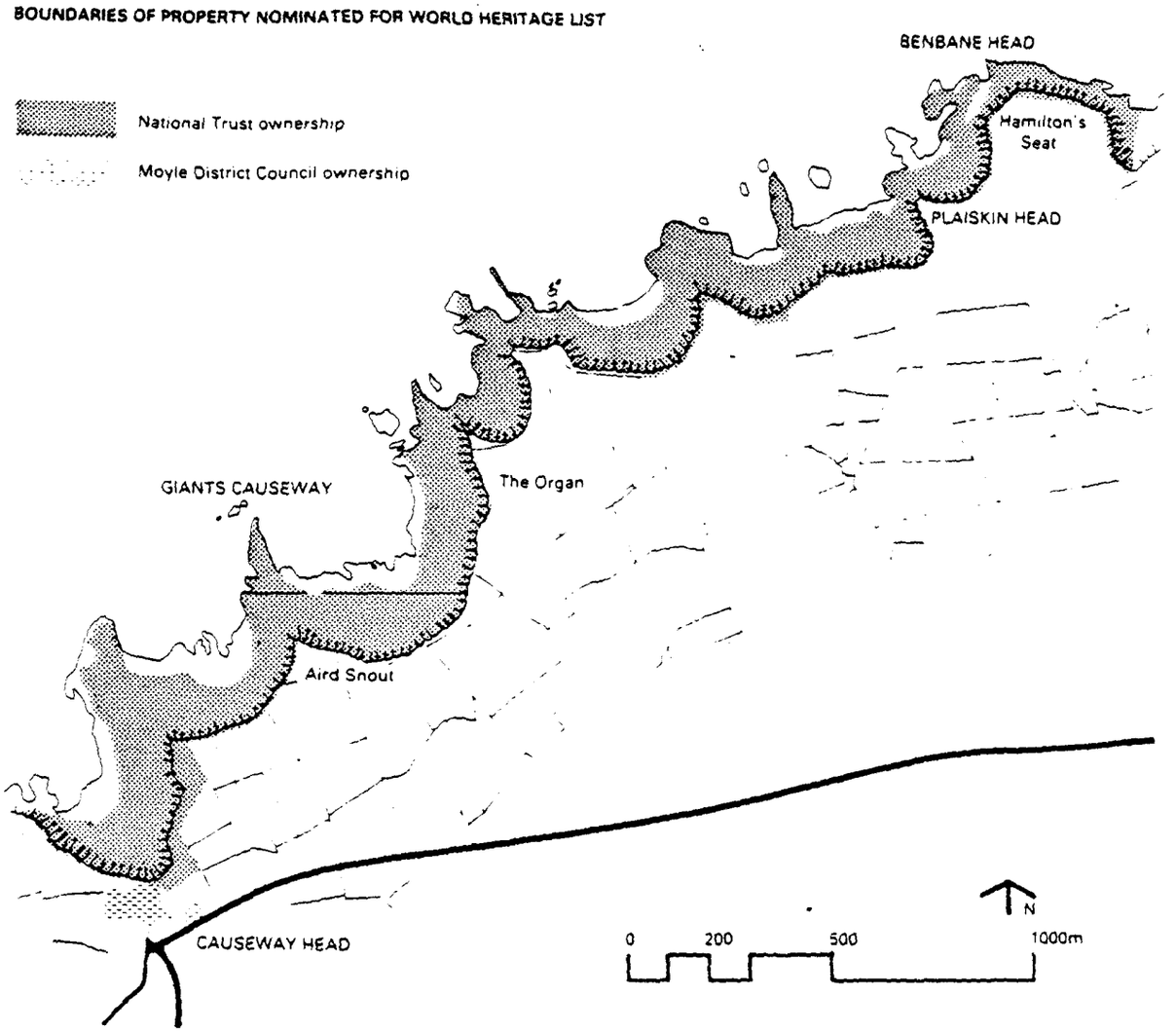
5. EVALUATION

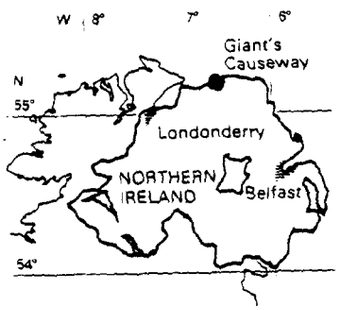
The Causeway Coast including the Giant's Causeway is a classic locality for the development of features associated with basaltic lava flows and their weathering. It is particularly noteworthy for its magnificent development of columnar structures in the basalt lavas, formed during the cooling of the flows, the clear development of weathered horizons, or ancient (reddened, iron-rick lateritic) soils between some flows, the three dimensional form of individual flows, particularly the flow forming the Grand Causeway at and near sea level, the contrast between older olivine basalt flows and the later, thick quartz basalt or tholeiitic flows (which comprise the higher parts of the cliffs and the Grand Causeway), the varied suite of late-formed zeolite minerals that infill former gas cavities in the lava flows, the clear demonstration that late vertical dykes of basalt cut the basaltic lavas, and the spectacular marine erosion features associated with this varied geology. It thus meets criteria (i) and (iii) for natural properties.

6. RECOMMENDATIONS

The Giant's Causeway should be inscribed on the World Heritage List. The Committee should note recent improvements to the management of the property and endorse the proposal to elevate its legal status to a National Nature Reserve.







Local Setting — Northern Ireland.